

# Standards for KRAV certified production January 2006



The KRAV mark  
stands for a  
good environment, good  
animal husbandry, good  
health and  
social responsibility.

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# READING INSTRUCTIONS

The table gives you an overview of the chapters that you will need to read thoroughly, depending upon your activities.

CHAPTER:	Inl.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Aggr. class	
Production	x	x	x	x																			
Crop production	x	x	x	x																			x
Animal husbandry	x	x	x	x	x					x													x
Apiculture	x	x	x	x		x																	x
Wild harvested	x	x	x						x														x
Handling and Processing	x	x	x						x									(x)	(x)				x
Slaughter	x	x	x		x					x													x
Retail	x	x	x						x						x								x
Restaurants and industrial kitchens	x	x	x						x							x							x
Production inputs	x	x	x	x	x	(x)			(x)				x										x
Textiles	x	x	x										x										x
Leather and skins	x	x	x										x	x									x
Mushrooms	x	x	x		x																		x
International trade and production	x	x	x		x														x	x			x
Aquaculture	x	x	x					x					x										x
Pet food	x	x	x						x														x
Fishing	x	x	x																				x
KRAV-approved ingredients	x	x	x																				x



# **Standards for KRAV certified production January 2006**

English translation of standards to be  
included in the corrected version of KRAV  
Standards January 2006

The KRAV Standards were approved by the  
KRAV Board of Directors the 10th of February,  
the 22nd of March and the 21st of June 2005.

The following standards have been amended:  
Definitions, standard 2.5.1, 2.5.2 (deleted), 2.5.3,  
2.9.2, 2.12.11, 5.1.2 (deleted), 5.1.17, 6.1.1,  
Chapter 13 and Chapter 14.

## **Entry into force**

The standards enter into force  
the 1st of January 2006.





# DEFINITIONS

*KRAV's standards use the following terms:*

*A-product*

A product which contains at least 95 percent by weight KRAV certified source materials is termed an A-product.

*Additive*

A substance that is not normally consumed as a foodstuff and is normally not used as a typical ingredient in food, regardless of its enrichment properties. The term also includes a substance added to a foodstuff for technological purposes when making, processing, preparing, treating, storing, packaging and transporting, which results in the substance becoming a component of the foodstuff whether or not the substance is altered.

*Appeals Committee* (old Certification Committee)

The Appeals Committee is elected on annual basis by the BoD, to which it also reports. The purpose of the appeals committee is to make decisions on the appeals of decision on matters of certification.

*Artificial fertilizer*

Fertilizer produced by a chemical process or other process which chemically alters a natural source material, except in cases where such a change occurs through a natural biological and physiological process. Artificial fertilizer may also be called synthetic fertilizer.

*Base amount*

The base amount for 2005 is SEK 39 400.

*B-product*

A product which contains at least 70 percent and less than 95 percent by weight KRAV certified source materials is termed a B-product.

*Biological agents for pest control*

Biological agents for pest control include biotechnical organisms (micrororganisms, nematodes, insects or arachnids that are produced having a technical function), that are specifically produced to prevent or neutralize animals, plants or microorganisms, including virus, from causing damage or discomfort to human health or damage to property.

*By-products*

The fish waste from processing industries including raw materials of fish from species intended for human consumption but are classified as unfit because of quality. This definition applies only to Chapter 7, Aquaculture.

*Cage*

A limited enclosure floor space for poultry or other small animals.

### *Certificate*

Document indicating KRAV certification for a specific product, production or activity.

### *Climate similar to outdoor conditions*

When the quality of air, light and the temperature inside a building follows the conditions outdoors.

### *Chemical pesticides and herbicides / chemical agents*

Chemical products intended to prevent or neutralize animals, plants or microorganisms, including virus, causing damage or discomfort to human health or damage to property.

### *Concentrated feed*

All feed that is not roughage or vitamin or mineral supplement. However, potatoes are considered to be concentrated feed.

### *Contamination*

By contamination is meant transferring, adulterating or infecting.

### *Certification matters*

Certification matters concern the approval or rejection of products and producers and also matters of inspection into deviation from KRAV's standards, applications for exemptions, appeals and inquiries into the standards. These matters apply to the application and interpretation of KRAV's standards.

### *Conventional*

In KRAV's standards, the term conventional signifies production and producers who are not KRAV certified.

### *Conversion period*

The interim period set from which KRAV standards are followed until the product is certified. The production must be registered to the KRAV inspection scheme during the entire period.

If a product is rejected, a new conversion period commences if no other exceptions are stated.

### *Colourings*

Substances that have or can give colour. These can be natural or synthetic.

### *Degradable*

According to OECD guidelines 301 A-F the limit for readily degradable is either more than 60 percent mineralization within 28 days measured as production of carbon dioxide/oxygen consumption (CO<sub>2</sub>/BOD) or more than 70 percent mineralization within 28 days measured as reduction of dissolved organic carbon (DOC).

According to OECD guidelines 302 A-C substances are ultimately degradable if more than 70 percent of the degradability is measured as DOC or COD (chemical oxygen demand). This term applies only to Chapter 12.

### *Divergence*

Deviation from KRAV's standards.

### *Drugs and chemical agents for the treatment of animals*

According to KRAV's standards, drug products apply to products that are administered to animals to indicate, prevent, relieve or cure diseases or symptoms caused by disease or use in similar situations. KRAV's classification of substances for chemical means of control includes agents against vermin, fly tags and pour-on agents.

### *Eco-labelled*

A product that is approved by the Nordic Swan label (Svanen), Bra Miljöval (Good Environmental Choice), EU flower, TCO 1999 and later, KRAV or that may be marketed as organic within the EU.

### *EN 45011*

European Norm 45011 (in Sweden "SS EN 45011", where SS stands for Swedish Standard)

### *Environmental aspects*

Is defined according to SS EN ISO 14 001.

### *Environmentally certified*

A third party certification that an operation complies with the stated standards or set of rules. The ISO 14000 series and EMAS (Eco Management and Audit Scheme) are examples of third party certification schemes.

### *Environmentally adapted product*

An environmentally adapted product is a good or service that causes less damaging environmental impact when compared to other products for the same purpose. Products that are labelled with the Nordic Swan label, or the "Bra miljöval" (Good Environmental Choice) label, or the EU flower label comply with the environmental criteria for the respective labels and are examples of environmentally adapted products.

### *Environmental impact*

A change in the environment - positive or negative - caused totally or partially by the producer's activities, products or services.

### *Established animal group*

By established animal group is meant a group of animals that have had the necessary time to establish an internal ranking order on the farm.

### *EU organic*

Grown in accordance with "Council Regulation (EEC) no 2092/91 on organic production of agricultural products and indications referring thereto on agricultural products and foodstuffs", without being certified by KRAV.

### *Exemption (individual and general)*

An individual exemption is an exemption from the KRAV standards for a limited time. General exemption is considered an urgent standard revision. When deciding on an urgent standard revision KRAV take into account the amount of products concerned.

### *Heavy metal*

A metal with a density higher than 5 g/cm<sup>3</sup>.

### *Heavy metals*

Arsenic (As)	Mercury (Hg)
Lead (Pb)	Nickel (Ni)
Cadmium (Cd)	Tin (Sn)
Cobalt (Co)	Vanadium (V)
Copper (Cu)	Zinc (Zn)
Chrome (Cr)	

Heavy metals include those with a density higher than 5 g/cm<sup>3</sup>. A large number of basic elements are included, but the most important for environmental considerations are listed here. Dangerously high levels of other heavy metals appear only occasionally. Arsenic is usually considered to be one of the most environmentally dangerous heavy metals though it is actually a semi-metal.

### *Game*

Game meat is considered to be meat from wild, living mammals and birds. The animals shall have been owned by anyone. Note: Reindeer is considered to be domesticated livestock.

### *Genetically modified organisms (GMO)*

An organism which carries genetic material manipulated in such a way other than natural recombination or mating.

This definition includes the genetic modification that arises from the application of the following methods:

- Hybrid DNA method with the vector system that is included in the Council's recommendation 82/472/EEC (1).
- Methods that directly inject hereditary material that was prepared outside the organism into an organism using techniques such as micro-injection, macro-injection or micro-encapsulating;
- Cell fusion (including protoplast infusion) 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;
- Induction of polyploids.

Products derived from genetically modified organisms

Products using GMO source materials or products that are synthesized by a GMO.

### *Grazing period*

The minimum period established by the Swedish National Board of Agriculture for grazing in different parts of the country.

## *Handling*

Handling is a collective concept for treatment of a product in such a way that no changes occur to the product such as for example receiving, storage, sorting and packaging a product. Drying own cereals on the farm and the washing of own products with water on the farm are considered to be handling. Transport, storage, distribution and sales of KRAV labelled products in unopened packaging are not considered to be handling.

## *Hazardous waste*

Hazardous waste includes explosive, inflammable, oxidizing, toxic or waste dangerous to health. Examples of hazardous waste include spill oil, impregnated timber, electric and electronic waste, batteries, solvents, paints and varnish.

## *Holding*

Property or business consisting of one or more registered properties or parts of properties with joint accounting.

## *IAC*

IFOAM Accreditation Criteria

## *IBS*

IFOAM Basic Standards

## *ICES*

International Council for the Exploration of the Sea

## *IFOAM*

International Federation of Organic Agriculture Movements. A worldwide collaborative federation for organic production (IFOAM). Develops international standards (IFOAM Basic Standards for Organic Production and Processing) for organic production and criteria for accreditation of certification programmes (IFOAM Accreditation Criteria for Programmes Certifying Organic Agriculture and Processing).

## *Indoor period*

The period when animals are kept daily indoors with or without an outdoor period. Milking during the grazing period is not included.

## *Ingredients* (including raw materials, additives, vitamins, flavourings and taste enhancers)

”Every substance, including additives, used in producing or processing of a foodstuff and that can be found in the final product even in another form. If an ingredient in a foodstuff consists of several ingredients, these shall be considered as ingredients in the foodstuff.

The following are not considered as ingredients:

- Constituents of an ingredient which, during the manufacturing process, are temporarily separated but which are subsequently returned to a foodstuff in proportions that are not in excess of the original proportions;

- Additives which occur in a foodstuff only as a result of their inclusion in one or more ingredients in the foodstuff, provided that the additives do not have any technological function in the finished product;
- Additives used as processing aids; or
- Substances used in quantities strictly necessary as solvents for, or as carriers of, additives, including flavourings.”

(See the Swedish SLVFS 1993:19)

### *Initial recipient*

Auction establishment or other organ that is authorized by the Swedish National Board of Fisheries (according FIFS 1995:23) to mediate sale of fish or buy fish for further marketing as the initial recipient in the chain of custody. In other countries outside of Sweden, it is an organization with equivalent authorization.

### *Inspection area*

A form of production that needs a separate registration contract. A production form can comprise of one or several standard areas (and one production may need several registration contracts).

### *ISO 65*

Certification Body - General standards to certification of products (ISO/IEC Guide 65:1996)

### *Litter bed*

Deep litter bedding is cleaned after a few to several weeks up to a year. It is kept dry by spreading new layers of litter on the bed.

### *Marketer*

A marketer registered for KRAV inspection and responsible for the use of KRAV's name or the KRAV mark in the marketing of a KRAV certified article.

### *Nature identical*

A term used to identify a substance that is produced synthetically but also could be found in nature.

### *Nets of degradable fibres, degradable panel*

A part of the fishing gear (usually a trap or fyke net) that rots after a time in the water. The netting or panel is placed so that the gear either collapses or gets a large hole when the panel had degraded. In this way, lost gear is prevented from continued fishing - (so called ghost fishing).

### *Outdoor period - free range*

The time preceding and following the grazing period. Animals are to be kept outside when the ground and weather conditions so permit for the respective animal.

### *Packaging*

A product's inner and outer wrapping.

### *Packaging agreement*

A contract form used when packaging and KRAV labelling are carried out by a non-certified KRAV supplier, however, the supplier is approved by another organic certifying body that has a contract with KRAV.

### *Packaging materials*

Products for containing, protecting, handling and presenting goods regardless of material.

### *Perishable goods*

Foodstuffs that are not preserved by such processes as sterilization, salting, drying, smoking or freezing and therefore have limited shelf life. Perishable goods may or may not be ready to use. Shelf life for some goods may be dependent upon manner of storage, such as refrigeration.

### *Precautionary approach*

The precautionary approach is a set of measures that intend to minimize degrading or irreversible effects by human activity on marine ecosystems. These measures require that fishery management must evaluate and consider effects of fishing on fish stocks and the marine environment when deciding on fishing.

### *Preservatives*

Substances that increase the shelf life of foods by preventing activity by microorganisms. However, salt (sodium chloride) is not considered to be a preservative.

### *Precautionary principle*

If the environmental effects 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. This is the underlying principle in the Environmental Code and means that any planned activity should take into consideration protective measures, observing boundaries and take precautionary steps necessary so the activities will not endanger health or the environment.

### *Processing*

Processing is the collective concept for all processing of agricultural products to food, feed, production inputs or textiles, furs, leather and skins. The first level of custody does not cover packaging and labelling the product as part of processing but, for example, if a product is washed or peeled, it is considered to be processed. Examples of processing include grinding cereals, producing juice concentrates, meat processing, dairy-, bakery-, slaughter and butchering operations, bottling, canning, freezing, drying or other treatments for preservation, spinning and weaving of textiles.



### *Processing aid*

A processing aid is a substance not consumed as an ingredient and used in food processing of source materials, food or ingredients to foods serving a technical function during treatment or preparation. The use may result in the avoidable or technically unavoidable presence of such a substance or its metabolites in the finished products. The presence may not create a danger to health or have any technological influence on the finished product.

### *Producer*

A person who is registered for inspection with KRAV and grows, produces, handles, processes, distributes or imports a product.

### *Product*

A product is a good that is composed of a single raw material or a composition of several raw materials. A product can also be a substance or a preparation.

### *Production*

A product, its packaging, a process, handling, a production unit, or anything else which is connected to producing products.

### *Production inputs*

Production inputs include additions to agriculture (such as fertilizer, soil conditioners and plant protection substances), animal management agents, disinfection agents and biocides in storage facilities.

### *Production unit*

A physically limited unit registered for inspection.

### *Protected areas*

The concept protected area is used to describe those areas, environments, types of natural areas etc. that are important for flora and fauna and/or have great cultural value. Examples of natural and cultural environments needing protection include meadows and natural pastures, keybiotopes in forests and biotope protected areas on agricultural lands such as stone walls, cultivated cairns, groups of trees/bushes in fields, avenues, open ditches, springs, small waterways and wetlands.

### *Raw or source materials*

Raw or source materials are the main ingredients in a processed product.

### *Recertification*

KRAV can approve and certify an organic product approved and certified by another inspectorial unit. KRAV uses the information from the unit as a basis for approval and examines whether the standards are in agreement (see Chapter 17).

### *Reconstitution*

Reconstitution means that the initial water content of a product is restored.

### *Registered for KRAV inspection*

A written agreement shall be entered into in order to join the KRAV inspection scheme. The agreement includes the obligation to follow KRAV standards and pay the relevant fees.

### *Roughage*

Roughage refers to pasture, hay, silage, whole crop silage, green fodder crops, straw, leaves, bark, twigs, sugar beet pulp and root crops (not potatoes).

### *Sanction*

A measure taken for indicating a deviation from KRAV's standards.

### *Sanitized residues from abattoirs*

Products from slaughtering used as fertilizers i.e. blood meal, hoof meal, horn meal, bone meal, bone char, meat meal, feather meal, hair meal, wool, fur and hair.

### *SS 15 54 34, SS 15 54 70*

The Swedish Standard Hydraulic Fluids - Requirements and Test Methods and the Swedish Standard Lubricating Grease - Requirements and Test Methods

### *Stock*

Biological unit that limits individuals within a species that mainly have a common geographic and annual lifecycle.

### *Sub-contracting*

The producer delivers raw materials for handling or processing to another business and then retrieves the processed goods. Slaughter is not covered in the standards for sub-contracting.

Sub-contracting can be exemplified with the following situation: A primary production operator sends its own produced raw material to an other company (a sub-contractor) for handling or processing and then retrieves it back to sell. An alternative situation is: A primary production operator sends its own produced raw materials to an other company (a sub-contractor) for handling or processing and sell it in his/hers own name without retrieving it from the sub-contractor. If the raw material/product is sold under someone else's name/brand the first bullet point in standard 2.5.1 shall be used. The KRAV-producer is responsible that the sub-contractor follows the KRAV Standards.

### *Subject to examination*

When 'subject to examination' is mentioned in the standards, a written application by the producer is required, followed by a decision by KRAV.

### *Synthetic substance*

A substance made by chemical means. If it is found in nature, it is nature identical. If not, it is artificial.

### *Ultimate country of origin*

The country where the finished product is packaged and labelled with the KRAV mark.

### *Ultimate producer origin*

The producer that packages and labels the finished product with the KRAV mark.

### *Watercourse*

Any watercourse or lake that is indicated on the topographic map and/or is water bearing year round.

### *Withdrawal period*

The withdrawal period is the period from the last treatment with the drug or chemical agent until the time the product may be sold as KRAV certified.



I. OBJECTIVE AND SCOPE  
OF THE STANDARDS

## Objective

Standards for KRAV certified production, henceforth referred to as KRAV Standards is a tool to implement “The goal of organic production” into the entire chain of custody from production of raw materials to the consumer in regards to food and other agricultural products.

Standards encompass many factors so that the entire production system and the surrounding environment are considered. Social justice and social rights are an integral part of the Standards. Biological mechanisms and contexts compose the basis for what is considered natural and therefore compatible with organic production. There is an endeavour to attain scientific support for all Standards. The precautionary principle is often used until research and experience can give a secure basis for the scope of the Standards. If there is a conflict between different objectives, the holistic view is judged to be more important than the different objectives.

KRAV Standards lay down the conditions for producing a product entitled to be labelled and marketed with the KRAV label and/or in other ways indicate that the product has been produced according to KRAV Standards. Through this, KRAV creates a platform for uniform marketing of KRAV certified production, and instils confidence in the chain of custody and on the market.

## Framework of the Standards

National laws, such as animal protection and environmental laws, always form the basis for KRAV certified production. In addition, other standards, on the European as well as on international level, are considered in the formulation and content of KRAV Standards. KRAV has been accredited by the international organization IFOAM, with a subsequent adaptation of KRAV Standards to IFOAM Basic Standards.

EU has standards for organic production in the ”Council regulation (EEC) 2092/91 on organic production of agricultural products and information thereof of agricultural products and food”. The regulation is law in Sweden and regulates the use of the word ”organic”. The regulation includes crop production, animal husbandry, and processing. KRAV Standards fulfil the EEC regulation and are in some cases stricter. KRAV Standards encompass more areas than the EEC regulations, such as certification of restaurants, textiles and aquaculture.

## Scope

Standards are drawn up with regards to what is considered practical and possible to achieve at present. KRAV ’s Board of Directors approve the standards which are current rules until another decision is taken. KRAV Standards create limits for the products and production or handling of organic products which can be certified.

The KRAV label is primarily used as a label for food products but KRAV also certifies other raw materials from organic agriculture and aquaculture. KRAV reserves the right to ascertain whether the Standards are applicable to specific types of production.

**Standards and inspection include**

- production conditions,
- products and recipes,
- documentation and
- labelling

**In relation to**

- primary production,
- production inputs & additives,
- handling, storage and packaging,
- processing,
- sales and marketing and
- recertification





## 2. GENERAL STANDARDS

## 2.1 REGISTRATION

*This section describes the general standards for KRAV certified production as well as the prerequisites for registering with the KRAV inspection.*

### 2.1.1

Producers, processors, marketers or those who handle KRAV approved products in any other way can apply to KRAV to be registered. (In addition, see Standard 1.1.3)

The applicant seeking to be KRAV certified agrees to comply with KRAV's standards

- submit complete application documents
- pay the KRAV registration fees for the specified production

Applications for KRAV registration of crop production, greenhouse production, apiculture, and wild production are subject to a fixed deadline.

*KRAV processes the registration applications and supplies information on the current standards and fees.*

*A deadline for seasonal production applications in the spring is established so that KRAV can plan for and carry out timely inspections. The deadlines for applications are announced annually.*

### 2.1.2

The Producer/Business is considered to be registered when the complete application has been processed and a registration contract has been signed. In addition the registrant is bound by the information in the registration application and/or later information.

### 2.1.3

KRAV certification is a voluntary undertaking and is open for all who comply with KRAV's standards and contracts.

### 2.1.4

For the purpose of preserving the benefits of the KRAV label for all certified operators KRAV has the exclusive right to change the KRAV standards. This may in exceptional cases mean that products with valid certifications is decertified.

### 2.1.5

Marketing of several KRAV certified products is covered by the "Council regulation (EEC) 2092/91 on organic agricultural production and information on agricultural products and foods" and all related EC regulations. KRAV's standards are written so that marketing of KRAV certified products shall fulfil the legal requirements or the regulations in force.

## 2.2 CERTIFICATION

### 2.2.1

Certified operators have the right to use KRAV's name and label according to the standards described below when KRAV has received the signed contract and has issued a certificate for the KRAV certified production, activities and/or products.

### 2.2.2

KRAV certified products with a limited certification period may continue to be

produced as long as the certificate is valid, regardless if KRAV's standards has been amended since the product was certified. The operator may market the product as long as there is in stock. KRAV certified production inputs may only be marketed during the validity of the certificate.

Producers having certified products with certificates not limited in time are responsible to comply with current KRAV standards regarding recipes as well as for packaging. If there is no other transitional period agreed with KRAV this kind of certifications will cease to apply by the latest the first of January 2005.

*Certified production inputs are regulated differently because they have a long storage life and are used as additions in KRAV certified production (certified production inputs are added at the beginning of the production line).*

### 2.2.3

Special/new certification is required for:

A special/new certification is required for:

- new tillage area/barn/green house
- new fields
- new animal specie
- new product
- new packaging
- changed recipe
- changed packaging (including decoration and design)
- product with an expired certification limited in time
- new productions unit
- new production line
- KRAV must be of informed and certify any new processes prior to their use
- changes in certified processing or additives
- changes compared to earlier letter of approval issued for import introduction (recertification)

## 2.3 COMMITMENT

### 2.3.1

The operator using KRAV's name or label in the marketing of products has towards the purchaser the full responsibility for compliance with KRAV's standards in the certified production and must bear any financial consequences if non-certified products are delivered as KRAV certified.

### 2.3.2

The operator shall follow KRAV's standards and inform all concerned within the activity. All personnel handling KRAV certified products shall have knowledge of the requirements to comply with the standards.

### 2.3.3

The operators have the responsibility to comply with the latest version of KRAV's standards. (See also 2.1.4 and 2.2.2)

*KRAV certified production strives to inform the operators of changes in the Standards for KRAV certified production within reasonable time, at latest three months prior to the standards coming into force. The current standards can be found at KRAV's web site - [www.krav.se](http://www.krav.se) - and may also be ordered from the KRAV office in Uppsala.*

#### 2.3.4

There shall be a contact person for every production unit included in the contract. This person must be well informed about KRAV's standards and the operations at the production unit. The name of the contact person must be notified to KRAV.

#### 2.3.5

The operator shall have documentation that shows compliance with KRAV's standards and the documentation shall be available to KRAV. KRAV has the authority to require documentation from the operator which KRAV consider it needs. The operator shall continuously document the products and raw materials that are purchased for the KRAV certified production. This shall contain information on quantities, origin and content. The operator shall also document quantity, content and receivers of sold KRAV certified goods.

Suppliers are responsible to declare KRAV certified on the delivery note and invoices. The documentation shall be stored for two years for the possibility for KRAV to inspect.

*The documentation may be stored as paper copies or electronically.*

#### 2.3.6

Purchased raw materials and products from KRAV certified production shall be explicitly described as KRAV certified by the supplier on possible packaging as well as on delivery notes and invoices. If this is not done the raw material cannot be considered KRAV certified. Additional instructions sent by KRAV must be complied with.

#### 2.3.7

The operator agrees to inform KRAV of all important changes in the operations. If a new inspection is required before the certification the operator bears the costs. Standard 2.2.3. indicates the type of changes that require a new written certification.

*Important changes are for example relocation of a business or there is a change in ownership.*

#### 2.3.8

The operator shall immediately inform KRAV of all violations of standards for KRAV certified production within the operations. This shall done regardless of who has violated the standards and regardless of whether or not the violation was made by mistake or not.

#### 2.3.9

The applicable legislation and regulations shall be followed and are superior KRAV standards for certified production.

#### 2.3.10

Operators shall have a written policy on social justice. Operators who hire fewer than ten (10) persons for labour and those who operate under a state system that enforces social laws are excepted from such a documented policy. Products will not be KRAV certified in cases where production is based on violation of basic human rights and clear cases of social injustice.

KRAV operators may not use forced or involuntary labour. The operators shall provide their employees and contractors equal opportunity and treatment

and not act in a discriminatory way. They shall furthermore enable children employed to attend basic education. Employees and contractors of organic operations shall have the freedom to associate, the right to organize and the right to bargain collectively.

## 2.4 KRAV's INSPECTION

### 2.4.1

When KRAV has received an application – or notification of major changes – then KRAV inspects the relevant part of the operations named in the application. After the initial inspection, KRAV is entitled to inspect the operation at any point during the duration of the contract. KRAV is entitled to inspect and receive documentation on other parts of the operations that the operator runs if it is deemed necessary to be able to certify the operation specified in the application. KRAV is also entitled to carry out spot checks of products and production.

### 2.4.2

*KRAV wants to make it simpler for licensees to show how to and that they follow the KRAV standards. In addition, KRAV appreciates the need to make KRAV's inspections more effective. An implemented quality management system or the equivalent makes the inspections and the assessments simpler.*

To simplify the inspection and the assessment that KRAV's standards are complied with, the licensee agrees to:

- Implement existing quality management system or equivalent for the entire operation.
- Submit all information concerning the operations that KRAV requests, such as different documents, certificates and accounts.
- Give KRAV access to land, greenhouses, animal housing, stores, manufacturing and production premises, sales facilities, eating places and other places that are a part of the operations.
- Upon request implement an analysis of land, source materials, products or anything else relevant that is included in the actual the production.

*By implementing an existing quality management system, the licensee agrees to comply with the quality management system that the licensee has decided to use in the operations. To implement an existing quality management system does not mean that all licensees must have a quality management system for their operations. The requirement for implementing only applies to the licensees that have decided to use a certain quality management system.*

### 2.4.3

KRAV may issue a sanction according to the section on sanctions if there are deviations from the standards and/or contract. (See Standard 2.9.1 - 2.9.5.)

### 2.4.4

Even if KRAV does not find shortcomings during the inspection, the operator is bound to ensure compliance with KRAV's standards. KRAV may comment upon documented shortcomings at any time retroactively.

#### 2.4.5

The operator may appeal KRAV's choice of inspector. The appeal must be written and KRAV must appoint a new inspector if there is just cause. (See also Standard 2.10.2 concerning appeal and review)

## 2.5 CONTRACT WITH THIRD PARTIES

#### 2.5.1

Third parties may be affected by KRAV certified production in some cases. In these cases, an additional contract must be issued and signed by the operator, the third party and KRAV. This must be done prior to the third party participating in the operations. KRAV is entitled to inspect the third party.

A third party contract must be issued in the following cases:

- Third party markets products under his/her own brand and the products are produced by a KRAV operator. The contract must be issued between the marketer, the certified producer and KRAV.
- The producer transfers simple processing (solely self produced raw materials), sub-contracting, to a third party. The contract must be issued between the operator, processor and KRAV.
- The producer transfers storage/drying of cereals or other comparable raw materials to a third party. The contract must be issued between the operator, the third party responsible for the drying facilities/warehouse and KRAV.
- The producer transfers packaging and KRAV labelling to a non-KRAV certified supplier in a packaging agreement. The contract must be issued between the operator, supplier and KRAV. The supplier must be certified by another organic inspection organization that has an agreement with KRAV.
- Other cases that KRAV considers that the third party should be inspected.

