

## **Committee Final Draft** **of the IFOAM Benchmark for Standards<sup>1</sup>**

(Basic Version)

Bonn, 15 February 2008

All IFOAM Members are invited to send in motions on this Committee Final Draft of the IBS. For further information please refer to the instructions for motions, which can be downloaded from the OGS revision section of the IFOAM website at:

[http://www.ifoam.org/about\\_ifoam/standards/OGS\\_Revision/OGS\\_Revision.html](http://www.ifoam.org/about_ifoam/standards/OGS_Revision/OGS_Revision.html)

**START of motions period:** 16 February 2008

**END of motions period:** 15 April 2008

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<sup>1</sup> This is a working title for the draft document and subject to revision by the IFOAM World Board.

## I. THE PRINCIPLES OF ORGANIC AGRICULTURE

The Principles are **not subject to consultation**. For further information see IFOAM website at:  
[http://www.ifoam.org/about\\_ifoam/principles/index.html](http://www.ifoam.org/about_ifoam/principles/index.html)

## II. IFOAM BENCHMARK FOR STANDARDS (IBS)

I. THE PRINCIPLES OF ORGANIC AGRICULTURE .....	2
Section A - Introduction .....	4
Section B - Definitions, Principles Applied, Objectives and Requirements .....	7
Definitions.....	7
1. Organic Ecosystems.....	10
1.1. Ecosystem Management and Biodiversity.....	10
1.2. Resource Management .....	10
1.3. Collection of Wild Products.....	10
2. Genetically Modified Organisms.....	11
3. General Requirements for Plant Production and Animal Husbandry .....	11
3.1. Conversion Requirements .....	11
3.2. Conversion of Plant Production Systems .....	12
3.3. Conversion of Animal Production Systems .....	12
3.4. Conversion of Aquaculture Systems .....	13
3.5. Split Production and Parallel Production .....	13
3.6. Maintenance of Organic Management .....	13
3.7. Avoiding Contamination.....	14
4. Crop Production.....	14
4.1. Seed, Propagation Material and Seedlings .....	14
4.2. Soil Conservation and Crop Rotation .....	14
4.3. Management of Soil Fertility .....	15
4.4. Pest-, Disease-, Weed-, and Growth Management.....	15
4.5. Aquatic Plants.....	16
5. Animal Husbandry .....	16
5.1. General Animal Management.....	16
5.2. Breeds and Breeding.....	17
5.3. Animal Nutrition .....	18
5.4. Transportation and Slaughter .....	18
5.5. Bee Keeping .....	19
6. Aquaculture Production .....	19
6.1. Aquatic Ecosystems .....	20
6.2. Breeds and Breeding of Aquatic Animals .....	20
6.3. Aquatic Animal Nutrition .....	20
6.4. Aquatic Animal Health and Welfare.....	21
6.5. Aquatic Animal Transport and Slaughter.....	21
7. Processing and Handling.....	22
7.1. General.....	22
7.2. Ingredients and Processing Aids .....	22
7.3. Processing Methods .....	23
7.4. Packaging and Containers .....	23
7.5. Cleaning, Disinfecting, and Sanitizing Processing Facilities .....	24
7.6. Pest and Disease Control.....	24
7.7. Textile Fiber Processing.....	24
8. Labeling.....	25
9. Social Justice.....	26
Section C - Criteria for the Evaluation of Substances Used in Organic Production and Processing.....	27

## **Section A - Introduction**

### **Role of the IFOAM Benchmark for Standards**

The IFOAM Benchmark for Standards (IBS) provides a crucial link from the Principles of Organic Agriculture to those standards that are applied directly to organic production and processing. The IBS functions as guidance for developing and evaluating these other standards, and for distinguishing organic from not-organic systems. Therefore it is a means to determine which standards and practices can be called “organic”.

A farm or processing plant could never be directly certified to this document. The document is intended for use as a tool for setting more detailed organic standards according to the Principles of Organic Agriculture. In order to link principles and standards, the IBS establishes objectives that are linked to the principles. The IFOAM Benchmark for Standards sets requirements for what organic standards must address in order to achieve the objectives. The requirements do not usually prescribe “how” to achieve the objective, but leave that to organic standards. Organic standards must not merely repeat the language in the IFOAM requirements; they must present specific requirements for operations.

This approach in the IBS provides flexibility for organic standards to vary according to the context in which that standard is applied to farming and processing (e.g. ecological context, stage of organic development, product specialization).

### **Function of the IBS**

The IFOAM Benchmark for Standards functions as a guidance for organic standards setting, as a tool for determining equivalence of standards, and as one of the two norms that must be met in the IFOAM Accreditation Program.

#### ***Guidance for Organic Standard-setting***

The IBS is the framework of all other organic standards setting. The IBS states what shall be achieved by organic production and processing and provides corresponding requirements for standards-setting.

Standards that meet the IBS can be considered and labeled as “organic standards” because they are consistent with the Principles of Organic Agriculture, address what is required by the IBS, and comply with certain mandatory and prohibited practices that the IBS specify.

#### ***Tool for Equivalence of Standards***

In order to foster equivalence among organic standards, IFOAM lists a Family of Standards. This Family consists of private and government organic standards recognized by IFOAM as meeting the principles, objectives and requirements of the IFOAM Benchmark for Standards.

Together, IBS and the Family of Standards form a tool for determining the equivalence of organic standards. IFOAM considers standards (with the same scope) in the Family of Standards as equivalent. Development of the Family of Standards is governed by IFOAM policy and procedures, which are available on the IFOAM website at:

[http://www.ifoam.org/about\\_ifoam/standards/ogs\\_policies\\_procedures/ogs\\_policies\\_procedures.html](http://www.ifoam.org/about_ifoam/standards/ogs_policies_procedures/ogs_policies_procedures.html)

#### ***Component of IFOAM Accreditation***

The IBS also function in the IFOAM Accreditation Program. This Program is a formal means of verifying that the standards employed by an organic certification body meet the IBS

requirements for organic standards and also IFOAM's requirements related to the quality of certification, which is addressed in another document, the IFOAM Accreditation Criteria.

