



**Standards for
KRAV-certified
Production
2021**



Standards for KRAV-certified Production - 2021 Edition



This is the English edition of the Standards for
KRAV-certified Production 2021. If there are any
discrepancies between the English and Swedish
editions, it is the Swedish version that is valid.

The KRAV Association

Standards for KRAV-certified Production - 2021 Edition

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New in the KRAV Standards 2021

We have revised Chapter 4 Crop Production, Chapter 10 Slaughter, and made new standards on climate, that are in Chapter 3. The types of production Single Product Certification (Chapter 13) and Shops (Chapter 14) have been cancelled. In Chapter 20 Labelling and Marketing, we have updated the standards with the aim of simplifying and making them more user-friendly.

SOME CHANGED STANDARDS THAT WE WANT TO EMPHASIZE

- **Chapter 3** General Standards – A new section on measuring climate impact on the farm has been introduced (3.11 Climate Reporting). The standards apply to agricultural companies with at least 200 hectares of agricultural land or at least 300 square meters of greenhouse. The aim is to be able to systematically reduce greenhouse gas emissions over the long-term.
- **Chapter 4** Crop Production – The requirement for ley or green manure in crop rotation remains, but has been made more flexible by providing options to comply with the standard (standard 4.6.1). We have also introduced a new standard on maximum supply of nitrogen (standard 4.6.9), as well as changed the requirement for making a phosphorus balance so that it applies from five ha of arable land instead of the previous 50 ha (standard 4.7.1).
- **Chapter 10** Slaughter – The most important changes concern keeping ruminants overnight in slaughterhouses, where there are stricter requirements for obtaining permission, and certification from the animal owner in connection with these requirements.
- **Chapter 14** Shops – This type of production has been cancelled. Shops requiring certification according to the EU regulation are offered certification according to Chapter 9 Food Processing.
- **Chapter 20** Labelling and Marketing – The standards have been simplified, parts covered by laws and regulations have been excluded, while other relevant parts have been highlighted in a separate trademark manual with the aim of guiding and inspiring. The standards have also been supplemented with Appendix 4, which is where the various KRAV labels are located. The approach of KRAV to trademark use has changed. Now, anyone who wants to market unpackaged KRAV-labelled products can do so by registering for trademark use (standards 20.1.2 and 20.4.2).

About the Text

All definitions are found at the end in the definitions section. Words in the standards that are included in the definitions section are written using a different font and bold formatting. *An example of this is the word **certificate**.*

THE TEXT ON THE STANDARDS

We have written the text on the standards so that it is clear what the mandatory requirements for KRAV-certification are and what the certification body must verify. If examples and explanations are given, they are written in italics and usually given at the end of the standard.

ORIGIN OF THE STANDARDS

In order for a product to be sold as organic within the EU, Swedish law also requires that production complies with the requirements in the EU Regulation (EC) 834/2007. All KRAV-certified production must comply with Swedish law, but since the KRAV standards are also applied outside of Sweden, in some cases understanding is facilitated by making the legal requirements clear, therefore the KRAV standards include some legal requirements.

The KRAV standards have developed over a long period of time and in cooperation with other international bodies. Therefore, our standards include requirements that go beyond the EU regulation. To make the background of a standard clear, the following abbreviations are used in the text:

- **(EU)**: the standard complies with the EU regulation
- **(SL)**: the standard is a clarification of other Swedish legislation
- **(I)**: the standard complies with IFOAM Standards for Organic Production and Processing
- **(K)**: the standard is KRAV's own
- **(EU/K)**: the standard partially complies with the EU regulation
- **(K/SL)**: the standard partially complies with Swedish legislation.

For more information on the background of any standard please contact KRAV, for example by sending an e-mail to lantbruk@krav.se or livsmedel@krav.se.

SYMBOLS:

- +** **New** – means a completely new standard in 2021.
- ↻** **Revised** – means a change in the meaning of the standard. The “revised” symbol is not used if a standard has been moved to another part of the book or where only the language has been changed.
- i** **Help is available on the KRAV website.** Examples of help on the KRAV website www.krav.se are information, templates and checklists.
- !** **Major nonconformity** (only in Chapter 5 Animal Husbandry).

Becoming KRAV-certified

In order to use the KRAV label, you need a certificate that shows that your activity complies with the KRAV standards. Certificates are issued by independent certification bodies that are authorized to inspect and certify according to the KRAV standards. There are several to choose from, which are listed below and found at www.krav.se.

THIS IS WHAT YOU NEED TO DO TO GET A CERTIFICATE:

1. Find out what applies in order for your activity to be KRAV-certified.
2. Make the changes that may be needed.
3. Register with KRAV and contact a certification body that is accredited to inspect according to the KRAV standards, and sign a certification contract.
4. An auditor from the certification body visits you and carries out an audit to ensure that your activity complies with the KRAV standards.
5. When your production is approved by the certification body and you have received your certificate, you can begin to use the KRAV label.
6. You pay an annual license fee to KRAV. You also pay fees to the certification body and are inspected at least once per year.

What Parts of the KRAV Standards are of Concern to Me?

The KRAV standards comprise both general standards which apply to everyone regardless of type of production, as well as standards adapted to specific types of production. The table below shows which chapters of the standards apply to you according to the type of production you have.

If for example, you have crop production, Chapters 2-4 and 20 apply to you.

ACTIVITY	TYPE OF PRODUCTION/CHAPTER	COMMENTS
- crop production	2 . 3 . 4 20	
- greenhouses	2 . 3 . 4 20	especially section 4.11
- mushroom cultivation	2 . 3 . 4 20	especially section 4.12
- animal husbandry	2 . 3 . 4 . 5 20	
• cattle		especially section 5.2
• sheep and goats		especially section 5.3
• pigs		especially section 5.4
• poultry		especially section 5.5
- apiculture	2 . 3 . 6 20	
- aquaculture	2 . 3 . 7 20	
- wild harvest production	2 . 3 . 8 20	
- food processing	2 . 3 . 9 20	
- slaughter	2 . 3 . 10 20	
- feed production	2 . 3 . 11 20	
- production aids	2 . 3 . 12 20	
- restaurants	2 . 3 . 15 20	
- import and bringing in	2 . 3 . 16 20	
- fisheries	2 . 3 . 17 20	
- certification of chains	2 . 3 . 19 20	
- certification of marketers	2 . 3 20	especially section 20.7
- voluntary origin labelling	2 . 3 . 9 20	especially section 20.9
- optional: standards for hygiene for cultivating and handling fruit and vegetables		especially section 4.13

List of Certification Bodies

At this time, the following certification bodies are accredited to inspect and certify according to the KRAV standards:

ControlCert Scandinavia AB

Box 12, 614 21 Söderköping

E-mail: info@controlcert.se

Tel.: +46 (0) 121 100 02

Website: www.controlcert.se

Labelling code: **SE-EKO-06**

The logo for ControlCert, featuring the word "ControlCert" in a bold, sans-serif font. The "Control" part is in a dark grey color, and the "Cert" part is in a lighter grey color.

– ControlCert Scandinavia AB offers certification according to the KRAV standards of the following production: food processing, restaurants and caterers including chain certification, importing and bringing in products, certification of marketers, and voluntary origin labelling.

Debio

1940 Bjørkelangen – Norway

E-mail: kontor@debio.no

Website: www.debio.no

Tel.: +47 (0) 63 86 26 50

Labelling code: **NO-ØKO-01**

The logo for Debio, featuring the word "Debio" in a bold, white, sans-serif font on a black rectangular background.

– Debio offers certification according to the KRAV standards of the following production: aquaculture, fisheries and processing of products from aquaculture and fisheries.

HS Certifiering AB

Flottiljvägen 18, 392 41 Kalmar

E-mail: info@hscertifiering.se

Website: www.hscertifiering.se

Tel.: +46 (0) 703 11 20 50

Labelling code: **SE-EKO-04**



HS Certifiering

– HS Certifiering offers certification according to the KRAV standards of the following production: crop production including greenhouses, mushroom cultivation, animal husbandry, apiculture, food processing, restaurants and caterers including chain certification, slaughter, feed production, production aids, importing and bringing in products, voluntary origin labelling, certification of marketers, as well as assessment of products as permitted for feed or as production aids.

Intertek Certification AB

Box 1103, 164 22 KISTA

E-mail: kontakt@intertek.com

Website: www.intertek.se/livsmedelscertifiering/krav-och-eu-ekologiskt/

Tel.: +46 (0) 8 750 03 33

Labelling code: **SE-EKO-08**

intertek

Total Quality. Assured.

– *Intertek Certification AB offers certification according to the KRAV standards of the following production:* food processing, restaurants and caterers including chain certification, slaughter, feed production, importing and bringing in products, voluntary origin labelling, as well as assessment of products permitted for feed.

Kiwa Certifiering

Box 7178, 170 07 Solna

E-mail: se.info@kiwa.com

Website: www.kiwa.se

Tel.: +46 (0) 18 17 00 00

Labelling code: **SE-EKO-01**



– *Kiwa offers certification according to the KRAV standards of the following production:* crop production including greenhouses, mushroom cultivation, animal husbandry, apiculture, aquaculture, fisheries, wild harvest production, food processing, slaughter, feed production, production aids, restaurants and caterers including chain certification, importing and bringing in products, voluntary origin labelling, certification of marketers, as well as assessment of products as permitted for feed or as production aids.

SMAK Certifiering AB

Box 42, 230 53 Alnarp

E-mail: certifiering@smak.se

Website: www.smak.se

Tel.: +46 (0) 20 61 62 63

Labelling code: **SE-EKO-03**

SMAK
CERTIFIERING AB

– *SMAK offers certification according to the KRAV standards of the following production:* crop production including greenhouses, mushroom cultivation, animal husbandry, apiculture, food processing, slaughter, feed production, production aids, restaurants and caterers including chain certification, importing and bringing in products, voluntary origin labelling, certification of marketers, as well as assessment of products as permitted for feed or as production aids.

Valiguard AB

Boglundsgatan 2, Box 1931, 703 74 Örebro

E-mail: foodsafety.sc@saiglobal.com

Website: www.valiguard.com

Labelling code: **SE-EKO-05**



– Valiguard offers certification according to the KRAV standards of the following production: food processing, slaughter, importing and bringing in products, certification of marketers, as well as voluntary origin labelling.



Standards for KRAV-certified Production 2021 Edition

Adopted by the KRAV board 3 June 2020

Introduction to the KRAV Standards

1

This chapter gives the basis for the KRAV standards, first generally and then by chapter. The purpose of the standards is given as well as short descriptions of the contents of the standards with explanations. The concrete standards that KRAV certificate licensees must comply with begin in Chapter 2.

Certain words are explained in the “Definitions” section. They are written in italic and bold. The definitions are found at the end of the standards.

1.1 About KRAV

KRAV is Sweden’s most well-known environmental label for food and beverages, based on ecological principles with especially high standards for animal welfare, health, social responsibility and climate impact. The KRAV label is a trademark registered with The Swedish Patent and Registration Office. The registration gives the KRAV Association sole and exclusive rights to the KRAV trademark. Companies that comply with the standards and are KRAV-certified, as well as pay the license fee, can use the KRAV trademark.

VISION

KRAV’s vision is that all food production should be economical, ecologically and socially sustainable and meet current needs without compromising the ability of future generations to meet their needs.

1.2 The IFOAM Principles of Organic Agriculture

KRAV drives the development of organic and sustainable foods. KRAV develops its standards based on the IFOAM principles on organic agriculture, but not limited to the EU regulation on organic production. IFOAM is a member-based international organisation that works for sustainable agriculture.

Following is a summary of the IFOAM principles.

“Organic agriculture:

- should sustain and enhance the health of soil, plant, animal, human and planet as one and indivisible
- should be based on living ecological systems and cycles, work with them, emulate them and help sustain them
- should be managed in a precautionary and responsible manner to protect the health and well-being of current and future generations and the environment
- should build on relationships that ensure fairness with regard to the common environment and life opportunities.”

1.3 The Basis of the Standards

The KRAV standards are based on a holistic view and therefore take into consideration many factors in the production system and the surrounding environment. Even social responsibility is included as an important part. We see biological mechanisms and contexts as the foundation for what is natural and therefore compatible with organic production. Our aim is to have scientific support for all the standards. However we often prioritise the precautionary principle until research and proven experience can provide a secure basis for a standard's boundaries. The ban on the use of GMOs (genetically modified organisms) and engineered nanomaterials are examples where the precautionary principle has been applied. When there is a conflict between different objectives, a holistic view can be regarded as more important than the different parts of the conflict.

The KRAV standards specify how production must take place in order for products to be labelled and marketed with the KRAV label, or with reference to the KRAV standards. In this way the standards create a platform that facilitates unified marketing of KRAV-certified production, and provides confidence in all steps of the production chain and in the marketplace. KRAV develops the standards together with producers, consumer and environmental organisations, researchers and business. The KRAV board then determines the standards based on what they consider to be practical to achieve at present. KRAV's work to improve the standards is ongoing, but we strive to publish changes in the standards only once per year.

FRAMEWORK

The KRAV standards are to a large degree adapted to other standards for organic production found at both the European and global level. For example, KRAV is a member of The International Federation of Organic Agriculture Movements (IFOAM). The EU also has standards for organic production, in Regulations (EC) 834/2007, 889/2008 and 1235/2008, as well as their amendments. EU regulations are the law in Sweden and regulate how the word "organic" may be used. The regulations encompass crop production, animal husbandry, apiculture, aquaculture, wild harvest production, food processing, shops, importing, and feed production. The KRAV standards comply with EU regulations but are in some cases more stringent, and as well cover more areas, for example slaughter, certification of restaurants and fisheries.

All KRAV-certified operations must also comply with national laws, for example, animal welfare and environmental legislation.

SCOPE

KRAV's first standards were published in 1985 and consisted of one A4 page of standards for crop production. Today there are standards for 17 different categories of production or types of production, as we refer to them. Independent certification bodies that are accredited to provide KRAV certification carry out audits and certification.

KRAV sets the boundaries for the products and production or handling of organic products that can be KRAV-certified. The KRAV label is primarily intended for food, but even other raw materials from organic agriculture can be certified.

THE STANDARDS AND INSPECTION INCLUDE:

- production conditions,
- products and recipes,
- documentation
- labelling
- sampling and analysis on a random basis.

AREAS OF CONCERN:

- primary production,
- production aids and inputs,
- handling, storage and packaging,
- processing,
- sales and marketing, as well as
- products and raw materials certified according to other standards for organic production.

1.4 General Standards for Certification (see Chapter 2)

The purpose of certification is to create security for consumers and producers by means of independent audits to ensure compliance with standards.

For food to be marketed as organic or KRAV-labelled, the whole production chain must be certified. In order to be certified, a company must register certain information with KRAV, receive a KRAV-number, as well as apply for certification to an approved certification body and sign a contract. The company can use the KRAV name and trademark only after first receiving a valid certificate for the type of production encompassed by the company activity. Before a certificate can be issued by a certification body, it ensures compliance with all the relevant standards. The certification body thereafter carries out at least one audit of the KRAV-certified activity every year, and sometimes several audits are carried out during the same year.

REGISTRATION OF PRODUCTS (see 2.2.4)

For the types of production food processing, feed production, production aids,

as well as import and bringing in, a company must register each product on the KRAV website before it can be sold. This makes it easier for companies to find KRAV-labelled products and as well makes it more difficult for companies that are not KRAV-certified to cheat. There is no comparable product list for EU organic products.

NONCONFORMITIES AND APPEALS (see 2.5-2.6)

A certification body makes a nonconformity report when an activity either partially or completely does not comply with a KRAV standard. The purpose of nonconformities is to clearly show noncompliance with the standards as well as the opportunities for improving the operation. There are three levels of nonconformity: minor, major and grounds for suspension. It is normal for an activity to have minor nonconformities. What is important is that they are found, that the company corrects them and provides safeguards to prevent a future occurrence. Major nonconformities that the certificate licensee cannot in due course correct can result in rejection of land, animals or products by the certification body. For especially serious cases, an entire activity can be rejected and in rare cases it can lead to an up to three-year disqualification for a producer by the certification body. Such strong measures are only taken when there is reason to believe that the producer consciously broke basic standards. KRAV licensees have a right to appeal decisions of the certification body.

LICENSE AND CERTIFICATION FEES (see 2.7.4)

The cost for KRAV-certification consists of both a license fee to KRAV and a fee to the certification body for its services. KRAV's license fees are used, amongst other things, to strengthen the KRAV trademark and to develop the standards.

1.5 General Standards (see Chapter 3)

All KRAV-certified companies must comply with the general standards.

SOCIAL RESPONSIBILITY (see 3.1 and 16.4)

KRAV's vision for sustainable production includes social responsibility. Therefore KRAV has standards for social responsibility which the EU organic standards lack. In Sweden this means that, in the first place, KRAV-certified companies must comply with legislation on social responsibility. As this is included in the standards, certification includes inspection of compliance with the legislation. There are also requirements that go further than the legislation, for example concerning housing conditions for immigrant workers. In wild harvest production and other activities with seasonally employed staff, KRAV's assessment is that there is an increased risk regarding social responsibility.

For import and bringing-in, KRAV has extra requirements with regard to

social responsibility. These extra requirements are based on the UN Universal Declaration Of Human Rights, the UN Guiding Principles on Business and Human Rights, the OECD Guidelines for Multinational Enterprises, the UN Global Compact and The International Labour Organization's (ILO's) conventions and recommendations.

HANDLING AND STORING KRAV-CERTIFIED PRODUCTS (see 3.2)

The purpose of the standards for storing and handling KRAV-certified products is to ensure that the products are not mixed with or contaminated by non-KRAV-certified products.

For example, those who handle KRAV-certified products and similar conventional products at the same location, must ensure that the KRAV-certified products are always clearly labelled, so as to minimize the risk of confusion. Another example is that when the same equipment is used for KRAV and conventional products, the equipment must always be cleaned before it is used for the KRAV-certified products.

SUBSTANCES AND MATERIALS (see 3.3)

The goal is that substances and materials used in KRAV-certified production must not entail risks for the environment or human health. There are therefore standards that forbid the use of GMOs and engineered nanomaterials.

Ban on GMOs (see standards 3.3.4-3.3.5): Use of genetically modified organisms (GMOs) or products made of or with GMOs is prohibited in KRAV-certified production. Those who want to use products or raw materials that may contain GMOs must provide a certificate verifying that the products are GMO-free, or in some cases take samples and have them analysed. KRAV has developed GMO risk lists in order to assist in determining whether a raw material is a risk product. These are available at www.krav.se.

It is, amongst other reasons, in order to be cautious that KRAV does not accept GMOs, since the risks of dispersion in nature and the consequences of dispersion are difficult to determine. As well, the manner used to apply current GMO technology in agriculture leads to, amongst other things, a one-sided agricultural system dependent on chemicals from multinational companies that own and sell both the seed and pesticides. Another reason that GMOs are prohibited is that organic farming must be an alternative for consumers who want production that does not use GMOs.

Nanomaterials (see standard 3.3.6): With the precautionary principle as a starting point, KRAV standards prohibit engineered nanomaterials. This ban is absent in the EU regulations for organic production.

With the help of nanotechnology, very small particles, nanoparticles, can be created of various substances. As the particles are so small, the substances have new properties and functions. In food, engineered nanoparticles are present in, amongst other things, food supplements and nutrition drinks, where their

purpose is to enhance absorption of the substances. Nanomaterials are also used in food packaging to provide the packaging with properties that can increase the shelf life of the products.

There is insufficient knowledge about how nanomaterials act in the environment, for example how they are absorbed by organisms or if they bioaccumulate. There is also great uncertainty about how nanoparticles affect the human body. It is however known that they can pass through cell membranes and even from the blood into the brain.

DECREASED ENVIRONMENTAL AND HEALTH IMPACTS FROM MEASURES RELATED TO HYGIENE (see 3.4)

The purpose of standards for measures related to hygiene is to minimise negative health and environmental impacts that occur during cleaning, disinfection and pest control. KRAV-certified companies must therefore use cleaning agents that are ecolabelled when such products that provide satisfactory results are available. To avoid problems with pests, in the first place preventive measures must be taken, and secondly, mechanical or physical methods should be used.

If in any case it is necessary to use chemical methods, the basic rule is that the company must ensure that there are no KRAV-certified products on the premises at the time.

PACKAGING (see 3.5)

The main purpose of packaging must be to protect and preserve the food. In addition, packaging must be as resource efficient and as climate neutral as possible. Those who choose packaging should avoid any containing substances that are harmful for human health or the environment. Therefore Bisphenol A is prohibited in all packaging containing KRAV-labelled products. PVC may however be used in lid seals and liners on metal, and only when PC-free options do not result in acceptable food quality. Similar regulations for packaging are not found in the EU standards for organic production.

KRAV has made a guide to help companies optimize packaging, see the "Packaging Guide" at www.krav.se.

PROTECTION OF NATURAL AND CULTURAL ENVIRONMENTS (see 3.6)

All KRAV-certified companies must carry out systematic environmental management and show care for natural and cultural environments. Unlike the EU standards for organic production, KRAV has specific standards for this which auditors must check during audits.

KRAV-certified companies must also ensure that the activity results in as little hazardous waste as possible. All waste must be sorted and taken for recycling or delivered to a landfill.

ENERGY USE AND ENERGY PLANNING (see 3.7–3.9)

One goal of organic production is to minimize energy use and reduce the need for fossil fuels. In order to reduce the negative climate impact from food production, KRAV has formulated standards in this area which go beyond the EU standards for organic production. All KRAV-certified companies must be able to report on their energy efficiency measures.

Large companies must as well carry out an energy audit with the help of an energy expert and in energy-intensive greenhouses at least 80% of the energy must come from renewable resources or waste heat.

Drivers who work permanently in the certified part of an activity must be trained in fuel-efficient driving. It is an efficient way to reduce use of fossil energy and at the same time lower company costs.

The electricity that KRAV-certified companies use must come from renewable energy sources, such as solar, hydro or wind power. The standard applies to all activities in a place of production even if the KRAV-certified production accounts for only a small part of the total. All electricity companies are able to offer electricity from renewable sources, often for the same or a marginally higher price than the electricity that is not specifically produced from a particular source. By increasing the demand for environmentally friendly electricity, a contribution is made to increasing investment in such energy sources.

1.6 Crop Production (see Chapter 4)

The goal is crop production that is sustainable in the long-term and that provides high quality products. The basis for organic cultivation is a system with many active measures for achieving good production. Hazardous chemical pesticides and fertilisers are not permitted and the soil must be maintained well, for example through using good crop rotations and active weed control.

The purpose of the standards for KRAV-certified crop production is to:

- preserve and strengthen the long-term production capacity of the land,
- protect and develop the biological and genetic diversity in the cultural landscape and in production,
- minimize use of fossil fuels and other nonrenewable resources,
- avoid non-naturally occurring substances and minimize release of contaminants to the surrounding environment, and
- reduce releases of greenhouse gases and increase carbon storage.

CONVERSION (see 4.1)

Growers who want to KRAV-certify their production must report this to a certification body and then comply with the standards during a so-called conversion period when the products cannot be sold as KRAV-certified. During the conversion period, the effects of chemical pesticides and fertilisers

previously used in the soil diminish. It is also a time for adapting the production to organic methods. The length of the conversion period is based on a balance between consideration to consumers and a desire to make it easier to convert to organic production. For producers, the conversion period means a reduction in income since it is not possible to charge extra for products during that period.

Conversion periods are found in various standards for organic farming throughout the world, though the length of time may vary. The conversion periods in the KRAV standards are adapted to the EU regulation for organic production. KRAV-certified Christmas trees are an exception. They must be cultivated according to the KRAV standards from planting to harvest, and must not go through a conversion period. The reasoning is that consumers' expectation is that chemical pesticides have not been used in cultivating the spruce trees.

The conversion period for crop production can in some cases be shortened if the farmer can show that no prohibited fertilisers or pesticides were used on the land during the years prior to the application for certification. If the land was certified according to the EU regulation, a new conversion period is not required in order for it to be KRAV-certified.

PARALLEL PRODUCTION (see 4.3.4–4.3.5)

Growing the same crop both conventionally and organically within the same agricultural company is not permitted. The reason is that in so-called parallel production, the risk of confusion between the two is greater and it is more difficult to avoid the sale of conventional products as KRAV-certified. It is not considered parallel production if different types of the same crop are cultivated and the differences are obvious, for example potatoes with differently coloured skins.

CONTAMINANTS AND PROTECTIVE DISTANCE (see 4.4)

KRAV-certified cultivation must be protected from contamination and KRAV has more detailed standards than the EU regulation. A contaminated place of cultivation or a crop with excessive levels of harmful substances can be rejected by the certification body. An example of protection is that only a restricted amount of heavy metals can be added to the soil with, for example, fertiliser and lime. There must also be a clear demarcation between organic and conventional parcels of land. The protective distance requirement is greater if the parcels of land belong to the same farmer. This is because it is not possible to place similar demands on a neighbour. It is thus all the more important to inform neighbours that farm conventionally that a crop is organic so that they actually comply with the legislation on protective distance when they use pesticides.

As well, it is not permitted to grow KRAV-certified food near roads with a lot of traffic. In the 1990s, authorities recommended that leafy vegetables not be grown within 25 m of heavily trafficked roads primarily due to the

presence of lead additives in gasoline. Although lead contaminants are not as clear a problem today, the uppermost layer of soil near roadways with a lot of traffic is contaminated and has increased levels of various heavy metals. KRAV has therefore decided to keep the protective distance of 25 m for food crops because it is an important issue for consumers. It is however permitted to grow animal feed and seed on this land. With regards to animal feed, it is a very small part of an animal's total ration that is grown within this area.

CULTIVATION ON HUMUS SOILS (see 4.5.4)

New cultivation on humus soil is prohibited. This is because cultivation on humus soil contributes significantly to the release of greenhouse gases to the atmosphere. It is estimated that this type of cultivation accounts for about one-fifth of the total release of greenhouse gases from Swedish agriculture. When humus soils are drained and cultivated, air circulation is increased and the organic material slowly breaks down. It is a process where the greenhouse gases carbon dioxide and nitrous oxide, are released. The EU regulation for organic production has no standards for humus soils.

KRAV has discussed if it is possible to introduce standards for how humus soils must be used to minimize release of greenhouse gases, but there is no clear-cut answer as to the methods or crops that result in the lowest releases. Putting humus soils underwater would reduce releases, but it is not reasonable or even practically possible in most cases. Current standards involve no special limits on how current cultivation on humus soils takes place. Cultivation may be regulated when there is greater knowledge on the subject.

SOIL FERTILITY AND PLANT NUTRITION MANAGEMENT (see 4.6)

A basic idea of organic farming is that soil fertility should be built up gradually. This is one of the reasons that it is prohibited to practise organic farming on a field some years and conventional farming other years (4.3.3). Otherwise, this could be a way to avoid taking care of the land and getting rid of weeds with chemical agents or fertilising with artificial fertilisers. Instead, the organic cultivation must take place with a varied crop rotation which includes, for example, ley and legumes.

A certain minimum percentage of ley or green manure as a main crop must be included in crop rotation on all parcels, even on farms that do not have animals that eat roughage. This is because ley keeps back weeds and decreases crop rotation diseases. As well, ley is a crop in our climate that contributes the most substantially to building up the humus content in the soil (4.6.1).

A higher humus content is good in a number of ways. It gives the soil a better structure which makes it easier to cultivate, which in turn decreases fuel use during cultivation. In addition, a higher humus content increases the soil's water retention properties and supports important soil organisms that can provide a better delivery of plant nutrients to the crop. When the humus

content increases, carbon binds to the soil, and this carbon storage decreases the amount of carbon dioxide in the atmosphere.

Sowing a green manure pasture crop into a cereal crop one year, increases significantly the amount of roots in the following year and is therefore preferred to a single-year green manure crop, but both methods are possible.

There are many advantages to sowing intermediate crops, catch crops, or under-sown crops as they, amongst other things, bind nutrients and reduce the risk of soil erosion. When land is covered with vegetation for a large part of the year, the humus content increases. How often these supporting crops occur in the crop rotation affects the amount of carbon storage. Other ways of keeping the land covered with vegetation during autumn or winter are also positive because it reduces the leakage of plant nutrients. The natural way to add nitrogen to the ecosystem is to use the ability of legumes to absorb nitrogen from the air with the help of bacteria. Since use of synthetic nitrogen fertilisers is prohibited, organic agriculture is totally dependent on legumes for its nitrogen supply. Therefore, legumes must always be included in crop rotation (4.6.1- 4.6.3).

It is important to minimize loss of plant nutrients from agricultural land. This is in part because leaching of phosphorus and nitrogen leads to eutrophication of watercourses, lakes and oceans, and in part because nitrogen which disappears from the soil in the form of nitrous oxide is a very powerful greenhouse gas, accounting for about one-third of the total climate impact from agriculture according to researchers. Ultimately it is also important to manage plant nutrients because it is an important resource for production. KRAV therefore has special standards to minimize losses of plant nutrients. These go further than the EU regulation for organic production (4.6.4 – 4.7).

One measure is that the grower must plough in liquid manure, urine and digestate spread on bare land within at least four hours in order to avoid nitrogen losses. Another measure to decrease leaching of plant nutrients is that the grower should have a non-fertilised area next to waterways permanently covered with vegetation. Keeping land untouched or covered with vegetation in winter also reduces leakage of plant nutrients. When the soil provides more nitrogen than the crop can use, there is a risk for nitrogen losses to soil and water. KRAV therefore limits the maximum addition of nitrogen via fertilisers to 170 kg per hectare. Pursuant to the EU regulation, the limitation applies only to stall fertiliser.

PLANT NUTRIENT BALANCE (see 4.7)

Most KRAV-certified crop producers who bring in plant nutrients from the outside in the form of fertiliser or feed must regularly carry out a phosphorus balance. This involves a calculation of how much phosphorus is brought into the farm compared to how much is taken out. On farms with average phosphorus values in the soil, the goal is to achieve a balance between the

amount of introduced and removed phosphorus. That KRAV has chosen to first require a phosphorus balance and not a nitrogen balance is because certain nitrogen losses are inevitable and the result of plant nutrient balances for nitrogen are difficult to interpret and compare between farms with varied conditions and production. Furthermore, phosphorus is an important finite resource that needs to be conserved.

FERTILISER AND SOIL CONDITIONERS (see 4.8)

A basic idea in organic production is that plant nutrients must circulate. Plants take nutrients from the soil which then go directly or via animals to the production of food. In order to have a cycle, it is important that manure from the animals returns to the arable land where soil organisms transform it to nutrients that plants can take up.

The goal is for KRAV-certified growers to use only manure from KRAV-certified production, but for the time being, a certain amount of conventional farmyard manure is permitted. This is due to, amongst other things, that some vegetable and grain growers do not have their own animal production and therefore need to be able to use manure from conventional farms to grow good crops. However, the requirements for permitted manure have become progressively more stringent. For example, manure from the most intensive conventional animal production is prohibited. The reason for this is that KRAV-certified cultivation must not depend on manure from forms of production that differ greatly from KRAV-certified animal husbandry.

Biogas production from animal manure has the potential to significantly reduce the amount of greenhouse gases from animal production and digestate is a valuable resource for organic farming. Therefore KRAV-certified farmers are permitted to use digestate from biogas plants where both permitted and certain non-permitted manure is mixed, but only to the extent that is equivalent to the portion of permitted manure. Production of this digestate must also be KRAV-certified or assessed as permitted.

Nutrients are removed from the farm via cash crops and in order to also have a cycle between city and countryside, KRAV-certified growers are permitted to use digestate that is produced from sorted household waste and waste products from the food industry and slaughterhouses provided that this does not present any environmental or health risks and that production of the fertiliser is KRAV-certified.

The KRAV list of permitted organic fertilisers is mostly in accordance with the EU regulation. There are however some exceptions for substances that do not comply with the KRAV general standards on substances that can be used in KRAV-certified production (see 3.3.1–3.3.2). This applies, for example, to leonardite and xylite, which are extracted by lignite mining.

The basic principle for use of minerals and other inorganic fertilisers is that they must only be used in their natural forms. Fertilisers must not have been

subjected to any processes other than grinding so that the natural processes in the soil are not disturbed. That is why ground limestone and gypsum from natural sources are the only forms of liming materials growers are permitted to use. Gypsum has a certain positive effect on soil structure, but it is significantly more short-lived than the effect of burnt or hydrated lime, which are prohibited. KRAV's list of permitted inorganic fertilisers complies for the most part with the EU regulation, but there are these exceptions: KRAV prohibits aluminium calcium phosphate and Thomas phosphate. Neither of these substances meets the above basic criteria, as they have undergone chemical processes.

In some soils there is a natural shortage of some substances that plants need in small amounts. When there is a provable shortage of a certain micronutrient, the standards allow fertilising with it, despite there not being any natural micronutrient fertilisers. The reason for this exception is that it would otherwise be difficult to obtain a good harvest on these soils.

PLANT PROTECTION (see 4.9)

Organic agriculture bases plant protection primarily on preventive methods and biological control. Growers are not permitted to use chemical pesticides consisting of non-naturally occurring substances as they contaminate both surface and groundwater, decrease biological diversity and can harm the user. As well, they leave residues in food, and what impact this has on health has not been examined sufficiently.

Examples of preventive methods used against weeds and pests are good crop rotation, use of robust varieties, as well as promoting biological diversity in and around the crop. In fruit crop cultivation, for example, growers can plant groundcover crops between the rows, interplant other tree species, or put up bird houses to attract birds that eat harmful insects. Other protective measures are to encourage and distribute the natural enemies of organisms harmful to plants (for example insects or predatory mites), or to use traps.

Certain chemical compounds which are not non-naturally occurring and certain biological compounds are permitted for use in organic cultivation, but only when there is a direct threat to the crop. There are no approved compounds for weed control in crops, but heat and electricity can be used. The list of permitted plant protectants in the KRAV standards generally complies with the EU regulation, but there are some exceptions where the KRAV standards are more restrictive. KRAV has not included some plant protectants which according to the regulation can only be used on crops not grown in Sweden. Examples are diammonium phosphate and some pyrethroids, which according to the EU regulation are permitted in olive groves. The fact that pyrethroids are chemical pesticides is another reason that KRAV prohibits their use. KRAV also prohibits copper compounds for combating fungal diseases, since the amounts of copper required exceed KRAV's limit for addition of heavy metals. Copper in excessive amounts is hazardous to people and animals.

Additives in plant protectants are not regulated in the EU regulation, therefore pyrethrum compounds with piperonyl butoxide are permitted. Piperonyl butoxide stabilizes pyrethrum extract so that it is more potent for a longer time, and it also has a certain combating effect. Piperonyl butoxide can leave residues in products, and is harmful to people and mammals. Pyrethrum compounds with piperonyl butoxide are therefore prohibited according to the KRAV standards.

For KRAV-labelled vegetable products that are imported, those plant protectants allowed according to the EU regulation are accepted.

SEEDS AND VEGETATIVE PROPAGATION MATERIAL (see 4.10)

KRAV wants to stimulate production of high-quality organic propagation material with a broad choice of varieties. The basic rule is that the grower must use KRAV-certified or EU organic seed and other propagation material. When such organic material is not available, conventional seed and vegetative propagation material may be used. This is regulated by The Swedish Board of Agriculture and is registered in the Swedish database organicXseed-Sverige. It is prohibited for seed or propagation material to be genetically modified or treated with chemical aids after harvest.

For cultivation of sprouts or shoots in water without added nutrients, the seed must always be KRAV-certified, since the sprouts or shoots then consist entirely of seed that has been allowed to germinate.

GREENHOUSE CULTIVATION (see 4.11)

The standards for crop production apply to greenhouses as well and even there, cultivation must take place in soil. This means that neither hydroponics nor cultivation in biologically inactive materials can be KRAV-certified. According to the KRAV standards, it is permitted to cultivate in delimited soil beds or containers with soil, provided that a significant portion of plant nutrients comes from the soil. Therefore there are standards for the minimum amount of soil required per plant. The EU has decided to change the regulations beginning in 2022, and at that time the regulation will clearly prohibit companies certified after June 2017 from cultivating in delimited soil beds. Since greenhouse production is energy intensive, KRAV also has special standards aimed towards reducing its climate impact.

MUSHROOM CULTIVATION (see 4.12)

KRAV-labelled mushroom cultivation involves cultivation without chemical pesticides and that a major part of the substrate the mushrooms grow on must come from organic production. For example, straw that is a component of the substrate must be organic and if peat is used, it must not be chemically treated. Certain mushrooms grow on wood, and for these, the wood must not be treated with chemical products.

1.7 Animal Husbandry (see Chapter 5)

KRAV-certified animal husbandry must be characterized by very good animal welfare. A fundamental principle is respect for the specific needs of different animals with regard to behaviour, feed and the environment they are kept in. KRAV has stricter standards for animal welfare than the EU regulation for organic production. Examples of this are that during the grazing season, pigs must be able to graze, root in the ground and bathe in mud, that hens must be able to bathe in real sand and that mother animals must be able to give birth in seclusion.

A condition for being able to have a KRAV-certified animal husbandry operation is that the crop production is KRAV-certified.

CONVERSION (see 5.1.2)

(Cattle 5.2.1, sheep and goats 5.3.1, pigs 5.4.1, poultry 5.5.1)

Animal keepers who want to KRAV-certify their production must report this to a certification body and then comply with the standards during a so-called conversion period when they cannot sell animals or products from them as KRAV-certified. The length of the conversion period varies according to the animal species.

PARALLEL PRODUCTION (see 5.1.3)

A company cannot raise animals of the same species both conventionally and organically. The reason is that in so-called parallel production, there is an increased risk of confusion between the animals as well as unintentionally selling conventional animals as KRAV-certified.

If there are different species of animals on a farm that are KRAV-certified and conventionally raised respectively, it is not considered parallel production.

PURCHASE OF ANIMALS (see 5.1.5)

(Cattle 5.2.2, sheep and goats 5.3.2, pigs 5.4.2, poultry 5.5.2)

In KRAV-certified animal husbandry, mothers and offspring should preferably be kept on the same agricultural holding. This reduces stress and infection, which can easily occur if animals from different farms are mixed. If animals need to be purchased, they must if possible be KRAV-certified. If the conditions are such that a farm needs to purchase animals regularly to raise them for slaughter, special measures must be taken so that the animals' health is not affected negatively.

For breeding, breeders are permitted to purchase EU organic or a limited number of conventional animals. This is permitted so as not to hamper development of KRAV-certified production. Good breeding practices result in healthier animals and the need to purchase animals for renewal is reduced.

The standards however prohibit purchase of EU organic or conventional animals to be raised for slaughter, with some exceptions for poultry.

BREEDING (see 5.1.6)

Breeding practises must be based on natural processes. At the same time there are some techniques that provide such great advantages for both animals and farmers that their use is permitted in organic production. For this reason insemination is permitted, but embryo transfer and synchronization of oestrus with hormones are not. It is also permitted to use sexed semen as it reduces the need to purchase animals, for example when a herd is being built up or expanded.

To the extent possible, purchased animals must be breeds suitable for organic breeding. The standards prohibit animal breeds bred so that they can no longer mate or give birth naturally. Examples of this are the most common breeds of turkey and the cattle breed Belgian Blue.

OUTDOOR ACCESS AND GRAZING (see 5.1.7)

(Cattle 5.2.3, sheep and goats 5.3.3, pigs 5.4.3, poultry 5.5.3)

One of the fundamental prerequisites of KRAV-certified animal husbandry is that all animals must have access to the outdoors as much as possible. This promotes natural behaviour and contributes to animals being healthy and strong. At the same time it is important to create good conditions for outdoor access, so the land is not damaged or leaching nutrients.

Grazing provides animals with both feed and natural activity. Therefore, all animal species must be able to graze, root or peck on overgrown land during the grazing period. The KRAV standards are more clear and strict regarding this added value than the EU regulation. For example, even pigs must be able to graze and root in the ground in KRAV-certified production and as well, KRAV is more detailed with regard to when different animal species should have access to grazing.

In exceptional cases, animals may be kept indoors during the grazing period primarily for animal welfare purposes, such as in the case of sickness or unsuitable weather, but also for certain practical reasons such as for insemination or just before slaughter.

It is not possible to avoid letting animals out to graze by only raising animals during the winter half of the year. However raising types of livestock with a short rearing stage exclusively during the summer is permitted.

HOUSING CONDITIONS (see 5.1.8)

(Cattle 5.2.4, sheep and goats 5.3.4, pigs 5.4.5, poultry 5.5.4)

Animals must have access to appropriate housing and there are standards for how stables must be, both regarding size and design. Stables must have sufficient space for the animals' movement needs and all stables must have windows that provide daylight throughout the building.

The basic principle is that all animals must be able to move freely, and they therefore cannot be tied up or kept in cages. Despite this, until further notice there is an exception for tied-up cattle in small herds. KRAV has determined that it would otherwise be impossible for many small farms to have organic production. To in some degree compensate for the limited freedom of movement, the animals must be let out daily during the periods before and after the grazing period, as well as be exercised at least twice a week during the winter. Keeping animals tied up is becoming less common and all newly constructed stables must be open housing system stables.

According to the standards, half of the floor area at the most can be made up of drained flooring, for example slatted flooring. These keep animals clean, but do not provide a comfortable lying area. If animals can choose, they normally avoid lying down on slatted flooring. There is a similar requirement for laying hens, but here at least one third of the indoor area must be littered. For other poultry the whole area must be littered.

The animals must be able to carry out their normal social behaviour through being able to be in groups most of the time. However, when mother animals give birth or lay, it is natural for them to withdraw from the herd. For this reason there are requirements for the number of laying beds per group laying hens. KRAV also has standards that exceed the EU regulation so that cows, ewes and sows have access to seclusion when giving birth and during the first period afterwards. This is important so that the young can suckle from their mothers and get the first milk.

FEED AND WATER (see 5.1.9-5.1.10)

(Cattle 5.2.5-5.2.6, sheep and goats 5.3.5-5.3.6, pigs 5.4.6-5.4.7, poultry 5.5.5)

The basic standard is that animal feed must be KRAV-certified, good quality and adapted to the livestock. All animals must also have free access to good roughage and water. Another important basic standard is that KRAV-certified farms must strive to be as self-sufficient as possible regarding feed. This is a matter of taking advantage of local resources, having a better ecological cycling of nutrients, reducing the risk of eutrophication, and minimizing transport. The KRAV standards on self-sufficiency are more stringent than the EU regulation, but both the KRAV standards and the EU regulation have become progressively more stringent.

Feed concentrate: For ruminants there is a restriction on the proportion of feed concentrate in the ration, as these animals are primarily adapted to eating roughage. Ruminants must therefore not be fed animal-based feedstuffs, with the exception of some milk products.

Organic feed: The required portion of organic feed in the ration has become progressively more stringent. It has been the case for many years that 100% of the feed for ruminants must be KRAV-certified including that a certain portion of feed from land in-conversion to KRAV-certified production may be used. Monogastric animals such as pigs and poultry have a greater requirement for

the right protein composition since they cannot themselves produce certain essential amino acids. This makes it more difficult to make good feed that is completely organic. For this reason it is still permitted to give a small amount of conventional protein feed to young pigs and poultry.

Self-sufficiency: Different farms can cooperate regarding feed and manure and are thus considered as one unit. The standards for self-sufficiency is more strict for ruminants than for pigs and poultry. The explanation is that a large part of the ration for ruminants consists of roughage that can be grown throughout the country.

For pigs and poultry whose feed consists largely of grain, the requirements for self-sufficiency are lower for woodland country than for lowland country because woodland areas are not as suitable for growing grain. It is common for farms with pig and poultry stocks to purchase a large part of the feed, especially in parts of the country with little grain cultivation. Up until a few years ago it was also prohibited for hygienic reasons to give poultry feed mixtures that were not heat-treated. This meant that even farms with their own grain cultivation sold the grain and purchased all the feed for the chickens. All protein feed for poultry must still be heat-treated, but mixing it with grain that is not heat-treated is currently permitted. Feed and feed mixtures purchased for a farm must comply with the standards for KRAV-certified feed. The basic principle is that raw materials of agricultural origin must be KRAV-certified.

FEEDING CALVES, LAMBS AND KIDS (see 5.2.6 and 5.3.6)

It is very important for the young and mother animals to have close contact during the young's first period of life in order for the animals to stay healthy and feel good. Therefore newborn lambs and kids must be able to suckle for at least their first three days. In milk production the minimum time has been reduced to 24 hours of suckling for calves. Many animal keepers experience that animals are stressed when calves are separated from cows after three days, since they have been able to create a strong bond. At the same time there is a lot of research that shows that a longer suckle period is good for the health of both cows and calves. Systems with suckling cows or gradual separation of cows and calves can be ways to achieve the positive effect of suckling and still avoid stress.

After suckling, the calves, lambs and kids must be raised for a number of months using real milk from their own species.

CLIMATE AND THE ENVIRONMENT

(Cattle 5.2.5.4, 5.2.5.5 and 5.2.7; sheep and goats 5.3.5.4; pigs 5.4.6.7; poultry 5.5.5.7)
In order to reduce climate impact, KRAV has standards over and above the EU regulation. For pigs and poultry the goal of these standards is good health with a high feed usage and good growth. This results in lower releases of greenhouse gases per kilo of product. For ruminants, which account for a significant part of

the release of climate gases from agriculture, the picture is more complicated. Good health is a basic requirement, but then the farmer has an opportunity to choose between alternatives in the standards for feed usage and growth. This is due to the fact that more extensive methods of raising animals on natural grazing land also has advantages. They are important for biodiversity which in turn provides nature with resilience to changes in the climate. Furthermore, well-managed natural ley and long-term ley store large amounts of carbon in the soil with a positive effect on climate.

HEALTH AND MEDICAL CARE (see 5.1.11)

(Cattle 5.2.7-5.2.8, sheep and goats 5.3.7, pigs 5.4.8)

An important goal for KRAV-certified animal husbandry is that animals must be healthy. They must therefore have a good stable environment and spend time outside when appropriate. They must have good feed and be well taken care of. There must also be a strategic plan to support good health, and for example, in milk production, there must be follow-up on the key performance indicators for health and animal welfare.

In order to avoid unnecessary medicating that can lead to resistant bacteria for example, preventive treatments are prohibited, with the exception of vaccination. As well, it is prohibited to routinely give substances against intestinal parasites - these are only to be used when necessary. This is due to the fact that the existence of certain insect species on ley is threatened by the use of such substances. Instead, the animal keeper must have a good grazing plan in order to reduce the risk of infection, especially for young, sensitive animals.

When animals, despite everything, become sick, they must be taken care of and treated as quickly as possible. After an animal has received medication, a certain amount of time must pass before the products can be delivered as KRAV-certified. This withdrawal period is twice as long as the withdrawal period set for animals in conventional production. This is a precautionary measure to reduce the risk of residues in the products.

1.8 Apiculture (see Chapter 6)

Endeavouring to prevent bees and their feed from exposure to chemical pesticides, GMOs and other contaminants is the basis for KRAV-certified apiculture and affects the entire management.

Beekeepers must not place hives close to sources of contamination or GMO crops. As a rule, bees do not fly farther than three kilometres. Therefore nectar and pollen sources within a three kilometre radius from the apiary must be primarily of KRAV-certified, organic or natural origins. KRAV-certified honey or sugar must be used for feeding outside of the high season.

Diseases and attacks by pests must in the first place be dealt with using

preventive measures, for example by doing regular inspections, checking drone larvae and by keeping hives, frames and equipment clean. There are also a few aids permitted for use in combination with preventive methods.

When converting to KRAV-certified production, beekeepers must replace all existing wax with KRAV-certified wax. As it can be difficult to get adequate amounts of KRAV-certified wax, it is therefore possible to use conventional cap wax that does not contain any prohibited residues.

Materials used in beehives must be primarily of natural origin. Plastic material can be used, for example, as insulation, as long as it makes up less than half of the hive's total weight.

1.9 Aquaculture (see Chapter 7)

The goal for KRAV-certified aquaculture is to show consideration for the environment as well as for the contentment and health of aquatic organisms. They should live in a sustainable environment that satisfies their basic physiological and behavioural needs. For example, the animals used in aquaculture must have sufficient space so that they feel well and are able to behave in a manner that is natural for the species.

KRAV-certified aquaculture includes cultivation of algae and aquatic animals such as fish, crustaceans, echinoderms and molluscs as well as cultivation of aquatic organisms used for feed.

KRAV-certified aquaculture is entirely in accordance with the EU regulation for organic production with the addition of KRAV's general standards as well as the standards for labelling and marketing.

LOCATION

The KRAV-certified unit must be located and operated with consideration for the surrounding environment. Aquaculture animals must have good quality water with sufficient oxygen and a temperature and light conditions that are natural for them. The total discharges from the unit must not burden the surrounding area so that the biodiversity is adversely affected or cause eutrophication of the water area. It is also important that the production is located at a safe distance from effluent sources and clearly separated from conventional units.

INITIAL MATERIAL

Breeding work must focus on goals such as health and environmental sustainability as well as good growth with the minimum possible use of input factors. For breeding purposes, wild-caught as well as conventional organisms are permitted when necessary, but a conversion period is required for conventional breeding animals. It is prohibited to stimulate spawning by using hormones.

FEED AND FEEDING

Feed used in KRAV-certified aquaculture must be of good quality and appropriate for the species. Therefore fish raised in ponds or lakes are fed with feed that is naturally found in the waters, for example. If there is not enough natural feed, use of organic feed of plant origin is permitted.

For carnivorous aquaculture animals, feed must consist preferably of organic feed products from aquaculture. If these are not available, fishmeal and fish oil from organic aquaculture slaughter waste can be used. Raw materials from sustainable stocks are also permitted.

Additives such as vitamins, minerals, antioxidants and colourings must be of natural origin or as close to their natural form as possible. Synthetic/non-naturally occurring additives are prohibited.

HEALTH AND ANIMAL WELFARE

For fish farms, an important objective is to maintain a low level of aggression and to prevent fish from injuring each other. The aquaculturalist must therefore regularly check the cultivation unit and watch for the presence of stress and deviant behaviour. As well, protective and preventive measures must be taken against predators that can stress or damage the aquaculture.

Those engaged in cultivating fish must prevent diseases through, amongst other things, good care and cleaning, as well as effective vaccination against relevant infectious diseases. The objective is to avoid outbreaks of disease and minimise the need for medicine. Biological disease control must be prioritized over use of chemicals when possible and adequately effective. It is especially important to avoid the risk of antibiotic resistance in the natural environment. After treatment with medication, the withdrawal period is twice that of the national regulations. In KRAV-certified production, veterinary medicinal products and pesticides that do not have a withdrawal period according to national regulations, have a withdrawal period of two days.

HANDLING AND SLAUGHTER

All handling of aquatic animals must be minimized and take place with the greatest care in order to avoid stress and physical injury. When advisable, anaesthesia must be used when handling breeding animals.

Slaughter methods must ensure that fish are rendered unconscious immediately so that they do not feel pain. The best slaughter methods should be chosen according to the size of the harvest, the species and the production facility.

1.10 Wild Harvest Production (see Chapter 8)

The KRAV standards for Wild Harvest Production aim to promote and define how plants can be sustainably collected or harvested in nature. The objective

is to take into account the long-term capacity of the soil and ecosystem to produce the plants that will be gathered. The standards cover plants and fungi that are not cultivated, as well as plants that have run wild and spread naturally. Harvesting plants and fungi on natural pasture where the KRAV standards for crop production are complied with can also be certified. The standards do not however cover wild animals or aquatic plants and algae.

The area where plants are harvested must not have been exposed to contaminants or chemical pesticides prohibited according to the KRAV standards. In contrast to the EU regulation, KRAV also has a standard that says that harvesting must take into account local cultural traditions and the people who live in the area.

Those who want to certify production must produce a report that shows how the plants will be harvested in a sustainable way without a negative impact on the environment, animal life or people. The report must include a risk analysis. Documentation for the report can come, for example, from government agencies, the landowner or from non-governmental organizations.

Relevant parts of the KRAV standards for social conditions apply to pickers. All pickers must be registered and be able to be identified and written information must be available in a language that the pickers understand. The standards for social responsibility are an added value for KRAV-certified wild harvest production in comparison to EU organic which has no such standards.

1.11 Food Processing (see Chapter 9)

The purpose of the standards for KRAV-certified food processing is to maintain and develop the KRAV-labelled raw materials' added value and at the same time stimulate and promote the market for KRAV-labelled products.

Therefore food processing must be carried out using selected processes that are gentle for both the environment and the products. Processers should avoid use of non-naturally occurring substances and only a limited number of additives, processes and process aids are permitted. Only natural flavourings and certain enzymes can be used and unlike EU organic meat products, nitrite is prohibited in KRAV-certified products for precautionary reasons. Nitrite can change to nitrosamines in the stomach which increases the risk of cancer.

The basic principle is that there should only be KRAV-certified raw materials in food marketed with the KRAV name or label. However, to make it easier to develop KRAV-labelled products, up to 10% EU organic ingredients and maximum 5% conventional ingredients may be used. It is not permitted to mix EU organic or conventional ingredients with KRAV-certified ingredients of the same type. If the conventional ingredients are not included on the EU list of permitted conventional ingredients in organic products, approval for their use is required from The Swedish National Food Agency.

If the portion of KRAV-certified ingredients is less than 90%, the product

cannot be KRAV-labelled, but there is the possibility of indicating which ingredients are KRAV-certified.

1.12 Slaughter (see Chapter 10)

The purpose of the standards for slaughter is that KRAV-certified animals must be slaughtered in an environment that is as calm as possible and in slaughterhouses adapted to animal needs and behaviour. Slaughter must take place at a KRAV-certified slaughterhouse in order for the meat to be sold as KRAV-labelled. The EU regulation for organic production has no detailed standards for the handling of animals in connection with slaughter.

A KRAV-certified slaughterhouse must carry out systematic, preventive, animal protection work for all of the animals at the slaughterhouse, with a person responsible for animal welfare who participates in annual meetings with KRAV. The slaughterhouse must also get help from independent advisors on animal welfare so that they can strive for continual improvement in the animals' environment and welfare.

To minimize the stress which transport of animals involves, KRAV welcomes slaughter that takes place locally, preferably on the farm or in the immediate vicinity. Currently however this is not possible on a large scale, but a positive development towards an increase in small-scale slaughterhouses is underway around the country.

Animals can be stressed by other animals that are agitated, bright lights, air currents, noise and loud sounds, pain, blows and being bumped. Staff should take this into consideration and handle animals calmly and systematically. They should, for example, take advantage of the animals' natural behaviour when herding them and refrain from mixing established animal groups together with foreign animals. Electric prods or other forms of hard herding are prohibited. It is also important to keep the animals occupied.

Using carbon dioxide as is currently done, for example in connection with killing pigs, is not entirely optimal. Research shows that an animal can experience discomfort from the gas. When better gas anaesthetic alternatives than carbon dioxide in high concentrations are available in the future, these should be used.

Slaughtering animals on the same day as they arrive at the slaughterhouse is prioritized, but at present this is not entirely possible to apply to cattle, sheep and goats for logistical or animal welfare reasons. Therefore a limited number of ruminants may stay overnight under special conditions.

Documentation and identification of animals is important for traceability and so that the people who handle the animals are familiar with their origin. The slaughterhouse must use the tagging technique that is most gentle for the animals.

1.13 Feed Production (see Chapter 11)

The purpose of the standards for feed production is that producers must be able to supply animal feed that is healthy, adapted to the type of animal and not harmful for the environment. The basic principle is that raw materials of agricultural origin must be KRAV-certified.

Feed not made up of agricultural raw materials, for example mineral feed, cannot be KRAV-certified. A certification body, however, can assess whether such feed is permitted in KRAV-certified production after which if permitted it is listed on KRAV's website.

All feed must be produced using approved processes. For instance, the use of chemical solvents is prohibited. For the sake of the environment, the heavy metal content must not exceed the limit values. These limits are set taking into consideration that the KRAV limits for addition of heavy metals to soil must not be exceeded. The KRAV standards for the trace elements, minerals and technical feed additives that can be used in feed comply completely with the EU regulation on organic production.

GMOs are not permitted in feed used in KRAV-certified animal husbandry.

1.14 Production Aids (see Chapter 12)

The purpose of the standards for production aids is that farmers and consumers should have access to environmentally friendly inputs for cultivation. Examples of production aids are soil mixtures, fertilisers and plant protection products.

The production, mining, or gathering of raw materials for production aids must not lead to serious environmental disruptions. There are also limits for the amounts of heavy metals soil and fertiliser may contain. Production aids cannot contain or be produced from GMOs. In addition to the contents of Chapter 12, the chapter on crop production (Chapter 4) regulates the allowable ingredients for production aids.

A production aid can be either KRAV-certified or assessed as permitted. The latter means that a certification body has assessed that it is permissible to use in KRAV-certified production. If it is KRAV-certified, it can be labelled with the KRAV label for production aids. Some examples are various biological and chemical products as well as some mineral products that farmers use in their crop production. Synthetic micro-fertilisers cannot be KRAV-certified since they can only be used in exceptional cases when there is a provable shortage. Production aids targeted towards consumers can also be KRAV labelled.

Production aids assessed as permitted are not KRAV-certified, therefore the producer cannot KRAV-label them. It must also not be written on the package that the aid is permitted according to the KRAV standards, but this can be provided in information about the product on for example product sheets or on websites.

In order to be used in KRAV-certified production, bio-fertilisers made from sorted household waste must be KRAV-certified. The same applies to fertiliser production from animal bi-products, for example bone meal. Digestate from biogas plants, where both permitted and non-permitted fertiliser is used, must be KRAV-certified or assessed as permitted.

Production aids that are KRAV-certified and assessed for permissibility are listed on www.krav.se.

1.15 Restaurants and Caterers (see Chapter 15)

The goal is that KRAV-certified restaurants contribute to making KRAV-labelled food more accessible. The purpose is also to show guests how far the restaurant has gone with their sustainable food efforts. The standards make it possible for those who want to start at a low level to do so and then to gradually increase the organic portion of the restaurant's selection.

The division of the levels is based on the size of the portion of approved food used by the restaurant based on the purchase value of the food. KRAV-certified as well as MSC-certified and plant-based EU organic foods are counted as approved. The KRAV-labelled food must account for at least half of the annual purchase of approved food.

The three levels are:

- Level 1: At least 25% approved food or at least 15 approved products.
- Level 2: At least 50% approved food.
- Level 3: At least 90% approved food.

The staff must be well-informed about KRAV and organic production, and in order to make things easy for guests, the restaurant must show which level they are certified for with a visibly posted certificate. The restaurant can also indicate on the menu which of the day's ingredients are KRAV-labelled, and if meals are delivered outside of the restaurant, for example for catering purposes, then the KRAV-labelled ingredients must be shown on the menu (for more information see Chapter 20).