KRAV determines the contents of the contract. The third party is not entitled to use the KRAV name or label unless there is a marketing contract.

*For further explanation of what is meant by sub-contracting, please see the definitions.*

#### 2.5.2

Sub-contracting contracts apply only to handling/preparation of products that include only own produced raw materials. Sub-contracting agreement is needed for all single cases without prejudice to the scope between the KRAV operator and non-KRAV operator. If both the producer and the sub-contractor are KRAV operators there is no need for an agreement. The sub-contractor is responsible for following the KRAV Standards concerning the sub-contraction. Sub-contraction shall always be notified to KRAV.

## 2.6 ANNUAL FEES AND CONTRACT DURATION

#### 2.6.1

The registered for KRAV inspection must pay KRAV's fees established annually. The fees include fixed and variable costs.

*KRAV also charges other fees in addition to the annual fees, such as fees for product applications and investigation fees.*

### 2.6.2

Those registered for KRAV inspection must submit supporting documents annually so that KRAV can determine the variable fees when these are based on production's sales value. KRAV must allow at least one month and clearly state the deadline for submission for the operator to submit information. The operator may request an extension in writing if there are special circumstances.

The information in the supporting documents must be certified by an accountant if requested during 2003 and beginning in 2004, from all limited liability companies and incorporated associations. This requires a qualified accountant according to the legislation in force.

*The variable fees for the production's processing, recertification, flp (foreign licence program) and production inputs are based on the sales value of the KRAV certified products. Those KRAV registered with other type of production exclusively are not affected by this standard.*

### 2.6.3

The contract between KRAV certified operators and KRAV applies until further notice. The operator may withdraw from the contract with KRAV in writing at any time. The contract ceases to apply after the expiration of the notice period and payment of any outstanding fees.

The period of notice is covered in the contract.

### 2.6.4

KRAV may cancel a contract with an operator with immediate effect if the operator does not pay the fees on time or does not submit information required for inspection and in cases of serious violation of standards. (See Standard 2.9.3.)

### 2.6.5

When a contract is revoked, all certificates, diplomas and similar materials must be returned to KRAV immediately. No products may be labelled with KRAV's label or contain any other labelling using KRAV's name. Other materials that indicate the operations are KRAV certified must be destroyed or returned to KRAV. The products may not be marketed as KRAV certified.

KRAV is entitled to inspect that there is no unauthorized use of KRAV's name and label during six months following the revoking of the contract. This also includes right to access to the accounts, storage facilities, packaging facilities etc.

*The operator must remain as registered if it is desired to no longer produce krav certified products but continue to sell the remainder in storage facilities.*

### 2.6.6

The operator is not entitled to recover fees paid to KRAV after the cancellation of the contract. The operator must render accounts of the sales value up until the cancellation of the contract and pay the variable fees.

## 2.7 CONFIDENTIALITY

### 2.7.1

KRAV ensures that the information submitted concerning the business operations and production methods are not released to any third party – unless permitted to do so by the operator. The following standards indicate some exceptions.

#### 2.7.2

Confidentiality does not apply to information that KRAV can prove was in the public domain and not a result of breaking the registration contract.

#### 2.7.3

KRAV is entitled to make public any information demanded by a court of law or authority. KRAV must immediately inform the operator of any information is made public.

#### 2.7.4

KRAV may also use information about and from the operator to develop the organic product market when, for example, publishing statistics. KRAV is entitled to do this even if the information otherwise would be covered by confidentiality. KRAV may only use the information in such a way that the operator cannot be identified.

#### 2.7.5

KRAV is entitled to publish information about if and how an operator has transgressed KRAV's standards.

## 2.8 HANDLING OF PERSONAL RECORDS

#### 2.8.1

KRAV has a directory of all those registered for KRAV inspection including information on name, address, contact person(s) and the type of operations. The directory helps KRAV to work effectively.

The information may be released on the KRAV web site, [www.krav.se](http://www.krav.se). The web site enables purchasers seeking to buy KRAV certified products to find KRAV certified products and producers.

The signing of the registration contract implies that the operator consents to the handling of the personal records.

#### 2.8.2

The operator should contact KRAV immediately to revoke consent or correct information in KRAV's directory

#### 2.8.3

KRAV will release an account of how personal records have been handled, to which purpose, the information registered, source of information and to whom information has been released upon request.

## 2.9 SANCTIONS FOR NON-COMPLIANCE TO STANDARDS

*The purpose of reporting divergences and sanctions is partly to clearly show when there is non-compliance with KRAV's standards, and partly that the products can be withdrawn.*

#### 2.9.1

If there are indications that the production has not complied with one or more of KRAV standards, the information is documented in a "Report on divergences from KRAV standards". The operator has 14 days to respond after receiving the report. Thereafter, KRAV investigates whether or not there has been a violation of



the standards. The following sanctions may be applied if the operator has violated the standards:

- Written remarks. KRAV outlines the measure(s) that must be carried out prior to the next inspection.
- Request for a correction plan. This means the operator must show a plan of what, how and when corrections will be made to comply with the standards. KRAV must approve the plan.
- Special conditions for approval. KRAV informs of the corrections that must be made immediately. If these corrections are not made within the indicated time limit, the production, production unit, activities, authorization or product will be decertified.
- The operator must pay for the extra inspections carried out to verify compliance with the standards.
- Warnings with or without fees can be issued for serious divergences.
- The fees are based on the financial gain plus 10 percent. The financial gain is figured on the difference in gross income between KRAV certified and the corresponding conventional products.
- Provisional decertification of a product or production (See also 2.9.4)
- Decertification of a product
- Decertification of the total production or parts of production, activities or authorization
- Decertification of all certified production, activities an/or authorization of the certified operator.

KRAV bases the type of sanction after judging the importance of the divergence. The different sanctions can be dealt out individually or in combination. KRAV may also demand damages for serious divergences.

#### 2.9.2

*The thought behind the system of adding warnings is to notify the client that divergences against the KRAV standards can result in a desertification of production.*

A stricter sanction is given with repeated divergence.

KRAV will consider decertification of production if the client within a period of three years, receives a third warning.

Warnings are added across inspection areas at divergences against common standards. When several serious divergences are discovered at the same inspection only one warning is given per inspection area.

*By repeated divergence is meant when a client is breaking the same standard (or part of standard) as before.*

*Please see the definitions what is meant by inspection area and production unit.*

*How warnings are added across inspection areas at divergences against common standards (for example chapter 2) can be explained with the following example: If a client gets a warning regarding his crop production (with reference to chapter 2) the warning is added to an eventual later warning (with reference to chapter 2) regarding his animal husbandry. The crop production and the animal husbandry are seen as two separate inspection areas. That means, if the divergences specifically (and only) concerns crop production or animal husbandry respectively, the divergences are not added.*

### 2.9.3

In serious cases the operator may be excluded from the KRAV control up to five years.

### 2.9.4

KRAV's inspectors are entitled to issue a provisional decertification if there are obvious violations of the standards. This occurs when there is a danger that non-certified products will be sold as KRAV certified. The inspector's decertification is valid for at the most three working days and is then examined according to the same routines as for certification matters.

### 2.9.5

In addition to the standards below, the following can be cause for sanctions, decertification, cancelling of contract(s) or exclusion:

- The production or operation continues to be run disregarding "The goal of organic agriculture" (see page 11).
- The operator simultaneously runs another operation or production that does not comply with the laws and regulations within the actual area.
- The operator detracts or spreads false information about KRAV or acts in any other way that is damaging to KRAV as an organization or the value of the KRAV label.
- Sub-standard working and/or social conditions
- The products contain high levels of undesirable substance such as traces of pesticides/herbicides, GMO, or raised levels of heavy metals (see Appendix 3).

*The reason why KRAV is entitled to decertify production under this standard even where the certified production complies with KRAV's standards is that it devalues the KRAV label marketing value if the producer has operation that clearly violate KRAV's goals or the society's regulations.*

## 2.10 EXEMPTION, APPEAL AND REVIEW

### 2.10.1

KRAV can allow individual or general exemptions according to established routines. The application for an exemption must be submitted in writing. The application must indicate why the exemption is requested and which standards(s) are applicable.

*See the KRAV webpage for more information on the management of exemptions.*

### 2.10.2

The decisions issued may be appealed to KRAV. Only the operator may appeal a decision concerning an individual certification matter. KRAV must receive the appeal within three weeks after the operator has been informed of the decision.

KRAV is entitled to review the decision without any right to appeal if new information comes to light.

## 2.11 ENVIRONMENTAL, NATURE, AND CULTURAL PROTECTION

Food production shall add to the enrichment of the natural and cultural environment. This demands conscious decisions and commitments in the whole chain of custody, not in the least when choosing resources. The following is required to reach the objectives for organic agriculture to long-term preserve and strengthen the ecosystems and to protect and develop the agricultural landscape's nature and cultural values:

1. that consideration is given to the environment surrounding the production place
2. a well-developed protection and care for the natural and cultural environments
3. that a general consideration given to biodiversity is integrated in all of the operations
4. that processed products are produced with the least possible environmental impact on the surrounding environment and minimal damage has been done to the final product.

### 2.11.1

KRAV licensees shall care for the natural and cultural environment. Special consideration must be shown to natural and cultural environments needing protection. KRAV licensees must observe KRAV recommendations found in Appendix 1.

### 2.11.2

Hazardous waste shall be minimized. Hazardous waste is defined in the section Definitions. Hazardous waste must be stored and handled so there is no danger that soil, air or water will be polluted. Different types of hazardous wastes may not be mixed. Neither may hazardous waste be mixed with other types of waste, substances or materials.

Hazardous waste may only be transported by businesses that have special permission. KRAV licensees may transport some hazardous waste from their own operations without permission but only in smaller quantities.

*For more information please see the Swedish Waste Regulation (SFS 2001:1063).*

### 2.11.3

KRAV licensees must have an environmental policy and manage a systematic environmental effort. An environmental management system or similar, for example the Swedish Miljöhusensyn. Documentation must contain defined objectives that are followed up during a KRAV inspection.

## 2.12 HANDLING OF KRAV CERTIFIED PRODUCTS

### 2.12.1

KRAV licensees using the KRAV label on products sold to the consumer must be able to show that all channels in production and handling leading to the final product are KRAV inspected and certified.

KRAV licensees whose operations include processing and handling of products must have a special processing contract with KRAV. Exceptions to the requirement for a processing contract include

1. enterprises that only handle unopened KRAV certified products,
2. producer licensees registered with the agricultural certification program that only handle their own raw materials,
3. producer licensees registered with the agricultural certification program who have a limited processing of their own raw materials,
4. licensees registered with the agricultural certification program who carry out sub-contracting according to Standards 2.5.1 and 2.5.3
5. processors that sub-contract according to Standards 2.5.1 and 2.5.3 or
6. companies that bring in/import products and only package or repackage.

With limited listed in paragraph 2, point 3, it is meant that the sales net of the processed products is less than three basic amounts annually. At least 50 percent of the end-product must consist of own products and it shall fulfil the Standard for A product. Processing according to paragraph 2, point 3 must be reported to KRAV.

Business according to paragraph 2, point 6 shall be registered for recertification of introduced/imported products (see chapter 17)

#### 2.12.2

Those excluded from the processing contract according to Standard 2.12.1 paragraph 2, shall have a sub-contractor contract according to KRAV Standard 2.5.1 and 2.5.3.

### Separation

#### 2.12.3

All handling of KRAV certified products shall occur in such in way that there is no danger of mixing with non-KRAV certified products. KRAV certified products shall be stored and handled so that separate handling is ensured and no contamination of the product can occur. Products may not be contaminated by containers, packaging or other factors in the surroundings.

#### 2.12.4

When facilities, equipment etc. are used for both KRAV certified and non-KRAV-certified production, the danger of mixing shall be minimized through a clear differentiation in the production. Containers, equipment for transport, machinery, etc. shall be carefully cleaned before KRAV certified production is started. The procedures guaranteeing handling must be in writing.

### Transport

#### 2.12.5

KRAV certified products may be transported by carriers without a special contract. The supplier must ensure that the products are labelled so that substitution can not occur. The delivery note shall state that the contents are KRAV certified products. The purchaser shall, on delivery, ensure the products are properly labelled and packaged on delivery so that no substitution or mixing of products can occur.

KRAV certified products shall be transported and handled so that separate handling is ensured and no contamination is possible. Products may not be contaminated by containers, packaging or other factors in the surroundings.

## Storage

### 2.12.6

During storage, KRAV certified products shall always be clearly labelled with the KRAV name or label in their respective units. Exceptions may be made only if all products in a certain storage area are KRAV certified.

### 2.12.7

KRAV certified products shall be stored and handled so that separate handling is ensured and no contamination of the products can occur. Products may not be contaminated by containers, packaging or other factors in the surroundings. If there is danger of contamination, KRAV certified products may not be stored in the same warehouse with products that have been chemically treated after harvest.

Air-tight storage or storage in a controlled atmosphere (carbon dioxide, nitrogen, argon or oxygen) are permitted.

### 2.12.8

KRAV certified products may not be stored in packaging or wrappings (such as reusable packaging or boxes) in which non-certified products have been stored unless the packaging and wrappings have been thoroughly cleaned.

Suppliers not KRAV certified may store KRAV certified products and raw materials in separate units, boxes, and containers or similar, without any sub-contractor contract.

## Cleaning, disinfection, and pest control

### Preventive measures

#### 2.12.9

KRAV licensees shall work with preventive measures including risk assessment, sanitary and building measures, surveillance and cleaning. KRAV licensees must be observant of the limits and take steps and other necessary precautions to forestall, prevent, or counteract the operations or measures bring about harm or nuisance to human health or the environment. KRAV licensees must also avoid using chemical products or biotechnical organisms that may possibly danger human health or the environment, if they can be replaced with products or organisms that are considered to be less harmful. For more information please see Chapter 2 §§ 3 and 6 in the Swedish Environmental Code Miljöbalken (SFS 1998:808).

#### 2.12.10

KRAV licensees shall consider the potential production problems in their risk assessment. Considering the risk assessment measures shall be taken to minimize potential problems.

In addition, KRAV licensees shall carry out sanitary and building measures such as proper waste disposal. Measures must be taken to correct deficiencies. In addition, licensees shall have a documented system for regular supervision of the operations.

The licensees shall also perform appropriate and continuous cleaning.

Cleaning agents must be eco-labelled. If eco-labelled cleaning products are not available, the precautionary principle described in Standard 2.12.9 should determine the choice of product.

## Measures

### 2.12.11

KRAV approved products shall be stored and handled so that separate handling is ensured and no contamination are possible. The products may not be contaminated by containers, packaging or other factors in the surroundings. Disinfection and pest control shall always be documented. The following agents and methods are permitted when carrying out pest control and disinfection in production facilities and storage areas where KRAV approved products are stored or handled:

1. Mechanical methods
2. Physical methods
3. Biotechnical methods or
4. Chemical methods

Mechanical methods include

- traps and catching devices
- rat- and mousetraps or
- insect bait with boric acid (The Swedish National Chemicals Inspectorate is testing the use of boric acid in specific circumstances).

Physical methods include

- freezing,
- light traps for capturing flying insects,
- ultrasound against rats and mice,
- ultraviolet light,
- heat or
- steam

Biotechnical methods include

- diatomaceous earth
- ethyl alcohol,
- sulphur,
- oxygen reduction with nitrogen gas,
- soaps and vegetable oils or,
- acetic acid

Chemical methods include using naturally occurring, non-synthetic products or substances or eco-labelled chemicals. Chemical methods may be used when other methods are considered impossible and after examination by KRAV. When using chemical methods the principle of the best available technique shall be used. For more information please see chapter 2 §3 of the Swedish Environmental Code (Miljöbalken SFS 1998:808).

Organisms/substances used in biotechnical methods stated in paragraph 4 may not be produced using genetic engineering or GMO.

*The Swedish National Chemicals Inspectorate must approve the pest control substances before sale and use (there are exceptions). Please also see the Swedish national rules on caution that include limits on using chemical products (or biotechnical organisms) for pest control, Chapter 14 §17 Miljöbalken (SFS 1998:808).*

#### 2.12.12

If there is pest control and disinfection in facilities where no KRAV certified products are handled or stored at the time, with substances other than those listed in 2.12.11, measures must be taken to ensure that no traces of the substances can come into contact with KRAV certified production. A disinfection and pest control log must be kept. Using pest control agents may be authorized in retailers, subject to examination, even if KRAV certified products remain at the retailer.

### Packaging material

#### 2.12.13

Environmentally adapted packaging shall preferably be chosen.

*Minimizing of packaging materials should be strived for. It is the KRAV goal that all use of PVC and other chlorine-based plastics when packaging KRAV-approved products stop.*

#### 2.12.14

Packaging materials may not be treated with preservatives or chemicals that can be a danger to health or the environment. For more information please see the Swedish National Chemicals Inspectorate's database describing limits governing use of chemicals and the Observation List for more information on environmental and health hazards of the chemicals.

#### 2.12.15

Only those processes listed in standard 9.2.4 are permitted for processing grains and feed.

## 2.13 LABELLING

#### 2.13.1

KRAV's name or the KRAV mark may only be used on products from KRAV inspected and certified production. The KRAV mark may be used only in the forms provided by KRAV according to the instructions issued by KRAV.

#### 2.13.2

The party responsible for labelling must be KRAV certified. Retailers, wholesalers and similar who only handle unopened KRAV labelled packaging with KRAV certified products may, however, use KRAV's name on receipts, invoices, packing slips and similar items.

#### 2.13.3

KRAV's name or mark on products must always be accompanied by the ultimate responsible producer's name. The ultimate producer is considered to be the producer who packages the final product. (Compare with standard 2.5.2 on marketing contracts).

Products must be labelled in such a way that it is possible to determine when and where production has taken place (processing, packaging etc). From the labelling, the producers must be able to determine the raw materials used in the production in question. The registered operator shall appropriately design labelling. The principles for labelling must be reported to KRAV.

An exception to the labelling standard includes fruit and vegetables. The date and place of production must be included on the delivery note and accompany delivery of the fruits and vegetables. KRAV may, after deliberation, also grant exemptions for other types of production if such labelling would incur greater costs in relation to the extent of the production.

#### 2.13.4

When selling unpacked KRAV certified products, the producer shall state that the products are KRAV certified on delivery notes and invoices.

#### 2.13.5

Where other certifying bodies have certified products, the companies registered with KRAV for re-certification are responsible for KRAV labelling according to Chapter 17.

#### 2.13.6

The name of the ultimate processor shall be on the packaging.

#### 2.13.7

KRAV's name may not be used in product brand names, or in such a size that it can give the impression of being a brand name.

#### 2.13.8

KRAV must approve all use of KRAV's name or the KRAV mark on packaging, product information sheets or similar. Changes in printed materials shall also be approved. KRAV requires no prior approval of advertisements, displays and similar but it shall be clear which products are KRAV certified.

### **Compound products**

#### **A-products**

##### 2.13.9

A product which contains at least 95 percent by weight KRAV certified source materials is termed an A-product. The KRAV mark for processed A-products shall be used. A-products may be called 'organic'.

#### **B-products**

##### 2.13.10

A product which contains at least 70 percent and less than 95 percent by weight KRAV certified source materials is termed a B-product. The KRAV mark for processed B-products shall be used. The list of ingredients should indicate the proportion of KRAV certified ingredients. B-products may not be termed 'organic'.

##### 2.13.11

The amounts of salt and/or water added to a product shall not be included in the above calculations. When water is added for reconstitution of concentrates the weight of the water will be calculated as belonging to the concentrate.



## List of contents

### 2.13.12

The list of contents shall state clearly the raw materials that are KRAV certified or EU organic in origin.

### 2.13.13

Food additives shall be identified by name in the list of contents.  
Single item sale by weight

### 2.13.14

Products may be sold from open KRAV labelled packaging only if the packing/refilling date is clearly stated (KRAV's standards for processing (Chapter 9) and retail handling (Chapter 15) apply to re-packing).

### 2.13.15

A sign bearing the KRAV mark shall be placed close to the product in question.

## Labelling from the country of origin and ultimate processing country

### 2.13.16

The ultimate processing country shall always be indicated on the package. The producer shall always be able to inform the consumer or purchaser of the country of origin of the source materials in a product. This information can be made available via internet web pages, by telephone customer service etc. Perishable goods shall always bear the country of origin on their label.

### 2.13.17

When selling unpacked recertified products the following shall be stated on the invoice and the delivery notes:

- Country of origin;
- The certification body which certified the product;
- The notice that the product is KRAV certified.

## Feed for KRAV certified animal husbandry

### 2.13.18

The KRAV mark may be used on feed sacks or product information sheets only if all the source materials in the feed are KRAV certified and feed additives etc. are in accordance with KRAV's standards.

Feed mixes which also contain non-certified source materials but only permitted feed additives may be marketed using KRAV's name directly followed by an equally clear statement of the proportion of KRAV certified source materials expressed as percent by weight.

## Wild harvested crops

### 2.13.19

Products which exclusively contain source materials from wild harvested crop production shall be labelled with the KRAV mark for wild harvested crops.

## Production inputs

2.13.20

Production inputs may be labelled and marketed as KRAV certified using the special KRAV mark for production inputs. Production inputs manufactured solely from products whose production is KRAV certified may be labelled with the KRAV mark.

**Pet food**

2.13.21

Pet food may be labelled with the KRAV mark.

## **2.14 MARKETING**

2.14.1

KRAV's name or the KRAV mark may not be used in marketing in such a way that gives the impression that products not certified by KRAV are KRAV certified.

2.14.2

A display bearing the KRAV mark shall be placed in conjunction with the products in question or in a place where no confusion with non-KRAV certified products is possible.

2.14.3

Producers are not permitted to state that a production unit has been inspected by KRAV other than in connection with the marketing of KRAV certified products. Nor is the producer permitted to state that animals have been fed on KRAV certified feed when selling non-KRAV certified animal products.

2.14.4

Certified retailers and restaurants may market the business as KRAV-certified. When the KRAV mark and name are used in advertisements at least one product in the advertisement shall be KRAV certified.

2.14.5

Restaurants and mass caterers that have registered KRAV certified foods may mention this in their marketing. See Chapter 16.2 Registration of KRAV certified foods.

### 3. AGRICULTURE IN GENERAL

## 3.1 EXTENT

### 3.1.1

KRAV inspections encompass the entire holding. The obligation to comply with KRAV's standards applies to the production that is registered as KRAV certified.

### 3.1.2

In cases where only part of the total holding is registered with KRAV, organic production shall be kept clearly and permanently separate from conventional production. KRAV certified animal husbandry shall be run separately from conventional production.

### 3.1.3

KRAV approved products, production inputs, feed etcetera shall be kept and handled separately from KRAV non-approved products. See also section 2.5.

### 3.1.4

KRAV will treat a holding having two or more KRAV certified production units that cannot be inspected during one inspection visit, or where there is separate accounting for the units as separate businesses registered with KRAV.

### 3.1.5

KRAV may request information on the entire original holding and also charge fees for extra inspections if a producer has several production units, if there is extensive co-operation between the agricultural businesses, or a holding is divided into several units and there is a risk of KRAV certified and conventional production becoming mixed.

## Protection of the environment, natural and cultural heritage

### 3.1.6

In the following cases, KRAV standards may apply to the entire holding:

- Chemical pesticides and herbicides/chemical agents may not be used on gravel paths, roads and farmyards with the exception of using acetic acid.
- Cultivation of genetically modified crops is not permitted on the conventional part of the holding.
- Environmentally adapted substances must be used in facilities where the drainage is connected to a manure receptacle or other drainage from which the end product can be used for cultivation purposes.
- The company running the operation ought to have an environmental management system.
- Clearing of primary ecosystems is prohibited.

*KRAV will gradually require an environmental management system for KRAV certified production. In the initial stage, the following points are planned to be included as a foundation for the environmental management system:*

- *plant nutrient balance*
- *soil mapping*
- *crop production management plan*

### 3.1.7

The Swedish Federation of Farmers Environmental Audit (Lantbrukarnas Riksförbund Miljöhousesyn, a self-auditing of environmental aspects of the farm) or similar programme shall be applied.

### 3.1.8

A nature and cultural heritage management plan to ensure biodiversity must be in place. If there is no such a plan, an application must be made to establish a management plan.

*KRAV takes into consideration that the county administrative board/county agricultural society or comparable at present do not have the capacity or financial resources to create such a plan.*

### 3.1.9

- A permanent, unfertilized overgrown buffer zone at least 3 meters wide (measured horizontally from the edge of the water) is to be left beside watercourses, wetlands and lakes that have are water-bearing year round;
- The Swedish Environmental Code shall be consulted before conducting new drainage work and the removal of obstacles to cultivation;
- Uncultivated patches in cultivated fields and other valuable vegetation and natural grazing shall be protected from rooting domestic animals;
- Wire fences which are not in use shall be removed.

### 3.1.10

Plastics, scrap metal, paper, oils and other waste products that are not likely to be used for repairs shall be sorted and sent for reuse, recycling or energy recovery. Vehicles and other kinds of scrap, which are not needed for repairs should be sent for recycling. Materials and spare parts required for repairs shall be neatly gathered and placed in the storage area which shall be maintained so that materials are not covered with vegetation.

## **Practical handling standards for agriculture**

### 3.1.11

Seed drills, manure spreaders, agricultural sprayers etc. shall be well cleaned if they have also been used for production inputs, seed etc. which are not KRAV certified.

### 3.1.12

The general standards for storage and handling shall be followed even in cases where a producer handles only his/her own products. These also apply to milk handling, harvesters, storage etc. See also standards 2.5.6 - 2.5.10.

### 3.1.13

Temporary storage or handling of products outside the holding is covered by the standards for handling and processing 2.5. This is to be documented and available for inspection. Regular storage or handling outside the holding shall be registered with KRAV for inspection through a processing agreement, under a sub-contracting agreement, or through a co-operation agreement for limited grain drying and storage. Farm shops are governed by the standards for retailers in Chapter 15.



## 4. CROP PRODUCTION

## 4.1 GENERAL

### 4.1.1

Cultivation shall be carried out so as to avoid a negative impact on crop quality.

### 4.1.2

Certification depends on nutrient management, the inclusion of pasture or green manure in the rotation system and the farmer's endeavours to minimize the loss of plant nutrients. Exceptions to crop rotation include cultivation of bushes and trees, permanent pasture and greenhouse cultivation.

### 4.1.3

Preventive cultivation techniques against weeds and pests shall be used to the greatest possible extent.

### 4.1.4

A cover of vegetation during winter is encouraged. The cultivation of catch crops is recommended where possible. Animal manure shall be handled in such a way as to minimize losses.

### 4.1.5

The application of organic or mineral fertilizer is acceptable only where it is necessary and where other measures have been taken as set out above.

### 4.1.6

Where it is considered justifiable, KRAV may request that a plant nutrient equation be calculated at the producer's expense.

## Conversion period

### 4.1.7

The production shall be KRAV registered and inspected during the conversion period. To KRAV certify one-year crop, pasture or grazing land the production on the parcel of land must have been practiced according to KRAV standards during the two preceding years. For perennial crop (except pasture) the production on the parcel of land should have been practiced according to KRAV standards during the three preceding years.

One year conversion can be practiced for the following acreage:

- Conversion land 2003 which was notified to KRAV and diverted by the 31st of December 2002.
- All acreages included in a five year KRAV certified diversion plan starting by the latest the 31st of August 2002. At least 10 percent of the acreage in the plan shall be diverted every year during the five year period. Land which according to the plan shall be in conversion during 2003 shall follow KRAV standards from the 31st of August 2002.