## **Structure of the IFOAM Basic Standards**

### ***IBS Chapters***

The IBS consists of 9 Chapters, which focus on certain topics in organic production and processing. Sections within each Chapter further develop the topic of the Chapter. Each of these sections is organized in a uniform structure, and contains the following subsections:

### ***Principles Applied***

The Principles of Organic Agriculture relevant to the topic of the Section are stated. In some cases the language is taken directly from IFOAM's Principles of Organic Agriculture and in other cases the spirit and language of the Principles is adapted to the topic. Principles Applied are declarative statements relating to organic agriculture or a subset thereof.

### ***Objectives***

This subsection states the achievements expected of the particular organic production or processing activity with respect to the Principles Applied. Objectives state the intended accomplishments of organic farming, handling and processing in this context. They always start with the phrase "The objective is" and are followed by a verb phrase e.g. to prevent, to protect, to ensure.

### ***Requirements for Organic Standards***

This subsections present those topics and requirements that organic standards must address in order to fulfill the objectives. Specific organic standards set by standards-setting bodies must not fall outside of the principles and must meet the objectives related to each topic. Requirements are placed by the standards on the operations. The sections containing requirements always start with the phrase "Standards must require that:"

Some sections list specific operator practices that are prohibited. Prohibited Operator Practices are part of the requirements and continue their numbering scheme, but they are formatted differently for clarification and emphasis. They do not constitute all prohibited practices in organic production and processing. The other requirements also call for organic standards to restrict and prohibit many practices. Organic standards may additionally restrict and prohibit practices in order to fulfill the requirements.

### ***Criteria for the Evaluation of Substances Used in Organic Production and Processing***

The Principle of Health states that organic agriculture should avoid the use of fertilizers, pesticides, animal drugs, and food and feed additives that may have adverse health effects. Therefore, most of these substances are prohibited in organic agriculture. The Principle of Ecology also limits the type and range of substances that can be used.

Exceptions made are based on the precautionary principle. Criteria to determine what substances are allowed in organic production and processing are contained in Section C.

Organic standards setting bodies must use these Criteria to determine which substances are allowed in their standard and they may also use the Criteria to prohibit certain substances. Lists of substances in organic standards regulated within the IFOAM Accreditation Program must meet the Criteria for Substances Used in Organic Production and Processing.

IFOAM publishes an Indicative List of Substances for Organic Production and Processing. This list is subject to change via a transparent process which is documented in IFOAM's Organic Guarantee System Policy and Procedure. The list functions in IFOAM Accreditation and as a reference for organic standards setting worldwide. Standards setting bodies may

accept the listed substances for their own standards without further evaluating them according to the Criteria. Substances other than those on this list may be used in organic production and processing if they have been assessed by a standards setting body in a documented process and determined to meet the Criteria for the Evaluation of Substances.

The current indicative list can be downloaded here:

[http://www.ifoam.org/about\\_ifoam/standards/OGS\\_Revision/20071013\\_Substance Lists.pdf](http://www.ifoam.org/about_ifoam/standards/OGS_Revision/20071013_Substance_Lists.pdf)

#### **Development of the IFOAM Benchmark for Standards**

The IFOAM Benchmark for Standards is developed in accordance with IFOAM policies and in compliance with the ISEAL Code of Good Practice for Standards Setting.

## Section B - Definitions, Principles Applied, Objectives and Requirements

### Definitions

**Additive:** A substance which is added to a processed product for a technological purpose and becomes a component of the final product and/or affects its characteristics.

**Biodiversity:** The variety of life forms and ecosystem types on Earth. Includes genetic diversity (i.e. diversity within species), species diversity (i.e. the number and variety of species) and ecosystem diversity (total number of ecosystem types).

**Breeding:** Selection of plants or animals to reproduce and / or to further develop desired characteristics in succeeding generations.

**Certification:** The procedure by which a third party gives written assurance that a clearly identified process has been methodically applied in order to assess that the operator is producing specified products according to specific requirements or standards.

**Contamination:** Contact of organic crops, animals, land or products with any substance that would compromise the organic integrity.

**Conventional:** Any production or processing practice or system that does not conform to organic production practices and standards.

**Conversion:** The transition from non-organic to organic farming.

**Conversion Period:** The time between the start of the organic management or the last use of substances that are not allowed in organic production, and the organic status of land, crops and animals.

**Crop Rotation:** The practice of alternating the species or families of annual and/or biennial crops grown on a specific field in a planned pattern or sequence so as to break weed, pest and disease cycles and to maintain or improve soil fertility and organic matter content.

**Derivative:** A substance that is produced chemically or biologically from another substance.

**GMO Derivative:** A substance that is produced by or from a GMO. This is traced one step back from the substance to its source. 'Produced from GMO' means that it consists in whole or in part of a GMO. 'Produced by GMO' means that it is a GMO metabolite.

**Disinfect:** To reduce, by physical or chemical means, the number of potentially harmful microorganisms in the environment to a level that does not compromise food safety or suitability.

**Farm Holding:** The total area of land under control of one farmer or collective of farmers, and including all the farming activities or enterprises. The farm holding may consist of one or more farm units.

**Farm Unit:** A subset of a farm holding including parcels of land or blocks or other subdivision.

**Genetic Engineering:** A set of techniques from molecular biology (such as recombinant DNA) by which the genetic material of plants, animals, microorganisms, cells and other biological units may be altered in ways or with results that could not be obtained by methods

of natural mating and reproduction or natural recombination. Techniques of genetic modification include, but are not limited to: recombinant DNA, cell fusion, micro and macro injection, encapsulation, gene deletion and doubling. Genetically engineered organisms do not include organisms resulting from techniques such as conjugation, transduction and natural hybridization.