The standards for restaurants can be applied to all forms of catering, restaurants and cafés, as well as companies that deliver grocery meal bags with recipes and raw materials to customers. Small production units such as group homes and preschools are also covered by the standards. The standards can also be applied to restaurants in a chain certification (read more about chain certification in a later section). In addition, restaurants must pursue an overall environmental performance, for example that includes use of ecolabelled cleaning products, renewable electricity and separation of waste.

1.16 Import and Bringing In Products (see Chapter 16)

The purpose of the KRAV standards for import and bringing in is to make it easier to buy and sell organic products from the rest of the world. The aim is

also that KRAV-labelled products and raw materials that are produced outside of Sweden will help to increase organic consumption and production in Sweden as well as in other countries. However in order for companies to be able to KRAV-label such products, they are required to comply with certain basic criteria which according to KRAV are lacking in the EU regulation on organic production. Therefore for products and raw materials that are to be KRAV-labelled, KRAV has certain additional standards compared to the EU regulation for import and bringing in. The additional standards originate from KRAV's added values for animal welfare, health, social responsibility and climate impact.

KRAV is part of the international organic movement and works to strengthen and uphold the cooperation that has been built up on a voluntary basis amongst these organizations within IFOAM.

Organic standards may differ between countries because different traditions, climate and conditions exist in various areas. Locally or regionally developed and adapted standards also have greater credibility for local producers than foreign standards. Therefore KRAV accepts that standards applied in other countries lead to KRAV-labelling, even though there may be certain differences between the standards. In the same manner, the EU and IFOAM also recognize other standards for organic production.

All this means that products and raw materials certified according to the EU regulation, or according to standards for organic production recognized by the EU regulation, can be KRAV-labelled if they have been produced in a manner that complies with the extra requirements in Chapter 16.

KRAV's assessment of certification systems is available at www.krav.se.

1.17 Fisheries (see Chapter 17)

The goal for KRAV-certified fisheries is that they should be sustainable, take into consideration the welfare of the fish, and deliver healthy food. Traceability is also fundamental. Consumers must know where the fish have been caught.

The KRAV standards for fisheries include all aspects of fisheries up until landing. The standards are formulated in Sweden and therefore relate primarily to fisheries in the northern part of the Northeast Atlantic.

KRAV-certified fishing must take place from sustainable stock and must not exceed the biological production ability of the ecosystem. Previously, KRAV's Fisheries Committee had responsibility for stock assessments, but from 1 January 2019, vessels are instead included in MSC-certified fisheries. The MSC standard includes sustainable stocks, minimized environmental impact and good fisheries management. KRAV-certified fisheries mean that the fishing vessel is also KRAV-certified.

There should be careful documentation showing where the vessel was fishing. Gear must be designed so as to limit by-catch of birds, mammals and unintentionally caught fish. KRAV also has standards for fish welfare, for

example limits for how long they can be left on a hook.

In order to minimise damage to the environment and the seafloor, KRAV also has standards for the fuels and lubricants that fishermen are permitted to use and beam trawling is prohibited. Bottom trawling is only permitted when fishing for North Sea shrimp and only under certain circumstances. To minimise greenhouse gas emissions, there are also limits on how much fuel may be used per kilo of landed fish.

For health reasons, levels of foreign substances in fish or shellfish must not exceed legal limits. Consumption of the product in question must also not be limited for any consumer group according to The Swedish National Food Agency's Dietary Guidelines. This means, for example, that herring from the Baltic Sea or the Gulf of Bothnia cannot be KRAV-labelled because of the dietary advice for children and women of childbearing age to avoid eating such fish more often than two to three times per year.

1.18 Standards for Certification Bodies (see Chapter 18)

The goal is a system that functions well, where the standards are interpreted in a uniform manner by competent auditors at the certification bodies authorized to audit and certify according to the KRAV standards.

The standards require that a certification body must be accredited, have a structured environmental management program and a contract with KRAV. There are also standards that outline the qualifications that auditors must have. For example, auditors must have specific qualifications within the types of production they audit.

KRAV regularly hosts meetings of representatives from all the certification bodies to discuss how the KRAV standards must be implemented.

1.19 Certification of Chains (see Chapter 19)

The purpose of the standards for certification of chains is that those with many similar places of operation are able to do part of the audits themselves, and thereby not require audits by the certification body every year at every location. Instead, the chain must have an internal auditing system.

A group of places of operation within restaurants and caterers can be chain certified. This is conditional upon there being central management to check compliance with the standards as well as central financial accounting. The chain must also have an internal system for nonconformities and be able to give support to places of operation that receive nonconformities.

An audit by the certification body is primarily focused on the chain's management as well as on the internal audit and management of nonconformities. The certification body carries out random checks and performs audits at a few places of operation every year in order to ensure that

the internal audit of the standards is functioning. Each place of operation must have at least one complete external audit by the certification body during a six year period, and an annual inspection by the company's internal audit.

1.20 Labelling and Marketing (see Chapter 20)

The aim of the standards for labelling and marketing is to increase and facilitate sales of KRAV-certified products, to ensure that the KRAV label is used correctly, as well as safeguard the credibility of the KRAV label.

The KRAV label is a trademark registered with The Swedish Patent and Registration Office. The registration gives The KRAV Association sole and exclusive rights to the KRAV trademark. This means that non-licensees are prohibited from labelling or re-labelling KRAV-certified products. However, it is permitted for both those who are certified or only registered for trademark use to use the KRAV name and label when selling unpackaged products directly to consumers. KRAV certification or registration is not required in order to indicate in product lists and advertising that others' pre-packaged products are KRAV-certified.

KRAV has different labels for different types of products. Besides the ordinary KRAV label, there is a label with English text for use outside Sweden and special labels for restaurants and for production aids.

KRAV-certified products covered by the EU regulation must also be labelled with the EU organic logo. It is however prohibited to use the EU organic logo on fisheries products as well as pet food, since there are no EU standards for these areas.

Information about who is responsible for the product and which certification body certified the product must always be clearly stated on the packaging.

Help Us to Improve

You can help us improve! Send an e-mail to lantbruk@krav.se or livsmedel@krav.se with your comments about our standards.

General Standards for Certification

2

This chapter contains the general standards for certification that apply to all KRAV-certified companies.

Contents of this chapter:

- 2.1 What it Means to be KRAV-certified
- 2.2 Certificates
- 2.3 Your Obligations when Certified
- 2.4 Audits
- 2.5 Non-Compliance with the Standards
- 2.6 Appealing Decisions or Lodging Complaints
- 2.7 Contract Issues
- 2.8 Change of Certification Body
- 2.9 Confidentiality
- 2.10 Use of Personal Information
- 2.11 Cooperation by Farmers with Subcontractors who are not KRAV-certified
- 2.12 Suspension due to Actions That May Harm the KRAV Trademark

2.1 What it Means to be KRAV-certified

2.1.1 Who can Become KRAV-certified

Becoming KRAV-certified is voluntary and open to anyone who complies with the KRAV standards and a **certification body** contract. **(EU/K)**

The KRAV standards for agriculture (Chapters 4-6) can only be used in the Nordic countries. The KRAV standards for fisheries are only applicable in the Northeast Atlantic and the Baltic Sea as well as in bodies of fresh water in the Nordic countries. Other KRAV standards can be used within the entire EU and EEA.

Companies outside the EU and EEA can be certified in accordance with Chapter 9, 16, or section 20.7. In this case the general standards in Chapter 3 are replaced by the standards in section 3.10. Otherwise production must comply with the standards in Chapters 2, 20 as well as 9, respective 16. **(K)**

2.1.2 Activities that Require KRAV Certification

Your company must be certified in the following cases:

- You produce, process, package, store, **import** or **bring in** products the company uses or markets with the KRAV name or label. **(EU/K)**
- You carry out services for a KRAV-certified company that entails **handling** unpackaged KRAV-certified products. **(EU/K)**
- You market a KRAV-labelled product and use your own name or trademark. **(EU/K)**
- Your restaurant uses the KRAV name or label to market your operation. **(K)**

2.1.3 Activities that Do Not Require KRAV Certification

Your company does not need to be certified in the following cases:

- You only handle pre-packaged KRAV-certified products. **(K)**
- You sell unpackaged products directly to consumers and are registered for trademark use. **(K)**
- You are a subcontractor and have made a contract with a KRAV-accredited agricultural company according to section 2.11. **(K)**
- You have a transport company and transport KRAV-certified products. Both the KRAV-accredited company responsible for loading the products and the KRAV-accredited company receiving the products must check that transport is carried out correctly. **(K)**

Note that the EU regulation requires auditing of certain companies that only handle pre-packaged products, such as wholesalers and e-commerce companies.

2.1.4 Types of Production

Certain KRAV standards are general while others are adapted to specific categories of activity. You can make a commitment to comply with the KRAV standards for one or several types of production.

The current types of production are **(K)**:

- Crop ProductionChapter 4
- Greenhousessection 4.6
- Mushroom Cultivationsection 4.7
- Animal Husbandry.....Chapter 5
- Apiculture.....Chapter 6
- Aquaculture.....Chapter 7
- Wild Harvest Production.....Chapter 8
- Food ProcessingChapter 9
- SlaughterChapter 10
- Feed ProductionChapter 11
- Production AidsChapter 12
- Restaurants and CaterersChapter 15
- Import and Bringing In.....Chapter 16
- Fisheries.....Chapter 17
- Certification of Marketers.....section 20.7
- Option: Hygiene Standards for Growing and Handling Fruit and Vegetables.....section 4.13

If you only store and/or handle KRAV-certified products in bulk, in large or small volumes, you must be certified according to Chapter 9 (Food Processing), 11 (Feed Production) or 12 (Production Aids) depending on the type of activity. **(K)**

If you are a farmer and process your own KRAV-certified raw materials, you must comply with the standards in Chapter 9.

If you are a farmer and have a shop where you purchase others' products that you sell using your own name, you must be certified according to Chapter 9. (K)

If you are a farmer and have a shop where you sell only your own products, you do not require certification according to Chapter 9.

2.1.5 Registering with KRAV - New for Certification

You must register with KRAV information about your company, contact information and the type of activity you want to certify. When registered with KRAV you will be issued a KRAV number.

- i** You can register yourself at "Mitt KRAV" ("My KRAV") at www.krav.se. As well, some certification bodies help with this. You can also always contact KRAV.

2.1.6 Applying to an Accredited Certification Body

After you have received your KRAV number and submitted an application to an accredited **certification body**, you can be certified according to the KRAV standards for the various types of production. The types of production available are given in standard 2.1.4.

An application for KRAV-certification is a commitment to:

- comply with the relevant sections of the KRAV standards (EU/K),
- provide completed application forms to the certification body (EU), and
- pay the appropriate fees for certification to the certification body (EU) and for the licence to KRAV. See also standard 2.7.4 (K).

- i** There is a list of accredited certification bodies at www.krav.se. Certification bodies provide application documents and information about current standards and prices. If you are applying for government subsidization for organic production or conversion to organic production, you must have submitted an application to a certification body at the latest by the last day for submissions to the Swedish Board of Agriculture for agricultural subsidies ("SAM" applications) in order to receive support for the current calendar year. Check the deadline and conditions for your application with the Swedish Board of Agriculture, see www.jordbruksverket.se.

2.1.7 When to Apply

For most activities, an application can be submitted at any time during the year. You must submit your application far enough in advance so that the **certification body** has enough time to deal with it prior to when you want to start the KRAV-certified activity. The relevant certification body provides information about when to submit your application. If your production requires a **conversion period**, the certification body must provide notification of when your production can be certified. (K)

For wild harvest production (Chapter 8), the final application date is during the spring so that the certification body can plan and carry out an **audit** in time. This date can be found in the certification body's application documents for each year. For apiculture (Chapter 6), 1 May is the last day to apply. (K)

2.1.8 Compliance with Standards and Revisions to the Standards

Those who are **KRAV-certified** must comply with the current KRAV standards. These are published annually at www.krav.se. (K)

KRAV notifies certified entities well in advance of changes in the standards for KRAV-certified production.

2.1.9 KRAV Standards Comply with EU Regulation (EC) 834/2007

The KRAV standards are written to also comply with the standards in the EU regulation (EC) 834/2007 on organic production. If the standards in the EU regulation are stricter than the KRAV standards, the EU regulation takes precedence. (EU)

The following types of KRAV production do not have an equivalent in the EC regulation: Option: Hygiene Standards for Growing and Handling Fruit and Vegetables, (section 4.13), Restaurants and Caterers (Chapter 15), and Fisheries (Chapter 17). (K)

2.1.10 KRAV Labelling in Relation to Other Standards for Organic Food

You must not KRAV-label products produced in Sweden if the raw materials are certified according to an organic **standard** other than the KRAV standards. (K)

Specific standards must be followed in order to KRAV-label products **imported** or **brought in**, see Chapter 16 (Import and Bringing In). (K)

2.1.11 Compliance with the Law

You must follow the applicable laws and regulations for the type of production you are certified for. Furthermore you must also act responsibly, amongst other things, by not taking part in production or activities that are in conflict with the KRAV statutes or that could damage the KRAV trademark.

All laws and regulations that apply to your activity take precedence over the KRAV standards. (EU)

2.2 Certificates

The standards in this section deal with how certified companies get their **certificate**, i.e. the affidavit for the types of production the company is certified for. Without a certificate, you are not allowed to sell products with the KRAV name or label on them.

2.2.1 Valid Certificates

You must have a valid **certificate** that shows that your production is KRAV-certified. You are not allowed to sell products with the KRAV name or label on them before you have received a signed certification contract and a certificate for the type of production concerned from your certification body (see standard 2.1.4). Before a certification body issues a certificate, an **audit** of your activity must be carried out and the results approved. (EU)

A certificate is valid for the period given on the certificate, regardless of whether a new edition of The KRAV standards has been published after the date of issue.

2.2.2 A Certificate for Each Type of Production

You must have a certificate for each type of production included in your business activity. If you have a **certificate** and you start a new activity within a type of production that you have not previously been certified for, you must apply for a new certificate from the certification body. The different types of production are listed in standard 2.1.4. **(K)**

2.2.3 Report Changes

You must inform the **certification body** about all significant changes in your activity. **(EU)**. Significant changes are, for example, change of location of an activity, change of ownership, or change of contact person. Another example of a significant change is if a certified production changes so that information previously submitted about the production that is significant for certification is no longer correct.

You must also report the following changes to your certification body **(EU)**:

- new **agricultural holdings**, barns, or **greenhouses**
- new parcels
- new animal species
- new **place of production**
- new production line
- new processes.

Your certification body must determine if the change in activity requires a new audit in order for you to continue to be certified.

2.2.4 Notify Articles to KRAV

If you are certified for one or more of the following types of production: food processing, feed production, production aids or import and bringing in, you must inform KRAV of the KRAV-certified products you plan to sell prior to marketing them. You must report the products at the article level and you report them by registering your articles in “Mitt KRAV” (“My KRAV”) at www.krav.se. You must also give an EAN-code if you have one for the article you are registering. As well, you must also deregister items no longer marketed as KRAV-certified. **(K)**

Your **certification body** verifies that the information is correct when they carry out an audit. **(K)**

*Since **KRAV-certified** companies can make new products on already certified production lines at any time during the year, articles can be registered at any time during the year. Certification means that the company has routines for complying with the KRAV standards even when new articles are produced. Certification does not mean that individual products must be checked by KRAV or the certification body before they can be marketed.*

2.3 Your Obligations When Certified

2.3.1 Inform Staff

You must inform everyone involved in your activity about the implications of KRAV-certification. It is your responsibility to ensure that all staff handling KRAV-certified products are adequately aware of the requirements for the activity so that they can comply with the standards. **(K)**

2.3.2 Contact Person

You must designate a contact person for each **production unit** covered by the contract for certification according to the KRAV standards. You must give the name of the contact person to your **certification body**. The contact person must be well informed about the KRAV standards and the activities at the production unit. **(K)**

2.3.3 Provide KRAV with Information About Your Production

You must provide information about your production to KRAV and ensure that the information is current and correct. You can do this directly at “Mitt KRAV” (“My KRAV”) at www.krav.se or via your certification body, if your certification body offers this service. This applies to the production you applied to have KRAV-certified. You must provide information about your production at the latest by the date that applies for your type of production. Current information about the applicable annual deadlines can be found at www.krav.se.

As well, you must check that your company and contact information at KRAV is up-to-date. You can do this directly at “Mitt KRAV” (“My KRAV”) at www.krav.se or via your certification body, if your certification body offers this service. **(K)**

2.3.4 Documentation Requirement

You must document how you comply with the KRAV standards and the documentation must be made available according to instructions from the **certification body**. The certification body has the right to require that you have the documentation it deems necessary. **(EU)**

You must keep current documentation about the **products** and raw materials you purchase for use in KRAV-certified production. The documentation must include information on what you have purchased, how much was bought, as well as who or what company supplied the products or raw materials. As well, you must keep current documentation about the KRAV-certified products you sell, i.e. what you have sold, how much and to who or what company. **(EU)**

In order for purchased raw materials and **products** to be considered KRAV-certified, it must be clearly stated on invoices, delivery vouchers or other documentation (e.g. a **certificate**) that they are KRAV-certified. **(EU/K)**

You must save the documentation for at least two years or according to the applicable law so that it can be checked by the certification body. **(K)**

2.3.5 Incoming and Outgoing Delivery Vouchers and Invoices

In order for purchased raw materials and products to be counted as KRAV-certified, it must be clearly stated on the invoices, delivery vouchers or other documentation (for example certificates) that they are KRAV-certified. If the KRAV-certification is not clearly stated, you are prohibited from further handling, processing, or selling the products as KRAV-certified.

On outgoing invoices, delivery vouchers or other documentation, it must be clearly stated which products are KRAV-certified. **(EU/K)**

Those certified according to Chapter 16 and selling unpackaged products that may be KRAV-labelled must clearly state the following on delivery vouchers, invoices or other outgoing documentation:

- country of origin **(K)**
- that the product has been certified according to the KRAV standards **(K)**
- the code number of the certification body that certified the company that carried out the final preparation of the product **(EU)**
- the name of the certification body that KRAV-certified your production (unless it is the same certification body as in the above point) **(K)**.

2.3.6 Report Nonconformities

You must as quickly as possible report to your **certification body** if anyone within your operation violates the KRAV standards in a manner that results in a major **nonconformity** (see standard 2.5.7). You must do this regardless of who was involved and whether or not it was a mistake. **(EU)**

2.3.7 Inform Buyers about Changes

If a **product** that was KRAV-certified no longer is, you must immediately correct your information about the product so that customers are not misled. Amongst other things, it may be necessary to actively inform buyers to avoid incorrect marketing. **(EU)**

2.3.8 Economic Liability Towards Buyers

When you sell **products** using the KRAV name or label, you have full responsibility for complying with the KRAV standards in KRAV-certified production. Your company is economically liable towards buyers if you supply products as KRAV-certified that are not. **(K)**

2.4 Audits

2.4.1 Audit Interval

Your **certification body** must carry out at least one complete, physical **audit** per year of your KRAV-certified activity. **(EU)**

Certification bodies may carry out inspections without a physical visit of companies outside Sweden that are inspected in accordance with EU regulations by another certification body. This only applies to certification

according to the types of production of food processing and importing and bringing in, and must be based on the certification body's risk assessment. **(K)**

For animal husbandry, on average, more audits are required than for other KRAV-certified production. During the first two years, KRAV-certified animal farmers must be audited twice per year in-person, once during the **stable period** and once during the **grazing period**. Starting with the third year of being a KRAV-certified animal farmer, the **certification body** carries out at least one in-person annual audit. **(K)**

2.4.2 Unannounced and Extra Audits

The **certification body** can carry out unannounced or announced audits and extra audits at any time during the period of the contract. **(EU)**

Ten per cent of a certification body's audits must be unannounced audits and 10% must be risk-based extra audits (these do not need to be unannounced). These audits must be distributed among all the certified companies. **(EU/K)**

For animal husbandry farms, the certification body must make 30% unannounced extra audits per year, for example, at critical times. The certification body distributes these unannounced audits in part according to a risk analysis and in part completely at random. These unannounced extra audits can be with regard to specific issues or be more comprehensive. **(K)**

For slaughterhouses (with the exception of **small slaughterhouses**) certification bodies must carry out at least one annual unannounced extra audit which focuses on management of live animals (see also standard 10.1.7). **(K)**

2.4.3 Access

The **certification body** is entitled to inspect and receive documentation on all your activities if it considers it necessary in order to certify the registered production. **(EU)**

You must **(EU)**:

- provide all information about the operation in question that is requested by the certification body, for example accounting, **certificates**, and documents
- give the certification body access to all land, **greenhouses**, stables, warehouses, manufacturing and production facilities, sales locations, cooking kitchens, serving kitchens and other places that are part of the operation.

2.4.4 Sampling

The **certification body** must take samples of products and cropland from the equivalent of 5% of all certified companies as well as in the case of suspected non-compliance with the standards. The samples must be analysed for prohibited substances such as prohibited **pesticides**, **GMOs**, food additives and pharmaceuticals. **(EU)**

2.5 Non-compliance with the Standards

This chapter deals with **nonconformities**. A nonconformity is when an activity either partially or completely does not comply with a KRAV standard. There are three levels of nonconformity: minor, major and grounds for suspension.

2.5.1 Registering Nonconformities

When an **auditor** discovers a **nonconformity**, the auditor must document it. Each individual incident of non-compliance with the KRAV standards must be documented as a nonconformity. This is called registering a report on a nonconformity. **(K)**

Only one incident per report may be documented, but an incident can involve non-compliance with several different standards.

2.5.2 Closing of a Nonconformity

All **nonconformities** must be dealt with. Nonconformities are dealt with in two steps: on the one hand you must correct the problem in question and on the other hand you must take measures to prevent further occurrences of the nonconformity. You must also report the actions taken to your **certification body**, which determines if the preventive measures are adequate. If the certification body approves the measures, the nonconformity is considered closed. If the measures are not approved, the nonconformity can be closed by issuing a sanction. Exactly how nonconformities are closed varies according to whether they are minor, major or grounds for suspension. **(K)**

A sanction can be, for example, the suspension of a certificate for animals, parcels of land, or products.

2.5.3 Immediate Closing of a Nonconformity

In some cases a **nonconformity** can be taken care of so quickly that it can be closed while the auditor is still on site. Such nonconformities must be registered with a report, dealt with and prevented from occurring again in the same manner as other nonconformities. It is thus easier to see if a problem recurs. **(K)**

2.5.4 Minor Nonconformities

A minor **nonconformity** is when your activity does not comply with one or more individual requirements of a KRAV standard. In the case of a minor nonconformity, you must respond to the auditor within 28 working days. Your response must include:

- which measures you have taken to correct the problem, and
- which preventive measures you have taken or will take to prevent a recurrence of the nonconformity.

Within five working days your **certification body** must notify you if they have decided to approve the measures you have taken. The nonconformity

is considered closed when the certification body has approved the measures taken. (K)

2.5.5 If Measures to Remove a Minor Nonconformity are Not Approved

If the **certification body** does not approve your response, they will provide notification that the nonconformity is classed as a major nonconformity and the case is handled according to standards 2.5.7-2.5.11.

If the certification body considers that your response only partly solves the problem, they can request extra information. The amount of time you have to answer is determined by the certification body. (K)

2.5.6 Checking Measures to Remove a Minor Nonconformity

The measures you have taken to correct a nonconformity and prevent it from recurring will be checked by the **certification body** during the next audit. If it turns out that you have not corrected a **nonconformity** or prevented it from recurring as documented in the response, the auditor must treat the nonconformity as a major nonconformity. (K)

2.5.7 Major Nonconformities

The following result in major **nonconformities** (K):

- You have used prohibited chemical products in crop production.
- You have used GMOs or products made of or with GMOs.
- You have used prohibited additives or process aids in production of KRAV-certified food.
- You have marketed a raw material or product as KRAV-certified though it is not.
- You have not complied with the standards for animal husbandry, which are marked as a major nonconformity in Chapter 5 Animal Husbandry.
- You carry out production or activity that conflicts with current laws and regulations for the types of production you are certified for (see standard 2.1.11).
- Your activity has significant deficiencies with regards to social responsibility (see section 3.1).
- You are certified under Chapter 16 (Import and Bringing In) and production of the products that are or will be KRAV-labelled show significant deficiencies with regards to social responsibility (see section 16.4).
- You have not handled a minor nonconformity according to standard 2.5.4 or the certification body has not approved your measures according to standard 2.5.6.

2.5.8 Major Nonconformities that Can be Corrected

If your **certification body** determines that a **nonconformity** can be corrected,

they request an action plan from you. You must submit it to the certification body within seven working days. The plan must describe **(K)**:

- the measures that you will take to correct the problem,
- the reason for the nonconformity, and
- the preventive measures that you will take to prevent the nonconformity from recurring.

Your certification body must notify you within five working days if they have decided to approve the action plan. If the plan is approved, the certification body will do a follow-up by carrying out an extra **audit** within 28 working days after the original audit. If necessary, for example if the audit must be done in the right season, the extra audit may be done more than 28 days after the original audit. When the certification body has done the extra audit and verified that your measures have been implemented, the nonconformity is closed.

The certification body has the right to require payment for this extra audit. **(K)**

2.5.9 If Measures to Close a Major Nonconformity Are Not Approved

If your **certification body** does not accept your action plan, they will decide to totally or partially decertify the production in question. The case is then handled as a major **nonconformity** that cannot be corrected (see standard 2.5.11).

In some cases the certification body can decide to require removal of the KRAV label from your products instead of total or partial decertification (see standard 2.5.13).

The certification body can request extra information if they consider that the situation is close to a satisfactory solution. **(K)**

2.5.10 If Measures to Close a Major Nonconformity Are Not Complied With

If at the follow-up **audit** a major **nonconformity** has not been corrected, the certificate for the production in question is totally or partially withdrawn.

When measures to correct the major nonconformity have been carried out and the **certification body** has verified this through an extra audit, a new **conversion period** begins for production that has a conversion period. **(K)**

2.5.11 If a Major Nonconformity Cannot be Corrected

If the **certification body** determines that a **nonconformity** cannot be corrected, they must totally or partially decertify the production. You must then notify your certification body within seven days about the measures you have carried out as a result of the decertification. You must inform your customers that one or more **products** are no longer KRAV-certified and recall such products.

In some cases the certification body can decide to require removal of the KRAV label from your products instead of total or partial decertification (see standard 2.5.13). **(K)**

2.5.12 Nonconformities that Constitute Grounds for Suspension

In the case of very serious **nonconformities**, your **certification body** may decide to suspend you for from one to three years. You cannot be KRAV-certified during the suspension period. You can be suspended if your production seriously deviates from “The IFOAM Principles of Organic Agriculture” (see Chapter 1) in any of the following ways:

- you seriously deviated from animal welfare standards
- you repeat a major nonconformity for the third time during a five year period.

The following can also result in suspension:

- you have consciously used prohibited chemical products in crop production
- you have consciously used genetically modified organisms (**GMOs**) or GMO products
- you have consciously used prohibited additives in KRAV-certified food
- you have consciously declared that a non-KRAV-certified raw material or product is KRAV-certified.

If the KRAV licensee is a legal person, a managing representative’s action can be ascribed to the legal person.

After the suspension period, you can apply for certification according to the same conditions as for new certification. **(K)**

2.5.13 Label Removal

Your **certification body** can require removal of the KRAV label from your products for a certain period until they have approved your corrective measures and closed the major **nonconformity**. This means that during that period you cannot sell the products concerned as KRAV-certified. When the nonconformity is closed and you again comply with the standards, the product can again be labelled.

In order for the certification body to make a decision to require label removal rather than to decertify production, you must be complying with all other standards while taking measures to close the nonconformity that resulted in the decision to require label removal. **(EU)**

2.5.14 Temporary Decertification Because of a Nonconformity

In the case of a major nonconformity or a nonconformity that constitutes grounds for suspension, the **certification body** can temporarily, totally or partially decertify your production. **(K)**

The temporary decertification is in effect while the nonconformity is investigated so that faulty products are not sold.

2.5.15 Withdrawal of a Certificate

The **certificate** for your production can be withdrawn totally or partially. If

your **certification body** has withdrawn a certificate for land or animals, a new **conversion period** is required according to standards 4.1.1 and 5.1.2.2. **(EU)**

The decision by the certification body documents the extent of the withdrawal, e.g. for specific parcels of land or specific products.

2.5.16 Restoration of a Certificate

For your production to regain its **certificate**, you must submit a plan with the following information:

- the reason for the **nonconformity**
- the preventive measures that you will take to prevent the nonconformity from recurring.

If the plan is approved, the **certification body** will carry out a follow-up extra audit within 28 working days after you gave notification that you implemented the planned preventive measures. The certification body has the right to require payment for this extra audit. **(K)**

2.6 Appealing Decisions or Lodging Complaints

2.6.1 The Right to Appeal

You have the right to appeal decisions by your **certification body**. Your certification body must give you a detailed description of how to appeal a negative decision regarding certification. **(EU)**

2.6.2 Appeal to the Right Authority

Your appeal of decisions regarding the KRAV standards must be sent in writing to your **certification body** which will make a decision on the appeal **(K)**. Appeals regarding decisions based on laws for **organic** production must be made to the County Administrative Board in the county where your certification body is registered. **(EU)**

2.6.3 Who Can Appeal?

Only you and your KRAV-certified company can appeal a decision in a specific certification case. The appeal must be received by the **certification body** within three weeks of when you received the decision in question. **(K)**

2.6.4 Reconsideration

The **certification body** can reconsider a decision if new information becomes available, even if you have not appealed. **(K)**

2.6.5 Complaints

Complaints about a **certification body** must be addressed directly to the certification body. Complaints regarding KRAV or the KRAV standards should be addressed to KRAV. **(K)**

2.7 Contract Issues

2.7.1 KRAV-certification

Once your **certification body** has received and dealt with your complete application, both you and the certification body must sign a certification contract. It is at this point that you become a **KRAV-licensee**. It is your responsibility to ensure that the information you provide to the certification body is correct. (EU)

2.7.2 Contract with the Certification Body

Your contract with your **certification body** regulates amongst other things (K):

- what information you must report to the certification body
- how this reporting must be done
- periods of notice
- other conditions concerning contract termination.

2.7.3 Contract Termination

When the contract ends, the **certification body** immediately revokes all valid **certificates**. After that point, you cannot use the KRAV label and/or refer to KRAV in any way. You must destroy all material that suggests that your operation is certified according to the KRAV standards. Furthermore, you cannot market products as KRAV-certified. (K)

For six months following termination of the contract, the certification body has the right to check that the KRAV name or label are not being used improperly. This includes, amongst other things, that the certification body has the right to inspect the company's financial accounts and check warehouses and packaging areas. (K)

If you stop producing KRAV-certified products but want to continue selling products left in stock, you must remain a **KRAV-licensee** and possess a valid certification contract. (K)

2.7.4 License and Certification Fees

The cost for KRAV-certification consists of both a license fee to the KRAV association and a certification fee to the **certification body**.

You do not pay a license fee for the current year if you become KRAV-certified after the end of October or if your KRAV certification ends before the first of March. (K)

You must pay a licence fee for the right to use the KRAV standards, the KRAV name or the KRAV label. The price list is set annually and is published at www.krav.se. KRAV sends an invoice for the license fee. (K)

In addition to the license fee you must pay the certification body for its certification services. The certification body sends an invoice for the certification fee. (EU)

2.7.5 Reporting Value of Sales

Those who are certified for one or more of the following types of production (**K**) must report the value of sales:

- food processing
- feed production
- production aids
- **import** and **bringing in**.

The report must be submitted by 15 March every year and be at the article level for KRAV-certified products sold during the previous calendar year. You must log in and report the values at www.krav.se.

2.8 Change of Certification Body

The standards in this section deal with the requirements if you want to change from one KRAV-accredited certification body to another KRAV-accredited **certification body**.

2.8.1 Application to Change Certification Body

If you want to change **certification body**, you must apply to the new certification body for a transfer of certification. The new certification body must then get assurance from the current certification body that the certificate for your activities is valid. (**EU**)

When changing certification bodies, the contract with the previous certification body must be terminated in writing when the contract with the new certification body is completed. (**EU**)

When you are issued a new **certificate**, the new certification body reports the change to KRAV. (**K**)

2.8.2 Documentation Requirements for Change of Certification Body

When changing **certification body** you must submit the following documentation to the new certification body (**EU**):

- audit report from the latest audit
- all reports of nonconformities and information about corrective measures from the four most recent years' audits
- copy of the current KRAV-**certificate**
- a report of what in your operation is: KRAV-certified, in first year's conversion, in second year's conversion, **EU organic** or conventional
- a land use report with associated map if you have certified crop production. The following must be marked on the map: first and/or second year conversion areas, and EU organic or conventional areas
- the number of animals of each kind and information about any on-going **conversion period** for animals if you have certified animal husbandry.

2.8.3 Audit Upon Change of Certification Body

The new **certification body** examines the documentation and determines if they have to carry out an on-site **audit** before issuing a new **certificate**.

All **nonconformities** must be corrected before you are issued a new certificate. This includes both nonconformities from the previous certification body as well as those found by the new certification body. **(K)**

2.9 Confidentiality

If you have not granted permission, neither the **certification body** nor KRAV can give out information about your business activities and production methods to anyone else, except in the following cases:

- KRAV has the right to give out information if it can be shown that the information was already generally known. **(K)**
- The certification body and KRAV have the right to make information public if a court or government agency requires it. The certification body and KRAV must then inform you about this as soon as possible. **(EU)**
- KRAV can use information about and from your certified activities even if the data would otherwise be protected by confidentiality if the purpose is to develop the organic market, for example, by publishing statistics. This may only be done in ways that do not reveal your identity. **(K)**
- Your certification body must provide the information they have regarding your production to KRAV if KRAV requests it. In such a case, confidentiality applies to KRAV according to this standard. **(K)**
- The certification body and KRAV are entitled to provide information that a certified party is violating the KRAV standards and in what way this has occurred. **(EU)**
- Certification bodies must exchange information when a customer changes certification body or when nonconformities are investigated. **(EU)**

2.10 Use of Personal Information

The **certification body** and KRAV keep databases of all certified operations. The purpose of this list is to be able to provide information about which companies are certified and in order to work efficiently. The standards in this section describe how to handle this information. **(K)**

i *There is information on the KRAV website about how we handle personal data and what rights those who are registered have under GDPR.*

For more information see: www.krav.se.

2.10.1 Publishing Information

KRAV and the **certification body** can publish information about name, address, type of certified production and certified products on their respective websites. The purpose of publishing this kind of information is to help buyers find KRAV-certified companies and products. (K) (I)

2.10.2 Consent for Use of Personal Information

By signing the certification contract, you consent to use of personal information by KRAV and the **certification body**. (K)

2.10.3 Access to Information

Upon your request, your **certification body** or KRAV must be able to provide the following information: how your personal information is handled, for what purposes information about you has been used, what information about you is registered, the source of the information, as well as to whom the information has been given. (K)

2.10.4 Withdrawing Consent and Changing Information

If you want to withdraw consent and permission for personal information to be used in this way or to correct information in the certification body's or KRAV's list, you must contact the **certification body** and KRAV. (K)

2.11 Cooperation by Farmers with Subcontractors that are Not KRAV-certified

The standards in this section describe how a KRAV-certified farmer can hire subcontractors who are not KRAV-certified and what is required in such a case.

2.11.1 When a Contract is Required

A **KRAV-certified** farmer can hire a subcontractor who is not KRAV-certified in the following cases (K):

- The subcontractor handles KRAV-certified **raw materials** that you have produced or purchased. Examples of **handling** are storage of products, grain drying and seed cleansing.
- The subcontractor **processes** a food from raw materials that you produced. You must have produced all the raw materials in a multi-ingredient product. **Additives**, common salt and water are not considered raw materials. An example of processing is oil pressing.

Subcontractor tasks cannot apply to slaughter. (K)

The **certification body audits** the subcontractor as part of the audit for the activity. (EU/K)

2.11.2 Reporting and Contracts

If you hire a subcontractor in accordance with 2.11.1 you must report it to

your **certification body** and sign a contract with the subcontractor prior to commencing the cooperation. (EU)

2.11.3 Contents of Contracts

The following must be included in contracts between a KRAV-certified farmer and a subcontractor (K):

- The subcontractor must agree to comply with the relevant parts of the KRAV standards.
- The subcontractor must give your **certification body** the right to carry out **audits** of the activity concerned according to the conditions in these standards.
- The KRAV-certified entity is responsible for any nonconformities by the subcontractor that the certification body finds.
- The subcontractor only has the right to KRAV-label the KRAV-certified farmer's products.
- The subcontractor cannot sell the products that the subcontractor has handled or processed for a KRAV-certified farmer.

2.11.4 List of Subcontractors

You must have an up-to-date and easily understood list of any subcontractors you have contracts with. (EU)

2.12 Suspension in Situations where the KRAV Trademark can be Damaged

2.12.1 Action that Constitutes Grounds for Suspension

If you violate laws and standards, or otherwise act in a reprehensible manner, and KRAV believes that your actions risk damaging the KRAV trademark or reputation, the **certification body** can make a decision to suspend you for one to three years. You cannot be **KRAV-certified** during the suspension period. (K)

Your actions can lead to suspension if you, for example (K):

- slander or spread faulty information about KRAV
- commit a criminal act of at least the normal degree relating to animal welfare, the environment, or social responsibility
- violate other laws and standards in a way that risks damaging the KRAV organisation or the KRAV trademark or reputation
- act in a reprehensible manner in any other way that risks damaging the KRAV organisation or the KRAV trademark or reputation.

If the KRAV licensee is a legal person, a leading representative's action can be attributed to the legal person.

2.12.2 Compensation

If you act in such a way that KRAV must intervene to a substantial extent to protect its trademark, you can be liable for additional costs incurred. (K)

General Standards

3

This chapter contains standards relevant for those certified according to the KRAV standards. If you carry out your activity outside the EU/EEA you must comply with the standards in section 3.10 instead of the standards in sections 3.1 to 3.9.

The following standards in Chapter 3 apply to the entire activity for all KRAV-certified companies regardless of whether or not the company has any production facilities where they carry out production:

- Section 3.1, for example Respect Human Rights (3.1.2), Compliance with Laws on Social Responsibility (3.1.3), and Safe and Hygienic Living Conditions (3.1.5)
- Section 3.6, for example Protection of Natural and Cultural Environments (3.6.1), Hazardous Waste (3.6.3), and Systematic Environmental Management for Other Companies (3.6.8)
- Standards 3.7.1-3.7.2 concerning fuel-efficient driving for transport and professional drivers, and company salespeople.

The following standards in Chapter 3 apply only to KRAV-certified companies or production facilities that carry out production:

- Section 3.2 applies to handling and storage of KRAV-certified products.
- Section 3.3 applies to use of substances and materials in KRAV-certified production.
- Section 3.4 applies to procedures for hygiene and disinfection as well as pest control in facilities where KRAV-certified production takes place.
- Section 3.5 applies to packaging of KRAV-certified products.
- Section 3.7 applies to the use of renewable electricity, energy efficiency and energy audits in facilities where KRAV-certified production takes place.

Contents of this chapter:

- 3.1 Social Responsibility
- 3.2 Handling and Storing of KRAV-certified Products
- 3.3 Substances and Materials
- 3.4 Reduction of Environmental and Health Impacts due to Measures Related to Hygiene
- 3.5 Packaging
- 3.6 Protection of Natural and Cultural Environments
- 3.7 Energy Use
- 3.8 Energy Planning for Agricultural Companies
- 3.9 Energy Planning For Greenhouses
- 3.10 General Standards for Certification Outside the EU/EEA
- 3.11 Climate Reporting

3.1 Social Responsibility

This section includes standards for working conditions and the working environment.

3.1.1 The Labour Force Concerned

The standards for social responsibility apply to the entire labour force in a KRAV-certified activity. This includes seasonal workers, immigrant workers, staff from agencies supplying temporary workers, or anyone who out of personal interest helps with the activity (for example volunteers or trainees).

The standards do not apply to **(K)**:

- companies without staff or hired labour
- service companies
- transport companies,
- tradespeople
- other workers who do not work with the **core activity**.

3.1.2 Respect Human Rights

You must respect basic human rights in all aspects of your activity. **(K)**

The KRAV standards on social responsibility are based on the UN Universal Declaration Of Human Rights, the UN Guiding Principles on Business and Human Rights, the OECD Guidelines for Multinational Enterprises, the UN Global Compact as well as The International Labour Organization's (ILO's) conventions and recommendations regarding social responsibility.

3.1.3 Compliance with Laws on Social Responsibility

You must comply with national labour law regarding working conditions and the working environment as well as The European Convention on Human Rights (Article 4). KRAV has chosen to emphasize the following aspects of these laws as especially important **(K)**:

- employment contract
- discrimination
- salary
- working hours
- sickness and accidents
- housing/overnight accommodation
- education and communication.

i *These selected aspects are found in the checklist - Social Responsibility in connection with KRAV Certification which is available at www.krav.se.*

3.1.4 Checklist for Social Responsibility

Those engaged in activities within areas where KRAV considers there to be an elevated risk for noncompliance with the standards on social responsibility must fill in a checklist (see Standard 3.1.3) prior to audits.

The activities are (K):

- wild harvest production
- activities that hire seasonal workers
- activities with foreign labour
- other cases where your certification body determines there are risks.

3.1.5 Safe and Hygienic Living Conditions

If an employer offers employees living accommodations, the accommodations must be safe and hygienic. (5L)

This can apply to, for example, hygiene, health, environmental and fire protection in housing for seasonal workers.

3.1.6 Multilingual Information

Written information needed by employees to carry out their work must be available in a language that the employee understands (5L).

This can apply to, for example, work routines, employment contracts and the KRAV standards for social responsibility.

3.2 Handling and Storing KRAV-certified Products

This section gives standards for storing and handling KRAV-certified **products**.

3.2.1 General Separation

You must handle KRAV-certified **products** in such a way so that there is no risk of mixing them with non-KRAV-certified products. You must have clear routines for storing and handling KRAV-certified products so that they are always kept separate from non-KRAV-certified products. (EU)

3.2.2 Separation During Processing

If you use the same premises, machines, etc. for both KRAV-certified production and production which is not KRAV-certified, the risk of mixing them up must be minimised by clearly separating them during the production process. You must carefully clean items such as containers, transportation equipment and machines each time production of KRAV-certified products begins. You must make sure there are written procedures to ensure that the separation is maintained. (EU)

3.2.3 Avoiding Contaminants

You must have procedures in place to ensure that KRAV-certified **products** and production aids are not contaminated by unwanted substances in the surroundings (for example by containers or packaging). **(EU)**

If you are going to store KRAV-certified products in packages or wrapping that previously held non-KRAV-certified products, you must carefully clean the packages or wrapping beforehand. **(EU)**

3.2.4 Receiving a KRAV-certified Product

When you purchase KRAV-certified **products**, you must check, upon delivery, that the product is properly labelled and packed in such way that it cannot be mistaken or mixed up with other products. You must be able to give an account of how you check goods upon reception. **(EU)**

You must always ask to see the current KRAV **certificate** before purchasing **unpackaged** KRAV-certified products. The certificate does not need to be shown for subsequent purchases from the same seller unless the certificate has expired at the next purchase. In that case you must request to see a new certificate. **(EU)**

3.2.5 Labelling for Storage

KRAV-certified **products** must be stored clearly labelled with the KRAV name or label and in their respective unit. The only exception is when all products in a storage space are KRAV-certified. **(EU)**

3.2.6 Storage Atmosphere

You can use airtight storage and storage in a controlled atmosphere (carbon dioxide, nitrogen gas, argon or oxygen). **(EU)**

3.3 Substances and Materials

The standards in this section cover how to work in a preventive manner in choosing substances and materials for use in your activity.

3.3.1 General Guidelines for Substances and Materials

You should try to use substances and materials in your KRAV-certified production that meet the following general requirements **(K)**:

- they must not be non-naturally occurring
- they must not pose risks to human health or the environment
- they must promote good animal care
- the production process must be sustainable from an environmental perspective

- their use must contribute to and be necessary for good food safety
- their use must be in accordance with the understanding and expectations of consumers.

3.3.2 Precautionary Principle – Substitution Principle

You must not use chemical products or biotechnological organisms that do not meet KRAV's general criteria for substances and materials in standard 3.3.1 if they can be replaced by products or organisms that are presumed to be less harmful. **(SI)**

3.3.3 Preventive Measures

You must take preventive measures such as risk assessment, hygienic and construction measures, monitoring as well as cleaning in order to minimize the use of chemical substances and risks for contamination. **(EU)**

3.3.4 Ban on GMOs

You are prohibited from using genetically modified organisms (**GMOs**) or products made of or with GMOs in your KRAV-certified activity. The only exception is veterinary medicinal products. The ban covers the following **(EU)**:

- food ingredients (including additives and flavourings)
- processing aids (including extraction solvents)
- feed materials and multi-ingredient feed
- feed additives and processing aids for feed production (including extraction solvents)
- seed and vegetative propagating material
- plant protectants
- fertilisers and soil improvement products
- microorganisms
- animals.

The ban against cultivating genetically modified crops applies to your entire **agricultural holding**. If you cooperate with another agricultural company in accordance with standard 4.3.2, the standard also applies to these agricultural holdings. **(K)**

3.3.5 Risk Assessment for GMOs

You must use the most current edition of KRAV's risk lists for **GMOs** in order to determine which measures to take to ensure that a product or ingredient does not contain GMOs or is made of or with GMOs. In certain cases a document is required and in other cases an analysis of the product you purchase **(K)**. In the case of analysis, the maximum permissible level allowed for unintentional presence of GMOs or genetically modified material is 0.9%. **(EU)**

i *The KRAV risk lists for GMOs (1 January 2021 editions) are available at: www.krav.se.*

KRAV thus complies with the GMO limit values legislated by the EU. For GMOs that are not approved by the EU, the upper limit is 0.1%.

3.3.6 Use of Nanomaterials and Nanotechnology is Prohibited

Food that contains or consists of engineered nanomaterials cannot be KRAV-labelled. Further, you must not use engineered nanomaterials in KRAV-certified production, including packaging and other surfaces that the product comes into contact with. **(K)**

3.4 Reduction of Environmental and Health Impacts due to Measures Related to Hygiene

This section deals with standards for working with hygiene.

3.4.1 Scope

The standards cover all types of hygienic measures i.e. cleaning and disinfecting in facilities where you carry out KRAV-certified production. Pest control measures carried out adjacent to facilities are also included. **(K)**

3.4.2 Documentation

You must document routines for cleaning and disinfecting. The routines need to include what must be cleaned, the method that must be used, how often to clean and the cleaning agents that must be used. Pest management measures must always be documented. **(EU)**

3.4.3 Permitted Cleaning Agents and Disinfectants

The cleaning agents you use must be ecolabelled with The Nordic Ecolabel, Good Environmental Choice or the equivalent if such products are available for the task at hand. **(K)**

For cleaning and disinfecting animal stalls, milking facilities and teats you must use products approved by “Bra Kemråd” (“Good Chemical Advice” - in Swedish only) within the area of use that they are approved for. **(K)**

Products approved by “Bra Kemråd” can be found at www.brakemrad.se (in Swedish only).

As well, you can use the following substances for cleaning and disinfection in production and storage areas where KRAV-certified products are stored or handled **(K)**:

- potassium and sodium soap
- water and steam
- lime wash,
- lime
- quick lime
- caustic soda

- caustic potash
- hydrogen peroxide
- natural plant extracts
- citric acid, peracetic acid, formic acid, lactic acid, oxalic acid and acetic acid,
- alcohol
- nitric acid (dairy equipment)
- phosphoric acid (dairy equipment)
- sodium carbonate.

You can use cleaning agents and disinfectants that are not specified in this standard as approved if they are required in order to comply with laws or requirements of government agencies (**EU**). The standards for veterinary treatment apply when using prescribed veterinary pharmaceuticals (see standards 5.1.11.9-5.1.11.14) (**K**).

3.4.4 Pest Control

For pest control at KRAV-certified production sites, you must always first take preventive steps, for example, blocking entry. As a second option, you can use traps or other mechanical measures. (**K**)

The following methods are permitted (K):

- freezing
- ultrasound
- UV-light
- heat
- steam
- diatom powder
- oxygen reduction with nitrogen gas
- pheromones
- electricity.

3.4.5 Chemical Rodenticides

You must either have valid authorisation and competence documentation for use of substances against rodents (rodenticides) or hire a professional pest control company. You must document the location of pest control stations, the substances used, who has carried out the pest control and when it took place. You must also carry out an evaluation of the effectiveness of the pest control. (**K**)

3.4.6 Pest Control on Premises Without KRAV-certified Products

You can disinfect or carry out pest control by means other than those given in 3.4.3 and 3.4.4 if it takes place in premises where no KRAV products are handled or stored for the time being. You must then take measures to ensure that no residues of the substances used can contaminate KRAV-certified products. You must keep a record of the disinfection and pest control measures carried out. (**K**)

3.4.7 Exceptions in Shops Only After Examination

After examination by a certification body, pest control in shops may be permitted even when KRAV-certified products remain on the premises. (K)

3.5 Packaging

This section includes standards for packaging.

- i** *KRAV has made a packaging handbook to help you comply with the standards for packaging. It can be downloaded from www.krav.se.*

3.5.1 Resource-efficient Packaging Solutions

The main purpose of packaging is to protect and preserve the product. You must therefore choose or design packaging so that food, feed or production aids reach final consumers without unnecessary loss of quality, and so that waste is minimized at every stage. (K)

In addition, the packaging solution must as a whole be as resource efficient and as climate neutral as possible by taking the following into account (K):

- using as little material as possible
- using renewable packaging material when possible
- using recycled material when possible
- making sure packaging can be re-used or recycled in existing systems,
- making sure packaging favours energy efficient methods of transportation
- making sure it is easy for consumers to empty and sort packaging.

During inspections, you must be able to show that this has been done. (K)

3.5.2 Avoid Substances and Materials that are Harmful for Human Health and the Environment

You must try to ensure that substances and materials used in packaging of your KRAV-certified products are non-toxic. This is especially important for the part of the packaging that comes in contact with food, feed or production aids. (K)

You must check if any of the SIN substances listed in Appendix 3 have been intentionally used in your packaging, and in that case make a phase-out plan. Polymerization aids or initiators used in the manufacture of plastics do not need to be reported. This standard applies only to **primary packaging**. (K)

Appendix 3 lists the SIN substances that can be found in food packaging. The appendix is updated annually based on the current SIN list published by ChemSec, which means that additional substances may be added in the next edition of the KRAV standards.

- i** *There are aids on the KRAV website for checking for SIN substances and for making a phase-out plan, see www.krav.se.*

3.5.3 Ban on Bisphenol A

BPA (Bisphenol A) must not intentionally be used in packaging for KRAV-certified products. This standard applies only to **primary packaging**. (K)

3.5.4 Ban on PVC and Other Chlorine-based Plastics

PVC (polyvinyl chloride) and other chlorine-based plastics must not be used in packaging for KRAV-certified products. This standard applies only to **primary packaging**. (K)

PVC may however be used in lid seals and liners on metal, when you can show that alternative solutions do not guarantee adequate shelf-life or quality of the food in question. A condition is that you are working on a phase-out plan.

(K)

- i** *Information on and aids for making a phase-out plan can be found on the KRAV website, www.krav.se.*

3.5.5 No Preservatives or Disinfectants

Packaging must not be treated with preservatives or disinfectants. Disinfection with the help of hydrogen peroxide is however permitted.

Note that engineered nanomaterials are prohibited in packaging according to standard 3.3.6.

3.6 Protection of Natural and Cultural Environments

The standards in this section are about how to show consideration for natural and cultural environments.

3.6.1 Protection of Natural and Cultural Environments

You must always show care for natural and cultural environments, especially for natural and cultural environments that warrant protection if your production is carried out in or near such environments. (K)

In standards 4.5.1 and 4.5.2, there are more detailed standards for protection of natural and cultural environments that apply to agricultural companies.

3.6.2 Prohibited Products and Handling Methods

The following applies to agricultural companies (K):

- You must not use pesticides on land outside the cultivation area that is included in the production unit anyways, for example between parcels of land, or on gravel paths, and access roads.
- You must not use non-woven fabrics or plastics based on chlorinated plastic such as for example polyvinyl chloride (PVC) for ground or plant cover, insect net or silage plastic.
- If you use non-woven fabrics or plastic of any type, they must be removed from the ground after use if they are not degradable.

- You must not burn non-woven fabrics or plastic on the sites where they were used.

The following applies to restaurants and caterers (**K**):

- For delivery of meals, you must not use disposable packaging based on chlorinated plastics such as for example PVC.
- For storage in the kitchen, you must not use stretch film based on chlorinated plastics such as for example PVC.

If only a certain part of your activity is certified, for example breakfast service, the standard only applies to the certified part.

3.6.3 Hazardous Waste

You must ensure that your activity produces as little **hazardous waste** as possible. (**SL**)

You must store and handle hazardous waste so as to avoid contamination of soil, air and water. Different types of hazardous waste must not be mixed together. Furthermore, hazardous waste must not be mixed with other types of waste or other substances or material. (**SL**)

Hazardous waste must only be transported by companies with specific authorization. If your company does not have such authorization, you can still transport small quantities of hazardous waste after reporting this to the County Administrative Board (Länsstyrelsen). (**SL**)

Waste is considered hazardous if it is, for example, explosive, flammable, oxidizing, poisonous or unhealthy. Examples of hazardous waste are oil refuse, impregnated lumber, electric and electronic scrap, batteries, solvents, agricultural chemicals, as well as paints and lacquer.

For further information see the waste regulation (SFS 2011:927) and LRF's General Farming Requirements (Miljöhusensyn), Hazardous Waste (Allmänna Gårdskrav: Farligt avfall).

3.6.4 Removal of Scrap and Trash

Scrap metal, scrap vehicles, plastic, paper and other waste products or waste that you will not likely need for repairs, must be sorted and taken for recycling, reuse, energy extraction or disposal. Reuse must be prioritised over recycling. (**K/SL**)

3.6.5 Materials Kept for Repair Purposes

You must keep materials stored for repair purposes well organised. You must also take care of the storage site so that the materials do not become overgrown with plants. (**K**)

3.6.6 Barbed Wire Fencing

You must remove barbed wire fencing that is not in use. (**K**)

3.6.7 Systematic Environmental Management for Agricultural Companies

You must implement a self-check system for complying with legal and branch requirements for the **operating unit**, for example LRF's General Farming Requirements (Miljöhusensyn), The Swedish Beekeepers' Association Self-check System (Bihusesyn) or other system considered equivalent by your certification body. You must annually, between 1 January and 1 July, review the requirements that apply to your activity to determine whether or not you comply with them. You must establish a remediation plan for the requirements that you determine you do not comply with. **(K)**

3.6.8 Systematic Environmental Management for Other Companies

You must have an environmental policy and ongoing documentation of your environmental management through use of an environment management system or similar method. You must have defined goals that can be evaluated by a certification body during an audit. **(K)**

3.7 Energy Use

The standards in this section are about what you must do to minimize energy use and reduce the need for fossil fuels. This section applies to all **KRAV-certified** production.

3.7.1 Fuel-efficient Driving – The Drivers who are Included

All transport or professional drivers who are permanently employed in the certified part of your company and who drive more than 80 hours per type of vehicle per year must be trained in fuel-efficient driving. (Examples of types of vehicles are farm machines, private cars and trucks.) **(K)**

Your salespeople who drive more than 80 hours per year must be trained in fuel-efficient driving regardless of whether or not they transport KRAV-certified products with every shipment. **(K)**

However, for driving shipments outside the KRAV-certified activity (*for example forestry*), training in fuel-efficient driving is not required.

During temporary peak work periods you may hire additional staff without training in fuel-efficient driving. **(K)**

3.7.2 Fuel-efficient Driving – Training Content

The training must provide a level of competence in fuel-efficient driving equivalent to the training provided in a driving school. Approved training includes courses, workshops or private studies. Training in fuel-efficient driving for tractors or heavy vehicles is considered sufficient for driving lighter vehicles such as private cars. Training in fuel-efficient driving for private cars however is not considered sufficient for driving heavier vehicles such as, for example, tractors. **(K)**

3.7.3 Renewable Electricity

All electricity you purchase must come from renewable sources, for example, hydropower or ecolabelled electricity. This standard applies to all production units where KRAV-certified production takes place even if the production only makes up a small part of the overall production. (K)

3.7.4 Introduction of the Standard on Renewable Electricity

Cancelled

3.7.5 Electricity Use that You Do Not Control

Electricity use that you cannot control, for example when purchasing services or if the electricity is included in the rental of premises, is not considered the KRAV licensee's and does not need to come from renewable sources. (K)

3.7.6 Improving Energy Efficiency

You must strive to improve energy efficiency and reduce use of fossil fuels, and you must be able to give an account of the measures you have taken. (K)

For companies with a large consumption of energy or many livestock units or greenhouses there are more detailed standards (see standard 3.7.7 and sections 3.8 and 3.9). (K)

3.7.7 Energy Audits

Slaughterhouses and processors of food, feed or production aids, with a production unit that uses more than 500,000 kWh/year, must base their work to improve energy efficiency on an energy audit. The energy audit must be carried out by a certified energy expert or person with equivalent competence and be completed in 2017 at the latest. Energy audits must be carried out for the production units concerned even if the KRAV-certified production comprises only a small part of the total production. The energy audit is not required for the entire enterprise. You must update the audit every five years. (K)

Farms with an annual energy use of more than 500,000 kWh or more than 100 livestock units must carry out an energy audit according to standard 3.8.1. Farms with greenhouse production must carry out an energy audit according to standard 3.9.1. (K)

3.8 Energy Planning for Agricultural Companies

This section only applies to companies with an annual energy use of more than 500,000 kWh or more than 100 livestock units, including conventional animals.

3.8.1 Energy Audits for Agriculture

You must carry out an energy audit of the energy used by your agricultural company. The audit must include (K):

- a review of all energy-consuming tasks that must be divided with clear boundaries between systems
- farm-specific proposals for action to improve energy efficiency
- a calculation of the farm's annual direct energy use for the following categories: electrical energy, diesel fuel, heating fuel, as well as any other propellants and fuels.

You must be able to confirm the audit with receipts or similar documentation. You must update the audit every five years. **(K)**

i *Information on how to carry out an energy audit is available on the KRAV website, www.krav.se (in Swedish only).*

3.8.2 Key Performance Indicators for Energy

You must calculate key performance indicators for the amount of energy used in relation to area of the farm, animals delivered, as well as the drying of grain, pulses and oilseeds **(K)**. You must document the key performance indicators every five years in conjunction with an update of the energy audit. Key performance indicators must be expressed according to the table below. **(K)**

Branch of Production	Key Performance Indicator
Driving farm machinery in crop production	Litre diesel/hectare
Animal production	kWh/kg milk kWh/suckler cows and calves (until the age of 220 days) kWh/kg beef (live weight) kWh/fattening pigs kWh/young pigs kWh/lamb kWh/kg egg kWh/chicken
Drying grain, pulses and oil seeds	kWh/kg water removed by drying

3.9 Energy Planning For Greenhouses

The standards in this section only apply if you heat your greenhouse or if additional lighting contributes to heating the greenhouse.