For land which has been exposed to intensive use of chemicals the conversion period may be even more extended.

KRAV can retroactive certify land that has received EU support for ecologic production as well as land where it can be proved that artificial fertilizer and chemical pesticides have not been used during three years. KRAV determines the necessary documentation and fee for this kind of retroactive conversion control.



## **New acreage**

### **4.1.8**

The producer is not permitted to remove acreage from KRAV certified and then re-establish the acreage as KRAV certified without KRAV approval. It is not permitted to rotate the certified production. New acreage may, therefore, be certified only if all previously certified acreage is still certified. Exceptions to this may be made in cases where a producer has lost acreage that was certified by KRAV. Exceptions may be made when the KRAV certified acreage is no longer available to the producer. KRAV can allow exemptions if the KRAV certified part of the holding will gain a more coherent geographical structure, or if there are other compelling reasons to cease KRAV certified cultivation on the land in question.

## **Parallel cultivation**

### **4.1.9**

A crop which is intended to be sold as KRAV certified may not be cultivated in both a conventional and an organic system on the same holding (parallel cultivation), unless the varieties differ in such a way that they can easily be distinguished by the producer, KRAV and buyers during and after harvest. KRAV may grant exceptions to this, subject to examination, only if the following criteria are met:

- The KRAV certified and non-certified crops are harvested at different times and dates, so that verification of the separate grain harvests is possible;
- The products are handled after harvest in such a way that it can be guaranteed that certified and non-certified products have not been mixed.

In connection with the examination, KRAV has the right to issue instructions to verify that KRAV certified crops are not mixed. If the KRAV certified grains are only used to feed the producer's own domestic livestock, the inspection will take place in connection with the inspection for animal husbandry.

## **4.2 POLLUTION AND CONTAMINATION**

### **4.2.1**

The areas where products are cultivated and stored should be located so that contaminants do not reduce the value of the KRAV certified products as food or feed. Arable land located within 25 metres of the side of a road carrying more than 3 000 vehicles per 24 hours may not be used for crops destined for human consumption.

### **4.2.2**

KRAV may de-certify a cultivation site because of residues of undesirable substances, e.g. residues of previously used pesticides and herbicides or excessive concentrations of heavy metals.

### **4.2.3**

In cases where the entire holding is not farmed according to KRAV's standards, chemical pesticides and herbicides may not be used within 25 metres of KRAV certified cultivation. Artificial fertilizers may not be spread within 10 metres of the KRAV certified cultivation. If fertilizer is drilled in, this distance will be reduced to 1 metre.

#### 4.2.4

If chemical pesticides and herbicides and artificial fertilizers are used on land farmed by another producer adjacent to land with KRAV certified organic cultivation, action should be taken to minimize the risk of contamination of the KRAV certified land or crops. Such action may include: an agreement with a neighbour on the establishment of a buffer zone, establishing a buffer zone of one's own, or the planting of a windbreak.

### Heavy metal contamination of arable land

#### 4.2.5

The application of heavy metals to arable land is to be limited. The highest permitted average amounts of heavy metals applied (over a five year period) via fertilizer, soil conditioners, chemical pesticides and herbicides or other products previously or subsequently applied to the soil (e.g. feed, feed minerals and medicines) are given in Appendix 3.

## 4.3 FERTILIZER AND SOIL CONDITIONERS

#### 4.3.1

The following are permitted:

- Manure (see 4.3.3), straw, plant residues, waste from green manure and similar agricultural products;
- Peat to plants, compost, litter, greenhouse cultivation and gardens;
- Algae and seaweed;
- Domestic wastes, refuse from parks and gardens, food retailers, restaurants, food-, textile- or forestry industries unless additives or processes have rendered the waste unsuitable for spreading;
- Compost or fermented domestic waste from a closed collection system that have been explicitly approved by KRAV;
- Sanitized residues from abattoirs. These shall be KRAV certified as KRAV certified inputs;
- Bone meal or meal free from residues of gelatine, bone char, horn, hoof, hair, meat, and fur meal, fur and hair, if the origin of the slaughter by-products is inspected by a veterinarian or the remains from cutting-up are approved for human consumption. Specified dangerous materials may not be included. Slaughter products inspected by a veterinarian must be sterilized at 133° C at a minimum of with at least 3 bars pressure for at least 20 minutes, or according to the recommendations for neutralizing BSE;
- Blood meal fit for human consumption;
- Poultry and chiquette meal produced in facilities where no animal proteins from other animal species are processed;
- Fishmeal produced in facilities where no animal proteins from other animal species are processed;

The above named fertilizer (sanitized residues from abattoirs) may not be spread on grasslands, cultivated grassland or green fodder. Covering seeds/harrowing when sowing or re-seeding are permitted.

**The following are not permitted:**

- Sea bird guano;
- Soil bacteria or other microorganisms that have been genetically modified;
- Manure from genetically modified animals;
- Other materials not stated above.

**4.3.2**

Sludge from a private waste water system or equivalent may be used, provided that the sewage system is not connected to sewers where environmentally harmful substances are used and that the use of all chemical products is environmentally adapted and the precautionary principle is applied. If the farm has many visitors (e.g. farm shop, bed and breakfast, and courses) such use shall be subject to examination by KRAV.

Manures containing human excrement (feces and urine) are prohibited for use on crops for human consumption.

**4.3.3**

Manure from the specialized indoor production of beef cattle in slatted floor boxes, uncertified pig production, battery hens and caged fur animals may not be used. Notwithstanding the above standard, manure from an annual pig production corresponding to fewer than 50 pigs for slaughter or pigs kept in large boxes with straw bedding may be used.

To stimulate the conversion to organic production, producers with non-certified pig production or specialized cattle breeding in boxes with slatted floor which simultaneously has KRAV certified production of the same species may, subject to examination, use manure from the conventional part of the production. In such a case the KRAV certified production shall at least extend to 10 percent of the conventional during the first three years, and thereafter 20 percent of the KRAV certified production.

**4.3.4**

Mineral fertilizers may be applied only if they are in their natural form, i.e. without any further processing to increase solubility, with the exception of grinding.

**The following minerals are permitted:**

- Stone meal (e.g. silicon, basalt and granite meal)
- Raw phosphate
- Apatite
- Limestone meal
- Calcified seaweed
- Dolomitic limestone

In addition to these the following may be used:

- Calcium silicates
- Wood and peat ash
- Gypsum
- Kieserite (magnesium sulphate)

The following are not permitted:

- Artificial fertilizers (synthetic fertilizers), unless stated in section 4.3.5.
- Chilean nitrate
- Kainite, patent kali, and other potassium salts
- All other substances not stated above

#### 4.3.5

Micronutrients may be applied to the soil if the need for micronutrients cannot be met by reasonable amounts of other approved fertilizers and if there is a clear lack of such nutrients. Micronutrients may be applied to growing crops only subject to examination by KRAV. An exception is manganese where the producer must document the use.

Criteria for the examination are:

- A documented need;
- Documented problems in previous years;
- The fact that the producer has taken other action to prevent the problem arising;
- Using the fertilizer in question cannot pose a risk to the environment, soil activity or humans or animal welfare.

### Miscellaneous

#### 4.3.6

Fertilizers may be rejected if the production or the use create an unacceptable environmental impact.

#### 4.3.7

Fertilizers and soil conditioners shall be analysed, before spreading, for their content of heavy metals and radioactive, contaminating or other undesirable substances where there is reason to expect high concentrations. This always applies in the case of by-products of industry or incineration such as ash, sludge and industrial lime.

#### 4.3.8

Substances not included in standards 4.3.1 or 4.3.4 may be allowed after examination by KRAV. IFOAM's standards for examination of fertilizers and soil conditions form the basis for the examination.

*In Annex II Council Regulation (EEC) no 2092/91 the kinds of fertilizer and soil conditioners that may be used in organic production are regulated. (this does not automatically allows the products to be used in KRAV certified production.)*

## 4.4 PLANT PROTECTION AND WEED CONTROL

#### 4.4.1

Plant protection and weed control substances may not be used with the exceptions of the substances listed in 4.4.2.

Thermal sterilization of soil is not permitted.

#### 4.4.2

The following are permitted:

- pesticides and plant protection products consisting of, or are directly

- extracted from for example, non-genetically modified plants, animals, micro organisms and insects
- products that are approved as fertilizers according to the above (4.3)
- gelatine
- pheromones and pheromone traps
- traps or other catching devices
- saponified fatty acids (soft soaps) that KRAV has specifically approved as production inputs
- copper compounds may be used as fungicides in fruit production but only within the framework of the limits stated in the Standards for heavy metals
- sodium bicarbonate
- ethyl alcohol
- pure sulphur
- thermal and electrical weed control
- hot water and steam
- silicates (sodium silicate, quartz)
- vegetable oils. If these do not produce the desired results, pure paraffin

oil can be used, subject to examination.

*The Swedish National Chemicals Inspectorate shall approve plant protection and weed control products for sale and use. There are also standards for safety and caution governing the use of chemical or biotechnical organisms. See the Environmental Code (Miljöbalken) Chapter 14 §17.*

*In Annex II Council Regulation (EEC) no 2092/91 the kinds of plant protection and weed control that may be used in organic production are regulated. (This does not automatically allow the products to be used in KRAV certified production.)*

#### 4.4.3

- Products or agents not listed in section 4.4.2 can be approved after examination. At such examination shall be considered if:
- The use of the product is necessary or has a considerable value for organic production
  - The product is bio-degradable
  - The use of the product in any considerable way affect the environment or other organisms than those targeted
  - The use of the product affects the end products

The IFOAM standards for evaluation of the inputs are used as the basis for examination.

#### 4.4.4

Synthetic additives to the substances stated in standard 4.4.2 such as carriers, wetting agents etc. may be used only subject to examination by KRAV. Such examination will assess if the additive:

- Is necessary for the function of the substance
- Is natural
- Is bio-degradable
- To any considerable extent affects the environment or other organisms than those targeted
- Affects the end production (food or feed)

In difficult cases, KRAV may apply the IFOAM standards for evaluation of additives. A list of approved additives is enclosed in Appendix 4.

## 4.5 MUSHROOMS

### 4.5.1

Culture medium for mushrooms shall contain KRAV-approved raw materials such as grain and straw. Other additives shall be approved according to the KRAV standards for crop production. The origin of at least 75 percent of the culture medium shall be KRAV certified calculated by the weight of the product prior to composting.

*According to Council Regulation (EEC) no 2092/91, 75 percent of the culture medium should consist of organic source materials.*

## 4.6 SOIL, SEED AND PLANTS

### 4.6.1

KRAV certified seeds, plants and propagation materials for annual and biennial plants shall be used whenever possible. Seeds shall be KRAV certified by 2010 at the latest. Seeds from KRAV certified production during conversion period may be included.

*According to Council Regulation (EEC) no 2092/91 organically grown seed and organically grown plants are compulsory. Until the 31st of December 2003 the Swedish National Board of Agriculture could permit the use of conventional seed and plant material where there where no organic propagation material of the appropriate sort available.*

### 4.6.2.

Plants for annuals shall be KRAV certified. Perennials and other propagation materials shall be KRAV certified if the harvest is to bear the KRAV label sooner than 12 months after planting. For harvest from 2005, the standard will be 18 months prior to planting.

### 4.6.3

Seed may not be treated (coated) with chemical pesticides or herbicides.

### 4.6.4

Seed, plants or other propagation material may not originate from genetically modified organisms.

### 4.6.5

Seedling and potting soil may only contain soil conditioners and fertilizers approved in accordance with these standards. Vermiculite, sand, clay, light clinker and perlite are accepted as soil conditioners for seedling and potting soil.

### 4.6.6

Seeds for sprouts shall be KRAV certified.

## 4.7 MISCELLANEOUS

### 4.7.1

Artificial light may not serve as the sole source of light during the entire life cycle of the plant. This does not apply to mushrooms.

### 4.7.2

Hydroponics is prohibited, other than for aquatic plants and sprouts.

4.7.3

Biologically inactive cultivation media are prohibited.

4.7.4

In the case of cultivation in greenhouses or pots, at least half of the plant's nutritional needs shall be met by the soil in which the plant is placed or planted. Exemptions can be granted for cultures in greenhouses with a long growing season where the soil volume per plant exceeds 20 litres

4.7.5

Only polyethylene- or polypropylene-based or similar materials may be used for fibre cloths and plastic used for soil and plant coverings, insect nets and plastic for silage. The materials should be removed from the soil and plants and shall be removed from the vicinity before incineration. Polyvinyl chloride (PVC) based products are not permitted.





## 5. ANIMAL HUSBANDRY

## **5.1 General**

### **5.1.1**

KRAV's goals for animal husbandry are to promote the physiological and ethological needs of animals. The environment and management given animals shall be such that animal health and welfare is promoted. All KRAV certified animal management shall be characterized by excellent animal care and protection.

### **Registration**

#### **5.1.2**

Animal husbandry shall be registered with KRAV at least 3 months prior to the planned start for the conversion period. An on-site inspection shall be made prior to the start of the conversion period. The earliest the start date for the conversion period can be determined is at the time of the first inspection.

### **Initial conversion period**

#### **5.1.3**

Milk production can be KRAV certified after a 6-month conversion period of production according to KRAV's standards.

#### **5.1.4**

Poultry production can be KRAV certified after at least a 6-week conversion period of production according to KRAV's standards.

#### **5.1.5**

For KRAV approved products such as meat, wool, and hides, the brood animal husbandry shall be in accordance to KRAV standards from at least two months before the calculated birth of ruminant, including deer, and one month for pigs. Animals present when joining the KRAV inspection scheme, may be certified after KRAV standards have been followed for one year. This also applies to conventional animals purchased later for breeding, milk- or egg-production. Animals can be certified after 24 months when there is a simultaneous conversion period for both animals and cultivation, and when the feed is primarily more than 60 percent produced on the conversion-year fields.

### **Extent**

#### **5.1.6**

All animals shall be cared for in accordance with KRAV's standards. This also applies to animals which cannot be KRAV certified, e.g. animals bought in or those receiving medication.

#### **5.1.7**

Rearing may not take place only in the winter, fattening of lamb and calves is excluded.

## **Parallel production**

### **5.1.8**

Parallel production in separate sectors (fields of activity) may be approved subject to examination by KRAV provided that:

- The stocks are not kept together or KRAV approved stock can easily be distinguished from KRAV non-approved stock (e.g. different breeds). External treatment of KRAV non-approved stock shall follow KRAV's standards if the animals are together
- The areas for storing feed for KRAV approved and KRAV non-approved animals are well separated
- Accurate documentation is kept of stock, feed handling, etc. Animals from the KRAV certified production may not regularly be transferred to the conventional production.

## **Marking, documentation**

### **5.1.9**

All animals which can be individually marked shall be marked. The least harmful method of marking shall be used. Birth, purchase, sales and death records shall be kept.

### **5.1.10**

A health record shall be kept of all injuries, illness, treatments and results. Prophylactic treatment shall also be documented. It should be possible to identify all individual animals and groups of animals in the health records. Reports from slaughter, live inspection, milk tests or equivalent shall be entered into the health records, or else they shall be well compiled and easily available.

## **Purchasing of animals**

### **5.1.11**

Rearing should be integrated, i.e. that mother and offspring shall remain in the same unit.

The purchase of KRAV certified animals for rearing or as breeding females may be approved by KRAV subject to examination. A contract of co-operation is required between the seller and the buyer.

KRAV recommends that such purchase should be made from one other farm only. If that is not possible such purchase can be extended to a maximum of 3 farms calculated for a 12-month period.

Pigs from different stocks or of different ages may not be mixed. They should be kept separate from other pigs on the farm for at least three weeks.

Purchasing of deer calves for further rearing is not permitted.

### **5.1.12**

Purchased pigs shall be held in quarantine for at least three weeks.

### **5.1.13**

At the purchase of mother or breeding stock KRAV certified animals shall be chosen, if possible in a contractual co-operation. If KRAV certified stock is not available, the purchase of single non-certified animals will be permitted. For

herds with more than 10 adult females, a maximum of 10 percent may be bought in. If there are less than 10 adult females, only one animal may be purchased. Purchased female animals should preferably not have given birth.

A higher proportion of purchased gilts than that indicated above may be allowed, subject to examination.

#### 5.1.14

Single non-certified animals may be purchased for milk production, in which case they shall undergo an individual conversion period of 6 months before the milk can be certified. However, the milk may be used to feed KRAV certified animals after 2 months.

#### 5.1.15

When expanding the herd or when part of the herd shall be slaughtered because of illness, the purchase of larger numbers of non-certified breeding females or breeding stock may be permitted subject to examination. Not certified animals may not be brought in for the purpose of meat production.

#### 5.1.16

For the time being, the purchase of day old chicks is permitted, where a breeder is unable to rear his own poultry. KRAV certified poultry should be the first choice for purchasing. Poultry reared for meat purchased from conventional operations must be at least 10 weeks old at slaughter to be KRAV certified.

It is until the 1st of December 2005 allowed to purchase older laying hens subject to a six-week conversion period according to standard 5.1.5. From the 1st of January 2006 bought in laying hens shall be brought up, from 3 days of age, according to the KRAV Standards for feed (see section 5.3 excluding grazing 5.3.13-5.3.15) and health and medical treatment (see section 5.4). Inclusion in the organic production shall be done at the latest at 18 weeks of age. Such hens shall come from a free-range system that to a large extent is similar to the breeder's own system.

*According to appendix 1 Council Regulation (EEC) no 2092/91 inclusion of laying hens as mentioned in paragraph 2 above has to be approved in beforehand by the Swedish Board of Agriculture.*

## 5.2 ANIMAL WELFARE

### General

#### 5.2.1

A healthy environment shall provide for the specific needs of each type of animal and allow stock to express the full range of normal behaviour patterns:

- Animals shall be able to express normal social behaviour including herd behaviour, territorial behaviour, loafing, rooting and scratching normal to the species, e.g. by being afforded sufficient space in suitable indoor and outdoor environments
- Animals shall be given the opportunity to be alone during birth or laying. Mother and young shall have the opportunity of close contact in the initial period of life of the offspring
- The natural behavioural patterns of pigs should be provided for such as

rooting and food searching behaviour e.g. through fallow land, forest or woodland and deep litter in the wintertime. Pigs should have access to a mud bath or other water bath during the warm season

- Hens and chickens should have access to a sand bath, perches and nest boxes so that these are freely available to all animals when needed
- Turkeys shall have access to perches
- Geese and ducks should have access to ponds during the warm season so that these can be used freely by all animals when needed.
- Deer should have an environment natural for the species, containing the plants and foods they prefer. The enclosure should have accessibility to protection in the form of trees or protection from the wind, and as far as possible in every grazing pen. Red deer should have access to mud holes during the vegetation period.
- When handling deer, special consideration should be given to their sensitivity to stress. The animal owner should be able to document preventive measures.
- The feeding station design should be such that all deer can feed simultaneously. This will minimize the risk of stress and butting injuries, and will facilitate low ranking animals to get enough to eat.

## **Birth**

### **5.2.2**

Cows shall calve alone and only in exceptional cases may be tethered. Indoor calving shall take place in a calving box. All cowsheds must contain calving box that may be permanent or temporary. In a spacious free-range system cows may calve in the flock.

### **5.2.3**

Sows shall farrow alone in shelter e.g. in a farrowing hut. Farrowing may take place indoors if the sow has sufficient freedom and space to find a separate farrowing place and plenty nesting materials. Only in exceptional cases may sows be locked up in a farrowing hut. After farrowing the sow and the piglets shall have outdoor access after two weeks at the latest.

## **Grazing and outdoor period**

### **5.2.4**

During the grazing period animals shall be able to be outdoors on grazing land for most of the day with the exception of poultry which may be kept in at night. In the outdoor period, which may be considerably longer than the grazing period, animals should have the possibility of being outdoors for at least part of the day. Animals shall be kept outdoors when the ground and weather conditions so permit for the respective type of animal.

Animals may be kept indoors temporarily in the case of mating, insemination, giving birth, illness, insect attacks, extreme weather conditions or before slaughter.

Calves may be kept indoors during the period of milk feeding. Calves that are three months old in August may be kept indoors for the rest of the grazing and outdoor period.

Pigs shall begin grazing from May until the end of September.

Sows may be kept indoors for at the most one month in the case of mating/insemination. The sows shall have access to an exercise yard if they are indoors for more than one week.

Bulls that have been notified for slaughter may be kept indoors until 15 June in Götaland and until 1 July in Svealand and Norrland, southern, middle and northern Sweden, respectively. Other bulls shall be let out to graze earlier in the season.

The producer should document the presence of animals kept indoors.

#### 5.2.5

In the case of dairy cows in a spacious indoor system where a climate similar to outdoor conditions is possible, the requirement for remaining outdoors can be restricted to the grazing period.

Outdoors during the cold period

#### 5.2.6

In the cold season animals shall have the opportunity to go out. Animals may be kept indoors during extreme weather conditions, when there is a danger of leaching, mating, artificial insemination, giving birth, illness and prior to slaughter. The producer should document the presence of animals who are kept indoors. The producer must document or keep a journal for all animals that do not have continuous access to the outdoors.

Exceptions to the outdoor period include cattle and hens that may be kept indoors in heated buildings.

Sheep and goats may be exempted from the standard, subject to examination, if they are kept indoors in a climate similar to outdoor conditions and there is adequate space to move freely.

Pigs shall have access to an outdoor exercise yard that may be partially covered.

*Cattle may be kept tethered in buildings constructed on or before the 24<sup>th</sup> of August 2000 providing that the animals have access to regular exercise. For the time being maximal outdoor period is enough, the recommendation is however regular exercise during the whole cold season.*

#### 5.2.7

Whenever animals are kept outdoors, measures shall be taken to prevent significant leaching and run-off of plant nutrients.

KRAV recommends that animals are to be kept on a hard surface.

### Housing conditions

#### 5.2.8

Specific measurements for space requirements are listed in Appendix 2.

No more than 7 hens per m<sup>2</sup> of floor surface are permitted in facilities for laying hens built prior to 24 August 1999. Floor surface means floor and littered area. The surface area of nests may not be included.

*No form of cage is acceptable in any form of animal management.*

5.2.9

All animals shall be able to move freely and may not be tethered. An exception is beef cattle over 20 months old, which may be tethered when indoors. Animals may be tethered temporarily for treatment and other handling. Animals may be tethered between 6 - 20 months for a total of three months to become accustomed to tethering.

5.2.10

Animals between the ages of 6 and 20 months may be tethered when indoors up until 1 September 2002 for herds registered to KRAV before 1 September 2000.

5.2.11

When building or rebuilding cowsheds, solutions shall be found which guarantee daily exercise for dairy cows.

*According to Council Regulation (EEC) no 2092/91 the loose housing system shall be in effect as of the 31st of December 2010 with the exception of dairy cows in small herds that are exercised twice per week.*

5.2.12

Electric cow trainers are not permitted and may not be found fitted in the cowshed. Electric fencing may not be used inside the sheds.

5.2.13

Calves shall be kept in groups. Normally they should not be left in a single box for more than one week. In some cases, they may be kept in single box longer but the size of the box should be comparable to two calving boxes according to the animal welfare provisions in force.

5.2.14

Growing pigs shall be kept in groups, both indoors and outdoors. Indoors they shall have access to a separate lying area with deep bedding and a separate manuring space. They shall also have a well-defined feeding place. The space shall be airy and large enough for all the animals to be able to rest without aggressive competition.

5.2.15

Animals shall be kept clean. See standard 10.7.1

5.2.16

Lying areas shall be kept dry, clean, free of draughts, and warm where necessary, with ample straw for bedding.

5.2.17

Slatted floors are permitted only if stock also have access to unslatted lying areas, such as stalls, a bedded surface, or a well functioning deep litter. At least half of the floor space should be whole including the cleaning area in front of the cub cles.

At least one-third of the laying hens' indoor area should be littered area  
Other poultry shall be on the littered area.

5.2.18

Animals shall have adequate access to daylight. The amount of daylight entering

the indoor area should be at least 5 percent of the floor area.

5.2.19

Hens and chickens shall have at least 8 hours of darkness without artificial light.

### 5.3 FEED

All feed indications are expressed as dry matter if nothing else is stated.

5.3.1

Feed shall be of a good hygienic quality and its composition shall be adapted to the respective type of animal.

5.3.2

The goal shall be the use of 100 percent KRAV certified feed. The exceptions below are permitted. However, when purchasing feed, KRAV certified feed should be the first choice.

Feedstuffs from non-KRAV certified production may be used if permitted and under the conditions below:

For ruminants this may be a maximum of 5 percent, non-ruminants a maximum of 15 percent and for poultry a maximum of 15 percent of the annual feed intake.

Deer shall be reared using 100 percent KRAV certified feed.

*According to (EEC) no 2092/91 calculations are made per animal and not per flock or herd. As stated in the EC Regulation the derogation from feeding with 100 percent organic feed raw materials (feed originating from agriculture products) applies until the 24th of August 2005. Allowed conventional feed and feed supplements are listed in the (EEG) no 2092/91 Annex II. Depending on the availability of organic raw materials the date for more stringent rules regarding the amount of conventional feedstuff and allowed conventional products can be revised.*

5.3.3

Genetically modified organisms are not permitted in feedstuffs, in the production of feedstuffs, in additives or in preservatives.

5.3.4

During the first 2 years from the start of the conversion period, in excess of that stated in standard 5.3.2, a further maximum of 5 percent of feed for ruminants and for pigs may be non-KRAV certified provided that it is produced on the holding.

5.3.5

Minerals, lime, shell etc. are not included when calculating the percentages of KRAV certified feed.

#### Self-sufficiency in feed

5.3.6

The proportion of feed that is home grown shall be at least 50 percent of the annual feed intake (per farm). The exceptions to this standard include herds with at most 3 cows with calves or 10 young animals; 3 sows in integrated production or 50 fattening pigs; 20 adult sheep or goats with young; 500 laying hens or broilers. Co-operation between KRAV certified farms located close to each other may be approved if a contract is entered between parties.



In special circumstances, exceptions also may be made for larger herds subject to examination, provided that manure spreading can be arranged so as to avoid harming the environment (this primarily concerns chickens and hens).

Daily feed intake

#### 5.3.7

A maximum of 25 percent of the daily feed intake may be non-KRAV certified.

Maximum proportion of non-KRAV certified feed in percent

TYPE OF ANIMAL	DAILY	ANNUAL	FIRST 2 YEARS*
Ruminants	25	5	10
Pigs	25	15	20
Poultry	25	15	15

\* Purchased and home grown feed, see standard 5.3.3.

Maximum proportion of bought in feed per year in percent.

Exceptions – holdings with fewer than 10 livestock units \*

TYPE OF ANIMAL	MAX. PURCHASED
Ruminants	50
Pigs	50
Poultry	50*

\* *Exceptions may be granted in special circumstances, provided that manure spreading can be arranged so as to avoid harming the environment. see standard 5.3.6.*

### Feed processing

#### 5.3.8

All feed shall be produced using processes, which comply with KRAV's processing standards. Such feed are listed on a list of processed feed permitted by KRAV. See Appendix 5.

### Feed from cultivation during the conversion period

#### 5.3.9

Up to 60 percent of the annual feed intake may consist of feedstuffs from the producer's own crops taken during the conversion period and is considered KRAV certified. Autumn sown crops where the seed is chemically treated or where artificial fertilizers have been used in the autumn previous to the conversion year may not be used as part of the quota. This also applies to crops where the land has been treated with chemicals during or after harvest in the autumn previous to the conversion year.

Up to 100 percent of own produced conversion-year feedstuffs may be used during the first two years with a longer conversion period. See standard 5.1.6.

### Roughage

#### 5.3.10

Livestock shall have free access to roughage.