**Genetically Modified Organism (GMO):** A plant, animal, or microbe that is transformed by genetic engineering.

**Green Manure:** A crop that is grown and then incorporated into the soil for the purpose of soil improvement, prevention of erosion, prevention of nutrient loss, mobilization and accumulation of plant nutrients, and balancing soil organic matter. Green manure may include spontaneous crops, plants or weeds.

**Habitat:** The area over which a plant or animal species naturally exists. Also used to indicate types of habitat, e.g. ocean, seashore, riverbank, woodland, grassland.

**High Conservation Value Areas:** Areas that have been identified as having outstanding and critical importance due to their environmental, socioeconomic, biodiversity or landscape values.

**Homeopathic Treatment:** Treatment of disease based on administration of remedies prepared through successive dilutions of a substance that in higher concentration produces symptoms in healthy subjects similar to those of the disease itself.

**Hydroponic Systems:** Crop production systems in inert media or water using dissociated nutrients as prime source of nutrient supply.

**Ingredient:** Any substance, including an additive, used in the manufacture or preparation of a product and present in the final product although possibly in a modified form.

**Ionizing Radiation:** High energy emissions from radio-nucleotides, capable of altering a food's molecular structure for the purpose of controlling microbial contaminants, pathogens, parasites and pests in food, preserving food or inhibiting physiological processes such as sprouting or ripening.

**Label:** Any written, printed or graphic representation that is present on a product, accompanies the product, or is displayed near and associated with the product.

**Operator:** An individual or business enterprise, responsible for ensuring that production meets, and continues to meet, the requirements

**Operation:** For the purposes of this document an operation is an individual or business enterprise producing, processing or handling agricultural products.

**Organic Agriculture:** A production system that sustains the health of soils, ecosystems and people. It relies on ecological processes, biodiversity and cycles adapted to local conditions, rather than the use of inputs with adverse effects. Organic agriculture combines tradition, innovation and science to benefit the shared environment and promote fair relationships and a good quality of life for all involved.

**Organic:** "The production and processing system and products described in this standard and not specifically referred to "organic chemistry".

**Organic Product:** A product that has been produced, processed, or handled in compliance with organic standards.

**Organic Quality:** Produced according to standards in compliance or equivalent to the IFOAM Benchmark for Standards.

**Parallel Production:** A situation where the same operation is producing visually indistinguishable products in both an organic system and a non-organic system. A situation with “organic” and “in conversion” production of the same product may also be parallel production.

**Processing:** The handling, treatment, transformation and packaging of agricultural and wild products.

**Processing Aid:** Any substance used in the processing of a product to fulfill a technical purpose and which is not normally a constituent of the product.

**Restriction:** Limitations on a product or practice that set clear conditions for when it may be used.

**Sanitizing:** Any treatment that is effective in destroying or substantially reducing the numbers of vegetative cells of microorganisms of public health concern, and other undesirable microorganisms.

**Split Production:** Conventional, in conversion and/or organic production, breeding, handling or processing in the same operation.

**Synthetic:** A substance that is formulated or manufactured by a chemical process or by a process that chemically changes a substance extracted from naturally occurring plant, animal, or mineral sources. Substances created by naturally occurring biological processes are not considered synthetic.

**Standards:** Norms that specify how a product should be produced and processed. For the purposes of this document standards are used to define organic production practices.

**Sustainable:** Using a resource so that the resource is not depleted or permanently damaged hence is not used faster than it can be regenerated.

## **1. Organic Ecosystems**

### **1.1. Ecosystem Management and Biodiversity**

#### ***Principles applied***

Organic agriculture is based on living ecological systems and cycles. Organic agriculture attains productivity and ecological balance through the design of farming systems, establishment of interconnected habitats and maintenance of biodiversity.

***The objective is*** to ensure the long-term management and resilience of an organic farm holding by respecting, maintaining, improving and completing ecological cycles and the quality of ecosystems and the landscape.

#### ***Standards must require that:***

- 1.1.1. Biodiversity is maintained or enhanced on the farm holding on crop and/or non-crop habitats.
- 1.1.2. Socially significant elements of the landscape on the farm holding such as historic features or sacred sites are preserved

#### ***Prohibited operator practices:***

- 1.1.3. Negatively impacting high conservation value areas.

### **1.2. Resource Management**

#### ***Principle applied***

Organic agriculture uses resources sustainably and attains ecological balance through the design of locally adapted farming systems.

***The objectives are*** to use materials and energy efficiently; to reduce the use of non renewable resources; to protect and to improve the environment. .

#### ***Standards must require that:***

- 1.2.1. Crop production, livestock production, processing and handling systems employ measures to reduce, reuse, and/ or recycle residual materials.
- 1.2.2. Measures are employed to prevent land degradation, such as erosion and salinization.
- 1.2.3. Management systems ensure that water resources are used sustainably.
- 1.2.4. Measures are employed to prevent pollution, and otherwise preserve water quality.
- 1.2.5. The living soil is maintained and improved.
- 1.2.6. Land preparation by burning vegetation is restricted.

### **1.3. Collection of Wild Products**

***Principle applied***

Organic management sustains and prevents degradation of natural biotic and abiotic resources.

***The objectives are to*** ensure that, habitats, biodiversity, waterways and visual appearance of wild collection areas are not degraded ; and that the wild collection system fits within the natural cycles and ecological balance of the area.

***Standards must require that:***

- 1.3.1. Collection does not exceed sustainable yield of the local ecosystem, nor threaten the existence of plant, fungal or animal species, including those not directly exploited.
- 1.3.2. Products are collected only from within the boundaries of the clearly defined wild collection area.
- 1.3.3. The collection area is not compromised by treatment or environmental pollution.

***Prohibited Operator Practices***

- 1.3.4. Collecting protected or endangered species

**2. Genetically Modified Organisms*****Principles applied***

Organic agriculture is managed in a precautionary and responsible manner to protect the health and well-being of current and future generations and the environment.

Organic agriculture prevents significant risks by adopting appropriate technologies and rejecting unpredictable ones, such as genetic engineering.