3.9.1 Energy Audits For Greenhouses

The amount of each type of energy used in greenhouse production must be calculated annually for heating, lighting, cooling, carbon dioxide production and other uses. **(K)**

The energy consumption both per amount of crop produced and per square metre cultivation area must be calculated. For potted plants, it is sufficient to

calculate energy use per square metre cultivation surface. Energy consumption must be divided into renewable and non-renewable energy. (K)

i *Information on how to calculate energy consumption and surface area is on the KRAV website at www.krav.se.*

3.9.2 Renewable Energy

You must comply with at least one of the two following requirements (K):

- At least 80% of the total energy you use for heating, lighting and cold storage rooms, as well as for production of carbon dioxide must be from renewable energy sources or waste heat. This must be calculated per calendar year.
- The average amount of fossil energy you use must not exceed 2.5 kWh per square metre per cultivation week during the cultivation period.

3.9.3 Insulate During the Winter

If you use heated greenhouses between 15 October and 1 April they must be equipped with energy retention fabric or plastic film. This is not required for double material greenhouses. (K)

3.10 General Standards for Certification Outside the EU/EEA

KRAV standards may be used for certification of companies outside of the EU/EEA for the types of production Food Processing (Chapter 9) as well as Import and Bringing In (Chapter 16). In this case, the standards in this section, 3.10, replace the general standards in sections 3.1-3.9. (K)

3.10.1 Scope

Those carrying out activities that can be certified according to Chapters 9 or 16 but are located outside the EU and EEA can be certified according to these general standards. (K)

3.10.2 What Standards Apply

You must comply with the standards in Chapters 2 and 20, as well as the standards in section 3.10 and the standards in Chapter 16 that affect your production. If you have food processing you must also comply with the standards in Chapter 9. (K)

3.10.3 Social Responsibility

You must comply with all the standards in section 16.4 in your own activity. (K)

3.10.4 Handling and Storage

You must comply with the standards in section 3.2 when handling and storing KRAV-certified products. (K)

3.10.5 Substances and Materials

You must comply with the standards in section 3.3 when choosing substances and materials in your activity. **(K)**

3.10.6 Reduction of Environmental and Health Impacts due to Measures Related to Hygiene

You must comply with the standards in section 3.4 regarding the measures related to hygiene in your activity. **(K)**

3.10.7 Packaging

You must comply with the standards for packaging in section 3.5. **(K)**

3.10.8 Protection of Natural and Cultural Environments

You must show care for natural and cultural environments, especially for natural and cultural environments that warrant protection if your production is carried out in or near such environments. **(K)**

3.10.9 Hazardous Waste

You must ensure that your activity produces as little hazardous waste as possible. You must store and handle **hazardous waste** so as to avoid risking contamination of soil, air and water. **(K)**

3.10.10 Removal of Scrap and Trash

Scrap metal, scrap vehicles, plastic, paper and other waste products or waste must be sorted and taken for recycling, re-use, energy extraction or disposal. Re-use must be prioritised over recycling. **(K)**

3.10.11 Systematic Environmental Management

You must have an environmental policy and ongoing documentation of environmental management through use of an environment management system or similar method. You must have defined goals that can be evaluated by a certification body during audits. **(K)**

3.10.12 Energy Use

You must strive to improve energy efficiency and reduce use of fossil fuels, and you must be able to give an account of the measures you have taken. **(K)**

+ 3.11 Climate Reporting

The standards in this section apply to agricultural companies that have at least 200 ha of agricultural land or at least 300 square meters of greenhouses. Companies that have completed the “climate check-up” of “Focus on nutrients” in 2017 or later do not need to make a new calculation.

+ 3.11.1 Calculation of Climate Impact

You must calculate your climate impact to make it possible to systematically reduce it. The calculation can be completed by using the “climate check-up” of “Focus on nutrients”, by taking part in Arla’s climate work, or through using other advisory services approved by KRAV. The calculations must be completed no later than 31 December 2022. **(K)**

+ 3.11.2 Report to KRAV

You must instruct the service to share raw data and results with KRAV, and consent to this taking place. **(K)**

In future editions of the standards, almost all companies will be required to comply with the standards for climate reporting. KRAV has the right to share the information only on condition that individuals cannot be identified, see standard 2.9 Confidentiality.

Crop Production

4

Those certified for crop production must also follow the general standards in Chapters 2 and 3 as well as the standards in Chapter 20. The standards that do not apply to greenhouse production are marked with “does not apply to greenhouses” in the title of the standard.

Contents of this chapter:

- 4.1 Registration and Conversion Periods
- 4.2 Documentation of Cultivation
- 4.3 Separation Between Conventional and KRAV-certified Production
- 4.4 Contaminants and Protective Distance
- 4.5 Protection of Natural and Cultural Environments, Good Maintenance, and Cultivation on Humus Soils
- 4.6 Soil Fertility and Plant Nutrition Management
- 4.7 Plant Nutrient Balance
- 4.8 Fertilisers and Soil Conditioners
- 4.9 Plant Protection
- 4.10 Seeds and Vegetative Propagation Material
- 4.11 Greenhouse Cultivation
- 4.12 Mushroom Cultivation
- 4.13 Optional: Hygiene Standards for Cultivating and Handling Fruits and Vegetables

4.1 Registration and Conversion Periods

This section covers **conversion periods** after **conversion** from conventional production for various types of crops. It also addresses special standards for feed and seed produced from land in-conversion and retroactive approval of conversion periods.

4.1.1 General about Registration and Conversion Periods

You are not permitted to sell a crop as KRAV-certified before the soil has been in conversion for a period of time. **(EU)**

The KRAV standards must be complied with during the **conversion period** and you must have registered with an approved **certification body** so that they can carry out an **audit** of your operation. The conversion period is calculated at the earliest from the date of registration. The date of registration is when the certification body is in receipt of the signed contract with a description of the company and activity as well as the parcels of land. **(EU)**

4.1.2 Conversion Period for Annual Crops

The **conversion period** for annual crops is at least two years to the day prior to sowing. Note that an autumn-sown crop can thus first be approved if sown in the autumn two years after the start of the conversion period. **(EU)**

4.1.3 Conversion Period for Ley and Grazing Land

For ley the **conversion period** is at least two years to the day before the harvest is considered KRAV-certified. The same applies to ley for ruminants. (EU)

For exercise yards and ley for pigs and poultry, the conversion period is one year. This can however be shortened to six months if you can show that prohibited substances were not used on the land during the last year. This period can be shortened to six months if you can show that prohibited substances have not been used on the land during the past year. (EU)

4.1.4 Conversion Period for Fruit and Berries

For fruit trees, berry bushes and other established perennial crops (other than ley and Christmas trees), the **conversion period** is at least three years before the harvest is considered KRAV-certified. For perennial crops established on land in conversion, the two-year conversion period must have passed before the crops are considered KRAV-certified. (EU)

+ 4.1.5 Conversion Period for Christmas Trees

In order for Christmas trees to be KRAV-certified, the spruce plants must be planted on land in-conversion or KRAV-certified land and be cultivated from planting to harvest according to the KRAV standards. The vegetative propagation material must comply with standards 4.10.1 and 4.10.4. (K)

4.1.6 Extension of a Conversion Period

If the land has been contaminated with products or substances prohibited in organic production, the **conversion period** can be extended. The Swedish Board of Agriculture makes such decisions. (EU)

If sewage sludge has been spread on the land, the conversion period is extended to at least three years from the time of spreading for all crops. For annual crops this means three years before sowing and for perennial crops three years before harvest. It is prohibited to use crops in-conversion as feed for KRAV-certified animals from land where sludge has been spread. (K)

4.1.7 Conversion Period When Cultivating in Delimited Substrate

A **conversion period** is not required if you cultivate in a **delimited substrate** comprised of soil approved according to standard 4.11.1. (EU)

🔄 4.1.8 Feed From Land In-conversion (does not apply to greenhouses)

You can to a certain extent use feed crops from cultivation in-conversion to feed your own KRAV-certified animals, see standards 5.1.9.11-5.1.9.17. As well, feed from land in-conversion can be sold if the harvest takes place at the earliest 12 months after the start of the conversion period for the land.

In such cases, you must use the following labelling for marketing and sales: *"Feed produced on land in-conversion to KRAV-certified production."* (EU)

4.1.9 Seeds from In-conversion Crops

Harvest from land in-conversion can be used as KRAV-certified seed in some situations (see standard 4.10.3). (EU)

From 1 January 2022, all KRAV-certified seed must be grown on KRAV-certified land. Seed from in-conversion cultivation can be marketed as seed from land in-conversion if at least 12 months have elapsed from the time the conversion began to the harvest.

4.1.10 Retroactive Approval of a Conversion Period

You can retroactively include time in a **conversion period** under the following conditions (EU):

- Land that is covered by commitments for which you receive a payment according to SJVFS (Swedish Board of Agriculture Code of Statutes) 2015:29 paragraph 6.
- Land for which you have not received payment according to SJVFS 2015:29 paragraph 6 can be approved retroactively if you can prove that no forbidden substances were used on the land during at least three consecutive years prior to registration. The Swedish Board of Agriculture makes a decision in such situations on a case by case basis.

Application for retroactive approval of a conversion period must be made to the **certification body** well ahead of the growing season. (EU)

You must not harvest a KRAV-certified crop from land with retroactively approved conversion before the certification body, or where applicable the Swedish Board of Agriculture, has given retroactive approval of the conversion period. (EU)

More information about what your application should include can be found at www.jordbruksverket.se, where there is also information about the environmental compensations that can constitute a basis for retroactive approval of the conversion period.

Note that from 1 January 2022, amongst other things, an in-person audit will be required in order to apply for retroactive approval of a conversion period according to the second point above.

4.1.11 Retroactive Approval for Part of a Conversion Period

If your application for retroactive approval of a **conversion period** can only be approved for one previous year, then the current year's crop can be used and sold as **in-conversion feed**. The in-conversion feed can be harvested at the earliest 12 months after the start of the approved retroactive **conversion period**. This is under the condition that you harvested the year's crop after the date the certification body, or where applicable the Swedish Board of Agriculture retroactively approved the conversion period. (EU)

Retroactive approval for the previous year can only be approved based on subsidy for **organic** production, grazing or meadows. (EU)

4.1.12 Transition from EU organic to KRAV-certified Crop Production

If you have had your **organic** crop production certified according to the current EU Regulation for organic production and want to have it KRAV-certified, you must notify your **certification body**. No new **conversion period** is required, but you must comply with the KRAV standards by the registration date at the latest. **(K)**

The above applies even if you resign your KRAV certification, are EU-certified and then want to reinstate your KRAV certification. You cannot however routinely switch back and forth between EU certification and KRAV certification on the same land. **(K)**

If the transition from EU-certified to KRAV-certified cultivation is registered with the certification body after the crop has been harvested, the harvest cannot be considered KRAV-certified. **(K)**

4.2 Documentation of Cultivation

4.2.1 Crop Cultivation Record

You must keep an up-to-date crop cultivation record with information on the distribution of crops on various parcels of land, dates for measures taken, methods and amounts as well as treatment methods. You must document the following:

- use of fertilisers and soil conditioners per parcel: type of fertiliser and quantity per hectare as well as date of use **(EU)**. See standard 4.6.5 on fertilisation plans **(K)**
- use of plant protectants per parcel: the type and amount per hectare as well as date of use. Specify why the **plant protectants** need to be used (what pests are being combated) **(EU)**
- harvest: amount harvested per crop cultivated (average tonne per hectare or crop). Also state if the crops harvested come from KRAV-certified production or production in **conversion**. **(EU)**

You must also document purchases of production aids, such as the type and amount of product purchased. You must be able to show receipts and product sheets for purchased production aids. **(EU)**

Your documentation must be clear and well organized. You must save documentation at the farm site for at least two years. Record book documentation is approved during audits carried out during the cultivation season. **(K)**

4.3 Separation between Conventional and KRAV-certified Production

This section contains standards on how separation must be maintained in cases where there are both **conventional** and KRAV-certified production, either within the same company or with companies that closely cooperate.

4.3.1 Separation Between Conventional and KRAV-certified Production Units

If you carry out both KRAV-certified and conventional production on the same **agricultural holding**, it must take place on clearly separated production units. Even conversion period production must take place on **production units** that are clearly separated from those with conventional production. (EU)

4.3.2 Several Agricultural Holdings or Close Cooperation with Other Farms

When there is close cooperation between KRAV-certified and conventional production on different **agricultural holdings**, you must on request provide documentation about the non-KRAV-certified agricultural holdings to your certification body. The **certification body** is then entitled to carry out **audits** on these holdings. (EU)

The standard applies when (EU):

- you operate several agricultural holdings, for example if one agricultural holding is divided into several companies
- you have an extensive cooperation with another farm
- the same person/people in the management of a KRAV-certified farm are also a part of the management of a farm with conventional production.

4.3.3 Moving KRAV-certified Crop Production is Prohibited

You are prohibited from temporarily carrying out conventional cultivation on previously KRAV-certified land and then starting to cultivate KRAV-certified crops there again. If you terminate KRAV-certification and operate a farm conventionally, you must wait one year before you can reapply for certification. Upon re-certification, the **conversion period** for the land according to section 4.1 applies. This also applies to individual KRAV-certified fields. You cannot however routinely switch back and forth between conventional cultivation and cultivation according to the KRAV standards on the same land. (K)

If you have had KRAV-certified land, you can only get new land KRAV-certified if all previously KRAV-certified land is still certified. As well, if you register new land, you are prohibited from removing KRAV-certified land from certification during the same season. (K)

Exceptions to this rule can be made if (K):

- you lose formerly KRAV-certified land, e.g. due to expiration of a lease
- the KRAV-certified part of your **agricultural holding** becomes more unified as a result of the process.

If you want to take advantage of any of these exceptions, you must document what land is involved and explain why an exception should be allowed. The **certification body** will determine if you fulfil the criteria. (K)

4.3.4 Parallel Production is Prohibited

You are prohibited from carrying out **parallel production**, i.e. cultivating the same crop both conventionally and KRAV-certified or conventionally and on in-conversion land. The standard applies even if you intend to use the parallel produced crop as feed for your own conventional livestock or sell all the parallel crops as conventional. (EU)

It is considered parallel production even if you cultivate spring and autumn varieties of the same crop. However, it is not considered parallel production if you cultivate different varieties that are easy to distinguish from each other, e.g. potatoes with different skin colours. Another example is that you grow only oats on KRAV-certified land and sow at least 10% barley with your conventional oats thereby turning it into a seed mixture. (EU)

Cultivation of the same crop on land in-conversion and on KRAV-certified land is not regarded as parallel production. You must, however, keep harvests from the KRAV-certified crop separate from the in-conversion crop and the separation must be documented. (EU)

4.3.5 Exceptions and Audits of Parallel Production

There are some exceptions where **parallel production** of the same variety or varieties that are difficult to distinguish from each other is permissible. Parallel production is allowed (EU):

- for multi-annual perennials with a cultivation period of not less than three years (this exception is valid for a maximum **transition period** of five years, see below)
- for research or educational purposes
- for production of seeds, vegetative propagation material and plants,
- on land used for grazing
- if you have both KRAV-certified land and land in conversion and where the products are kept separate.

To take advantage of any of these exceptions you must (EU):

- apply in advance in writing for an audit regarding parallel production to the certification body. Contact your certification body to find out how this is done, when it should be done and what it costs. They will forward your application to the Swedish Board of Agriculture for the required approval.
- notify your certification body at least 48 hours before harvesting each one of the products in question
- after harvesting, inform the certification body about exactly how much was harvested and how the products concerned are kept apart. Documentation on harvested quantities and practices for separation must be available for **inspection**.

Those who use the first exception above must also make a plan for conversion of all perennial crops on the farm. The last part of the cultivation

must be converted within five years. The plan must be monitored and approved annually by the Swedish Board of Agriculture. You should be able to show your certification body that the Swedish Board of Agriculture has approved your plan. **(EU)**

The application form is available at www.jordbruksverket.se.

4.4 Contaminants and Protective Distance

The purpose of the standards in this section is to prevent contamination of your KRAV-certified crops.

4.4.1 Previous Land Use

At the start of the conversion period, you must be able to document previous land use. If there is reason to believe the land is contaminated, you must investigate and document the contamination. **(K)**

4.4.2 Rejection of a Contaminated Cultivation Site or Crop

The **certification body** can reject a cultivation site if the amount of residue from unwanted substances is so high that it can cause problems. This applies e.g. if the KRAV-certified products contain contaminant residues in such concentrations that the value of the product as food or feed is affected. High levels of contaminants are also a reason for the certification body to reject the crop itself. **(K)**

4.4.3 Protective Distance From One's Own Conventional Cultivation (does not apply to greenhouses)

If you produce crops conventionally, in the same or in another company, and the cultivation is adjacent to your KRAV-certified fields, the following protective distances must be applied for the KRAV-certified fields **(K)**:

- at least 25 m from land where chemical pesticides have been used
- at least 10 m from land where **artificial fertiliser** has been used
- at least one meter from land where there has been manure spreading in rows or impregnated seeds have been sown.

4.4.4 Border With Other Conventional Cultivation (does not apply to greenhouses)

Measures must be taken to minimise the risk of KRAV-certified fields or fields in conversion being contaminated by **chemical pesticides** or **artificial fertilisers** from adjacent cultivation. You must inform your neighbours that you have **organic** cultivation or if necessary have a protective zone on your own land. **(K)**

There must be a clearly marked border in the field between **KRAV-certified** land and conventionally cultivated land. If the parcels are adjoining and there is no natural separation such as a ditch, road or permanent fence or headland,

then border-marking poles or the equivalent must be set up along the border at intervals of less than 50 metres. **(K)**

When a neighbour with conventional cultivation uses pesticides they must as a minimum apply an appropriate protective distance and take “special care” according to the regulations of The Swedish Environmental Protection Agency SNFS 2015:5 and SNFS 2015:2 (SL). See also the Swedish Board of Agriculture’s “Guide for determining appropriate protective distance” at www.sakertvaxtskydd.se.

4.4.5 Cleaning Machinery

Sowing machines, threshers, manure dispensers, spray pumps, etc. must be cleaned well if they have been used for production aids or for sowing seeds not permitted according to the KRAV standards, or for harvesting conventional products. **(EU)**

4.4.6 Heavily Trafficked Roads (does not apply to greenhouses)

Crops grown within 25 metres from the edge of a heavily trafficked road may not be sold as KRAV-certified food. In this context, a road is regarded as heavily trafficked if it is used on average by more than 3,000 vehicles per 24 hours calculated on an annual basis. **(K)**

4.4.7 Limitation for Addition of Heavy Metals

(does not apply to greenhouses)

You must limit the amount of heavy metals added to your arable land via fertilisers, soil enhancers, and liming materials. **(K)**

You do this through using **(K)**:

- KRAV-certified or **assessed for permissibility** fertilisers, soil enhancers, and liming materials and by not exceeding the specified maximum permissible ration
- other fertilisers, soil enhancers, and liming materials that are permitted according to the KRAV standards and by yourself calculating the maximum permissible ration based on the heavy metal content according to standard 4.4.8.

You may add the maximum permissible ration for several years, though five at the most, on one occasion. You must then limit the ration in the following years. See standard 4.4.8 for the maximum amount of various heavy metals that you may add. Calculate the total addition of heavy metals in fertilisers, soil enhancers, and liming materials over a five-year period. **(K)**

You do not need to include the heavy metal content in your own farmyard manure or farmyard manure that you receive directly for other farmers. **(K)**

4.4.8 Calculate the Maximum Permissible Ration

When you calculate the **maximum permissible ration** of fertilisers, soil enhancers, and liming materials you must request an analysis of heavy metal

content from the product marketer. (K)

You calculate the maximum permissible ration based on the maximum permissible addition of heavy metals to arable land according to the table below. You must be able to show that you do not add more than five-year's ration of any heavy metal during a five-year period. (K)

Substance	g/ha and year	
lead	25	
cadmium	0.45	
copper	300*	* Larger amounts of copper, maximum one kg per hectare, are permitted if it can be shown that the arable land in question requires additional copper.
chromium	40	
mercury	0.8	
nickel	25	
zinc	600	
silver	3	

Addition of one tonne per hectare per year of a product that contains one ppm of a certain substance, results in addition of one gram per hectare per year of that substance. Remember to add the amounts together when using a number of different substances.

4.5 Protection of Natural and Cultural Environments, Good Maintenance, and Cultivation on Humus Soils

This section is about how you must practise good maintenance with your cultivation and protect natural and cultural values, as well as about cultivation on **humus soils**.

4.5.1 Management Plan

Those who are **KRAV-certified** must show great consideration for natural and cultural environments, including biological diversity. You must do one of the following (I/K):

- Establish and implement a management plan for environmental and cultural values.
- Use the checklists from “Miljöhusensyn” (in Swedish only), an environmental inspection tool, on consideration for nature and cultural environments, biotope protection and historic sites and carry out the measures they identify.

The standard applies to the whole **agricultural holding**.

4.5.2 Measures for Natural and Cultural Protection

You must take the following measures if they are relevant for your farm:

- Minimize negative impacts on land and water from grazing. (I/K)
- Avoid supplementary feeding on natural grazing land. (K)

- Avoid using preparations for parasite control that contain difficult-to-degrade substances when animals are grazing on natural grazing land. An example of such substances are avermectines. **(K)**
- Protect natural grazing land as well as non-arable outcrops and other valuable landscape elements from livestock that dig up the land. **(K)**
- Maintain valuable meadows and pastures well e.g. those of great importance for flora and fauna or that have important cultural value. **(K)**
- Maintain productive trees and bushes, such as wild fruit trees, hazel trees, etc., as well as polled trees and tree-lined avenues. When this is not possible, you must replace them with new trees or bushes. **(K)**
- Avoid measures that can harm biotope protected areas in farmland, for example, stone walls, clearance cairns, non-arable outcrops, tree-lined avenues, open ditches, springs as well as ponds and wetlands. **(K)**
- Avoid cultivating on, or by other means permanently altering, important and sensitive ecosystems with long continuity, e.g. natural forests and wetlands. **(I/K)**
- Make sure not to overexploit water resources. If there is a risk of excessive soil salinity, take measures to counteract its occurrence. **(I/K)**

4.5.3 Good Maintenance

Cultivations must be maintained well, i.e. well-kept, in order to minimize the risk of an increase in pest and weed levels. **(EU)**

4.5.4 Cultivation on Humus Soils

Peat land must not be drained to establish new cultivation on humus soil. You can however use existing cultivated land on **humus soil**. **(K)**

4.6 Soil Fertility and Plant Nutrition Management

In this section there are standards for **crop rotation**, fertilisation plans, and other measures to reduce loss of plant nutrients and release of greenhouse gases.

4.6.1 Legumes and Ley or Green Manure in Crop Rotation and Plant Nutrition Management (does not apply to greenhouses and fruit and berry cultivation)

You must present a plan for the **crop rotation** and document your crop rotation for each field. You must comply with the following requirements. **(K)**

- You must have a varied crop rotation and a strategy for weed control. The crop rotation normally must not exceed 10 years and it must include **legumes**.
- Ley or **green manure** must make up at least 20% of the **main crops** in the crop rotation for each individual parcel of land.

If you increase biological nitrogen fixation, carbon storage or soil fertility, or reduce plant nutrient leakage by complying with at least two of the following requirements (a–c), you may have 10–20% ley or green manure as the main crop in the crop rotation (**K**):

- a) 10% of the crops in the crop rotation are legumes.
- b) at least 30% of your annual KRAV-certified area is **land under vegetative cover during autumn or winter**.
- c) at least 50% of your annual KRAV-certified area is covered with **intermediate crops, under-sown subsidiary crops** or **catch crops**.

Compliance with this standard is not required for parcels of land with grassland or perennial fodder plants with a rotation period longer than five years, for example permanent pastures.

Note that you must at a minimum comply with the legislation that applies in your area regarding land under vegetative cover during autumn or winter.

4.6.2 Minimize Erosion and Plant Nutrient Leaching

You must cultivate in a way that minimizes loss of plant nutrients and reduces risk of erosion. You must be able to provide an account of measures you have taken and plan to take to achieve this. (**K**)

Examples of such measures are:

- having the land covered with vegetation during the winter
- cultivating **catch crops**, especially after **green manure**
- densely storing and managing farmyard manure so as to minimize loss of nutrients from leaching
- spreading farmyard manure using suitable technology at a suitable point in time (which can require a larger storage capacity than required by law)
- ploughing ley under at a suitable time
- practising good management of nutrient solutions and irrigation surpluses in **greenhouses**.

At a minimum, you must comply with the legislation that applies in your area, for example regarding land under vegetative cover during autumn or winter and when farmyard manure may be spread. (**SL**)

A summary of the laws in this area can be found in the Federation of Swedish Farmers “Miljöhusensyn” (a checklist of legal requirements for farming) in the Crop Production section (“växtodling”). The “Miljöhusensyn” can be found at www.miljohusesyn.nu (in Swedish only).

4.6.3 Permanent Buffer Strip Bordering on Watercourses (does not apply to greenhouses)

At a minimum, you must leave a three metre protective zone beside watercourses, wetlands and lakes that are normally water-bearing year-round. This protective zone must have permanent vegetation and be free from fertiliser. Three metres is calculated horizontally from the mean water line. (**K**)

When you spread farmyard manure near watercourses, you must also leave a non-fertilised protective zone that stretches at least two metres into the field. For watercourses that are water-bearing year round, this means that the unfertilised protection zone must be five meters. **(SL)**

4.6.4 Ploughing in Liquid Manure, Urine and Digestion Digestate (does not apply to greenhouses)

You must plough in liquid manure, urine and digestion digestate directly or within four hours after spreading it on bare ground. **(K)**

4.6.5 Fertilisation Plan

You must adapt fertilisation to the needs of the crop so as to minimise the risk of plant nutrient loss. You must therefore have a fertilisation plan. You must plan your fertilisation so that every year you take into consideration at least nitrogen and phosphorus for the various parcels of land. If you use several parcels in the same way, they can be reported on together. **(K)**

Proceed using the harvest result from the previous year for the parcel in question, the expected harvest level for the current year, the previous crop, as well as local conditions (based for example on a current soil survey).

You do not need to have a fertilisation plan if you fulfil the requirement and are exempt from making a **plant nutrient balance** according to standard 4.7.1. Then it is adequate for you to show via your fertilisation record book that the farm manure has been spread evenly over the area. **(K)**

For greenhouse cultivation you must adapt fertilisation as much as possible to the needs of the crop. **(K)**

Note that current legal requirements limit the maximum amount of phosphorus and nitrogen that can be added per hectare per year. In nitrate-sensitive areas, you must also document calculation of the crop's nitrogen fertiliser requirements. For more information see www.jordbrukverket.se.

+ 4.6.6 Maximum supply of nitrogen (does not apply to greenhouses)

You may add a maximum of 170 kg nitrogen per hectare of arable land and year with fertiliser. **(K)**

You must calculate the addition as an average total amount of nitrogen in the manure. You must report the calculation per hectare as an average value for your KRAV-certified arable land area. **(K)**

4.7 Plant Nutrient Balance

This section is about when you need to make a phosphorus and nitrogen balance, how to make them and how much surplus phosphorus is permitted. Only standard 4.7.9 applies to greenhouses.

4.7.1 Phosphorus Balance Requirement (does not apply to greenhouses)

In order to have good control of phosphorus use at the farm level, you must regularly make a phosphorus balance report for your KRAV-certified crop production. (K)

You do not need to report a phosphorus balance if one of the following conditions is met (K):

- you fertilize at the most five hectares arable land
- you normally do not bring any fertiliser or feed to your KRAV-certified farm. Mineral feed or small purchases of additional feed during extreme years are not included in such purchases.

If you have a cooperation agreement on feed and fertiliser (standard 5.1.9.2) with another farm, you can be exempt from the requirement of reporting a **plant nutrient balance** report if the farms together comply with the above requirements, for example by not bringing in feed or fertiliser to the joint KRAV-certified production. This is determined by your **certification body**. (K)

4.7.2 When a Phosphorus Balance Must be Made (does not apply to greenhouses)

You must carry out a phosphorus balance at least every third year. In the following cases, a phosphorus balance must be done more often (K):

- when there is a change in production that can increase the phosphorus surplus
- if you in the previous year have been near the limit of permitted surplus according to standard 4.7.5
- if you have a surplus that requires an action plan
- on request from the **certification body**.

The phosphorus balance must be calculated after the season has ended and be available for **audit** at the latest by 31 March in the year after the calculation year.

Examples of changes in production that can increase excess phosphorus are changed fertiliser or feed purchases that increase the amount of phosphorus brought in, changed crop choice that results in reduced phosphorus removal, or if you change type of production.

4.7.3 Basis for Calculating Phosphorus Balance (does not apply to greenhouses)

The calculation must be based on actual values from the year in question. When there are large deviations from the normal, you can adjust the harvest to levels found in an average year. (K)

If the entire farm is KRAV-certified, you must only calculate for the part of the farm that is KRAV-certified. (K)

At www.greppa.nu there are advice and tools for making a phosphorus balance calculation yourself.

4.7.4 Up-to-date Soil Map when there is a Surplus of Phosphorus (does not apply to greenhouses)

If your phosphorus balance shows a surplus of phosphorus you must within a year have a soil map that corresponds to standardized mapping according to good soil mapping practice. **(K)**

You do not need to map **(K)**:

- natural grazing land and permanent trees
- permanent ley and **long-term ley** on arable land, as long as you do not have milk cows in these areas
- temporarily leased land (three years in a row at the most) and leased land that will become uncertified the current year due to termination of the lease. **(K)**

For a definition of “good soil mapping practice”, see “Guidelines for fertilisation and liming” (in Swedish only) on the website of the Swedish Board of Agriculture, www.jordbruksverket.se.

4.7.5 Phosphorus Surplus Limits (does not apply to greenhouses)

You must limit the amount of phosphorus you add, using the phosphorus balance and soil map as a starting point. On land classified as **P-AL class III** and above, you must aim to achieve a balance between the amount of phosphorus you add and remove. For land with lower phosphorus classifications (P-AL class I-III) you are allowed some surplus (see the table below). **(K)**

Average allowed phosphorus surplus on KRAV-certified land area over a five-year period (kg/ha) **(K)**:

P-AL class				
I	II	III	IV	V
+20	+10	+5	0	0

There are the following exceptions to the standard **(K)**:

- You are allowed a higher surplus than the values above for **crop rotations** based on open ground vegetable cultivation, as well as fruit and berry cultivation. In these cases, the greater part of the farm’s KRAV-certified area must have this type of production. A limit has not been set for such cases because there is too little known about reasonable surpluses for these types of plant rotations.
- If you have KRAV-certified animal husbandry, KRAV allows you to have a surplus of maximum two kg phosphorus/ha for fields in P-AL class IV and V, provided that you do not purchase farmyard manure or other fertilisers that contain phosphorus. **(K)**

According to current legislation you can add a maximum of 22 kg phosphorus per hectare per year from organic fertilisers. You must calculate the addition as an average over five years.

4.7.6 Action Plan for Phosphorus Surplus (does not apply to greenhouses)

If you have a surplus of phosphorus that exceeds the limits in the table (standard 4.7.5) you must report an action plan with measures to reduce the phosphorus surplus according to the table in standard 4.7.5. (K)

*Examples of such measures are reducing purchases of fertilisers, increasing the level of feed self-sufficiency, and increasing the area fertiliser is spread on. You may also need to adjust your **crop rotations** and increase the portion of **legumes** to achieve a balance between phosphorus and nitrogen.*

The action plan must not extend for longer than five years. The action plan can involve follow-up of the surplus with more frequent balance calculations.

(K)

You must implement your action plan, which is checked at the next **audit** or earlier if requested by the **certification body**. The action plan must be carried out within 5 years. (K)

4.7.7 Nitrogen Balance Requirements (does not apply to greenhouses)

If you have a larger surplus of phosphorus than is given in the table (standard 4.7.5), your **certification body** can require that you do a nitrogen balance and if necessary make an action plan. (K)

Nitrogen balance calculations must include nitrogen fixation and nitrogen fallout. The calculation must be based on actual values from the year in question. For large deviations from the normal you can adjust the harvest to the harvest level in an average year. When necessary, an advisor with qualifications within the area must either carry out or review and approve the work. (K)

At www.greppa.nu there are advice and tools for making a plant nutrient balance calculation yourself.

4.7.8 Action Plan For Nitrogen Surplus (does not apply to greenhouses)

If the **certification body**, based on the nitrogen balance, determines that you have a nitrogen surplus, you must make an action plan. In the action plan you must identify the cause of the nitrogen surplus and then show measures to reduce the surplus. (K)

The action plan must not extend for longer than five years. The action plan can involve follow-up of the surplus with more frequent balance calculations. (K)

You must implement your action plan, which is checked at the next **audit** or earlier if requested by the certification body. (K)

4.7.9 Plant Nutrient Balance Requirements for Greenhouses

You must carry out regular plant nutrient balance calculations and adapt fertilisation to the requirements of the culture. (K)

You do not need to make a **plant nutrient balance** if you meet one of the following criteria (K):

- you do not use more than 200 m² greenhouse area at any time during the year

- you can show that irrigation water is not released into the surrounding environment.

Calculations must be made for (K):

- nitrogen, potassium and phosphorus
- the surface used for KRAV-certified cultivation in the **greenhouse**
- each greenhouse or section. If you cultivate in a delimited substrate, you must make a report per culture.

The plant nutrient balance must be calculated each year at the end of the season and be available for **audit** by 31 March at the latest in the year after the calculation year. (K)

4.8 Fertilisers and Soil Conditioners

This section covers standards for the fertilisers and soil conditioners that you can use in KRAV-certified crop production and the stipulations for their use. There is also a standard for assessment of digestate from biogas facilities.

i *To make it easier for you to determine if a fertiliser or soil conditioner is permitted, the producer can certify the product according to Chapter 12 (Production Aids). The KRAV name and label can then be used on the product and in marketing. The producer of a fertiliser or soil conditioner can also request that a certification body make an assessment of whether or not the product is permitted (see standard 12.1.10). A list of the fertiliser and soil conditioners assessed as permitted is available at www.krav.se (in Swedish only).*

4.8.1 Use of Fertilisers and Soil Conditioners

As a first choice, you must choose fertilisers and soil conditioners that are by-products of crop production and animal husbandry, e.g. **green manure** and farmyard manure (EU). You must also take into consideration the principles of ecological cycles, climate impact, and the risk of using up non-renewable resources. (K)

When required by the crop and when other technical cultivation methods or fertiliser from the farm's own **organic** production cannot cover nutrient requirements, you can bring fertiliser into the farm. You can only use the organic and inorganic fertilisers and soil conditioners that are permitted according to standards 4.8.4 and 4.8.8. (EU)

4.8.2 Heavy Metals and Other Undesirable Substances

If you use fertilisers or soil conditioners that are purchased or otherwise brought in, they must not lead to concentration of heavy metals or other environmentally hazardous substances or contaminants in the soil.

To prevent accumulation of heavy metals you must comply with standards 4.4.7.1 and 4.4.7.2.

4.8.3 Use of Genetically Modified Organisms is Prohibited


You cannot use fertilisers and soil conditioners that contain **genetically modified organisms (GMOs) (EU)**. Further, fertilisers and soil conditioners cannot be derived of or with GMOs (EU). You cannot use manure from animals fed with GMO feed if the manure can contain material that can germinate. (K)

If there is a risk that a fertiliser or soil conditioner contains or is made of or with GMOs, you must get a letter of confirmation that states that the product does not contain GMOs or have the product analysed. When an analysis is done, the upper limit for accidental presence of GMOs is 0.9%. (EU)


4.8.4 Permitted Organic Fertilisers and Soil Conditioners

All fertilisers and soil conditioners in the table are permitted according to the current EU regulation for organic production, but in some cases KRAV has more far-reaching requirements. These are marked with “(K)” in the conditions of use.

Fertiliser and Soil Conditioner	Description, compositional requirements, conditions of use	
farmyard manure	Products made up of a mixture of animal excrement and vegetable matter (<i>litter areas</i>). The manure cannot come from conventional animal husbandry prohibited according to standard 4.8.5.	EU
dried farmyard manure and dried poultry manure	Must not originate from conventional animal husbandry that is prohibited according to standard 4.8.5.	EU
composted animal excrement, including poultry manure and composted farmyard manure	Must not originate from conventional animal husbandry that is prohibited according to standard 4.8.5.	EU
liquid excrement from animals	For example, urine. Used after verified fermentation and/or appropriate dilution. Must not originate from conventional animal husbandry that is prohibited according to standard 4.8.5.	EU
sorted household waste that is composted or fermented	Vegetable and animal household waste from a closed, monitored collection system approved by the Swedish Board of Agriculture and which has been composted or anaerobically fermented for biogas production. Compost and digestate from sorted and household waste must be certified according to Chapter 12. (K) Waste from restaurants is considered household waste.	EU
peat	Only in horticulture (market gardening, floriculture, arboriculture, nursery).	EU
mushroom culture waste	The initial composition of substrate must be limited to products given in section 4.8.	EU
dejecta from worms (vermicompost) and insects		EU

Fertiliser and Soil Conditioner	Description, compositional requirements, conditions of use	
 composted or fermented mixture of plant matter	Product from a mixture of vegetable material that has been composted or been anaerobically fermented for biogas production.	EU
digestate from biogas facilities that only contains material permitted as fertiliser or soil conditioners, and that contains animal by-products	The digestate must be certified according to Chapter 12. (K) Animal by-products (including by-products from wild animals) must be from category 3 or only stomach and intestine contents from category 2 [the definition of categories 2 and 3 are found in Regulation (EC) 1069/2009]. Processes must comply with regulation (EU) 142/2011. Must not be applied on edible parts of a crop that is to be used as food or feed.	EU
digestate from biogas facilities that contains prohibited farmyard manure and/or animal by-products from animals whose manure is not permitted by KRAV (see standard 4.8.5)	Digestate that contains both prohibited and permitted farmyard manure must be certified or assessed as permitted according to Chapter 12. Digestate that contains animal by-products must be certified according to Chapter 12. (K) Manure from animals raised in cages or manure prohibited according to 4.8.6. cannot be included. When permitted and prohibited manure is digested in the same biogas plant, only the portion of digestate equivalent to the amount of manure permitted in the digestion chamber can be used for KRAV-certified production. At least 5% of the substrate added to the biogas plant on an annual basis must come from organic production. Calculations must be made on dry weight content . Animal by-products (including by-products from wild animals) must be in category 3 or only stomach and intestine contents in category 2 [the definition of categories 2 and 3 are in Regulation (EC) 1069/2009]. The processes must comply with Regulation (EU) 142/2011. If animal by-products are included the digestate must not be applied to edible parts of the crop if it is to be used as food or feed.	EU
animal by-products as below: <ul style="list-style-type: none"> • blood meal • hoof meal • horn meal • bone meal • bone meal with the gelatine removed • fish meal • meat meal • feather, hair and “chiquette” meal • wool • fur • hair • dairy products • hydrolysed protein 	Products must be certified according to Chapter 12. This requirement for certification does not apply to category 3 dairy products (K). Products must meet the requirements for category 2 or category 3 material according to Regulation (EC) 1069/2009 on animal by-products. Must not be applied to edible parts of the crop if it is to be used as food or feed. <i>This condition for spreading does not apply to dairy products. (K)</i>	EU

Fertiliser and Soil Conditioner	Description, compositional requirements, conditions of use	
vegetable products and by-products	<p>For example, straw, cut-down green manure plants, grass, plant wastes from parks and landscaping, oilseed cake meal, cocoa husks, malt culms, as well as certain other waste from the food industry.</p> <p>The manufacturing process cannot have made the material unsuitable to spread as fertiliser. When you use industrial waste products, the material must have been analysed to make sure it does not contain unwanted substances such as pharmaceutical residues, radioactive materials, contagions or heavy metals. Food classified waste products are exempt from this standard. See standard 4.4.7 for heavy metal addition limits. (K)</p> <p>Waste must be managed and treated according to the applicable legislation. See especially waste regulation (SFS 2011:927).</p>	EU
algae, seaweed and seaweed products	<p>Products made from algae or seaweed may have been through the following processes:</p> <ul style="list-style-type: none"> • physical processes (for example dehydration, freezing and grinding), • extraction with water or aqueous acid and/or alkaline solution, • fermentation. 	EU
sawdust and wood chips, composted bark, wood ash	<p>The material must come from wood that has not been chemically treated after felling. Ashes from straw is not considered to be tree ash.</p> <p>Ashes from large scale combustion must be analysed for heavy metal content to ensure that you do not exceed the KRAV limits for addition of heavy metals (see standards 4.4.7 and 4.4.8). (K)</p> <p>Ashes from combustion on your own farm must be analysed if you use more than 100 kg ashes per hectare. If ashes are used continually, a new analysis is required every third year. (K)</p>	EU
+ mollusc waste	Only from sustainable fisheries, as defined in Article 4 (1) (7) of Regulation (EU) 1380/2013, or from organic aquaculture.	EU
+ eggshell	Must not come from conventional animal husbandry prohibited according to standard 4.8.5	EU
+ humus and fulvo acids	Only if they are obtained by purifying drinking water. (K)	EU
chitin (polysaccharide produced from the shells of crustaceans)	<p>Only if it comes from sustainable fisheries according to the definition in Article 4.1.7, Regulation (EU) 1380/2013, or from organic aquaculture.</p>	EU
organic rich sediments from freshwater formed under oxygen-free conditions (for example sapropel)	<p>Only organic sediments derived as by-products from activities in fresh water or previous fresh water areas.</p> <p>Only sediments from sources that are free from contamination by pesticides, persistent organic pollutants and substances like petrol.</p> <p>Extraction must have taken place in a way that causes the least possible impact on the aquatic environment.</p> <p>Maximum permissible concentrations in mg/kg dry weight:</p> <ul style="list-style-type: none"> • copper: 70 • nickel: 25 • lead: 45 • zinc: 200 • mercury: 0.4 • chromium (total): 70 • chromium (VI): not detectable. 	EU

Fertiliser and Soil Conditioner	Description, compositional requirements, conditions of use	
 biochar	<p>Product from pyrolysis of organic matter of vegetable origin used as soil improver.</p> <p>Only from untreated material or material treated with permitted plant protectants according to standard 4.9.3.</p> <p>Biochar must be analysed for polycyclic aromatic hydrocarbons (PAH), the maximum permitted content of PAH is 4 mg / kg dry matter.</p> <p>Biochar brought to the farm must be analysed to ensure that you do not exceed the KRAV limits for heavy metals (see standards 4.4.7 and 4.4.8).</p>	EU

You can also use fertilisers and soil conditioners according to the table if they have undergone other biological or **physical processes** for the purpose of extracting or concentrating nutrients from organic waste products. You can however not use fertilisers and soil conditioners or products that have been refined so that the nutritive substances are found primarily in the inorganic form. (EU)

4.8.5 Prohibited Farmyard Manure from Conventional Production

You can use farmyard manure from **conventional** animal husbandry except in the following cases (EU):

- It is prohibited to use farmyard manure from specialized production of cattle in slatted-floor boxes with the exception of integrated production of cattle with young animals on a slatted floor.
- It is prohibited to use farmyard manure from slaughter hog stocks with an annual production of more than 50, but allowed from stocks with **litter beds** in large box systems.
- It is prohibited to use farmyard manure from table chickens and other table poultry. Manure from flocks with an occupancy rate of maximum 21 kg/m² are however permitted if there is documentation confirming that the feed is free from coccidiostats.
- It is prohibited to use farmyard manure from battery hens, and fur-bearing or other animals in **cages**.

4.8.6 Prohibited Organic Fertilisers and Soil Conditioners

Other than what is specified in standard 4.8.5, use of the following organic fertilisers and soil conditioners is also prohibited:

- animal by-products in category I according to Regulation (EC) 1069/2009 (EU)
- guano (K)
- xylitol (K)

- leonardite **(K)**
- humic and fulvic acids from inorganic salts or solutions other than ammonium salts **(K)**
- soil organisms or other micro-organisms that are **genetically modified (EU)**
- sewage sludge, not from your own three-compartment septic tank nor in any other form **(EU)**
- human urine and human faeces in any form **(EU)**
- manure from animals that have been fed **GMO** feed, if the manure can contain material that can germinate **(K)**
- mixtures of permitted and prohibited fertilisers and soil conditioners. The only exception is digestate from biogas facilities, see standard 4.8.4 **(EU)**
- other fertilisers that are not listed as permitted **(EU)**.

4.8.7 Use of Digestate from Biogas Facilities

You can use digestate from biogas facilities that mix both permitted and prohibited fertiliser and soil conditioners according to standard 4.8.5 **(EU)** if the biogas facility is certified according to Chapter 12 of the KRAV standards, or assessed as permitted according to standard 12.1.10. The requirement of certification or **assessed as permitted** also applies to biogas facilities on your own farm, if you handle both permitted and prohibited manure **(K)**. Only the amount of digestate that corresponds to the proportion of permitted manure input can be used on KRAV-certified land. **(K)**

If only permitted manure is included in the mixture of material that is digested, determining whether the digestate is permitted is not required, but the user of the digestate must be able to show documentation for all the material included in the process. **(K)**

4.8.8 Permitted Inorganic Fertilisers and Soil Conditioners

You can use inorganic fertilisers and soil conditioners in their natural form. Mineral products must not have been subjected to processes with the purpose of making them more easily soluble, with the exception of milling. Physical extraction is permitted. The products must not contain substances that are explicitly prohibited according to standard 4.8.9, or have excessive levels of unwanted substances according to standard 4.8.2. **(K)**

All the fertilisers and soil conditioners in the table below are permitted according to the EU regulation, but in some cases KRAV has more far-reaching conditions. These are indicated with “**(K)**” in the conditions for use.

Fertiliser and Soil Conditioner	Description, compositional requirements, conditions for use	
raw phosphate, soft ground	Must have tricalcium phosphate and calcium carbonate as the main components. See the exact definition in Regulation (EC) 2003/2003 no. 7, Annex I.A.2. The amount of cadmium must not exceed 12 mg/kg P. (K)	EU
crude potassium salt, for example kainite	From unrefined potassium salts. See the exact definition in Regulation (EC) 2003/2003 no. 1, Annex I.A.3.	EU
potassium sulphate and potassium-magnesium	Product obtained from crude potassium salt using a physical extraction process. May contain magnesium salts.	EU
vinasse and vinasse extract	Vinasse from ammonium chloride production is prohibited.	EU
calcium carbonate, ground lime-stone, calcite, marl, calcareous sea algae (maerl), phosphate chalk	Only of natural origin.	EU
calcium and magnesium carbonate	Only of natural origin. For example dolomitic limestone and other limestone containing magnesium.	EU
magnesium sulphate (kieserite)	Only of natural origin.	EU
calcium chloride solution	Foliar treatment of apple trees, after identification of calcium deficit.	EU
gypsum (calcium sulphate)	Only of natural origin. See the exact definition in Regulation (EC) 2003/2003 no. 1, Annex I.D.	EU
lime from sugar production	By-product of sugar production from sugar beet and sugar cane.	EU
industrial lime from vacuum salt production	By-product of vacuum salt production from salt deposits found in mountains.	EU
elemental sulphur	Purified natural product or industrially produced product. See the exact definition in Regulation (EC) 2003/2003 no. 3, Annex I.D.	EU
trace elements (micronutrient)	Inorganic fertilisers that contain micronutrient substances according to the list in Annex I.E. to Regulation (EC) 2003/2003. See also standard 4.8.10. (K)	EU
 sodium chloride (NaCl)	Only and sugar cane rock salt.	EU
stone meal, for example silicon, basalt and granite meal, and clays	Including heat-treated products made of clay/clay minerals such as vermiculite, perlite and LECA.	EU

4.8.9 Prohibited Inorganic Fertilisers

You cannot use the following inorganic fertilisers:

- aluminium calcium phosphate (**K**)
- basic slag (**K**)
- **artificial fertiliser** (synthetic commercial fertiliser) (**EU**)
- nitrogen salts and solutions (**EU**)
- other substances not specified as approved (**EU**).

4.8.10 Micronutrients

You can use special fertilisers with micronutrients if the need for micronutrients cannot be met with reasonable amounts of other approved fertilisers and if there is a clear deficiency. (**EU**)

For field-scale cultivation you must show based on earlier experience or analysis that there has been a deficiency, if there are not clear deficiency symptoms. For greenhouse cultivation with computer-controlled nutrient supply, deficiency symptoms can be calculated in advance. (**K**)

You cannot use micronutrient fertilisers that contain nitrogen in amounts that have significance for the plants' nitrogen supply. Also, you cannot use fertilisers that contain several micronutrients if you cannot prove that the crops lack all these micronutrients. Micronutrients can be added to the soil or a growing crop. For a definition of micronutrient substances see the table in standard 4.8.8. (**EU**)

4.9 Plant Protection

In this section there are standards for **plant protection products** permitted for KRAV-certified crops and the conditions of use for these products.

Plant protectants must be approved by the Swedish Chemicals Agency before they can be sold and in many cases even to be able to be used. According to regulations EC 1107/2009 and SFS 2014:425 on approval of plant protectants, plant protectants with a physical effect such as soap, plant oils and paraffin oil must also be approved by The Swedish Chemicals Agency. The regulations also include standards on how chemical products or biotechnical organisms can be used to combat pests.

To make it easier for you to determine if a plant protectant is permitted, the producer can certify the product according to Chapter 12 (Production Aids). The KRAV name and label can then be used on the product and for marketing. The producer of a plant protectant can also request that a certification body make an assessment of whether or not the product is permitted (see standard 12.1.9). A list of the plant protectants assessed as permitted is available at www.krav.se (in Swedish only).

4.9.1 Preventive Methods

You must use preventive methods against weeds and pests as much as possible. You may use preparations with natural enemies that consist of nematodes,

insects or arachnids and that are approved by the Swedish Environmental Protection Agency. You can only use the **plant protectants** listed in KRAV standard 4.9.3 when there is a direct threat to the crop. (EU)

You must minimize the risk of weeds, harmful insects and diseases attacking your crops by promoting the natural enemies of pests, choosing appropriate species or varieties, using a suitable crop rotation, and by using mechanical or physical methods. (EU)

You can use thermal weed control (heat) and electrical weed control (EU). Thermal sterilisation of soil is prohibited. (K)

4.9.2 Genetically Modified Organisms are Prohibited

You cannot use plant protectants that contain **genetically modified organisms**. As well, the **plant protectants** cannot be made of or with **GMOs**. (EU)

If there is a risk that a plant protectant contains or is made of or with GMOs, you must get a letter of confirmation that states that the product does not contain GMOs or have the product analysed.

When an analysis is done, the upper limit for accidental presence of GMOs is 0.9%. (EU)

4.9.3 Permitted Plant Protectants

You can use certain types of **plant protectants** in your KRAV-certified crop production. Note however that plant protectants must be approved by the National Chemicals Inspectorate. All plant protectants in the table are permitted according to the current EU regulation for organic production. Complete conditions for use are available on the website of the Swedish Chemicals Agency, www.kemi.se.

Plant Protectant	Description, compositional requirements, conditions for use	
Plant or Animal Substances		
Allium sativum (garlic extract)		EU
azadirachtin extracted from Azadirachta indica (Neem tree)		EU
beeswax	Only as a wound dressing.	EU
COS-OGA Chito-OligoSaccharide - Oligo-galactorrose		EU
hydrolysed proteins other than gelatin		EU

Plant Protectant	Description, compositional requirements, conditions for use	
laminarin	Kelp should either be grown organically according to the current EU Regulation for organic production or harvested in a sustainable manner, according to this regulation.	EU
maltodextrin	Must not be produced by or with genetically modified organisms.	EU
pheromones	Only in traps and dispensers.	EU
vegetable oils (for example oils from mint, pine and cumin)	Approved for all areas of use except as weed control.	EU
pyrethrins	Only of vegetable origin	EU
quassia extracted from <i>Quassia amara</i>	Only as an insecticide, repellent	EU
repellents (fragrances) of animal or plant origin/mutton suet	Repellent. May only be used on non-edible parts of the crop, and if the crop is not eaten by sheep or goats.	EU
<i>Salix</i> spp Cortex (bark from <i>Salix</i> species)		EU
terpenes	eugenol, geraniol and thymol	EU
General Chemicals		
food-based general chemicals	These include lecithin, sucrose, fructose, vinegar and wine-vinegar, whey, chitosan hydrochloride (from sustainable fishing or organic aquaculture) and <i>Equisetum arvense</i> . Only general chemicals as defined in Article 23 of Regulation (EC) 1107/2009 which constitute food as defined in Article 2 of Regulation (EC) 178/2002 and which are of vegetable or animal origin. The substances must not be used as herbicides.	EU
Micro-organisms or Substances Produced by Micro-organisms		
micro-organisms (bacteria, viruses and fungi)	Do not originate from genetically modified organisms .	EU
spinosad		EU
cerevisane	Must not be produced by or with genetically modified organisms.	EU
Other Substances		
aluminium silicate (kaolin)		EU

Plant Protectant	Description, compositional requirements, conditions for use	
calcium hydroxide (slaked lime)	When used as a fungicide, only for fruit trees, including nurseries, to combat <i>Nectria galligena</i> .	EU
carbon dioxide		EU
ethylene		EU
fatty acids, for example potassium salt (soap) of fatty acids	Approved for all areas of use except as herbicides.	EU
ferrous phosphate, iron (III) orthophosphate	Preparations to be surface-spread between cultivated plants.	EU
hydrogen peroxide		EU
diatomite (diatomaceous earth)		EU
lime sulphur (calcium polysulphide)		EU
paraffin oil		EU
potassium bicarbonate and sodium bicarbonate		EU
sodium chloride (salt)	All uses approved, except weed control.	EU
quartz sand		EU
sulphur		EU

4.9.4 Prohibited Plant Protectants

It is prohibited to use the following **plant protectants** even though they are permitted according to current EU regulations for organic production (K):

- pyrethrum, and
- copper in the form of copper hydroxide, copper oxychloride, copper sulphate, and cupric oxide.

4.9.5 Additives in Plant Protectants

You must not use pyrethrum extract with the **additive** piperonyl butoxide. (K)

4.10 Seeds and Vegetative Propagation Material

This section describes the requirements for seeds, plants and plant propagation material.

If you grow seed for sale, seed legislation must be complied with. The seed of agricultural plants must be certified according to the legislation. There are exceptions for so-called conservation varieties. Vegetable seed must be certified or meet the requirements for verified standard seed according to the Swedish Board of Agriculture, see www.jordbruksverket.se.

4.10.1 Organic Seeds and Vegetative Propagation Material

You must use **organic** propagation material when possible. Annual plants for planting must always be organic. Organic propagation material means that seeds and vegetative propagation material must be certified according to the KRAV standards or Regulation (EC) 834/2007 **(EU)**:

- For annual plants, this means that the seed or parental plant's vegetative propagation must originate from plants that have been grown organically for at least one generation.
- For perennial plants, the seed or vegetative propagation material must come from a plant grown organically for at least two cultivation seasons.
- Propagation material must not be produced by or with **genetically modified organisms**.

You must comply with the Swedish Board of Agriculture's requirement for organic seed and vegetative propagation material. The seeds you use to produce organic seeds can be conventional seeds that have not been chemically treated. **(EU)**

If you cultivate seed on KRAV-certified soil and the seed is downgraded, you may use or sell the crop as a KRAV-certified product. You can also use the harvest for your own seed if you determine it to be appropriate based on the reasons for downgrading the seed crop. **(EU)**

When there are no organic seeds or vegetative propagation material of a certain crop or variety, the Swedish Board of Agriculture determines whether or not you and other KRAV-certified farmers can use conventional non-chemically treated seeds or vegetative propagation material. The Swedish Board of Agriculture can also make exceptions on an individual basis if there are special circumstances. Availability of organic vegetative propagation material is registered in the Swedish database [organicXseed Sweden](http://organicxseedSweden.se), see se.organicxseeds.com in Swedish only).

4.10.2 Treated Seed

You cannot use chemically treated seed or propagation material in KRAV-certified cultivation, but vegetative propagation material may be treated with biological agents or heat-treated. **(EU)**

4.10.3 Production of Seed from Land In Conversion

Seed from land in **conversion** can be considered as KRAV-certified if you have registered the land as in conversion before sowing the seed crop. For ley seed, you must register the land at least 12 months before harvesting. **(EU)**

If you cultivate seed from a cultivation in conversion and the seed is downgraded, you can use the harvest according to the standards for land in conversion, see standards 5.1.9.11-5.1.9.15. You can also use the harvest for your own seed if you determine it to be appropriate based on the reasons for downgrading the seed crop. **(EU)**

From 1 January 2022, all KRAV-certified seed must be grown on KRAV-certified land. Seed from in-conversion cultivation can be marketed as seed from land in conversion if at least 12 months have elapsed from when the conversion began to harvest. The in-conversion seed will be able to be used KRAV-certified production only under certain conditions.

4.10.4 Restrictions and Conditions for the Use of Conventional Propagation Material for Perennial Plants

When no **organic** vegetative propagation material is available, you may use with certain restrictions, **conventional** material. If you use conventional vegetative propagation material intended for planting and production of products other than seed and vegetative propagation material, the following applies **(EU)**:

- For outdoor cultivation, plants with a shorter cultivation time than a year that are propagated vegetatively using cuttings, propagation material must come from mother plants grown organically for at least one growing season. For **greenhouse cultivation** the growing season corresponds to the plant's normal growing time. Rosemary, tarragon and poinsettia are examples of plants propagated from cuttings.
- For cultivation of plants with a longer growing time than one year, conventionally cultivated plants may be used, provided that the harvest is sold as **organic** at the earliest in the calendar year after planting.
- For the cultivation of flower bulbs for the production of cut flowers, the bulb must be organic.

“Growing time” refers to the time from planting or sowing to harvest or sale. When using conventional propagation material, it must be chemically untreated after harvest, see standard 4.10.2. **(EU)**

4.10.5 Seed for Cultivation of Sprouts and Shoots

Seed for cultivation of sprouts and shoots in water without nutrient additives must always be KRAV-certified. You must not use seeds from in-conversion cultivation. The same standards apply to shoot cultivation in soil as for seed in general. **(EU)**

4.11 Greenhouse Cultivation

This section is about special standards for **greenhouses**. Those who cultivate in greenhouses must also comply with all the other applicable standards for crop production in this chapter, unless “does not apply to greenhouses” is included in the title of the standard.