KRAV recommends that deer also have access to vegetation for browsing during the winter.

### **Concentrate**

#### **5.3.11**

For ruminants reared for meat and ruminant young stock, concentrate may constitute a maximum of 30 percent of the daily dry matter intake.

For milking stock, concentrate may constitute a maximum of 40 percent of the daily dry matter intake but it may go up to 50 percent during not more than 3 months in the beginning of the lactation.

During weaning, the proportion of concentrate may go up to a maximum of 50 percent for a brief period. For lamb, this period may be a maximum of one month after weaning and for calves it may last until the age of 6 months.

For deer, a maximum of 30 percent of the daily dry matter intake may constitute concentrate.

### **Feed of animal origin**

#### **5.3.12**

Feed of animal origin (including milk, dairy products, fish and other marine animals) shall be of a high quality and is permitted only for pigs and poultry. Meat products are not permitted.

However, whey, skim milk and other by-products from KRAV certified milk processing may be fed to ruminants. See also 5.3.16 och 5.3.17.

### **Grazing period**

#### **5.3.13**

Grazing shall constitute at least 50 percent of the dry matter for ruminants. A somewhat lower proportion may be permitted during parts of the period for milking animals and bullocks. Grazing shall, however, constitute at least half of the roughage.

For pigs, grazing is to provide both food and much opportunity for activity.

For poultry, the grazing area shall have a grass cover and provide both food and much opportunity for activity.

For poultry and bullocks, the grazing may be supplemented by fresh roughage.

For deer, the daily dry matter intake during the vegetation period can comprise grazing or other plants in the enclosure. The number of animals should be adjusted so that normal growth can be achieved without concentrate supplements.

#### **5.3.14**

Stud bulls may be kept in outdoor runs. During the grazing period, stud bulls shall have access to roughage.

#### **5.3.15**

All fences shall be well kept. Barbed wire shall be avoided, and electrified barbed wire is prohibited.

## Suckling

### 5.3.16

Calves, lambs and kids shall suckle for at least the full colostrum period and thereafter be fed unprocessed whole milk from the species in question for at least 12 weeks (calf), 8 weeks (lamb) and 6 weeks (kid).

Deer kids should suckle throughout the milk period up until natural weaning.

### 5.3.17

In the raising of supernumerary or motherless animals certified milk from another species may be used. If that is not possible unprocessed conventional milk may be used. Milk may not be acidified with formic, propionic or acetic acid.

Milk substitutes may be used only in individual emergencies for a shorter period. If the quantity exceeds 30 percent of the daily intake, a 12-month conversion period will be required. The producer shall document all use of milk from other species, conventional milk or milk substitutes.

When treating sickness, exceptions can, subject to examination, be made for warming-up milk or the use of milk from other species.

### 5.3.18

Calves which do not suckle shall be given the opportunity to suck through an artificial teat placed in a natural position.

### 5.3.19

Piglets shall not be weaned before 7 weeks of age.

### 5.3.20

Milk from animals treated with drugs may not be used to feed other than the animal's own suckling offspring during the withdrawal period laid down by the Swedish National Food Administration plus one day for the treated suckling cows and calves.

## Water

### 5.3.21

Animals shall always have access to good quality water.

## Feed supplements

### 5.3.22

Supplementing feed with salt and seashells is permitted.

### 5.3.23

Synthetic supplements such as enzymes may be approved only subject to examination to determine whether these are necessary for the health of the animal and where there are no natural alternatives.

Generally, the following apply:

- Trace elements, vitamins and minerals are permitted;
- Amino acids produced in pure form and urea are not permitted.

*Conventional feedstuffs and feed supplements shall be listed in Annex II Council Regulation (EC) no 1804/1999.*

#### 5.3.24

Piglets should have access to soil all year round for iron. Soil may be enriched with iron where necessary.

#### **Heavy metal content**

#### 5.3.25

Analyses of the heavy metal content of minerals, concentrate and ready prepared feed, regulated in accordance with standard 4.2.5 shall be requested from the supplier.

Feedstuff preservatives

#### 5.3.26

Synthetic preservatives are not permitted with the exception of formic, propionic and acetic acids.

#### 5.3.27

Permitted silage inoculants are:

- Bacteria (sodium benzoate may be permitted as a preservative upon examination);
- Formic acid, propionic acid and acetic acid;
- Enzymes;
- Molasses in an amount sufficient for making silage (40 kg/ton green fodder);
- Feed permitted under standard 5.3 may be used but is included in the percentages of KRAV certified/non-certified feed.

#### 5.3.28

Bacteria cultures and acidification substances of plant origin may be used for acidification of milk. Chemical feed preservatives including formic, propionic and acetic acids are not permitted for milk acidification.

## **5.4 HEALTH AND MEDICAL TREATMENT**

#### 5.4.1

Livestock should be kept in such a way that good environment, care and feeding procedures promote good health and keep the level of illness low. Overall good health of stock is a prerequisite for KRAV certification. Animal caretakers shall demonstrate proper care of all stock.

Deer should be free from tuberculosis. Membership of an official control programme is recommended.

#### 5.4.2

Animals showing signs of illness or injury shall be attended to immediately and given proper care. If proper care is not provided for, the whole herd may be de-certified.

#### 5.4.3

If health disturbances arise which may have been caused by a deficient environment, care or feeding, action shall be taken to remedy these deficiencies immediately. If appropriate actions are not taken the whole herd may be de-certified. In serious cases, KRAV may demand that the producer join an established animal welfare programme.

#### 5.4.4

Injections of vitamins and minerals are permitted in individual cases. In order to avoid recurring problem, supplements should subsequently be provided.

Where low selenium levels are documented, prophylactic injections may be given following notification to KRAV.

### **Drugs and chemical agents for the treatment of animals**

#### 5.4.5

Routine prophylactic treatment with drugs or chemical disease control agents is not permitted. Exceptions include:

- The use of vaccine in cases of clear need and where other methods of treatment are considered less effective. Vaccine made of or produced by genetically modified organisms are prohibited. Other restrictions may be introduced in the future.
- The use of anaesthesia.

It is not permitted to use synthetic substances to stimulate or arrest production or natural growth.

#### 5.4.6

Drugs or chemical agents may be used only where there is a clear need and observing the withdrawal periods set out below. Treatment of entire groups of stock should be notified to KRAV in advance. Subject to examination preventive treatments may be given in specific cases.

5.4.7 Avermectins may be used only where other substances are not expected to have the desired effect. Non-degradable substances, e.g. avermectins, should not be used when animals are on natural grazing.

### **KRAV's withdrawal periods**

#### 5.4.8

There is no withdrawal period for the following, assuming the agents or treatments are not prescribed with a withdrawal period:

- Calcium for milk fever
- Agents to increase blood sugar levels (e.g. propylene glycol) for appetite disorders
- Carbon preparations
- Natural medicine
- Injections with vitamins and minerals
- All external treatment except parasite treatment and formalin. For these treatments the withdrawal periods apply as laid down for other substances in standard 5.4.10 and for substances with a withdrawal period of 0 days in standard 5.4.11.

#### 5.4.9

Animals must undergo a conversion period according to "Council Regulation (EEC) No 2092/91" if:

- They receive more than two or a maximum of three courses of treatments with chemically synthesized allopathic veterinary medicinal products or

- antibiotics within one year;
- They receive more than one treatment if their productive lifecycle is less than one year.

The length of the conversion period is:

- 12 months for beef reared for meat
- 4 months for pigs, sheep, goat. Minimum withdrawal period according to standard 5.4.10
- 3 months for dairy production
- 10 weeks for poultry reared for meat, minimum withdrawal period according to standard 5.4.10
- 6 weeks for laying hens

A treatment means all the treatments made to cure a disease. Use of vaccine, parasite treatments and compulsory treatments demanded by authorities are not included in the number of treatments.

### **KRAV's withdrawal periods for meat, wool and hides**

#### **5.4.10**

For treatment with antibiotics and chemotherapeutics:

- Double the withdrawal period laid down by the Swedish National Food Administration for the respective substance, however always at least 6 months.

For vitamins, minerals and anaesthetics with prescribed withdrawal periods:

- Double the withdrawal period laid down by the Swedish National Food Administration for the respective substance.

**For other substances:**

- Double the withdrawal period laid down by the Swedish National Food Administration for the respective substance, however always at least 2 months

### **KRAV's withdrawal periods for milk and eggs**

#### **5.4.11**

For substances with a fixed withdrawal period:

- Double the withdrawal period laid down by the Swedish National Food Administration

For drugs or agents with a withdrawal period of 0 days:

- 48 hours

## **5.5 MISCELLANEOUS**

### **5.5.1**

Medical hormonal heat synchronization, embryo transfer, or routinely induced birth, are not permitted.

Genetic modified organisms are not allowed.

## **Mutilation**

### **5.5.2**

Mutilation of animals shall be restricted. Mutilation other than castration and dehorning is not permitted.

### **5.5.3**

Castration is permitted for calves prior to 8 weeks of age. Calves shall be anaesthetised during castration.

Castration of pigs is permitted prior to 7 days of age. Teeth grinding of piglets is permitted in the case of large litters and should be done before one week of age.

### **5.5.4**

De-horning, by burning only, may be carried out prior to 8 weeks of age. Dehorning of older animals for animal welfare or handling safety reasons can be approved subject to examination.

Deer may be dehorned to allow handling and transport. This should be done after approval from KRAV. In this case de-horning entails sawing off of horns after cleaning.

## **Breeding**

### **5.5.5**

Animals of a breed that cannot mate or give birth without human assistance cannot be KRAV certified. The use of sperm from embryo transfer bulls is permitted for the time being.

## **Age at slaughter**

### **5.5.6**

For poultry which is not slow-growing the minimum age at slaughter shall be

- 81 days for chicken
- 140 days for turkeys and geese

## **Transport**

### **5.5.7**

The owner of the stock shall ensure that loading, transport and unloading of livestock are carried out in a way that causes as little physical or mental stress as possible.

### **5.5.8**

The owner of the stock shall allow and facilitate KRAV's knowledge of the results of live inspections and slaughter reports.

### **5.5.9**

Deer may only be transported in connection with purchase or sale of breeding stock or milch cattle.





## 6. APICULTURE

## 6.1 REGISTRATION AND CONVERSION

### 6.1.1

Bee keeping may be KRAV certified after a conversion period of one year, during which it shall comply with the KRAV standards and be inspected by KRAV. Parallel production may be approved, subject to examination, under the condition that all production and handling are conducted in a way where there is no danger of mixing certified and conventional products. KRAV certified wax should be used upon entering the inspection scheme. If KRAV approved wax is not available in sufficient quantities at new entry, existing conventional wax may be used under the condition that the wax does not comprise of any residual substances of pesticides.

### 6.1.2

It shall be possible to identify hives.

### **Purchasing bees**

#### 6.1.3

Bee colonies and queen bees may only be purchased from KRAV certified producers. An exception may be made, subject to examination, where there are no KRAV certified bee colonies and queen bees for sale.

Genetic modified organisms are not allowed.

#### 6.1.4

Wax not certified may not be brought to the certified production when purchasing bee colonies.

### **Feed**

#### 6.1.5

Portable colonies and hives may not be situated close to fields where chemical pesticides and herbicides are used, i.e. near conventional cultivation of oil-producing plants, fruits and berries. Nectar and pollen sources shall essentially consist of organically produced crops and/or spontaneous vegetation.

#### 6.1.6

Additional feeding of honey and sugar water to bees is permitted during hibernation and in early spring.

#### 6.1.7

KRAV certified sugar or sugar solution shall be used as feed for the winter.

### **Sources of contamination**

#### 6.1.8

The use of chemical agents around beehives is not permitted.

#### 6.1.9

Beehives may not be placed close to sources of contamination, such as industrial areas and waste dumps.

## **Drugs and chemical agents**

6.1.10

Diseased colonies shall be treated.

6.1.11

In addition to cold storage, the following are permitted for treating illness and pests, for health control in beehives and when storing frames: oxalic acid, formic acid, acetic acid, lactic acid, soda and caustic soda.

## **Mutilation**

6.1.12

Clipping of wings of queen bees is prohibited.

## **Handling**

6.1.13

Smokers, water and vinegar are permitted to remove and calm bees. Only untreated natural wood and non-fossil fuels of plant origin are permitted in smokers. No other agent to remove or calm bees is permitted.

6.1.14

Oil, diesel and other petroleum products are not permitted in order to prevent ant infestation.

## **Material for honey frames**

6.1.15

Compartment wax walls may only consist of KRAV certified wax or of plastic permitted in use with food.



## 7. AQUACULTURE

*The standards for KRAV-certified aquaculture have been developed jointly with the Norwegian certification body, Debio. They therefore have a different structure compared to the other chapters in KRAV's standards.*

*General: Under this heading is a general introduction to the actual standards section.*

*Recommendation: Recommendations contain advice on how the standards should be practically viewed.*

*Standards: In the section Standards are the minimum standards that KRAV inspects for compliance. All standards must be complied with for the production to be KRAV approved.*

*Standards have been compiled with a vision of a sustainable and ethically acceptable aquaculture. It has not always been possible to unite this vision with conditions in reality. KRAV's principle is to continually develop standards for aquaculture with the goal of realizing this vision as far as possible. See also Chapter 1 Objective and scope.*

## **7.1 SCOPE**

KRAV-certified aquaculture covers cultivation of different species in fresh-, salt-, and brackish waters and transporting and slaughter of these species.

Species allowed can be carnivorous, herbivorous or omnivorous (eating meat, plant or both) in all stages. These can be cultivated in all types of land-based or floating/submersible enclosures in seawater or freshwater or in a dam/lake with natural demarcation and where the activity can be controlled.

Stationary organisms such as seaweed and shellfish can be certified as KRAV approved when the applicable parts of these standards are fulfilled.

These standards contain specific standards for salmonoid fish (Salmonidae), the perch family (Percidae), and blue mussels (common mussel) (*Mytilus edulis*)

### **General standards for all types of aquaculture**

## **7.2 PRODUCTION SET UP**

### **General**

The overall objective for the production shall be consideration for the environment and the thriving and health of the organisms. The production shall be adjusted so that the organisms live in a sustainable and renewable environment, which is established to secure their fundamental physiological and behavioural needs.

The production shall be managed in such a way that the environment in surrounding water and land areas is preserved through:

- Impacting to the minimum possible extent on the local biological processes, which cover microorganisms, plants, and animals
- Preventing escape
- When marine foodstuffs are used, they shall come from a sustainable stock, which is not normally used as human food and/or byproducts from species used as human food

- Managing production so that infections, parasites and drug residues do not affect wild organisms in the environs
- Not using synthetic fertilizers and impregnating agents that load the environment
- Providing for biodiversity in the production where this is possible (for example production of blue mussels or barnacles in connection with fish cultivation)

The production can consist of both KRAV-inspected and conventional production provided that these operating units are kept well separated and without danger for mixing (i.e. parallel production).

Production in sealed cages means that water is pumped into the cage from outside water. The cages are totally sealed. The water in the cage is thereafter pumped to a cleaning process where the nutrient salt load is reduced up to maybe 70 percent. The system means that the feedloss is negligible. The fishes consume practically all feed.

Records must be kept for the entire cultivation unit.

## **Recommendation**

KRAV recommends that the entire management of the unit be converted to KRAV-certified production. To gain experience with this type of production, however, it may be appropriate to convert the production gradually.

The consideration of the surrounding environment is crucial for the location and management of the KRAV-inspected unit. The total amount of discharge shall not load the surroundings so that the biodiversity is affected negatively or cause over-fertilization of the water area. This applies also to wild salmon river mouths and openings to salmon watercourses. Considering the dangers of spreading disease, special caution should be taken with the mouth to salmon watercourses.

In accordance with the objectives for KRAV-certified aquaculture it is important that the production is located at an appropriate distance from discharge sources and conventional units.

Feed wastage or faeces that are collected shall if possible be used as fertilizer in KRAV-certified agriculture or in other appropriate ways. Feed wastage and faeces can be approved for KRAV-certified production, see Chapter 12 Production inputs.

## **Standards**

### **7.2.1 Conversion to KRAV-certified production**

#### **7.2.1.1**

The KRAV-inspected production unit shall be clearly defined and demarcated so that confusion cannot arise with conventional feed, input factors etc. It shall be possible to inspect the unit in respect to the documentation requirements laid down in the standards.

#### **7.2.1.2**

At the production unit, there shall be a production description stating how the requirements in the standards are complied with. The production description

shall be adapted to Annex 3 in (EEC) No 2092/91 and shall be approved by KRAV. The production description shall be updated when needed.

#### 7.2.1.3

A production manager shall keep a record of the operation and shall be able to show a documented systematic overview of the cultivation activity at any time.

The record shall be available to KRAV.

### 7.2.2 Parallel production

#### 7.2.2.1

If the whole production unit is not converted at the same time shall

- the units not affect each other through feed wastage, medication, and use of cleaning agents or equivalent,
- in the sea and lakes, the distance between open KRAV-certified and conventional installations be at least 25 metres
- the KRAV-certified unit in flowing freshwater lay at least 10 metres upstream from the conventional unit.
- for land-based installations there be physical barriers between KRAV-certified and conventional units.
- areas for storing feed and production inputs between different types of production methods be kept well separated, feed and production inputs for KRAV-certified production be clearly marked.

#### 7.2.2.2

Converted units cannot switch between KRAV-certified and non KRAV-certified management without this first having been agreed to with KRAV. A return to non KRAV-certified production without KRAV's approval means that KRAV can refuse a new agreement for up to five years.

#### 7.2.2.3

Both of the production methods shall be documented separately through keeping records, accounting etc. KRAV shall have access also to relevant documentation for the conventional management.

### 7.2.3 Environment and water quality

#### 7.2.3.1

The water shall have such a low degree of pollution and such oxygen content that the cultivated organisms do not demonstrate physiological or behavioural symptoms. The unit may not be placed near to, or downstream from a significant source of pollution.

#### 7.2.3.2

The unit shall be positioned in an area with a good water exchange and/or designed so that no significant sediment build-up occurs underneath the unit.

#### 7.2.3.3

The producer must be able to show documentation that supports this, for example, through an in-house inspection programme or other third-party documentation.



#### 7.2.3.4

The environment shall be loaded to the minimum possible extent with feed wastage and faeces that can cause over-fertilization or other disturbances. Depending on the available techniques, KRAV can require collection in or around the unit. In fresh and brackish waters that are loaded with nutritive salts over normal background levels, it is required to have sealed cages or similar systems for collecting faeces and feed wastage as of 2009.

*Normal background levels is defined in the Swedish Environmental Protection Agency Report 4913 for lakes and Report 4999 for coastal areas.*

#### 7.2.3.5

Material, equipment, paints, etcetera used in the production shall be selected according to Chapter 2.

#### 7.2.3.6

Growth on production equipment shall be removed using mechanical or biological methods. Impregnating agents that contain environmental toxins are not allowed.

#### 7.2.3.7

Installations for cultivating fish or other aquatic animals shall have a container or other device for satisfactory storage of dead aquatic animals. The capacity shall be dimensioned for the installation's production and cleaning routines. Disposal shall be according to the regulations of the local or central authorities.

## 7.3 CONVERSION PERIOD

### General

Conversion to KRAV-certified production is a process to develop an environmentally adapted production system with special consideration for the thriving and health of the cultivated organisms. The time that runs from applying these standards in their entirety until the production is certified by KRAV is called the conversion period.

The objective is that the cultivation complies with the standards for KRAV-certified production throughout the organism's total life cycle. If organic raw material (fry for example) is not available, importation of organisms from conventional production with a subsequent conversion period is allowed.

The organisms are considered KRAV-approved when the last 90 percent of the increase in biomass has occurred according to the standards.

During the conversion period, the standards for KRAV-inspected management shall be applied and it is therefore necessary that inspections be performed also during this period.

### Recommendation

A conversion period should not be started until all of the conditions for a stable KRAV-certified production are fulfilled.

## **Standards**

### **7.3.1**

The conversion period, i.e. the time from when these standards are applied in their entirety until the production is certified by KRAV, shall at least comprise the last 90 percent of the increase in the biomass.

The requirements for KRAV-certified production laid down in these standards shall be complied with during the conversion period.

### **7.3.2**

For cultivation to be able to be KRAV certified it must be registered for KRAV inspection during the conversion period.

## **7.4 RAW MATERIALS AND ORIGIN**

### **General**

The breeding work shall be focussed on breeding goals as health and environmental adaptation and good growth with the least possible use of input factors.

The production shall be arranged so that injury to individuals is avoided.

### **Recommendation**

Preferably, the stock used should be adapted to the local conditions.

Breeding should be based on a large number of parents to avoid inbreeding, genetic aberrations and loss of genetic variation.

When purchasing breeding pairs, such should, if possible, be obtained from the nearby area so that transport time is minimized.

### **Standards**

#### **7.4.1**

If breeding materials or roe are taken into the unit, these shall be KRAV approved. If KRAV-approved breeding material with the desired characteristics cannot be obtained, a full conversion period will be applied.

Triploid fish and genetically modified organisms are not allowed.

#### **7.4.2**

Artificially induced sexual manipulation is not allowed.

#### **7.4.3**

During hatching and the fry stage shall environmental factors be controlled so that malformations are avoided.

## **7.5 FEEDS AND FEEDING**

### **General**

In all contexts, consideration of the environment and effective use of feedstuffs are the overriding principles when choosing feed and feeding.

The feed in KRAV-certified aquaculture shall be of good quality with a

nutritional composition adapted to the species.

The feed shall consist of organically produced feed products and/or feedstuffs originating in wild aquatic stock. For resource reasons, aquatic feedstuffs from stock that is not used for human food and from byproducts shall be used. One all-embracing principle is that marine feedstuff raw materials originate in fishing operations managed in a sustainable way, take consideration of the total marine ecosystem's function and are preferably environmentally certified. To ensure that these stocks are not overestimated, it is suggested that ICES' recommended quotas be adhered to.

Additives such as vitamins, minerals, antioxidants and dyes shall have a natural origin or shall be as close to their natural form as possible.

Synthetic/unnatural additives are not allowed.

Feeding shall be performed in a way that allows natural food intake with minimal feed wastage. The feed type and feeding shall not have a negative effect on the biological diversity in the area.

## **Recommendation**

Use of foodstuffs based on byproducts and other materials of biological origin that are not intended directly for or are used only to a limited extent, for human consumption should be promoted. At the same time, the feed shall supply the organisms' nutritional requirements and not contain any environmental toxins that can be injurious to the organism or humans. The fish-based feed raw materials should originate from an environmentally certified fishery, to the extent that such feed raw materials are available.

KRAV notice a conflict of goals between sustainable use of resources and natural feed for carnivorous. From a sustainable point of view producers should therefore take into consideration to use KRAV approved vegetable food ingredients. Fish feed comprises normally of 30 percent vegetable and within the international harmonisation of aquaculture standards there is a proposal with a requirement on 30 percent vegetable feed.

## **Standards**

### **7.5.1 RAW MATERIALS**

#### **7.5.1.1**

Feed for aquaculture organisms shall basically consist of 100 percent KRAV-approved feed and/or feed which is approved for use in KRAV-certified production originating from wild aquatic stock. If such approved feed is not available, up to 5 percent of the feed (the dry weight) may be from non KRAV-approved origin. The feed must have at least 45 percent dry matter.

#### **7.5.1.2**

If a KRAV-approved feed ingredient is available, but cannot be used in a justifiable way with regard to resources and/or with satisfactory quality, an exemption can be made for use of an equivalent ingredient of non-organic origin for a limited period.

#### 7.5.1.3

Feedstuff raw materials from wild fish can be used in KRAV-certified production on the following conditions:

- Wild fish shall come from sustainable stock and shall be environmentally certified by a certification body approved by KRAV

or,

- Where feedstuffs from an environmentally certified aquatic stock are not available or only constitute a part of the feed mix, at least 50 percent of the aquatic protein in the remaining parts shall come from byproducts. The remaining part shall consist of aquatic feedstuffs from species that are not normally used for human consumption and that come from biologically-safe stock according to the International Council for the Exploration of the Sea (ICES). This means that the feedstuff raw materials shall originate from a fish stock where the quota for catches does not exceed ICES' recommendations for the current year.

#### 7.5.1.4

Raw materials from the same species that the feed shall be used for are not allowed. Ingredients that are genetically modified or produced with the aid of genetic modification are not allowed.

### 7.5.2 ADDITIVES AND MISCELLANEOUS

#### Allowed additives

##### 7.5.2.1

The following additives are allowed:

- Shrimp peels, algae, fungi and bacteria cultures as dyestuff in feeds;
- Antioxidants, vitamins, minerals, emulsifiers, immune-stimulating substances of natural origins.

##### 7.5.2.2

Additives (minerals and vitamins) in a natural form shall be used when this is possible.

If this is not possible, synthetic minerals and vitamins can be used after a review.

In addition to the additives named in paragraph 1, the additives according to the (EEC) No 2092/91 are allowed.

#### Additives not allowed

##### 7.5.2.3

The following synthetic/artificial additives are not allowed:

- Growth regulating agents
- Appetite stimulants
- Antioxidants
- Amino acids
- Preservatives
- Dyestuffs
- Hormones

#### 7.5.4.2

Neither are the following allowed in KRAV-certified aquaculture:

- Additives consisting of GMO
- Additives produced using GMO
- Ingredients that are genetically modified or produced with the aid of genetic modification
- Gelatine from ruminants
- Products/ingredients where chemical solvents are used

#### 7.7.3 RECORD KEEPING

##### 7.5.3.1

The production manager shall keep a monthly record of the feed type, feed producer and quantity fed.

## 7.6 HEATH AND ANIMAL WELFARE

### General

KRAV certified aquaculture should make efforts to attend to the organisms' health through preventive measures so that medication does not become necessary. If there are still signs of disease, suitable measures shall be adopted immediately.

When cultivating fish, disease prevention work shall be pursued including effective vaccination against relevant infectious diseases, so that outbreaks of disease and use of drugs are avoided to the greatest possible extent. The production conditions within KRAV certified aquaculture shall always be such that the danger of infection and outbreak of disease are minimized.

When there is a disease, the consideration of the environment and animals' welfare shall be the deciding factors for choosing the method of treatment. In KRAV-certified production, the objective is to maintain a low aggression level and to prevent fish from injuring each other. It is documented that a low stock density can entail increased aggression for certain species of fish. On the other hand, a high stock density can also cause discomfort. The stock density standards weigh these considerations against each other, compare with section 7.7.5.

The cultivation unit must be observed regularly so that distress and abnormal behaviour is noticed. When deviations are discovered, the cultivation conditions shall be changed so the individuals' normal behaviour is reinstated.

### Recommendation

The water quality should be maintained so the physiological needs of the species are not negatively affected.

The production should be aimed at prophylactic health work and be adapted to the needs of the organisms. There should be routines for hygiene and there should be regular checks for discovering latent disease and disturbances in production.

Biological combating of disease should be prioritized above use of chemicals where this is possible and adequately effective, for example, when "delousing" with wrasse (*Labrus*, Fam. Labridae). Drugs with the minimum

possible environmentally harmful effect and with the minimum possible risk to the working environment and animal health should preferably be used. The risk for resistance to antibiotics in the natural environment should be given special consideration. The organisms shall be handled to the minimum possible extent and as carefully as possible.

## **Standards**

### **7.6.1 TREATMENT/DRUGS**

#### **7.6.1.1**

Organisms that show signs of disease shall be given suitable treatment immediately.

#### **7.6.1.2**

Drugs shall be used when no other treatment method can be justified from an animal protection viewpoint and/or when this is required according to national laws and standards.

The routine use of prophylactic treatment with drugs is not allowed.

Drugs containing GMO or produced using GMO may only be used when there is no effective alternative.