***The objectives are*** to prevent pollution of organic ecosystems and contamination of organic products with genetically modified organisms (GMO) or GMO derivatives and to preserve the genetic integrity of varieties and traditional ecotypes.

***Standards must require that***

- 2.1. The deliberate use or negligent introduction of genetically modified organisms (GMO) or their derivatives is prohibited in all stages of organic production and processing.
- 2.2. Inputs, processing aids and additives are not produced by or from GMOs, with the exception of vaccines.

**3. General Requirements for Plant Production and Animal Husbandry****3.1. Conversion Requirements*****Principle applied***

Organic agriculture attains productivity and ecological balance through the design and management of sustainable farming systems.

**The objective is** to clearly identify when organic practices begin and how long they have to be applied before the operation and products can be considered organic, taking into consideration the balance of the ecosystem and the skills of the operator.

**Standards must require that:**

- 3.1.1. A date or event identifies the point at which conversion begins.
- 3.1.2. A set period of time elapses between the start of the conversion period and the achievement of the organic status of the corresponding land, animals and products.

### 3.2. Conversion of Plant Production Systems

**Principle applied**

Organic crop production attains productivity and ecological balance.

**The objective is** to establish a suitable period of organic management prior to the organic status of a crop, during which contaminants are reduced, and healthy soils and sustainable ecosystems are being established.

**Standards must require that:**

- 3.2.1. There is a conversion period of at least 12 months.

### 3.3. Conversion of Animal Production Systems

**Principle applied**

Organic animal husbandry attains a balanced farm ecosystem while ensuring the health and well-being of individual animals.

**The objective is** to apply organic production practices to the entire life cycle of the animals with no breaks in the organic management.

**Standards must require that:**

- 3.3.1. Animals are raised organically from birth or hatching, or when this is not possible from early ages subject to a conversion requirement.

- 3.3.2. There are specific conversion periods for each species, purpose and production type, which are no less than the following:

<b>Production</b>	<b>Conversion period</b>
• Meat (except poultry):	12 months
• dairy:	90 days
• poultry meat/eggs:	42 days

- 3.3.3. There are specific conditions for simultaneous conversion of land and animals.
- 3.3.4. In apiculture there is a conversion of a bee colony based on the time necessary for the replacement of wax and not less than 12 months.

### **3.4. Conversion of Aquaculture Systems**

#### ***Principle applied***

Organic aquaculture attains a balanced ecosystem and ensures the health and well-being of individual animals.

***The objective is*** to apply organic production practices to the entire life cycle of the animals with no breaks in the organic management.

#### ***Standards must require that:***

- 3.4.1.** The conversion period of the operation is set depending on the past use of the site with respect to waste, sediments and water quality and is no less than 12 months.
- 3.4.2.** Aquatic animals are preferably raised organically from birth or hatching or when this is not possible from early ages subject to a conversion requirement.
- 3.4.3.** Conversion periods appropriate for each species are at least two-thirds of the life-span of the animal or one year, whichever is shorter.

### **3.5. Split Production and Parallel Production**

#### ***Principle applied***

Organic agriculture is managed in a precautionary and responsible manner.

***The objective is*** to guarantee the integrity of the organic production and products on holdings with split or parallel production.

#### ***Standards must require that:***

- 3.5.1.** The integrity of the organic farm unit is not compromised by the management of the non-organic operation.
- 3.5.2.** The non-organic and organic parts and products of holdings with split or parallel production are completely and clearly separated, e.g. physical barriers, management practices, storage of inputs and products.

### **3.6. Maintenance of Organic Management**

#### ***Principle applied***

Organic agriculture works with living ecological systems and cycles, while emulating and sustaining them.

***The objective is*** to maintain the ongoing organic system.

#### ***Standards must require that:***

- 3.6.1.** A production system does not rely upon switching between organic and conventional management.

### **3.7. Avoiding Contamination**

#### ***Principle applied***

Organic agriculture is managed in a precautionary and responsible manner.

***The objective is*** to avoid pollution of the environment and contamination of products.

#### ***Standards must require that:***

- 3.7.1. Precautionary measures are taken to avoid contamination.
- 3.7.2. Where there is reasonable suspicion of contamination, an investigation is made, the source of the contamination sought and measures are taken to address the problem.
- 3.7.3. The use of synthetic coverings and mulches is restricted.

## **4. Crop Production**

### **4.1. Seed, Propagation Material and Seedlings**

#### ***Principle applied***

Organic management sustains production at all crop stages.

***The objective is*** to ensure that organic practices are implemented along the entire production chain from propagation to final product including the production of seed and propagation materials.

#### ***Standards must require that:***

- 4.1.1. Seed and plant propagation material is of organic quality unless such seed and material is unavailable.
- 4.1.2. All substances used for treatment of all seed material are on the IFOAM Indicative List of Substances for Organic Production and Processing or comply with the IFOAM Criteria for the Evaluation of Substances Used in Organic Production and Processing, unless treatment with other substances is legally required or unless seed not treated with these other substances is regionally unavailable. Exemptions are limited in time.
- 4.1.3. Seedlings are of organic quality.

### **4.2. Soil Conservation and Crop Rotation**

#### ***Principle applied***

Organic crop production sustains and enhances the health of the soil and ecosystem; healthy soils produce healthy crops that foster the health of animals and people.

***The objective is*** to improve the health and condition of the soil and crops.

#### ***Standards must require that:***

- 4.2.1. A diverse crop rotation is included as an integral part of the management system of the holding. For perennial crops this includes cover crops (green manures) and/or other plant-based ground cover. For annual crops this includes minimum crop rotation practices, cover crops (green manures) or other diverse plant production with comparable achievements.
- 4.2.2. The management system is based on conserving or improving soil structure, organic matter, fertility and biodiversity.
- 4.2.3. Soil management minimizes erosion and depletion of soil nutrients.

#### 4.3. Management of Soil Fertility

##### ***Principle applied***

Organic crop production systems enrich the living soil creating an environment that can support the production of healthy and productive crops.

