

OFDC Organic Certification Standards

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Organic Food Development and Certification Center
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INTRODUCTION

Intended to push further forward the cause of rural environmental protection and agricultural cleaner production, reduce or control pollution of the environment by agricultural chemicals (such as pesticides, fertilizers, etc.) and agricultural wastes, promote sustainable development of the rural society, economy and environment, accelerate development of the organic food industry in China and ensure quality the production and processing of organic (ecological) food, so as to provide the society with natural, nutritional and high-grade environmentally and ecologically safe food and meet the demands of the domestic and foreign markets for organic food, and to meet the requirements of IFOAM accreditation, this Organic Certification Standards is worked out by the Organic Food Development and Certification Center (abbreviated as OFDC), on the basis of the Chinese national standard GB19630 Organic Products enforced since April 1st of 2005, the Basic Standards of the International Federation of Organic Agriculture Movements (IFOAM) for Organic Production and Processing and with reference to the EU's Council Regulation EEC No. 2092/91, International Certification Standards of the Organic Crop Improvement Association (OCIA) International, and of other organic farming associations or organizations in Germany, Sweden, UK, USA, Australia, New Zealand and so on.

This Standards is the fundamental requirement for organic production, processing and trading. Organic operators applying for certification should sign an agreement with OFDC, assuring their abidance by the Standards in organic production, and acceptance of certification inspection by OFDC inspectors. The OFDC Certification Committee will issue organic certificates to those production bases, processors and traders evaluated to be qualified, upon completing examination of the inspection report prepared by the inspector, thus authorizing their use of OFDC organic logo on their organic products, and their use of IFOAM logo on those in the scope of IFOAM accredited.



Acknowledgement: For IFOAM accreditation, evaluation of certification standards is one of the most important contents. On February 14, 2003, OFDC officially acquired IFOAM accreditation, which means that its standards are fully in compliance with the IFOAM Basic Standards. Hereby, special thanks are extended to the members of the OFDC Standard Committee and German GTZ-sponsored international experts who have made valuable contributions to the revision and amendment of the OFDC Standards in line with the recommendations IFOAM put forth in its evaluation.

1 Scope

These standards shall apply to the following products, where such products bear, or are intended to bear, the OFDC logo and where the operator for OFDC certification or is certified by OFDC:

- 1 unprocessed agricultural crop products; also livestock and unprocessed livestock products
- 2 processed agricultural crop and livestock products intended for human consumption
- 3 feeding stuff, compound feeding stuff and feed materials
- 4 aquaculture and aquaculture products
- 5 wild collected plants
- 6 textile products
- 7 fertilizers and plant protection products
- 8 honey, bee and bee products

Products covered by the OFDC certification will be inspected during the whole production chain. Any person that sells a product (write an invoice) with reference to the OFDC certification shall be registered and certified. Normally this applies until the product is in its final package/has its final label. Especially the following activities require inspection of OFDC:

- 1 agriculture production (the operations on the agricultural holding involved in producing including plant production and livestock production)
- 2 aquaculture production
- 3 preparation/processing (the operations of preserving and/or of agricultural products, including slaughter and cutting of livestock products)
- 4 packaging
- 5 labelling (any words, particulars, trade marks, brand names, pictorial matter or symbols on any packaging, document, notice, label, board or collar if referring to OFDC certification)
- 6 storage of products unless they are finally packaged
- 7 export of products

Storage and transportation of products which are not only finally packaged are under the responsibility of the owner of the product who has to be certified by OFDC. The inspection thereof will be covered by the certified operator.