#### **7.6.1.3**

Drugs and additives in feed and water given to artificially increase growth/yield are not allowed.

An artificial day length may not be longer than the longest natural daylight length in a year for the locality in question. In open installations, only underwater lighting may be provided.

#### **7.6.1.4**

When using drugs and disinfectants in the breeding installation, care shall be taken and active measures adopted to minimize discharges to the surrounding environment.

### **7.6.2 CONVERSION PERIOD WHEN USING DRUGS**

#### **7.6.2.1**

The conversion period after use of drugs is double that compared with the national regulations. Drugs and control agents that do not have a conversion period according to national regulations have a conversion period of two weeks in KRAV-certified production.

#### **7.6.2.2**

During treatment with drugs with a conversion period in one unit, the same conversion period applies for all surrounding KRAV-certified production within 150 m in the sea and lakes and within 10 m when a treated unit lies downstream in flowing freshwater.

### **7.6.3 RECORD KEEPING**

#### **7.6.3.1**

A record shall be kept of treatment of diseases. The record shall contain:

- Identification of the actual disease/infection

- Type and length of treatment
- The type of drugs used
- Implemented conversion period.

### Special standards for fish farming

## 7.7 SALMONOID FISH AND THE PERCH FAMILY

This section contains special standards for salmonoid fish and the perch family. These are built upon the general standards for KRAV-certified aquaculture. The chapter covers the Salmonoid species including salmon (*Salmo salar*), rainbow trout (*Salmo gairdneri*), brown trout (*Salmo trutta lacustris*); arctic char (*Salvenius alpinus*), and fish from the perch family, Zander/perchpike (*Stizostedion lucioperca*) and perch (*Perca fluviatilis*).

Standards for converting to KRAV-certified production 7.2.1, Parallel production, 7.2.2, Conversion period 7.3, and Feeds and feedstuffs 7.5 apply in their entirety.

Otherwise, the following additional standards for salmonoid fish and the perch family apply:

### Standards

#### 7.7.1 MEASURES TO PREVENT ESCAPE

##### 7.7.1.1

The production shall focus on preventing escape in respect to both technical equipment, handling and internal control.

##### 7.7.1.2

A cultivation production manager shall have a current contingency plan for all units for how escapees can be recaptured effectively. Escapes shall be reported immediately to KRAV. The contingency plan shall also cover governing principles to minimize danger for escape when moving breeding cages, filter changes, emptying of cultivation trays, extreme weather conditions and for handling fish during sorting, loading or unloading.

##### 7.7.1.3

KRAV can impose special conditions on the production manager to prevent escapes and for identifying the escaped fish. For example, these conditions can include individual marking and technical requirements for the design of the cultivation units. Visual inspection of the cultivation cages shall be regular, at least monthly, for example by diving or using camera surveillance.

##### 7.7.1.4

If the farmer is judged in a court of law for irresponsible operation in regards to escapees, the cultivation shall be de-certified.

#### 7.7.2 ENVIRONMENT AND WATER QUALITY (COMPARE WITH SECTION 7.2.3)

##### 7.7.2.1

Daily-recorded measurements shall normally be performed in every production unit of:

- Temperature
- Salinity (in marine installations)
- Oxygen content
- Level of carbon dioxide (in land-based facilities)

All measures in cage cultivations shall be taken at a depth of three meters; in land-based cultivation the measures shall be made in the outlet water. Excessively high temperatures can mean distress for the fish.

The water temperature may not exceed during a period longer than one week:

- 19°C with cultivation of char
- 20°C with cultivation of salmon and trout
- 22°C with cultivation of rainbow trout
- 28°C with cultivation of zander/pikeperch and perch.

Oxygen solubility is dependent on temperature and salinity and shall be maintained at an optimal level for the welfare of the fish. As a minimum level, the oxygen content in the water shall be at least 7 mg oxygen per litre. The water exchange shall be so great that harmful effects of carbon dioxide and ammoniac are avoided. When the danger of exceeding these levels is present, the cultivation shall be equipped with appropriate additional equipment such as pumping in of cold bottom water (cage cultivation) or ground water (land-based facilities) and increasing the oxygen content.

### 7.7.3 RECORD KEEPING

#### 7.7.3.1

The following information shall be recorded every month for every production unit:

- Releasing and stocking of fish: The number of individuals, species, origin, time when put out and average weight (live weight).
- Volume per cultivation unit
- Number of kilos of fish per cubic meter
- Removed quantity of dead/dying fish: Information about the quantity shall be specified as the number of individuals and total weight in kilograms.
- Production result (slaughter weight): Information about the quantity shall be specified as the number of individuals and total weight in kilograms.
- Consumption of cleaning agents and disinfectants: Chemical type, product name, quantity and consumption period.

#### 7.7.3.2

Information about the following conditions shall be recorded every calendar month for the KRAV-certified cultivation unit:

- Fish health status: In the event of disease, a diagnosis shall be specified, who has made the diagnosis (fish health inspector/veterinary surgeon), diagnostic investigations carried out (public/private laboratory), treatment implemented or treatment method, conversion periods
- Treatment and handling of dead fish: Treatment method, quantity supplied, time of delivery and recipient
- Oxygen content, temperature, salinity (in sea facilities), carbon dioxide (in land-based facilities).
- Inspection of cultivation cages (net condition and fish behaviour)
- Possible escapees



#### 7.7.4 BROUGHT-IN AQUATIC ORGANISMS AND ORIGIN (COMPARE WITH SECTION 7.4)

##### 7.7.4.1

Brought-in aquatic organisms (such as roe and breeding fish) taken into the production unit shall come from cultivation that is subject to health checks (for example fish health).

##### 7.7.4.2

Salmonoid breeding fish shall originate from domesticated fish. Roe and breeding fish from fish in the perch family may originate from wild captured parents. The starting stock shall be captured with equipment that in the least possible way can damage the fish, such as with a fyke net. Nets may not be used to capture starting stock.

##### 7.7.4.3

The origin of the breeding fish shall be recorded.

#### 7.7.5 HEALTH AND ANIMAL PROTECTION (COMPARE WITH SECTION 7.6)

##### 7.7.5.1

When adjusting the stock density, consideration must be given to

- That the fish have a low aggression level and low frequency of fin biting and other fin damage
- That the fish can form shoals
- That the normal behaviour of the fish can be maintained as long as possible
- The stock unit density does not cause behaviour that indicates distress
- The oxygen levels in the water (compare with Environment/water quality 7.7.2.1)

##### 7.7.5.2

The cultivation unit shall be affiliated with an organized health inspection scheme.

##### 7.7.5.3

Abnormal behaviour and/or mortality exceeding 0.05 percent per day shall be reported to the fish health control programme and to KRAV and immediate measures shall be taken that solve the problem and ensure the welfare of the animals. Emergency slaughter shall be considered as an alternative to drug treatment.

##### 7.7.5.4

Dumping of dead/dying fish or fish parts/residues is not allowed. Neither is release of fish from the cultivation unit allowed. Dead or diseased fish, waste that comes from the cultivation, and used packaging shall be considered to be infectious and shall be treated correctly so that it cannot entail a danger of spreading infection. If possible, packaging should be recycled. This means that dead or dying fish should be removed from the production unit daily to the greatest possible extent. Dying fish shall be immediately slaughtered. Dead fish shall immediately be ground down and be conserved in acid or handled according to other approved treatment methods.

#### 7.7.5.5

In the event of salmon lice, the first most natural choice is to use wrasse (*Labrus*, Fam. Labridae) for controlling the problem when there are no weighty reasons to not do this. Such reasons can be that the facility is located in too fast-flowing water or exposed, or that the facility is in Troms or Finmark.

Even if wrasse does not solve the whole problem with salmon lice, these can be very helpful in reducing the remaining lice after a drug treatment or to maintain a control of lice in the slaughter cages.

When using wrasse, consideration shall be taken to their natural needs, such as feed and hiding places.

#### 7.7.5.6

With a treatment bath for salmon lice all of the units shall be treated in isolation to ensure there is effective control over the concentration of the treatment, minimize use of chemicals, reduces discharge in nature, obtain an effective treatment and prevent resistance to the drug in use.

#### 7.7.5.7

Vaccinating is allowed if it is certain that the disease is found in the area and cannot be controlled through prophylactic production methods. KRAV approval is not affected by vaccination that is ordered by an authority. Vaccinating shall be carried out with the least possible suffering for the fish and least possible side effects.

#### 7.7.5.8

When aberrations in the animals' physiology an/or behaviour is observed, shall the necessary measures be immediately taken to return to the optimal conditions.

#### 7.7.5.9

Fish shall be sorted with the least possible distress.

### 7.7.6 TRANSPORT

#### 7.7.6.1

Live fish may be transported for a maximum of 6 hours. After review, KRAV can give exemption from this standard for a limited time.

#### 7.7.6.2

A person shall be designated as responsible for animal welfare during transport. It shall be reported immediately to KRAV if the transportation caused physical injury to the fish due to distress and handling.

#### 7.7.6.3

Transport equipment and materials shall have no possibility of causing poisoning.

When transporting, the transport equipment shall be disinfected.

#### 7.7.6.4

Synthetic stimuli and/or tranquilizers may not be administered in connection with transport. Sodium chloride may be given in connection with transport.

#### 7.7.6.5

Transport time, number of fish and any divergences from the standards during transportation shall be recorded.

### 7.7.7. SLAUGHTER

#### 7.7.7.1

All handling in connection with slaughter shall entail the minimum possible suffering and distress for the fish.

#### 7.7.7.2

Fish may not be starved in connection with slaughter more than in a maximum of 100 day degrees (water temperature x day).

#### 7.7.7.3

Capture methods for salmonoid fish can be a dense landing net, a vacuum pump, a seine and fyke net. Fish caught using a hook and line cannot be KRAV approved.

#### 7.7.7.4

All fish that are stunned shall be killed immediately.

Stunning methods that are approved by the authorities shall be used. A blow to the fish's head is recommended for stunning. Fish shall be fully stunned before they are killed. Slaughter shall be done by bleeding.

#### 7.7.7.5

Salmonoid fish and the perch family may not be prepared for slaughter in water temperatures that exceed the limits in standard 7.7.2.1.

#### 7.7.7.7

Slaughtering and subsequent handling of KRAV-approved and conventional fish shall be clearly separated in time or place so that no mixing of the fish can occur.

## 7.8 SPECIAL STANDARDS FOR CULTIVATING MUSSELS

### General

Aquaculture of common mussels has been a subject of many scientific studies. The resources are renewable and there is no danger for over-exploitation. Blue mussels lie lower in the food chain and feed directly on primary production. This means that nutrient salts that are taken up by phytoplankton are carried away indirectly from the marine environment when mussels are harvested. Aquaculture of blue mussels could thus contribute to a necessary reduction of the problems with filamentous algae in bays, oxygen depletion in deep waters, dead sea floors, etcetera, that have come about in the wake of over-fertilization. Mussel cultivation thus brings about a cyclical adaptation of food production at the same time the marine environment is improved.

Mussel cultivation can be a good growing area for young fish and form protection for the fish.

The following section contains the special standards for cultivating blue mussels. These are built upon the general standards for KRAV-certified aquaculture. No feed additives and no chemicals are used.

Standards for converting to KRAV-certified production 7.2.1.1, Environment and water quality 7.2.3.1 and 7.2.3.2 as well as Conversion period 7.3 are also applicable to blue mussels.

## Food inspection

Based on the EC Directive 91/492/EEC, the Swedish National Food Administration (SLV), has developed regulations governing the sale of mussels for human consumption. The mussels are tested both in regards to the level of toxins and bacteria. SLV is responsible accordingly for opening or closing specific seawaters for harvesting of shellfish as well as classifying according to the same regulations. In this respect the EC law require biological testing. As of now, the testing is conducted on mice. As soon as SLV's regulations allow, all testing for toxins will be carried out using chemical methods. The testing for bacteria is carried out according to established methods.

KRAV welcomes a development of KRAV-certified mussels production. Though, as KRAV does not permit animal testing within KRAV-certified production makes it for the time being hard to use KRAV-approved mussels for human consumption.

## Standards

### 7.8.1 ENVIRONMENT AND WATER QUALITY

The cultivation unit shall be located in an area with good water flow to meet the nutritional needs of the mussels. The unit shall be located at an appropriate distance from a larger point of discharge (purification facility, industry).

### 7.8.2 RECORD KEEPING

Every other month, the following information shall be recorded for every cultivation unit:

- Initial needs and measures taken
- Regular stock estimations
- Possible losses and measures taken
- Register the occurrence of settling, of mussels as well as other organisms, during the first 20 weeks after setting out the ropes.
- Possible predation by starfish and eider

### 7.8.3 HEALTH AND ANIMAL WELFARE

Scarecrows may be used with the conditions that they send noise at irregular intervals and that they mainly imitate predatory birds' calls. The scarecrow may not be used at the cultivation when then mussels have grown to an average length of 5 cm or more.

### 7.8.4 AESTHETICS

The design of the installation may only be made with homogenous materials. Barrels and other floating items shall have a neutral and same colour and size.

The heterogeneous materials in existing cultivation units shall be successively exchanged within three years.

### 7.8.5 HARVEST

During the harvest, the growth on the collecting materials shall be gathered in. The only materials that may be returned to the sea are undersized mussels that have been sorted out and re-socked and later placed out in shallow sea areas for further growth.

#### 7.8.6 PREPARATION

Mussels shall be prepared and sorted without chemical additives. Still, if the portion intended as food for human consumption must be treated to reduce the level of microorganisms in accordance with the EU-issued regulations, shall this be done in running water for at least 42 hours, where the newly added water or the circulating water can be UV treated. Chemical additives may not be used.

The additional preparation shall be carried out quickly in temperature-controlled conditions and the final product shall be kept refrigerated at less than 8°C.

With preparation and sorting, the waste products shall preferably be used either as animal feed or as soil conditioners and thereby enter the aqua-agro cycle.

#### 7.8.7 TRANSPORT

During transport, mussels shall be kept moist and handled carefully. Mussels shall be brushed clean before transport. When cleaning the mussels, waste products may not be thrown back into the sea. Live mussels that are taken up out of the water may be transported no longer than 72 hours in temperature-controlled conditions. Without any cooling agents, mussels may be transported for 4 hours at the most.

*Excessive growth of other organisms can generate warmth. Therefore, mussels shall be brushed clean.*

#### 7.8.8 CULTIVATION MATERIAL

Rope, metal and other materials may not be impregnated with chemical additives nor painted with toxic paint. Plastic trays shall be recyclable. The vessel may not be painted under the waterline with paint containing tin. Preferably, rust-resistant materials or elox aluminium (anodized aluminium finish) shall be used.

When equipment is replaced, an environmentally approved receiver for destruction shall dispose of the used items.

Handling the waste shall be done with the highest possible requirement for sorting and recycling.

See also section 2.11-12.

#### 7.8.9 CLEANING AGENTS

When cleaning the vessels, facilities or equipment in connection with harvest and working with the mussels or waste products, the cleaning agents and the hand- and dish washing agents shall be eco-labelled when it is available. Disinfecting may be done with steam or acetic acid.

See also 2.12.9-12.

#### 7.8.10 FOOD INSPECTION

The farmer is responsible to see that a harvested group of mussels do not contain for example bacterial or toxin levels exceeding the nationally prescribed limits. Tests on living animals, including so-called mice tests, are not permitted.



## 8. WILD HARVESTED CROP PRODUCTION

8.1.1

Wild harvested crop production includes anything that is harvested or gathered without, to any considerable extent, being actively cultivated.

8.1.2

The producer in charge of gathering or harvest should enter into a certification agreement with KRAV.

8.1.3

Wild production shall come from a clearly defined area that meets the criteria below.

8.1.4

The area may not have been treated with artificial fertilizer or chemicals in the three years prior to harvest. Plants treated with pest control agents may not be planted during the last three years. Liming is permitted.

8.1.5

Areas shall be situated such that contamination does not reduce the value of the products as food for human consumption or animal feed.

8.1.6

A 25 metre wide buffer zone shall be provided beside roads with traffic intensity above over 3000 vehicles per day on a yearly average, or other sources of contamination (e.g. industries or neighbouring land to which artificial fertilizers or chemical pesticides and herbicides have been applied). Limit values have been laid down for caesium in land, see Appendix 6.

8.1.7

The harvest/gathering of the product shall not have a negative impact on the environment or endanger the existence of any species of plant or animal.

8.1.8

All places of purchase shall have personnel who are well-versed in KRAV's standards.

8.1.9

Persons who gather or pick shall have access to maps of KRAV approved areas so that all gathering and picking is confined to these areas. All information, including instructions and standards, shall be available in the appropriate language of the parties at the point of purchase.



## 9. FOOD PROCESSING

*Food processing of raw materials from KRAV certified production shall occur in such a way that the objective of organic production, as it is defined in the byelaws of KRAV, is fulfilled. This is done in the the same way as in the other inspection areas by taking responsibility for the environment impact and by separate handling so the KRAV approved products contain what the labelling indicates. standards for contract, separation, labelling and environmental protection etcetera can be found in chapter 2. In chapter 9 there are standards that only apply to food processing. Processing standards are also important for retailers and restaurants. To get an overview of all the standards please see the reading instructions on page 22.*

#### 9.1.1

The objective is that 100 percent of the ingredients in processed products shall come from a KRAV approved origin. Below are the exceptions allowed.

#### 9.1.2

KRAV may permit the inclusion of KRAV non-approved ingredience in a processed product, subject to examination, if the approved ingredience in question is not available in sufficient quantity or quality. The producer is obliged to make efforts to find KRAV approved ingredients and document this in the application or, on the other hand, EU organic ingredients. To obtain certification for a product, it is necessary for the producer to replace conventional ingredients with KRAV approved ingredients or EU organic ingredients when these are available.

#### 9.1.3

It is not permitted to use both KRAV approved and KRAV non-approved ingredients of the same sort in one and the same product.

#### 9.1.4

The following conventional ingredients are permitted and exempted from the requirements in 9.1.1 and 9.1.2:

- yeast
- common salt (sodium chloride)
- water
- game not reared in enclosures (reindeer are not considered game)

*The exemption means that these products may be used as conventional ingredients. Common salt and water shall not be considered in the calculation of the portion of conventional ingredients in a product. See 2.3.10-12 for further information.*

#### 9.1.5

Ingredients (including raw materials, additives, vitamins, flavourings and taste enhancers), carriers, solvents and processing aids may not contain nor be produced using genetically modified organisms.

#### 9.1.6

Standards 9.1.5, 9.1.7, 9.2.1 and 9.2.4 also apply to conventional ingredients in a product.

#### 9.1.7

Minerals (including trace substances), vitamins, amino acids and other nitrogen compounds are permitted only if it is specifically prescribed by an authority that one or more of the substances shall be used in the foodstuff in question. See Standard 9.2.2 for KRAV's consideration of enrichment substances.

#### 9.1.8

Synthetic and nature-identical colourings, flavourings and taste enhancing substances are not permitted by KRAV. Only natural substances are permitted.

#### 9.2.1

Food additives and processing aids for processed products must be permitted by KRAV. Lists of the permitted food additives and processing aids are found in appendices 7 and 8. When possible, food additives and processing aids produced with KRAV approved raw materials shall be used.

#### 9.2.2

Food additives and processing aids may be KRAV approved subject to examination of whether the food additive or processing aids:

- are of KRAV approved raw materials,
- are manufactured using processes permitted by KRAV,
- are considered completely harmless for human consumption in the amounts in question,
- do not have negative effect on the product as a food,
- are essential to produce a certain product using a specific process,
- are not produced using genetically modified organisms,
- do not load the environment to a significant extent.

IFOAM's standards for certification of food additives and processing aids are also used as a basis for the examination.

#### 9.2.3

Preservatives (such as anti-fungal agents), pest control substances, and synthetic or nature-identical colouring agents may not be added to substances that come into contact with foodstuffs (such as for example cheese wax).

#### 9.2.4

The following production processes are permitted:

- Mechanical and physical processes,
- Biological processes such as fermentation and brewing (such as for example using lactic acid cultures and mould cultures),
- Enzymatic processes where the effect is to coagulate (such as rennet) or cleaving substances (such as the enzyme amylase),
- Extraction. Only water, ethanol or fats may be used as solvents.,
- Smoking,
- Precipitation,

Irradiation is not permitted.

*KRAV does not permit processes that lead to the creation of foreign molecules.*

9.2.5

Filtration techniques that lead to chemical changes at the molecular level are permitted only after special examination according to the relevant criteria in Standard 9.2.2. Filtration equipment may not contain asbestos or affect the product negatively in any other way.

9.2.6

It is permitted to treat potatoes and vegetables with peat or soil if done with KRAV approved soil or peat.

## 10. SLAUGHTER

KRAV endeavours in all steps in the chain of custody (production, processing, distribution, etcetera) to exhibit care of the natural course and behaviour, as well as design operations so that the animals' good health is fostered and that they are given the possibility to a natural behaviour, a high quality of life and an end to suffering and distress.

KRAV's principle is that slaughter of KRAV-approved animals shall occur in a peaceful environment for the animals where the abattoir is adapted to the animal's biology. To minimize transport, KRAV would preferably see that slaughter in the future is carried out either on the farm itself or in local slaughter facilities. As this is not possible with the current situation, KRAV accepts the slaughter at the nearest possible abattoir that is KRAV certified for KRAV-approved animals. In addition, KRAV strives to support abattoirs where all slaughtering is carried out in compliance with KRAV standards. KRAV also sees an increased need for small- and medium-sized abattoirs and therefore will be working to develop these types of operations.

Chapter 10 Slaughter begins with the requirements for the actual abattoir. This is followed by the general regulations for how animals shall be handled. Sections 10.5 and 10.6 regulate the lairage and the actual slaughter. The chapter concludes with the regulations with criticisms from inspections. In addition, the chapter contains standards on marking and transport of animals. In the revised version of Chapter 10 Slaughter, KRAV has tried to clarify and emphasize the areas that KRAV considers most important. For example, this includes regulating the established livestock groups, transport time and waiting time in the abattoir. KRAV has also tried to simplify the standard text and include KRAV's interpretations. Clarifying texts have been added to some standards.

## 10.1 GENERAL

### 10.1.1

Slaughter shall be carried out at a KRAV-certified abattoir. For certifying it is required that the abattoir establishes and follow a plan of action, documented with routines and work instructions or the equivalent.

*The abattoir can in a clear way show, through a plan of action, that it comply with the KRAV standards. See the KRAV webpage for information on how a plan of action can be designed.*

### 10.1.2

Licensee businesses that transport or slaughter animals shall have a person, a KRAV designate, charged with being responsible for handling all live animals at every facility for slaughter. The KRAV designate shall see that animals are handled in compliance with KRAV standards and be responsible to continually inform relevant personnel about KRAV standards. Also see section 2.3 Commitment.

### 10.1.3

The KRAV-approved livestock stockman/caretaker shall have the opportunity to be present at slaughter until the moment of death. Each animal or group of animals shall be identifiable during each step in the transport and slaughter process.

## 10.2 HANDLING

### 10.2.1

All handling including transport in connection with slaughter shall be carried out calmly and gently and involve the minimum of physical and mental strain for the animal. Personnel experienced with animals shall carry out handling. Exposure of livestock to reflective surfaces, noise and other stressful factors shall be avoided during all stages of handling including transport in combination with slaughter. For driving animals, see also 10.6.1.

Established livestock groups shall be kept together and apart from other strange individuals or groups so that they are not agitated by each other. It is the producer's responsibility to compose the groups prior to transport, see also 5.2.1 and 5.5.7.

*The expression established animal groups is defined in the section on Definitions.*

*Animals are susceptible to olfactory signals for example those of stress and agitation from other animals. Animals are distressed by for example strong light and agitation of and threats from other animals, noise and loud noise levels as well as pain. A hard handling with blows and shocks also stresses the animals.*

### 10.2.2

Electric prods may not be used. Sheep may not be lifted/pulled by their wool.

### 10.2.3

All spaces and passages where animals are handled shall be designed so that the animal's instinct to naturally proceed is exploited. See also 10.6.1.

## 10.3 LABELLING

### 10.3.1

Animals shall be ID- and KRAV-labelled with ear tags or the equivalent with the delivery from the farm and the labelling shall be attached to the carcass until dressing. Smaller animals such as poultry shall be delivered in labelled boxes. Pigs may be labelled with a well-cleaned tattoo hammer on the hindquarters or shoulder.

The KRAV approved animals' stockman/caretaker is responsible for the marking until the animals are loaded for transport from the farm. The KRAV designate has responsibility for the labelling during the remaining steps of the transport and slaughter process. See also 2.3.6.

*Labelling and documentation is required to guarantee traceability throughout the whole chain of custody. KRAV's objective is to use the gentlest possible technique for the animal. To avoid double marking, KRAV may after review, approve another labelling system if it guarantees traceability throughout the entire chain of custody.*

## 10.4 TRANSPORT

### 10.4.1

When transporting to the abattoir, KRAV approved animals may be loaded in the same vehicle as other animals. Different established groups shall be kept apart with gates or similar. The KRAV designate must ensure that KRAV approved animals are not mixed with other strange individuals or groups.

Only animals that have been tethered earlier may be bound during transport. The vehicle must have satisfactory ventilation so that a good comfortable climate is maintained for the animals. The transport driver shall have a smooth driving technique. The total time for transport, including rest stops, may not exceed 8 hours.

*By other animals is meant other non KRAV- approved animals from the same farm. By other animals shall also mean other KRAV approved or non KRAV-approved animals from another farm.*

*The vehicle shall be inspected by the relevant authority. The driver's driving credentials can be certified through driver training in transport or the equivalent*

*The requirements for a veterinary inspection prior to slaughter and strict hygienic standards can make it difficult for slaughter on the farm and therefore a certain amount of transport is necessary. The principle is still that transport of live animals shall be minimized.*

*For transport of live animals, see 5.1.12 and 5.4.1.*

#### 10.4.2

Animals may not be treated with synthetic stimulants or synthetic tranquillisers prior or during transport.

## 10.5 FACILITIES AND LAIRAGE

*A new barn environment is stressful to the animal because of for example new sounds and smells and therefore, time in the abattoir should be minimized. KRAV standards aim at making the barn environment as good as possible.*

#### 10.5.1

Animals shall normally be slaughtered the same day as they arrive to the abattoir. High-lactating animals shall be slaughtered within a maximum of 12 hours after the last milking. Poultry, including ostrich, shall be slaughtered the same day they come into the abattoir.

The animals shall be handled in the lairage in the manner they are accustomed to. Only animals that are used to being tethered may be tethered or held in small, single animal pens during lairage.

*Various circumstances may allow the operator to deviate from the main rule that animals shall normally be slaughtered the same day they arrive to the abattoir. The number of animals concerned, the amount and the reason for the animals to stay overnight shall be documented and reported to KRAV. See the KRAV webpage for more information.*

#### 10.5.2

During shorter lairage of cattle, the animals shall have free access to water. During a longer waiting period, the animals shall in addition receive feed regularly and have access to a dry, whole and bedded lying area.

During shorter lairage of pigs, the animals shall have free access to water and hay or other activities. During a longer waiting period, the animals shall in addition have roughage in sufficient amounts and access to dry, whole and bedded lying area.

During shorter lairage of sheep, the animals shall have free access to water. During a longer waiting period, the animals shall in addition have roughage and access to dry, whole and bedded lying area.