***The objective is*** to nourish plants primarily through the soil ecosystem, and achieve nutrient balance.

##### ***Standards must require that:***

- 4.3.1. The fertility program of a holding is based on enhancing the soil-ecosystem by incorporating green manure and other biodegradable inputs and/ or by nitrogen fixation from plants.
- 4.3.2. Mineral fertilizers are naturally occurring and used only as a supplement to methods in 4.3.1.
- 4.3.3. Pollution of the environment by fertility inputs and practices is prevented.
- 4.3.4. All substances used are on the IFOAM Indicative List of Substances for Organic Production and Processing or comply with the IFOAM Criteria for the Evaluation of Substances Used in Organic Production and Processing
- 4.3.5. Manures containing human excrement (feces and urine) are applied to crops for human consumption only when under specific sanitation requirements.

##### ***Prohibited operator practices***

- 4.3.6. Using synthetic nitrogen fertilizers, superphosphates and sodium (Chilean) nitrate.
- 4.3.7. Producing crops in hydroponic systems.

#### 4.4. Pest-, Disease-, Weed-, and Growth Management

##### ***Principle applied***

Organic crop production sustains and enhances the health of ecosystems and all living matter, from the smallest organisms found in the soil to human beings.

***The objective is*** to improve and sustain the health of crops while maintaining productivity and the integrity of the agro-ecosystem.

***Standards must require that:***

- 4.4.1. Crop production maintains soil and crop health through interrelated positive processes and mechanisms for the management of pests, diseases, and weeds. These include but are not limited to site and crop adapted fertility management and soil cultivation, choice of appropriate varieties, enhancement of functional biodiversity; and in case additional measures are required, restricted use of crop protectants and growth regulators.
- 4.4.2. All active substances used are on the IFOAM Indicative List of Substances for Organic Production and Processing or comply with the IFOAM Criteria for the Evaluation of Substances Used in Organic Production and Processing.
- 4.4.3. Co-formulants (e.g. inert and synergists) in formulated products are not carcinogens, mutagens, teratogens or neurotoxins.

#### **4.5. Aquatic Plants**

***Principle applied***

Organic aquaculture maintains the health of the aquatic ecosystem.

***The objective is*** to preserve the ecosystem while producing and harvesting aquatic plants.

***Standards must require that:***

- 4.5.1. Aquatic plants are managed in a manner that avoids any degradation of the production area or the surrounding ecosystem.

#### **5. Animal Husbandry**

##### **5.1. General Animal Management**

***Principles applied***

Organic animal husbandry is based on the harmonious relationship between land, plants and animals. It meets their physiological needs and supports their natural and social behavior and well-being.

***The objectives are*** to treat animals respectfully, assure their health and welfare and preserve the environment.

***Standards must require that:***

- 5.1.1. Living conditions (including housing) provided to the animals:
  - afford them comfort and safety
  - allow them to exhibit natural behavior
  - give them freedom of movement
  - allow access, whenever weather allows, to open air, exercise areas and/ or, pasture, which include shade.
- 5.1.2. Nutrition practices are consistent with the animals' natural needs.
- 5.1.3. There is a weaning period for young animals, which is based on the natural behavior of the species.

- 5.1.4. Stocking density management ensures sustainable land and water use.
- 5.1.5. Health care practices follow the principle of positive health; the graduated approach of prevention, including appropriate vaccinations, then natural medicines and treatment, and finally if unavoidable, treatment with allopathic drugs.
- 5.1.6. Medical treatment considered necessary for the welfare of an animal is never withheld in order to maintain the organic status of the animal. Animals are not allowed to suffer for lack of treatment.
- 5.1.7. The use of antibiotic and other allopathic medication is strictly limited to the treatment of illness and injuries under the supervision of qualified personnel, and subject to defined withdrawal periods that are not less than double that required by legislation.
- 5.1.8. Mutilations are prohibited. Standards may allow specific exemptions when good management practices are insufficient to ensure the health and welfare of the animal and/ or operator or when it is specifically required for meat quality. Mutilations performed under exceptions employ measures to minimize suffering.

***Prohibited operator practices***

- 5.1.9. Cruelly treating and forcefully handling animals.
- 5.1.10. Operating landless animal husbandry systems.
- 5.1.11. Confining calves for veal production.
- 5.1.12. Keeping any animals confined in cages.
- 5.1.13. Using hormones or other drugs to promote growth and production.
- 5.1.14. Routinely using antibiotics and parasiticides when there is no risk of illness.

**5.2. Breeds and Breeding**

***Principle applied***

Organic animal husbandry is consistent with local conditions.

***The objective is*** to use animal breeds and breeding techniques that are appropriate for the environment and the wellbeing of the animal itself.

***Standards must require that:***

- 5.2.1. Animal production systems use breeds suited to the region and the production method.
- 5.2.2. Animal production systems use breeds that reproduce successfully under natural conditions and without routine human involvement.
- 5.2.3. Only breeding techniques consistent with organic production methods are used. This includes artificial insemination.

### ***Prohibited operator practices***

5.2.4. Using hormones to induce ovulation and birth unless for medical reasons

5.2.5. Employing embryo transfer techniques and cloning.

## **5.3. Animal Nutrition**

### ***Principles applied***

Organic animal production is integrated with organic crop production systems and supplies organic feed to animals in a manner that meets their natural foraging behavior.

**The objective is** to provide a diet to the animals that consists of high quality and nutritious organic feed.

### ***Standards must require that:***

5.3.1. Feed rations meet the nutritional and dietary requirements of the species and ruminants have access to roughage.

5.3.2. The use of non-organic feed is specified, is strictly limited to non-accessibility of organic feed and time limited.

5.3.3. Vitamins, trace elements and supplements are from natural sources unless they are not available in sufficient quantity and/ or quality.