4.11.1 Seed-starting Soil and Potting Soil

You can use vermiculite, sand, clay, lightweight-aggregate concrete and perlite in seed-starting soil and potting soil. You can also use fertilisers and soil conditioners that are permitted according to section 4.8. **(K)**

4.11.2 Cultivation in a Delimited Substrate

A substantial portion of the plant nutrients all plants takes up must come from the soil the plant is grown in. Therefore, you cannot cultivate exclusively in biologically inactive material or cultivate in excessively minimal soil volumes. **(K)**

If you **cultivate** in a **delimited substrate**, e.g. in a pot, and you add plant nutrients after planting, each plant must have at least 30 litres of soil. This applies to annual vegetable crops with a long cultivation time, such as tomatoes, cucumbers, red peppers and eggplants. Other cultivations must have at least 0.2 litres substrate per pot. Other cultivations include mainly herbs and lettuce, though berry cultivations such as strawberries are included in this group. **(K)**

For plants that are replanted on open land or in a larger soil volume in a **greenhouse**, there are no size requirements for pots, but they must be grown in a biologically active material. **(K)**

From 1 January 2022, cultivation in delimited substrates is prohibited. Exceptions apply to: **(EU)**

- *Cultivation of plants for the production of ornamental plants and herbs in pots sold together with the pot to the final consumer.*
- *Cultivation of seedlings or plants in containers for further replanting.*
- *Surfaces that were organically certified for cultivation in delimited beds before 28 June 2017. You may not expand these areas. This exception applies until 31 December 2031.*

By 31 December 2026, the European Commission will present a report on the use of delimited beds in organic farming. The report may lead to a proposal for a new regulation.

4.11.3 Hydroponics

Hydroponic cultivation is when plants are grown in a nutrient solution. You can only cultivate aquatic plants with this technique. **(EU)**

Cultivation of sprouts is not considered hydroponics.

4.11.4 Artificial Light

You cannot use artificial lighting as the only source of light during the entire lifespan of a plant. **(K)**

For shoots cultivated in soil, the standards for greenhouses apply, and thus artificial light cannot be the only source of light. However, for sprouting, only water is added and it is therefore not considered greenhouse production, and thus production does not require any daylight. **(K)**

4.12 Mushroom Cultivation

This section has specific standards for cultivating mushrooms. You must also comply with the applicable standards in Chapters 2, 3, 4 and 20.

4.12.1 Substrate

The substrate you grow your mushrooms in can only contain (EU):

- farmyard manure from **organic** or in-conversion animal husbandry
- farmyard manure from conventional animal husbandry if farmyard manure according to the first point is not available and provided that it is permitted as fertiliser and soil conditioner (see standards 4.8.5 and 4.8.6), and comprises not more than 25% of the total weight of the substrate before it is composted or before addition of water
- other products of agricultural origin, for example straw, from organic production
- peat which is not chemically treated
- wood not chemically treated after felling
- mineral products which are approved as fertilisers and soil conditioners (see standard 4.8.8)
- water
- soil.

4.12.2 Artificial Light

You can cultivate mushrooms in the dark and use artificial lighting as the only light source when you work with the cultivation. (EU)

4.13 Optional: Hygiene Standards for Cultivating and Handling Fruits and Vegetables

For most types of production, the KRAV standards do not contain specific handling standards in order to comply with legislation or industry guidelines. In general, it is our view that the industry guidelines in each respective area may be used as a supplement to the KRAV standards.

However, to make it easier for those who want an independent third-party review of compliance with the hygiene standards below, this section contains hygiene standards for cultivating and handling fruits and vegetables. You can decide yourself if you want your certification body to audit compliance with the standards. Those certified for the standards in this section meet the “From Sweden” labelling standard 5.1.1. for these products: potatoes, fruit, berries, root vegetables, vegetables and mushrooms.

4.13.1 Give Notification of Your Activity

If you want to be certified for this type of production you must notify your

certification body well in advance of when you want the certification to be completed. After an approved audit, your certification body issues a certificate that the voluntary hygiene standards are complied with.

4.13.2 Risk Assessment of Water Sources for Irrigation and Washing

You must make an annual risk assessment with regard to food safety and review procedures and hazards that may affect your water source. You must take into account changing conditions that may affect water quality, such as changing water sources. You must document your risk assessment. The documentation must include:

- the water sources you use
 - the irrigation technique you use
 - what potential sources of pollution your production is exposed to
 - what kind of crop you cultivate
 - how the harvested product will be consumed
- Example: The consumer is expected to rinse the lettuce before eating it raw, winter potatoes are peeled and boiled or fried before eating
- the preventive measures you take.

The industry guidelines for food safety in the production of field-grown vegetables and berries include aids in the form of flow charts that you can use to assist in the risk assessment of water sources. The aids are available at: www.livsmedelsverket.se.

4.13.3 The Water's Microbiological Quality

You must test irrigation water and rinse water according to the schedule you determined in your risk assessment and you must be able to verify the microbiological quality of the water sources, for example through approved sampling results.

For tools and guidance for sampling your water source, see the industry guidelines for the production of field-grown vegetables and berries.

Other References:

- The Swedish Board of Agriculture
- The County Administrative Board
- National Board of Health and Welfare's General Advice for Pools, SOSFS 2004:7
- Regulation of Private Well Water, SOSFS 2003:17
- Hygienic Quality of Drinking Water, SLV 2001:30.

4.13.4 Appropriate Irrigation Technology and Time of Irrigation During the Growing Season

If the irrigation water comes into contact with edible parts of the crop, the water must maintain drinking water quality. Irrigation close to harvest time must be done in such a manner so that splashing of soil on edible parts is

avoided. You must be able to describe what irrigation technology you use for each respective crop when you have irrigated.

Properly carried out irrigation is especially important for vegetables and berries that are eaten raw.

4.13.5 Hygiene

You must have written procedures for:

- personal hygiene
- procedures in the event of injury or sickness.

Everyone who works with cultivating and handling must:

- have access to bathrooms with facilities for washing hands
- always wash their hands before starting work and after going to the bathroom
- have whole and clean protective and work clothing
- know the procedures for personal hygiene and what to do in the event of injury or sickness.

4.13.6 Packaging and Equipment

You must handle and store all packaging that comes in contact with the product in such a manner that contamination by an infection and foreign objects does not occur.

To avoid infections and other contamination you must have written procedures for:

- cleaning machines and equipment
- cleaning packaging intended for reuse
- cleaning equipment that comes in contact with the products.

You must be able to describe how the packaging you use is stored pending use, and how it is handled during harvest. The packaging must not be contaminated by infections, foreign matter or pests.

Support is provided in the industry guidelines for food safety in the production of field-grown vegetables and berries. The cleaning routines should reflect the type of production you have and it should be relevant from a food perspective. More detailed procedures are expected to be carried out by producers of ready-to-eat vegetables and berries as well as producers who rinse ready-to-eat vegetables and berries.

Animal Husbandry

5

This chapter describes the standards for animal husbandry on a KRAV-certified farm. Those certified for animal husbandry must also comply with the general standards in Chapters 2, 3 and 20 as well as the standards in Chapter 4 Crop Production.

Contents of this chapter:

- 5.1 Standards for All Types of Livestock
- 5.2 Cattle
- 5.3 Sheep and Goats
- 5.4 Pigs
- 5.5 Poultry

5.1 Standards for All Types of Livestock

The standards in this section apply to all KRAV-certified animal husbandry regardless of type of livestock. This section includes:

- 5.1.1 General
- 5.1.2 Notification and Conversion Period
- 5.1.3 Parallel Production and Change of Production
- 5.1.4 Identification and Documentation
- 5.1.5 Purchase of Animals
- 5.1.6 Breeding
- 5.1.7 Outdoor Access and Grazing
- 5.1.8 Housing Conditions
- 5.1.9 Feed and Water
- 5.1.10 Processes, Additives and Preservation of Feed
- 5.1.11 Health and Care
- 5.1.12 Handling and Transport
- 5.1.13 Wool and Hides

5.1.1 General

5.1.1.1 Good Care and Environment

You must provide animals with care and an environment that is of a sufficiently good standard so that every animal can stay healthy (**EU**). Animals must be able to live with dignity (**K**). Good animal health is a prerequisite for animal production to be KRAV-certified. (**K**)

! *It is a major nonconformity if there are significant deficiencies in animal care, state of health or environment.*

5.1.1.2 Knowledge about Animal Husbandry

You must have the necessary basic and professional knowledge about **animal welfare** and protection. (**EU**)

5.1.2 Notification and Conversion

5.1.2.1 Notification

You must notify your **certification body** about your animal husbandry before the **conversion period** can begin. You must also report new types of livestock and changes in production to your certification body. Notification must be done enough in advance so that the certification body can carry out an audit before the start of the conversion period if necessary. (EU)

5.1.2.2 Start of the Conversion Period

You must take care of your animals according to the KRAV standards from the starting date for the conversion period set by the **certification body**. (EU)

5.1.2.3 The Conversion Period

You must take care of your animals according to the KRAV standards during a **conversion period** before you can sell animal products or animals as KRAV-certified. The conversion period varies for different types of livestock. (EU)

The conversion period is given in the standards for each respective type of livestock.

5.1.2.4 Conversion Period During the Transition from EU organic to KRAV-certified Production

If you switch from **EU organic** production to KRAV-certified production, your time spent as EU organic can be included in the **conversion period**, from the date the **certification body** verifies that you have complied with the KRAV standards for animal husbandry. (K)

! *It is a major nonconformity if products or animals are sold as KRAV-certified before the conversion period is finished.*

5.1.3 Parallel Production and Change of Production

5.1.3.1 Parallel Production

Parallel production is prohibited. Parallel production is prohibited even if the animals are at separate production units within the same company. (EU)

You can have KRAV-certified and conventional animals of different animal types in the same company provided that you keep them clearly separated.

5.1.3.2 Exceptions when Parallel Production is Permitted

Parallel production is allowed if it is carried out for research or educational purposes. The Swedish Board of Agriculture makes the decision as to whether the products can be sold as **organic**, which is a condition in order for them to be KRAV-certified.

The following conditions must be complied with in order to carry out parallel production (EU):

- You must notify your **certification body** that you have parallel production. The certification body forwards your application to The Swedish Board of Agriculture which decides if the parallel production is permitted.
- You must notify your certification body as to the measures you take to keep animals, animal products, fertiliser, and feed separate between the different units (the organic and the conventional).
- You must notify your certification body as to the quantities produced by both units and how the products can be identified.
- You must notify your certification body prior to delivery or sale of animals or products.

5.1.3.3 KRAV-certified and EU organic of the Same Livestock at the Same Time

You must not have **EU organic** animal husbandry at the same time as you have KRAV-certified animal husbandry with the same type of livestock. **(K)**

5.1.3.4 Changing Between KRAV-certified and EU organic Production

You cannot temporarily change your animal husbandry to **EU organic**. If you switch to EU organic production and then want to return to KRAV-certification for the production, you must once again go through the conversion period for the livestock in question. **(K)**

However, the time your animal husbandry has been EU-certified can shorten the conversion period if your certification body can verify that you have complied with the KRAV standards for animal husbandry. See section 5.1.2.4.

5.1.3.5 Changing Between KRAV-certified and Conventional Production

You cannot temporarily change to conventional animal husbandry. If you switch to conventional production and then want to return to KRAV-certification for the production, you must once again go through the **conversion period** for the livestock in question. **(K)**

For egg production, you must take at least a 12 month break before you can begin KRAV-certified production again. **(K)**

Note that other conversion standards apply to land, see section 4.1.

5.1.4 Identification and Documentation

5.1.4.1 Identification of Animals

You must mark every animal that can be marked individually according to the applicable laws. **(SL)**

Fattening pigs, lambs and poultry that cannot be marked individually must be able to be distinguished if they are being treated with veterinary medicinal products. **(EU)**

5.1.4.2 Documentation

You must be able to show the following documentation for your animal husbandry (EU/K):

- born, purchased, sold and dead animals
- all injuries and sicknesses
- all treatments, including those you carry out yourself, with information about treatment results and the **withdrawal time** you intend to apply
- preventive measures, injections with selenium, **feed supplements** or other preparations
- **key performance indicators** for preventive health work with dairy cows
- castration and dehorning
- start and stop times for the **outdoor period**
- start and stop times for the **grazing period**
- temporary indoor periods during the outdoor or grazing periods for animal groups or a few animals
- which tethered cattle were not taken outdoors, the reason and/or the weather conditions
- temporarily tethered animals, which animals and for how long,
- feed rations
- purchase of feed, feed supplements, additives and preservatives,
- product sales
- own feed production
- remarks from slaughter, live inspections, milk assessments or equivalent,
- drawings of buildings, exercise yards, pastures and raceways
- any additional information required for specific cases in other standards.

All animals and groups of animals must be identifiable in the documentation. When information about complete groups of animals are documented, the group must be defined so that it is clear which individuals are included. The documentation must be clear, well-organized and stored on the farm so that it provides information about conditions over the long term (see also section 2.3.4). (EU)

The reason for all documentation about your production is that animals, feed and other inputs must be traceable. Declarations of contents must be available for multi-ingredient products. You can then show that you only use products approved according to the KRAV standards. The documentation also helps you monitor production to see that it complies with the KRAV standards. Several of the documentation requirements are already included in the laws and regulations of The Swedish Board of Agriculture.

5.1.4.3 Documentation for Live Animals

If you sell live animals, you must give the next owner an excerpt from the treatment journal for the most recent 12 months. You must also provide documentation for any ongoing **conversion** period or **withdrawal period** after medicating. (K)

5.1.5 Purchase of Animals

5.1.5.1 Purchase of Animals for Breeding and Renewal

You can purchase KRAV-certified animals (also including animals in conversion) if needed for breeding, renewal or expansion. There is no limitation regarding number or age. **(K)**

If KRAV-certified animals are not available, you can purchase **EU organic** animals. However, if you regularly purchase renewal animals, these must be KRAV-certified and you must have an established cooperation with the breeder.

5.1.5.2 Purchase of Animals to Raise for Slaughter

If you purchase animals to raise for slaughter the animals must be KRAV-certified or in conversion. You must be able to show that the forms of cooperation between you and the breeder are such that the animals maintain good health and are delivered directly between the **farms**. **(K)**

Read more about what applies under the respective animal species.

In the evaluation of compliance with the standards, your certification body takes into consideration how many different herds are involved in the cooperation, the age of animals when purchased, the presence of a quarantine stable or reception stable, what the stable system looks like, and if you and the breeder are affiliated with a health program.

! *It is a major nonconformity if you have purchased conventional or EU organic animals to raise for slaughter.*

5.1.5.3 Purchase of a Few Conventional Animals for Reproduction and Renewal

If KRAV-certified or **EU organic** animals of the breed or with the characteristics appropriate for your production are not available, you can purchase a few conventional replacement and breeding animals. You can buy pregnant animals but not animals that have had offspring. **(EU)**

Limitations on the number of purchased animals per year as well as conversion periods for the conventional animals are given in the standards for the respective livestock.

Use of conventional animals in organic production will eventually be phased out in accordance with the new regulation for organic production (EU) 2018/848, which enters into force on 1 January 2022.

5.1.5.4 Purchase of Several Conventional Animals When there are Changes in Production

You can only purchase more conventional animals for breeding and renewal when KRAV-certified or **EU organic** animals are not available, in any one of the following three situations **(EU)**:

- When you are going to switch animal breed as part of a long-term plan. The animals purchased must be of the breed that is going to be the main production breed in the herd.

- When you change animal husbandry specialization but continue with the same livestock. The new specialization must then differ substantially from the existing animal husbandry, for example a change from dairy cows to suckler cows.
- When you need to renew endangered breeds of animals.

Mother animals must not have had offspring, as long as they are not from an **endangered species**. You are permitted to purchase 40% new animals at the most calculated using the number of mother and pregnant young animals you have after the purchase. You must document that KRAV-certified or EU organic animals have not been available for purchase. **(EU)**

The conversion periods for conventional animals are given in the standards for the respective livestock.

5.1.5.5 Purchase of Conventional Animals For Expansion Following Approval by The Swedish Board of Agriculture

When you are going to expand your stock and there are no KRAV-certified or **EU organic** animals available, you need approval from The Swedish Board of Agriculture to purchase a large number of conventional mother animals. You must also apply for approval if you need to purchase new animals due to some form of catastrophic situation resulting in high mortality among your animals. **(EU)**

You are permitted to purchase 40% new animals at the most calculated using the number of mother animals and pregnant young animals you have after the purchase. You cannot purchase animals that have had offspring. **(EU)**

The conversion periods for the conventional animals are given in the standards for the respective livestock.

5.1.6 Breeding

5.1.6.1 Choice of Breeds and Lines

You should primarily use breeds and lines that are suitable for organic animal husbandry. KRAV-certified animals must come from breeds that are able to mate and give birth naturally. **(EU)**

! *It is a major nonconformity if you purchase or keep a forbidden breed of animal.*

5.1.6.2 Breeding Material to Promote Organic Production

You can use semen and **genomic selection** to achieve the desired progress in breeding. You can also use sexed semen. **(EU)**

Sexed semen can be used in organic production according to current praxis in Sweden. Use of sexed semen is not regulated in the EU law for organic production, which may change.

5.1.6.3 Embryo Transfer

Transfer of embryos is not permitted **(EU)**. It is also not permitted to purchase animals developed with embryo transfer (ET). **(K)**

You can however use semen from embryo transfer animals for insemination and you may purchase animals of ET descent (EU).

This is permitted so as not to limit breeding material.

5.1.6.4 No Preparations for Controlling Reproduction

It is not permitted to synchronize females' oestrus or to routinely induce labour with the help of artificial substances, hormone preparations, etc. (EU)

It is a major nonconformity if you do not comply with the standard.

5.1.6.5 No Genetically Modified Animals

Genetically modified animals are prohibited in KRAV-certified production. (EU)

It is a major nonconformity if you have genetically modified animals in your KRAV-certified production.

5.1.6.6 Care of all Animals According to the KRAV Standards

You must take care of all animals of the same type according to the KRAV standards, that is to say even those animals that are not going to be KRAV-certified (K).

This can for example be the case with purchased, rented or medicated animals.

5.1.7 Outdoor Access and Grazing

See also under the respective livestock as to what applies for outdoor access and grazing.

5.1.7.1 Maximized Outdoor Access

You must keep animals outdoors as much as possible without causing injury to animals or damage to the land. You must plan the animals' outdoor access and grazing periods so that they work well to the greatest possible extent even if it is unusually dry or rainy. You must be able to report on your routines for outdoor access during different times of the year. (K)

One of the basic conditions of KRAV-certified animal husbandry is that animals are able to be outdoors.

5.1.7.2 Grazing for Feed and Activity

You must ensure that all livestock can graze during the appropriate part of the year. Grazing must provide both feed and activity for the animals. You must show how you have planned for adequate grazing during the whole grazing season, e.g. with a written grazing plan. (K)

5.1.7.3 Year-round Production

Production must be continual and year-round. There must be outdoor access and grazing for the herd but not always for each individual, as there are some animals that have a lifespan shorter than a year. It is however permitted to have production exclusively during the grazing and outdoor season. (EU/K)

If you cooperate with another KRAV-certified **farm**, for example by raising lambs and **calves**, one of the farms can raise animals during the **stable period** only and the other during the outdoor and **grazing period**. (EU/K)

It is a major nonconformity if you do not comply with the standard.

5.1.7.4 Fencing

All fences must be well taken care of. You must avoid use of barbed wire fencing, but if used it cannot be electrified.

If you combine barbed wire with electrified smooth electric fencing you must comply with The Swedish Board of Agriculture's regulations. (SL)

Barbed wire is prohibited for pigs in accordance with the Swedish Board of Agriculture's regulations on pig farming (SJVFS 2019: 20).

5.1.7.5 Outdoor Area

The outdoor area must not leach plant nutrients. The surface must also provide animals with a solid and dry underlay (K). Ground surfaces that receive a lot of wear by animals must be hardened, drained or naturally have the equivalent characteristics. (SL)

5.1.7.6 Animals in Seasonal Mountain Holdings

If you have animals in seasonal mountain holdings that are registered with the County Administrative Board, they can be kept indoors during the night even during the **grazing period** if it is necessary due to an abundance of gnats and mosquitoes over a prolonged period of time. This means that you then do not have to comply with the standard that animals must be outdoors most of the time. You can also keep animals indoors during the night if there is a high risk for attack by predatory animals. (K)

5.1.8 Housing Conditions

5.1.8.1 Housing

Your animals must have housing that is well-suited to them.

There are detailed standards under each respective livestock.

5.1.8.2 Free Range Herds

You can be exempted from the requirement of having suitable housing if you are registered with a inspection program for outdoor animals that is approved by The Swedish Board of Agriculture.

5.1.8.3 Freedom to Move for All Animals

All animals must be able to move freely. Animals must not be tethered or held in any form of cage. (EU)

See the exception in the special standards for cattle in small holdings, 5.2.4.9.

5.1.8.4 Temporary Tethering

If you have special reasons, you can temporarily tether animals providing that you keep them under supervision. “Special reasons” means for reasons of security, animal welfare or veterinary requirements.

You must limit the time the animal is tethered to what is strictly necessary to achieve the objective of the specific reason. However, the longest period is two weeks unless a veterinarian prescribes a treatment that requires longer tethering. **(EU/K)**

5.1.8.5 Solid Floor Area

At least half of the minimum floor area must be solid for all animals other than poultry. The rest can be slatted flooring. **(EU)**

The dimensions for minimum floor area and other detailed standards are found in the section for the respective type of animal.

5.1.8.6 The Animals’ Lying Area

You must provide the animals with a comfortable and spacious lying area, which must be kept clean, dry, draft-free and if necessary warm. The lying area must have a solid floor, be littered and be comfortable for the animals. You can have a mattress or a rubber mat on the lying area, but there must also be litter material. You must take care of the lying areas, maintaining good hygiene and preventing propagation of flies. Straw for bedding can be conventionally cultivated. **(EU/K)**

! *It is a major nonconformity if you do not comply with the standard.*

5.1.8.7 Access to Eating Places

All animals in a group must be able to eat without competition, which in most cases means that more eating places are required than the minimum number specified by the Swedish Animal Welfare Act. **(K)**

5.1.8.8 Access to Daylight

Animals must have access to a lot of daylight and lighting that supports their daily rhythm and behaviour needs. Light openings must provide daylight that is evenly distributed through the entire stable. **(SL)**

If you add buildings to the certification or if there is new construction or renovation, daylight must be let in via an area equivalent to at least 3% of the floor area unless otherwise stated (for sheep and goats see standard 5.3.4.4). **(K)**

5.1.8.9 No Electric Wire Shock Systems in Stables

Electric wire shock systems in the stable are prohibited. **(SL)**

Indoors, there is a risk that animals would be pressed against the electric wire since the movement area is more limited than outdoors.

! *It is a major nonconformity if you do not comply with the standard.*

5.1.9 Feed and Water

All feed specifications are given as **dry matter** (DM) if not otherwise noted.

5.1.9.1 Feed Self-sufficiency

You must to a certain degree produce the feed for your animals on your own **farm** or in cooperation with another farm according to standard 5.1.9.2. (EU)

The level of self-sufficiency is calculated from the annual use of feed on the farm, including grazing. You must base the calculation on your harvests during normal conditions. If you have several types of KRAV-certified livestock on the farm, you can add the self-sufficiency requirements together for the whole farm. (EU/K)

! *It is a major nonconformity if you do not comply with the standard.*

5.1.9.2 Cooperation on Feed and Fertiliser Between KRAV-certified Farms

You can cooperate with one or more KRAV-certified **farms** on feed and manure so that your farms together reach at least the level of self-sufficiency in feed required for the livestock you have. In that case, you must make a cooperation agreement between your farm and those you work together with. (EU)

5.1.9.3 Purchased Feed

If you purchase feed, you can offset the following crops that you or one or more **farms** that you cooperate with grow and sell (EU):

- all crops that can be used as feed for the animal concerned, and
- planting seed.

5.1.9.4 Spreading Fertiliser on Organic Land

Manure from KRAV-certified animal husbandry must be spread on KRAV-certified or **EU organic** land. If you do not have sufficient land area yourself that is farmed organically, you must draw up a contract for spreading manure with another KRAV-certified or EU organic **farm**. (EU)

5.1.9.5 Water

You must ensure that animals always have access to good quality water. (SL/K)

! *It is a major nonconformity if you do not comply with the standard.*

5.1.9.6 Good Quality Feed that is Adapted to the Livestock

You must give animals feed that keeps them healthy. The feed must be of good hygienic quality and its composition must be adapted to the respective livestock and production. (SL)

! *It is a major nonconformity if you do not comply with the standard.*

5.1.9.7 **KRAV-certified Feed**

All feed of agricultural origin must be KRAV-certified. However, until 31 December 2021 you can give pigs and poultry a small portion of conventional protein feed (EU).

See standards and percentages for this under each respective livestock.

The exemption for feed with conventional protein feed will also apply according to the new regulation for organic production (EU) 2018/848, which enters into force on 1 January 2022, but note that it is then limited to only young monogastric animals.

! *It is a major nonconformity if you do not comply with the standard.*

5.1.9.8 **Mineral Feed and Similar Substances**

You must not include mineral feed, calcium, seashells and similar substances when you calculate the percentage of KRAV-certified feed. (EU)

5.1.9.9 **No Genetically Modified Organisms in Feed**

You cannot use **genetically modified organisms** as feed or for making feed, feed additives or feed preservatives. (EU)

! *It is a major nonconformity if you do not comply with the standard.*

5.1.9.10 **Permitted Feed of Animal Origin**

You can give certain high quality feed materials of animal origin to pigs and poultry. Whey, skim milk and other residual products from KRAV-certified milk production can also be given to ruminants. The products that can be given are listed in Appendix 1. (EU)

Fishmeal must come from **sustainable fisheries**, in other words fisheries that comply with **ICES** advice or the equivalent. (K)

KRAV recommends use of mussel meal.

5.1.9.11 **Feed From Land in Conversion**

You can use feed grown on land in **conversion** in various ways depending on how much of the **conversion period** has been completed before you harvest. You must keep different types of **conversion feed** separated as well as separated from KRAV-certified feed. Down-graded seed from a cultivation in conversion can also be used according to the standards for fodder from land in conversion (see also standard 4.10.3).

5.1.9.12 **Harvest From Your Own Farm the First 12 Months – Up to 20%**

If you harvest from land on your own **farm** before 12 months have passed since you began **conversion** of the land, you can use the harvest for your own KRAV-certified animals and animals in conversion. This applies however only if it is (EU):

- grazing land, feed from perennial feed crops or **protein crops**, and
- a maximum of 20% of the annual quantity of feed.

5.1.9.13 Harvest From Your Own Farm After at Least 12 Months – Up to 100%

When 12 or more months have passed from the beginning of the **conversion period** to the harvest, you can use all crops as **conversion feed**. The conversion feed from your own **farm** can then comprise the entire annual quantity of feed. (EU)

5.1.9.14 Purchased Conversion Feed - Up to 30%

You can purchase **conversion feed** harvested 12 months or more after the beginning of the **conversion period**. Purchased feed can thus comprise (EU):

- 30% at most of the annual quantity of feed, and
- all of the crops for the animal concerned.

The feed must be marked with "Feed produced in conversion to KRAV-certified production".

5.1.9.15 Combinations of Conversion Feed - Up to 30%

You must not use more than a total of 30% purchased **conversion feed** and feed from your own **farm** that you harvested during the first 12 months. (EU)

5.1.9.16 Concurrent Conversion – Up to 100%

If you start conversion of animals and crops at the same time, you can choose 24 months conversion for animal husbandry. You can then use all your own conversion feed of various crops even if 12 months have not passed from when conversion began to the time of harvest. During the conversion period you may also use existing conventional feed if it has been harvested on your own farm. (EU)

5.1.9.17 Cooperation Agreements – Several Farms are Regarded as a Single Unit

If you have a written cooperation agreement for feed production and manure with one or several **farms**, you can count the farms as one unit according to the standards for plant nutrients, feed supply and **conversion feed**. Grazing animals can thus also be moved between the farms. (K)

5.1.10 Processes,, Additives and Feed Conservation

5.1.10.1 Approved Feed Processes

All processed feed you use must be made using processes permitted by the KRAV standards. The following processes are permitted (EU):

- mechanical and physical processes
- **biological processes** such as **fermentation** (for example use of lactic acid cultures and fungus cultures)
- enzymatic processes, for example, to coagulate or break down substances

- extraction with water, ethanol or fats
- sedimentation.

i *Feed that is permitted according to standard 11.4.4 is at www.krav.se (in Swedish only).*

5.1.10.2 Salt in Feed

You can supplement feed with salt and seashells.

5.1.10.3 Trace Elements, Vitamins and Minerals

If available, you must use trace elements, vitamins and minerals from natural sources. The permitted trace elements, vitamins and minerals are found in Annex V and VI to Regulation (EC) 889/2008. **(EU)**

You can use synthetic feed additives for a limited time if the following three conditions are met **(EU)**:

- it is recommended by a veterinarian
- the additives are necessary for the animal's health
- natural alternatives are not available.

*Enzymes are an example of such synthetic feed additives. **(EU)***

5.1.10.4 Amino Acids and Urea

You cannot use pure amino acids or urea. **(EU)**

! *It is a major nonconformity if you do not comply with the standard.*

5.1.10.5 Feed Preservatives

The chemical feed preservatives that are permitted in **roughage** are formic acid, propionic acid and acetic acid. It is also permitted to use propionic acid to preserve grain. **(EU)**

5.1.10.6 No Additives to Straw

It is prohibited to use straw treated with ammonia or other feed preservatives. **(EU)**

5.1.10.7 Additives and Substrate when Ensiling

You can use the following additives when ensiling **(EU)**:

- enzymes and microorganisms; may be used only if weather conditions do not allow sufficient fermentation
- formic acid, sodium formate, propionic acid, sorbic acid, citric acid, lactic acid, and acetic acid.

Other than these you can also use molasses in the amount needed for ensiling. **(EU)**

i *On the **KRAV** website there is a list of substances for ensiling that are assessed as permitted by a certification body according to this standard, see www.krav.se/tillatna-ensileringsmedel (in Swedish only).*

5.1.10.8 Acidifying Milk

To acidify milk you can use acidified milk, for example sour milk, bacteria cultures and acidification substances of plant origin (K). It is prohibited to use chemical feed preservatives such as formic acid, propionic acid and acetic acid to sour milk. (EU)

5.1.11 Health and Care

5.1.11.1 Supervision

Your animals must be well supervised. (SL)

5.1.11.2 Animal Health

You must work with preventive measures for **animal health** by providing a good environment and taking care of them well, and by having good grazing and feeding routines. (EU)

■ *It is a major nonconformity if you do not comply with the standard.*

5.1.11.3 Animal Cleanliness

You must keep animals clean. Animals that are considerably fouled by manure or that receive remarks from the slaughterhouse indicating deficient animal care cannot be KRAV-labelled. (K)

Slaughterhouses are required to inform the animal keeper's **certification body** if there are remarks regarding slaughter that indicate deficient animal welfare in the population (see section 10.2.7).

■ *It is a major nonconformity if you do not comply with the standard.*

5.1.11.4 Preventive Health Care

You must be able to show that you take preventive measures and that the health of the animals is good. You must have a well thought out plan for strategic preventive animal health care including protection against infection. The plan must include at least (K):

- routines for protection of infection from visitors as well as during transport of animals to and from the herd
- a plan for requisite testing, for example, for parasites or udder health,
- a grazing plan to, amongst other things, minimize infection from intestinal parasites and limit propagation of infection on the land
- the possible need for **quarantine**, vaccinations and other measures to improve health
- **cleaning** and **disinfection** of stables.

❗ *Templates for preventive health care can be found at www.krav.se (in Swedish only).*

5.1.11.5 Follow-up by a Veterinarian

You must get help from a veterinarian with the preventive health care work if your production has (K):

- an abnormally high mortality rate for animals by category
- recurring problems with certain types of diseases
- recurring problems with lameness or other physical injuries,
- an increasing number of cases of sickness
- an increasing frequency of inspection faults according to slaughter injury statistics
- other deficiencies your **certification body** determines that you must attend to with the help of a veterinarian.

You must, thereafter, together with your veterinarian, do an annual follow-up on the preventive care measures for at least two years. (K)

5.1.11.6 Taking Care of Sick Animals

You must immediately take care of an animal that shows signs of being sick or hurt, and give them the care they need. If health disturbances arise that can be attributed to deficiencies in the animals' environment, care or feeding, you must immediately remedy the deficiencies. Critically ill animals that cannot be treated must be put down. (SL)

! *It is a major nonconformity if you do not comply with the standard.*

5.1.11.7 Vitamin and Mineral Injections

In exceptional cases, a veterinarian or someone else who is qualified can give injections of vitamin and mineral preparations. To avoid recurrence of this type of problem, you must thereafter supplement feed with vitamins and minerals. In areas where there is a documented low level of selenium, injections with a selenium preparation for preventive purposes are allowed. (K)

5.1.11.8 Routine or Preventive Medicating

You cannot treat your animals routinely or preventively with veterinary medicinal products or chemical pesticides (EU). There are however the following exceptions:

- You can use vaccine if there is an obvious need and other methods of treatment are considered worse (EU). You must have a plan as to which vaccinations are required for the population. (K)
- You can use **analgesics** and **local anaesthetics** for operations such as dehorning and castration. (EU)

! *It is a major nonconformity if you do not comply with the standard.*

5.1.11.9 Using Veterinary Medicinal Products When Needed

You must use veterinary medicinal products if there is a need from an animal welfare perspective. If you use veterinary medicinal products or veterinary preparations, you must comply with the **withdrawal periods** according to sections 5.1.11.12 and 5.1.11.14. You can even use veterinary medicinal products or vaccines developed with or made from **GMOs**. (EU)

*Cows with verified raised cell counts can be treated during the dry period.
It is a major nonconformity if you do not comply with the standard.*

5.1.11.10 Combating Parasites

Combating parasites with medical preparations must not be done preventively, but rather only when the need can be verified. The need can be verified by taking samples that show that an animal is infected with parasites and/or when treatment is recommended by a veterinarian. It is prohibited to use preparations with long-term effects such as fly tags and capsules placed in rumens since they are considered preventive treatments. **(EU/K)**

Decisions on combating parasites must be based on weighing good animal welfare and the goal of not being dependent on chemical synthetic pharmaceuticals or contributing to an increased resistance to deworming preparations.

It is a major nonconformity if you do not comply with the standard.

5.1.11.11 Deworming with Avermectins

You can only use avermectins for deworming when other preparations are not expected to give the desired result. When animals are on natural grazing land you must avoid preparations that contain difficult to break down substances such as, for example, avermectins. **(K)**

5.1.11.12 Withdrawal Periods following Treatment with Veterinary Medicinal Products

For preparations that The Swedish Medical Products Agency has set a withdrawal period for, you must apply double the **withdrawal period** given. If you use a preparation with a withdrawal period of zero days or when no information is given about the withdrawal period, you must apply a 48 hour withdrawal period. **(EU)**

During the withdrawal period the milk and eggs from treated animals must be separated from the products of healthy animals. Milk and eggs from treated animals must not be delivered as KRAV-certified.

The treatment receipt you receive from the veterinarian shows the withdrawal period that applies to the preparation. It is that time period you must double.

Treatments that do not have a withdrawal period are given in section 5.1.11.13.

It is a major nonconformity if you do not comply with the standard.

5.1.11.13 Preparations and Treatments Without a Withdrawal Period

Provided that the preparation you are using does not have a stipulated **withdrawal period**, the following list of preparations and treatments do not have a withdrawal period **(K)**:

- calcium treatment during milk fever
- agents to increase blood sugar levels such as propylene glycol if the

- animal does not have an appetite
- carbon preparations
- vitamin and mineral injections
- washing with disinfectants
- all external treatments other than parasite treatments
- vaccinations.

Preparations for external treatment can contain ingredients based on mineral oil. (EU)

5.1.11.14 Withdrawal Period in the Case of Repeated Drug Treatment

For certain types of repeated drug treatment, animals must go through a new **withdrawal period**. This applies to animals that have been treated with chemical synthetic veterinary medicinal products more than three times during a year, or animals with a lifespan that is shorter than 12 months that have been treated more than once during their lifetime. In these cases the length of the withdrawal period is (EU):

- 12 months for cattle, though at least three quarters of the animal's life
- six months for pigs, sheep and goats
- six months for milk production
- 10 weeks for poultry for meat production
- six weeks for laying hens.

A treatment is considered to be all regimens intended to cure one and the same sickness. Vaccinations, combating parasites or **analgesics** and **local anaesthetics** must not be counted in the number of treatments. As well obligatory treatments required by government agencies must not be included. (EU)

! *It is a major nonconformity if you do not comply with the standard.*

5.1.11.15 Mutilation

You cannot mutilate animals. You can however in some cases castrate **calves** and pigs as well as dehorn animals so that they cannot injure each other. (SL)

The relevant conditions are found in the specific standards for the respective animal species.

! *It is a major nonconformity if you do not comply with the standard.*

5.1.12 Handling and Transport

5.1.12.1 Loading and Transport

The transport time must be as short as possible. You must ensure that all animals are exposed to a minimum of physical and psychological stress when they are loaded, transported and unloaded. (EU)

You must be able to describe how you handle animals in order to minimize negative effects during loading, transport and unloading. (K)

Note that you may need an attestation of competence and other permits to transport animals. More information is available on the Swedish Board of Agriculture's website.

5.1.12.2 Cohesion of Animal Groups

You must avoid introducing new animals into groups destined for slaughter. If you in any case put together new animal groups, it should be done no later than two weeks before transport, so that the animal group has time to become established. (K)

+ 5.1.12.3 Documentation and Information Before Slaughter

When you send animals for slaughter you must make sure that the slaughterhouse receives the information required according to standards 10.2.3, 10.3.4, and 10.5.3. (K)

If it is prohibited for the animals to overnight according to the above standards, you must ensure that the slaughterhouse receives that information in well before slaughter.

5.1.13 Wool and Hides

5.1.13.1 Use of the KRAV Name When Selling Wool or Hides

If you have KRAV-certified livestock and sell your own products to consumers, you can state that wool and hides come from KRAV-certified production. (K)

5.1.13.2 How the KRAV Name can be Used

Labelling wool, hides or skin products as KRAV-certified or with the KRAV label is prohibited. When you label or market a hide from KRAV-certified animal production, you can for example write: "This sheepskin comes from KRAV-certified livestock." The word "KRAV" must be written with capital letters. (K)

5.1.13.3 Where to put the Label

When you label a hide, it can be done with sewn-on labels, a hanging label, or by marking the package cover, or by stamping. (K)

5.1.13.4 Companies that Prepare Wool or Hides

If you sell prepared and labelled hides or wool, you must indicate which company was responsible for the preparation. (K)

5.2 Cattle

This section has all the animal specific standards for KRAV-certified cattle that you must comply with and implement together with section 5.1 Standards for All Types of Livestock.

This section includes:

- 5.2.1 Conversion Periods for Admission and Purchase
- 5.2.2 Purchase of Animals
- 5.2.3 Outdoor Access and Grazing
- 5.2.4 Housing Conditions
- 5.2.5 Self-sufficiency and Feed
- 5.2.6 Feeding Calves
- 5.2.7 Preventive Healthcare for Dairy Cattle
- 5.2.8 Surgical Operations

5.2.1 Conversion Periods for Starting and Purchase

5.2.1.1 Conversion Periods for Starting the Certification Process

Conversion periods for cattle are (EU):

- six months for the production of milk
- 12 months for the production of meat and hides, however at least three quarters of the animal's life expectancy.

Calves born during the conversion period can be sold as KRAV-certified after 12 months from the start of the conversion period.

Alternatively you can choose:

- a 24 month conversion period for milk, meat and hides when land and animals together are converted to KRAV-certified production. In this case, you must feed the animals primarily (more than 50%) your own feed from the land in the **conversion** and you do not need to comply with the standards for use of one's own **conversion feed**. (EU)

Example: a young animal that is one year old when you begin the certification process can be sold as KRAV-certified when four years of age at the earliest, since it takes that long to have been certified during three-quarters of the animal's lifetime. If you have not yet converted crop production, it is therefore advantageous to choose 24-month conversion of both animals and crops at the same time. After 24 months, all animals that began conversion at the start of the conversion period can be sold as KRAV-certified regardless of their age.

! *It is a major nonconformity if products or animals are sold as KRAV-certified before the conversion period is finished.*

5.2.1.2 Conversion Periods for Purchased Conventional Cattle

If you already have KRAV-certified cattle and purchase **conventional** cattle for renewal or breeding, the purchased animals must go through a **conversion period** before you can sell products from them as KRAV-certified. **Calves** from these purchase animals have no conversion period.

The conversion periods are (EU):

- six months for the production of milk
- 12 months for the production of meat and hides from cattle, however at least three-quarters of their expected lifetime.

If you have cattle in conversion and purchase conventional animals for renewal or breeding, the purchased animals must go through the same conversion period before you can sell products from them as KRAV-certified. Calves from these purchased animals can be sold as KRAV-certified when the conversion period for the original herd is complete. (EU)

! *It is a major nonconformity if products or animals are sold as KRAV-certified before the conversion period is over.*

5.2.2 Purchase of Animals

5.2.2.1 Purchase of KRAV-certified Calves or Young Animals to Raise for Slaughter

You can purchase **calves** or young animals to raise for slaughter from a maximum of three different herds within a 12 month period. If you want to purchase calves or young animals from more than three herds within a 12 month period, your production must be affiliated with a **health program**. (K)

If the purchaser has suckler cows, or access to KRAV-certified milk for feeding by another method, calves can be moved earlier than at weaning if it takes place in such a way that the health and development of the calves is not negatively affected by the early move. (K)

5.2.2.2 Purchase of a Few Conventional Cattle

You can only purchase a few conventional animals for breeding purposes. For renewal, you can in addition purchase a maximum of 10% conventional heifers per year, calculated using the number of cows and pregnant heifers you will have after renewal. If there are less than 10 mother animals in the herd, you can purchase one conventional animal per year at the most. (EU)

See also standards 5.1.5.3 - 5.1.5.5.

5.2.3 Outdoor Access and Grazing

5.2.3.1 Grazing Time for Cattle (Not Dairy Cattle)

You must arrange for cattle over six months of age to be outdoors most of the day during the **grazing period**. (K)

"Most of the day" denotes more than 12 hours during an entire day.

! *It is a major nonconformity if you do not comply with the standard.*

5.2.3.2 Grazing Intake During the Grazing Period

All cattle more than six months of age, other than dairy cows and steers, during the **grazing period** must have pasture that provides at least 50% of the daily intake of feed calculated as **dry matter** (DM). (K)

Any drought that results in a shortage of pasturage for the animals must be documented. (K)

! *It is a major nonconformity if you do not comply with the standard.*

5.2.3.3 Grazing for Dairy Cattle

You must actively work in order to have your dairy cattle outdoors on grazing land most of the day during the **grazing period**. The daily grazing intake must be at least 6 kg dry weight. (K)

“Most of the day” denotes more than 12 hours during an entire day.

! *It is a major nonconformity if you do not comply with the standard.*

i “The Grazing Guide – An Aid to Implementing the KRAV Standards for Dairy Cattle” (“Betesguiden – ett hjälpmedel för tillämpning av KRAV’s betesregler för mjölkkor,” in Swedish only) is available at www.krav.se.

5.2.3.4 Grazing Intake for Steers

The daily grazing intake for steers during the **grazing period** must be at least 50% of the roughage intake. (K)

5.2.3.5 Outdoor Access for Calves

During the **grazing period** you must arrange outdoor access for calves at the latest from the age of four months. When outdoors, calves must have access to a shed or other protection, for example trees. The outdoor access may consist of an exercise yard and must take place at least partly during the day. (EU)

Calves that are four months old in August may be kept inside for the rest of the **grazing** and **outdoor period**. (K)

5.2.3.6 Outdoor Access for Breeding Bulls

Breeding bulls can be kept in bare exercise yards during both the grazing and outdoor period. (EU)

5.2.3.7 Outdoor Access for Cattle Other Than During the Grazing Period

You must arrange for animals to be outdoors during at least part of the day during the outdoor period. The **outdoor period** is the time before and after the **grazing period** and must total at least two months, but should be longer if possible. During the rest of the year, during the **stable period**, cattle can be kept indoors. (EU/K)

! *It is a major nonconformity if you do not comply with the standard.*

5.2.3.8 Cattle Temporarily Indoors

In certain cases you can keep animals indoors that are otherwise required to be outdoors every day. During the **grazing** and **outdoor periods**, you can temporarily keep cattle inside for two weeks at the most during mating, insemination, drying off, birthing or before slaughter. You can also keep them temporarily indoors due to sickness, black fly attacks, unsuitable weather, or

when there is great risk for attack by predatory animals. You must provide animals with access to the outdoors during the **withdrawal period** after drug treatment. (EU)

5.2.3.9 Young Bulls Registered for Slaughter

You can keep young steers indoors if they are registered for slaughter and will be slaughtered before (K):

- 15 June in Götaland
- 1 July in Svealand and Norrland.

! It is a major nonconformity if you do not comply with the standard.

5.2.4 Housing Conditions

5.2.4.1 Space Measurements in Housing for Cattle

The space indoors and outdoors that must always be accessible to the animals is specified in the table below. For cubicles and other details not given in the KRAV standards, the minimum measurements according to Swedish animal protection regulations apply. (K)

The space requirements are minimum levels. Functional requirements can mean that greater areas are needed in your stable.

Table 1. Space Requirements for Cattle

Category of Animal	A. Total minimum area indoors and outdoors (m ² per animal)	B. Minimum outdoor/exercise yard area (m ² per animal)
calf, young animal and suckler cow:		
live weight (kg);		
< 60	1.5 (SL)	1.1 (EU)
< 90	1.7 (SL)	1.1 (EU)
< 100	2.2 (SL)	1.1 (EU)
< 200	2.5 (EU)	1.9 (EU)
≤ 350	4.0 (EU)	3.0 (EU)
> 350	1 m ² /100 kg (at least 5.0) (EU)	0.75 m ² /100 kg (at least 3.7) (EU)
milk/foster cow on litter bed	8.5 (SL)	4.5 (EU)
milk/foster and dry cow, other loose housing	6.0 (EU)	4.5 (EU)
breeding bull	10.0 (EU)	30.0 (EU)
tethered adult cows	animal protection regulations	4.5 (EU)

The measurements in the table are based on Swedish animal protection legislation as well as requirements of the EU regulation.

5.2.4.5 Access to Lying Areas

In stables with cubicles, there must be at least one cubicle per animal. **(SL)**

5.2.4.6 Loose Housing for New Construction

You must use loose housing design for new construction, extensive renovations or additions for cattle stables. **(SL)**

5.2.4.7 Cows Must be Able to Calf in Seclusion

You must ensure that cows are able to calf in seclusion away from other animals. Calving indoors must take place in a calving box, that can be permanent or temporary. You must plan so that you have access to an adequate number of calving boxes in relation to the distribution of the calving throughout the year. **(K)**

If calving takes place on **deep litter beds** indoors, it may only take place within the herd if you monitor the animals so that you can separate the cow and calf from the rest of the herd in connection with birthing if necessary. **(K)**

You can only in exceptional circumstances tether a cow that is going to calf. Lack of space is not a good enough reason to tether a cow during calving. **(K)**

Seclusion during birthing is important, amongst other reasons, so that the calf can get colostrum from its mother. During grazing there is abundant space and cows can themselves get away from the herd.

5.2.4.8 Groups of Calves

You must keep **calves** in groups. You can keep one calf in an individual box up to a maximum of one week of age **(EU)**. If you, in exceptional cases, must keep a calf alone in a box for a longer period, the box must be as big as two individual boxes **(K)**.

It is more important that calves in a group are about the same age, so that feeding functions well, than that there are many in the group. Therefore, two calves in a group is enough if it means that you have a better age distribution.

5.2.4.9 Exceptions for Tethered Cattle in Small Holdings

Female cattle that are older than 20 months and kept by small agricultural holdings can be tethered during the **stable period**, provided they are exercised outdoors at least twice per week. A “small agricultural holding” is a herd with 45 or fewer tethered cattle (calculated using the number of usable cubicles), regardless of the size of the herd. The exception applies until further notice. **(EU)**

At the age of nine to 20 months, cattle in small herds can be tethered for a total of one month in order to become accustomed to being tethered. **(K)**

You must be able to show routines for exercising.

Note that the new regulation for organic production (EU) 2018/848, which enters into force on 1 January 2022 limits the maximum number of animals at a “small agricultural holding” to 50 adult cattle. According to the KRAV standards, a maximum of 45 of these may be tethered.

Details for implementation of exercising can be found in the National Guidelines for Organic Production, at www.lrf.se (in Swedish only).

! *It is a major nonconformity if you do not comply with the standard.*

5.2.5 Self-sufficiency and Feed

5.2.5.1 Level of Self-sufficiency for Cattle

You must to a certain degree produce the feed for your animals on your own farm or in cooperation with another farm. The level of self-sufficiency for cattle must be:

- at least 60% for dairy cattle and renewal animals (EU)
- at least 75% for other cattle (K).

Herds of cattle in areas with limited access to the keeper's own feed and limited opportunities for cooperation regarding feed and fertiliser with another KRAV-certified farm, for example on islands, can be exempt from the 75% self-sufficiency requirement. The level can then be lowered, though not lower than 60%. (K)

Your certification body determines what a reasonable level is for your farm.

! *It is a major nonconformity if you do not comply with the standard.*

5.2.5.2 Portion Concentrated Feed in the Ration for Cattle

You can feed according to the following:

- Maximum 30% **concentrated feed** for slaughter animals and young animals. (K)
- Maximum 40% concentrated feed for cows. For up to three months in the beginning of lactation, you can increase the portion to 50%. (EU)
- Maximum 40% concentrated feed for **calves** in transition from suckling to a normal roughage ration. The period can last up to six months of age. (K)

You must calculate the amount of concentrated feed in the ration using the daily intake of feed as **dry matter**.

! *It is a major nonconformity if you do not comply with the standard.*

5.2.5.3 Free Access to Roughage

You must give your animals free access to good quality **roughage** (EU). Grazing, hay or silage must be included in the animals' ration. You can temporarily feed with straw only, for example when drying off cows. (K)

! *It is a major nonconformity if you do not comply with the standard.*

5.2.5.4 Amount of Urea and Ration for Dairy Cows

You must monitor the urea content in the milk and correct the feeding of your dairy cows if levels are greater than 5.5 or under 2.5 mMol per litre milk. To make corrections you must monitor the values for the three most recent months. If the level deviates occasionally or during high grazing consumption it

is considered as a normal variation. You must use analysis values from your milk tank. If your corrections are not effective you must contact an advisor. **(K)**

5.2.5.5 Climate and Environmental Benefits of Roughage Usage

For animals other than milk cows, you must comply with at least one of the following alternatives **(K)**:

- During the **grazing period**, you must keep your animals primarily on grazing land. This means at least one grazing period for slaughter cattle. “Grazing land” is land defined according to code 52 of The Swedish Board of Agriculture and similar land. Permanent pasture on arable land, where the ley has not been farmed for the last 10 years, is also considered grazing land.
- You must have a good feeding strategy in order to minimize the risk of over or under feeding. You must be able to describe your feeding strategy. This can for example consist of analyses of your harvested **roughage** or other assessments of the nutrient content in different sections of the harvest, and adjustment of feeding for various groups accordingly.
- You must monitor that your slaughter and renewal animals are growing well by weighing them or assessing growth in other ways. You must be able to show good growth in your slaughter animals with, for example, normal slaughter weights on the slaughter reports.

When there are recurrent problems, for example with slaughter weight or unplanned high calving age, documented monitoring of growth and feed strategy is required until the problem has been solved. You can use different alternatives to comply with the standard for different animal groups.

5.2.6 Feeding Calves

5.2.6.1 Suckling

You must ensure that your **calves** suckle for at least one day, in other words for 24 hours after their birth, but a longer suckling period is positive. When necessary, you can support feed colostrum with a feeding bottle. Tube feeding of calves is not permitted except as an exceptional emergency measure for treating sickness, ensuring that weak calves who are unable to suckle get nutrition. **(K)**

Exceptions to the standard on suckling are acceptable if your herd is going through a period of decontamination from a disease when suckling cannot be permitted. You must then inform your **certification body** in advance.

! *It is a major nonconformity if you do not comply with the standard.*

5.2.6.2 Milk-feeding During the Suckling Period

After the suckling period, you must raise calves primarily using KRAV-certified milk from their own species until they are three months old. **(EU)**

If a calf does not have the opportunity to suckle, it must be able to suck milk in a natural position through an artificial nipple that must not be placed too high. To satisfy the animal's need to suck, you should let the milk bar, feeding pail or equivalent be available for a while after the animal has finished drinking the milk. (K)

You may begin weaning at the earliest when one week remains of the suckling period.

“Primarily” denotes that the calf should get plenty of milk during most of the suckling period. As the calf grows, a phasing-out can be implemented whereby the share of milk in the feed ration is decreased. It is however only during the last week of weaning that the share of milk can comprise less than half of the daily energy requirement.

5.2.6.3 Feeding Concentrated Feed and Roughage During the Suckling Period

You must ensure that **calves** raised with milk feeding have free access to appropriate **roughage**, as well as **concentrated feed** during the suckling period. You can adapt calves to other feeding one week before sale to **conventional** rearing. (K)

The section for portion of concentrated feed, 5.2.5.2, applies at the end of the suckling period.

5.2.6.4 Feeding with Milk from Cows in Conversion

You can feed **calves** with milk from purchased **conventional** heifers that have calved two months after the beginning of the heifers' conversion period. (K)

5.2.6.5 Feeding with Milk from Cows Treated with Veterinary Medicinal Products

During the withdrawal period set by The Swedish Medical Products Agency, you are only permitted to give milk from a cow being treated with veterinary medicinal products to its own **calf**. After that you can also give the milk to other calves. (K)

This also applies to milk from cows treated repeatedly and that must go through an extra withdrawal period according to section 5.1.11.14. (K)

5.2.6.6 Feeding with Other Milk and Milk Substitutes

You can only use conventional milk or milk substitutes in exceptional emergency situations. If the feeding with a milk substitute or conventional milk is carried out for one week at the most, the calf can still continue to be KRAV-certified. (K)

If you raise animals with conventional milk or milk substitutes for more than one week, the following applies:

- **Calves** raised for slaughter cannot be KRAV-certified.

- Calves kept in the herd for renewal can be KRAV-certified after a **conversion period** of 12 months. (K)

It is permitted to heat milk to combat disease if recommended by a veterinarian. (K)

5.2.6.7 Milk Acidification

To acidify milk you can use acidified milk, for example sour milk, bacteria cultures and acidification substances of plant origin. (EU/K)

5.2.7 Preventive Healthcare for Dairy Cattle

“Ask the Cow” (“Fråga kon”) or an equivalent animal welfare assessment acts as an aid to identify areas where measures need to be taken to improve animal welfare.

Read more about “Ask the Cow” (“Fråga kon”), “Milk Health Package” (“Hälsopaket Mjölk”) and “Cow Inspection” (“Kokontrollen”) at www.vxa.se (in Swedish only).

5.2.7.1 Herds Registered with the “Cow Inspection” (“Kokontrollen”)

If you have a herd that is registered with “Cow Inspection”, you must regularly monitor the key **performance indicators** below from “Signals of Animal Welfare” (“Signaler Djurvålfärd”) (in Swedish only) (K):

- suckling calf mortality 0-24 hours
- calf mortality 1-60 days (heifer calves)
- calf mortality 2-6 months (heifer calves)
- young animal mortality 6-15 months (heifers)
- cows that die a natural death or are euthanized
- total loss (cows) (not live)
- total number of cases of illness reported for cows
- mastitis treatments
- hoof and leg diseases (cows).

You must have “Ask the Cow” (“Fråga kon”) or the equivalent carried out if any of the above key performance indicators from “Signals of Animal Welfare” (“Signaler Djurvålfärd”) (in Swedish only) show a red light symbol (which means that the herd belongs to the 10% with the worst values for the key performance indicator in question), or if other signals in animal management indicate an animal welfare problem in the herd. (K)

An exception is if any key performance indicator shows a red light symbol and the cause can be traced to a carefully prepared strategy that does not jeopardize **animal welfare** or to an isolated event (for example the temporary breakout of disease). In that case you do not need to carry out “Ask the Cow” (“Fråga kon”) or the equivalent. You must however follow-up that measures already taken have been effective by checking after 12 months have passed that

the key performance indicator has changed to a yellow or green light symbol. (K)

5.2.7.2 Herds Not Registered with “Cow Inspection” (“Kokontrollen”)

If you have a herd that is not registered with “Cow Inspection” (“Kokontrollen”), you must systematically follow up **animal welfare** by annually documenting at least the following **key performance indicators (K)**:

Key Performance Indicator	Maximum Permitted*
• suckling calf mortality 0-24 hours.....	11%
• calf mortality 1-180 days (heifer calves).....	10%
• young animal mortality 6-15 months (heifers).....	4%
• cows that die a natural death or are euthanized.....	10%
• total cows lost (not live).....	47%
• total number of cases of illness (cows).....	44%
• mastitis treatments.....	22%
• hoof and leg diseases treated by a veterinarian.....	5%

* *The numbers are equivalent to limit values for the 10% with the worst values in herds (= red light symbol) from “Signals of Animal Welfare” (“Signalerna Djurvälfärd”) (in Swedish only).*

i At www.krav.se there is a guide to how the above parameters are calculated.

If any of the key performance indicators exceed the limit values given in the table or if other signs indicate an animal welfare problem, you must have “Ask the Cow” (“Fråga kon”) or the equivalent carried out. (K)

An exception is if any key performance indicator exceeds the limit values and the cause can be traced to a carefully prepared strategy that does not jeopardize animal welfare or to an isolated event (for example the temporary breakout of disease). In that case you do not need to carry out “Ask the Cow” (“Fråga kon”) or the equivalent. You must however follow-up that measures already taken have been effective by checking after 12 months have passed that the key performance indicator shows a value under the limit value. (K)

5.2.7.3 New in Certification

When you register your milk production to be KRAV-certified, you must have an animal welfare assessment carried out, such as “Ask the Cow” (“Fråga kon”), “Milk Health Package” (“Hälsopaket Mjölk”), or the equivalent. (K)

5.2.7.4 After an Animal Welfare Assessment

You must implement the proposed remedies resulting from “Ask the Cow” (“Fråga kon”), “Milk Health Package” (“Hälsopaket Mjölk”), or the equivalent. You must follow-up that the measures have had an effect by checking the key performance indicators, and when necessary, by carrying out a new animal welfare assessment after a certain amount of time has passed. (K)

5.2.8 Surgical Operations

5.2.8.1 Castration of Calves

Calves that are younger than eight weeks can be castrated. The calves must be given local **anaesthetics** and **analgesia** during the operation. In exceptional cases you can have older animals castrated. **(EU/K)**

5.2.8.2 Dehorning Calves

You can dehorn calves younger than eight weeks using hot dehorning methods **(K)**. A calf must receive a **local anaesthetic (SL)** and be given **analgesia** during the procedure **(K)**.