*By shorter waiting period, KRAV means up to 4 hours. By longer waiting period, KRAV means a longer waiting time than 4 hours.*

10.5.3

The number of animals in a lairage pen may not be more than that they can move freely. With a longer waiting period single pens shall be at least 6 m<sup>2</sup> per animal for cattle and at least 2 m<sup>2</sup> per animal for pigs and sheep. Pigs and sheep however shall preferably not be accommodated in single pens. With lairage in a group pen the space afforded the animals shall be according to the following:

Animal species	Weight	Space m <sup>2</sup>
Cattle	<100	1
	100-250	1,5
	250-400	1,9
	400-600	2,3
	>600	2,7
Sheep, goats	<50	0,5
	>50	1
Pigs (fattening pigs) Mature pigs	<120	0,75
	>120	1,5

*By lairage pen, KRAV means all of the types of limited areas where the animal is held while awaiting slaughter. The drive chute is not considered to be a lairage pen.*

## 10.6 SLAUGHTER

### Driving and hanging

10.6.1

Driving shall above all be conducted in a calm pace and without harassment. The animals may not be distressed. Driving shall be made easier by designing the driving chute and the surroundings (for example the air flow, light, temperature) minimizing the clanging/banging and smells. The animals' natural behaviour shall be used when driving, such as through keeping the group together, that the animal may go from darkness into the light or that they follow a leader animal. Driving in a drive groove is not permitted.

The drive chute shall be designed so that the driving runs smoothly without harassment and without distressing the animals. Abrupt corners and dead ends should be avoided. Waiting time in the drive chute shall be minimized and may not exceed 15 minutes.

Collecting animals in the stunning pen shall occur calmly without harassment and without using physical violence.

*Sheep will willingly follow a leader animal and cattle wish to avoid dead ends and are easier to drive in a chute with slight curve where the end is not visible.*

10.6.2

Hanging of chickens and broilers on slaughter hooks prior to stunning shall be carried out calmly. After hanging, each animal shall be held for an instant before the next bird is hung alongside.

Poultry larger than chickens may not be slaughtered using slaughter hooks.

*Poultry larger than chickens are too heavy to be slaughtered using slaughter hooks.*

## **Stunning and slaughter inspection**

### **10.6.3**

The number of animals in the stunning pen may not be so great that they agitate each other or are exposed to injurious crowding. Personnel shall supervise the remaining animals in the stunning pen when a cohesive group of sheep, pigs or lambs are stunned.

### **10.6.4**

When stunning, the established group of sheep, pigs or lambs shall be kept together as long as possible. Animals that are taken to slaughter shall be stunned as soon as possible and be bled immediately afterwards.

Cattle shall be stunned by a shot in the head without other animals noticing. Pigs and sheep can be stunned in the flock.

*Pigs and sheep can be stunned in the flock to exploit their natural behaviour as flock animals.*

### **10.6.5**

The effectiveness of the stunning procedure shall be checked for each individual animal. This shall be done immediately after stunning and before bleeding. For cattle, pigs and sheep, this shall be done by inspecting the dilation of the pupil or the eye reflex. In the gas chamber, there shall be observation windows and the effect of the stunning must be immediately inspected. There must be a control system for checking the carbon dioxide level and an alarm.

A boltgun or a slaughtering mask must be available in case the stunning is not effective. The number of animals that have been stunned more than one time because of insufficient stunning shall be registered in a journal.

## **Bleeding**

### **10.6.6**

Bleeding and subsequent processing of the carcass shall be carried out without the awareness of the non-stunned animals. Manual inspection that the animal is dead shall be done after bleeding before further handling may continue.

*Examples of manual inspection are plugging the sticking hole when scalding in a vat, rotary sticking knives inspection or other accepted method.*

## **Deer**

### **10.6.7**

Deer shall be slaughtered in such a way so that stress is avoided as much as possible. The animal owner shall document the manner of slaughter. Slaughter of deer shall take place in an enclosure or in a handling installation adjacent to the enclosure.

## 10.7 OTHER

### Criticisms after inspection

#### 10.7.1

Meat or carcasses from animals that during live inspection and meat inspection have received remarks that point to inadequate animal care, i.e. animals covered with a considerable amount of manure (codes 96 and 97), emaciated animals (codes 47 and 48) or overgrown hooves may not be KRAV labelled. The abattoir is obliged to inform KRAV of criticisms that indicate inadequate animal care. See also 5.5.8.

*Abattoir shall within a week from the time of the inadequate animal care inform KRAV of actual criticisms.*



## II. PET FOOD

11.1.1

Pet food that is produced according to KRAV's standards for processing may be KRAV labelled.

11.1.2

Vitamins and minerals may be added.

11.1.3

Animal feed shall meet the same requirements as feed for KRAV certified animal husbandry but may contain meat products fit for human consumption. Pet food shall be adapted to the animal species.

## 12. PRODUCTION INPUTS

*The main objective of labelling production inputs is to make it easier for KRAV licensed producers to determine the production inputs that are permitted in production.*

*These Standards inform the production inputs producer of the inputs that can be certified and the criteria for certification.*

*Production input companies that are licensed agree to comply with KRAV Standards for the licensed production and are inspected annually. Production inputs become KRAV certified and may be marketed with KRAV name and label.*

*Other production inputs may also be used in organic production according to Chapters 4 and 5. These are called permitted production inputs.*

*Examples of products that can be certified:*

- animal management agents*
- plant protection agents*
- plant growth stimulants*
- soil conditioning agents/fertilizers*
- sowing and potting soil*
- pesticide and disinfection agents in storage areas*

## Scope

### 12.1

Products that are permitted for use in organic production according to KRAV Standards in Chapters 4 and 5 and Standard 2.12.1, can be certified as production inputs. Products packaged for consumers can be certified if it has an application area within organic production and comply with KRAV Standards.

Production inputs can only be certified if:

- it is permitted according to the Council Regulation (EEG) 2092/91 annex I and II and IFOAM Basic Standards
- the producer can substantiate that manufacturing, quarrying or collection does not cause serious environmental disruptions
- it is only marketed in the application area and where it has documented effects
- it is not classed as hazardous for animal or human health or the environment according to the risk phrases listed in Appendix 9
- it does not include GMO or is produced using GMO.

IFOAM guidelines for evaluation of additives and production inputs is also used as a basis for certification.

The following may not be registered for production inputs inspection:

- technical equipment
- products permitted only after an examination
- copper compounds.

*The Swedish National Chemicals Inspectorate must approve pest control substances for sale and use.*

### 12.2

It is permitted to use the following for soil mixtures:

- Sand, clay, and turf that are taken from an area where no chemical pest control or artificial fertilizers have been used 24 months prior to removal;
- Soil from KRAV approved/KRAV certified land



## Analyses

### 12.3

KRAV certified production inputs must be analyzed for content of heavy metals listed in Standard 4.2.5 and in Appendix 3. Products marketed as fertilizer must also be analyzed for nitrogen, phosphorous, and potassium levels. The frequency of analysis is established when certification of production is determined. The analysis methods for each substance can be found at KRAV's web site, [www.krav.se](http://www.krav.se). The level of heavy metals may not be so high so that the highest permitted application will render the substance worthless for the production. Heavy metal levels in sowing and potting soils may not exceed levels given in Appendix 3.

## Packaging

### 12.4

KRAV certified production inputs must declare the following information on the packaging:

- Raw materials. The origin of raw materials from conventional or organic production must be indicated for agricultural and residual products from the food industry.
- The nitrogen, phosphorous, and potassium content must be stated for products marketed as fertilizer. The contents may be stated as an interval.
- A recommended dose or the highest permitted dose according to Standard 4.2.5 and Appendix 3. The recommended application may not exceed the highest permitted applications.

The operator producing products in bulk must include a product sheet with the corresponding information.

Marketing of certified production inputs, where the packaging does not comply with these Standards, may only continue until the 31st of December 2004. This only applies if the packaging complies with the 2003 KRAV Standards.

### 12.5

Certified production inputs may contain conventional raw materials but only those with 100 weight by percent organic raw materials may also be called organic.



## 13. TEXTILES

*By the 1st of January 2007 at the latest, KRAV will begin to cooperate with other certification bodies for inspection and certifying of textiles. The objective is to coordinate the entire chain of production for better handling and service to producers. KRAV is aware of and considers it important that no stage/step in the chain of production is left outside inspection.*

*The cooperation signifies that KRAV will no longer inspect and certify the handling and refining process of KRAV-approved fibres. This means that mainly sections 13.5 Processing to and including section 13.9 Quality criteria for the finished product are removed. Instead, inspection and certifying of the handling and processing of KRAV-approved fibres will be carried out by another certification body. Please contact KRAV for more information.*

*KRAV's standards concerning textile raw materials together with hides, leather and skins that enter into force the 1st January 2007 at the latest can be read at KRAV's website, [www.krav.se](http://www.krav.se).*

### **13.1 EXTENT**

These standards regulate the processing of KRAV certified fibres. These may come from organic production certified by KRAV or from wild production certified by KRAV. The standards relate to all kind of products made of natural fibres, including:

- Yarn
- Fabrics
- Clothes, cloths, mats and decoration textiles
- Non-woven products

### **13.2 THE FOUNDATION OF THE STANDARDS**

The KRAV standards for processing of KRAV certified fibre into ready-made products are based on the following:

- The fibre raw materials shall as far as possible be 100 percent KRAV certified
- Non textile raw materials used in a textile products shall as far as possible be harmless to people and the environment, in production and consumption as well as at disposal
- To avoid an unnecessary load on the environment should the raw material have the properties that characterise the final product (e.g. naturally coloured fibre, natural flame retardation)
- When assessing chemical inputs shall their total environmental impact be considered
- The processing of KRAV certified fibres shall as far as possible:
  - Use the best possible technology from an environmental point of view.
  - Minimize the use of energy
  - Use KRAV certified or natural substances
  - Avoid the use of chemical inputs
  - Minimize pollution

### **13.3 RAW MATERIALS**

Apart from KRAV's standards for crop production, animal production, handling and recertification, etc. the following standards apply:

### 13.3.1

Defoliation of cotton may, subject to examination, be used with the following agents, until the year 2002:

- Calcium chloride
- Magnesium chloride
- Sodium chloride

### 13.3.2

Field retting of flax and other fibres is permitted. If water or steam retting is used there shall be an appropriate wastewater treatment.

### 13.3.3

The experiences of organic silk production are not sufficient to establish definitive standards. Registered production will be assessed according to the standards below, but KRAV reserves the right to impose additional requirements:

- Mulberry tree plantations for silk shall be KRAV certified
- Use of hormones and veterinary treatments shall be in compliance with KRAV standards for animal production
- All products, including disinfectants, in the silkworm cultivation, egg production, reeling and de-gumming shall be in compliance with KRAV standards for handling and processing
- At de-gumming there shall be an appropriate waste water treatment
- Silk may not be treated with metal salts

### 13.3.4

Chemical products used for scouring and de-greasing of wool shall be readily degradable (OECD 301) and there shall be an appropriate wastewater treatment. Source materials not certified by KRAV

The KRAV labelling standards permits a limited blending of other than KRAV certified fibres. The standards below applies to such fibres:

### 13.3.5

Non- KRAV certified source materials may be used when needed to produce a long lasting quality, a certain function or fashion. Fibres or their production that are apparently hazardous to consumers, workers or the environment are excluded.

### 13.3.6

It is not permitted to use the same fibre of both KRAV certified and non-certified origin in the one and same product.

### 13.3.7

There are no standards for sewing thread or sewn labels.

## Approved fibres

### 13.3.8

The following fibres are approved without further examination:

- Natural fibres which are not available in a KRAV certified quality. The producer have to demonstrate that he/she has made considerable efforts to establish that this is the case and continually examine the possibilities to

- obtain KRAV certified source materials.
- Polyester
  - Viscose
  - Polyurethane (Lycra, Elastan)

### **Unapproved fibres**

#### **13.3.9**

The following fibres are not approved to use in a KRAV certified product:

- Acrylic
- Asbestos
- Cuprammonium rayon
- Flourinated fibres
- Fibreglass
- Chlorofibre
- Modakrylic
- Modal

#### **13.3.10**

The use of fibres that are not mentioned above either as approved or not approved will be examined on application by the producer.

## **13.4 ACCESSORIES**

#### **13.4.1**

Accessories may not contain more cadmium than 0.1 mg/kg. KRAV may at a future date develop threshold values also for nickel and chrome. Products where non-textile accessories constitute a major part of the product cannot be KRAV certified.

## **13.5 PROCESSING**

### **General**

#### **13.5.1**

The KRAV standards for handling and processing apply in all relevant parts. (Standards for separation of products, documentation, use of pesticides etc. are applicable, while standards for additives and processing aids in food production are not applicable).

#### **13.5.2**

The following exception from the standards of processing applies; The standards for separation can be given a more generous interpretation if the requirements would cause substantial economical disadvantages or if the environment would be negatively effected by huge quantities of processing liquids that could not be re-circulated in the process. In order to grant such exception it shall be verified (e.g. by means of analysis) that the KRAV certified production is not contaminated.

## **13.6 ENVIRONMENTAL CRITERIA FOR WET PROCESSING**

*The environmental criteria for wet processing may apply exclusively to the KRAV certified production and not to the whole production unit. This assumes that the KRAV certified production constitutes a minor part (<25 percent) of the total production or if it is carried out in separate production lines.*

### 13.6.1

Each production unit shall:

- at least comply with national regulations regarding environment
- document the use of chemicals, water consumption and waste water treatment, including the disposal of sewage sludge and relevant analyses of effluents

### 13.6.2

Each unit shall have at least a functioning, internal or external, sewage water treatment. As a minimum a sedimentation stage, temperature and pH regulation shall be implemented. In addition reduction of oxygen consuming compounds and phosphorus shall be made depending on the inputs used, the extent of production, the legislation and the economic development in the country, and the nature of the recipient. The requirements do not apply for plants with closed systems.

### 13.6.3

In cases of minor deviations from the environmental criteria the producer shall have developed a plan for how to improve the environmental performance of the production no later than one year after the initial certification. The plan shall contain a time schedule for implementation.

## 13.7 INPUTS

*The standards regulate the use of chemical products (dyes, auxiliaries, processing aids, finishing agents etc.) in textile processing. These are referred to as inputs in the text. The standards do not apply to lubricating oils for machinery, paints for machines and facilities and similar, unless they are likely to contaminate the textile product.*

### Documentation

#### 13.7.1

All inputs, including preservatives, shall be declared by the operator, including relevant data to assess (among others, safety data sheets according to EEC 1556/91).

#### 13.7.2

Single chemical compounds that constitute more than one percent of the active substance in an input shall be declared with the information that KRAV needs to assess its effect on the environment and health (normally this includes CAS number, chemical structure and eco-toxicological data).

#### 13.7.3

Only formula that have been fully declared and approved by KRAV prior to start of production may be used.

### Assessment of inputs

#### 13.7.4

All inputs will be evaluated according to the following table of biological degradability and toxicity for aquatic organisms except for those which

exceptions are given below. The same assessment will be made of metabolites, when such are known.

	Bio-degradability (percent) 28 days (OECD 302 A)	Toxicity for aquatic organisms (mg/L) (LC50 or EC50 or IC50 for algae, water-fleas and fish) (OECD 201, 202, 203)
Can be approved	< 70	> 100
Can be approved	> 70	10-100
Can be approved	> 95	1-10
Prohibited	< 70	< 100
Prohibited		< 1

### 13.7.5

In addition to the requirements regarding bio-degradability and toxicity for aquatic organisms, an input cannot be approved by KRAV if it is:

- Carcinogenic (R45)\*
- Mutagenic (R46)\*
- Teratogenic (R60-63)\*
- Toxic to mammals - LD50 < 2000 mg/kg shall not be allowed
- Known to be bio-accumulative and not bio-degradable (< 70% 28d OECD 302A)
- Are listed on the list of not permitted chemicals or contains chemicals on this list.

\* R# refers to the European system as described in Reg. 92/32/EEC)

### 13.7.6

Notwithstanding that an input fulfils the criteria above it can be prohibited if there is another input with the same function that:

- is natural
- has less negative environmental impact.

## Prohibited chemicals

### 13.7.7

The following chemicals may not be present in any input:

- APEO
- Biocides including PCP, TCP and PCB
- Fluorocarbons
- Halogenated flame proof agents
- Halogenated anti-moth agents
- Heavy metals (iron is excluded; see also limits for impurities in dye stuffs and copper in certain dyestuffs)
- Organo-chloride carriers
- Other chlorinated compounds
- Other halogenated compounds



### 13.7.8

The following chemicals may not constitute more than one percent of any input:

- Alfa-MES
- Antimony
- AOX - Absorbable halogenated hydrocarbons, and substances that can cause their formation
- DEHP
- DTPA
- EDTA
- LAS
- NTA
- Quarternary ammonium compounds (DTDMAC etc.)
- Phosphonates

## 13.8 SPECIAL REGULATIONS FOR DIFFERENT STEPS IN PROCESSING

In addition to the general criteria the following standards apply to specific steps in the processing.

### 13.8.1

Spinning oils (avivage) and waxes shall be readily bio-degradable (OECD 301), or made from plant or animal origin. Paraffin is approved for waxing of yarn.

### 13.8.2

Sizes shall be ultimately degradable (OECD 302), or be recycled to a minimum of 75 percent.

### 13.8.3

For de-sizing and washing the general criteria for inputs apply.

### 13.8.4

Sodium hydroxide or other alkali is permitted for mercerizing, but shall be recycled to the greatest possible extent.

### 13.8.5

Chlorinated and perborate bleaching agents are not permitted for bleaching, colour removal, or stain removal.

### 13.8.6

Mordants may not contain heavy metals above the limits indicated under 'dyestuffs'.

### 13.8.7

Anti-matting (superwash) with hypochlorite or other chloride-based compounds are not permitted.

### 13.8.8

Enzymes shall be readily bio-degradable (OECD 301).

## Dyestuffs

### 13.8.9

The following dyes may be used:

- Dyes derived from plants (CI 75 000-75 999)
- Mineral dyes not containing heavy metals

### 13.8.10

The following are not permitted:

- Heavy metal dyes (except for iron)
- Complex bonded metals in excess of 1g metal/kg textile, calculated on the applied quantity of dyestuff
- Complex bonded dyestuffs with copper in excess of 1 g/kg textile
- Dyes capable of releasing aromatic amines that are known or suspected carcinogens
- Dyes that are, or are suspected of being, allergenic or carcinogenic
- Dyes which toxicity for aquatic organisms, LC50 is less than 10mg/L

### 13.8.11

Apart from what is stated in the paragraph above, the general criteria for assessment of inputs apply for the assessment of dyestuffs and pigments, except for the criterion for biodegradability.

## Dyestuff contamination

### 13.8.12

Dyestuffs shall not contain more impurities than:

Antimony 50 ppm	Arsenic 50 ppm	Barium 100 ppm
Lead 100 ppm	Cadmium 20 ppm	Chromium 100 ppm
Iron 2500 ppm	Copper 250 ppm	Manganese 1000 ppm
Nickel 200 ppm	Mercury 4 ppm	Selenium 20 ppm
Silver 100 ppm	Zinc 1500 ppm	Tin 250 ppm
Cobalt 500 ppm		

*(ETAD Agreement)*

### 13.8.13

Urea may not be used in dyeing

### 13.8.14

The fixation of a dye may not be too low. KRAV reserves the right to reject formulas because of insufficient fixation of dyestuffs. A guideline for the evaluation of the degree of fixation is that it should be at least 70 percent at a colour shade of 2 percent in a usual dyeing procedure (exhaust dyeing) as described by the manufacturer. If possible, dyeing should be made as standing bath. The requirements for fixation do not apply for dyestuffs and pigments derived from plant or animal source materials.

## Printing

### 13.8.15

The total proportion of aromatic solvents in printing pastes may not exceed 5 percent.

13.8.16

Only printing methods based on water or natural oils are allowed.

13.8.17

Colour residues shall be recycled or disposed of in an environmentally safe way. Surplus pastes should be handled as solid waste and may not reach the wastewater.

13.8.18

Only readily bio-degradable (OECD 301) thickeners may be used in dyestuff printing.

### **Other methods and treatments**

13.8.19

Other processing methods and the use of chemical products will be assessed according to the general standards for inputs.

13.8.20

No restrictions apply to mechanical and physical treatments.

13.8.21

Chemical pesticides or biocides (such as TCP and PCP and their salts and esters) may not be used, also during transport and storage.

## **13.9 QUALITY CRITERIA FOR THE FINISHED PRODUCT**

### **Formaldehyde content**

13.9.1

The formaldehyde content (tested according to Japan Law 112) may not be higher than:

- 20 ppm for baby clothing and other clothes intended for direct skin contact
- 20 ppm for bed textiles
- 75 ppm for other clothing and outerwear
- 100 ppm for interior decoration textiles

## **13.10 LABELLING**

13.10.1

The labelling shall follow the KRAV general standards for labelling (Section 2.13) with the modifications below.

13.10.2

The materials in non-textile accessories shall be declared. They are not included in the calculation of the proportion of organic ingredients.

13.10.3

Inputs used during processing do not have to be declared.

13.10.4

Information on fastness, resistance, shrinking and washing shall be included in the labelling, whenever appropriate and applicable.

13.10.5

In the labelling or the packaging information shall as far as possible be declared from which country the fibre and the accessories originate, where the main processing has been carried out and where the latest stage of essential processing has been made. At the request of clients the producer shall disclose complete information where the different stages of processing has been carried out.

13.10.6

Finished products intended for the consumer market may have sewn-on labels, attached labels or labels on the packaging. The KRAV mark included on sewn-on labels should be washable. The ultimate producer shall be identified on the same label.

13.10.7

Textiles can be KRAV labelled where the certified textile constitutes only a part of the finished product (i.e. furniture upholstery) . It shall be clear from the labelling that it only relates to the textile part of the product.

13.10.8

The following exception may be granted, subject to examination:

If a KRAV certified finished product is printed on a total surface of less than 30 percent, the products may be KRAV labelled even if the printing method does not comply with the standards. Exceptions will not be granted if satisfactory print could be offered by a KRAV certified operator.

# 14. HIDES, LEATHER AND SKINS

*By the 1st of January 2007 at the latest, KRAV will begin to cooperate with other certification bodies for inspection and certifying of hides, leather and skins from KRAV-certified animal husbandry. The objective is to coordinate the entire chain of production for better handling and service to producers. KRAV is aware of and regards it important that no stage/step in the chain of production is left outside of inspection.*

*The cooperation signifies that inspection and certifying of handling and processing of hides, leather and skins from KRAV-certified animal husbandry will be performed by another certification body. Please contact KRAV for more information.*

*KRAV's standards concerning textile raw materials together with hides, leather and skins that enter into force the 1st of January 2007 at the latest can be read at the KRAV website, [www.krav.se](http://www.krav.se)*

## **14.1 EXTENT**

### **14.1.1**

These standards apply to processing of KRAV certified hides and skins. The standards cover all kind of products made out of hides, skins and leather.

## **14.2 RAW MATERIALS**

### **14.2.1**

Hides and skins shall originate from KRAV certified livestock production.

### **14.2.2**

Salting of hides and skins is permitted. For production located in areas where salt in wastewater can constitute a considerable problem, KRAV reserves the right to require other methods (drying, cooling etc).

### **14.2.3**

Preservatives may not be added to the skins.

## **14.3 ACCESSORIES**

### **14.3.1**

Accessories containing more than 0,1 mg/kg Cadmium may not be used. KRAV may, at a future date, set limit values also for Chrome and Nickel. Products where accessories constitute a major part cannot be certified. No requirements are made for sewing thread.

## **14.4 PROCESSING**

### **14.4.1**

The standards for textiles apply.

## **14.5 ENVIRONMENTAL CRITERIA FOR WET PROCESSING**

### **14.5.1**

The standards for textiles apply. Appropriate handling of solid waste shall take place.

## 14.6 INPUTS

### 14.6.1

Only inputs approved by KRAV may be used. For the time being, the criteria for evaluating inputs for textiles will be used as a starting point, when applicable.

## 14.7 SPECIAL STANDARDS FOR STEPS IN THE PROCESS

### 14.7.1

Chlorinated and aromatic solvents may not be used for de-greasing. In plants with closed systems or extensive recycling, exemptions may be granted, subject to examination.

### 14.7.2

Sodium sulphide may be used for hair removal. Measures shall be taken to reduce the inconveniences for employees.

### 14.7.3

De-liming with carbon dioxide is permitted. The use of ammonium chloride and ammonium sulphate shall be limited and shall normally only be used as a complement to de-liming with carbon dioxide. Producers using processes depending on larger quantities of ammonium chloride and ammonium sulphate shall develop a plan for how to develop alternative methods.

### 14.7.4

- Tanning or preparation with chrome is not permitted
- Natural tanning and preparation agents are permitted without restrictions

At a future date, KRAV may develop standards for the environmental effects of the production of natural tanning and preparation agents.

### 14.7.5

The standards for textile dyes and pigments apply for dyeing and printing.

### 14.7.6

For other processes the following apply:

- Halogenated compound may not be used
- Chlorinated or aromatic solvents may not be used.

## 14.8 LABELLING

### General

### 14.8.1

The labelling shall follow the KRAV standards for textiles. Impressing the KRAV mark may be done if the ultimate responsible producer is indicated in conjunction with the mark.

## ABBREVIATIONS USED IN THE STANDARDS FOR TEXTILES, HIDES, LEATHER AND SKIN

Alfa-MES	$\alpha$ -methyl ester sulphonate (C16/18)
AOX	Absorbable halogenated hydrocarbons, and substances that can cause their formation
APEO	Alkylphenoxylate
CI	Colour Index
COD	Chemical Oxygen Demand
DEHP	Di-2ethylhexylphthalate
DTPA	Diethylenetriamine pentacetate
EC50	Effect concentration (50% effect)
EDTA	Ethylendiamine tetraacetate
ETAD	Ecological and Toxicological Association of the Dyestuff Manufacturing industries
IC50	Inhibition concentration (50% inhibition)
LAS	Linear alkyl benzene sulphonate
LC50	Lethal concentration (50% mortality)
OECD	Organization of Economic Cooperation and Development
PCB	Polychlorinated biphenyls
PCP	Pentachlorophenol
TCP	Tetrachlorophenol



## 15. RETAILERS

## 15.1 GENERAL

### 15.1.1

A KRAV certified retail shop shall contribute to increased availability of KRAV approved products through:

- A wide range of KRAV approved products;
- Displaying KRAV's name and mark;
- A staff well-informed about KRAV and organic production;

*Certification may take place either through a retailer contract according to the Standards in this Chapter or by a processing contract according to Chapter 9. In addition to the Standards in this chapter, KRAV's other standards also apply in the appropriate areas. See Reading Instructions on page 22.*

### Farm shop

#### 15.1.2

KRAV farmer licensees selling KRAV approved products from another producer must certify the shop according to the Standards in this chapter if:

- the value (at the consumer level) exceeds three base amounts annually of unpackaged KRAV approved products from another producer/supplier and/or,
- the KRAV approved product from another producer/supplier is handled or packaged

*The above does not apply to producers who only sell their own produced products in farm shops. Special forms shall be used when making an application to certify a farm shop. Contact KRAV for more information.*

### Occasional sales

#### 15.1.3

The Standards in this chapter apply when appropriate to occasional sales of KRAV approved products. All such sales shall be reported to KRAV unless it is solely own-produced products.

*Examples of occasional sales can be open-air markets, factory outlet sales and markets.*

## 15.2 ASSORTMENT AND HANDLING

*KRAV approved products may be sold prepacked (packaged by the producer or supplier), packed in the shop, processed and as single items over the counter or for self-service.*

### 15.2.1

A certified retail shop shall offer KRAV approved products in a quantity that reflects the availability on the market. The retailer shall strive for a continuous development of the breadth of the product range to include more products and product groups.

*The objective is that a consumer shall be able to choose a KRAV alternative from all product groups for the shopping cart. A product group means items grouped together such as flour, pasta or fruit concentrates.*

## Processing in a retail shop

### 15.2.2

Standards for processed KRAV approved products can be found in Chapters 9 and 16.