### ***Prohibited operator practices***

5.3.4. Feeding:

- a. slaughter waste to ruminants.
- b. slaughter products of the same species.
- c. all types of excrements.
- d. any product subjected to solvent extraction (e.g. hexane) or the addition of other chemical agents.
- e. synthetic amino-acid and amino acid isolates.
- f. urea and other synthetic nitrogen compounds.
- g. synthetic growth promoters or stimulants.
- h. synthetic appetizers, preservatives and coloring agents.

## **5.4. Transportation and Slaughter**

### ***Principles applied***

Organic animal husbandry treats animals with respect and care and maintains their organic integrity throughout the system.

**The objectives** are to minimize stress and suffering and maintain organic integrity of the animals during their movement, handling and slaughter.

### ***Standards must require that:***

5.4.1. The organic integrity of the animal is maintained during movement, handling and slaughter.

- 5.4.2. Measures are taken to minimize stress and avoid suffering during transit and holding prior to and during slaughter.

***Prohibited operator practice***

- 5.4.3. Using any injurious devices, electric prods, tranquilizers, and stimulants.

**5.5. Bee Keeping**

***Principles applied***

Organic bee keeping sustains and enhances the health of ecosystems.

***The objective is*** to maintain bee colonies as an integral part of the ecosystem and maintain their natural cycles.

***Standards must require that:***

- 5.5.1. Bee races are adapted to the local environment and conditions.
- 5.5.2. For the renovation of apiaries 10% of the queen bees and swarms can be replaced by non-organic queen bees and swarms.
- 5.5.3. Hive placement minimizes the risk of contamination.
- 5.5.4. The health and welfare of the bee colony is primarily achieved through good management and hygienic practices.
- 5.5.5. Where preventative health measures fail, veterinary medicinal products may be used provided that preference is first given to phyto-therapeutic and homeopathic treatments, and then:
- lactic, formic, oxalic, acetic acid
  - sulfur
  - natural essential oils.
- Where veterinary medicinal products are administered, the conversion requirements specified in 3.3.4 apply.
- 5.5.6. Methods permitted for hive and honey comb disinfection are restricted to steam, direct flame ,caustic soda and Bacillus thuringiensis.
- 5.5.7. Harvesting methods ensure that there are sufficient food reserves left behind for the survival of the colony during the dormancy period.
- 5.5.8. Supplementary feed is organic and is restricted to colony welfare.

***Prohibited operator practices***

- 5.5.9. Deliberately killing bees as a method of harvesting.
- 5.5.10. Clipping the wings of queen bees.

**6. Aquaculture Production**

## 6.1. Aquatic Ecosystems

### ***Principles applied***

Organic aquaculture supports a healthy and diverse ecosystem. It meets the animals' physiological needs and supports their natural and social behavior and well-being.

**The objectives** are to maintain well-being of the farmed species, the biodiversity of natural aquatic ecosystems, the health of the aquatic environment, and the quality of surrounding aquatic and terrestrial ecosystems.

### ***Standards must require that***

- 6.1.1. The release of nutrients and waste into the aquatic ecosystem is minimized.
- 6.1.2. Measures are taken to prevent introduced or the cultivated stocks from escaping into the ecosystem.
- 6.1.3. The production units have an appropriate distance from contamination sources and conventional aquaculture.
- 6.1.4. All substances used in the system are on the IFOAM Indicative List of Substances for Organic Production and Processing or comply with the IFOAM Criteria for the Evaluation of Substances Used in Organic Production and Processing.
- 6.1.5. Inputs, such as fertilizers applied in organic aquaculture systems, are in accordance with the IBS.

## 6.2. Breeds and Breeding of Aquatic Animals

### ***Principle applied***

Organic aquaculture is consistent with local conditions.

**The objective is** to use aquatic animal breeds and breeding techniques that are appropriate for the environment, the species and the wellbeing of the animal itself.

### ***Standards must require that***

- 6.2.1. Aquatic animal production systems use breeds and breeding techniques suited to the region and the production method.

### ***Prohibited operator practices***

- 6.2.2. Using artificially polyploid organisms or artificially produced monosex stock.
- 6.2.3. Using synthetic hormones to artificially stimulate reproduction.

## 6.3. Aquatic Animal Nutrition

### ***Principle applied***

Organic aquaculture closely integrates the health, well-being and nutritional needs of the animals with the maintenance of a healthy ecosystem.

**The objectives are** to feed animals according to their natural feeding behavior, and to meet their nutritional and dietary needs with good quality organic feed.

**Standards must require that:**

- 6.3.1. Aquatic animals are fed predominantly organic feed. The use of non-organic feed is specified; it is strictly limited to non-accessibility of organic feed and time limited.
- 6.3.2. All components of agricultural origin are organic.
- 6.3.3. Non-organic aquatic animal protein and oil may only be used if they derive from wild marine products harvested from verifiable sustainable sources or from by-products from fishery for human consumption
- 6.3.4. Where relevant the diet fed to aquatic animals complies with the requirements of section 5.2.

#### **6.4. Aquatic Animal Health and Welfare**

**Principle applied**

Organic aquaculture promotes and maintains the health and well-being of the animals.

**The objectives are** to actively promote the welfare of aquatic animals and control disease through preventive, system-based methods.

**Standards must require that:**

- 6.4.1. The relevant requirements of section 5.1 are applied
- 6.4.2. Stocking densities do not compromise animal welfare.
- 6.4.3. Production units are designed and managed to maintain water quality and the health and natural behavior of the stock.

**Prohibited operator practices**

- 6.4.4. Using chemical allopathic veterinary drugs prophylactically.
- 6.4.5. Using chemical allopathic veterinary drugs and antibiotics for invertebrates.

#### **6.5. Aquatic Animal Transport and Slaughter**

**Principles applied**

Organic aquaculture treats animals in a responsible and humane manner.

**The objective is** to meet species-specific needs and to minimize stress and suffering.

**Standards must require that:**

- 6.5.1. All relevant requirements of section 5.3 are applied.
- 6.5.2. Aquatic vertebrates are stunned before slaughter.