In special cases, for example if an animal has late horn growth, hot dehorning can be done at somewhat older ages. **(EU)**

Occasional dehorning of older animals is permitted for animal welfare or handling reasons.

- i** *Sedation during castration and dehorning is permitted but not required. You can find more information on local anaesthetics, analgesia and sedation at www.krav.se (in Swedish only).*

5.3 Sheep and Goats

This section has all the animal specific standards for KRAV-certified sheep and goats, that you must comply with together with section 5.1 Standards for All Types of Livestock.

This section includes:

- 5.3.1 Conversion Periods for Admission and Purchase
- 5.3.2 Purchase of Animals
- 5.3.3 Outdoor Access and Grazing
- 5.3.4 Housing Conditions
- 5.3.5 Self-sufficiency and Feed
- 5.3.6 Feeding Lambs and Kids
- 5.3.7 Surgical Operations

5.3.1 Conversion Periods for Starting and Purchase

5.3.1.1 Conversion Periods for Starting

Conversion periods for sheep and goats are (EU):

- six months for production of meat, hides and wool
- six months for the production of milk.

You can sell lambs and kids as KRAV-certified that are born during the conversion period, six months after the start of the conversion period. (EU)

Alternatively you can choose:

- a 24 months conversion period for milk, meat, hides and wool when land and animals are converted to KRAV-certified production at the same time. In this case, you must feed the animals primarily (more than 50%) with your own feed from the land in the conversion and you do not need to comply with the standards for use of one's own conversion feed. (EU)

! *It is a major nonconformity if products or animals are sold as KRAV-certified before the conversion period is over.*

5.3.1.2 Conversion Period for Purchased Conventional Sheep and Goats

If you already have KRAV-certified animal husbandry and purchase conventional animals of the same type for renewal or breeding, purchased animals must go through a **conversion period** before you can sell products from them as KRAV-certified. Lambs and kids from these purchased animals do not have a conversion period. (EU)

Conversion periods for sheep and goats are (EU):

- six months for production of meat, hides and wool
- six months for production of milk.

If you have a herd in conversion and purchase conventional animals of the same type for renewal or breeding, purchased animals must go through the same conversion period before you can sell products from them as KRAV-certified.

Lambs and kids from these purchased animals can be sold as KRAV-certified when the conversion period for the original herd is completed. (EU)

It is a major nonconformity if products or animals are sold as KRAV-certified before the conversion period is finished.

5.3.2 Purchase of Animals

5.3.2.1 Purchase of KRAV-certified Animals to Raise for Slaughter

You can purchase lambs and kids from a maximum of three different herds within a 12 month period. (K)

5.3.2.2 Purchase of A Few Conventional Sheep and Goats

You can only purchase a few conventional animals for breeding purposes. For renewal, you can in addition purchase a maximum of 20% young ewes/goats per year that have not lambed/kidded, calculated using the number of mother animals and pregnant young animals you will have after the renewal. If there are fewer than five mother animals in the herd, you can purchase one conventional animal per year at the most. (EU)

See also standards 5.1.5.3 - 5.1.5.5.

5.3.3 Outdoor Access and Grazing

5.3.3.1 Time Grazing During the Grazing Period

You must arrange for your sheep and goats to be outdoors on grazing land around the clock during the **grazing period**. (EU)

It is a major nonconformity if you do not comply with the standard.

5.3.3.2 Grazing Intake During the Grazing Period

The animals must have a pasture that provides them with at least 50% of the daily intake of feed calculated as **dry matter (DM)**. (K)

It is a major nonconformity if you do not comply with the standard.

5.3.3.3 Outdoor Access for Rams and Bucks

In exceptional circumstances, rams and bucks for breeding can be kept in bare exercise yards during the **grazing period** and **outdoor period**. They can be kept inside during the winter, if you comply with the extra requirements in section 5.3.4.4. (K)

5.3.3.4 Outdoor Access for Sheep and Goats at Other Times

During other times than the **grazing period**, you must ensure that sheep and goats are able to be outdoors at least part of the day. You can however during the winter make an exception to the requirement of outdoor access if you comply with the extra requirements in section 5.3.4.4. (K)

It is a major nonconformity if you do not comply with the standard.

5.3.3.5 Sheep and Goats Temporarily Indoors

In some cases you can keep animals indoors that otherwise would be outdoors every day. During the **grazing period** and other periods when animals must have daily outdoor access, you can temporarily keep them inside for two weeks at the most during mating, insemination, drying off, birthing or before slaughter. You can also keep them temporarily indoors due to sickness, black fly attacks, unsuitable weather, when there is high risk for attack by predatory animals, or after shearing. You can keep the herd or groups within the herd indoors during the period for lambing and kidding. You must provide animals with access to the outdoors during the **withdrawal period** following drug treatment. **(EU/K)**

5.3.4 Housing Conditions

5.3.4.1 Space Measurements in Stables for Sheep and Goats

The space indoors and outdoors that must always be accessible to the animals is specified in the table below. For details not given in the KRAV standards, the minimum measurements according to Swedish animal protection regulations apply. **(K)**

The space requirements are minimum levels. Functional requirements can mean that greater areas are needed in your stable.

Table 2. Space Requirements for Sheep and Goats

	Minimum space indoors (m ² per animal)	Minimum outdoors/exercise yard (m ² per animal)
adult sheep or goat	1.5 (EU)	2.5 (EU)
pregnant ewes	1.7 (SL)	2.5 (EU)
lamb or kid: live weight (kg):		
< 15	0.35 (EU)	0.5 (EU)
< 30	0.5 (SL)	0.5 (EU)
> 30	1.0 (SL)	1.0 (K)

The measurements in the table are based on Swedish animal protection legislation as well as requirements of the EU regulation.

5.3.4.2 Outdoor Area (Exercise Yards)

Sheep and goats must have year round access to an exercise yard except when they are in the grazing period, and provided they are not being kept in a stable that complies with the requirements in section 5.3.4.4. **(K)**

Up to 75% of the area of the exercise yard can be covered with a roof. **(EU)**

! *It is a major nonconformity if your sheep or goats do not have access to the outdoors during the winter.*

5.3.4.3 Sheep and Goats in Open Sheds

For animals kept in open sheds with permanent access to the outdoors, the area

covered by a roof can be equivalent to the minimum measurements for lying area according to Swedish animal protection legislation. The total accessible area must thus be as big as the combined area of the smallest area indoors and outdoors/exercise yard, according to Table 2.

Example: you have 10 pregnant ewes in a group in an open shed with permanent access to the outdoors. According to Swedish animal protection legislation, the ewes must have a space of 1.2 m² per animal, i.e. 12 m², in the open shed. If the spaces indoors and outdoors/exercise yards (17 m² + 25 m²) are added together, the result is that the ewes must have a total of at least 42 m². As you have reduced the area “indoors” to 12 m², the area of the exercise yard must therefore be at least 30 m².

5.3.4.4 Sheep and Goats in Stables in the Winter

You can keep sheep and goats inside during the winter without access to an exercise yard if the stable has **(K)**:

- one-and-a-half times as large an area as the minimum indoor area according to Table 2 for adult animals
- twice as large an area as the minimum indoor area according to Table 2 for lambs and kids
- openings for light into the stable that are equivalent to at least 10% of the floor area
- admission of fresh air so that the stable environment is similar to outside, but dry and protected from the wind.

In addition, your sheep and goats must be outdoors around the clock for a longer time than just during the **grazing period**, weather permitting. **(K)**

The standard also applies to lambs born during the winter and slaughtered before the grazing period. **(EU)**

! *It is a major nonconformity if your sheep or goats do not have access to the outdoors during the winter without your stable complying with the conditions above.*

5.3.4.5 Seclusion During Lambing/Kidding

Sheep and goats must when necessary be able to lamb/kid in seclusion from other animals. Indoors, you must monitor the animals to be able to separate them from the rest of the flock in connection with birthing.

Seclusion during birthing is important. Outdoors there is abundant space and the animals can themselves get away from the flock.

5.3.5 Self-sufficiency and Feed

5.3.5.1 Level of Self-sufficiency for Sheep and Goats

You must to a certain degree produce the feed on your own farm or in cooperation with another farm. The level of self-sufficiency for sheep and goats must be:

- at least 60% for milking animals **(EU)**
- at least 75% for others **(K)**.

Flocks in areas with limited access to the keeper's own feed and limited opportunities for cooperation regarding feed and fertiliser with another KRAV-certified farm, for example on islands, can be exempt from the 75% self-sufficiency requirement. The level can then be lowered to 60%, but not less. **(K)**

Your **certification body** determines what a reasonable level is for your farm.

It is a major nonconformity if you do not comply with the standard.

5.3.5.2 Portion of Concentrated Feed in the Ration for Sheep and Goats

You can feed according to the following:

- Maximum 30% **concentrated feed** for slaughter and young animals. **(K)**
- Maximum 40% concentrated feed for milk producing animals. **(EU)**
For up to three months early in the lactation period, you can increase the portion to 50% **(EU)**. You can also move forward the three-month period for heavily pregnant ewes and goats when they do not have enough space to consume an adequate amount of **roughage** due to growth of the foetus. **(K)**
- Maximum 40% concentrated feed for lambs and kids in transition from suckling to a normal roughage ration. The period can last for one month at most after weaning. **(EU)**

You must calculate the amount of concentrated feed in the ration using the daily intake of feed as **dry matter**.

It is a major nonconformity if you do not comply with the standard.

5.3.5.3 Free Access to Roughage

You must give the animals free access to good quality **roughage** **(EU)**. Grazing, hay or silage must be included in the animals' ration. You must ensure that goats have year-round access to woody plants or branches. **(K)**

It is a major nonconformity if you do not comply with the standard.

5.3.5.4 Climate and Environmental Benefits of Roughage Usage

For sheep and goats you must comply with at least one the following standards **(K)**:

- During the **grazing period**, you must keep your animals primarily on grazing land. This means at least one grazing period for slaughter animals. "Grazing land" is land defined according to code 52 of The Swedish Board of Agriculture and similar land. Permanent pasture on arable land, where the grazing land has not been farmed for the last 10 years, is also considered grazing land.
- You must have a good feeding strategy in order to minimize the risk of over or under feeding. You must be able to describe your feeding strategy. This can for example consist of analyses of your harvested roughage or other assessments of the nutrient content in different sections of the harvest, and adjustment of feeding for various groups accordingly.

- You must monitor that your slaughter and renewal animals are growing well by weighing them or assessing growth in other ways. You must be able to show good growth in your slaughter animals with, for example, normal slaughter weights on the slaughter reports. When there are recurrent problems with slaughter weights, you must carry out a documented monitoring of growth and feed strategy until the problem has been solved.

You can use different alternatives to comply with the standard for different livestock groups.

5.3.6 Feeding Lambs and Kids

5.3.6.1 Suckling

Lambs and kids must suckle for at least three whole days, but a longer suckling period is positive. When necessary, you can support feed colostrum with a feeding bottle. Tube feeding of lambs and kids is not permitted except as an exceptional emergency measure in the case of sickness or if lactation is not functioning, ensuring that weak animals who are unable to suckle get nutrition.

Exceptions to the standard on suckling are acceptable if your flock is going through a period of decontamination from a disease when suckling cannot be permitted, for example CAE for goats. You must then inform your **certification body** in advance.

It is a major nonconformity if you do not comply with the standard.

5.3.6.2 Milk-feeding During the Suckling Period

After the colostrum period, lambs and kids must be raised primarily using KRAV-certified milk from their own species until the lambs are at least eight weeks old and the kids at least 45 days old. **(EU/K)**

If the young do not have the opportunity to suckle, they must be able to suck milk in a natural position through an artificial nipple that must not be placed too high. To satisfy the animal's need to suck, you should let the milk bar, feeding pail or equivalent be available for a while after the animal has finished drinking the milk. **(K)**

5.3.6.3 Feeding with Milk from Mother Animals in Conversion

You can feed lambs and kids with milk from purchased conventional mother animals two months after the start of the mother animals' conversion period. **(K)**

5.3.6.4 Feeding Milk from Animals Treated with Veterinary Medicinal Products

During the **withdrawal period** set by The Swedish Medical Products Agency, you must only give milk from an animal treated with veterinary medicinal products to its own suckling offspring. After that you can also give the milk to other lambs or kids. **(K)**

This also applies to milk from mother animals treated repeatedly and that must go through an extra **withdrawal period** according to section 5.1.11.14. (K)

5.3.6.5 Feeding with Other Milk and Milk Substitutes

You can only use conventional milk or milk substitutes in exceptional emergency situations. If feeding with a milk substitute or conventional milk is carried out for one week at the most, the fed animal can still continue to be KRAV-certified. (K)

If you raise animals with conventional milk or milk substitutes for more than one week, the following applies:

- Animals raised for slaughter cannot be KRAV-certified.
- Animals kept in the herd for renewal can be KRAV-certified after a **conversion period** of six months. (K)

It is permitted to heat milk or to use milk from another animal species to combat disease if recommended by a veterinarian. (K)

5.3.7 Surgical Operations

5.3.7.1 Dehorning

You can dehorn animals younger than eight weeks using hot dehorning methods (K). The animal must receive a **local anaesthetic (SL)** and be given **analgesia** during the procedure (K). In special cases, for example when an animal has late horn growth, hot dehorning can be done at a somewhat older age. (EU)

Dehorning of older animals is permissible for reasons of animal welfare or handling.

- i** *Sedation during dehorning is permitted but not required. You can find information on local anaesthetics, analgesia and sedation at www.krav.se (in Swedish only).*

5.4 Pigs

This section has all the animal specific standards for KRAV-certified pigs, that you must comply with together with section 5.1 Standards for All Types of Livestock. This section includes:

- 5.4.1 Conversion Periods for Starting and Purchase
- 5.4.2 Purchase of Animals
- 5.4.3 Outdoor Access and Grazing
- 5.4.4 Natural Behaviour
- 5.4.5 Housing Conditions
- 5.4.6 Self-sufficiency and Feed
- 5.4.7 Feeding Piglets
- 5.4.8 Surgical Operations

5.4.1 Conversion Periods for Starting and Purchase

5.4.1.1 Conversion Periods at the Start of the Certification Process

Conversion periods for pigs are six months for production of meat and hides. You can sell pigs as KRAV-certified that are born during the conversion period after six months have passed from the start of the conversion period. (EU)

As an alternative you can choose a 24 month conversion period for meat and hides when land and animals are converted to KRAV-certified production at the same time. In this case, you must feed the animals primarily (more than 50%) with your own feed from the land in the conversion period and you do not need to comply with the standards for use of one's own **conversion feed**. (EU)

! *It is a major nonconformity if products or animals are sold as KRAV-certified before the conversion period is over.*

5.4.1.2 Conversion Periods for Purchased Conventional Pigs

If you already have a KRAV-certified group of pigs and purchase conventional gilts or boars for renewal or breeding, the purchased animals must go through a conversion period before you can sell products from them as KRAV-certified. Offspring from the purchased gilts have no **conversion period**. (EU)

If you have a group of pigs in conversion and purchase conventional gilts or boars for renewal or breeding, the purchased animals must go through the same conversion period before you can sell products from them as KRAV-certified. Offspring from these purchased gilts can be sold as KRAV-certified when the conversion period for the original group is complete. (EU)

See also standards 5.1.5.3 - 5.1.5.5.

! *It is a major nonconformity if products or animals are sold as KRAV-certified before the conversion period is finished.*

5.4.2 Purchase of Animals

5.4.2.1 Purchase of KRAV-certified Pigs to Raise for Slaughter

You can purchase KRAV-certified piglets from a maximum of three different herds within a 12 month period. (K)

You must keep piglets purchased from different groups, as well as purchased pigs of different ages, within their groups and separated from other groups. (K)

5.4.2.2 Purchase of a Few Conventional Animals

You can only purchase a few conventional animals for breeding purposes. For renewal, you can as well purchase a maximum of 20% conventional gilts per year, calculated using the number of sows and pregnant gilts you will have after the renewal. If there are less than five mother animals in the herd, you can purchase one conventional animal per year at the most. (EU)

See also rules 5.1.5.3 - 5.1.5.5.

5.4.2.3 Quarantine for Purchased Animals

You must keep pigs purchased for renewal in **quarantine** for at least three weeks to protect your animals from infectious disease. (K)

5.4.3 Outdoor Access and Grazing

5.4.3.1 Grazing Time During the Grazing Period

You must arrange for pigs to be outdoors most of the day, during a continual period of at least four months during the **grazing period**, on land that is mostly covered with vegetation. (K)

! *It is a major nonconformity if you do not comply with the standard.*

5.4.3.2 Grazing for Feed and Activation

Pastures must provide the pigs with both feed and an abundance of opportunities for activity. Pigs must always have access to vegetation covered ground when strip grazing or in other grazing systems. You must move them to new pasture as soon as they have rooted up the pasture they are in. (K)

5.4.3.3 Outdoor Access at Other Times

You must provide pigs with access to an exercise yard during the time of year that they are not grazing. (EU)

5.4.3.4 Pigs that Will be Slaughtered During the Grazing Period

Pigs must be let out to graze as soon as land and weather conditions permit. Fattening pigs that will be slaughtered in July or later during the **grazing period** must be let out on grazing land by 1 June at the latest. (K)

5.4.3.5 Outdoor Access for Breeding Boars

You can keep breeding boars in bare exercise yards during both the **grazing and outdoor periods**. (EU)

5.4.3.6 Pigs Temporarily Indoors

You can temporarily keep the animals indoors due to sickness, black fly attacks, or unsuitable weather. During the **withdrawal period** after drug treatment, you must provide animals with access to pasture or an outdoor exercise yard. (EU)

5.4.3.7 Mating or Insemination Indoors

You can keep sows and gilts without pasture for up to four weeks after mating or insemination that leads to pregnancy. They must have access to an outdoor exercise yard if they have to be indoors for more than a week. (K)

5.4.3.8 Farrowing Indoors

Three weeks at the latest after farrowing, you must ensure that the sow and piglets are let out to pasture during the **grazing period** or onto an exercise yard during the rest of the year. When animals are kept in groups and raised in all-in-all-out production, the three weeks is counted from the time the last litter was born. (K)

5.4.3.9 Collection from Pasture Before Slaughter

You can collect pigs from pasture at the most two weeks before planned delivery for slaughter. During this period the pigs must have access to an outdoor exercise yard.

5.4.3.10 Cooling with Water During Grazing

During the warm season, you must ensure that pigs have access to a mud bath or other ways of cooling off in water when grazing. (K)

It is a major nonconformity if you do not comply with the standard.

5.4.4 Natural Behaviour

5.4.4.1 Seclusion When Farrowing

You must ensure that sows are able to farrow in seclusion and under cover, for example in a farrowing hut. A sow can farrow indoors if she has enough freedom, space to build a nest and access to an abundance of material to build a nest with. (K)

You can move a sow to a farrowing box at the earliest one week before the expected farrowing. You must have routines for taking care of animals and other conditions in connection with farrowing that make it possible for the sows to be in the group up until the days before farrowing. (EU)

It is a major nonconformity if you do not arrange for your sows and gilts to be able to farrow in seclusion.

5.4.4.2 Pigs in Groups

You must keep grower pigs and sows without piglets in groups both indoors and outdoors. (EU)

! It is a major nonconformity if you do not comply with the standard.

5.4.4.3 Opportunity for Rooting

You must give pigs access to natural activity and active food search behaviour by providing them with the opportunity to root, for example on fallow land, forest or woodland, or in **deep litter beds**. (EU)

! It is a major nonconformity if you do not comply with the standard.

5.4.5 Housing Conditions

5.4.5.1 Space Measurements in Housing for Pigs

The space indoors and outdoors that must always be accessible to the animals is specified in Table 3. For details not given in the KRAV standards, the minimum measurements according to Swedish animal protection regulations apply. (K)

The space requirements are minimum levels. Functional requirements can mean that greater areas are needed in your stable.

Table 3. Indoor and Exercise Yard Space for Pigs

	live weight (kg)	Minimum space indoors (m ² per animal)	Minimum space outdoors (exercise yard, not grazing land) (m ² per animal)
dry pregnant sow, pregnant gilt		2.5 (EU)	1.9 (EU)
boars for breeding		7.0 (SL) (10 if boxes are used for natural breeding)	8.0 (EU)
lactating sow with piglets until weaning		7.5 (EU)	2.5 (EU)
fattening pigs	< 30	0.6 (EU)	0.4 (EU)
	< 50	0.8 (EU)	0.6 (EU)
	< 85	1.2 (SL)*	0.8 (EU)
	< 110	1.5 (SL)*	1.0 (EU)
	> 110	according to the method used to calculate litter boxes*	1.2 (EU)

You must calculate the space in boxes for several animals based on the largest individuals in the group.

*The minimum area for growing pigs weighing 10-130 kg in litter boxes is calculated according to the Swedish Board of Agriculture's regulations on pig farming SJVFS 2019: 20 according to the following method: 0.2 + weight (kg)/84.

5.4.5.2 Housing for Pigs

If you build a new stable for pigs or newly establish production, the building must be planned and sectioned in order to provide for the best possible protection from infectious disease. (K)

5.4.5.3 The Feeding, Lying and Dunging Area for Pigs

You must ensure that pigs indoors have access to separate lying areas with deep litter beds and a separate dunging area. They must also have a well-defined feeding place. The space must be airy and big enough so that all the animals can eat at the same time or rest at the same time without having to compete. Pigs that have free access to **concentrated feed** do not all need to be able to eat simultaneously, but you must ensure that there are enough eating places so that all the pigs are able to eat without crowding and competition. (K)

5.4.6 Self-sufficiency and Feed

5.4.6.1 Level of Self-sufficiency for Pigs

You must to a certain degree produce the feed on your own **farm** or in cooperation with another farm. The level of self-sufficiency for pigs must be at least 50%. (K)

! *It is a major nonconformity if you do not comply with the standard.*

5.4.6.2 Self-sufficiency for Farms in Norrland as well as Forest and Central Districts

Pig farms in Norrland as well as in forest and central districts (in Sweden) can be exempted from the self-sufficiency requirement of 50%. This can then be reduced to a lower level, but no lower than 20% (EU). You must strive toward successively increasing your level of self-sufficiency. (K)

Your certification body determines what a reasonable level is for your farm.

5.4.6.3 Self-sufficiency for Farms with Special Crops

Farms that raise pigs and also have special crops, for example vegetable crops, can be exempt from the requirement of 50% self-sufficiency. This can then be reduced to a lower level, but no lower than 20% (EU).

The exemption applies only if manure is needed for your own crop. (K)

Your certification body determines what a reasonable level is for your farm in relation to manure needs.

5.4.6.4 Maximum 5% Conventional Feed per Year

You can give pigs up to 5% conventional protein feed of agricultural origin up until 31 December 2021. This applies according to the European Commission's extended exemption. (EU)

Conventional feed that is not of agricultural origin, for example fish meal, can be included in the ration for pigs (EU). You can give at the most 10% such

conventional feed, calculated using the annual feed consumption. **(K)**

The conditions for feeding conventional feed regardless of origin are that the feed must be necessary to make the ration complete as well as permitted in **organic** animal husbandry. **(EU)**

You must calculate portions of feed per animal and year, not per group of animals and year. For animals with a lifetime shorter than one year, consumption for the animals' lifetime applies. **(EU)**

The conventional feed that is not of agricultural origin and is permitted is given in Appendix 1.

The exemption for feed with conventional protein feed will also apply according to the new regulation for organic production (EU) 2018/848, which enters into force on 1 January 2022, but note that it is then limited to only piglets up to 35 kg.

! *It is a major nonconformity if you do not comply with the standard.*

5.4.6.5 Maximum 15% Conventional Feed Per Day

If you give your pigs conventional feed, it can constitute at the most 15% of the daily feed consumption. **(K)**

5.4.6.6 Free Access to Roughage

You must provide pigs with free access to good quality **roughage** **(EU)**. Grazing, hay or silage must be included in the animals' ration. **(K)**

! *It is a major nonconformity if you do not comply with the standard.*

5.4.6.7 Feed Consumption for Pig Production

You must annually calculate how much **concentrated feed** is used per kilo fattening pig or piglet that you sell. You choose yourself if you want to do separate calculations for the piglet and fattening pig parts of your production. **(K)**

5.4.7 Feeding Piglets

5.4.7.1 Weaning Piglets

You can wean piglets when they are 40 days old at the earliest, if you keep them in groups and raise them in all-in-all-out production. You must then follow a **health plan** **(EU)**. The health plan must help you maintain good protection against infectious disease and strict group keeping so that animals stay healthy.

If you do not apply strict grouping and raising in all-in-all-out production, piglets can be weaned at 49 days of age at the earliest. **(K)**

! *It is a major nonconformity if you do not comply with the standard.*

5.4.7.2 Iron for Piglets

You must make sure that piglets get enough iron. They must have access to soil or iron enriched peat. If you give piglets iron paste within 24 hours of birth, you must within a week at the latest give them soil or peat. **(K)**

You can enrich the soil with iron sulphate, for example. You cannot use iron supplements that contain prohibited feed additives. **(EU)**

5.4.7.3 Feeding with Milk Substitutes

You can only use **conventional** milk or milk substitutes in exceptional emergency situations, or during sickness if recommended by a veterinarian. If feeding with a milk substitute or conventional milk is carried out for one week at the most, the animal can still continue to be KRAV-certified. **(K)**


For animals raised with conventional milk or milk substitutes for more than one week the following applies:

- Animals raised for slaughter cannot be KRAV-certified.
- Animals kept in the herd for renewal can be KRAV-certified after a **conversion period** of six months. **(K)**

5.4.8 Surgical Operations

5.4.8.1 Castration of Pigs

You can have pigs younger than seven days of age castrated **(SL)**. The pigs must receive a **local anaesthetic (SL)** and **analgesia** when being operated on **(K)**.

 *More information about local anaesthetics and analgesia can be found at www.krav.se (in Swedish only).*

5.4.8.2 Grinding Piglets' Teeth

You can grind the teeth of piglets from a large litter if it takes place during the pig's first 24 hours of life (before the tooth enamel has hardened). Grinding must not take place routinely, but rather only if experience has shown that injuries can occur to other animals that are not preventable using other means. **(SL/K)**

5.5 Poultry

This section has all the animal specific standards for KRAV-certified poultry that you must comply with together with section 5.1 Standards for All Types of Livestock. This section includes:

- 5.5.1 Conversion Periods for Starting and Purchase
- 5.5.2 Purchase of Animals
- 5.5.3 Outdoor Access and Grazing
- 5.5.4 Housing Conditions
- 5.5.5 Self-sufficiency and Feed
- 5.5.6 Handling Before Slaughter

Note that the European Commission made a new EU regulation for organic production that comes into force 1 January 2022. It contains many changes to the regulations for poultry. These changes influence for example use of verandas, the number of pop-holes, division of the flock in exercise yards, etc.

5.5.1 Conversion Periods for Starting and Purchase

5.5.1.1 Conversion Periods for Starting

Conversion periods for poultry are:

- six weeks for egg production from other poultry than laying hens **(EU)**
- six weeks for egg production from laying hens, if you convert a mixed age flock that was already on your **farm (EU)**
- six weeks for egg production from laying hens if you convert existing **conventional** flocks along with the purchase of new batches of pullets that are raised according to section 5.5.2.1 **(K)**
- 10 weeks for meat production **(EU)**.

If you start egg production with purchased pullets, they must be raised according to section 5.5.2.1 and then a conversion period is not required. **(EU)**

As an alternative you can choose a 24 month conversion period for eggs and meat when land and animals together are converted to KRAV-certified production. In this case, you must feed the animals primarily (more than 50%) with your own feed from the land in the conversion. *You then do not need to comply with the standards for use of one's own conversion feed.* **(EU)**

This alternative can for example apply when several types of livestock on the farm are simultaneously converted to KRAV-certified production.

- ! *It is a major nonconformity if products or animals are sold as KRAV-certified before the conversion period is over.*

5.5.1.2 Conversion Periods for Purchased Conventional Poultry (not laying hens)

You can purchase chickens and other young, with the exception of laying hens, from **conventional** poultry if they are less than three days old. The purchased animals must go through a **conversion period** before you can sell products from them as KRAV-certified.

The conversion periods are (EU):

- six weeks for egg production
- 10 weeks for meat production.

If you purchase pullets, they must be raised according to section 5.5.2.1. (EU)

! *It is a major nonconformity if products or animals are sold as KRAV-certified before the conversion period is over.*

5.5.1.3 Slaughter Age for Poultry

Poultry that doesn't come from a slow-growing breed can be slaughtered after they have reached the following ages, regardless of whether they were purchased when they were younger than three days old or raised on the **farm (EU)**:

- 81 days for chickens
- 140 days for geese
- 49 days for Peking ducks
- 70 days for female Muscovy ducks
- 84 days for male Muscovy ducks.

5.5.1.4 Slaughter Age for Slow-growing Breeds

Slow-growing breeds of poultry can be slaughtered (EU):

- after a 10 week **conversion period** at the earliest, if the day-old chicks are conventionally hatched
- regardless of age if the parent animals are KRAV-certified.

5.5.2 Purchase of Animals

5.5.2.1 Purchase of Pullets for Flocks of Laying Hens

When you purchase pullets they must come from EU organic breeding. Pullets must not be more than 18 weeks old when put into production. (EU)

Production of EU organic pullets (younger than 18 weeks) must be certified in accordance with the Regulation for Organic Production (EC) 834/2007 or be certified no later than 1 December 2020 in accordance with the requirements of the Swedish Board of Agriculture's regulations on organic production (SJVFS 2015: 29), Chapter 3, paragraph 5.

! *It is a major nonconformity if you do not comply with the standard.*

5.5.2.2 Purchase of Poultry Other than Laying Hens

For poultry other than laying hens, you can purchase animals that are three days old at the most and if you are not able to hatch them yourself (EU). You must choose KRAV-certified animals as a first choice. (K)

5.5.3 Outdoor Access and Grazing

5.5.3.1 Times for Outdoor Access

You must actively work so that poultry can be outside in an exercise yard during most of the year. You must comply with the following requirements for poultry:

- They must be able to be outdoors most of the time for at least four continuous months between May and September. The stable must be open more than 12 hours per day. **(K)**
- They must be able to be outdoors during part of the day from early spring to late autumn, as long as weather and ground conditions are suitable. **(K)**
- They must be able to be outdoors during at least one third of their life **(EU)**.

You cannot substitute outdoor access with the animals having access to a **veranda**. **(EU)**

Table birds can be kept without an exercise yard until they are one month old. **(K)**

Poultry can be kept indoors during the night.

! *It is a major nonconformity if you do not comply with the standard.*

5.5.3.2 Outdoor Access After Addition

You must arrange outdoor access for pullets as soon as possible, and four weeks after addition at the latest **(K)**. Young hens can be gradually habituated to being outside and initially do not need to be outdoors most of the time, even if they are added between May and September. However, when pullets are 25 weeks old at the latest, the stable must be open more than 12 hours per day.

5.5.3.3 Exercise Yards for Poultry

You must ensure that exercise yards and pasture for poultry comply with the following requirements:

- They must contain trees, bushes or other facilities where the animals can find protection and feel secure. You must place plants or other protection so that it helps poultry to use the entire exercise yard. **(K)**
- They must provide the animals with both pasture and abundant opportunities for activity. **(EU)**
- They must be mostly covered with vegetation during the whole period of use. **(EU)**
- They must be left empty for at least six weeks between each batch of laying hens as well as two weeks between each batch of table birds or other meat birds. **(EU)**
- There must be a divider between the different flocks so that the groups do not mix. Exercise yards must be designed so that they comply with the requirement of separation between flocks, but if you have a problem with attack by predators and the chickens graze together with other livestock, you do not need to separate the flocks in the exercise yard. **(K)**
- They must not have any **bottlenecks**. This applies if you construct new buildings or add buildings to the certification **(K)**. For existing buildings that were KRAV-certified before 1 January 2016, bottlenecks that hinder pasture utilization must be remedied. **(K)**

You must not feed poultry outdoors with anything other than roughage and water. (K)

It is a major nonconformity if your exercise yard is not properly designed.

5.5.3.4 Detailed Requirements for Exercise Yards for Laying Hens

Each laying hen must during its lifetime have access to at least four m² of exercise yard area.

If you construct new buildings or add buildings to the certification, the exercise yard must be no further than 150 metres from the nearest pop-hole in the housing.

For existing buildings that were KRAV-certified before 1 January 2016, the exercise yard can be no further than 250 metres from the nearest exit hole in the housing. It is however not permitted to increase the dimensions of the exercise yard you had the 1 January 2016 through reconstruction or the like if it will be greater than 150 metres. (K)

You must actively work so that laying hens use as much of the exercise yard as possible, by offering a stimulating and interesting environment that attracts them to being outdoors. You must carry out measures in your exercise yard based on current research and advice. (K)

Examples of possible measures to encourage hens to go outdoors are:

- letting pullets out as soon as they arrive on the farm,
- more roosters in the flock,
- planting trees or shrubs, and
- having water in several places in the exercise yard.

i At www.krav.se there is a checklist with more suggestions for measures and support for promoting outdoor access for hens during the grazing period.

When you use a rotation plan, you can divide the exercise yard into different pens to, for example, sow new vegetation or reduce parasites. If you use rotation grazing during the period from May to September and have permanent buildings, each hen in the flock must always have access to an area of at least two square metres. You must be able to describe your rotation plan.

During the early spring and late autumn, outdoor access can be limited to part of the exercise yard, to even less than an area of two square metres per animal, so as to be able to offer the laying hens outdoor access without the land or pasture being damaged.

It is a major nonconformity if your exercise yard is not properly designed.

5.5.3.5 Detailed Requirements for Exercise Yards for Table Chickens

Each chicken must during its lifetime have access to at least four square metres of exercise yard area. The exercise yard must be located no further than 150 metres from the nearest exit hole in the stable. You must actively work so that table chickens use as much of the exercise yard as possible by offering a stimulating and interesting environment that attracts them to being outdoors.

You must carry out measures in your exercise yard based on current research and advice. (K)

- It is a major nonconformity if your exercise yard is not properly designed.

5.5.3.6 Temporary Indoor Periods for Poultry

You can in some cases keep poultry indoors during the period when they are required to have access to the outdoors. This applies when government agencies have decided on restrictions, for example when there is an outbreak of a contagious disease (EU). If the veranda is counted as part of the accessible indoor area, poultry must have access to it during their waking hours (see standard 5.5.4.5). (K)

5.5.3.7 Access to Pools of Water for Geese and Ducks

You must ensure that geese and ducks, during the period from May to August, have access to pools of water to the degree that all animals can freely and according to need use them to bathe. (EU)

- It is a major nonconformity if you do not comply with the standard.

5.5.4 Housing Conditions

5.5.4.1 Space Measurements in Housing and Exercise Yards for Poultry

The space indoors and outdoors that must always be accessible to the animals is specified in the table below. For details not given in the KRAV standards, the minimum measurements according to Swedish animal protection regulations apply. (K)

The space requirements are minimum levels. Functional requirements can mean that greater areas are needed in your stable.

Table 4a.
Number of Poultry per Section as well as Building Area per Housing

Maximum number of animals (flock size) per section in housing:		Maximum number of animals or building area per housing:
laying hens	3,000 (EU)	18,000 animals (K)
table birds	4,800 (EU)	1,600 m ² (EU)
Guinea fowl	5,200 (EU)	1,600 m ² (EU)
female Muscovy/Peking ducks	4,000 (EU)	1,600 m ² (EU)
males or other ducks	3,200 (EU)	1,600 m ² (EU)
geese	2,500 (EU)	1,600 m ² (EU)

Included in the available floor space or indoor space is the floor area on all levels, nesting-box footings (for example the cover over an egg conveyor) and litter area. (K)

Table 4b. Indoor and Outdoor Space for Poultry

	Number of animals per square metre indoors	Perches in-doors (cm per animal)	Nest***	Outdoor space – available space in rotation (m ² per animal)
laying hens*	6 hens, the nesting box area cannot be included in the available area (EU)	18 (EU)	6 hens/nest or with shared nest 120 cm ² /hen	4 (EU) Note! Maximum 170 kg nitrogen may be added via manure per ha/year.
table birds	10 animals with maximum live weight/m ² : 16 kg (ducks) (SL) 14 kg (geese) (SL) 20 kg (table chickens) (SL) ****	20 (only for Guinea fowl) (EU)		4 (table chickens and Guinea fowl) (EU) 4.5 (ducks) (EU) 15 (geese) (EU) Note! Maximum 170 kg nitrogen may be added via manure per ha/year.
table birds in movable buildings	16 animals,** with maximum live weight/m ² : 20 kg (ducks) (SL) 18 kg (geese) (SL) 20 kg (table chickens) (SL)			2.5 (EU) Note! Maximum 170 kg nitrogen may be added via manure per ha/year.

* For pullets, the same space as in animal protection regulations applies until further notice.

** Only when the movable building does not have a floor space greater than 150 square metres.

*** The area of a nesting box is measured as the length of the nest times the outside width, not including the area for an egg conveyer.

**** For table chickens, more than 10 animals per m² are allowed at the time of addition, but not more than 20 kg/m².

5.5.4.2 Measurements for Openings in Barns for Poultry

For laying hens you must adjust the total length of openings of pop-holes in the barn wall respectively veranda to the number of animals according to the information in Table 4c.

For other poultry, you must have a total length of openings to the exercise yard of 4 m per 100 square metres floor area (EU). Between the barn and veranda, length of openings must be at least two metres per 100 square metres floor area. (K)

Pop-holes must be evenly distributed along the walls that have contact with the exercise yard. The total width of the openings at the pop-holes per side must however be in proportion to how much of the exercise yard is on the outside. This applies if you construct new buildings or add buildings to the certification. For existing buildings that were KRAV-certified before 1 January 2016, the pop-holes must be as evenly distributed and as much in proportion to the exercise yard as possible without jeopardizing the building’s safety. (K)

Table 4c. Openings in Barns for Laying Hens

Number of laying hens in a group	1. Openings in barn walls to the veranda/exit passage (total length) (EU)	2. Openings in the passage from the exit passage on the barn wall or from veranda to exercise yard/grazing area (total length) (K)
up to 200	0.4 m	1.4 m
500	1.0 m	3.4 m
1,000	2.0 m	6.7 m
2,000	4.0 m	13.3 m
3,000	6.0 m	20.0 m

If you have a passageway or veranda between the barn and exercise yard, you can have a smaller total opening between the barn and passage/veranda (column 1) and greater opening between the passage/veranda and exercise yard (column 2). If your hens go directly from the barn to the exercise yard, total openings must be greater, i.e. according to column 2.

5.5.4.3 Buildings for Laying Hens

For laying hens, you must comply with the following requirements for buildings and the indoor environment:

- You can have a maximum of 18,000 hens in one continuous building. (K)
- You can have a maximum of 3,000 hens per section. If you have several sections under the same roof, you must separate each section with a solid or wire wall. (EU)
- The nesting area must not be included in the available area. (EU)

5.5.4.4 Verandas in Buildings for Poultry

If you construct new buildings or add new buildings to the certification, there must be a veranda. (K)

5.5.4.5 Verandas as Accessible Barn Area

If you have a **veranda** connected to the barn, you can include the veranda area in the accessible barn area if the animals have access to it year-round during their waking hours. The measurements of the insulated part of the barn must however comply with Swedish animal protection legislation for poultry. In such a case, the veranda must only be closed when it is dark in the barn (during night rest).

The veranda must be equipped with lights and must not be dark when used by the poultry. (K)

5.5.4.6 Access to Sand Baths, Perches and Laying Nests for Hens

You must ensure that hens have access to sand baths, perches and laying nests to the degree that all animals can use them freely and according to need.

There must be sand baths indoors or on the **veranda**, provided the hens have continual access to them. From May to September, the ground in the exercise yard can substitute for the indoor sand bath, provided that the laying hens sand bathe outdoors. (K)

In Table 4b there are specific measurement requirements for perches and nesting boxes for different types of poultry.

It is a major nonconformity if you do not comply with the standard.

5.5.4.7 Access to Sand Baths and Raised Perches for Table Chickens

You must ensure that table chickens have access to a sand bath to the degree that all animals can use them freely and according to need. There must be sand baths indoors or on the veranda, provided the chickens have continual access to the **veranda**. From May to September, the ground in the exercise yard can substitute for the indoor sand bath provided that the chickens sand bathe outdoors. (K)

You must also ensure that there are objects that the chickens can jump up on in their indoor environment (K).

Examples of such objects are hay bales, perches and shelves.

It is a major nonconformity if you do not comply with the standard.

5.5.4.8 Litter Areas for Poultry

You must ensure that at least one-third of the indoor area for laying hens is a litter area (EU). For other poultry, the entire indoor area must be **litter area**. (SL)

Sand baths are also included in the litter area.

It is a major nonconformity if your animals do not have enough litter area.

5.5.4.9 Access to Light for Poultry

You must ensure that poultry have access to daylight and lighting that supports their daily rhythm and behaviour needs. Light openings must provide daylight that is evenly distributed through the entire barn. (SL)

If you add buildings to the certification or if there is new construction or renovation, daylight must be let in via a surface area equivalent to at least 3% of the floor area. (K)

In poultry barns you should be able to regulate admission of daylight when necessary. Windows can only temporarily be covered with material that blocks light. If it is necessary to regularly limit entry of direct sunlight, it must be done in another way. If you temporarily block entry of daylight, you must document it (K).

Examples of ways to limit direct sunlight are changing the location of windows, using awnings, or using film that lets through light.

5.5.4.10 Night Rest for Poultry

Poultry must get at least eight hours night rest without artificial light. The barn must be dark during the night rest period. Darkening applies to electric lights. During the light part of the year, entry of natural light during the night rest is acceptable (EU). You must document the times when lighting is turned on in the barn during different times of the year (K).

5.5.5 Self-sufficiency and Feed

5.5.5.1 Level of Self-sufficiency for Poultry

You must to a certain degree produce the feed on your own **farm** or in cooperation with another farm. The level of self-sufficiency for poultry must be at least 50%. **(K)**

It is a major nonconformity if you do not comply with the standard.

5.5.5.2 Self-sufficiency for Farms in Norrland as well as Forest and Central Districts

Poultry farms in Norrland as well as in forest and central districts (in Sweden) can be exempted from the self-sufficiency requirement of 50%. This can then be reduced to a lower level, but no lower than 20% **(EU)**. You must strive toward successively increasing your level of self-sufficiency. **(K)**

Your certification body determines what a reasonable level is for your farm.

5.5.5.3 Self-sufficiency for Farms with Special Crops

Farms that raise poultry and also have special crops, for example vegetable crops, can be exempt from the requirement of 50% self-sufficiency. This can then be reduced to a lower level, but no lower than 20% **(EU)**.

The exemption applies only if manure is needed for your own crop. **(K)**

Your certification body determines what a reasonable level is for your farm in relation to manure needs.

5.5.5.4 Maximum 5% Conventional Feed per Year

You can give poultry up to 5% **conventional** protein feed of agricultural origin until 31 December 2021. This applies according to the EU Commission's extended exemption. **(EU)**

Conventional feed that is not of agricultural origin, for example fish meal, can be included in the ration for poultry **(EU)**. You can give up to 10% such conventional feed, calculated using the annual feed consumption. **(K)**

The conditions for feeding conventional feed regardless of origin are that the feed must be necessary to make the ration complete as well as permitted in **organic** animal husbandry. **(EU)**

You must calculate portions of feed per animal and year, not per group of animals and year. For animals with a lifetime shorter than one year, consumption for the animals' lifetime applies. **(EU)**

The conventional feed that is not of agricultural origin and is permitted is given in Appendix 1.

The exemption for feed with conventional protein feed will also apply according to the new regulation for organic production (EU) 2018/848, which enters into force on 1 January 2022, but note that it is then limited to only young poultry.

It is a major nonconformity if you do not comply with the standard.

5.5.5.5 Maximum 15% Conventional Feed Per Day

If you give your poultry conventional feed, it can comprise at the most 15% of the daily feed consumption. **(K)**

5.5.5.6 Free Access to Roughage

You must provide your poultry with free access to **roughage (EU)**. You can feed them root vegetables instead of roughage. Roughage must be available indoors or on the veranda, provided your poultry have continual access to them.

From May to September, grazing in the exercise yard can substitute for the requirement of roughage indoors, provided the laying hens graze outdoors. **(K)**

You may limit the amount of roughage during the ready-to-lay period, if required in order not to affect other feed consumption. **(K)**

Roughage briquettes made of long fibre do not need to be supplemented with more than 20% other roughage.

■ *It is a major nonconformity if you do not comply with the standard.*

5.5.5.7 Feed Consumption for Poultry Production

You must calculate how much **concentrated feed** is consumed annually per kg meat or eggs that you sell. **(K)**

5.5.6 Handling Prior to Slaughter

5.5.6.1 Gathering Poultry Prior to Slaughter

Gathering and placement of poultry in transport crates prior to slaughter must be carried out by experienced personnel, or under the supervision of experienced personnel. Table chickens can be gathered mechanically with good results. **(K)**

When gathered manually, table birds must be gathered individually by lifting the body around the wings and carried and handled upright. **(K)**

KRAV recommends that hens be handled in the same manner. If this is not possible, they must be gathered by carefully taking hold of both legs and the person gathering must not have more than three animals in each hand. **(K)**

Geese and ducks must also be gathered under calm conditions and handled carefully to avoid injuries. **(SL)**

You must be able to describe how you handle poultry when gathering them. **(K)**

Apiculture

6

Those certified for apiculture must also comply with the general standards in Chapters 2 and 3 as well as the standards in Chapter 20.

Contents of this chapter:

- 6.1 Starting and Conversion
- 6.2 Marking and Documentation
- 6.3 Purchase of Bees
- 6.4 Feed and Risks for Contamination
- 6.5 Pharmaceuticals and Pest Control
- 6.6 Hives
- 6.7 Animal Care

6.1 Starting and Conversion

The standards in this section deal with **conversion period**, replacement of wax when converting, parallel production and knowledge requirements.

6.1.1 Conversion

Your apiculture can be approved only after it has complied with the KRAV standards and been monitored by a certification body for one year, the so-called conversion period (**EU**). Calculating conversion periods retroactively is prohibited (**EU**). Thus apiculture must go through a conversion period even if you can show that you complied with the KRAV standards prior to certification (**EU**). When you purchase **EU organic** bees for your KRAV-certified production, they do not require a conversion period (**K**).

6.1.2 Application

You cannot begin your conversion after 1 May of the current year. (**K**)

6.1.3 Wax Handling at the Start of Conversion

You must use KRAV-certified wax when you begin conversion to KRAV-certified production (**EU**). Wax produced during the **conversion period** is regarded as KRAV-certified wax (**K**). If KRAV-certified wax is not available in large enough quantities when you register for certification, you must first of all use **EU organic** wax (**K**). If this is not available either, you can use **conventional** cap wax providing that is not contaminated with products or substances prohibited in organic production (**EU**). It is your responsibility to sample and analyse the conventional wax in order to prove that this is the case. (**K**)

6.1.4 Parallel Production is Prohibited

Parallel production is prohibited. In other words, you cannot in the same company operate both KRAV-certified apiculture and apiculture that is not KRAV-certified. (**K**)

6.1.5 Competency Requirements

You must have the necessary basic and professional training in apiculture. (EU)

6.2 Marking and Documentation

6.2.1 Marking Apiaries

You must mark apiaries so they can be identified (EU). Your name should be visible so you can be contacted. (K)

6.2.2 Logbook for the Bee Colonies

You must have a list of your apiaries and a logbook where each colony can be monitored (EU).

The following should be clearly noted (EU):

- placement as well as movement of the colonies
- time, amount and type of feed when feeding
- veterinary treatments: what substance was used and the dose, how it was administered, diagnosis, treatment time and **withdrawal time**
- harvest, processing and storage. Each filled large container (batch) should be marked with a batch code. Keep track of how much is processed and how much is flavoured.

6.2.3 New Establishment and Movement of Apiaries

When you newly establish or move an apiary you must inform your **certification body** within a previously agreed upon time limit. (EU)

6.3 Purchase of Bees

The standards in this section describe what you should think of before you buy bee colonies and queens.

6.3.1 Purchase

As a first choice, you must purchase bee colonies and queens from KRAV-certified producers. If no KRAV-certified bee colonies or queens are available, you must purchase EU organic bee colonies. If there are no KRAV-certified or EU organic bee colonies or queens available, you can purchase a maximum of 10% **conventional** bee colonies and queens per year. You must calculate the percent using the number of colonies you overwintered the previous year. Purchased colonies must be in good health. (EU)

6.3.2 Choice of Breed

When you choose breeds, you must consider whether or not the bees can adapt to local conditions as well as their resilience and resistance to disease. As a first choice, use European breeds of the species *Apis mellifera* and their

local ecotypes, i.e. local variations of the breeds. **Genetically modified** bees are prohibited. (EU)

6.3.3 Management of Wax if you Purchase Conventional Colonies

If you purchase **conventional** bee colonies the queen must be placed on KRAV-certified wax and blocked from access to the conventional wax. You must then gradually remove the conventional wax from the colonies as the hatched larvae crawl out of it, and replace it with KRAV-certified wax. The conventional wax must be completely replaced within two months, otherwise the bee colony must go through a one-year **conversion period**. Any honey on removed frames is classed as conventional and must be handled separately. (EU/K)

6.3.4 Renewal Following a Catastrophe

If your bees have a high mortality rate or if they must be killed due to a contagious disease or catastrophe, you can apply to The Swedish Board of Agriculture to purchase **conventional** bees to build up your apiculture again. This is permitted only if there are no KRAV-certified or EU organic bee colonies or offshoots for sale. If the conventional wax in the new colonies is replaced within two months, no **conversion period** is required, as long as the colonies were not treated with Apistan. (EU/K)

When you purchase EU organic bees for your KRAV-certified production, no conversion period is required. (K)

6.3.5 Swarms and Packaged Bees

You can take swarms and procure packaged bees that originate from KRAV-certified colonies. If you catch a swarm or procure packaged bees that you are not sure come from KRAV-certified colonies, you must handle them as new **conventional** colonies. You must include these bees in the number of allowed purchases, see standard 6.3.1. (EU)

6.3.6 Conversion Period When Purchasing

In the following cases, your purchased bees and the bee colonies must go through a one-year conversion period before you can sell the honey as KRAV-certified (EU):

- If packaged bees, swarms or purchased colonies were treated with prohibited pharmaceuticals (Apistan).
- If you did not replace the wax within two months after purchase of **conventional** bee colonies.
- If you catch a bee swarm of unknown origin.

6.4 Feed and Risk for Contamination

These standards describe both what applies when bees look for food in nature and how you can feed them.

6.4.1 Feeding Range of the Bees

Nectar and pollen sources within a radius of three kilometres must be primarily **KRAV-certified, EU organic** or of natural origin. (EU)

6.4.2 Feeding Outside of High Season

You must use **KRAV-certified** sugar or KRAV-certified honey for feeding outside of high season. (EU)

6.4.3 Supplementary Feeding During the High Season

If you happen to experience exceptional weather conditions or a catastrophe that result in your bees not being able to gather food, they can require supplementary feeding. In that case you must apply to The Swedish Board of Agriculture for dispensation due to a catastrophe. You cannot supplementary feed your bees before The Swedish Board of Agriculture has granted your application.

If you get dispensation, you must feed the bees with KRAV-certified honey or KRAV-certified sugar. You must document the supplementary feeding. (EU)

6.4.4 Location of Beehives

You cannot locate beehives so close to sources of pollution, e.g. genetically modified crops, industrial areas or garbage dumps, that the honey can be contaminated. If there is cultivation with **genetically modified organisms** in close proximity you must locate your beehives at least three kilometres from such cultivation. (EU)

You cannot move hives to cultivation where there is chemical pest control, for example **conventional** cultivation of oil crops, fruit or berries. You can however have your apiaries permanently located in a place where conventional oil crops are grown occasionally. (EU)

6.4.5 Chemical Pest Control

You cannot use chemical pest control near beehives. (K)

6.5 Pharmaceuticals and Pest Control

The standards in this section deal with methods for disease prevention as well as permitted methods of treatment.

6.5.1 Preventive Measures

The following measures should be taken to prevent disease (EU):

- choose suitable hardy breeds,
- take measures that promote resistance to disease, prevent infection and contribute to early detection of disease. Examples of such measures include regularly changing the queen bee, regular inspection, inspection

of drone larvae, destruction of polluted material and providing the bees with adequate amounts of feed,

- keep hives, frames and equipment clean.

6.5.2 Treatment of Disease

You must treat diseased bee colonies. Drone larvae may only be killed to limit attack of Varroa destructor mites. You can destroy colonies that are strongly weakened by disease. (EU).

6.5.3 Pharmaceutical Treatment

There are two registered pharmaceuticals for apiculture. Both are used against Varroa mites. The drugs are Apistan and Apiguard. Apistan contains a non-permitted substance therefore you must not treat your bee colonies with Apistan. Doing so will lead to loss of KRAV certification. You may however use Apiguard according to the directions for use, and the treated colonies do not require a **conversion period**. (EU)

6.5.4 Approved Methods of Pest Control

Other than cold storage you can use oxalic acid, formic acid, acetic acid, lactic acid, menthol and thymol to treat disease or pests, to carry out health inspections in the hive as well as to store frames. Other methods of chemical **pest control** are prohibited. (EU)

You can use spores from *Bacillus thuringiensis* to prevent wax moth where honey supers are stored. (EU)

6.5.5 Petroleum Products are Prohibited

You cannot use oil, diesel fuel or other petroleum products to prevent attack by ants or for any other type of pest control. You can use paste adhesives and similar substances that can provide a physical obstruction for insects. (K)

6.6 Hives

The standards in this section describe the materials that can be used in hives and foundations.

6.6.1 Foundation

You must use KRAV-certified wax in the foundation. It is prohibited to use foundations made of plastic. (EU)

6.6.2 Material in Beehives

Beehives must primarily be made from materials of natural origin. To show that you comply with this standard, you must calculate the weight of boxes, frames, bottoms and tops that are used year-round. (EU)

It is prohibited to use construction material that can contain toxic substances. You must only use natural materials such as wax, propolis and vegetable oils inside the hive. **(EU)**

6.7 Animal Care

The standards in this section cover bee wing cutting, what is allowed in smoke bellows and what applies during harvest.

6.7.1 Wing Cutting Prohibited

It is prohibited to cut the wings of queens. **(EU)**

6.7.2 Methods to Calm and Drive Away Bees

You can use water and vinegar to drive away and calm bees. You can also use bellows. Only untreated wood products and other plant-based, fossil free fuels are permitted in the bellows. Use of synthetic chemical substances to drive away bees is prohibited. **(K)**

6.7.3 Care During Harvest

You must not damage bee colonies when you harvest honey or other products from the bees. Killing larvae on the honeycomb during harvest is forbidden. You can use a bee blower when harvesting, but bee blowers must be used carefully to avoid injuring the bees. **(EU/K)**

Aquaculture

7

Aquaculture can be certified according to the KRAV standards if it is carried out in compliance with Commission Regulation (EC) 834/2007 and the implementation requirements in Commission Regulation (EC) 889/2008, and complies with KRAV's general standards in Chapters 2 and 3, as well as the standards for labelling and marketing in Chapter 20.

Wild Harvest Production



Those certified for wild harvest production must also comply with the general standards in Chapters 2 and 3, as well as the standards in Chapter 20.

Contents of this chapter:

- 8.1 Registration and Assessment
- 8.2 Contaminants and Protective Distance
- 8.3 Consideration for People and the Environment
- 8.4 Traceability, Documentation and Social Responsibility

8.1 Registration and Assessment

The standards in this section deal with how to register collecting areas for certification.

8.1.1 Registration of an Area

You must define your area for wild harvest production and register the area with an approved **certification body**. The certification body must approve the area for wild harvest production before you begin harvesting. (EU)

8.1.2 Assessment

Your application to register an area must include an assessment of the area of land. The analysis must determine whether or not the requirements in sections 8.2 and 8.3 are complied with (EU). The assessment must also include a risk analysis that examines all risks for contamination in connection with **handling** during harvest, as well as the risk that the harvest is not sustainable. (K)

Your **certification body** must approve the assessment before you begin harvesting. (K)

The information for your assessment can come from government agencies, environmental organizations, humanitarian organizations or the landowners. If there is no government supervision for the issues in question or if the land ownership conditions in the area are complex, the assessment must be supplemented with information about the local area and land ownership documents. (K)

8.2 Contaminants and Protective Distance

This section contains standards for how you ensure that products do not become contaminated.

8.2.1 Prohibited Fertilisers and Plant Protectants

You must not harvest wild harvest production from an area that was treated with prohibited fertilisers and soil conditioners or plant protectants during three years prior to the harvest (EU). Forest plants treated with chemical **pesticides**

must not have been planted during the previous three years. **(K)**

Prohibited substances are those that are not allowed according to the KRAV standards for crop production, see section 4.8 on fertilisers and section 4.9 on plant protectants.

8.2.2 Approved Fertiliser and Plant Protectants in an Appropriate Quantity

You cannot conduct wild harvest production in an area where the ground has been treated with approved fertilisers and **plant protectants** in such quantities that there is a risk the harvest may contain high levels of undesired substances.

(K)

An example of an approved substance that can be used in forestry is ashes. The ashes, however, must not be spread in such quantities that there is a risk that the harvest can absorb undesired levels of, for example, heavy metals. You must only gather products from areas where those that use the forest comply with The Swedish Forest Agency's or an equivalent government agency's recommendations for recycling ashes.

8.2.3 Contaminants in a Certified Area

You cannot conduct wild harvest production in an area where as a result of contamination, there is a reduction in the value of food or feed. **(EU)**

8.2.4 Caesium in Soil

You cannot conduct wild harvest production in areas where the ground contains more caesium than the permissible limits given in the Table below. Products from land with a higher level of caesium cannot be KRAV-certified. **(K)**

Product	Maximum caesium content in soil
Berries (excluding cloudberries)	60 kBq/m ²
Cloudberries	40 kBq/m ²
Fungi	5 kBq/m ²

8.2.5 Protective Distance from Sources of Contamination

You cannot conduct wild harvest production **(K)**:

- closer than 25 metres from roads where traffic exceeds an average of 3,000 vehicles per day over a whole year, or
- closer than 25 metres from other sources of pollution, for example industries, garbage dumps, railways and **conventional** agricultural land.

8.3 Consideration for People and the Environment

This section is about consideration for people who live in a collection area and for the biodiversity in the area.

8.3.1 Consideration for Residents and Land Owners

You must harvest so that your activity does not have a significant negative impact on people's way of life or livelihood. You must show consideration for local traditions and the people who live in the area. You should also show reasonable consideration for the interests of landowners. **(K)**

8.3.2 Sustainable Harvest

You must submit a written description to your **certification body** about how you plan to harvest and indicate the size of harvest possible without threatening sustainable production. Your harvest must not have a negative impact on the environment or threaten the existence of any plant or animal species. **(EU)**

8.3.3 Red Listed and Threatened Species

You cannot collect plants that are red listed or listed as threatened in the country where you plan to harvest them. You cannot collect species included in an international protection program or in any other way are included in restrictions that make it inappropriate to harvest them. If the species are addressed by The Convention on International Trade in Endangered Species of Wild Flora and Fauna (CITES), you must comply with the special recommendations given by CITES. **(K)**

A list of red listed species is given at www.artdatabanken.se/en/.