## Single items

### 15.2.3

Single item sales of KRAV approved product may occur if there is no obvious danger of mixing with conventional product.

When there is parallel handling of KRAV approved and conventional products single items, and such products cannot be distinguished by their outer appearance, the following applies:

- KRAV approved products must be clearly labelled while in storage (Standards 2.12.6-8)
- The handling shall occur in such a way that there is no danger of mixing or contamination (Standard 2.12.3).

*In cases where single item products are individually marked it is not considered to be parallel handling.*

### 15.2.4

Handling and sales as single items over the counter (e.g. cheese, meat) may take place if the packaging (the cheese, the meat etcetera) from which the product is sold is properly labelled. The standards applying to handling are the same as in Standards 15.2.5-7.

## Packaged at the retailer

### 15.2.5

A certified retail shop has the right to pack and repack a KRAV approved product. All such handling shall occur in such a way that there is no danger of mixing with, or contamination from conventional products.

### 15.2.6

When equipment, utensils, surfaces, etcetera are used handling both KRAV approved and conventional product, the danger of mixing shall be minimized through a clear differentiation in the processes. Equipment, utensils, surfaces, etcetera shall be carefully cleaned before the handling of KRAV approved products begin. There must be written routines to ensure this handling.

*The routines be advantageous to integrate into the shop's own inspection program.*

### 15.2.7

In regards to packaging material see Standards 2.12.13-14.

## Cleaning, disinfection and pest control

### 15.2.8

In regards to cleaning, disinfection, and pest control, see Standards 2.12.9-12

## 15.3 LABELLING

### 15.3.1

A KRAV certified retailer has the right to label and pack KRAV approved products with KRAV's mark. With this type of product labelling, the name of the retailer must be on the product. See also Standard section 2.13. If the retailer has entered a written agreement with the supplier (distributor or producer), the retailer may label goods with the name of the KRAV approved supplier. Where goods are re-packed, for example with trimming of vegetables, the retailer may label the product as it was originally labelled.

## 15.4 DISPLAY

The KRAV approved products shall be easily accessible and highly visible for the customer.

### 15.4.1

The displays in the retail shop of both KRAV approved and conventional products shall be constructed in such a way that there is no risk of mixing or contamination. All the signboards must clearly indicate which are the KRAV approved products. KRAV approved products shall be displayed so there is no risk of contamination from containers, packing materials or other factors in the surroundings. If special packaging materials have been produced for KRAV approved products, it must be placed near these products so that it cannot be misunderstood for which products the material is intended.

### 15.4.2

At counters selling only KRAV approved products, the display information may include all products. At counters selling both KRAV approved and conventional single items by weight, every KRAV approved product shall be clearly labelled or displayed. In addition to the KRAV mark, the signboard shall, when possible, indicate the ultimate responsible producer's name when possible. See also Standards 2.13.3, 2.13.8, and 2.13.17.

## 15.5 DOCUMENTATION

### 15.5.1

For documentation concerning bought and sold KRAV approved product, see Standard 2.3.5.

## 15.6 MARKETING

### 15.6.1

Certified retail shops may market the business as KRAV certified. See Standard 2.14.4.

### 15.6.2

The certificate indicating that the retailer is KRAV certified must be placed in a highly visible location for the customer.

15.6.3

At the entrance it shall be apparent that the shop is KRAV certified for example by a decal or equivalent notice.

15.6.4

Information counter(s) for information about KRAV and organic production shall be accessible in the shop in a highly visible location for customers.

*Customers must be able to easily find information about KRAV approved products.*

## 15.7 WELL-INFORMED STAFF

15.7.1

The staff shall be well-informed about organic production and KRAV. The retailer shall try to always have some staff in the shop during open hours who completed a course on KRAV and organic production. See also Standard 2.3.4.

*Staff who have completed a course should be able to produce a course certificate.*



# 16. RESTAURANTS AND OTHERS INDUSTRIAL KITCHENS

*The standards in this chapter include all types of industrial kitchens, restaurants, and cafés. Even smaller production units such as sheltered housing and pre-schools are included. In the following text, industrial kitchen are used as a collective term.*

## 16.1 GENERAL

### 16.1.1

A KRAV certified industrial kitchen and industrial kitchen that has registered KRAV approved food shall contribute to an increased availability of KRAV approved meals and products through:

- A wide range of KRAV approved meals and products;
- Displaying the KRAV name and mark;
- A staff well-informed about KRAV and organic production

## 16.2 CERTIFICATION OF INDUSTRIAL KITCHENS

### 16.2.1

An industrial kitchen can certify the entire operation or parts of it such as:

- à la carte
- lunch
- buffet
- breakfast
- cafés

### **À la carte**

### 16.2.2

An à la carte menu shall offer at least two KRAV approved main courses daily.

### **Lunch**

### 16.2.3

A lunch menu shall have at least one KRAV approved main course weekly.

*A KRAV approved supper course may replace a KRAV approved lunch course. By main course is meant the main dish ingredients and secondary components thereof.*

### **KRAV approved dish**

### 16.2.4

A KRAV approved dish shall contain 100 percent by weight KRAV approved ingredients. If KRAV approved ingredients cannot be obtained, KRAV permits a lower limit of 70 percent by weight KRAV approved ingredients. This assumes that the main ingredients in the dish are KRAV approved. Note that KRAV's list of the permitted additives (Appendix 7) also applies to conventional ingredients in a KRAV approved dish.

### 16.2.5

In fish and shellfish dishes, the first choice shall be products from KRAV certified aquaculture and fisheries. When this is not possible, KRAV accepts a lower limit of KRAV approved ingredients of 50 percent by weight in the dish. From



the 1st of January 2006, the lowest possible level will be 70 percent by weight. Conventionally farmed fish are not permitted.

*KRAV can supply a recipe template for those who wish it.*

#### 16.2.6

Game not reared in enclosures may be used in KRAV approved dishes on the condition that 100% of the other ingredients in the dish are KRAV approved. When KRAV approved ingredients are not available, KRAV permits a lower limit of 95 percent by weight for other ingredients.

*Reindeer is not considered game in Sweden.*

#### 16.2.7

As far as possible, the accompaniments to the KRAV approved dish shall be KRAV approved products.

*Accompaniments include for exemple beverage, bread, contents of sandwiches, salads, coffee, tea, ketchup and mustard. The objective is to offer the guest a complete KRAV approved meal.*

### **Buffet**

#### 16.2.8

In KRAV approved lunch or supper buffets, there must be a complete meal (main course, accompaniments such as for example beverage, salad and bread) composed of KRAV approved products. The buffet shall reflect the availability on the market of KRAV approved products. A significant portion of the offerings on smorgasbord and Christmas buffets shall be KRAV approved.

### **Breakfast**

#### 16.2.9

At least one KRAV approved alternative must be offered in nine of the following product groups. The restaurant must document which product groups have been chosen.

- Coffee
- Tea
- Milk
- Juice/nectar
- Sugar/honey
- Sour milk/yogurt
- Bread
- Cheese
- Marmalade/jam
- Breakfast cereals/müsli/bran
- Fruits/vegetables
- Eggs

The other product groups shall reflect the availability on the market.

*KRAV's objective is that KRAV approved eggs shall be part of KRAV approved breakfast in the future.*

## Cafés

### 16.2.10

In the following product groups (in those product groups handled by the coffee bar) at least one KRAV approved alternative shall be offered:

- Coffee
- Tea
- Milk
- Fruit concentrate/juice/nectar
- Sugar/honey
- Sandwiches (The objective shall be that the content consists of 100 percent KRAV approved ingredience.) When KRAV approved ingredience cannot be obtained, KRAV may permit a lower limit of 70 percent by weight KRAV approved ingredients in the sandwich).
- Buns/biscuits (cakes, confections, small biscuits)
- Fruit

The other product groups shall reflect the availability on the market.

## Handling

### 16.2.11

When there is parallel handling of KRAV approved and KRAV non-approved product single items, and such products cannot be distinguished by their outer appearance, the following applies:

- Products shall be well-labelled during storage and serving (Standards 2.12.6-8)
- The handling shall occur in such in way that there is no danger of mixing or contamination (Standard 2.12.3)

### 16.2.12

When equipment, utensils, surfaces, etcetera are used handling both KRAV approved and conventional products, the danger of mixing and contamination shall be minimized through a clear differentiation in the processes. Equipment, utensils, surfaces etcetera shall be cleaned carefully before handling KRAV approved products may begin. There must be written routines to ensure this handling.

*The routines be advantageous to integrate into the industrial kitchen's own inspection program.*

### 16.2.13

In regards to packaging material, see Standards 2.12.13-14.

## Cleaning, disinfection and pest control

### 16.2.14

In regards to cleaning, disinfection and pest control see Standards 2.12.9-12.

## Labelling

### 16.2.15

KRAV's B-mark shall be used for KRAV approved dishes, see section 2.13.

#### 16.2.16

It shall be clearly indicated which ingredients are of KRAV approved origin. If this is not possible, the staff must be able to answer questions about which ingredients in the dish that are KRAV approved.

#### 16.2.17

The menu/bill of fare must clearly indicate the KRAV approved dish. The KRAV approved alternative must be clearly labelled on the buffet, breakfast and in cafés.

#### 16.2.18

KRAV approved product/dish must be displayed so that there is no mixing or contamination of the product/dish with conventional. KRAV approved product may not be contaminated by containers, utensils or other factors in the surroundings.

*KRAV approved products shall be easily accessible and highly visible for the guest.*

### **Documentation**

#### 16.2.19

For documentation of purchased, used and sold KRAV approved products, see Standard 2.3.5.

*KRAV can supply recipe templates for those who wish it.*

### **Marketing**

#### 16.2.20

Industrial kitchens that have certified their entire operation may market themselves as KRAV certified. In those cases where industrial kitchens have certified one or more parts of their operation, they may market these parts as KRAV certified.

#### 16.2.21

The certificate indicating that the industrial kitchen is KRAV certified must be placed in a highly visible location for the guests. The certificate indicates in which areas the industrial kitchens are certified.

#### 16.2.22

At the entrance it shall be apparent that the industrial kitchen is KRAV certified for example by a decal or equivalent notice.

### **Well-informed staff**

#### 16.2.23

Staff shall be well-informed about organic production and KRAV. Industrial kitchens shall try to always have some staff in the kitchen during open hours who have completed a course on KRAV and organic production.

*Employees who have completed a course should be able to produce a course certificate.*

## 16.3 REGISTERING OF KRAV APPROVED FOODSTUFFS

### 16.3.1

Industrial kitchens may register with KRAV if they use one or more KRAV approved foods. The registered foods must be totally replaced with KRAV approved.

### 16.3.2

KRAV must be informed of any changes, expansions or reduction of the number of KRAV approved registered foodstuffs.

### 16.3.3

If a KRAV approved registered food is not obtainable, the guest and KRAV must be informed immediately.

### Seasonal foods

#### 16.3.4

KRAV approved seasonal foods may be used without registration with KRAV. The purchases shall be documented.

#### 16.3.5

The guest shall be informed of which KRAV approved seasonal foods are used.

### Cleaning, disinfection and pest control

#### 16.3.6

In regards to cleaning, disinfection and pest control, see Standards 2.12.9-12.

### Labelling

#### 16.3.7

KRAV's B-mark shall be used for KRAV approved foods.

*Foodstuffs not mixed with other foods in the industrial kitchen and which are marked with KRAV's A-mark on the original packaging may continue to be marked with the A-mark.*

### Documentation

#### 16.3.8

The quantities of purchased registered KRAV approved foods shall be documented. There must also be records of the quantities used. The documentation shall be saved for at least two years.

### Marketing

#### 16.3.9

Certificate indicating the foodstuffs the industrial kitchen has registered must be placed in a highly visible location for the guests.

16.3.10

At the entrance it shall be apparent that the industrial kitchen has registered KRAV approved foodstuffs by for example a decal or equivalent notice.

#### **Well-informed staff**

16.3.11

The staff shall be well-informed about organic production and KRAV.

## **16.4 TEMPORARY CERTIFICATION**

16.4.1

In certain cases, permission may be granted to use KRAV's name and mark when serving KRAV approved dishes or foods.

*Contact KRAV for more information about applying for temporary permission.*



# 17. RECERTIFICATION OF PRODUCTS THAT ARE APPROVED BY OTHER CERTIFICATION BODIES

*KRAV wishes to stimulate consumption and increase the supply of organic products. KRAV therefore strives to increase the volume of organic production by facilitating global trade with organic products.*

*The KRAV recertification is based on that the product in question is produced according to KRAV standards or equivalent. In the assessment KRAV take into consideration*

- The IFOAM intention with organic production*
- The KRAV goal with organic production*
- The KRAV assessment of the certification body*

*Production that is certified or products that are approved by another IAC program recertifies directly by KRAV. For other recertification, a comprehensive assessment is made based primarily on our own experience and that of others. KRAV is of the opinion that a vegetable product inspected according to the (EEC) no 2092/91 can on the whole be recertified directly without additional requirements. An animal product requires deeper analysis and this is primarily based on that KRAV values animal welfare questions highly.*

*Permitted additives and processing aids are those that are specified in the IBS.*

*According to 17.3.1.1 KRAV uses an assessment list in the recertification process. The assessment list has been compiled with the help of a fact-based comparison of standards between the (EEC) no 2092/91 and the IBS. The assessment list is kept updated mainly based on our own experience and that of others on how inspection and certification function outside of Sweden. By requesting information is meant that we contact the actual certification body to obtain reports on the manner of production. If KRAV considers it necessary, we go further to the next step in the production process. KRAV can deny a recertification on the basis of that the assessment list is not fulfilled or if we judge that a recertification could in some way damage KRAV's credibility or label.*

## **17.1 GENERAL INFORMATION ON RECERTIFICATION**

### **17.1.1**

Recertification occurs either through a certification based on other certification bodies' certificates (certification transference) or through certification based on inspection reports. When recertification is based on certification transference, KRAV requires that the actual certification body be recognized by KRAV according to 17.2 .

### **17.1.2**

When applying to have a production certified or a product approved, it is required that the production or product is certified according to 17.3 and 17.4.

For registration to recertification, the relevant sections of Chapter 2 are also applicable.



## 17.2 RECOGNITION OF CERTIFICATION BODY

### 17.2.1

For recognition, the certification body shall be either IFOAM accredited or ISO 65/EN45011 accredited. For recognition, KRAV also makes a comprehensive assessment of the certification body.

For recertification of production or products certified by a certification body that applies other quality assurance systems than IAC or ISO 65/EN45011, KRAV makes an independent evaluation of the certification body.

*The comprehensive assessment is based primarily on our own experience and that of others. At the KRAV web site, [www.krav.se](http://www.krav.se), there is a list of certification bodies that KRAV recognizes and also all of the programs that KRAV recognizes.*

## 17.3 RECERTIFICATION OF PRODUCTION OR PRODUCT

### 17.3.1 GENERAL REGULATIONS

#### 17.3.1.1

For a production or a product to be recertified, it must be certified according to an IFOAM accredited program or approved according to the (EEC) no 2092/91. When recertifying a production or product certified according to a program not IFOAM accredited, KRAV uses an assessment list in the recertification process.

For certification of a production or approval of a product, the relevant sections of Chapter 2 are applicable.

*At the KRAV web site, [www.krav.se](http://www.krav.se), you will find the current assessment list.*

### 17.3.2 VEGETABLE PRODUCT

#### 17.3.2.1

KRAV can recertify an organic vegetable product if it is:

Standard/program	Additional requirements
Certified according to an IFOAM accredited program	<ul style="list-style-type: none"><li>• No additional requirements</li></ul>

or

Approved according to the (EEC) no 2092/91	KRAV may require information on the following when recertifying a vegetable product: <ul style="list-style-type: none"><li>• General reliability (including social aspects), see in addition 2.3.9-10 and 2.9.5</li></ul>
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*At the KRAV web site, [www.krav.se](http://www.krav.se), you will find the current assessment list.*

### 17.3.3 ANIMAL PRODUCT

#### 17.3.3.1

KRAV can recertify an organic animal product if it is:

Standard/program	Additional requirements
Certified according to an IFOAM accredited program	<ul style="list-style-type: none"><li>• No additional requirements</li></ul>

or

Approved according to the (EEC) no 2092/91	<p>KRAV may request information about the following:</p> <ul style="list-style-type: none"><li>• General reliability (including social aspects), see in addition 2.3.9-10 and 2.9.5</li></ul> <p>KRAV will ask for information on the following:</p> <ul style="list-style-type: none"><li>• Grazing opportunity at the time of fattening indoors during summer</li><li>• Transport of animals</li><li>• Keeping established animal groups together with recertification of animal product</li></ul>
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*At the KRAV web site, [www.krav.se](http://www.krav.se), you will find the current assessment list.*

## 17.4 PERMITTED ADDITIVES AND PROCESSING AIDS

#### 17.4.1

The following additives and processing aids are permitted when recertifying products intended for human consumption:

- Additives and processing aids according to the IBS.

# 18. KRAV INSPECTED AND CERTIFIED FOREIGN PRODUCTION

18.1.1

All relevant parts of KRAV's standards apply. Where these are not applicable due to different circumstances, exceptions may be made if such exceptions comply with IFOAM's Basic Standards and/or the EU standards for organic production.

18.1.2

In addition to the applicable standards, KRAV may issue special guidelines/instructions for certification to ensure an ecologically sustainable production. This may concern e.g. measures to prevent erosion, improve water management, protect biodiversity etc. As far as possible, such standards shall be based on consultation with local organizations in organic farming, conservation and environmental protection.

## 19. FISHING

*The Standards include all parts of the chain of custody from the fishery to the retailers.*

*Every section of the standards begins with a principle that describes the starting point for the standards in the section. The section describes what is hoped to be gained on a visionary level, even if this is not possible to realize at the present in the form of detailed standards. Principles are founded primarily on the objectives used in the development of these standards.*

*After the principles follows a rationale. This describes what the standards cover at the present and why the specific issues are considered.*

*After the rationale there is a list of the requirements that the certified organization must fulfil.*

## **19.1 COMPETENCY REQUIREMENTS FOR KRAV AND COMPLIANCE WITH THESE STANDARDS**

### **Principle**

These standards are created to drive development in the fishing industry towards a sustainable fishing and processing. Standards have been developed during a long process involving experts in many areas. To ensure that the standards are actually complied with, KRAV must be able to inspect that all standards are followed in the entire chain of custody with great certainty.

Consumers must be able to trust eco-labelling and the standards shall encourage and facilitate trade with KRAV approved fish- and shellfish products. KRAV's procedures for where and how decisions are taken to certify fishing activities must be transparent. It shall also be transparent as to the identity of those making the decisions. The standards shall facilitate trade with products produced in compliance with these Standards. There must be room for standards to be further refined if this is necessary. Standards are developed for conditions in Scandinavia and are neither tested nor intended for other areas.

Those who wish to have their production KRAV certified are responsible to prove that they comply with the requirements. Therefore, businesses or organisations that wish to have a stock certified shall deliver the documentation and pay for the work for assessing the stock.

### **Rationale**

The competency requirements in these standards ensure that KRAV maintains a system that guarantees their independence and competence.

At present, the standards do not directly protect against bycatches of marine mammals. KRAV shall therefore gather knowledge and statistics of catches of marine mammals to collect sufficient documentation to consider changes in the standards, if necessary

The application of the standards is geographically limited because the work resulting in these standards could not take into consideration the conditions outside of the areas that have been defined. No one has investigated if this system leads to a more sustainable fishing outside of the defined areas.

## 19.1.1 Quality assurance

### 19.1.1.1 Certification for marketing

These standards shall only be applicable in their entirety. A certification according to the standards may be called "KRAV certified", "KRAV certified according to 20XX standards for fisheries" or the equivalent in other languages. A product derived from a certified operation and fulfilling all parts of the standards may be marketed as "from a KRAV certified fishing" or the equivalent in other languages. Standards may be applied together with other voluntary labelling systems.

### 19.1.1.2 Where do the Standards apply?

Standards in chapters 19.2, 19.3 and 19.4 are applicable in fishing waters within 200 nautical miles from a Scandinavian country.

### 19.1.1.3 Statistics covering non-target species, bycatches

KRAV shall maintain statistics of bycatches of marine mammals and birds. The organization shall publicize the statistics annually.

## 19.1.2 Decision-making organization

### 19.1.2.1 Task of the Fishing Committee

The KRAV Board of Directors appoints a Fishing Committee that shall have a documented terms of reference according to IAC or ISO65. The Fishing Committee's main task is to advise KRAV whether or not fishing of the indicated stock using the stated methods shall be approved.

### 19.1.2.2 Working procedures of the Fishing Committee

A researcher with documented knowledge of marine ecology leads the Fishing Committee. The Fishing Committee shall be competent to jointly to judge fishing effects on the marine environment. Thus, there must be competence in the areas of marine ecology, fisheries biology, environmental preservation, ethology, fishing methods, and development of fishing gear. The KRAV Board of Directors shall also be represented in the Fishing Committee.

The Fishing Committee shall also have experience of fishing and have competence within eco-labelling of food products. The Fishing Committee contacts other experts as needed. The Fishing Committees' decision shall be unanimous.

### 19.1.2.3 Opinions from stakeholders

Prior to KRAV taking a decision to permit or not permit KRAV certified fishing, the stakeholders shall be allowed to express their opinions concerning the suggested decision. The recommendation of the Fishing Committee shall accompany the suggested decision.

### 19.1.2.4 Decision by KRAV

KRAV decides which stock shall be open for KRAV certified fishing and what methods and gear that may be used in KRAV certified fishing on the stocks.

### 19.1.2.5 Announcing the decision

KRAV shall put the decision to allow fishing on a stock in the public domain. The decision shall include answers to the following questions: What stock is approved? Where is fishing permitted? Which gear and methods are permitted?

What size limits apply for captured fish? What other limits apply?

#### 19.1.2.6 Time limits

The decision to permit a stock to be open for KRAV certified fishery is normally valid for three years. In special cases, the decision can be reconsidered within a shorter time period. Examples of such cases can be when a scientific investigation shows that the stock is nearing exhaustion or that the methods and gear used are accompanied by serious effects on the marine ecosystem or that the fishery results in unacceptable bycatches.

### 19.1.3 Application for assessment

#### 19.1.3.1 Information in the application

Those who wish to operate a certified fishery according to these standards, on a stock not assessed earlier, may apply for an assessment of the fishery by KRAV. This also applies for a renewal of the assessment when the previous approval has expired. It is the responsibility of the applicant to supply the information that the Fishing Committee deem necessary to make an accurate assessment of the stock. If necessary, the Fishing Committee also has the right to request supplemental information from the applicant about the stock and the suggested methods and gear.

#### 19.1.3.2 Application fees

KRAV has the right to charge a fee to cover the costs in connection with estimating the stock. KRAV shall inform the applicant of the amount of the fees and an explanation of the costs before the work is begun.

#### 19.1.3.3 Appealing the decision

KRAV's decision (see Standard 19.1.2.4) to approve or deny approval for KRAV certified fishing can be appealed according to KRAV's appeal procedures, see 2.10.2.

## 19.2 STOCK - BASIC PRINCIPLES AND STANDARDS FOR ASSESSING FISH AND SHELLFISH STOCKS

### Principle

Certified fisheries are operated on stocks that are sustainable in the long-term and conducted in such a way that captures do not exceed the biological capacity. Consumers shall be able to eat KRAV approved fish safely.

Gear shall be designed so that it does not endanger the stock's tenability or cause long-lasting damage to the environment.

### Rationale

At this time, we do not know everything about any fish stock. Neither do we believe that all stocks can be assessed using the same criteria because the biological conditions are too varied. The best we can do is convene a group with high competence, give them guidelines, and circulate their conclusions for comments. This section contains the guidelines for the Fishing Committee's assessment of the stock's status.

Environmental toxins are a complex problem in Scandinavian waters. This applies mainly to heavy metals and dioxins. A simple assessment of the stock's



load of environmental toxins shall be performed.

#### **19.2.1 Assessment of the size of stock**

##### **19.2.1.1 Extent of fisheries**

The collective fishing pressure on a stock may not exceed its production capacity or endanger the balance in the marine ecosystem.

##### **19.2.1.2 Precautionary approach**

Assessments of the size of stock shall apply the precautionary approach. See the definition section.

##### **19.2.1.3 Ensure reproduction**

The precautionary approach means that fishery may not endanger the stock's future reproduction. A certified fishery can be permitted if the stock is assessed to be within safe biological limits. Safe biological limits means that the stock must contain the minimum critical spawning biomass and that fishery is not allowed to exceed the critical mortality. Biological criteria shall provide the basis for assessing the "spawning biomass" and fish mortality.

##### **19.2.1.4 Basis for assessment**

Assessment must be based on available data and relevant knowledge of the stock, methods, and gear. The Fishing Committee may recommend that the fishery be not approved, due to insufficient knowledge.

##### **19.2.1.5 ICES counsel**

The Fishing Committee shall consider the ICES counsel; if ICES has assessed the stock. The Fishing Committee shall demonstrate how it has considered the ICES counsel in their own recommended decision.

##### **19.2.1.6 Gear and methods**

The Fishing Committee shall determine what gear and methods are permitted when fishing a certain stock. Gear shall mainly catch sexually mature individuals of the target species but at the same time sort out inferior individuals. Fishing methods that cause long-lasting or irreversible damage to the environment (such as damage to coral reefs or very sensitive biotopes) may not be approved.

##### **19.2.1.7 Unwanted substances**

Sweden's and Finland's exception in article 1 in the Commission Regulation 466/2001 does not apply when concerning unwanted substances in fish and shellfish from stocks approved for fishing according to these Standards. The maximum permitted levels are defined the Appendix to the regulation.

The Fishing Committee may refuse to approve a stock because of high levels of unwanted substances. Liver and roe from fish from the Baltic Sea, Gulf of Bothnia, and Gulf of Finland may not be sold as KRAV approved.

## **19.3. FISHING VESSELS**

### **Principle**

The fishing vessels' operations must be planned and run to result in the least possible environmental impact. Environmental impact results from the vessel's operations (fuel, maintenance, etc.) and activities (fishing and transport). The

environmental impact is to a great degree controlled by the competence of the crew and shipowner. These standards shall promote vessels exerting the least possible environmental burden.

### **Rationale**

Consumers' confidence in the products is essential for the standards. The emphasis is placed on the basic functions, such as compliance with current legislation, development of competence and other measures that are all considered to have positive effects on the environmental impact in the long run. Impure fuel and two-stroke engines cause considerable discharges that cannot be tolerated in KRAV certified fisheries. Some bottom paints are so toxic that they are also not permitted. The most toxic are legally prohibited in Sweden, but may be permitted in other countries - therefore these are mentioned here.

### **19.3.1 Requirements - fishing vessel**

#### **19.3.1.1 Certifying the vessel**

KRAV certifies the fishery that occurs on an individual fishing vessel. Certification means that the vessel may land fish or shellfish as KRAV approved. The bearer of the vessel's commercial registration is responsible for ensuring compliance of all standards when fishing according to these standards.

#### **19.3.1.2 Documentation and routines**

There must be documentation and methods to show that vessel complies with the environmental, fishing and occupational safety legislation, se 2.3.9. There must be procedures to ensure that the responsible person is made aware of changes in legislation and pending fishing stops.

#### **19.3.1.3 Personal development**

Fishing vessels that are certified according to these standards shall have a plan for employee personal development to ensure that personnel receive the appropriate continued education.

#### **19.3.1.4 Diesel motors**

Fishing vessels with diesel motors shall use diesel of quality E10 gasoil with a maximum of 0.05% sulphur.

#### **19.3.1.5 Outboard motors**

Fishing vessels with outboard motors shall change to a four-stroke engine when replacing a motor. All outboard motors on fishing vessels certified according to these standards shall have a four-stroke engine no later than 2007-01-01.