## **7. Processing and Handling**

### **7.1. General**

#### ***Principle applied***

Organic processing employs care, precaution and responsibility in management, development and technology choices.

***The objectives are to*** maintain organic integrity of processed products, contribute to health and well-being, produce high quality products and protect the environment.

#### ***Standards must require that:***

- 7.1.1. Risks of product contamination are identified and minimized.
- 7.1.2. Risks of environmental pollution are identified and minimized.
- 7.1.3. Transparency and traceability in the organic processing chain are guaranteed.
- 7.1.4. Organic products are processed separately, in time and/or place, from non-organic products.
- 7.1.5. Measures are taken to prevent co-mingling of organic products with non-organic products in processing, packaging, storage and transport.

### **7.2. Ingredients and Processing Aids**

#### ***Principle applied***

Organic processing delivers high quality organic products. Ingredients as part of an organic product are chosen with care, precaution and responsibility.

***The objective is*** to preserve the organic nature and authenticity of processed products and to maximize the use of organic ingredients..

#### ***Standards must require that:***

- 7.2.1. Organic processed products are made from organic ingredients except for when they are not available. Use of non-organic ingredients is time-limited.
- 7.2.2. Any additives, processing aids or other substances that are used and modify organic products shall be restricted and are on the IFOAM Indicative List of Substances for Organic Production and Processing or comply with the IFOAM Criteria for the Evaluation of Substances Used in Organic Production and Processing.

#### ***Prohibited operator practices***

- 7.2.3. Using the same ingredient in organic and non-organic quality in products.
- 7.2.4. Using any substance primarily to correct losses of properties during processing except where the replacement of nutrients is required by law or strongly recommended by authorities.

### **7.3. Processing Methods**

#### ***Principles applied***

Organic processing technologies produce healthy and safe products in an ecologically sound manner. Organic processing is governed by the Precautionary Principle.

**The objectives are** to uphold the organic integrity of the final product and, in the case of food and feed, maintain the nutritional value.

#### ***Standards must require that:***

**7.3.1.** Processing methods other than biological, mechanical or physical techniques are restricted.

#### ***Prohibited operator practices***

**7.3.2.** Using solvents for extraction other than substances that appear on the IFOAM Indicative List of Substances for Organic Production and Processing or that do not comply with the IFOAM Criteria for the Evaluation of Substances Used in Organic Production and Processing.

**7.3.3.** Using filtration techniques that chemically react with or modify the organic product at the molecular level.

**7.3.4.** Using ionizing radiation.

### **7.4. Packaging and Containers**

#### ***Principle applied***

Organic processing maintains the organic integrity of the product while responsibly using resources.

**The objective is** to package products in a manner that has minimal adverse impact on the product and environment, as well as efficient and responsible use of resources.

#### ***Standards must require that:***

**7.4.1.** Packaging and storage/transportation containers do not contaminate the organic product they contain.

#### ***Prohibited operator practices***

**7.4.2.** Using packaging that has been treated with substances that do not appear on the IFOAM Indicative List of Substances for Organic Production and Processing or that do not comply with the IFOAM Criteria for the Evaluation of Substances Used in Organic Production and Processing.

## 7.5. Cleaning, Disinfecting, and Sanitizing Processing Facilities

### ***Principle applied***

Organic processing is conducted in a precautionary and responsible manner to protect the health and well being of current and future generations and the environment.

***The objective is*** to maintain the organic integrity and safety of the product while minimizing the negative impact of cleaning and sanitation on the product and the environment.

### ***Standards must require that:***

- 7.5.1. Management systems for cleaning and disinfecting surfaces, machinery and processing facilities are in place.
- 7.5.2. Contamination of organic products by cleaning, disinfecting and sanitizing substances is prevented.
- 7.5.3. Where there is a risk that cleaning disinfecting and sanitizing substances may come in contact with the organic product only water and substances that appear on the IFOAM Indicative List of Substances for Organic Production and Processing or comply with the IFOAM Criteria for the Evaluation of Substances Used in Organic Production and Processing are used.

## 7.6. Pest and Disease Control

### ***Principle applied***

Organic processing is conducted in a precautionary and responsible manner to protect the health and well-being of current and future generations and the environment.

***The objective is*** to protect organic products from pests and diseases while upholding organic product integrity and without compromising the health of humans and the environment.

### ***Standards must require that:***

- 7.6.1. Pests are managed according to a hierarchy of practices starting with prevention, and then physical, mechanical, biological methods and substances on the IFOAM Indicative List of Substances for Organic Production and Processing or that comply with the IFOAM Criteria for the Evaluation of Substances Used in Organic Production and Processing.
- 7.6.2. Where the practices in 7.6.1 are not effective, and other substances are used they do not come into contact with the organic product.

## 7.7. Textile Fiber Processing

### ***Principle applied***

Organic fiber processing employs care, precaution and responsibility in management, development and technology choices.

***The objectives are*** to maintain organic integrity of the product, contribute to human health and minimize impact on the environment.

**Standards must require that:**

- 7.7.1. In fiber processing preference is given to mechanical, physical and/or microbiological methods.
- 7.7.2. A management system is in place to minimize the negative effects of textile processing on the environment.
- 7.7.3. All substances used meet the criteria for textile processing substances on the IFOAM Indicative List of Substances for Organic Production and Processing or that comply with the IFOAM Criteria for the Evaluation of Substances Used in Organic Production and Processing.
- 7.7.4. Contamination of the organic fiber in the processing chain is prevented.
- 7.7.5. The use of processing aids is accompanied by requirements for recycling and an established recovery rate.

## 8. Labeling

**Principle applied**

Organic agriculture ensures fairness at all levels and to all parties through transparency in the product chain.

**The objectives are** to clearly identify organic products, to provide relevant information for consumers to make informed, conscious choices and to avoid misleading them.