CITES recommendations are at www.cites.org.

8.4 Traceability, Documentation and Social Responsibility

This section covers standards for traceability, documentation and special standards to protect pickers. More standards on social responsibility are found in section 3.1.

8.4.1 Traceability

You must handle your production so that the harvest can be traced in all stages up until when the goods are either sold or you process them further. It must always be possible, by using the packaged raw material as a starting point, to trace wild harvest production back to an agent, picker or picking group and picking location or picking area. **(EU)**

8.4.2 Documentation

You must document handling at every step from gathering to selling or processing. The documentation must describe how you comply with the requirements in this chapter and other relevant chapters. **(EU)**

8.4.3 No Independent Pickers

You must not hire **independent pickers**, nor can an agent that you hire do it on your behalf. (K)

8.4.4 Payment

Pickers must be paid salaries according to collective agreements. If you enlist an employment agency, you must ensure that pickers earn salaries in accordance with collective agreements. (K)

8.4.5 Food and Accommodation for Pickers

If you provide food or accommodation for pickers for a fee, it must not exceed cost price.

8.4.6 Registration of Pickers

You must register all pickers and they must be identifiable by passport number or other identification. You must register the residence of all pickers. When you register pickers who have a work permit and visa and are hired through an employment agency, you must provide the name of the employment agency. All pickers must confirm that they will comply with the standards for KRAV-certified wild harvest production. (K)

8.4.7 Contracts with Agents

You must sign a contract with all agents. The agents must confirm that they will comply with the relevant standards for KRAV-certified production. (K)

8.4.8 Information to Pickers

You must have a routine that describes how information on the KRAV standards is communicated to pickers. (K)

You must provide all information, including purchase lists, in a language that pickers understand. (K)

You must provide a map in an appropriate format, for every vehicle that pickers use. The map must be in a scale of 1:100,000 or more detailed, and show the approved area with any unapproved areas marked. (K)

You must post the following written information at every purchase location so that it is clearly visible (K):

- Map of the approved area, with any unapproved areas marked, in a scale of 1:100,000 or more detailed. If the pickers have the information in a navigation device, GPS or other digital device that is always accessible and the equivalent information is available at the purchase location, then a paper map does not have to be posted there.
- The standards for KRAV-certified wild harvest production.

- Picking instructions that describe how to harvest the plants.
- Information about responsibilities and precautions for good land management and consideration towards landowners, for example information about the common right of access to private land in Sweden.

You are responsible for ensuring that the employer informs pickers of the above in writing and verbally, and that the pickers have understood the information. **(K)**

Approved and unapproved areas are included in the assessment approved by the certification body, see standard 8.1.2.

8.4.9 Reporting Contracts and Payments

You must report the following to your certification body **(K)**:

- if you hire an employment agency: a contract between you and the agency as well as employment agreements between the pickers and the agency
- if you hire pickers yourself: the contract between you and the pickers,
- payments to pickers
- where the pickers live.

Food Processing

9

Those certified for food processing must also comply with the general standards in Chapters 2, 3 and 20.

Even if you only handle or store KRAV-certified food you must be certified for food processing if the food that is not packaged. In that case only standard 9.7 applies, and other standards in Chapter 9 are not of concern to you.

Contents of this chapter:

- 9.1 Raw Materials
- 9.2 Processes
- 9.3 Process Aids, Additives and Flavourings
- 9.4 Substances in Contact with Food
- 9.5 Yeast and Wine Making
- 9.6 Labelling KRAV-certified Ingredients (moved to 20.3.5)
- 9.7 Handling

9.1 Raw Materials

The standards in this section describe the details regarding raw materials in KRAV-certified products.

9.1.1 KRAV-certified Raw Materials

Cancelled.

9.1.2 At least 90% KRAV-certified Ingredients

You can use the KRAV name and label on products with at least 90% by weight KRAV-certified ingredients, provided that the products contain a total of at least 95% by weight organic ingredients (**K**). Your calculation must be based on the amount of **ingredients** used. (**EU**)

An EU organic ingredient must not be used in a product with a KRAV-certified ingredient of the same type (**K**).

*If the portion of the KRAV-certified ingredients is less than 90% by weight, you can indicate which ingredients are KRAV-certified if you comply with the standards in section 20.3.5. (**K**)*

9.1.3 Salt and Water

Water cannot be KRAV-certified and must not be included when calculating the KRAV-certified proportion of ingredients in a multi-ingredient product. However, water added for reconstitution must be taken into account. (**EU**)

9.1.4 Scarcity of KRAV-certified and EU organic Raw Materials

Up to 5% by weight of the **raw materials** in multi-ingredient products can be conventional raw materials, if you can show that there is an insufficient quantity or quality available of KRAV-certified or **EU organic** raw materials of a certain type, according to standards 9.1.5, 9.1.6 and 9.1.7. (**EU**)

9.1.5 Conventional Raw Materials

Conventional raw materials of agricultural origin can only be used if (EU):

- the raw material is permitted according to Annex IX to Regulation (EC) 889/2008, or
- has been approved by The Swedish National Food Agency according to Article 29 of the same regulation after you have submitted an application.

According to Article 29 in Regulation (EC) 889/2008, The Swedish National Food Agency can issue a fixed-period permit to use a specific conventional ingredient in a specific product. Information about how to submit an application to The Swedish National Food Agency is on their website www.livsmedelverket.se.

The standard does not apply to products that contain KRAV-certified wild-caught fish or shellfish.

9.1.6 Conventional Raw Materials in Products that Contain KRAV-certified Wild-caught Fish or Shellfish

Conventional raw materials of agricultural origin can only be used if (K):

- the raw material is approved according to Regulation (EC) 2018/848, or
- you can show that the raw material cannot be obtained in sufficient quantity or acceptable quality as KRAV-certified or as **EU organic**.

Your **certification body** will determine if the conventional raw material is permitted for use. (K)

9.1.7 Prohibited Conventional Raw Materials

Despite what is given in standards 9.1.4 and 9.1.5, a **conventional raw material** cannot be used in KRAV-certified food processing (EU):

- in a product with a KRAV-certified **ingredient** of the same type
- if it contains or is made of or with **GMOs**
- if it is made with prohibited processes according to section 9.2
- if it is made up of or contains **engineered nanomaterials (K)**
- if it contains prohibited additives according to Appendix 2.

9.2 Processes

This section is about the production processes that are permitted for food processing.

9.2.1 Permitted Processes

You can only use the following production processes (EU):

- mechanical and physical processes
- biological processes, for example fermentation and leavening (for example use of lactic acid cultures and fungus cultures)

- enzyme processes, for example to coagulate or break down substances,
- extraction
- smoking
- precipitation
- ion exchange and adsorption techniques, with resin, only when used in the preparation of organic raw materials for infant formulae and baby food. Infant formulae and baby food are defined in Article 11 (1) (a) and (b) of (EU) 609/2013.

9.2.2 Irradiation

You must not irradiate your raw materials or products with ionizing radiation. (EU)

However, control instruments using X-rays are allowed if the radiation dose does not exceed 0.5 Gy and the energy level does not exceed 10 MeV. Other exceptions in accordance with Directive 1999/2/EC Article 1 (2) (a) are also allowed.

9.3 Process Aids, Additives and Flavourings

This section is about the process aids and additives that are permitted for food processing.

9.3.1 Ban on GMOs

Additives, flavourings, carriers, solvents or **process aids** cannot contain or be made with or from genetically modified organisms. (EU)

9.3.2 Permitted Process Aids

The process aids listed in Regulation (EC) 2018/848 are permitted. In addition to these, preparations of microorganisms and enzymes normally used in food preparation are also permitted for use. (EU)

The enzymes invertase and lysozyme can also be used as food additives, but as such are prohibited in KRAV-certified production.

For wild-caught shellfish certified according to the standards in Chapter 17 (Fisheries), it is also permissible to use diphosphates and triphosphates as process aids for shelling. (K)

9.3.3 Permitted Solvents

You can only use water, ethanol, carbon dioxide and fats as **solvents**. (I)

9.3.4 Additives

Appendix 2 provides a list of permitted **additives**. (K)

9.3.5 Flavourings

You can only use flavourings consisting of **natural flavouring** substances and **permitted additives** (see standard 9.3.7) (EU/K)

9.3.6 Enrichment Products

You can only use **enrichment products (EU)**:

- when such use is specifically prescribed by a government agency
- in the production of infant formulae and baby food.

Infant formulae and baby food are defined in Article 11 (1) (a) and (b) of (EU) 609/2013.

9.3.7 Carriers

Substances needed for the function of an enzyme preparation are permitted as **carriers** of enzymes (I).

Permitted carriers for flavouring substances and additives are water, ethanol, fats, raw materials or permitted additives according to Appendix 2. (K)

9.4 Substances in Contact with Food

This section is about the substances that must not come into contact with food and the substances that can be used to wash eggs.

9.4.1 Preservatives, Pesticides and Colourings

You must not add **preservatives** (for example antifungal agents) that are not listed in Appendix 2, **pesticides**, or synthetic or nature-identical **colourings** to substances that come into contact with food (for example cheese wax). (EU)

9.4.2 Egg Washing

You can wash eggs with substances permitted by The Swedish National Food Agency. (S1)

A permit from The Swedish National Food Agency is required for egg washing.

9.5 Yeast and Wine Making

This section addresses what applies for the processing of two products when the EU regulation has special requirements and lists of permitted additives which have no equivalent in the KRAV standards.

9.5.1 Certification of Yeast Production

Your production of yeast can be KRAV-certified if it complies with the EU standards for **organic** yeast as well as KRAV's general standards in Chapters 2, 3 and 20. (K)

9.5.2 Certification of Wine Production

Your wine production can be KRAV-certified if it complies with the EU standards for **organic** wine making as well as KRAV's general standards in Chapters 2, 3 and 20. (K)

9.6 Labelling KRAV-certified Ingredients

Section 9.6 has been moved to 20.3.5.

+ 9.7 Handling

9.7.1 Handling of Unpackaged Food

If you only handle or store KRAV-certified food you must be certified for food processing if the food is not packaged without per unit labelling. You must then comply with the general standards in Chapters 2, 3 and 20, and pay special attention to the standards in section 3.2 which addresses the handling and storage of KRAV-certified products. (K)

Slaughter

10

A slaughterhouse certified for slaughtering must also follow the general standards in Chapters 2 and 3 as well as the standards in Chapter 20.

Contents of this chapter:

- 10.1 Responsibility of the Slaughterhouse
- 10.2 Handling and Animal Welfare
- 10.3 Marking, Identification and Separation
- 10.4 Transport
- 10.5 When to Slaughter
- 10.6 Herding
- 10.7 Stunning and Bleeding
- 10.8 Cattle
- 10.9 Sheep and Goats
- 10.10 Pigs
- 10.11 Poultry

10.1 Responsibility of the Slaughterhouse

10.1.1 Documentation of Standard Routines and Job Instructions

The slaughterhouse must have and implement a **manual** that contains standard operating procedures and job instructions for handling KRAV-certified animals. (SL/K)

10.1.2 An Animal Welfare Officer at Each Slaughter Facility

The slaughterhouse must have an **animal welfare officer**. This is required by law if more than 1,000 livestock units are slaughtered per year, but KRAV-certified slaughterhouses must have one regardless of size. (K)

The animal welfare officer must:

- have completed training for the certificate required (SL)
- develop standard operating procedures that they monitor and revise, as well as document any deficiencies in **animal welfare** at the slaughterhouse (SL/K)
- make a plan for continual improvement in the handling of live animals, and revise it at consultation sessions (see standard 10.1.4), and make it available to the **certification body** during an **audit**. (K)

Regarding responsibility for ensuring the KRAV standards are known and complied with, see standards 2.3.1 and 2.3.2.

10.1.3 Annual Meeting

The **animal welfare officer** must take part in KRAV's annual meeting for animal welfare officers. If the **animal welfare officer** cannot take part, someone else from the slaughterhouse who is familiar with the slaughterhouse routines can act as a substitute. For **small slaughterhouses**, participation in at least one meeting during a three year period is sufficient. (K)

10.1.4 Consultation with Focus on Animal Welfare

In the following cases, slaughterhouses must get help from an external consultant with specialist qualifications in handling, **herding** and stunning animals, as well as in how equipment and interior fittings should be designed to achieve good **animal welfare** at slaughterhouses. (K)

Slaughterhouses must get help:

- prior to certification
- at least every three years, for **small slaughterhouses** at least every 10 years
- in the event of extensive new or reconstruction of unloading locations, herding corridors, holding pens or stunning boxes
- when results show a high or increasing frequency of slaughter remark code 42 (fresh damage)
- when there are other remarks or signs that indicate recurrent animal welfare problems
- when other incidents occur that the **certification body** considers unsatisfactory regarding animal welfare.

The purpose of the consultations is to identify critical points throughout the process, from unloading of animals to stunning and slaughter. The consultations must cover all the types of livestock normally slaughtered at the slaughterhouse. The consultant must make a report that the **animal welfare officer** must use as a tool for development of a plan with suggestions for improvement and a schedule for measures to be taken regarding animal welfare and the animal environment at the slaughterhouse (see standard 10.1.2). (K)

“Normally” denotes that if the slaughterhouse for example only slaughters horses, bison or goats on a few occasions per year, these types of animals do not need to be included in consultations.

10.1.5 Qualifications of Consultants

Consultants must have documented, broad, practical experience in handling animals in the slaughter process and have training in ethology. They can then provide consultation according to the above at a slaughterhouse where they do not have a conflict of interest. (K)

The consultant must also have:

- knowledge and understanding of the KRAV standards so that these requirements can also be identified
- knowledge of the latest developments in animal welfare issues concerning handling animals and systems for stunning.

10.1.6 Obligations of Slaughterhouses Towards Farmers

The slaughterhouse must (K):

- give the animal farmer or handler the possibility of being present during slaughter up until the killing of the animal

- make arrangements so that the animal farmer can receive the remarks regarding slaughter registered by the National Food Agency's official veterinarian in connection with slaughter.

10.1.7 Verification Audit and Extra Unannounced Audit

Slaughterhouses must have at least one annual on-site audit. (EU)

With the exception of *small slaughterhouses* the **certification body** must also carry out an annual extra **unannounced audit** of slaughterhouses. Handling of live animals is the most essential part of the KRAV standards for slaughter and must be evaluated at every audit. The extra unannounced visit must focus only on the handling of live animals. (K)

The certification body can in addition carry out several extra audits, for example to follow-up nonconformities (see section 2.5). (K)

10.2 Handling and Animal Welfare

10.2.1 Handling Animals

Animals must be handled calmly and carefully during loading, transport, unloading and at the slaughterhouse, so that they experience a minimum of **stress**. (SL/EU)

Animals must be handled, herded and kept in lairage in a manner that takes into consideration their natural behaviour. Slaughterhouses must have routines for handling injured and sick animals. (SL)

10.2.2 Qualification Requirements for Staff

All staff that take part in restraining and slaughter must have a certificate of competence issued by The Swedish Board of Agriculture for the livestock in question. (SL)

The **animal welfare officer** must make sure that all staff use and have mastered the methods described in the standard routines. (K)

10.2.3 Established Animal Groups

To prevent animals from **stressing** each other, the slaughterhouse must not mix **established groups of animals** together with other animals. The slaughterhouse may divide established groups when kept in **lairage**, but the groups must not be mixed with other animals. (K)

It is the producer's responsibility to put groups together before they are transported to the slaughterhouse, see section 5.1.12.2. The animal owner must verify that the animal group is established. (K)

10.2.4 Electric Prods

Electric prods cannot be used on KRAV-certified animals in any step of the process from loading to slaughter (this applies to all types of livestock). (K)

Electric prods must not be used on the following types of livestock regardless of whether or not the animal is KRAV-certified:

- pigs
- sheep
- goats.

Slaughterhouses must also take preventive measures so that electric prods are not used at all on conventional cattle. **(K)**

If a slaughterhouse or transporter uses electric prods then the following applies:

- If an electric prod is used on a KRAV-certified animal, the animal must have their KRAV marking removed. They must not be sold as KRAV-certified (this applies to all types of livestock).
- Slaughterhouses must report to their **certification body** the number of KRAV-certified animals that have had their KRAV marking removed.
- A major **nonconformity** is given by the certification body for the use of electric prods on either pigs, sheep or goats. This applies to both KRAV-certified and conventional animals.
- For cattle, slaughterhouses must be able to report to their certification body the measures taken to minimize the number of cases when electric prods are used.

10.2.5 Herding Animals

When **herding** animals, the slaughterhouse must take advantage of the natural behaviour of animals. **Hard herding** of animals is prohibited. This applies to both KRAV-certified animals and all other animals handled at slaughterhouses. **(K)**

! *It is a major nonconformity if you do not comply with the standard.*

10.2.6 Serious Remarks from Inspection

Meat or carcasses from animals that have received serious remarks regarding deficient animal welfare cannot be KRAV-labelled. The following examples result in serious remarks during an inspection of live animals or meat **(K)**:

- animals that are greatly contaminated by manure
- emaciated or excessively thin animals
- very overgrown hooves
- serious external injuries
- poultry: high incidence of DoA (dead on arrival birds) and wing injuries.

10.2.7 Serious Remarks are Reported to the Certification Body

Slaughterhouses must immediately give notification of serious remarks that indicate deficient animal welfare in the stock of an individual breeder. Applicable remarks are, amongst others, those given in standard 10.2.6.

Slaughterhouses must inform the **certification body** that certified the farmer whose animals have received remarks so that the certification body can evaluate the whole **production**. (K)

10.3 Marking, Identification and Separation

10.3.1 Marking Animals

All cattle, sheep and goats as well as pigs that arrive at a slaughterhouse must be marked according to the law. (SL)

10.3.2 Traceability and Separation

The slaughterhouse must have a system for separation and traceability of KRAV-certified animals throughout the entire handling chain from live animals to carcass/cutting-up. (K)

10.3.3 Responsibility for Marking

The KRAV-certified animal keeper or handler is responsible for marking up to the point that the animals are loaded for transport from the farm. The slaughterhouse is responsible for marking during the rest of the transport and the slaughter process. If the animal owner personally transports the animals, they are responsible for the marking until the animals are put in **lairage** at the slaughterhouse. (K)

“Marking” of the animals refers to the marking/documentation required according to standard 10.3.4.

10.3.4 Documentation About KRAV-certified Origin

When animals arrive at the slaughterhouse, the following documentation/information must accompany the KRAV-certified animals:

- valid **certificate**
- verification of the individual animals' certification status (for example KRAV-certified, in a **withdrawal period**, or in-conversion)
- information needed by the slaughterhouse to comply with standards 10.2.3 and 10.5.3.

If documentation is missing or incomplete, the slaughterhouse must not accept the animals as KRAV-certified. (K)

10.4 Transport

10.4.1 Transport Responsibility of the Slaughterhouse

Slaughterhouses must, both when using their own or hired transport as well as when animal owners transport their own animals, ensure that:

- the driver has a valid certificate of competence (SL)
- the vehicle has been inspected and approved by the County

Administrative Board (SL)

- the transporter is registered with the Swedish Board of Agriculture (SL)
- total transport time (including resting) does not exceed eight hours. For poultry however, this time can be extended according to certain conditions provided in the legislation (SL).
- the vehicle has satisfactory ventilation so that the climate is good for the animals (K)
- the driver drives safely (K)
- the transporter is aware of the KRAV standards (K)
- the slaughterhouse's **certification body** must when necessary be able to inspect the animal transport, be present when loading and unloading, as well as receive relevant documentation (for example a certificate of competence) (K).

The above must be ensured by the slaughterhouse's own routines for drivers they employ, by a transport agreement with external carriers, or by agreements with producers that transport animals themselves. (K)

For those who transport their own animals to a slaughterhouse, the first three points do not apply provided this is consistent with animal welfare legislation. This means that the transport distance must be shorter than 65 km and that transports do not exceed eight times per year. (SL)

10.4.2 Stimulants or Tranquilizers are Prohibited

Animals must not be treated with stimulants or tranquilizers before or during transport. (EU)

+ 10.4.3 Loading and Unloading

The driver and slaughterhouse staff must handle the animals calmly during unloading at the slaughterhouse. When herding animals, the slaughterhouse must take advantage of the natural behaviour of animals. **Hard herding** of animals is prohibited. The slaughterhouse must in particular (SL/K):

- use non-slip surfaces such as rubber mats, grooved floors and/or bedding
- use an unloading ramp with as small an incline as possible and equipped with stable gates.

The animals may also be led individually.

10.5 Overnight Stay at the Slaughterhouse

+ 10.5.1 Time of Slaughter

Normally, KRAV-certified animals must be slaughtered the same day they arrive at the slaughterhouse. However, as this is not always possible for logistical and animal welfare reasons, slaughterhouses may overnight a maximum of 30% of the KRAV-certified ruminants according to the conditions specified

in standards 10.5.2-10.5.5. When there is an overnight stay, the animals must be in an **established group** and be kept in the group during **lairage** without mixing with other animals. An established group may be divided during lairage (according to standard 10.2.3), but the groups must also not be mixed with other animals. (K)

🔄 10.5.2 Documentation on Keeping Animals Overnight

Under certain conditions slaughterhouses may overnight a maximum of 30% of the KRAV-certified ruminants calculated per calendar year. Slaughterhouses must when inspected be able to report the percentage of KRAV-certified ruminants that have overnights the previous year. (K)

📌 *The slaughterhouse can use a template available at www.krav.se or its own system to report the proportion of ruminants that overnight.*

🔄 10.5.3 Animals Prohibited from Staying Overnight

The following animals may not overnight (K):

- single animals, meaning animals delivered from the farm by themselves, see exceptions in standard 10.5.6
- pigs, see exception in standard 10.5.6
- **high-lactating ruminants**
- unweaned animals during the milking period
- mothers or offspring separated for less than two days
- animals not used to being housed and/or handled

The above is verified by the animal owner. (K)

📌 *The verification can, for example, be given on the transport document or the completed checklist at www.krav.se.*

+ 10.5.4 Basic Requirements for Animals that Overnight at a Slaughterhouse

The following must be complied with in order for animals to overnight (SL/K):

- The animals must have free access to water from equipment adapted to the species and animal.
- The bedding surface must be dry, complete and littered.
- The space requirements according to Swedish law must be complied with.
- The animals must be fed **roughage** in a hygienic manner and an amount so that they have feed to keep them occupied most of their waking time.
- The animals must be inspected regularly. The inspection must take place in the morning and evening at a minimum.

Examples of hygienic methods are feeding with roundballs or feeding-troughs.

Inspection should take place after the last shipment of animals has arrived at the slaughterhouse.

+ 10.5.5 Individual Overnight Stay in a Group Box or Single-animal box

Animals should preferably overnight together with their **established group** in a group box. Only animals that for animal welfare reasons need to be separated from their group may stay overnight alone, provided that they have conspecifics within sight. Animals must then primarily stay overnight on their own in a group box and as a last alternative stay overnight in a single-animal box such as the Uddevalla system.

In the **Uddevalla system**, a soft slatted floor can substitute for the requirement for a solid and littered bedding surface. (K)

Individual overnight stays in a box or Uddevalla system must be documented according to standard 10.5.2 and the reasons for keeping the animal separately must be given. (K)

Animal welfare reasons may be that the animals stress each other or pose a risk of injury. When audited, the slaughterhouse must be able to report on its routines and assessment criteria regarding the separation of animals into individual boxes and the Uddevalla system.

Animals that are not used to being housed or in other ways are not suitable, for example due to size, temperament or having horns, should never spend the night in the Uddevalla system. Animals not suitable for keeping in the Uddevalla system should always be given priority at slaughter.

+ 10.5.6 Animals Delivered by the Animal Owner

KRAV-certified animals delivered by the animal owner or caretaker and that do not belong to the following categories (K):

- **high-lactating ruminants**

- unweaned animals during the milking period
- mothers or offspring separated for less than two days
- animals not used to being housed and/or being handled

may spend the night at the slaughterhouse provided that:

- the animals are delivered as late as possible the evening before slaughter, after 6 p.m.
- the animal owner ensures that the slaughterhouse guarantees that the animals have ample access to feed, water and litter.

The standard of a maximum 30% of ruminants staying overnight must not be applied when the animal owner delivers the animals.

Note that the applicable parts of section 10.4 Transport must be complied with.

10.6 Herding

🔄 10.6.1 Raceway Design

Raceways must be designed so that **herding** takes place smoothly and without **stressing** the animals. Herding must for example be facilitated in the following ways (K):

- raceways must not have abrupt corners or dead-ends
- raceways must have a non-slip surface
- raceways must be as horizontal as possible
- raceways must have a good climate for the animals
- air currents towards the animals, blinding light, and reflective surfaces must be avoided
- noise, loud sounds and odours must be minimized.

10.6.2 Take Advantage of the Natural Behaviour of Animals

Take advantage of the natural behaviour of animals when **herding**, for example by keeping groups together, allowing animals to go from dark to light and/or allowing them to follow a leader animal. (K)

10.6.3 Waiting Time in Raceways

Minimize waiting time in raceways. Animals must never have to wait more than 15 minutes in a raceway. A somewhat longer time can however be accepted if it means that a group is kept together all the way to the stunning box. (K)

10.6.4 Screening from Stunning and Bleeding

Animals must be protected from **stress** by a screen that blocks conscious animals from seeing **bleeding** and further management of slaughtered bodies. For cattle, stunning must also take place out of sight of conscious animals. (K)

10.7 Stunning and Bleeding

10.7.1 Immediate Stunning and Bleeding

Once the animal arrives in the stunning area, it must be stunned as soon as possible and bled immediately afterwards. These steps must only be carried out by staff certified for stunning and **bleeding** the livestock being handled. (SL)

10.7.2 Keeping Groups of Animals Together During Stunning

The slaughterhouse must keep **established groups** of sheep, pigs and lambs together as long as possible when they are going to be stunned.

10.7.3 Number of Animals in a Stunning Box

The slaughterhouse must make sure that there are not so many animals in a stunning box that they worry or injure each other due to crowding.

10.7.4 Monitoring Animals in a Stunning Box

The slaughterhouse must monitor the remaining animals in a stunning box when a group of pigs, sheep or lambs is being stunned. (K)

10.7.5 Check the Effect of Stunning

The slaughterhouse must immediately check that the stunning was effective

for each individual animal. Stunning must be checked regarding the stunning method and livestock.

10.7.6 Monitoring Gas Stunning Facilities

It must be possible to inspect facilities while they are in operation. It is the responsibility of the slaughterhouse to have a control system in place to maintain correct levels of gas and exposure times, as well as an alarm that warns if there are operating problems. **(SL)**

In the future, when efficient gas stunning alternatives are available that are less aversive than high concentrations of carbon dioxide, these must be used.

10.7.7 Backup Weapon and Evaluation of the Effect of Stunning

The slaughterhouse must ensure that backup stunning equipment is always easily accessible during all types of stunning in case the stunning does not work. **(SL)**

When there is the smallest suspicion that stunning did not work, the animal must be stunned again. The animal must however not be gas stunned again if an inspection has shown that the gas stunning is not working. In that case another method of stunning must be used. **(K)**

Slaughterhouses must have standard routines for maintenance, **cleaning** and calibration of stunning equipment. A record of inspection of equipment must be kept **(SL)**. A regular evaluation of how the stunning is functioning must also be done. **(K)**

10.7.8 Verification of Bleeding

Slaughterhouses must verify that an animal is dead as a result of being bled before the carcass continues to the next stage in the slaughter process. **(SL)**

As part of the verification, the slaughterhouse must use the Swedish Centre for Animal Welfare's, (SCAW's) recommended times from when bleeding starts until further handling can take place. For beef the time is at least four minutes, pigs and sheep at least two minutes, and for poultry at least one minute. **(K)**

i *The material from SCAW referred to in the standards is linked to from www.krav.se.*

10.8 Cattle

10.8.1 Tethering Animals

Only animals that have been previously tethered can be tethered. If an animal is tethered it must be done using equipment designed so that there is no risk of strangulation or injury and so that the animal can quickly be let loose. **(SL)**

10.8.2 Feed, Water, Litter and Activity

During the day while waiting for slaughter, animals must have free access to

water (SL) and roughage (K). When kept overnight, animals must have free access to water and roughage (SL/K). They must also have a dry, solid and littered bedding area or soft slat. (K)

10.8.3 Lairage in Group Boxes

When kept in lairage in group boxes animals must have at least the following space (SL):

Weight (kg)	Space (m ²)
less than 100	1
100–250	1.5
250–400	1.9
400–600	2.3
more than 600	2.7

10.8.4 Lairage of Animals in Single-Animal Boxes

As a first choice, cattle must be stabled with their *established group*. Single-animal boxes in an *Uddevalle system* can be used for cattle that are not part of a group if the boxes meet the following requirements (K):

- whole lower edge (at least 30 cm from the floor surface) (K), and
- space requirements according to Swedish law (SL).

Note standard 10.5.5 when housing in single animal boxes at night.

10.9 Sheep and Goats

10.9.1 Handling Animals

It is prohibited to lift or pull animals by their fur or wool. (K)

10.9.2 Feed, Water, Litter and Activity

During the day while waiting for slaughter, animals must have free access to water (SL) and roughage (K). When kept overnight, animals must have free access to water and roughage (SL/K). They must also have a dry, solid and littered bedding area (K).

10.9.3 Lairage in Group Boxes

When kept in *lairage* in group boxes animals must have at least the following space per animal (SL):

- 0.5 square metres if they weigh less than 50 kg
- 1 square metre if they weigh more than 50 kg.

10.9.4 Lairage of Animals in Single-Animal Boxes

Animals must only in exceptional cases be kept in *lairage* in single-animal boxes, which in that case must be at least two square metres in size. (SL)

10.10 Pigs

10.10.1 Feed, Water, Litter and Activity

During the daytime while waiting for slaughter, the animals must have free access to water **(SL)**. They must also have access to straw or other suitable material to meet their behavioural needs. **(K)**

10.10.2 Lairage in Group Boxes

When kept in lairage in group boxes, animals must have at least the following space per animal **(SL)**:

- 0.75 square metres for fattening pigs that weigh less than 120 kg
- 1.5 square metres for adult pigs that weigh more than 120 kg.

10.10.3 Lairage of Animals in Single-Animal Boxes

Only in exceptional cases is it acceptable to keep animals in *lairage* in single-animal boxes. In that case the single-animal boxes must be at least two square metres in size for pigs that weigh up to 120 kg. Sows and galts boarded individually must have boxes that are six respectively seven square metres in size. **(SL)**

10.11 Poultry

10.11.1 Same-day Slaughter

Poultry must be slaughtered the same day they arrive at a slaughterhouse. **(K)**

10.11.2 Hanging in Foot Shackles

Hanging laying hens and table chickens in foot shackles before stunning must take place calmly. **(SL)**

The line of foot shackles must be as short as possible and designed without sharp bends so that the hung birds don't hit obstacles. The birds should be subjected to as little *stress* as possible. **(SL)**

The line of foot shackles must be designed so that the birds are not hung up for more than 30 seconds while conscious. **(K)**

In addition there must be a conveyor belt or similar device that provides support under the chest and has a calming effect. Another alternative is to hold the birds after hanging and until stunning. **(K)**

The foot shackles must be suited to the size of the bird. **(SL)**

10.11.3 Handling Laying Hens and Chickens After they are Hung Up

Every animal must be held for a short while after it has been hung up in foot shackles. **(K)**

10.11.4 Handling Other Poultry Than Laying Hens and Chickens

No poultry other than laying hens and chickens can be slaughtered with the help of hanging in foot shackles unless they are held the whole time from hanging to stunning.

+ 10.11.5 Documentation of Serious Remarks

The slaughterhouse must document the DoA (birds dead on arrival), wing injuries and other things the slaughterhouse deems relevant in order to be able to identify and take measures according to standards 10.2.6 and 10.2.7. **(K)**

Feed Production

11

Those certified for feed production must also comply with the general standards in Chapters 2 and 3 as well as the standards in Chapter 20.

Even if you only handle or store KRAV-certified feed that is not packaged, you must be certified for feed production. However the standards in Chapter 11 do not apply to you, but you must comply with the general standards in Chapters 2, 3 and 20, giving special attention to the standards in section 3.2 concerning handling and storage of KRAV-certified raw materials and products.

Contents of this chapter:

- 11.1 General Standards for All Types of Feed
- 11.2 Raw Materials
- 11.3 Processing
- 11.4 Ingredients and Labelling
- 11.5 Pet Food

11.1 General Standards for All Types of Feed

This section contains standards on GMOs, irradiation and substances that come into contact with feed. The standards apply to feed for both KRAV-certified animals and for pets.

11.1.1 No Genetically Modified Organisms (GMOs)

You cannot use feed materials and feed additives that contain or are made of or with **GMOs**. (EU)

If there is a risk that a **product** or raw material contains GMOs or is made of or with GMOs, you must get a certificate or in some cases have the product analysed (see standard 3.3.5). (EU/K)

- i** For determination of risk you must use KRAV's risk list for GMOs in feed (2021-01-01 edition), which is available at www.krav.se. (K)

11.1.2 Irradiation

You must not irradiate your raw materials or products with ionizing radiation and you must ensure that your suppliers have not irradiated the raw materials. (EU)

You can do this for example by obtaining a certificate from your supplier. However, control instruments using X-rays are allowed if the radiation dose does not exceed 0.5 Gy and the energy level does not exceed 10 MeV. Other exceptions are also allowed according to Directive 1999/2/EC Article 1 (2) (a).

11.1.3 Substances in Contact With Feed

You must not add preservatives (other than those listed in Annex VI of Regulation (EC) 889/2008), **pesticides** or synthetic or nature-identical **colouring agents** to substances that come into contact with feed. (EU)

11.2 Raw Materials

This section contains standards that determine which raw materials you can use in KRAV-certified feed.

There are particular standards for raw materials in pet food in section 11.5.

11.2.1 KRAV-certified Raw Materials

You must use KRAV-certified raw materials. If this is not possible you can use the non-KRAV-certified raw materials of animal origin listed in Appendix 1. (EU)

Until the end of 2021 pigs and poultry can annually be given up to 5% conventional protein feed of agricultural origin, provided that organically produced protein feed is not available. (EU)

11.2.2 No Mixing of KRAV-certified and non-KRAV-certified

You cannot use feed materials from both KRAV-certified and non-KRAV-certified agriculture in the same feed mixture if the different raw materials are of the same type. As well you cannot use feed materials that come from both second-year *in-conversion* crops and from non-KRAV-certified agriculture together in a feed mixture if the different raw materials are of the same type. (EU)

11.2.3 Feed of Animal Origin

You can use the feed materials of animal origin given in Appendix 1 in feed for pigs and poultry. (EU)

In feed for ruminants you can use whey, skim milk and other residual products from KRAV-certified milk production. (EU)

11.2.4 Feed Materials Not of Agricultural Origin

You can use non-KRAV-certified feed materials not of agricultural origin, for example fishmeal, in the ration program for pigs and poultry (EU). Such feed materials can comprise a maximum of 10% of the annual feed intake calculated as *dry matter*. (K)

Raw materials from fisheries must come from *sustainable fisheries*. KRAV recommends using mussel meal. (K)

If the raw materials are processed they must be made using permitted production processes (see standard 11.3.1). (EU/K)

More conditions for use of products from sustainable fisheries can be found in Appendix 1.

11.2.5 Mineral Raw Materials, Vitamins and Trace Elements

You can only use the mineral raw materials, vitamins, trace elements and other feed additives given in Annex V and VI in Regulation (EC) 889/2008. (EU)

You must not include mineral feed, calcium, sea shells or similar mineral additives when you calculate the percentage of KRAV-certified raw material in feed. (EU)

11.3 Processing

11.3.1 The Production Process

You must not use chemical solvents or additives of other chemical substances when you produce and prepare feed. You can only use the following production processes (EU):

- mechanical and physical processes, for example grinding
- biological processes, for example fermentation and leavening (for example use of lactic acid cultures and fungus cultures) (EU)
- enzyme processes, for example, to coagulate or break down substances
- extraction with permitted solvents
- precipitation.

You can only use water, ethanol or fat as a solvent. (EU)

11.3.2 Technical Additives

If KRAV-certified molasses is not available you can use non-KRAV-certified molasses. Use is limited to 1% of the annual feed intake per animal calculated as dry matter for feed made from agricultural products. (EU)

With the exception of molasses, feed additives included in products for technical reasons (e.g. as a binding agent or dust absorbent) can make up a maximum of 0.1% of a feed mixture or **feed supplement (K)**. You must not use additives made of or with GMOs or chemical solvents. You can only use the technical additives given the current EU regulation for organic production. (EU)

11.4 Ingredients and Labelling

11.4.1 Threshold Values for Heavy Metals in Feed

You must ensure that the feed you sell contains low levels of heavy metals. The levels of heavy metals in KRAV-certified feed must not exceed the threshold values in the Table below. You must have a control system to guarantee that these threshold values are not exceeded. Your certification body can require that you take random samples or show the results of samples taken by government agencies. (K)

mg/kg feed (12% water content)					
heavy metal	chromium	cadmium	lead	mercury	nickel
regular feed	9	0.10	5	0.1	6
supplementary feed	16	0.18	10	0.1	10

11.4.2 Declaration of Contents

You must on the packaging, the product sheet or similar document have a declaration of contents that shows (EU):

- all the KRAV-certified raw materials included in the product
- the portion of total weight as **dry matter** of each KRAV-certified raw material included in the product
- the raw materials from second-year **in-conversion crops** included in the product (if there are any), as well as their portion of total weight as dry matter
- the portion of feed materials of agricultural origin included in the product.

11.4.3 Labelling

You can only use the KRAV label on sacks and product sheets if all of the raw materials are KRAV-certified and all additives comply with the KRAV standards. (K)

The following applies if you want to use the KRAV name to market feed mixtures that contain both KRAV-certified and non-KRAV-certified raw materials (EU):

- the feed can only contain approved additives
- immediately after the KRAV name, and in similarly clear writing, the proportion of KRAV-certified raw materials must be given in percent by weight
- you must calculate based on the weight of the raw materials as **dry matter** and subtract mineral additives according to standard 11.2.5.

11.4.4 Assessment of Permissibility of Certain Feed that Cannot be KRAV-certified

Certain feed or feed additives that cannot be KRAV-certified can be **assessed for permissibility** and can thereafter be marketed as permitted for KRAV-certified production. A certification body, authorized to certify according to the standards in Chapter 5 (Animal Husbandry) or Chapter 11 (Feed Production), must carry out the assessment of permissibility of the recipe in question and ensure that all ingredients are approved according to Chapters 5 and 11. For mineral feed, all ingredients of agricultural origin (for example, corn, wheat and alfalfa) must be KRAV-certified or **EU organic**. (K)

After a product has been assessed for permissibility and approved as permitted in KRAV-certified production, this can be indicated in the product information but not on the package. Products assessed as permitted cannot be

KRAV-labelled. You do not pay a license fee to KRAV and you do not need to report the value of sales for products assessed as permitted. An assessment of permissibility is valid for three years and then must be renewed. **(K)**

i *A list of permitted feedstuffs is published on the KRAV website, see www.krav.se.*

11.5 Pet Food

11.5.1 Raw Materials

You must use KRAV-certified raw materials in pet food. If this is not possible, you can use certain non-KRAV-certified raw materials according to paragraphs 17 and 18 in the Swedish Board of Agriculture's regulation SJVFS 2015:29. **(EU)**

11.5.2 The Production Process

You must produce pet food according to the standards for feed processing, see standard 11.3.1. When you calculate the percentage of KRAV-certified raw materials in the feed, you must not include mineral feed, mineral additives or similar substances. **(K)**

11.5.3 Additives, Flavourings and Process Aids

You can only use the mineral raw materials and feed additives given in Annex V and VI of Regulation (EC) 889/2008. The feed additives used must also be approved to be used for the type of animal in question in accordance with Regulation (EC) 1831/2003. **(EU)**

You can only use natural **flavourings**. **(EU)**

11.5.4 Labelling of Pet Food

You can label pet food with the KRAV label if the food contains at least 95% KRAV-certified raw materials. If the food contains less than 95% KRAV-certified raw materials, standard 20.3.5 on KRAV-certified ingredients applies. **(K)**

If you comply with the standards in section 11.5 you can call your feed "organic" but you cannot use the EU organic logo. **(EU)**

Manufacturing, Management and Marketing of Production Aids

12

Those certified for manufacturing and marketing of production aids must also comply with the general standards in Chapters 2 and 3 as well as the standards in Chapter 20. Take special note of standard 20.1.5 about the KRAV label for production aids.

Even if you only handle or store KRAV-certified production aids that are not packaged, you must be certified for production aids. However, the standards in Chapter 12 do not apply to you, but you must comply with the general rules in Chapters 2, 3 and 20, and pay special attention to the standards in section 3.2 concerning handling and storage of KRAV-certified raw materials and products.

Contents of this chapter:

- 12.1 General Standards
- 12.2 Soils and Soil Mixtures
- 12.3 Fertilisers and Soil Conditioners
- 12.4 Plant Protectants

With a few exceptions, the standards in this chapter are KRAV's own. We have therefore only marked the standards based on the EU regulation.

12.1 General Standards

The standards in this section apply to all types of production aids used for crop production and horticulture.

12.1.1 What Production Aids Can be KRAV-certified?

Production aids that can be KRAV-certified include a range of biological and chemical products as well as some mineral products used by **producers** in their crop production. Production aids intended for individual consumers can also be KRAV-certified. Examples of production aids that can be KRAV-certified are:

- soil mixtures
- soil conditioners
- fertilisers
- **plant protectants**
- microbiological preparations

The following are examples of production aids that cannot be KRAV-certified:

- products for animal husbandry
- technical equipment
- copper compounds
- micronutrient fertilisers.

Micronutrient fertilisers can however be assessed for permissibility, see standard 12.1.9.

12.1.2 Production Aids that Must be KRAV-certified

A production aid must be KRAV-certified if it is completely or partly made of

the following organic fertilisers:

- composted or **fermented** sorted household waste (see standard 12.3.4)
- digestate from biogas plants that has animal by-products in the substrate. For digestate that includes prohibited farmyard manure, it is adequate that it is **assessed as permitted** (see standard 12.3.5)
- animal by-products, for example bone meal (see standard 12.3.6).

12.1.3 Show Consideration for the Environment and Health

If you are going to KRAV-certify a production aid, the following criteria must be complied with:

- You have documents that prove it does not cause any serious environmental impact to produce, extract or gather the raw materials in the production aid.
- The production aid has not been produced through cultivation or other permanent change of areas with natural ecosystems of **high conservation value (HCV)**. Land with high conservation value that has been cultivated for more than five years can however be accepted.
- The production aid is not classed as a hazard to the environment or health of animals and people, according to the classification, labelling and packaging (CLP) regulation, see www.kemi.se.
- The production aid does not contain **genetically modified organisms (GMOs)** or is made of or with GMOs (see standards 3.3.4 and 3.3.5).

12.1.4 Description of Production

You must document the production process for the production aid. You must include the origin of raw materials. You must also document the manufacturing process of the production aid in your own operation, when and where the different steps take place as well as the processing methods used.

12.1.5 Analyse Heavy Metal and Nutrient Content

If you are going to KRAV-certify soil mixtures, soil conditioners and fertilisers, the finished product or raw material inputs must be analysed for content of the heavy metals lead, cadmium, copper, chromium, mercury, nickel, zinc and silver. You must also do an analysis of the amount of relevant macro and micronutrients in the products you market.

The analysis must be done:

- before certification of a new product
- when there is a new **supplier** of a raw material
- regularly when a product contains close to the threshold level for one or more heavy metals (how often is determined in consultation with your **certification body**)
- if your certification body determines that it is necessary.

When samples are taken you must take representative samples of your

production aids or the respective raw material inputs contained in the production aid. For the analysis, you must use the services of an accredited laboratory that uses approved methods of analysis.

12.1.6 Importing and Bringing In Production Aids

If you **import** or bring in products and raw materials to be sold as KRAV-certified production aids, you must be able to show that their extraction and production complies with the standards 12.1.1-12.4.1, as well as:

- standard 3.3.6 regarding the ban on the use of nanomaterials
- section 3.5 on packaging.

If you allow a **supplier** outside of Sweden who is not KRAV-certified to package and KRAV-label your products, you must have a contract with the supplier. The contract must give you control over how the KRAV-labelling is used and give you and your **certification body** the right to inspect your supplier's production if required.

 *A template for a labelling contract is at: www.krav.se.*

12.1.7 Information on Packaging

If you sell a KRAV-certified production aid you must write the following information on the packaging:

- All the raw materials included. For agricultural products and waste products from the food industry, it must be indicated if the raw materials come from **conventional** or **organic** production. If a raw material has a mixed origin from both conventional and organic production, you must designate the entire quantity as conventional.
- For a product that you want to market as a soil mixture, soil conditioner or fertiliser, you must indicate the amount of relevant macro and micronutrients in the products. The content can be given as a range.
- For fertiliser you must indicate the **maximum permissible ration** with regard to heavy metal content. The amount can be given as an annual ration or as a total added over a period of five years at the most.

Information on heavy metal content must accompany the product. You must give both content and maximum permissible ration. For products delivered in bulk, the producer must provide equivalent information in the form of a product sheet.

For use of the KRAV label on production aids, see standard 20.1.5.

Note that only production aids that contain 100% organic raw materials can be called organic. You can then also use KRAV's standard label on the product.

12.1.8 Traceability of Raw Materials Inputs

You must label the products so that it is possible to determine the time and place for the various stages of production, such as processing and packaging.

12.1.9 Notify KRAV of New Products

You must notify KRAV about which KRAV-certified products you plan to sell before you begin to market them. Notification is done at “Mitt KRAV” (“My KRAV”) at www.krav.se. Your **certification body** verifies that the information is correct when they carry out an **audit**.

12.1.10 Assessment of Permissibility of Production Aids

If you produce or market a production aid and do not want to or are unable to certify the product, you can have the product assessed for permissibility to be used according to the KRAV standards. You must then turn to a **certification body** that is accredited to certify according to the standards in Chapter 4 (Crop Production) or Chapter 12 (Production Aids), that assesses the product to ensure that all the ingredients are permitted according to the KRAV standards in Chapter 4. For organic and inorganic fertilisers and soil improvement products, the heavy metal content must be analysed and a **maximum permissible ration** must be indicated in compliance with standard 4.4.8. Information on heavy metal content must accompany the product. You must give both content and maximum permissible ration.

If the product is determined to be permitted, you can indicate in the product information, but not on the packaging, that the production aid is permitted in KRAV-certified production. An **assessment of permissibility** is valid for three years and then must be renewed.

You do not pay a license fee to KRAV for assessment of permissibility and you do not need to report sales values for production aids that are assessed as permitted.

i *Lists of production aids assessed as permitted are at www.krav.se (in Swedish only).*

12.2 Soils and Soil Mixtures

This section contains the particular standards for KRAV-certification of soils and soil mixtures.

12.2.1 What Soils and Soil Mixtures Can Contain

If you produce soil or soil mixtures that you want to KRAV-certify, you can only use the following ingredients:

- sand, crushed stone, clay and peat from areas where no chemical **pesticides** or **artificial fertilisers** have been used 24 months prior to removal
- soil from KRAV-certified land
- organic fertiliser according to standard 4.8.4
- inorganic fertiliser according to standard 4.8.8.

12.2.2 Heavy Metals in Soil and Soil Mixtures

If you are going to KRAV-certify seed starting soil or potting soil and soil mixtures, their levels of heavy metals cannot exceed the following limits:

Substance	mg/kg dry material in soil
lead	30
cadmium	0.3
copper	40
chromium	40
mercury	0.1
nickel	25
zinc	120
silver	0.25

12.3 Fertilisers and Soil Conditioners

This section contains the particular standards for KRAV-certification of fertilisers and soil conditioners.

12.3.1 What Fertilisers and Soil Conditioners Can Contain

If you produce fertiliser or soil conditioners that you want to KRAV-certify, you can only use the following ingredients:

- sand, crushed material, clay and peat from areas where no chemical **pesticides** or **artificial fertilisers** have been used 24 months prior to removal
- organic fertiliser according to standard 4.8.4
- inorganic fertiliser according to standard 4.8.8.

12.3.2 Limited Addition of Heavy Metals

When using production aids, the addition of heavy metals to arable land cannot exceed the levels in the table below, calculated as an annual average over a five-year period.

Substance	g/ha/year	
lead	25	
cadmium	0.45	
copper	300*	* For copper, larger amounts, maximum one kg per hectare, are acceptable if it can be shown that the field concerned needs additional copper.
chromium	40	
mercury	0.8	
nickel	25	
zinc	600	
silver	3	

The amount of heavy metals in a substance cannot be so high that the substance lacks value for the production at the **maximum permissible ration**. If for example a fertiliser contains so much heavy metals in relation to the nutrients added that the effect of fertilisation is marginal, the fertiliser cannot be KRAV-labelled.

12.3.3 Maximum Permissible Ration

You must calculate the **maximum permissible ration** based on the amount of the heavy metals lead, cadmium, copper, chromium, mercury, nickel, zinc and silver in your production aid. You must calculate the amount of your production aid that can be used without addition of any of these heavy metals exceeding the threshold values in standard 12.3.2 and without addition of any nutrient being excessive. You must calculate the maximum permissible ration on an annual basis, or over a time period of five years at the most. You must be able to show your calculations.

Rule of thumb: addition of one tonne per hectare per year of a product that contains one ppm of a certain substance results in an addition of the substance of one gram per hectare per year.

12.3.4 Certification of Sorted Household Waste

In order for compost or digestate from household waste of vegetable or animal origin to be permitted for use in KRAV-certified crop production, the facilities must be KRAV-certified, and the collection system must be approved by the Swedish Board of Agriculture. It must be a closed, monitored collection system where the risk of contamination by unwanted substances is minimised. Waste from restaurants and caterers is also considered household waste. If substrates other than food waste is added to the facility, you must be able to show that they are permitted as fertiliser or soil conditioner for **organic** cultivation.

In order for compost or digestate to be KRAV-certified the following is also required:

- The product is certified according to SPCR 120 respectively 152 or equivalent.
- The concentration in mg/kg dry weight of heavy metals in compost or digestate must not exceed (EU):
 - cadmium: 0.7
 - copper: 70
 - nickel: 25
 - lead: 45
 - zinc: 200
 - mercury: 0.4
 - chromium (total): 70
 - chromium (VI): no detectable amount.

Note that KRAV also has standards that limit addition of heavy metals to arable land, see standards 12.3.2 and 12.3.3.

There is information on the Swedish Board of Agriculture's website, www.jordbruksverket.se, about applying for approval of collection systems for household waste.

12.3.5 Certification of Biogas Plants Where Prohibited Farmyard Manure or Animal by-products are Included

In order for digestate from animal by-products (category 3 or stomach and intestine contents of category 2) to be permitted for use in KRAV-certified crop production, the biogas plant must be KRAV-certified. If both permitted fertiliser and prohibited farmyard manure are digested in the same facility for biogas production, the facility must either be KRAV-certified or the digestate must be **assessed as permitted** (see standard 12.1.9). The substrate must comply with the requirements in standard 4.8.4.

The following requirements must be complied with for digestate with by-products of animal origin or prohibited farmyard manure (EU):

- The substrate must not include:
 - animals or manure from animals raised in **cages**, and
 - fertiliser prohibited according to 4.8.6 or 4.8.9.
- At least 5% of the substrate added to the biogas plant on an annual basis must come from fertiliser, ley or other **organic** material from organic production or production in **conversion** to organic.
- Only a portion of digestate equivalent to the portion of permitted fertiliser on an annual basis can be used in KRAV-certified production.

Calculations must be made on **dry matter content**.

The requirements for category 2 or category 3 material must be complied with according to Regulation (EC) 1069/2009 on animal by-products. The processes must comply with Regulation (EU) 142/2011.

Certain specific substances, substrates and **additives**, are significant for biogas production. As long as the EU Commission has not clarified what is applicable, the position of KRAV is that process aids for biogas production listed in Table 2 in “Permitted inputs in organic production” are permissible for use until further notice. The list is at www.lrf.se.

It must indicate in information to users of the digestate if animal by-products are included.

Biofertilisers with animal by-products as substrates must not be spread on **edible parts of the crop**. The condition only applies if the crop is used as food or feed. (EU)

12.3.6 Certification of Permitted Animal by-products

In order for animal by-products listed in standard 4.8.4 (category 2 or 3 material) to be used in KRAV-certified crop production, the product must be KRAV-certified.

The requirements for category 2 or category 3 material must be complied

with according to Regulation (EC) 1069/2009 on animal by-products. The processes must comply with Regulation (EU) 142/2011.

In animal by-products from fur, wool and hair, for example, hair meal, detectable amounts of chromium (VI) are prohibited.

Farmyard manure is included in category 2, but does not need to be certified before it can be used in KRAV-certified crop production.

12.4 Plant Protectants

12.4.1 Permitted Plant Protectants

You must only KRAV-label and market **plant protectants** that are permitted according to the KRAV standards for plant protection (see section 4.9).

In order to for you to be able to sell a plant protectant it must be approved by the Swedish Chemicals Agency (see Regulation (EC) 1107/2009 and SFS 2014:425 on approval of plant protectants).

The plant protectant products used in KRAV-certified cultivation may contain the excipients and additives permitted according to Regulation (EC) 1107/2009. Piperonyl butoxide is not permitted in pyrethrum preparations according to standard 4.9.5.

Single Product Certification

13

The chapter has been cancelled.

Shops

14

The chapter has been cancelled.

Restaurants and Caterers

15

Those certified for restaurants and caterers must also comply with the general standards in Chapters 2 and 3 as well as the standards in Chapter 20. The standards in Chapter 15, Restaurants and Caterers, can be used for chain certification.

Contents of this chapter:

- 15.1 General
- 15.2 Use of Raw Materials and Approved Food
- 15.3 Staff Knowledge
- 15.4 Grocery Meal Bags

The standards in sections 15.1-15.4 cover all forms of catering, restaurants and cafés, as well as companies that deliver grocery meal bags. Small units, such as for example group homes and preschools, are also included. In this chapter, all of these activities are referred to as restaurants.

You can only certify the restaurant itself according to the standards in this chapter, not the dishes served there.

To certify dishes as well as other composite products, you must be certified according to Chapter 9 (Food Processing).

All the standards in this chapter are KRAV's own. We have therefore not marked them with (K).

Note that The Swedish National Food Agency is working on developing national standards for organic food in restaurants, but it is currently uncertain when these will take effect. When they do take effect, if the KRAV standards are more permissive in any instance than these, the standards of The Swedish National Food Agency apply.

15.1 General

15.1.1 Limitations of Certification

You can certify all or part of the activity. If you only want to certify a part of the activity, your accounting must be designed so that food purchases for the certified part of the activity can be totalled from separate accounts or supplier statistics. If only part of the activity is certified, this must be clearly indicated in your marketing.

Limitations can be made according to time, for example, in a restaurant certification can be limited to breakfast. Limitations can also be physical, for example, only the restaurant can be certified, while the bar in the same activity is not.

15.1.2 Activities with Several Premises

If you have several restaurants, each unit where you make meals must have its own certification. If you have an activity with both preparation and serving kitchens, the serving kitchen needs its own certification only if it makes its own purchases or carries out any preparation other than heating food. Brewing or making coffee is not considered preparation.

15.1.3 Serving Kitchens Without their Own Certification

The following applies to serving kitchens that do not require their own certification:

- All relevant standards in Chapters 2 and 3 must be complied with.
- The KRAV name and label can be used according to the standards in Chapter 20.
- Staff must be trained according to standard 15.3.2 and be able to inform customers according to standard 15.3.3.
- A copy of the joint certificate must be kept in the serving kitchen and be plainly visible to guests.

The serving kitchen is thus included in certification of the preparation kitchen, and must be audited by the **certification body**, but an annual audit is not required. The certification body determines how often each serving kitchen is audited.

15.1.4 Activity at Temporary Locations

If you have a certified restaurant, you can also carry out your restaurant activity in temporary locations, such as festivals, exhibitions, etc.

15.2 Use of Raw Materials and Approved Food

This section contains standards on raw materials, approved food and the three levels that a restaurant can be certified for.

15.2.1 No Red-light Fish or GMO-labelled Food

This standard applies to the entire restaurant activity, not only the KRAV-certified part.

You must not serve:

- red-light species according to the World Wildlife Fund seafood guide, see fiskguiden.wwf.se (in Swedish only), or
- food with labelling indicating that it contains **GMOs**.

15.2.2 Approved Food

Only food with the following labels can be included as **approved food**:

LABEL	LIMITATION
• KRAV-certified	All products can be included.
• EU organic certified	Plant products can be included.
• MSC-certified	Products without additives or with additives according to the KRAV standards in Appendix 2 can be included.

15.2.3 Level Assessment During Initial Audit

During the initial audit, you must show your **certification body** that you can purchase **approved food** according to the level you want to be certified for. This also applies to a change of level if you are already certified.

You can for example show this using the previous year's purchase level, your suppliers' selection of goods or in other ways that your certification body regards as reliable.

15.2.4 Minimum Proportion Approved Food

You must comply with the minimum requirements for one of the following three levels.

Level 1: at least 25% of total purchase value is **approved food**.

Level 2: at least 50% of total purchase value is approved food.

Level 3: at least 90% of total purchase value is approved food.

During an **audit** you must show your certification body the proportion of approved food purchased as a percentage of your total food purchases over the last year.

You can also choose to certify your activity for Level 1 according to standard 15.2.10 KRAV-certification of at least 15 **products**.

15.2.5 Minimum Proportion KRAV-certified food

If you are certified for at least 25, 50 or 90% **approved food**, at least 50% of the purchase value of these approved foods must be KRAV-certified. You must be able to show this through purchase statistics.

For example, if the purchase value of your approved foods amounts to 40% of your food purchases, and you are certified for the category of at least 25% approved food, it is thus adequate if at least 12.5% of your food purchases are KRAV-certified.

15.2.6 Self-produced Raw Materials

If you have access to KRAV-certified **raw materials** from your own production, you can include them as **approved food** at an estimated market price.

15.2.7 Exemption for Wild Game

If you purchase wild meat, the purchase value can be exempted from the total purchase value when you calculate the portion of **approved food**.

Deer, wild boar and other animals bred in captivity, as well as reindeer, are not considered wild game.

15.2.8 Purchase Records

You must design your financial records or put together supplier statistics so that the **approved food** can be distinguished from all other purchases. Purchases are recorded in Swedish crowns. You can also have your own system for recording

purchases. Before you implement it, your **certification body** must assess its reliability and approve your system.