#### **19.3.1.6 Hydraulic oil and lubricating greases**

Hydraulic oils used on-board shall be eco-labelled or approved according the standard "Hydraulic fluids - Requirements and Testing Methods SS 15 54 34"

Lubricants used on-board shall be eco-labelled or approved according the standard "Lubricating greases - Requirements and Testing Methods SS 15 54 70".

KRAV may only give exemption from this standard if the vessel can show documentation that the oil or lubricant of that quality is not available for purchase on the market.

#### 19.3.1.7 Cleaning agents

Heavy-duty cleaners used on-board may not contain ingredients classified as carcinogenic, causing mutations or disruptive of reproduction. Surfactants and other agents may not interfere with the separation of oil and water or cause the filtering tank to malfunction. Heavy-duty cleaners shall otherwise be as environmentally adapted as possible.

#### 19.3.1.8 Waste

The vessel shall have clearly defined procedures for handling different type of waste.

#### 19.3.1.9 Bottom paints

Paints containing tin may not be used for painting the bottom of fishing vessels.

## 19.4. FISHING METHODS

### Principle

Methods shall be adapted so that the fishermen only capture the intended catch. Methods shall also be gentle to the surroundings. We should generally endeavour to use the catch method that causes the least suffering to the animals prior to death.

Catching and landing fish always results an environmental impact. If a parts of the catch is lost due to inappropriate handling, the impact has become meaningless and is disrespectful to the catch. Therefore, the standards must also have measures to promote quality.

Consumers must always be able to trust that the catch is taken from the indicated location.

### Rationale

Standards focus on traceability, to avoid ghost fishing and avoid bycatches of organisms that cannot or may not be sold. The requirements for equipment for ensuring traceability are reduced for small vessels with a limited range. The reason is that these vessels cannot cover such large areas so that they change stock.

At the present, vessels are permitted to fish both KRAV certified and non-KRAV certified - but only when these are of different species. In this way, more vessels have the financial possibility to convert to KRAV certified fishing.

#### 19.4.1 Requirements for all fishing

##### 19.4.1.1 Adhere to laws and standards

All fishing shall be carried out according to the applicable legislation, se 2.3.9. This means that if authorities close a fishing area, it is automatically closed for KRAV certified fishing.

##### 19.4.1.2 Permitted stock, gear and methods

Certified fishing is only is permitted within the limits defined by KRAV according to 19.2.1.6.

#### 19.4.1.3 Other gear on-board

A vessel fishing KRAV certified for a specific target species may not have forbidden gear on-board that is usually intended for the target species.

#### 19.4.1.4 Fishing trip

A vessel may not fish on the same certified stock with both approved and unapproved gear and methods. During a transitional period though, a certified vessel may carry out KRAV certified fishing on approved stock and with approved methods on one target species and non-approved fishing on another target species. The vessel, however, may not operate a fishery on a stock that is obviously threatened or with methods that are clearly environmentally inappropriate.

#### 19.4.1.5 Documentation of the fishing trip

The vessel shall document the fishing trip so that there is no doubt as to where the catch was taken. The accuracy of the information shall be 10 nautical miles or better. Both the setting location and lifting location for the trawl or other gear must be documented. The time of the catch must also be documented.

#### 19.4.1.6 System for reporting of position

Vessels with the longest length greater than 12 meters shall be equipped with a VMS system or other system that cannot be manipulated

Vessels with the longest length greater than 15 meters shall report information on the position, course and speed to an organization that gathers data at least once every hour. Vessels between 12 and 15 meters shall report information on the day's trip at least once every fishing day. KRAV shall have access to the information from the organization gathering the data.

If the system ceases to function during a fishing trip, no portion of the catch may be sold as KRAV approved.

Vessels returning to the home harbour within 24 hours from the beginning of the fishing trip are exempted from this standard point.

#### 19.4.1.7 Storing the catch

The catch shall be stored in fish boxes labelled to ensure complete traceability. Such labelling includes the KRAV name and/or mark, species, fishing area, time for catch and similar. See also section 2.13. Information on position shall be according to 19.4.1.5.

#### 19.4.1.8 Labelling of gear

All gear shall be clearly labelled directly on the gear. Marking shall make it possible to trace the gear to the owner.

#### 19.4.1.9 Damaged gear

Damaged gear shall be taken ashore for repairs or destruction.

#### 19.4.1.10 Bycatches of marine mammals, birds and invertebrates

All bycatches of non-target species of marine mammals, birds and invertebrates shall be reported in the logbook. All bycatches of marine mammals shall be reported to KRAV within two weeks.

Catches of invertebrates may be reported in the logbook with an estimate of the weight, or in another appropriate way that describes the quantity.

#### 19.4.1.11 Duration of fishing trip

The duration of the fishing trip from the harbour to the fishing area may not be longer than that the catch can be sold for human consumption.

### 19.4.2 Requirements - trawling

#### 19.4.2.1 Limits

Trawling is permitted within the limits set by KRAV according to 19.2.1.6.

19.4.2.2 Selecting devices - Cod (*Gadus morhua*) and bottom-feeding fish  
Trawlers for Cod (*Gadus morhua*) and bottom-feeding species shall be equipped with a Bacoma window or other selective device with equivalent effects. The devices shall allow undersized fish to escape.

#### 19.4.2.3 Selecting devices - shellfish

Trawlers for fishing shellfish must be supplied with an appropriate selection grid or selecting device with equivalent effects.

#### 19.4.2.4 Prohibited beam trawlers

Beam trawlers are not permitted for KRAV certified fishing.

### 19.4.3 Requirements - net fishing

#### 19.4.3.1 Limits

Net fishing is permitted within the limits set by KRAV if according to 19.2.1.6.

#### 19.4.3.2 Duration for nets in the water

Nets must be lifted so often so that the fish will never be caught in the net for more than 24 hours. KRAV may determine special restrictions in the question of specific fishing.

#### 19.4.3.3 Drifting nets and marine mammals

All drifting nets shall be designed so that marine animals can avoid them.

#### 19.4.3.4 Drifting nets in the Baltic Sea and the Gulf of Bothnia

KRAV certified salmon fishing with drifting nets in the Baltic Sea and the Gulf of Bothnia are only permitted if the nets have a maximum length of 2.5 km.

### 19.4.4 Requirements - fishing with line and hooks

#### 19.4.4.1

Fishing with line and hooks is permitted within the limits set by KRAV according to 19.2.1.6. KRAV can also decide on the duration for how long hooks can remain in the water.

#### 19.4.5 Requirement - fishing with fishing traps and fyke nets

##### 19.4.5.1 Limits

Fishing with fishing traps and fyke nets is permitted within the limits set by KRAV according to 19.2.1.6.

##### 19.4.5.2 Time periods

Fishing traps and fyke nets shall be lifted at least twice per week.

#### 19.4.5.3 Candling of crabs

Crabs shall be candled by transmitted light at sea during crab fishing. Non-meaty crabs shall be returned to the sea undamaged. There shall be documentation that the candling equipment or other handling does not damage the crabs.

#### 19.4.5.4 Nets or panels of degradable fibres

Degradable panels, or an equivalent construction, must be a part of all traps and all fishing houses in fyke nets.

#### 19.4.5.5 Selection

Fyke nets should be designed to select for the target species. Vessels that lift eel fyke nets shall have the best available equipment so that the boat can effectively select between eel and other fish. The other fish shall be returned undamaged to the sea.

## 19.5. LANDING AND PROCESSING

### Principle

In connection with the landing, auction and further transport to the wholesalers and processing industry, KRAV approved fish and shellfish shall be kept separately from non-KRAV approved fish and shellfish. Additives and other raw materials not originating from the sea, processing aids, flavour enhancers and similar shall come from natural sources or be produced with environmentally-adapted methods. Disposal of waste must meet the highest possible requirements for sorting and recycling.

Transports and processing shall use minimal amounts of energy by choosing the best available fuels and technologies and by choosing the shortest possible rout from the sea to the consumer. Using cheap fossil energy to make long detours to use cheap processing labour with unsatisfactory conditions is not consistent with KRAV certified processing.

### Rationale

These standards make the traceability of the product a priority. By means of traceability, the consumer can trust the fact that the fish has been caught and handled in compliance with the KRAV standards.

### 19.5.1 Requirements - landing

#### 19.5.1.1 Basic standards for handling and processing

The KRAV approved fish shall be handled and processed according to Chapter 9 Food Processing.

#### 19.5.1.2 Initial recipient's responsibility

The initial recipient is responsible to ensure that the relevant parts of the standards are followed during landing and further sales, and shall be certified according to these standards to market the products as KRAV approved.

#### 19.5.1.3 Accounts

The initial recipient's accounts shall be examined and approved by a certified accountant.

#### 19.5.1.4 Boxes and packaging materials

Boxes or other packaging materials for products from KRAV certified fishing shall be labelled to ensure complete traceability. Such labelling includes the KRAV name and/or mark, species, fishing area, time for catch and similar information. See also section 2.13. Information on positions shall be in accordance with 19.4.1.5.

#### 19.5.1.5 Handling and storage

The initial receiver shall handle and store the labelled fish and shellfish so as to ensure that catches from different vessels are not mixed. Catches from different vessels may be mixed if every individual is labelled with KRAV's name and/or label and indicating which vessel has captured the individual. See also section 2.13.

#### 19.5.1.6 Inspection of source

The initial receiver is responsible for ensuring that the KRAV approved fish that the company has received are sourced from fisheries certified according to these standards.

### 19.5.2 Requirements - processing

#### 19.5.2.1 The processor's responsibility

The processor is responsible to ensure compliance with relevant portions of these standards during those parts of the chain of custody under processor's control and shall be affiliated to KRAV to be able to market the processed products as KRAV approved.

#### 19.5.2.2 Requirements for the processor

Processors shall have clear environmental targets, both in short and long terms as well as an action plan to reach the targets. The processor shall also have an internal audit scheme or equivalent to follow up the targets and the action plans. See also 2.11.3.

#### 19.5.2.3 Documentation and assessing raw materials

The processor shall be informed of and document where the fish used as raw material was caught. The processor shall consider environmental aspects when choosing fish used as raw material.

#### 19.5.2.4 Yield

The processor shall ensure the best possible yield of fish in relation to final product. This shall be accomplished by measures taken in the processors own production as well as by requirements directed at suppliers.

#### 19.5.2.5 Handling and other raw materials

Handling of the KRAV approved fish shall otherwise be carried out according to Chapter 9 Food Processing. This also applies to use of other raw materials than fish and shellfish in connection with processing of products that will be KRAV approved according to this system.

#### 19.5.2.6 Other additives

In addition to the additions approved according to Chapter 9 Food Processing, the following additives are approved for use in processing of KRAV approved fish and shellfish. The additives may only be used in cool tins where the raw material

comes from KRAV certified fishing.

- acetic acid (E260)
- potassium and calcium sorbates/sorbic acid (E200, E202-203)
- benzoic acid/benzoates (E211-213)

*The additives are needed due to food safety. KRAV strive though towards to replace them after evaluation and discussion with the industry.*

#### 19.5.2.7 Other eco-labelling systems

KRAV may allow processors to use fish and shellfish source materials that are certified according to other eco-labelling systems. In such cases, KRAV applies the IAC's criteria for "Acceptance of prior certification".

#### 19.5.2.8 Packaging

KRAV approved fish and shellfish products may only be packed in recyclable packaging. The packaging must be produced by a company affiliated with REPA - the Swedish company managing the producer responsibility for packaging recycling (or the equivalent outside of Sweden). Recyclable means that packaging is designed so that it can be recycled. Recycling by means of extracting energy is not approved, with the exception of burning wooden boxes and barrels that may not be reused.



## 20. KRAV-APPROVED INGREDIENTS

*KRAV observes changed food consumption among consumers - we eat out more often and when we eat at home we increasingly often choose totally or partially prepared meals.*

*KRAV chooses to prioritize larger volumes of KRAV-approved ingredients on the market in spite of a clear conflict with the goal of KRAV-approved products in their entirety. As a basis, KRAV notes those groups of consumer who can seldom or never buy KRAV-approved products because the products asked for are not possible or difficult to produce within the framework of KRAV's current standards. For example, persons with diabetes, with gluten intolerance, lactose intolerance, and those who want products with low fat content or vitaminized or products fortified with minerals.*

*In addition there are groups of products that are not possible to produce with the current KRAV-standards; examples are certain partially finished products, cured meat products with nitrite, ice cream without egg, foods with vitamin and mineral additives.*

*A licensee who has registered KRAV-approved ingredients may list this on the packaging and indicate this in their marketing. It shall be clearly evident which ingredients that are of KRAV-approved origin. The products may not be marked as organic, as KRAV-approved or labelled with KRAV's mark.*

## **Registration**

### **20.1**

A licensee may register that they use one or more KRAV-approved ingredients. For registration of ingredients the relevant sections of Chapter 2 are also applicable.

*After KRAV has approved a registration of a KRAV-approved ingredient the licensee receives a certificate that confirms the registration.*

## **Ingredients**

### **20.2**

It is not permitted to use both KRAV-approved and non-KRAV approved ingredient of the same sort in the same product.

*As an example, KRAV-approved and conventional potatoes may not be used in the same instant mashed potato mix.*

### **20.3**

Ingredients may not contain or have been produced by GMO. This also applies to the conventional ingredients in a product.

## **Documentation**

### **20.4**

The purchased quantity and the quantity used of the registered KRAV-approved ingredients shall be documented. The licensee shall also document the origin of the ingredients as well as the recipient of sold goods containing KRAV-approved ingredients. The documentation shall be kept for at least two years.

Any changes, increasing or decreasing, of the number of KRAV-approved registered ingredients shall be reported to KRAV.

*Documentation may be done on paper or digitally.*

## 20.5

Prove sheets for packaging for which KRAV-approved ingredients are used, shall be sent to KRAV for approval, prior to printing.

### Handling and inspection

## 20.6

When handling KRAV-approved ingredients, standard 2.12.3 is correspondingly applicable. See also 20.2.

## 20.7

Labelling and marketing of products according to 20.8-9 may only appear on products whose KRAV-approved ingredient is approved by KRAV. With regards to inspection, see Chapter 2.

### Labelling and marketing

*Generally, according to Swedish legislation governing marketing, it is not permitted to state more, promise more than what can be answered for. KRAV considers it important that labelling of ingredients does not mislead the consumer. Labelling of ingredients may only be used for ingredients that come from KRAV-certified production.*

## 20.8

Licensee that has registered a KRAV-approved ingredient may write this on the packaging and state this in their marketing. It shall be clearly evident which ingredients that are of KRAV-approved origin. From the list of ingredients, it shall be clear which weight by percent the KRAV-approved ingredients represent. See also 2.14.1.

The products may not be marked as organic, as KRAV-approved or labelled with KRAV's mark. The licensee shall be able to state the measures that have been taken to fulfil the labelling and marketing legislation in force. Labelling or marketing according to Chapter 20 may not in any way mislead to be perceived as if it regards a KRAV-approved product.

## 20.9

When labelling or marketing, any of the following expressions shall be used: "Contains KRAV-approved XX", "XX comes from KRAV-certified production" or equivalent. In addition, it shall be stated on the packaging that the KRAV-approved ingredient is inspected by KRAV. The word KRAV shall be written in capital letters but labelling or marketing in other respects may not in any way through typeface or colour be associated with KRAV Incorporated Association's logotype or mark for KRAV-certified production.



# APPENDICES

# APPENDIX 1 RECOMMENDATIONS FOR CARE OF THE ENVIRONMENT, NATURE AND CULTURE CONSERVATION

## STANDARD 2.4.1

For all producers registered with KRAV

Producers who are registered with KRAV shall act to protect the environment to the greatest possible extent.

### Care of the environment

- Environmentally adapted products shall be the first choice. If these are not available, the least harmful choice with regard to the environment shall be chosen
- Oils and fuels shall, if possible, be of non-fossil, plant or animal origin
- Cleaning products, rust-proofing agents and degreasers shall be environmentally adapted
- Environmentally adapted paints and solvents shall be the first choice
- Impregnated wood (creosote, copper or arsenic) shall be avoided

### Energy consumption

- Energy consumption shall be minimized
- Renewable energy shall be used where possible
- Energy consumption shall be documented
- Providers of energy shall be environmentally labelled

### Documentation of environmental measures

Documentation of the company's environmental measures shall be produced. For agriculture, see standard 3.1.6. For processors, see standard 2.4.3.

### Special standards for agriculture

#### Plant nutrients

- KRAV recommends that a current soil analysis and a nutrient balance shall be available

### Conservation

- Protected meadows and wooded pastures should be maintained
- Fences shall be established in order to enable grazing of headlands between fields, forests, uncultivated spots and ditch-banks
- Additional feeding shall be avoided when stock is on natural pasture
- Crop bearing fruit/nut trees etc., pollarded trees and avenues shall be preserved or replaced with new trees
- Substances containing avermectins shall not be used when stock is grazing in natural pastures

## APPENDIX 2 SIZE REQUIREMENTS FOR ANIMAL HOUSING

### STANDARD 5.2.8

The following standards apply to animal housing built after 24 August 1999 and after 31 December 2010 for older buildings. The indoor space is that space accessible to the animal. Shelters from wind and huts may be smaller. The Swedish animal welfare standards for lying area and other details apply.

#### 1 A Beef cattle and sheep

According to standard 5.2.17 at least half of the floor space should be whole. See standards 5.2.2 - 5.2.18 for ruminants

	Indoor spaces		Outdoor space (exercise yard, not pasture)
	Least live weight (kg)	m <sup>2</sup> /animal	m <sup>2</sup> /animal
Beef cattle and horses, breeding fattening animals	no more than 100 no more than 200kg no more than 350kg more than 350kg	1,5 2,5 4,0 5 and no less than 1m <sup>2</sup> /100 kg	1,1 1,9 3 3,7 no less than 0,75m <sup>2</sup> /100 kg
Dairy cows/beef cow in straw bedding Dairy cows/beef cow in other free-range systems Dry cow		8,5  6 6	4,5
Breeding bulls		10	30
Adult sheep and goats		1,5	2,5
Gestating ewe	more than 65 kg no more than 65 kg	1,5 1,7	2,5
Lamb/kid	no more than 15 kg more than 15 kg more than 30 kg	0,35 0,5 1,0	0,5  0,75
Regenerating goat		0,75	0,75

#### 1 B Pigs

Outdoor exercise yard may be partially covered by a roof. see standards 5.2.3 - 5.2.18

	Indoor spaces		Outdoor space
	Least live weight (kg)	m <sup>2</sup> /animal	m <sup>2</sup> /animal
Brood-sows with up to 40-day old piglets		7,5 sow	2,5
Growing pigs	no more than 50 no more than 85 no more than 110	0,9 1,2 1,5	0,6 0,8 1
Piglets	more than 40 dagar and no more than 30 kg	0,6	0,4
Breeding pigs		2,5 females 7,0 males	1,9 8,0

## 2 Poultry

The opening between the poultry yard and the housing shall have a total length of 4m/100m<sup>2</sup> of the area accessible to the birds indoors.

*Openings in the barn shall be at least 2m per 1000 hens according to the Swedish Board of Agriculture Regulation (SJVFS:6).*

Max no. of animals/house:		Max housing areaproduction unit
Laying hens	3.000	–
Chicken	4.800	1 600 m <sup>2</sup>
Guinea fowl	5.200	1 600 m <sup>2</sup>
Duck	3.200	1 600 m <sup>2</sup>
Geese	2.500	1 600 m <sup>2</sup>
Turkeys	2.500	1 600 m <sup>2</sup>

	Indoor space (accessible to the animals)			Outdoor space (m <sup>2</sup> are accessible in rotation/animal)
	N <sup>o</sup> animal/m <sup>2</sup>	cm perch/animal	Living	m <sup>2</sup> /animal
Laying hens	6 including laying nest	18	6 laying hens per nest or with a shared nest box 120 cm <sup>2</sup> /bird	4, on condition that the 170 kg kväve N/ha/year not be exceeded for the above species
Poultry raised for meat	10 at no more than live weight/m <sup>2</sup> : 16 kg (duck) 14 kg (goose) 21 kg (turkey) 20 kg (poultry)	20 (only for guinea fowl)		4 broilers and guinea fowl 4.5 ducks 10 turkeys 15 geese The limit of 170 kg N/ha/year limit may not be exceeded for the above species.
Poultry raised for meat in movable enclosures	16 (*) with no more than live weight/m <sup>2</sup> : 20 kg (duck) 18 kg (goose) 30 kg (turkey) 20 kg (poultry)			2.5 on condition that the 170 kg N/ha/year limit is not exceeded

(\*) Only if the enclosure has no more than 150 m<sup>2</sup> floor space and is open during the night.



## APPENDIX 3

Limits in foods:

The limit for cadmium in cereal grains for human consumption is 100 ug/kg dry matter (ppb).

### Application of heavy metals to arable lands:

STANDARDS 4.2.5, 12.3 AND 12.4

The highest average applications (during 5 years) of applied fertilizer, soil conditioners, pest control agents, and other products that are sooner or later applied to the soil (such as feed, feed minerals and medicines) are:

Substance	g/ha/year
Lead	50
Cadmium	0.75
Copper	500
Chromium	50
Mercury	1
Nickel	50
Zinc	700

*Note: Application of 1 ton/ha/year of a product containing 1 ppm of certain substance means an application of 1 g/ha/year. When several different agents are applied the amounts must be added together.*

The limits for KRAV certified production inputs marketed as sowing and potting soils must not have higher levels of heavy metals than the following:

Substance	mg/kg dry matter in soil
Lead	40
Cadmium	0.4
Copper	40
Chromium	60
Mercury	0.3
Nickel	30
Zinc	150

## APPENDIX 4 APPROVED ADDITIVES IN PESTICIDES AND CROP PROTECTION AGENTS

Standard 4.4.4

Substance	Function
Na Laureate ether sulphate	Anionic surfactant
Fatty acid ethoxilate EO 6	Non-ionic surfactant
Carboxy methyl cellulose	Thickener
Methyl parahydrobenzoate	Preservative
Propyl parabenzoate	Preservative
Citric acid	Preservative, pH adjustment
Polysorbate	Emulsifier
Propylene glycol	Disperger
Bitrex	Repellent for use in insect traps
Acid Blue	Dye for use in insect traps
Nipacide salt	Preservative
Poly sodium acrylate	Carrier (approved until 1 January 2003)

## APPENDIX 5 PROCESSED FEED APPROVED BY KRAV

Standard 5.3.8

- By-products from the food industry (sugar beet pellets, cake, whey, brewery and distiller grains etc. which are not extracted using chemical solvents, e.g. hexane)
- Grain, legumes, oil-producing plants or meadow plants which have been processed in some way (e.g. dried)
- Products extracted from plants e.g. potato protein and maize gluten

## APPENDIX 6 LIMITS FOR LEVELS OF UNDESIREDB SUBSTANCES IN SOIL

Standard 8.1.6

Limits for cesium levels in soil for de-certification of products

Product	Cesium in soil
Berries (not cloudberry)	60kBq/m <sup>2</sup>
Cloudberry	40 kBq/m <sup>2</sup>
Mushrooms	5 kBq/m <sup>2</sup>

## APPENDIX 7 ABOUT FOOD ADDITIVES

The following technological food additives may be added to a KRAV approved products:

- Sulphur dioxide (E220), only for wine
- Lactic acid (E270)
- Carbon dioxide (E290)
- Ascorbic acid (E300)
- Lecithin (E322), produced using KRAV approved processing aids
- Citric acid (E330)
- Calcium citrate (E 333)
- Tartaric acid (E334)
- Sodium tartrate (E335)
- Potassium tartrate (E336)
- Monocalcium phosphate (E341), only in flour as a rising agent
- Sodium alginate (E401)
- Agar (E406)
- Carrageenan (E407)
- Locust bean gum (E410)
- Guar gum (E412)
- Xanthan gum (E415)
- Pectin (E440(I)), amidated pectin is not permitted
- Calcium carbonates (E170) (not for dyeing)
- Sodium carbonates (E500)
- Potassium carbonate (E501)
- Ammonium carbonate(E503)
- Calcium chloride (E509) (Permitted in dairy products)
- Beeswax (E901)
- Carnauba wax (E903)
- Argon (E938)
- Nitrogen (E941)
- Oxygen (E948)

*Common salt (sodium chloride) is not tested by KRAV and may contain anti-caking agents normally used. KRAV recommends that common salt without additives is used when possible.*

## APPENDIX 8

### Agents

Pectinase  
Sodium hydroxide (E524)  
Citric acid (E330)  
Sulphuric acid (E513)  
Vegetable oil  
Lactic acid (E270)  
Calcium chloride (E509)

### Only for the areas of use

Berry concentrates  
Oil purification (rape seed oil); sugar refining  
Oil purification  
Sugar refining  
Anti-foam  
Brewing beer  
Coagulating agent

Diatomit (Kiselgur)	
Calcium sulphate (gypsum) (E516)	Coagulating agent
Bentonite (E558)	Oil
Perlite	Berry concentrates and beer
Ethylene	Maturing process
Amylase	Bread and ethanol
Protease	Bread
Activated carbon	
Yeast	
Cheese rennet	

## APPENDIX 9 CRITERIA FOR THE ENVIRONMENTAL AND HEALTH HAZARDS OF CHEMICALS

### General Standards for consideration

The precautionary principle, the principle of choice of product, and the principle of the best available technique is always in force, that is, the choice between two comparable methods or products is always guided by the practice of choosing the least hazardous product for human health and the environment.

### Swedish laws governing chemical pest control agents and biotechnical organisms

The Swedish National Chemicals Inspectorate must approve the pest control agents (plant protection substances and biocides) for sale and use. There are also standards for caution governing the use of chemical products or biotechnical organisms. For more information please see Chapter 14 §17 of the Swedish Environmental Code Miljöbalken (SFS 1998:808).

### About safety datasheets for chemical products hazardous to health or the environment

The producer/importer of chemical products hazardous to health or the environment must provide Safety datasheet (earlier the declaration of contents) in Swedish. The health and environmental properties are described. For more information please see the Swedish National Chemicals Inspectorate regulations on chemical products and biotechnical organisms (KIFS 1998:8). The safety datasheet, in particular point 15 "Applicable regulations", indicate the properties of the product that determine the type of labelling and risk phrases (R).

### About labelling and classification

It is the responsibility of the producer/importer to obtain information about the properties of the chemicals and label the products with the symbols of danger and risk phrases (R) in effect. These are governed by the Swedish National Chemicals Inspectorate's regulations on the classification and labelling of chemical products (KIFS 1994:12).

### Standard 12.1

According to Standard 12.1.1, production inputs may not be certified if they are classified as hazardous to health or the environment according to the risk phrases below:

Risk phrases Dangerous to the environment

R 50 Very toxic to aquatic organisms

R 51 Toxic to aquatic organisms

R 52 Harmful to aquatic organisms

R 53 May cause long-term adverse effects in the aquatic environment

R 54 Toxic to flora

R 55 Toxic to fauna

R 56 Toxic to soil organisms

R 57 Toxic for bees

R 58 May cause long-term adverse effects in the environment

R 59 Dangerous for the ozone layer

Risk phrases Danger to health

R 28/27/26 Very toxic if swallowed, in contact with skin or by inhalation

R 25/24/23 Toxic if swallowed, in contact with skin, by inhalation

R 33 Danger of cumulative effects

R 39 Danger of very serious irreversible effects

R 40 Suspected risk for cancer

R 45 May cause cancer

R 46 May cause heritable genetic damage

R 49 May cause cancer by inhalation

R 60 May impair fertility

R 61 May cause harm to the unborn child

R 62 Possible risk of impaired fertility

R 63 Possible risk of harm to the foetus

R 68 Possible risk of irreversible effects