**Standards must require that:**

- 8.1.1. Products labeled as “organic” or “in-conversion”, or an equivalent term (e.g. biologic or ecological), comply with the applicable organic standards.
- 8.1.2. Labels contain information that provides full disclosure of ingredients including whether or not they are organic.
- 8.1.3. Labels identify the following:
  - the person or company legally responsible for the product
  - the body that assures conformity to the applicable organic standard.
- 8.1.4. Processed products are labeled according to the following minimum requirements:
  - a. Where 95 to 100% of the ingredients (by weight) are organic, the product may be labeled as “organic”.
  - b. Where less than 95% but not less than 70% of the ingredients (by weight) are organic, these product cannot be labeled as “organic”, but phrases such as “made with organic ingredients” can be used, provided the proportion of organic ingredients is clearly stated.
  - c. Where less than 70% of the ingredients (by weight) are organic, the product cannot be labeled as “organic”, but individual ingredients may be called “organic” in the ingredients list.

Notes on calculating percentages:

- Water and salt are not included in the percentage calculations of organic ingredients.
- For textiles the percentages refer to the total weight of the fibers and do not include the weight of the non-textile accessories such as buttons and zippers.

- 8.1.5** Labels for in-conversion products or similar terms are clearly distinguishable from labels for organic products.

## **9. Social Justice**

### ***Principle applied***

Organic agriculture builds on relationships that ensure fairness with regard to the common environment and life opportunities of employees and workers.

**The objective is** to achieve fairness, respect and justice, equal opportunities and non-discrimination for employees and workers.

### ***Standards must require that:***

- 9.1.** .In countries where social legislation is absent or not enforced, organic operations have a social policy that is in accordance with the International Labor Organization's Declaration on Fundamental Principles and Rights at Work
- 9.2.** Employees and contracted workers have the freedom to associate, the right to organize and the right to bargain collectively.
- 9.3.** All employees and contracted workers have equal opportunities and are not subject to discrimination.
- 9.4.** Employees and contracted workers are guaranteed human rights and fair working conditions.

### ***Prohibited operator practices***

- 9.5.** Using any type of forced or involuntary labor.
- 9.6.** Using child labor without guaranteeing the child's integral well-being.

## Section C - Criteria for the Evaluation of Substances Used in Organic Production and Processing

Download The IFOAM Indicative List of Substances for Organic Production and Processing here:

[http://www.ifoam.org/about\\_ifoam/standards/OGS\\_Revision/20071013\\_Substance Lists.pdf](http://www.ifoam.org/about_ifoam/standards/OGS_Revision/20071013_Substance_Lists.pdf)

### Introduction

Substances used in organic production, processing and handling must be consistent with the Principles of Organic Agriculture. Precaution and responsibility are the key concerns in management, development and technology choices in organic agriculture.

Standard setting bodies shall at minimum use the following criteria when evaluating substances for inclusion in their standards.

### General Criteria

All substances used in organic production and processing must meet the following criteria:

- i) use of the substance is consistent with the Principles of Organic Agriculture
- ii) the substance is necessary/essential for its intended use.
- iii) approved alternatives are not available in sufficient quantity and/or quality
- iv) manufacture, use and disposal of the substance does not result in, or contribute to harmful effects on the environment
- v) The substance has the lowest negative impact on human or animal health or the environment when compared to alternative substances.
- vi) the consumer is not deceived concerning the nature and quality of the substance
- vii) consideration is given to social and economic impacts of sourcing and manufacturing the substance

In addition, the following criteria must be applied in the evaluation process:

- a) if the substance is used for fertilization and/or soil conditioning purposes:
  - it is essential for obtaining or maintaining the fertility of the soil or to fulfill specific nutritional requirements of crops, or specific soil-conditioning and rotation purposes which cannot be satisfied by other relevant parts of the IBS.
  - the ingredients are of biological or mineral origin and may have undergone the following processes: physical (e.g., mechanical, thermal), enzymatic, microbial (e.g., composting, fermentation);
    - *Synthetic nature identical products that are not available in sufficient quantity and quality in their natural form maybe allowed provided all other criteria are satisfied.*
  - use does not have a harmful impact on the balance of the soil ecosystem or the physical characteristics of the soil, or water and air quality.
  - use may be restricted to specific conditions, specific regions or specific commodities.
- b) if the substance is used for plant protection, growth regulation or weed control:
  - it must be essential for the control of a harmful organism or a particular disease for which other biological, physical, or plant breeding alternatives and/or other management practices consistent with this IBS are not effective.
  - it has the least harmful impact (compared to alternatives) on the environment, the ecological balance (in particular non-target organisms) and the health of consumers human, livestock, aquatic animals and bees.

- substances must be of biological or mineral origin and may undergo the following processes: physical (e.g. mechanical, thermal), enzymatic, microbial (e.g. composting, digestion);
    - *Synthetic substances may be used by exception such as the use in traps or dispensers, or substances that do not come into direct contact with produce, or those for which no natural or nature identical alternative is available provided that all other criteria are met.*
  - use may be restricted to specific target organisms, conditions, specific regions or specific commodities;
- c) if the substance is used as an additive and/or processing aid in the preparation or preservation of the product:
- it must otherwise be impossible to produce or preserve the product
  - the substance is found in nature, and may have undergone mechanical/physical processes (e.g. extraction, precipitation), biological/enzymatic processes and microbial processes (e.g. fermentation).
    - *Synthetic nature identical products that are not available in sufficient quantity and quality in their natural form maybe allowed provided all other criteria are satisfied.*
  - In the case of textile processing, the relevant criteria above are applied, and in addition
    - The substance may be allowed only if it is biodegradable into non-toxic metabolites, generally recognized as safe and hypoallergenic.
    - The substance shall be prohibited if it is carcinogenic, mutagenic, teratogenic, endocrine disrupting or generally recognized to present a risk to human health.
    - Pigments or mordants containing heavy metals are restricted.
    - Additives and processing aids including sizes and lubricants must be either organic or biodegradable.
    - Non-biodegradable, bio-accumulating inputs are restricted.