15.2.9 Warehousing and Storage of Approved Products

The products that you report as **approved food** must be well-labelled when warehoused and stored.

You must warehouse and store approved food, such as MSC-certified products, so that it is possible to distinguish them from non-MSC-certified products.

15.2.10 KRAV-certification of At Least 15 Products

An alternative to certification for Level 1 is certification for at least 15 products. You must then comply with all of the following requirements:

- At least 15 of the products you use must be completely replaced with **approved food**.
- At least five of the replaced products must be **staple products** in your menu.
- At least 50% of the chosen products must always be KRAV-certified.
- The products must be registered with your **certification body** and all changes to the selection must be reported to the certification body.
- If a registered product is temporarily not available as approved, you must document the time period when it was not available. You must also clearly inform restaurant guests about this. The documentation must be kept for **audit**.
- If any of the registered approved food is frequently unavailable from your supplier, you must replace the product with another approved food. You must notify your certification body that must then change your certificate or appendix to your certificate.
- The number of registered products must increase by at least two per year until the restaurant reaches 25% approved food, according to standard 15.2.4.

Following is a clarification of how the number of products must be calculated. Products that are essentially the same thing must be considered as one product, while products that are different from each other or provide a different result can be considered as different products. The following examples help to provide an understanding for how the division must be made:

- *Drinking milk with different fat content is ONE product.*
- *Ordinary milk and lactose-free milk are counted as DIFFERENT products.*
- *Apple juice from different companies is ONE product.*
- *Different flavours of fruit and berry juices are DIFFERENT products.*
- *Flour that results in different types of bread with widely varying characteristics are DIFFERENT products.*
- *Different herbs/spices, for example thyme and basil, are DIFFERENT*

products. The same herbs/spices in different forms, for example, whole and ground pepper, are ONE product.

- *Black respectively green tea are two DIFFERENT products. Different kinds of black tea are ONE product.*
- *Red wines from one and the same winemaker are ONE product. Red wines from different winemakers are DIFFERENT products. A red and a white wine from the same winemaker are DIFFERENT products.*
- *Filleted and whole fish of the same species are considered ONE product. The same species in semi-prepared form is considered another product. The same species in a raw material mixture is also considered another product.*

15.2.11 Exceptions for Chain Certification of At Least 15 Products

If you are certified according to Chapter 19 (Certification of Chains) and are KRAV-certified for at least 15 **products** according to standard 15.2.9, you do not need to register the products with your **certification body**. You must instead establish your own internal procedures to ensure that the minimum number of **approved foods** and KRAV-certified products are always available in the assortment and that the guests always receive correct information about which foods are approved foods respectively KRAV-certified. You must have a central document detailing which foods are registered at each unit.

15.3 Staff Knowledge

The standards in this section are about your responsibility for ensuring that restaurant staff know about the KRAV standards and can answer questions about **organic** ingredients.

15.3.1 Tasks of the Contact Person

The contact person for certification of the restaurant must ensure that there are procedures to ensure compliance with all relevant parts of the KRAV standards. If you have chain certification, the contact person can be responsible for several units. The contact person must have completed training about KRAV and **organic production** (see standard 15.3.2).

More information on what applies for contact persons is in standard 2.3.2.

15.3.2 Knowledge About KRAV-certified Production

You must ensure that there are always staff in the restaurant during preparation and serving that have completed training about KRAV and organic production.

The training must include the following items:

- basic information about organic production and its aim
- general information about the KRAV standards, KRAV's goals and KRAV's added value

- information about procedures for keeping KRAV-certified **products** separate from other products in the restaurant
- information about labelling and marketing KRAV-certified food, and
- basic information about other ecolabels.

Staff who have completed the training must be able to show a training certificate. New and temporary staff must be informed as to which staff members have this knowledge.

i *All staff do not have to go through the training. Information on training and trainers is available at www.krav.se.*

15.3.3 Information to Customers

You must ensure that there are always staff available who can answer questions from customers about which **ingredients** are **approved foods** and about the origin of ingredients.

15.4 Grocery Meal Bags

A grocery meal bag is made up of portioned raw materials together with a recipe that your restaurant makes for home delivery to your customers.

15.4.1 Delivery of Grocery Meal Bags

Those who are KRAV-certified for restaurants and caterers can put together grocery meal bags with recipes and portioned raw materials for home delivery. You can market grocery meal bags with information that the food comes from a KRAV-certified restaurant, according to the standards in section 20.10. You must indicate the KRAV-labelled ingredients in the recipe. You must ensure that the KRAV certificate is available for customers, for example on the company website or as a copy included in the grocery meal bag.

A bag with only raw materials and without an accompanying recipe is not a grocery meal bag.

Import and Bringing in Products

16

If you are certified for **importing** and **bringing in**, you must also comply with the general standards in Chapters 2 and 3, as well as the standards in Chapter 20. This chapter contains the standards that must be complied with for production of products that will later be KRAV-labelled. The basic principle is that products must be certified according to EU Regulation (EC) 834/2007 on organic production. In addition, the extra requirements in this chapter must be complied with by operations that are not KRAV-certified. This chapter describes how you, when certified for import and bringing in, can determine if it is possible to KRAV-label a product.

If you import or bring in production aids and want to KRAV-label them with KRAV's special label for production aids, you must comply with the standards in Chapter 12. Standard 12.1.6 describes what applies for import and bringing in.

Contents of this chapter:

- 16.1 Basic Standards
- 16.2 Recognised Certification Systems
- 16.3 Ways to Verify the Extra Requirements
- 16.4 Extra Requirements for Social Responsibility for All Products
- 16.5 Cancelled
- 16.6 Other Extra Requirements for All Products
- 16.7 Extra Requirements for Plant Products
- 16.8 Extra Requirements for Animal Products
- 16.9 Extra Requirements for Other Products
- 16.10 Products Certified according to NOP
- 16.11 Products Certified According to Other Standards Recognized by the EU

16.1 Basic Standards

This section contains standards about which products can be certified according to this chapter.

16.1.1 What Products Can be KRAV-labelled?

In order for you to be able to KRAV-label **imported** or **brought in** products, the **supplier** must have a valid certificate according to Regulation (EC) 834/2007 that covers the product that you are going to import or bring in.

16.1.2 Standards for Certain Products

If any of the standards in section 16.6 apply to the **product** that you want to **import** or **bring in** and KRAV-label, it is indicated in the respective standard what you must do and how you must show compliance.

16.1.3 Basis for Being Able to KRAV-label Products Imported or Brought In

You must comply with one of these alternatives (K):

- The products are certified according to a **certification system** recognised by KRAV, see section 16.2. When audited you must be able to show your **certification body** that the products are covered by a valid certification from a recognised certification system.
- You can in one of the ways given in section 16.3 verify that your products comply with the extra requirements specified in sections 16.4-16.11.

16.1.4 Transition Standard

Cancelled

16.1.5 Not Swedish Products

Chapter 16 can only be applied to **products** that are produced outside of Sweden. You must not KRAV-label products that are produced in Sweden and certified according to an organic **standard** other than the KRAV standards. (K)

16.1.6 Certificate of Inspection

If you **import products** from a third country, i.e. from countries outside the EU and EEA, you must always get an electronic certificate of inspection. You must in such a case register as an importer in TRACES-NT. The government agency responsible for food is the Swedish National Food Agency. The Swedish Board of Agriculture is responsible for non-food products, such as feed raw materials.

(EU)

Information about this is available respectively at www.livsmedelverket.se and www.jordbruksverket.se.

16.2 Recognized Certification Systems

KRAV can recognize other **certification systems** as a basis for KRAV-labelling.

16.2.1 Certification Systems as a Basis for KRAV-labelling

KRAV can recognize a **certification system** as a basis for KRAV-labelling for parts of the KRAV standards or for the KRAV standards in their entirety.

- i** *At www.krav.se KRAV publishes the certification systems that are recognised and which parts of the KRAV standards the recognition covers.*

16.2.2 Who Can Apply for Recognition of a Certification System

If you are KRAV-certified according to Chapter 16, you can apply to KRAV to have a **certification system** recognized. (K)

16.2.3 KRAV Can Withdraw Recognition of a Certification System

KRAV has the right to withdraw the recognition of a certification system if it changes or the KRAV standards change. You must therefore check that the system you have chosen is still approved. (K)

16.3 Ways to Verify the Extra Requirements

The standards in this section deal with different ways to verify the extra requirements in sections 16.4-16.11.

16.3.1 Verification of Extra Requirements

Verification of all extra requirements must be done where the **production** takes place. You are responsible for planning and carrying out the verification. When audited you must be able to show your certification body that the verification is effective and credible.

Verification of extra requirements for a product that you want to KRAV-label must be done in one of the following ways (K):

- according to a system for **supplier evaluation** that KRAV recognizes. If the system has its own inspection cycles, then these must be complied with, otherwise verification must be done annually
- using one or several of the KRAV checklists for the type of product concerned. Verification must be carried out annually by a **certification body** that is accredited for organic production by an accreditation body that is an **IAF MLA signatory**
- using one or several of the KRAV checklists for the type of product concerned. Verification must be carried out annually by a supplier evaluation that you plan and carry out. The verification must be carried out by a person qualified to audit organic production. The extra requirements on social responsibility can also be verified by a person qualified to carry out such an audit.

16.3.2 Recognized Systems for Supplier Evaluation

KRAV can recognize systems for supplier evaluation as a basis for KRAV-labelling for parts of the KRAV standards or for the KRAV standards in their entirety. (K)

- i** The list of recognized systems for supplier evaluation is available at www.krav.se. In each recognised system, the parts of the KRAV standards it applies to are specified.

16.3.3 Who Can Apply for Recognition of a Supplier Evaluation System

If you are KRAV-certified according to Chapter 16, you can apply to KRAV to have a **supplier evaluation** system recognized. (K)

16.3.4 KRAV Can Withdraw Recognition of a Supplier Evaluation System

KRAV has the right to withdraw the recognition of a **supplier evaluation** system if it changes or if the KRAV standards change. You must therefore check that the system you have chosen is still approved. **(K)**

16.4 Extra Requirements for Social Responsibility for All Products

The standards in this section deal with the extra requirements for social responsibility.

16.4.1 Documenting Social Responsibility

Your suppliers must be able to provide documentation showing that there is a systematic way of checking that there is compliance with standards 16.4.2-16.4.12 where production takes place. This must be done using a recognized certification system, a recognized system for **supplier evaluation**, or with the help of KRAV's checklists.

You do not need to show documentation from operations **(K)**:

- with less than 10 employees
- in the European Union, EEA, Switzerland, USA, Canada, Australia, New Zealand, and Japan. **(K)**

16.4.2 National Legislation

National legislation on labour law must be complied with. **(K)**

16.4.3 No Human Rights Violations

Products cannot be KRAV-certified if there are human rights violations associated with the **production**. Activities where production takes place must comply with the ILO core conventions, the UN Convention on the Rights of the Child, and the UN Universal Declaration of Human Rights. **(K)**

16.4.4 No Forced Labour

Forced or involuntary labour is prohibited. **(K)**

16.4.5 No Discrimination

Employees must be treated equally, provided with the same opportunities and not be subjected to discrimination. **(K)**

16.4.6 Child Labour

It is prohibited to employ children under 15 years of age. **(K)**

ILO's exception for limited extra work in accordance with ILO convention 138 applies.

16.4.7 Special Conditions for Children and Young Employees

When child and young employees under 18 years of age are hired, it must be ensured that **(K)**:

- the work is not harmful to their health or development
- the number of hours or scheduling of work does not affect their school attendance.

16.4.8 Right to Organize and to Collective Bargaining

Employees must have the opportunity to organize and the right to collective bargaining. **(K)**

16.4.9 Salary Size

Employers must comply at the least with the alternative which follows that most benefits employees **(K)**:

- the statutory minimum wage in each respective country or
- the industry standard implemented through collective bargaining agreements.

16.4.10 Working Hours

National legislation regarding working hours and overtime must be complied with. **(K)**

16.4.11 Health and Safety

The work environment must be safe and not present a health risk. **(K)**

16.4.12 Employment Contracts

All employees must have a binding employment contract. **(K)**

16.5 Cancelled

Cancelled

16.6 Other Extra Requirements for All Products

In this section there are standards on the extra requirements, in addition to those related to social responsibility, that must be complied with in order for you to be able to KRAV-label various **products**. **(K)**

16.6.1 GMOs

You must use the most recent version of the KRAV risk lists for **GMOs**, to determine what you need to do to ensure that a **product** or ingredient does not contain GMOs or are made of or with GMOs. In some cases a certificate is required, and in other cases analysis of the goods you purchase. In the case of

analysis, the maximum permissible level allowed for unintentional occurrence of GMOs is 0.9%. (EU)

i *The KRAV risk lists for GMOs is available at www.krav.se.*

16.6.2 Labelling Agreements

If you allow a non-KRAV-certified **supplier** outside of Sweden to package and KRAV-label your **products**, you must have a contract with the supplier. The contract must give you control over how the KRAV labelling is used and give your **certification body** the right to **audit** your supplier's production if required. (K)

The supplier must be certified according to Regulation (EC) 834/2007 by a certification body that carries out organic certification. (EU)

The following must be included in the contract between the KRAV licensee and the supplier (K):

- The supplier undertakes to comply with relevant standards in sections 20.1, 20.2, 20.3 and 20.3 in Chapter 20 of the KRAV standards.
- The supplier gives the certification body the right to audit the production in question, according to the conditions of the KRAV standards.
- You who are KRAV-certified have responsibility for any nonconformities by the supplier found by the certification body.
- The supplier does not have the right to use the KRAV name and label other than on behalf of a KRAV-certified company.

i *There is a template for labelling agreements on the KRAV website at www.krav.se.*

16.6.3 Standards for Packaging

If you allow a non-KRAV-certified supplier or subcontractor outside Sweden to package your products, you must by 1 January 2020 show that standards 16.6.4, 16.6.5, 16.6.8 and 16.6.9 below are complied with.

16.6.4 Resource-efficient Packaging

The main purpose of packaging is to protect and preserve the product. You must therefore choose or design packaging so that food, feed or production aids reach final consumers without unnecessary loss of quality, and so that waste is minimized at every stage. (K)

In addition, the packaging solution must as a whole be as resource efficient and as climate neutral as possible by taking the following into account (K):

- using as little material as possible
- using renewable packaging material when possible
- using recycled material when possible
- making sure packaging can be re-used or recycled in existing systems,
- making sure packaging favours energy efficient methods of transportation

- making sure it is easy for consumers to empty and sort packaging. During inspections, you must be able to show that this has been done. (K)

16.6.5 Avoid Substances and Materials Hazardous to Health and the Environment

You must try to ensure that substances and materials used in packaging of your KRAV-certified products are non-toxic. This is especially important for the part of the packaging that comes in contact with food, feed or production aids. (K)

You must check if any of the SIN substances listed in Appendix 3 have been used in your packaging, and in that case make a phase-out plan. When checking for SIN substances in plastics, polymerization aids or initiators do not need to be reported. This standard applies only to **primary packaging**. (K)

Appendix 3 lists the SIN substances that can be found in food packaging. The appendix is updated annually based on the current SIN list published by ChemSec, which means that additional substances may be added in the next edition of the KRAV standards.

i *There are aids on the KRAV website for checking for SIN substances and for making a phase-out plan, see www.krav.se.*

16.6.6 Ban on Bisphenol A in Packaging

Bisphenol A must not have intentionally been used in packaging after 1 January 2018. The standard applies only to **primary packaging**. (K)

16.6.7 Ban on PVC and Other Chlorine-based Plastics

PVC (polyvinyl chloride) and other chlorine-based plastics must not be used in packaging for KRAV-certified products packaged after 1 January 2018. The standard applies only to **primary packaging**. (K)

PVC is however permitted in lid seals and liners on metal in those cases where it can be shown that alternative solutions cannot guarantee the shelf life or quality of the food in question. A condition is that you are working on a phase-out plan. (K)

i *Information on and aids for making a phase-out plan can be found on the KRAV website, see www.krav.se.*

16.6.8 No Preservatives or Disinfectants

Packaging must not be treated with preservatives or disinfectants. Disinfection with the help of hydrogen peroxide is however permitted. (K)

16.6.9 Nanomaterials and Nanotechnology is Prohibited

You cannot use engineered **nanomaterials** in packaging on surfaces that the product comes into contact with. (K)

16.7 Extra Requirements for Plant Products

In this section there are standards on extra requirements for plant **products** and wild harvest production.

16.7.1 Crop Production Products

For **EU organic products** of plant origin, other than sprouts, greenhouse products, and products from wild harvest production, there are no extra requirements other than those that apply to all products. **(K)**

16.7.2 Extra Requirements for Sprouts

If you want to KRAV-label **brought in** or **imported** sprouts, the seeds they were sprouted from must be organic seeds that meet KRAV's extra requirements for foods of plant origin. **(K)**

16.7.3 Extra Requirements for Greenhouse Products

For **greenhouse** cultivation, there must be compliance with either point A or point B below **(K)**:

- A. Of the total annual energy used for heating, cold rooms, lighting as well as production of CO₂, at least 80% must come from **renewable energy** or waste heat.
- B. Fossil energy, on average, can make up at most 2.5 kWh per m² and production week during the growing period.

16.7.4 Protection of Natural Areas with High Conservation Value

Cultivation or other enduring changes in areas with natural ecosystems with a **high conservation value (HCV)** is prohibited. The standard must be verified for cultivation of those crops that KRAV considers to be at the highest risk for exploitation.

You must verify that cultivation for the production of oil palm and soy has not taken place in the last five years.

You must verify that cultivation for the production of sugar cane, coffee, cocoa or coconut palm has not taken place since certification began. **(K)**

16.7.5 Products from Wild Harvest Production

The following extra requirements apply to products from wild harvest production **(K)**:

- Harvesting must not have an obvious negative impact on peoples' way of life or ability to support themselves. Consideration must be given to local traditions and the people that live in the area.

- Species harvested must not be subject to international protection programs or other forms of restrictions that show that harvesting is inappropriate. For species listed by **CITES** (The Convention on International Trade in Endangered Species of Wild Fauna and Flora), compliance with CITES regulations is required for those who are KRAV-certified.
- Species that are red listed and listed as endangered species in the country concerned cannot be harvested.
- You must make sure that **independent pickers** always sell berries, plants or mushrooms that they have picked themselves. An intermediary between agents and pickers is prohibited. You must take special care to ensure that there are not any intermediaries when large volumes of berries, plants or mushrooms are delivered.
- You must ensure that independent pickers are free to sell to any agent they wish, and as well that the pickers' **basic human rights** are not violated. Everyone who sells berries, plants or mushrooms to an agent must be paid the same price per kilo for equivalent quality. Discrimination, for example, regarding payment, is prohibited.

16.7.6 Extra Requirements for Mushroom Cultivation

Your **suppliers** must (K):

- use **renewable electricity** in mushroom production.
- implement energy efficiency measures, especially to reduce the use of fossil energy.

16.8 Extra Requirements for Animal Products

In this section there are standards on extra requirements for animal products. The extra requirements are divided according to type of animal.

16.8.1 Extra Requirements for All Animal Products

The following applies to all animal products (K):

- if veterinary medicinal products are used that have an approved **withdrawal period** of zero days then a withdrawal period of 48 hours must be applied.

16.8.2 Dairy Products

For you to be able to KRAV-label dairy products, the following extra requirements must be complied with (K):

- Mother animals must have access to seclusion when giving birth.
 - If the mother animals are kept on **deep litter beds** indoors, birthing can take place in the herd only if the animals are monitored so that

the mother animal and calf can be separated, if necessary, from the rest of the herd, at the latest, immediately in conjunction with birth.

– If the mother animals are kept indoors in other ways, they must give birth in seclusion in a pen.

- Lambs and kids must suckle for at least three days.
- **Calves** must suckle for at least one day, i.e. at least 24 hours.
- During castration and dehorning, **anaesthesia and analgesia** must be used. For calves, the procedure must be carried out before they are eight weeks old.
- No mutilation other than castration and dehorning is permissible.
- During the growing season, all types of livestock must have access to pasture for more than 12 hours per day. Temporary indoor periods are permitted when there is sickness, birthing, mating, insemination, severe insect infestation, extreme weather, and a maximum of two weeks before slaughter.
- The following categories of animals must have **outdoor access** during the growing season, but do not need to be provided with pasturage:
 - cattle 4-6 months of age (calves younger than four months do not need to be offered outdoor access),
 - bulls, rams and goats for breeding.

16.8.3 Eggs and Egg Products

For you to be able to KRAV-label eggs and egg products, the following extra requirements must be complied with (K):

- Hens and chickens must have access to a sand bath. If the poultry have outdoor access throughout the year the surface in the exercise yard may replace the indoor sand bath.
- Exercise yards for laying hens must not extend more than 150 meters from the nearest entrance and exit holes in the poultry housing. Provided that there is a sufficient number of shelters against bad weather and predators evenly distributed over the entire outdoor exercise yard, and at least four shelters per hectare, the exercise yard may extend up to 250 meters from the nearest entrance and exit holes in the poultry housing.
- At least 50% of the feed must be produced on the keeper's farm or in cooperation with one or more other organic farms. Feed can also be produced and sold to a feed supplier and bought from the supplier.
- If the farm cooperates with other organic farmers in order to comply with the standard, those who grow the feed must receive an equivalent portion of manure from the livestock operation.
- Beak trimming is prohibited.

16.8.4 General Extra Requirements for Slaughter

For you to be able to KRAV-label meat products, the following extra requirements must be complied with during slaughter (**K**):

- All handling in connection with slaughter, including transport, must be carried out calmly and with dignity and with a minimum of physical and psychic stress for the animals.
- There must be live inspection by a veterinarian of animals that are to be KRAV-labelled. Meat from animals that during a live inspection or inspection of the carcass received adverse remarks regarding deficient animal protection cannot be KRAV-labelled.
- **Established groups** of animals must be kept together during transport, lairage and stunning. Separate animal groups must be kept apart, so that they do not worry each other. During waiting periods, animals must have access to water and adequate amounts of roughage.
- Animals' natural behaviour must be taken advantage of when **herding** them. *This can be done, for example, by keeping a group together, by allowing animals to go from dark to light or to follow a leader animal.*
- Use of electric prods or other forms of hard herding is prohibited.
- Each animal must be stunned before slaughter and the effect of stunning must be checked for each individual animal. This must be done immediately after stunning and before **bleeding**.
- Bleeding and further handling of the carcass must be done so that animals that have not been stunned do not see it.
- After bleeding, animals must be checked manually to confirm that they are dead before the carcass can continue to the next stage.

16.8.5 Beef

For you to be able to KRAV-label beef and beef **products** the following extra requirements must be complied with (**K**):

- Cows should be able to calve separately from other cows.
 - If calving takes place outside, there must be adequate space and the cows themselves must be able to get away from the herd.
 - If the cows are kept on **deep litter beds** indoors, calving can take place in the herd only if the animals are monitored so that the mother animal and calf can be separated, if necessary, from the rest of the herd, at the latest, immediately in conjunction with birth.
 - If the cows are kept indoors in other ways, they must calve in a calving pen.
- During the growing season, cattle must have access to pasture for more than 12 hours per day. Temporary indoor periods are permitted when there is sickness, calving, mating, insemination, severe insect infestation, extreme weather, and a maximum of two weeks before slaughter.
- Cattle 4-6 months of age as well as bulls for breeding must have

outdoor access during the growing season, but do not need to be provided with pasturage. Calves younger than four months do not need to be offered outdoor access.

- **Calves** must suckle for at least one day, i.e. at least 24 hours.
- During castration and dehorning, **anaesthesia and analgesia** must be used. The procedure must be carried out before the calves are eight weeks old.
- No mutilation other than castration and dehorning is permissible.
- At least 75% of the feed must be produced on the keeper's farm or in cooperation with one or more other organic farms. Feed can also be produced and sold to a feed supplier and bought from the supplier.

If the farm cooperates with other organic farms in order to comply with the standard, those who produce the feed must receive an equivalent portion of manure from the livestock operation.

16.8.6 Sheep and Goat Meat

For you to be able to KRAV-label meat and meat products from lambs, sheep, or goats, the following extra requirements must be complied with (**K**):

- Ewes and goats must be able to give birth separately from other animals.
 - If lambing and kidding takes place outside, there must be adequate space and the ewes and goats themselves must be able to get away from the flock.
 - If the animals are kept on **deep litter beds** indoors, lambing and kidding can take place in the flock only if the animals are monitored so that the mother animal and offspring can be separated, if necessary, from the rest of the flock, at the latest, immediately in conjunction with birth.
 - If the animals are kept indoors in other ways, they must give birth in a separate pen.
- Lambs and kids must suckle for at least three days.
- During the growing season, sheep and goats must have access to pasture for more than 12 hours per day. Temporary indoor periods are permitted when there is sickness, lambing or kidding, mating, insemination, severe insect infestation, extreme weather, and a maximum of two weeks before slaughter.
- Rams and bucks for breeding must have **outdoor access** during the growing season, but do not need to be provided with pasturage.
- No mutilation other than castration and dehorning is permitted. Docking of tails or mulesing (removing of skin from the hindquarters of sheep) is not permitted.
- At least 75% of the feed must be produced on the keeper's farm or in cooperation with one or more other organic farms. Feed can also be

produced and sold to a feed supplier and bought from the supplier.

- If the farm cooperates with other organic farms in order to comply with the standard, those who produce feed must receive an equivalent portion of manure from the livestock operation.

16.8.7 Pork

For you to be able to KRAV-label meat and meat products from pigs, the following extra requirements must be complied with (**K**):

- Sows must farrow in seclusion and protected, for example in a farrowing hut. Farrowing can take place indoors if the sow has sufficient freedom and space for nesting and abundant access to nesting materials.
- Pigs must have the opportunity to exercise their natural behavioural activities such as rooting and active foraging, for example in fallow land, areas prepared for forestry or lumber processing, and during the wintertime, rooting in a **deep litter bed**.
- During the warm season pigs must have access to a mud bath or other water cooling.
- During the growing season, all types of livestock must have access to pasture for more than 12 hours per day. Temporary indoor periods are permitted when there is sickness, farrowing, mating, insemination, severe insect infestation, extreme weather, and a maximum of two weeks before slaughter.
- Boars for breeding must have **outdoor access** during the growing season, but do not need to be provided with pasturage.
- For pigs, at least 50% of the feed must be produced on the keeper's farm or in cooperation with one or more other organic farms. Feed can also be produced and sold to a feed supplier and bought from the supplier.
If the farm cooperates with other organic farms in order to comply with the standard, those who produce feed must receive an equivalent portion of manure from the livestock operation.
- It is permitted to castrate pigs younger than seven days, but only if they are given both anaesthesia and analgesia during the surgery.
- No other mutilation than castration is permitted.

16.8.8 Poultry Meat

For you to be able to KRAV-label meat and meat products from poultry, the following extra requirements must be complied with (**K**):

- Hens and chickens must have access to a sand bath. It can be outdoors if the soil is suitable and the animals can be outside every day.
- Exercise yards for chickens must not extend more than 150 meters from the barn.
- During the growing season, all types of livestock must have access to pasture for more than 12 hours per day. Poultry can be kept indoors

during the night. Temporary indoor periods are permitted when there is sickness, severe insect infestation, extreme weather, and a maximum of two weeks before slaughter.

- For poultry, at least 50% of the feed must be produced on the keeper's farm or in cooperation with one or more other organic farms. Feed can also be produced and sold to a feed supplier and bought from the supplier.

If the farm cooperates with other organic farms in order to comply with the standard, those who produce feed must receive an equivalent portion of manure from the livestock operation.

- Beak trimming is prohibited.

16.9 Extra Requirements for Other Products

This section contains standards on extra requirements for **products** not dealt with in 16.7 and 16.8.

16.9.1 Products from Aquaculture

Products from aquaculture certified according to Regulation (EC) 834/2007 can be KRAV-labelled. An exception is giant prawns, i.e. large tropical prawns, which cannot be KRAV-labelled. (K)

You may not permanently alter areas with natural ecosystems and **high conservation value (HCV)**. Areas with high conservation value that have been used for more than five years can however be accepted for production.

16.9.2 Processed Food Products

If you want to KRAV-label imported or brought in processed food products the following applies (K):

- At least 90% by weight of the ingredients must always be KRAV-certified.
- All organic **ingredients** that are to be considered as KRAV-certified must comply with the extra requirements in this chapter.
- Only the permitted **food additives** given in Appendix 2 of the KRAV standards may be included.

16.9.3 Feed and Feed Materials

If you **import** or **bring in** feed or feed raw materials, you must comply with the standards in Chapter 11 as well as the extra requirements in this chapter. (K)

16.10 Products Certified according to NOP

This section contains standards on **products** certified according to the US **standard** for organic production, the National Organic Program (NOP). The EU recognizes this **standard** for products from the USA. Therefore, products

certified according to NOP and produced in or imported to the USA can be marketed as organic in the EU or be included as **ingredients** in multi-ingredient **EU organic products. (EU)**

16.10.1 Plant Products

In addition to the extra requirements that apply to **EU organic products**, the following extra requirements apply to products of plant origin certified in accordance with NOP (**K**):

- If the crop is fertilized with Chile saltpetre/sodium nitrate, the product cannot be KRAV-labelled.

16.10.2 Animal Products

In addition to the extra requirements that apply to EU organic products, the following extra requirements apply to products of animal origin certified in accordance with NOP (**K**):

- Meat from lamb, pigs and cattle must come from animals whose mothers are organic.
- Meat from lambs and cattle must come from animals that have received at least 70% **roughage** in their feed ration, and that do not receive more than 40% **feed concentrate** in the daily feed intake during fattening.
- Meat or milk must come from animals that have not been raised in individual pens for more than two weeks.

16.11 Products Certified According to Other Standards Recognized by the EU

The EU recognizes certification bodies and countries outside the EU according to Regulation (EC) 834/2007 and 1235/2008. The recognition can be limited to certain product categories and include specific requirements regarding origin.

16.11.1 The Same Extra Requirements

For **products** from countries or certification bodies that the EU recognizes the same extra requirements as for EU organic products produced in the EU apply, other than products from the US. Products from the US must comply with the extra requirements in section 16.10 as well. (**K**)

Fisheries

17

Those certified for fisheries must also comply with the general standards in Chapters 2 and 3 as well as the standards on labelling and marketing in Chapter 20.

Contents of this chapter:

- 17.1 KRAV-certified Fisheries on MSC-certified Fisheries
- 17.2 Cancelled.
- 17.3 Certification of Vessels, Documentation and Competency Requirements
- 17.4 Fisheries Methods and Catch Management
- 17.5 Technical Standards for Vessels

All the standards in this chapter are KRAV's own. We have therefore not marked them with (K).

17.1 KRAV-certified Fisheries on MSC-certified Fisheries

17.1.1 MSC-certified Fisheries

If your vessel is on the MSC's vessel list for an MSC-certified fishery, or you can show in another manner that you are included in a MSC-certified fishery, you can apply to be KRAV-certified according to section 17.3.

17.1.2 - 17.1.6 Cancelled

17.1.7 Transition Standard

For stocks approved by KRAV's Fisheries Committee on 30 June 2018 you can continue to carry out a KRAV-certified fishery according to the conditions when approved until approval for the fishery concerned expires, though at the latest until the end of 2020.

17.2 Assessment of the Fisheries Committee

Cancelled.

17.3 Certification of Vessels, Documentation and Competency Requirements

The standards in this section are about what certification means, as well as about the requirements for documentation, reporting and knowledge about the KRAV standards.

17.3.1 Certification of Vessels

It is the applicant's responsibility to make sure individual vessels are certified by a **certification body** accredited to certify according to the KRAV standards for fisheries (Chapter 17).

Certification of a vessel means that it can land fish or shellfish as KRAV-certified. It is the person with the vessel permit who is responsible for complying with all the standards for KRAV-certified fisheries.

17.3.2 Foreign Substances

Fish and shellfish that are to be KRAV-labelled must not be limited by The Swedish National Food Agency's Dietary Guidelines for any consumer group. Levels of foreign substances in fish and shellfish must not exceed legal limits in the country where the fish is landed.

17.3.3 Certified and Non-certified Catches

You cannot fish the same target species within MSC-certified fisheries with both permitted and non-permitted equipment or methods. However, you can, during the same trip, carry out fishing of a targeted species within MSC-certified fisheries and fishing of another target species not covered by the MSC-certified fisheries.

17.3.4 Documentation and Routines

There must be documentation that shows how the vessel complies with the environmental, fisheries, and labour protection laws concerned. There must also be routines that ensure that the person responsible for the vessel's fishing is informed, for example, about changes in the law and any fisheries bans.

17.3.5 Documentation of the Fishing Trip

You must document the vessel's fishing trip so that there is no doubt about where the catch was taken. The information must give the vessel's position with an accuracy of 10 nautical miles or better. You must document both the location where the vessel puts equipment in the water and where the equipment is taken up. The documentation is checked during every **audit** by your **certification body**.

17.3.6 System for Reporting Position

Vessels longer than 12 metres must be equipped with VMS-equipment. If the vessel is between 12 and 15 metres, you must send information about the day's trip at least once every fishing day to a data gathering organisation. If the vessel is longer than 15 metres, you must also send information about position, course and speed to a data collection organisation at least once per hour.

Your **certification body** must have access to the information from the data collection organisation. If the system stops functioning during a fishing trip, no parts of the catch can be sold as KRAV-certified.

Vessels that return to their home port within 24 hours after the start of a fishing trip are exempt from this standard.

17.3.7 Catch Reporting

The total catch includes all fish and shellfish taken up, both target species and **by-catch**. You must report your total catch in the logbook as well as any by-catch of seabirds, marine mammals, and invertebrates. During an **audit**, you must give your **certification body** access to this data compiled on an annual or quarterly basis. Inability to present this data during an audit is a minor nonconformity.

17.3.8 Staff Knowledge

Staff on fishing vessels certified according to these standards must be well-informed about the KRAV standards and how to comply with them, e.g. either by having read them or by having the standards presented to them and then discussing them with other members of the crew.

17.4 Fisheries Methods and Catch Management

This section is about handling a catch, marking equipment, as well as which fisheries methods are permitted respectively prohibited.

17.4.1 Prohibited Fisheries Methods

The following fisheries methods are prohibited:

- beam trawling
- bottom trawling.

Bottom trawling however is permitted until further notice for Northern shrimp in areas where it is well-documented that trawling does not cause long-term damage to the ecosystem. The standard will be re-evaluated when alternative fisheries methods are available.

17.4.2 Decisions on Stocks by the Fisheries Committee

Cancelled.

17.4.3 Use of Bait

If you use bait in cages or on hooks, the bait must come from sustainably fished **stock** – i.e. fisheries that comply with **ICES** guidelines or the equivalent – or be made up of by-products from the fisheries industry. You must document the amount of bait used and from which stock it comes. During an **audit**, this must be reported in relation to the amount of fish landed.

Your certification body checks that the amount of bait you use when fishing is reasonable.

17.4.4 Emptying Nets and Hooks

You must empty nets and hooks with enough frequency so that fish are never left in the net or on the hook for more than 24 hours. KRAV can make special

restrictions for certain certified fisheries. During bad weather you can wait until the weather permits emptying without risk.

17.4.5 Emptying Cages and Traps

You must pull up cages and traps at least twice a week.

17.4.6 Transmission of Light Through Crabs

You must transmit light through crabs at sea when crab fishing. Crabs that are not meaty must be returned to the sea unharmed. Crab claw fisheries, i.e. when only the claws are landed and the rest of the animal is thrown back, cannot be KRAV-certified.

17.4.7 Degradable Meshes and Degradable Panels

There must be degradable meshes and degradable panels or equivalent equipment in all cages and traps.

17.4.8 Other Equipment On-board

A vessel certified to fish for a specific target species is prohibited from having equipment on-board for catching the target species that is forbidden according to the certification.

17.4.9 Marking Equipment

You must clearly mark all equipment so it is possible to trace the equipment to you.

17.4.10 Damaged Equipment

Damaged equipment must be taken to land to be repaired or destroyed.

17.4.11 Rendering Fish Unconscious

If you fish with a vessel longer than 24 metres, you must have the means on-board to render the catch unconscious, for reasons of both fish welfare and quality. If you are not able to do so, you must make a plan to put such equipment in place, or if you think it is not possible, explain the reasons for this to your **certification body**.

17.4.12 Storing the Catch

You must store the catch in labelled units to achieve full traceability. The label must include the KRAV name or label, species, catch location, time of the catch, etc. The position report must give the vessel's position with an accuracy of 10 nautical miles or better.

For coastal fisheries with small boats it is permitted to label the units upon **landing**.

Information on catch location and fishing method must accompany the catch at later stages as well.

17.5 Technical Standards for Vessels

This section contains standards on environmental requirements for fishing vessels.

17.5.1 Diesel Motors

Diesel motors must use diesel with a maximum of 0.05% sulphur (MK 1).

If you have technical or other acceptable practical reasons for not using such diesel fuel, you must document the reasons as well as make and implement a plan for changing to use of diesel fuel with the stipulated sulphur level.

17.5.2 Outboard Motors

All outboard motors must be four-stroke motors or modern two-stroke motors with direct injection.

17.5.3 Fuel Consumption

Fuel consumption per kilo of landed fish cannot exceed the levels in the table below.

Type of Fishery	Maximum Permitted Fuel Consumption
species that live in open water and are fished with pelagic trawl or purse seine/ring nets, e.g. herring, mackerel, sprat	0.10 litres/kg whole fish landed
demersal fish such as e.g. cod, saithe, haddock and flatfish – processing on land	0.35 litres/kg landed head-on and gutted
demersal fish such as e.g. cod, saithe, haddock and flatfish – processing on-board	0.33 litres/kg live fish taken up. This is equivalent to 0.37 litres per kg head-on and gutted fish. Processing on-board is estimated to require about 6% of the vessel's energy consumption.
shellfish (shrimp, crab, lobster)	1.5 litres/kg landed living shellfish. If the shellfish is landed cooked, a recalculation must be made so that fuel consumption is calculated per live weight.

17.5.4 Calculation of Fuel Consumption

You must when **audited** be able to provide a report on how much fuel the vessel has bunkered during one year and how much fish was landed during the same year (per species). If the same method was used to fish the same target species throughout the year, the total amount of fuel is just divided by the total amount of landed catch to obtain fuel consumption. If the vessel was active in several different fisheries, fuel consumption must be calculated separately for each fishery.

17.5.5 Hydraulic Oils and Lubricating Grease

Hydraulic oils used on vessels must be ecolabelled or approved according to the standard "Hydraulic Fluids – Requirements and Test Methods – SS 15 54 34" or meet equivalent requirements.

Lubricating grease used on-board must be ecolabelled or approved according to the standard "Lubricating Grease – Requirements and Test Methods – SS 15 54 70" or meet equivalent requirements.

Your **certification body** can grant an exception from this standard if the vessel can show documentation that oil or lubricating grease of the quality required by the standard is not available on the market or that those that are available have an inferior quality.

17.5.6 Cleansers

You cannot use heavy-duty cleaning products with components that are classed as carcinogenic, mutagenic or disruptive for reproduction. Tensides and other components must not prevent oil and water from separating or make it so that purification plants don't work. In addition, heavy-duty cleaning products must be ecolabelled if such alternatives are available.

17.5.7 Refrigerants On-board

You can only use ozone- and climate-neutral refrigerants on-board.

For example, you must not choose CFCs. Examples of refrigerants that may be used are carbon dioxide, butane, propane and ammonia.

17.5.8 Waste

The vessel must have clear routines for:

- handling various types of waste
- minimizing the amount of waste
- not polluting land, air or water.

Different types of **hazardous waste** must not be mixed together. Further, hazardous waste must not be mixed with other types of waste or other substances or material. Moreover, hazardous waste must be handled in compliance with regulations in the country where the catch is landed.

Waste is hazardous, for example, if it is explosive, flammable, oxidizing, poisonous or unhealthy waste. Examples of hazardous waste are waste oil, impregnated lumber, electric and electronic scrap, batteries, solvents, paints and lacquer.

17.5.9 Bottom Paint

You must comply with the regulations concerning bottom paints in the country where the catch is landed. Documentation on the type of bottom paint used on the vessel must be available during an **audit**.

Standards for Certification Bodies

18

In this chapter there are standards for how certification bodies that are accredited to certify according to the KRAV standards must work, the qualifications auditors must have and what commitments the certification body has to KRAV.

Contents of this chapter:

- 18.1 General Standards
- 18.2 Requirements for Certification Bodies
- 18.3 Requirements for Auditors
- 18.4 Qualification Requirements for Chain Certification
- 18.5 Calibration of Implementation of Standards

18.1 General Standards

18.1.1 The Current Edition of the Standards

You must always use the current website edition of the KRAV standards for an audit.

When you make a *nonconformity* report, the website edition that was current at the time of the nonconformity applies.

If the website edition changes, the standards are given a new version number. The date of changes and what they involve are also provided.

18.2 Requirements for Certification Bodies

The standards in this section deal with the requirements a certification body must comply with in order to be authorized to certify according to the KRAV standards.

18.2.1 Accreditation

Certification bodies that certify according to the KRAV standards must be accredited according to SS-EN ISO/IEC 17065:2012.

🕒 18.2.2 Environmental Management Program

The certification body must have a documented, structured environmental management program and be able to show that it has:

- an environmental policy,
- environmental goals, including goals for reduced climate impact, and
- systematic evaluation of these goals.

🕒 18.2.3 Contracts with KRAV

If you want to certify according to the KRAV standards, you must apply for a certification contract with The KRAV Association. The application must include which type of production you want to certify. An application together with a copy of the agreement with the accreditation body as well as a time

schedule for accreditation must be sent to KRAV. If you are already accredited, a valid accreditation certificate must be sent in. If you want to expand the scope of the certification to more types of production, a new application must be made to KRAV.

KRAV employees, or those appointed by KRAV, must be able to participate when the **certification body** carries out an **audit** according to the KRAV standards, or be able to carry out shadow audits, in order to take part in the work of the certification body. This is planned in consultation with the certification body.

18.2.4 Check that the Applicant has Not Been Rejected

Before signing a contract for KRAV-certification, you must check that the applicant has not been rejected with regards to KRAV certification by another **certification body**.

18.2.5 Inform About the Standards

It is primarily the responsibility of KRAV to inform prospective and existing **KRAV-licensed** producers about current standards.

Responsibility for being informed about new or changed standards and complying with them is always the responsibility of the KRAV-licensee.

The certification body must verify that prospective and existing KRAV-licensed producers comply with current KRAV standards, and if necessary be able to inform prospective and existing KRAV-licensed producers about new and revised standards.

If a standard is going to be changed so that it becomes less stringent, you must, in connection with a **nonconformity** from the current standard, inform the **producer** about the upcoming change and take it into account when you assess the measures.

18.2.6 Audits when Issuing and Withdrawing Certificates

Certification bodies must issue certificates when audits result in certification or an approved **conversion** period.

For a certificate to be valid a KC number is required. You must get a KC-number from KRAV for each certificate issued. There must be only one KC-number per certificate. Every place of production must have its own certificate with its own KC-number.

The main certificate for a chain and the site certificates for the different locations of activity can have the same KC-number with a consecutive number addition, such as e.g. KC 12345-01, KC 12345-02, etc.

When you issue a certificate, you must ensure that the essential information in the certificate has also been submitted to “Mitt KRAV” (“My KRAV”) before a KC number is issued.

If you withdraw all or part of the certificate or decide to remove the labelling

on **products**, you must immediately send a copy of the decision to KRAV. If you withdraw the certificate completely, you must also withdraw the associated KC number.

The **certification body** is responsible for withdrawing certificates according to section 2.5, and if the **KRAV-licensed** producer has not paid the annual license fee to KRAV or the fee for the audit to the certification body.

18.2.7 System for Risk Assessment

You must have a system for risk assessment. The system must at least include an evaluation of the following:

- the results of previous **audits**,
- the production volume covered by the certification,
- the market value of the KRAV-certified **product** in relation to the equivalent conventional product, and
- the risk for mixing KRAV-certified and non-KRAV-certified products.

The risk assessment must be the basis for determining which risk-based extra audits are required.

18.2.8 Audit Due to a Change in Production

After significant changes in the activity of a certified company, you must carry out an audit as soon as possible. This applies, amongst other things, to the following changes in activity:

- the activity moves to a new location,
- there is a change in ownership,
- there is a new **place of production**, or
- there is a new type of animal.

18.2.9 Audit of Mass Balance

At the time of the annual audit, you must check that the volumes of outgoing products is consistent with the volumes of incoming raw materials or products, according to the principles for mass balance calculations.

In primary production, the principle is applied by checking that production and sold volumes are reasonable in relation to input volumes (for example seed, fertiliser and feed) and production conditions.

18.2.10 Investigate Suspected Serious Nonconformities and Inform KRAV

You must have clear routines for dealing quickly with nonconformities.

If you receive reliable information about a serious nonconformity by one of your KRAV-certified **producers**, you must inform KRAV and carry out an extra **audit** as soon as possible.

When there is suspicion of the following serious nonconformities you must inform KRAV and carry out an extra audit as soon as possible:

- serious deviation from animal welfare standards,
- use of prohibited chemical products in crop production,
- use of GMOs or GMO products,
- use of prohibited additives in KRAV-certified food,
- a **raw material** or **product** is marketed as KRAV-certified when it isn't,
- clear violations of the law,
- deficiencies in social responsibility, and
- nonconformities that in other ways seriously threaten the integrity of the KRAV label.

When an audit is carried out due to suspicion of serious nonconformities, you must on an ongoing basis inform KRAV about your work.

18.2.11 Inform KRAV About the Outcome When there is Suspicion of Serious Nonconformities

When an **audit** is carried out due to suspicion of serious **nonconformities**, you must inform KRAV about the results of the audit within two working days after completion of the audit.

18.2.12 Report to KRAV

You must report information in the customer portal “Mitt KRAV” (“My KRAV”) about and the status of **KRAV-licensed producers**. If you have integrated your own IT-system with “Mitt KRAV” the integration must result in the information and status in “Mitt KRAV” being complete and current.

If you completely or partly withdraw a **certificate** or decide to remove labelling on **products**, you must immediately send a copy of the decision to KRAV. If the certificate is cancelled you must also cancel the corresponding KC-number.

18.2.13 Reporting Complaints

If you receive complaints about the KRAV standards, you must forward them to the respective Business Area Manager via lantbruk@krav.se or livsmedel@krav.se.

18.2.14 Reporting Nonconformities

You must annually, by 31 January at the latest, report the following information about the previous year to KRAV:

- the number of **nonconformities** per type of production,
- the most common nonconformities,
- anything else with regard to nonconformities that was decided upon at the last regular calibration meeting of the year.

18.2.15 Information about KRAV-licensed Producers

Upon request from KRAV, you must provide information about a **KRAV-licensed producer** to KRAV. KRAV must comply with the confidentiality requirements according to standard 2.9.1.

18.2.16 Audit of Information and Item Registration

During every audit, and at least annually, you must ensure that the customer's company and contact information as well as certification and production information in "Mitt KRAV" ("My KRAV") are current and correct (see standard 2.3.3). The information about production is what is given under "Rapportera" ("Report") in "Mitt KRAV".

You must check that your **KRAV-licensed producers** with the types of production food processing, feed production, production aids, or import and bringing in register their KRAV-certified articles correctly according to standard 2.2.4. You must also check that the sales values are reported according to standard 2.7.5 and make a reasonableness assessment. You must also check that articles no longer in use are deregistered.

18.2.17 Design of Certificates

Certificates and certification decisions must be signed, on paper or electronically, by a representative of the certification body authorized to sign. The KRAV label must be on the certificate and must have a higher profile than the logo of the certification body if it is also included.

18.2.18 Contents of all Certificates

All KRAV certificates must clearly provide the following:

- The name of the company or **place of production** and address. For restaurants: name and address of the preparation kitchen and name of all the serving kitchens, as well as level of certification.
- The KC-number received from KRAV (see standard 18.2.6).
- The company's **KRAV-number** (see standard 2.1.5).
- The government registration number.
- The SE number for animal husbandry.
- The type of production certified is given in the same manner as according to standard 2.1.4 (several types of production can be given on the same certificate if they have the same KC-number).
- Date of issue.
- Validity date. A certificate can be valid for a maximum of 24 months from the time of issue.
- Date for the audit.
- Name and code number of the **certification body** (only name if the type of production is not covered in EU Regulation (EC) 834/2007).
- Any conditions and limitations.

Certificates for a chain are made up of a main certificate and site certificates (see standard 19.5.5).

18.2.19 Special Contents of Certificates for Production In Conversion

If the entire production within a type of production is in **conversion**, the date conversion started and information on conversion times must be given.

18.2.20 Products in Certificates According to Type of Production

For most types of production, the certificate must indicate which products or types of products can be marketed as KRAV-certified. The designations to use are as follows:

- crop production – crops or crop groups (e.g. cereals, oilseeds, pulses, grassland on arable land, pasture, vegetables, fruit, and others)
- mushroom cultivation – specie/s
- animal husbandry – type of animal and type of production must be indicated (e.g. milk and beef production or laying hens)
- aquaculture – specie/s
- wild harvest production – specie/s or production group(s) (e.g. mushrooms and herbs)
- food processing – product groups in COICOP or other classification of your choice
- slaughter – type of animal
- feed production – product groups according to KRAV's classifications for product reporting
- production aids – product groups according to KRAV's classifications for product reporting
- restaurants and catering that are certified for at least 15 products: all the chosen **approved foods** (can be included in an appendix to the certificate)
- import and bringing in – product groups in COICOP or other classification of your choice
- fisheries

On the certificate for greenhouses, apiculture, restaurants and catering (other than certification for at least 15 products) and certification of marketers, no information is required about products or types of products.

On certificates within the types of production that only deal with handling and storage i.e. food processing, feed production and production aids, this must be indicated. Thus the certificates are not required to indicate the product or product group.

COICOP (Classification of Individual Consumption According to Purpose) is an international classification developed by the United Nations Statistics Division. For more information see www.scb.se.

18.3 Requirements for Auditors

18.3.1 Auditor Training

An auditor must have:

- at least two-years of high school education or other equivalent education and at least four years of relevant work experience or have at least a three-year post-secondary education within a relevant area.
- completed training in carrying out and leading systems audits according to the requirements in SS-EN ISO 190 11 or an equivalent **standard**. Training must be comprised of at least two days of theory as well as practice carrying out **audits**. The auditor must have completed the training and passed the exam.

18.3.2 Auditor Qualifications

Before beginning to carry out **audits**, an **auditor** must have:

- participated as an observer of an audit according to the KRAV standards carried out by an experienced auditor for a minimum of 10 audits. The audits must deal with the types of production the auditor will work with,
- on the second-last observer occasion, independently carried out part of the audit, and
- on the last observer occasion, independently carried out a complete audit including the accompanying initial and concluding meetings, as well as set up an audit plan.

Alternatively, you must show in some other way that the auditor has the necessary competencies.

🔄 18.3.3 Maintaining Qualifications

To maintain their qualification, an auditor must carry out at least 15 **audits** within a three-year period, and at least three audits per calendar year.

The certification body must have routines to monitor that their auditors maintain their competence.

If there are not a sufficient number of **KRAV-licensed producers** in the same country within the relevant regulatory area for the auditor to be able to retain his or her qualification, other similar audits of the same type of activity may be credited.

Examples of similar audits are audits according to the EU regulation and according to private standards for organic production. For the types of production food processing and import, audits according to standards for food safety may also be credited.

🔄 18.3.4 Special Knowledge Requirements for all Auditors

An auditor must:

- know about how representative samples are taken of the **products** and

inputs that may be relevant for the type of **production** the auditor is auditing,

- have adequate knowledge about accounting systems and/or systems for production control that are relevant for the type of production the auditor audits, in order to be able to carry out audits of mass balance,
- have good knowledge of relevant legislation for the type of production that the auditor audits,
- have relevant, up-to-date and deep knowledge in the type of production that the auditor audits, and.
- have undergone training in hazard analysis and critical control points (HACCP) and in basic food hygiene in order to be able to carry out audits of the types of production food processing, feed production or restaurants and catering, as well as section 4.13.

18.3.5 Change of Auditors

You cannot use the same **auditor** for more than four years in a row for the same KRAV-licensed **producer**. Thereafter, the next regular **audit** must be carried out by another auditor. This also applies if the auditor changes certification body.

The certification body appoints the auditor for a certain KRAV-licensed producer. The KRAV-licensee can request a change of auditor and the certification body must have a routine for doing this, and state the conditions under which a change is approved.

18.4 Qualification Requirements for Chain Certification

The standards in this section are about the special qualifications required for certification of chains according to Chapter 19 (Certification of Chains).

18.4.1 Support for Chain Certification in the Certification Body's Management

Your management must be well-informed about the basis for decisions made for **certificates** issued according to Chapter 19. The management must determine the qualification requirements for the auditors who carry out the certification. You must:

- regularly evaluate the qualification requirements to determine if they are relevant,
- maintain an updated list of people who meet the qualification requirements given below.

18.4.2 Qualifications of Auditors

Auditors who work with chain certification must comply with the following requirements:

- They must have independently carried out at least 15 **audits** according to the KRAV standards.
- They must have experience with auditing management systems.

18.5 Calibration of Implementation of Standards

This section has information about the obligations of **certification bodies** when calibrating implementation of standards.

18.5.1 KRAV's Calibration Meetings

You must appoint at least one representative to participate in the calibration meetings organised by KRAV. The meetings are held two days per year on two separate occasions.

If necessary, KRAV can also convene additional calibration meetings. The **certification body** can also take the initiative to convene extra calibration meetings if they detect an urgent need to determine how to implement a standard. Separate calibration meetings can be held for an individual type of production. All certification bodies must comply with the implementation of standards determined by KRAV at these meetings.

The most important purpose of calibration meetings is to ensure that auditors implement the standards in the same manner. The meetings provide an opportunity for certification bodies and KRAV to discuss problems and fundamental interpretation issues, as well as to propose clarifications of individual standards. Meetings can also be used to exchange information.

18.5.2 Internal Calibration within the Certification Body

You must have internal routines to, at least twice per year, calibrate your implementation of the standards. A standing item on the agenda of these meetings must be information from KRAV's calibration meetings. The internal calibrations must be documented. The documentation must be handled according to your routines for documents reported and archived for at least three years.

The purpose of these internal calibrations is to ensure that all audits according to the KRAV standards are as uniform as possible, regardless of the staff involved, and that the requirements for certification are equivalent everywhere in Sweden.

18.5.3 Inform About and Train With "Mitt KRAV"

You must have routines for training new auditors in the use of "Mitt KRAV" and for disseminating information about the use of and changes to "Mitt KRAV", so that you ensure that everyone works according to KRAV's instructions. KRAV provides web training for this.

Certification of Chains

19

The standards for certification of chains can be applied together with the standards for Chapter 15 Restaurants and Caterers. The general standards in Chapters 2 and 3 as well as the standards in Chapter 20 must also be complied with.

Contents of this chapter:

- 19.1 Before Certification
- 19.2 Joint Accounting and Documentation
- 19.3 Management
- 19.4 Internal Audit
- 19.5 Tasks of the Certification Body

All the standards in this chapter are KRAV's own. We have therefore not marked them with (K).

19.1 Before Certification

The standards in this section deal with which places of operation must be included in chain certification, when the places of operation need to be divided into groups, as well as the requirement for an internal audit at all the places of operation.

19.1.1 What Can Be Chain Certified

If you have a group of **places of operation** with central management to ensure compliance with the standards as well as central financial accounting, you can use chain certification instead of individual certification of each unit.

Certification of **chains** is possible for Restaurants and Caterers (Chapter 15).

19.1.2 Scope of Certification

It is up to you to decide which places of operation to include in the certification. If you choose to only include some of the sites in the chain, the marketing must clearly indicate which sites are and are not included.

19.1.3 Division Into Subgroups

If the **places of operation** vary a lot with regard to routines and structure, you must together with the **certification body** create subgroups for sites with similar activity. Alternatively, subgroups can be made on the basis of organizational affinity.

Certification of chains is based on the certification body being able to audit a smaller number of places of operation and at the same time assume that the activity is the same at the other places of operation.

19.1.4 Requirement for an Internal Audit and Closing all Nonconformities

Before your **certification body** can carry out its initial **audit** of the **chain**

according to this chapter, the internal audit must have audited all **places of operation** included and all **nonconformities** must be closed.

19.2 Joint Accounting and Documentation

The standards in this section deal with what you need to do so that your certification body can analyse the balance between bought and sold volumes without having to visit every place of operation.

19.2.1 Purchases and Sales Must be Traceable

The **chain's** joint accounting system must show:

- For restaurants and caterers: purchase of KRAV-certified, **organic** and MSC-certified food, as well as total purchases of food and which products are in stock.

19.2.2 Requirement for Consistent Information

You must check that the **chain's** information and the **places of operations'** information is consistent with regards to:

- bought and sold volumes of all products
- the inventory of products in stock.

You must have written procedures that specify how the check will be carried out, how often and who will do it.

19.3 Management

The standards in this section are about the structure, procedures and division of responsibility for **chains**.

The chain must supervise all the **places of operation** included in the chain certification to make sure they comply with the KRAV standards. The chain must have a well-defined and documented structure with functioning routines and a clear division of responsibility. The chain must also clearly document which places of operation are certified, and be responsible for excluding sites from the certification that do not comply with the KRAV standards.

19.3.1 Certificate First, Then Marketing

You must not start marketing the **chain** as KRAV-certified until the **certification body** has issued a **certificate** for the chain.

19.3.2 Clear Responsibility and Authority

You must ensure that there is a contact person at each **place of operation** who is responsible for ensuring that the site complies with the KRAV standards and who has the authority to close **nonconformities** with the KRAV standards.

You must also ensure that there is a contact person in the central management of the chain who has been assigned the task by the management of ensuring that the standards are complied with.

Those who are contact persons for places of operation or the chain's central management cannot also be internal auditors for the chain's KRAV-certification.

19.3.3 List of Places of Operation

You must have an up-to-date list of the **places of operation** included in the KRAV certification. This list must include the name and contact information of a contact person at each location.

You must ensure that the **chain** has procedures to ensure that no place of operation can be included in the list without first having been issued a certificate by the **certification body**.

A new **place of operation** can receive a **certificate** when the certification body has received confirmation that the new place of operation has been approved by an internal audit, and that all **nonconformities** have been closed. The chain shows this by providing a copy of the internal audit report.

19.3.4 Special Standards when all Places of Operation are Not Certified

A **chain** that has both **places of operation** that are and are not certified must comply with special requirements. In such cases there must be documented routines that:

- ensure consumers clearly understand which places of operation are and are not certified
- prevent there from being, under normal circumstances, both certified and non-certified units within the same subgroup, brand or graphic profile.

19.3.5 Internal System for Dealing with Nonconformities

You must ensure that the **chain** has a system for handling **nonconformities** (see standard 19.4.6).

19.3.6 Support for Places of Operation with Nonconformities

You must ensure that the **chain** has procedures to support **places of operation** that receive **nonconformities** and that make sure that the nonconformity is not present at other chain locations. The support should ensure that the risk of repeated nonconformities from the KRAV standards is minimised.

19.3.7 Rejection of Places of Operation

For **places of operation** that do not comply with the KRAV standards, for example due to a nonconformity that the place of operation has not corrected so that it could be closed, the certificate for the location must be withdrawn.

You must ensure that the **chain** has procedures for doing this.

The procedures must also ensure that the chain:

- immediately informs its **certification body** that a place of operation has been rejected
- removes places of operation that have been rejected from the list of places of operation included in the KRAV certification
- ensure that KRAV-labelling of products at the place of operation ceases immediately if this is relevant
- remove all signals that indicate that the place of operation is covered by KRAV certification
- ensure that marketing the place of operation as KRAV-certified ceases immediately
- inform customers that the place of operation in question is no longer included in the certification
- stop all marketing that claims all places of operation are certified, if there is any.

When the certification body receives information that a place of operation has been rejected, it must send a new appendix with the places of operation included in the certification, see standard 19.5.5.

19.3.8 Places of Operation can Get a New Certificate

A **place of operation** that has had its certificate withdrawn can get a new certificate. In order for a place of operation to get a new certificate, your **certification body** must determine that the place of operation has the prerequisites for complying with the KRAV standards in the long term.

Places of operation cannot repeatedly be removed and returned to chain certification.

Places of operation that have been rejected three times cannot get a new certificate for three years.

19.3.9 Management's Responsibility for Quality Assurance of the Chain's Procedures

At least once a year, the management of the **chain** must ensure that the documented routines comply with the KRAV standards. "Management" in this context means at least:

- the person or group that has responsibility for the chain's KRAV-certification
- the person or group that has overall responsibility to make sure routines are followed at the **places of operation**.

There must be clear procedures as to who will organise the annual review, who will be present and when the review will be carried out. It must also be clear as to who is responsible for making sure that measures decided upon are implemented.

The chain must have a set agenda for the annual review.

The following points should be included:

- *Do the routines for KRAV certification work well?*
- *Reports from the chain's **certification body**.*
- *Results of internal audits.*
- *Overall reviews of **nonconformities**, customer feedback and complaints.*
- *Completed and planned preventive measures.*
- *Required resources.*
- *Required skills development.*
- *Action plan for the coming year.*
- *Establishment of the internal audit plan for the coming year.*

19.4 Internal Audit

The standards in this section are about the internal audit work, as well as the qualifications and authority of internal auditors.

19.4.1 Tasks in an Internal Audit

The **chain's** internal audit must have documented routines to annually inspect all **places of operation** included in the chain's KRAV-certification. During the annual inspection, the internal audit must audit all applicable KRAV standards at all places of operation.

The internal audit must also check that the preventive measures carried out by the chain after any **nonconformities** have actually had an effect and resulted in improvements.

19.4.2 Competence of Internal Auditors

Internal audits must be carried out by people with adequate competence. The **chain** must have documented requirements for internal auditors' competence. The competence requirements must include that the internal auditor must have relevant experience and education.

19.4.3 The Authority of Internal Auditors

Internal auditors must have the authority to audit any **place of operation** anytime, without giving notice to anyone or asking permission from anyone.

19.4.4 Resources of Internal Auditors

Internal auditors must have access to adequate resources in order to carry out their work according to these standards. Each internal auditor must audit several sites. An internal auditor must not audit their own **place of operation**.

19.4.5 Participation in External Audits

Each internal auditor must have participated in a complete external audit before the chain can be certified, see standard 19.5.2.

The purpose of this is that the internal auditor must be able to communicate their experiences from internal audits to the certification body, as a basis for the external auditor's assessment of how well the internal audit works.

19.4.6 Nonconformities in Internal Audits

You must handle **nonconformities** in internal audits in a manner that corresponds to the KRAV standards. This can mean that nonconformities are handled in exactly the same way as in section 2.5, with division into minor nonconformities, major nonconformities and nonconformities that constitute grounds for suspension. The **certification body** can however approve your dealing with them according to another system that fulfils the same function.

You must take the following steps for each nonconformity discovered in an internal audit:

- Document the nonconformity.
- Correct the nonconformity. The place of operation must see to it that it once again complies with the KRAV standards.
- Prevent the nonconformity. The place of operation must investigate why the nonconformity occurred and take measures to prevent it from happening again.
- The **chain** must determine whether or not routines need to be changed so that the same nonconformity does not occur at any other **place of operation**.
- The nonconformity must be closed by the internal audit or by another method defined by the chain.

19.4.7 Documentation of the Internal Audit

You must ensure that all reports from internal audits, including all reports on **nonconformities**, are available to the **certification body** during the **audit** of the features common to the units within the **chain**. Internal audit reports and nonconformity reports must be kept for at least two years.

19.5 Tasks of the Certification Body

The standards in this section are about **audits** by the certification body, which are primarily focused on the chain's management of compliance with the standards, as well as how the internal audit works and the internal handling of nonconformities.

19.5.1 Initial External Audit

The initial **audit** can only begin after the **chain's** internal audit has checked all places of operation and closed all **nonconformities**, see standard 19.1.4.

The **certification body** must ensure that that the **places of operation** have sufficiently similar procedures and structure. If necessary, the certification body

together with the chain must divide the places of operation into subgroups that are similar enough to comply with the conditions (see standard 19.1.3).

The following must take place before a decision about certification can be made:

- the certification body must audit 20% of the chain's places of operation. The audits must be evenly distributed among any subgroups included,
- the people who are internal auditors for KRAV-certification must have participated in a complete external audit
- all systematic **nonconformities** must be closed (see standard 19.5.4)
- the certification body must ensure that all temporary nonconformities at the places of operation are taken care of by the chain's nonconformity system.

The certification body must randomly choose the places of operation to be audited. Nonconformities can even be registered for places of operation that have not been visited.

19.5.2 Annual External Audit

The **certification body** must annually audit the **chain's** overall management, with particular focus on the following:

- routines
- the internal audit
- internal management of nonconformities.

19.5.3 Ongoing External Audits of Places of Operation

The **certification body** must establish an audit plan for each certified **chain**. The audit plan must be designed so that all places of operation receive at least one full external audit per six year period. The number of places of operation that are audited each year must be evenly distributed over a six year period, and the same applies to the distribution of audits within and between any subgroups.

19.5.4 Management of Nonconformities

The **certification body** must determine if **nonconformities** made by the certification body at **places of operation** are systematic or temporary.

Systematic nonconformities are:

- nonconformities found at several places of operation
- nonconformities that can be expected to be repeated at the same **place of operation**
- major nonconformities (see standard 2.5.7).

Temporary nonconformities are isolated minor nonconformities that arise at a place of operation despite an essentially functioning inspection system.

Systematic nonconformities are dealt with according to KRAV's standards for

nonconformities in section 2.5. Temporary nonconformities are documented and managed by the chain's internal nonconformity system.

19.5.5 Certificates

Certificates for a **chain** are made up of a main certificate and site certificates for each **place of operation**. The main certificate as well as the site certificates must clearly indicate which parts of the activity are certified. The main certificate must have an appendix that lists the places of operation covered by the chain certification.

If the chain informs the **certification body** that a place of operation has been rejected, the certification body must immediately send a new updated list of the approved places of operation covered by the new certificate.

Labelling and Marketing

20

The KRAV label is a trademark registered with The Swedish Patent and Registration Office. The registration gives The KRAV Association sole and exclusive rights to the KRAV trademark. In this chapter there are standards on how the KRAV name and labels may be used, see also Appendix 4.

Detta kapitel innehåller

- 20.1 General Standards
- 20.2 Labelling with the KRAV Name or Labels
- 20.3 Other Labelling on Packaging
- 20.4 Marketing
- 20.5 Labelling on Delivery Vouchers and Invoices (moved to 2.3.5)
- 20.6 Voluntary Origin Labelling
- 20.7 Certification of Marketers

i *The various KRAV labels can be downloaded at www.krav.se/ladda-ner-market.*

Examples of how you may use the KRAV name and labels next to packaged and unpackaged products are in the KRAV Trademark Manual.

20.1 General Standards

The standards in this section are about the KRAV name and labels, and how they can be used on **products**, in marketing and in which operations.

20.1.1 Use of Labelling

You can use the KRAV name or label when labelling and marketing **products** from KRAV-certified **production** as well as for operations certified according to the KRAV standards. (K)

20.1.2 When a Certification Agreement is Required to Use the KRAV Name or Labels

You only have the right to label and market **products** and market operations with the KRAV name or labels if you have a certification agreement with a certification body and the **certification body** has issued a valid certificate for your production. (K)

If you are certified for trademark use according to standard 20.4.2, you may, however, without being certified use the KRAV name and label when selling unpackaged products directly to the consumer.

20.1.3 Marketing Design

You must not design marketing so that it in any way is inappropriate or misleading or discredits KRAV or **organic** production. (K)

20.1.4 KRAV as Producer

You must not use the KRAV name and labels in a way that could cause KRAV

to be perceived as a producer, distributor, reseller or marketer of the **product**.

20.2 Labelling with the KRAV Name or Labels

This section describes in more detail how you may or must use the KRAV name and various labels.

There are guidelines and examples of how the KRAV name and various labels may be used in the KRAV Trademark Manual.

20.2.1 Use of the KRAV Name or Labels

When using the KRAV name and labels you must make sure that:

- the right label is used for the standard specified, see Appendix 4,
- the size of the label is at least 12 mm for labels that do not include text. Labels with supplementary text must be at least 18 mm. On packages where the minimum area is less than 50 cm², the label may be 9 mm,
- the label is at least as prominent as the EU organic logo,
- the label has an uncovered surface corresponding to half the height of the text “KRAV”,
- KRAV is written in capital letters in all text.

20.2.2 Colour When Printing

The KRAV label must be printed in green (PMS 342) or black, and the area inside the label should be white. In exceptional cases you may:

- print the label on a colour paper background so that the surface inside the KRAV label is the same colour as the paper. In such cases, the colour of the label must be in contrast to the surrounding colour.
- print the KRAV label in the same colour as your company logo if it is printed in a shade of green very close to PMS 342.
- print the label in another colour when **individually labelling** with a laser or similar technique, as long as the label is easily legible.

If you want another colour than white on the inside of the label or want to use an inverted variation of the label, you must consult KRAV to obtain approval.

20.2.3 Use of the EU Organic Logo

You must use the EU organic logo on KRAV-certified pre-packaged **products** that are covered by Regulation (EC) 834/2007 and are packaged in Sweden or in another EU country. You must do this even though they contain **raw materials** from a country outside the EU. On packaged products that you **import** from a country outside the EU and only label, you can choose whether or not to use the EU organic logo. When using the EU organic logo, the code number of your **certification body** must be given in the same visual field. **(EU)**

20.3 Other Labelling on Packaging

20.3.1 Reference to Certification Bodies

You must indicate which **certification body** certified your production. **(EU/K)**:

- If the **product** is packaged in Sweden, you must give the certification body's code.
- If the product is packaged outside Sweden, you must use the code for the certification body that certified the last preparation measure according to the EU regulation, as well as the name of the certification body that carried out the KRAV-certification.
- If the product is packaged in a third country, you must use the code of the certification body that certified the last preparation measure according to the EU regulation, as well as the name of the certification body that carried out the KRAV-certification. This applies regardless of whether or not you use the EU organic logo.
- If the product comes from production certified according to Chapter 12 (Production Aids), Chapter 17 (Fisheries) or section 11.5 (Pet Food), you must give the name of the certification body that carried out the KRAV-certification.

When selling unpackaged products "business to business", you can give information about your certification body, for example on a delivery voucher.

20.3.2 Indication of Production Location

Directly below the code number, you must give the production location for the ingredients of agricultural origin included in the product. **(EU)**

- "EU Agriculture" if the agricultural raw material was produced in the EU.
- "Non-EU Agriculture" if the agricultural raw material has been produced outside the EU.
- "EU/Non-EU Agriculture" if some of the agricultural raw materials have been produced in the EU and some have been produced outside the EU.

You may only replace "EU" or "Non-EU" with a specific country, if all the agricultural raw materials that make up the product have been produced in that country. **(EU)**

You do not need to indicate the place of production for small quantities of ingredients, provided that the total amount of ingredients from the place of production in question does not exceed 2% of the total weight of the **raw materials** of agricultural origin. **(EU)**

20.3.3 List of Ingredients on KRAV-labelled Products

When there is a list of ingredients, you must state which **ingredients** are respectively KRAV-organic and **EU organic**. **(K)**

In lists of ingredients written in languages other than Swedish, you do not need to state KRAV-organic.

20.3.4 List of Ingredients of Products with Raw Materials from Fisheries

For products containing fish or shellfish certified according to Chapter 17 (Fisheries), organic ingredients may be marked in the list of ingredients, but the product must not be specified as organic. (EU)

When you use any of the additives that may only be used for wild-caught fish or shellfish according to Appendix 2 of the KRAV standards, the KRAV-certified ingredients in such a product may be described as “KRAV-certified”, but not as “organic”. (EU/K)

20.3.5 Labelling KRAV-certified Ingredients in a product that is not KRAV-certified

To be able to specify that a KRAV-certified **ingredient** is included in a **product**, the following must always be complied with (K):

- the same type of ingredient that is not KRAV-certified must not be included in the product,
- the requirements in the EU regulation on **additives, flavourings** and **process aids** must be complied with, and
- **raw materials**, additives, flavourings, carriers, solvents and process aids must not contain or be made of or with GMOs.

If you are KRAV-certified, you can label KRAV-certified ingredients on pre-packaged products as follows:

- products that contain at least 95% **organic** raw materials of agricultural origin can be called organic and information about the inclusion of KRAV-certified ingredients is allowed on the package and in marketing of the product. (K)
- products that contains less than 95% organic raw materials must not be called organic, and the inclusion of KRAV-certified ingredients can only be indicated in the list of ingredients and not in any other way on the packaging. (EU)

It should also be clearly indicated in the list of ingredients which ingredients are KRAV-certified and their percentage by weight. (K)

20.3.6 Responsibility for Information on the Geographical Origin of Raw Materials

You must be able to inform both consumers and other buyers about the country or origin of the **raw materials** in a **product**. (K)

You can, for example, do this on your website.

20.4 Marketing

The standards in this section are about how you can use the KRAV label in your marketing.

If you are not KRAV-certified and want to use the KRAV name or labels, you can register to use the label.

20.4.1 Marketing Companies

If you have a KRAV-certified operation, you can market the operation as KRAV-certified. This applies regardless of the media you use for your marketing. You may use the KRAV label in your marketing provided that you comply with the specifications in Appendix 4.

If your company markets both KRAV-certified **products** and non-KRAV-certified products, it is especially important that your customers receive clear information about which products are, or which **production** is, KRAV-certified. (K)

+ 20.4.2 Registration for Trademark Use

When selling directly to consumers, you may use the KRAV name and label in connection with KRAV-certified **unpacked products**, provided that you are KRAV-certified or registered for trademark use. However, if you sell KRAV-labelled pre-packaged products, no certification or registration is required, see standard 2.1.3. (K)

20.4.3 Marketing on Menus

You may use the KRAV name and label in connection with KRAV-certified **raw materials** and **products** on a menu if you comply with standard 20.4.2.

You may not use the KRAV label on a menu so that it can be interpreted as a dish being KRAV-labelled. If you want to KRAV-label a dish, your business must be certified according to Chapter 9 (Food Processing) and the dish must be registered as a product. (K)

20.4.4 Marketing for Self-service

You may use the KRAV name and KRAV label in connection with KRAV-certified **raw materials** and **products** for self-service if you comply with standard 20.4.2. This applies to both products that are exposed in their packaging and products taken out of their packaging.

You may not use the KRAV label so that it can be interpreted as meaning that an entire dish or product that you have **processed** is KRAV-labelled. To be permitted to do this, your operation must be certified according to Chapter 9 (Food Processing) and the dish must be registered as a product. (K)

20.4.5 Placement of Certificates in Restaurants

You must place the restaurant's KRAV certificate in a location where it is plainly visible to customers. For service outside the premises of a restaurant, a copy of the restaurant's KRAV certificate should be accessible for the customer, for example on the website or together with the food. (K)

20.5 Labelling on Delivery Vouchers and Invoices

Moved to standard 2.3.5.

20.6 Voluntary Origin Labelling

The standards in this section deal with the KRAV voluntary origin labelling for **products** produced in Sweden.

+ 20.6.1 Who May Use Voluntary Origin Labelling

Those who are KRAV-certified and comply with the criteria in standards 20.6.2, 20.6.3 and 20.6.4 may use the KRAV voluntary origin labelling.

+ 20.6.2 Raw Materials and Products

The following is required in order for you to be able to label a product with the KRAV voluntary origin label:

- Products that consist of just one **raw material** must come from a KRAV-certified **production** in Sweden.
- Composite products must use at least 75% by weight **ingredients** from KRAV-certified production in Sweden. The product must also comply with the standards for composite products in Chapter 9 Food Processing.
- In products that contain raw materials of animal origin, these must be from KRAV-certified production in Sweden.
- An imported ingredient must not be used in a product with a Swedish KRAV-certified ingredient of the same type.

+ 20.6.3 Processing, Packaging and Labelling

All processing, packaging and labelling of the **product** must take place at KRAV-certified facilities in Sweden.

+ 20.6.4 Information on Packaging

When there is a list of ingredients, it must be clear which **ingredients** are from Sweden.

20.7 Certification of Marketers

Certification of marketers is its own type of production that includes companies that only market products with their own name or trademark, but have no production themselves. To be certified according to 20.7, you must comply with the standards in Chapters 2, 3 and 20.

20.7.1 Who Must Be Certified

Those who only market KRAV-certified **products** with their own name or trademark, where another actor has carried out the production, must be certified according to this type of **production. (K)**

Appendices



Appendix 1 – Permitted Conventional Feed and Feed Additives (EU)

This Appendix presents permitted conventional feedstuffs, permitted feed of animal origin, permitted feed additives and fermentation by-products.

PERMITTED FEED RAW MATERIALS OF ANIMAL ORIGIN

- Raw materials (dairy and egg products) from KRAV-approved production.
- Products from sustainable fisheries are permitted for poultry and pigs if:
 - they are produced or processed without chemical solvents, and
 - use of protein hydrolyzate from fish is restricted to young animals only.

PERMITTED CONVENTIONAL FEED RAW MATERIALS OF PLANT ORIGIN

Until the end of 2021, pigs and poultry can annually be given a maximum of 5% conventional protein feed of agricultural origin, if organically produced protein feed is not available. The portion must be calculated on an annual basis based on the dry substance content of feed from agricultural products. **(EU)**

You can also use conventional spices, herbs, and molasses, if:

- they are not available as KRAV-certified
- they are produced or processed without chemical solvents
- use by farmers is limited to 1% of the feed for a given species, calculated annually based on dry substance content in feed of agricultural origin.

PERMITTED FEED RAW MATERIALS OF MINERAL ORIGIN AND OTHER FEED RAW MATERIALS

- All raw materials that are permitted according to sections 1 and 2 of Annex V to Regulation (EC) 889/2008.
- Salt (sodium chloride) is allowed.

APPROVED FEED ADDITIVES

- All raw materials that are permitted according to Annex VI to Regulation (EC) 889/2008.
- Salt (sodium chloride) is allowed.

Appendix 2 – Food Additives

According to Standard 9.3.4

The following technological food additives (including carriers permitted in the KRAV standards), can be added to a KRAV-certified product. An X in a column means that the additive can be used. For products containing both vegetable and animal raw materials, the additive is permitted if it is permitted in any of the ingredients in the multi-ingredient food.

Additives for the production of wine from grapes listed in Annex VIIIa of Regulation (EC) 889/2008 are permitted.

When ink is used to stamp eggs, the requirements of Article 17 of Regulation (EC) 1333/2008, apply.

It is permissible for salt (sodium chloride) to contain the anti-caking agents normally used. KRAV recommends that salt without additives be used whenever possible.

Additive	Vegetable food products	Animal food products	Special conditions
calcium carbonates (E 170)	X	X	Cannot be used for colouring or calcium enrichment.
sulphur dioxide (E 220)	X	X	Only in fruit wines (*) and mead with or without added sugar. Maximum content from all sources: 100 mg SO ₂ /l. (Food of animal origin is only with regard to mead.)
sodium pyrosulfite (E 223)		X	Only in crustacean preparations, wild fish and shellfish.
potassium disulphite (E 224)	X	X	Only in fruit wines (*) and mead with or without added sugar. Maximum content from all sources: 100 mg SO ₂ /l. (Food of animal origin is only with regard to mead.)
lactic acid (E 270)	X	X	
carbon dioxide (E 290)	X	X	
malic acid (E 296)	X		
ascorbic acid (E 300)	X	X	Only for meat products and wild fish and shellfish in food of animal origin.
tocopherol-rich extract (E 306)	X	X	Anti-oxidant.

Additive	Vegetable food products	Animal food products	Special conditions
🔄 lecithin (E 322)	X	X	Only for milk products within products of animal origin. Only when it originates organic raw materials. <i>From 1 January 2022: only when it originates from organic production.</i>
citric acid (E 330)	X	X	
sodium citrate (E 331)	X	X	
calcium citrate (E 333)	X		
tartaric acid (L(+)-form) (E 334)	X	X	Only for mead regarding food of animal origin.
sodium tartrate (E 335)	X		
potassium tartrate (E 336)	X		
mono calcium phosphate (E 341)	X		Only as a leavening agent for flour.
extract of Rosemary (E 392)	X	X	Only when originating from organic production.
alginic acid (E 400)	X	X	Only for milk-based products within products of animal origin.
sodium alginate (E 401)	X	X	Only for milk-based products within products of animal origin.
potassium alginate (E 402)	X	X	Only for milk-based products within products of animal origin.
agar (E 406)	X	X	Only for milk-based products and meat products within products of animal origin.
carrageenan (E 407)	X	X	Only for milk-based products within products of animal origin.
🔄 locust bean gum (E 410)	X	X	<i>From 1 January 2022: only when it originates from organic production.</i>
🔄 guar gum (E 412)	X	X	<i>From 1 January 2022: only when it originates from organic production.</i>
🔄 acacia gum, gum arabic (E 414)	X	X	<i>From 1 January 2022: only when it originates from organic production.</i>
xanthan gum (E 415)	X	X	
+ tara gum (E 417)	X	X	Only when it originates from organic production.

Additive	Vegetable food products	Animal food products	Special conditions
+ gellan gum (E 418)	X	X	Only with high acyl group content. Only when originating from organic production.
+ glycerol (E 422)	X	X	Only when originating from organic production. For plant extracts, flavourings, moisturizers in gel capsules and as a surface layer on tablets.
pectin (E 440 (i))	X	X	Only for dairy-based products for products of animal origin. Amidated pectin is prohibited in all products.
sodium carbonates (E 500)	X	X	
potassium carbonates (E 501)	X		
ammonium carbonates (E 503)	X		
magnesium carbonates (E 504)	X		
calcium chloride (E 509)		X	Only permitted for milk coagulation.
calcium sulphate (E 516)	X		Only permitted as a carrier.
sodium hydroxide (E 524)	X		Only permitted as surface treatment of "Laugengebäck" and regulation of acidity in organic flavourings.
silicon dioxide (E 551) in gel or colloid form	X	X	Only permitted in herbs and spices in the form of dried powder, as well as flavourings and propolis.
beeswax (E 901)	X		Only as a glazing agent for confectionery. Only organic beeswax.
🔄 carnauba wax (E 903)	X		Only as a glazing agent for confectionery. xxx xxx xxx Only when originating from organic raw materials. <i>From 1 January 2022: only when it originates from organic production.</i>
argon (E 938)	X	X	

Additive	Vegetable food products	Animal food products	Special conditions
nitrogen (E 941)	X	X	
oxygen (E 948)	X	X	
acetic acid (E 260), sorbic acid/sorbates (E 200, E 202-203), sodium benzoate/benzoates (E 211- 213), and calcium hydroxide (E 526)		X	Only for wild-caught fish and shellfish.

(*) In this context fruit wine is defined as wine made from fruits other than grapes (including cider and pear cider).

Appendix 3 – SIN List Substances in Food Packaging

A SIN (Substitute It Now!) substance is a substance identified by the International Chemical Secretariat (ChemSec) as a “substance of very high concern” (SVHC) according to the criteria in the EU chemical regulation REACH. Following is a list of SIN substances that may be present in food packaging, and that must be included in documentation of SIN substances regardless of the material the packaging consists of.

CAS	SIN-substance	Packaging Material					
		card-board/ paper	wood/ cork	coating	printing ink	rubber	plastic
100-42-5	styrene				X		X
10043-35-3	boric acid		X		X		
101-14-4	4,4'-Methylenebis [2-chloroaniline]					X	
101-77-9	4,4'-Methylenedianiline				X		
106-89-8	epichlorohydrin	X			X		X
106-91-2	glycidyl methacrylate	X			X		X
106-99-0	1,3-Butadiene				X		X
107-13-1	acrylonitrile				X		X
108-46-3	1,3-Benzenediol (Resorcinol)				X		X
109-86-4	2-Methoxyethanol				X		
110-80-5	ethylene glycol monoethyl ether				X		
111-41-1	ethanol, 2-[(2-aminoethyl)amino]				X		X
115-96-8	tris(2-chloroethyl) phosphate				X		X
117-81-7	di(ethylhexyl) phthalate (DEHP)	X			X		X
117-84-0	dioctyl phthalate (DOP)				X		X
119-61-9	benzophenone				X		X
123-77-3	azodicarbamide					X	
126-99-8	2-Chloro-1,3-butadiene					X	

CAS	SIN-substance	Packaging Material					
		card-board/ paper	wood/ cork	coating	printing ink	rubber	plastic
128-37-0	butylhydroxytoluene (BHT)				X	X	X
1309-64-4	antimony trioxide				X		X
131-56-6	2,4-Dihydroxybenzophene, benzophenone-1 (BP-1)				X		X
131-57-7	benzophenone-3; (BP-3), oxybenzone				X		X
1330-43-4	sodium tetraborate	X			X		X
137-26-8	thiram	X		X			
137-30-4	ziram					X	
137-42-8	methyldithiocarbamic acid, sodium salt	X			X		X
140-66-9	4-(1,1,3,3-Tetramethylbutyl) phenol				X		
151-56-4	aziridine				X		X
15571-58-1	dioctyltin bis(2- ethylhexylmercaptoacetate)				X		X
25013-16-5	2 and 3-tert- butylhydroxyanisole (BHA)			X	X		X
26027-38-3	4-nonylphenol, ethoxylated	X					
28553-12-0	diisononyl phthalate (DINP)				X		X
3380-34-5	triclosan				X		
3825-26-1	ammonium perfluorooctanoate (PFOA)				X		X
3864-99-1	UV-137, (2-(5-chloro-2H- benzotriazole-2-yl)-4,6- bis(1,1-dimethylethyl)phenol)				X		X
50-00-0	formaldehyde	X	X		X		X
54079-53-7	CHPD						X
56-35-9	Tributyltin oxide (TBTO)		X				
611-99-4	4,4'-dihydroxy benzophenone				X		X
620-92-8	bisphenol F			X	X		
630-08-0	carbon monoxide						X

+

CAS	SIN-substance	Packaging Material					
		card-board/ paper	wood/ cork	coating	printing ink	rubber	plastic
68515-48-0	1,2-Benzenedicarboxylic acid, di-C8-10-alkyl esters, branched, C9-rich				X		X
+ 7128-64-5	uvitex OB						X
71-43-2	benzene			X			
75-01-4	chloroethylene					X	X
75-21-8	ethylene oxide				X		X
75-56-9	methyloxirane				X		X
7632-04-04	sodium perborate	X					
77-58-7	dibutyltin dilaurate			X			
78-79-5	isoprene				X		X
79-06-1	acrylamide						X
80-05-7	bisphenol A				X		X
8009-03-8	petrolatum			X			
80-09-1	bisphenol S	X					X
84-61-7	dicyclohexyl phthalate (DCHP)	X		X	X		
84-65-1	anthraquinone	X			X		
84-66-2	diethylphthalate (DEP)	X		X	X		X
84-69-5	diisobutyl phthalate (DIBP)	X		X			
84-74-2	dibutyl phthalate (DBP)	X					X
85-68-7	benzyl butyl phthalate (BBP)	X			X		X
872-50-4	N-methyl-2-pyrrolidone				X		X
9016-45-9	nonylphenol, ethoxylated	X					
94-13-3	propylparaben; propyl 4-hydroxybenzoate				X		X
95-80-7	4-methyl-m-phenylenediamine					X	
96-45-7	ethylene thiourea					X	
98-54-4	4-tert-butylfenol				X		X

Appendix 4 – The KRAV Labels

This Appendix presents the KRAV labels and which standards or types of production that must be complied with in order to use them.

The KRAV Label



- **Type of production:** You may use the KRAV label if you are certified and comply with standard 20.1.1 or if you are registered for trademark use.
- **Comments:** Those certified according to Chapter 12 and Chapter 15 have specific labels intended for their type of production. See below.

Those certified according to Chapter 12 may however use the KRAV label for production aids that consist of 100% of products or raw materials from KRAV-certified production.

Those certified according to Chapter 15 may use the KRAV label to label ingredients on menus and for self-service if standard 20.4.3 or 20.4.4 is complied with.

The KRAV Label for Production Aids



- **Type of production:** Chapter 12 Manufacturing, Management and Marketing of Production Aids.
- **Comments:** May only be used on production aids certified according to the standards in Chapter 12.

The KRAV Label for Restaurants



- **Type of production:** Chapter 15 Restaurants and Caterers.
- **Comments:** You may only use the label on operations certified according to the standards in Chapter 15. The KRAV label may be given on certificates, signs and in other marketing. The label must not be used to label KRAV-certified ingredients on menus and for self-service.

🔄 The Voluntary KRAV Label for Export



The former KRAV label for export may be used until 1 January 2023.

- **Type of production:** Chapter 9 Food Processing.
Chapter 11 Feed Production.
- **Comments:** The voluntary additional label that replaces the KRAV label for marketing outside Sweden. May only be used on KRAV-certified products intended for export.

Definitions

D

The following definitions are used in the KRAV standards.



additive

Sometimes called technological additives. Substances that have a technical purpose in the food product and for which government agencies have determined require a special safety test. These additives have an E number. For example, ascorbic acid (vitamin C) is a technological additive when used as an antioxidant and has E number E300. Additives must always be given in the list of ingredients on the food label. Most enzymes are not considered as food additives, but invertase (E 1103) and lysozyme (E 1105) are until further notice classified as food additives.

agricultural holding/farm

An agricultural property or agricultural business comprised of one or more registered properties or parts of such properties with joint accounting. The concept is equivalent to the definition of “holding” in Regulation (EC) 834/2007. The terms “farm” and “agricultural holding” mean exactly the same thing here.

analgesia/analgesic

Long-term alleviation of pain after an operation. Many studies show a reduced frequency of pain related behaviour, however with little or no pain relief during the actual operation. Veterinary medicinal products with NSAID (non-steroid anti-inflammatory drugs) inhibit the enzyme cyclooxygenase (COX-1 and COX-2) and formation of prostaglandin (PG) in the damaged tissue. Without pain relief the PG activates an inflammation reaction resulting in, amongst other things, pain.

See also local *anaesthetic* and *sedation*.

animal health

An animal's physical well-being.

animal welfare

Animal health and other well-being.

animal welfare officer

The responsibilities, role and qualifications of this person are defined in Regulation (EC) 1099/2009, Article 17. Note however that all KRAV-certified slaughterhouses must have an animal welfare officer (even if less than 1,000 livestock units are slaughtered per year). This person must have completed a course approved by the Swedish Board of Agriculture.

approved food

The concept is used in the KRAV standards for restaurants and caterers (Chapter 15 and the labelling standards in Chapter 20), and includes KRAV-certified products and raw materials, EU organic vegetable products and MSC-labelled products. If additives are used, only those in KRAV's Appendix 2 are permitted.

article

A term used in connection with an accounting of sales value. KRAV-certified products must be registered at the article level, which means that all articles must be reported to KRAV. Example: KRAV-labelled semi-skimmed milk sold under the same brand is a product, regardless of package size. Each size of package is an article.

artificial fertiliser

Industrially manufactured synthetic fertiliser.

audit

An independent, systematic evaluation to determine if a KRAV-certified entity complies with the KRAV standards. An audit can be carried out using techniques such as inspections, audits, sampling, testing, mapping, etc. The certification body must always verify that those being certified understand the standards and have methods of operation and routines to comply with the standards, which is why an audit is the dominant technique used. Choice of inspection technique must be based on an individual risk assessment.

- Annual audit: At least one annual on-site audit is carried out for all KRAV-certified entities. All the relevant standards are reviewed during an annual on-site audit. Both documentation and facilities are reviewed (see standard 2.4.3).
- Extra audit: A certified entity can receive one or more extra audits in addition to the regular audit. For example, an extra audit can be carried out to follow-up on nonconformities if it is required by the standards. Extra audits can be announced or unannounced.
- Unannounced audit: An on-site audit of a certified entity with no notification or not more than 24 hours notification.

auditor

A person who can and is allowed to carry out inspections.

B

basic human rights

Rights regulated in the UN Universal Declaration Of Human Rights from 1948.

biocide

A chemical or biological pest control substance made to prevent or counteract animals, plants and micro-organisms, including viruses, from causing damage to, or problems for, human health or property.

biological process

Processes that take place with the help of living organisms, e.g. anaerobic digestion, composting, and fermentation.

bleeding

Draining blood from an animal's body.

bottleneck

A passage in a poultry exercise area that is narrower than the required total opening width of the pop-hole from a veranda to the exercise yard. For hens this is 6.7 m per 1,000 hens and for table birds 4 m per 100 square metre floor area (see Table 4c, column 2, standard 5.5.4.2).

bringing in

Purchasing a product from another country within the EU and EES. You can freely bring in organic products from these countries, but they cannot automatically be KRAV-labelled.

C

cage

An enclosure with greatly limited floor space for one animal or a small group of poultry or other small animals.

calf

A cow under six months of age.

carrier of additives and flavourings

Substances used in the smallest, absolutely necessary quantity as a carrier for additives and flavourings are not considered ingredients. For example, corn starch can be used as a carrier for a flavouring.

catch crop

A crop that grows primarily between the main crops and that is grown in order to reduce nutrient losses after harvest of the main crop. It often consists of grass.

catering

A business activity where food is prepared for immediate consumption at a different location than where production takes place. The food must not be subject to further preparation other than heating after it has left the kitchen where production takes place.

certificate

Document indicating KRAV-certification for a special product, production or activity.

certification body

An organisation that can and is authorized to certify production or products according to a standard. Many certification bodies offer certification according to several standards. A certification body must be accredited for the certification it offers. To be able to certify according to the KRAV standards, the certification body must be accredited by Swedac within the type of production certification is offered.

certification system

A certification system is comprised of standards that must be complied with and how they must be audited.

chain

A group of places of operation that have a common management system, common economic accounting, and a common trademark or graphic image.

cleaning

The process of removing dirt from, for example, floor surfaces and production equipment. This can take place through the use of dry or wet methods – mechanical or hydromechanical treatment. Aids include various tools such as brushes, rags or high-pressure washers. Cleaning agents are often used to dissolve grease and dirt. Chemically, these are often detergents.

colouring agent

Substances that have or can give colour. These can be natural or synthetic.

conventional

Production or product from production that is not KRAV-certified, EU organic, or in conversion to KRAV-certified or EU organic production.

conversion

Transition from conventional to KRAV-certified production.

See also *in-conversion*.

conversion period

The set time period during which you must comply with the KRAV standards until the product is KRAV-certified. Production must be registered for inspection during the whole conversion period. If production is not approved, a new conversion period begins, providing nothing else is specified in the disapproval decision.

See *withdrawal period* regarding medication.

core activity

An activity whose purpose is to produce a product or raw material that will be KRAV-certified or KRAV-labelled.

crop rotation

A planned sequence of crop changes on one specific parcel.

**deep litter area/litter area**

A litter area is cleaned out at intervals of one to several weeks up to a year. It is kept dry by spreading new layers of litter on the old litter.

A deep litter area is a litter area that is cleaned out once or a couple times per year.

delimited bed

A cultivation bed that is separated from the ground so that the soil is not in contact with the subsoil or bedrock.

delimited substrate

Cultivation substrates that are not in contact with the subsoil or bedrock, for example, cultivation in pots or delimited beds.

disinfection

Treatment of premises, material or staff using physical or chemical methods with the purpose of eliminating the risk of transferring infection. This does not mean that all micro-organisms are removed or killed (which occurs with sterilisation) but that the amount of potential pathogenic micro-organisms is reduced to the degree that the risk of infection is eliminated. Treatment of air and water to prevent spread of infection is also considered disinfection.

dissolvent for additives and flavourings

A substance used in a very minute quantity that is absolutely necessary to dissolve additives and flavourings. These substances are not considered ingredients.

dry matter (DM)

That which remains when all the water has been removed from something, for example from feed. The concept is used, for example, for feed in order to compare products with widely varying water content.



ecolabelled product

A product labelled with the Nordic Ecolabel (*Svanen*), Good Environmental Choice (*Bra Miljöval*), or equivalent independent third-party ecolabelling.

edible parts of a crop

Edible parts of plants are defined for different crops (A-I). The definition complies with Swedish organic sector's National Guidelines for Organic Production.

- A. Ley, whole crop silage, green fodder.
Above-ground plant parts.
- B. Cereals for threshing, i.e., grain and straw and straw from herbage grass-seed production.
After stem elongation has begun (DC 32).
- C. Legumes and rapeseed for threshing.
After flowering.
- D. Herbs and lettuce in pots, for example dill, parsley, basil.
Above-ground plant parts.
- E. Vegetables, such as lettuce, cabbage plants with shoots, leaves or flowers as an edible part, mangold, spinach, dill, parsley, celery root, asparagus, peas, beans, celery, herbs, onion. Tops of early root vegetables, such as bunches of carrots.
Above-ground plant parts.
- F. High-growing vegetables, for example tomatoes, cucumbers, peppers and eggplants.
Unripe fruit after the petals have fallen.
- G. Root vegetables, for example carrots, parsnips, potatoes, cabbages with roots as the edible part, beets, celery root.
Underground plant parts.
- H. Berries, for example strawberries and black currants.
Unripe fruit after the petals have fallen.

I. Fruit.

Unripe fruit after the petals have fallen.

employment

An agreed upon exchange between an employer and employee. It can be a permanent, probationary or temporary position.

endangered species

Included among endangered livestock are the species animal farmers can receive government compensation for, i.e. Swedish Mountain cattle, Rödkulla cattle, Ringamåla cattle, Väneko or Bohuskulla cattle, Linderödssvin pigs, Svensk Lantrasget goats, Jämtget goats, Göingeget goats, Lappget goats, Gutefår sheep, Svensk Finull sheep, Ryafår sheep, Roslagsfår sheep, Dala Pälsfår sheep, Värmlandsfår sheep, Helsingefår sheep, Gestrikefår sheep, Klövsjöfår sheep, Åsenfår sheep and Svärdsjöfår sheep.

enrichment product

Substances, for example, minerals, including trace elements, vitamins, amino acids and micronutrients, that are added for the purpose of satisfying special nutrient needs or for replacing vitamins that were lost during manufacturing.

established animal group

A group of animals that have had the necessary time to establish social relationships amongst themselves.

EU organic

A product or production that is not KRAV-certified, but is only certified according to the current EU regulation for organic production (EC) 834/2007.



farm/agricultural holding

See also *agricultural holding/farm*.

feed from conversion year cultivation/conversion feed

Feed cultivated on land in conversion and harvested at the earliest 12 months after the beginning of the conversion period. Some crops may be used earlier as feed for one's own animals, which is noted in the standards.

feed supplement

A product that contains specific nutrient substances that is used to complement other feed as needed, for example mineral feed.

fermentation

Oxygen-free breakdown of organic material.

flavouring

Materials made up of aromatic substances and carriers or solvents, also called aromas.

**genetically modified organism (GMO)**

An organism in which the genetic material has been changed in such a way that does not exist in nature from mating or natural recombination.

This definition includes the genetic modification that arises from the application of at least the following methods:

- Hybrid DNA methods with the vector system that is included in the European Council's recommendation 82/472/EEC.
- Methods that directly inject hereditary material into an organism that was prepared outside the organism using techniques such as micro-injection, macro-injection and micro-encapsulating.
- Cell fusion (including protoplast fusion) or methods of hybridization where living cells with new hereditary genetic codes are artificially created by fusing two or more cells.

The following methods are not considered to lead to genetic modification providing that hybrid DNA molecules or genetically modified organisms are not used:

- in vitro fertilization
- conjugation, transduction, transformation or other natural process
- polyploidy induction.

genomic selection

The breeding value of an animal is determined with the help of DNA markers using a blood or tissue sample from an animal.

grazing period

The time the animal must be out grazing, as a continuous period during the growing season. For ruminants, it is the minimum time for grazing which are:

- at least two months in Dalarna, Gävleborg, Västernorrland, Jämtland, Västerbotten, and Norrbotten
- at least three months in Stockholm, Uppsala, Södermanland, Östergötland, Jönköping, Kronoberg, Kalmar, Gotland, Västra Götaland, Värmland, Örebro, and Västmanland
- at least four months in Blekinge, Skåne, and Halland.

For pigs and poultry, a minimum of four months is required.

greenhouse

A permanent building where plants are cultivated. The building is in the same location for several years, which means that tunnel cultivation on open land that is moved around is not included in the definition. Cultivation in distinct beds is always considered as a greenhouse.

green manure/green manure crop

A crop that is not harvested for feed or food, and is meant to be used as fertiliser, often on the same land that it is grown. It is usually made up of nitrogen fixing legumes.

***handling***

Everything done with a product that does not change it. Included here is receiving the product, storage, sorting and packaging. Also included is drying one's own grains on the farm and washing one's own products on the farm with clean water.

hard herding

The illegal use of electric prods, herding by for example tail twisting (which is prohibited by Swedish law), hard kicks and blows or hard and/or repeated blows or pokes with a weapon, as well as careless herding with gates or similar equipment.

hazardous waste

Materials that are, for example, explosive, flammable, oxidizing, poisonous and harmful to health. Examples of hazardous waste are used oil, impregnated lumber, electric and electronic scrap, batteries, solvents, paint and lacquer.

health plan

A plan adapted to your herd oriented towards strategic preventive measures for animal health, including disease control, made together with a veterinarian.

health program

An established program with systematic follow-up of animal health, adapted to the respective livestock.

herding

Making animals move on their own in a desired direction.

high conservation value (HCV)

Areas with natural ecosystems and a high protection value as defined by the organisation HCV Network according to six values. The values include species diversity, landscape-level ecosystems and mosaics, ecosystems and habitats, ecosystem services, community needs and cultural values. The complete definition can be found at www.hcvnetwork.org.

high-lactating ruminant

Cows, sheep and goats with obviously strained udders in need of regular milking. See also the reference in the Swedish Board of Agriculture's regulation on slaughter and killing (SJVFS 2019: 8 case no. L22).

humus soil

Topsoil containing at least 30% by weight organic material. A parcel is considered to consist of humus if the humus soil covers more than half of the parcel's surface area.

**IAF MLA signatory**

An accreditation body that signed a multilateral agreement (MLA) with the International Accreditation Forum (IAF) to follow their principles. An MLA is a multilateral agreement, a so-called multi-party agreement. The IAF is a global association of accreditation bodies, that for example includes Swedac in Sweden and the United Kingdom Accreditation Service (UKAS) in the UK.

ICES

International Council for the Exploration of the Sea.

IFOAM

International Federation of Organic Agriculture Movements is a worldwide collaborative federation for organic production, that develops international standards for organic production - IFOAM Norms for Organic Production and Processing. These include:

- IFOAM Standards
- IFOAM Standards Requirements
- IFOAM Accreditation Requirements

The KRAV standards comply with IFOAM Standards Requirements.

import

Purchase of products from a third country (a country outside the EU and EES). In order to import organic products, an import permit from The National Food Administration or Swedish Board of Agriculture may be required.

in-conversion seed/seed from land in conversion

Seed cultivated on land in conversion to KRAV-certified production where conversion began at least 12 months before harvest.

See also *conversion*.

independent picker

A person who picks berries, plants or mushrooms for a few days and up to several months. As a private individual, the person sells the berries, plants or mushrooms picked. An independent picker does not work on behalf of an employer.

individually labelled

Products in bulk that are individually labelled or in bundles with a label, such as a KRAV label.

initiator

A substance that initiates polymerization and/or controls the formation of the macromolecular structure. Initiators are used in very small amounts and are not intended to remain in the final polymer.

ingredient

Ingredients are divided into the categories of raw materials, food additives and flavouring.

In this text raw material ingredients are also called raw materials. Such ingredients are the foundation of a recipe, for example milk, lactose, turmeric and lactic acid bacteria.

Food additives are enrichers or technological supplements.

intermediate crop

A crop that grows between two main crops.

The International Chemical Secretariat's SIN (Substitute It Now!) List

“ChemSec, the International Chemical Secretariat, is a non-profit organisation founded in 2002 by four environmental organisations”. They “strive to reach broad acceptance in society for the key principles of Precaution, Substitution, Polluter Pays and Right to Know.” (Source: www.chemsec.org/about-us). Their work includes the establishment of a list of chemical substances harmful to health and the environment that are especially important to phase-out, called

the SIN List. A SIN substance meets the EU regulation criteria for “Substances of Very High Concern (SVHC)”. The list is available at www.sinlist.org.



key performance indicator

A comparative number calculated to analyse activity and used to follow-up an activity's quality improvement.

KRAV-certified/KRAV licensee

A producer or equivalent that has a contract with a certification body authorized to certify according to the Standards for KRAV-certified Production. The term “producer” in the standards means “KRAV-certified producer”.

KRAV number

A number provided by KRAV when a new customer is registered. Starting in 2017, all KRAV certificate licensees must have a KRAV number. The number stays with the licensee in the case of a change of certification body.



lairage

A place where animals are kept on the way to slaughter.

land under vegetative cover during autumn or winter

The crops and measures (for example uncultivated stubble) that are counted as “land under vegetative cover during autumn or winter” according to the regulations of the Swedish Board of Agriculture. For the Mälardalen region as well as western Svealand and Norrland, the same date limits apply as those according to the regulations of the Swedish Board of Agriculture for Östergötland and Västra Götaland.

landing

Delivery of a catch from a fishing vessel to a recipient on land.

lead auditor

An experienced auditor who acts as a leader for a team of auditors.

legume

- Plants from the pea family alone or in mixtures such as: clover-grass meadows, clover-seed meadows and pulses.
- Mixtures with cereals, such as peas-oats or field-bean-wheat, where the proportion of legumes is at least 30%.
- Under-sown subsidiary crop, intermediate crop and catch crop where the proportion of legumes is at least 40%. Counted as 0.3 x legumes.

litter area/deep litter area

A litter area is cleaned out at intervals of one to several weeks up to a year. It is kept dry by spreading new layers of litter on the old litter.

A deep litter area is a litter area that is cleaned out once or twice a year.

local anaesthetic

The relief of pain that occurs during an operation (for example, incision or branding). No long-lasting analgesia is received after the operation. The active substance in the drug blocks the nerve fibres from sending impulses causing the tissue to become numb - be frozen (anaesthetised). In order to extend the anaesthetic's presence in the tissue, adrenalin can be added to the drug.

See also *sedation* and *analgesia/analgesic*.

long-term ley

Ley not ploughed for at least five years.

**main crop**

The main crop of the growing season and that is harvested for feed or food or used as green manure in the current year.

main raw material

The dominating raw material by weight in a composite product.

management system

A documented system that includes organizational structure, planning, responsibilities, practices, routines, processes, and resources for developing, implementing, performing, modifying and maintaining an activity. Management systems can be certified, but certification is not required for this definition. Examples of standards for certifiable management systems are ISO 9001 and ISO 14001.

maximum permissible ration

The maximum quantity of a fertiliser or soil improvement product (production aid) that a farmer can add to the soil without it, at the same time, resulting in too great a quantity of heavy metals or plant nutrients. The maximum permissible ration can be calculated over a period of five years at the most. You must state the period of time used in your calculation.

**nanomaterial, engineered**

Intentionally produced nanomaterials with the exception of those that arise during traditional food processing. Nanomaterials which are naturally present in the environment (e.g. volcanic ash), naturally present in food (e.g. monosaccharides, amino-acids and fatty acids) or are created unintentionally (e.g. flour or homogenised milk) are not included.

national guidelines

The trade's interpretation of the EU law for organic production. These can be found on the website of the Federation of Swedish Farmers (LRF), www.lrf.se. (In Swedish only.)

natural flavouring substance

A flavouring substance produced using appropriate physical, enzymatic or microbiological processes from materials of vegetable, animal or microbiological origin. Natural flavouring substances correspond to substances that are naturally occurring and have been identified in nature.

nonconformity

Departure from the KRAV standards.

nonconformity, report on

The certification body's report to the producer responsible that KRAV standards are not being complied with.

non-naturally occurring

Substances that do not occur naturally and which have not been identified in nature.

**organic**

A term that may be used when labelling and marketing products if the EU regulation for organic production (EC) 834/2007 is complied with. KRAV-labelled products are organic, with the exception of those certified according to the standards for Fisheries in Chapter 17.

outdoor period

The time before and after the grazing period, when ground and weather conditions allow animals to be outdoors. The outdoor period must be at least two months.

**packaging materials**

Products for containing, protecting, handling and/or presenting goods regardless of material.

P-AL class

A division of soils according to the concentration of easily soluble phosphates.

parallel production/parallel cultivation

Within agriculture, the term parallel production is found both within plant and animal production.

Parallel production within animal production means that the same livestock is cared for both conventionally and according to the KRAV standards within the same agricultural holding/company. Parallel animal production is only permitted under very limited conditions.

Parallel production within crop cultivation is when the same type of crop is both cultivated conventionally and according to the KRAV standards within the same agricultural holding/company. Parallel cultivation is only permitted under very limited conditions.

perishable goods

Food that is not treated for the purpose of preservation by for example sterilization, salting, drying, smoking or deep freezing and that therefore can have a limited shelf life. Perishable goods can be prepared or not prepared. The shelf life of certain perishable goods depends on their being handled in a certain manner, for example, by being refrigerated.

permitted feedstuffs (assessed as)

Non-KRAV-certified feed that has been assessed as permitted by a certification body for use in KRAV-certified production. These are not KRAV-labelled but are published in a list on the KRAV website.

permitted production aid (assessed as)

A non-KRAV-certified production aid for which an accredited certification body has reviewed the list of ingredients and determined that it is permissible for use in KRAV-certified production. These are not KRAV-labelled but are published in a list on the KRAV website.

pest control

Use of physical, biological or chemical methods (with biocides) to prevent damage to, for example, food or property.

pesticide

A biocide or a plant protectant. A pesticide is defined in The Environmental Code (a set of Swedish laws) as a chemical or biological product intended to prevent or counteract animals, plants and micro-organisms from causing damage to or problems for human health and/or property. Only pesticides that have been approved by the Swedish Chemicals Agency may be sold and used.

physical process

A process using physical methods, e.g. milling, freezing and drying.

place of operation

A physically delimited location where restaurant activity is carried out, and that is part of a chain (see chain).

place of production

A physically demarcated operation that is KRAV-certified. The concept corresponds to “production unit” in the EU regulation. In the EU regulation the concept is used for labelling to indicate where a product was produced (EU/non-EU agricultural or country), and therefore the concept is used in this way in standard 20.3.3.

plant nutrient balance

The relation between added plant nutrients (e.g. in purchased fertilisers) and the plant nutrients removed in the products that leave the farm.

plant protectant

These are mainly used to protect plants and plant products in agriculture, forestry and gardening. Their purpose is to protect plants or parts of plants from pests, fungi or competing plants, etc.

polymerization aid

A substance used to provide a suitable medium for the manufacture of polymers or plastics. It may unintentionally occur in the final material but has no physical or chemical effect on it.

precautionary principle

If the environmental impacts of a substance, product or activity are unknown or uncertain, then it is better to err on the side of caution to minimize possible risks. The “general rules of consideration” in the Environmental Code (a set of Swedish laws) means that anyone planning an activity should take protective measures, observe limitations and otherwise take the amount of precaution necessary so the activity will not harm health or the environment.

primary packaging

A package that encloses and is in contact with a product when sold to the end user. A consumer package is an example of a primary package, but a primary package can also be packaging for products sold to industry or agriculture to be included in the production, or to restaurants and caterers.

process aid

Substances used in production but not considered as ingredients and that do not have a technological influence on the finished food product. An example is vegetable oil used as a release agent.

processing

An overall concept for all preparation of agricultural products and other raw food materials into food, feed and production aids. In the first phase, packaging and labelling of the product are not considered processing, but if the product is for example washed or peeled it is considered processed. Examples of processing are milling grain, juice production, processed meat production, dairy, bakery, slaughtering and cutting up operations, conserving, deep freezing, drying or other conserving treatment.

producer

The entity certified according to the KRAV standards and that cultivates, produces, handles, processes, distributes, brings in or imports a product. In the text, the term means the same as a KRAV licensee.

product

Everything from live or unprocessed products from agriculture, aquaculture, and fisheries to processed, packaged products intended for use as food, as well as wool, hides and production aids.

production

Primary production, processing, handling, storing and packaging of a product or raw material that will be KRAV-certified or KRAV-labelled. Activities carried out in KRAV-certified restaurants and shops are also production.

production unit

A clearly defined part of an agricultural holding in cases when the whole agricultural holding is not run according to the KRAV standards. A production unit can consist of one or more parcels of land or greenhouses.

protein crop

Crops including: peas (other than canned peas), field beans (here equivalent to broad beans and horse beans), sweet lupins (which may make up 5% at the most of bitter seeds), vetch and soy. Crops mixed with grain may also be included, as long as the share of grain is less than 50%. The crops can be harvested green, as whole crop silage or as mature harvest.

***quarantine***

Isolated housing to keep introduced animals apart from the existing herd due to the risk of infection.

***raw material***

Raw material ingredients are here also referred to as raw materials. They are those ingredients that are the elements in a recipe, for example milk, lactose, turmeric, and acid culture.

ready-packaged

A product marked with the KRAV name or label. This also includes individually labelled products in bulk.

ready-packaged dishes

A dish in unchanged form that is meant to be sold to end consumers and caterers and that consists of one dish and the packaging it is placed in prior to being available for purchase. The dish must not be able to be altered unless the packaging is opened or changed.

Dishes that are packaged at a place of sale at the request of the consumer, for example at a catering company, or are ready-packaged for direct sale, for example take-away food, must not be considered as ready-packaged dishes.

reconstitution

Restoring the water content of a product to its original level.

renewable energy/renewable energy sources/renewable electricity

Renewable energy sources are hydropower, wind power, solar collectors and solar cells, biofuels and waste heat. Electricity, heating and cooling that is ecolabelled according to “Good Environmental Choice (Bra Miljöval)” is considered renewable.

report on nonconformity

See *nonconformity*, *report on*.

roughage

Pasture, hay, silage, whole crop silage, green fodder, straw, leaves, bark, brushwood, beet pulp and root crops (not potatoes).

**sedation**

Treatment with medicine that provides very short term analgesia (pain relief) (10-45 min. according to FASS, the Swedish medicines database). Lowers the animal's degree of consciousness by inhibiting the release of noradrenalin from the central nervous system. There is at the same time a general relaxation of the muscles and short term analgesia.

See also *local anaesthetic* and *analgesia/analgesic*.

slaughter manual

The document containing the standard routines and work instructions that the slaughterhouse needs to ensure that the KRAV standards are being met for the slaughterhouse's KRAV-certified activity. The manual must also contain report forms for the various steps in the process so that a certification body can check the slaughter operation during an audit. The manual must show that the KRAV standards are established in the organization and available to the staff.

slow-growing poultry breed or line

Breeds are breeds of animals that grow on average a maximum of 45 grams per day.

small slaughterhouse

Slaughterhouses that slaughter less than 1,000 livestock units per year.

EU Regulation (EC) 1099/2009 defines these as slaughterhouses where fewer than 1,000 livestock units of mammals or 150,000 birds or rabbits are slaughtered per year. It is possible to combine the different categories of animals to be able to compare them, according to the following:

- adult cattle and horses: one livestock unit
- other cattle: 0.5 livestock units
- pigs with a live weight exceeding 100 kg.: 0.20 animal units
- other pigs: 0.15 livestock units
- sheep and goats: 0.10 livestock units
- lambs, kids, and piglets with a live weight under 15 kg.: 0.05 livestock units.

stable period

The period during the year that an animal is normally kept indoors every day, with or without access to being outside. The period of time when an animal is inside only for milking purposes is not included.

standard

A law text or a standard for (organic) production. The KRAV standards are a certification system.

staple product

A food or product that forms the backbone of the menu of the restaurant concerned.

stock

A biological unit that clearly defines a group of individuals of the same species that primarily live in the same area and have the same annual lifecycle. The definition used in Chapter 17 is: a clearly defined group of fish of the same species with the same spawning area.

stress

Both physical and psychological strain on animals. Animals can be stressed by reflective surfaces, noise and loud sounds, air currents, strong lights, odours, abrupt corners or dead ends, pain, rough handling with blows and prodding as well as stress and uneasiness of other animals. Slaughterhouses can reduce stress by taking advantage of animals' natural behaviour to move them, for example by keeping a group together, by allowing animals to go from dark to light or follow a leader animal.

sustainable fishery

Fisheries that comply with The International Council for the Exploration of the Sea (ICES) or equivalent assessments which are based on scientific stock evaluations.

supplier

An actor that delivers or provides products, raw materials or services to another actor.

supplier evaluation

A documented process for the approval of suppliers and ongoing monitoring to ensure that all suppliers of products manage risks for KRAV's extra requirements not being complied with. Supplier evaluations recognized by KRAV can be used for verification of compliance with the extra requirements in Chapter 16.



targeted species (fisheries)

The species of fish desired to catch.



Uddevalla system

A type of stable design system with single animal boxes for cattle, comprised of a number of rows with individual compartments. The system is built together with alleys.

under-sown subsidiary crop

Green manure sown in a main crop or between rows

unintentional catch

During fishing, the unplanned catch of mammals and birds or fish of a species or size that it was not intended to catch.

unpackaged

A product that is not packaged and not labelled. It can be, for example, products in bulk that are not individually labelled, as well as a product sold directly to the consumer that is packaged at the time of sale.



veranda

Used for poultry. A hard surface with a roof over it outside an insulated barn. It can be completely or partly covered with a windproof tarp or similar material.



withdrawal period

During medication, the time from the last treatment until the product can be sold as KRAV-certified is the withdrawal period.

See *conversion period* regarding products.



KRAV's VISION

All food production is economically,
ecologically and socially sustainable,
and meets current needs without
compromising the ability of future
generations to meet their needs.

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