2 Normative References

- 2.1 GHZB1 Environmental Quality Standards for Surface Water;
- 2.2 GB5749 Hygiene Standards for Living and Drinking Water;
- 2.3 GB 11607 Water Quality Standards for Fisheries;
- 2.4 GB5084 Standards for Irrigation Water Quality;
- 2.5 GB8978 Integrated wastewater discharge standard;
- 2.6 GB15618 Environmental Quality Standards for Soils;
- 2.7 GB3095 Ambient air quality standard;
- 2.8 GB9137 Maximum Permissible Concentration of Air Pollutants for Protection of Crops;
- 2.9 GB2760 Hygiene Standards for Use of Food Additives;
- 2.10 GB14880 Hygiene Standards for Use of Nutrition Fortifiers in Foodstuff;
- 2.11 GB4278 Emission Standards for Wastewater from Textile Dyeing and Finishing Industry;

3 Definition

3.1 Organic

It refers to production systems and products described in the Standards, rather than a definition of chemistry.

3.2 Organic farming

A kind of plant and animal production system that rejects synthetic chemical substances such as pesticides, fertilizers, growth regulators, fodder additives, etc. and genetically modified organisms (GMOs) and products thereof, and instead, by following the law of nature and the principle of ecology, harmonizes crop cultivation with animal rearing and by adopting a series of sustainable-development-oriented agricultural techniques maintains a stable sustainable agriculture.

3.3 Traditional farming

An agricultural production pattern that is based on the long accumulated farming experience, and features the use of man power and animal forces to till the land and control of crop insects, pest and weeds by means of agricultural practices, artificial measures or traditional herbal pesticides.

3.4 Organic food

Agricultural produce and their products produced, and processed in line with the Standards for Organic Certification from organic production systems and certified by independent certifying bodies.

3.5 Organic Products

Foodstuff and products of various kinds produced and certified in line with the Organic Certification Standards

3.6 Natural products

Products that grow naturally in regions with distinct geographic boundaries, and are free from any influence of GMOs and extraneous chemical compounds.

3.7 Conventional

Production systems and products thereof that have not been certified organic or organic in conversion.

3.8 Organic conversion period

The time between the start of the organic management and the certification of crops and animal husbandry as organic.

3.9 Parallel production

A producer, handler, or processor that grows, breeds, raises, handles, or processes a given product as certified organic and as otherwise. This includes (a) as non-organic, (b) in conversion.

3.10 Buffer zone

A clearly defined and identifiable boundary area bordering an organic production site that is established to limit application of, or contact with, prohibited substances from an

adjacent area.

3.11 Crop rotation

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

3.12 Genetic engineering

Genetic engineering is a set of techniques from molecular biology (such as recombinant DNA) by which the genetic material of plants, animals, micro-organisms, cells and other biological units may be altered in ways or with results that could not be obtained by methods of natural reproduction or natural recombination.

3.13 Homeopathy

Treatment of disease based on administration of remedies prepared through dilution and succession of a substance that in larger amounts produces symptoms in healthy animals similar to those of the disease itself.

3.14 Food ingredients

Any substance, including a food additive, used in the manufacture or preparation of a food or present in the final product although possibly in a modified form.

3.15 Food additives

Synthetic or natural materials or substances which may be added into foodstuff to improve its keeping quality, color, taste, or smell, or other technical property.

3.16 Processing aids

Any substance or material, not consumed as a food ingredient by itself, intentionally used in the processing of raw materials, foods or its ingredients, to fulfil a certain technological purpose during treatment or processing and which may result in the non-intentional, but unavoidable presence of residues or derivatives in the final product.

3.17 Ionizing radiation

High energy radiation from radioactive nuclides (e.g. ^{60}Co , ^{137}Se), capable of altering molecular structure of a food product for the purpose of controlling microbial contaminants, pathogens, parasites and pests in the product preserving the food product or inhibiting physiological processes such as germination or ripening.

3.18 Labeling

Any written, printed or graphic representation that is present on the label of a product, accompanies the product, or is displayed near the product.

3.19 Permitted for use

Materials or substances or methods that can be used in organic production systems.

3.20 Restricted for use

Materials or substances or methods that can be used conditionally in organic production systems in the case that no permitted substitutes can be found available. Generally, it is not advised to use this type of materials or methods. Usually, the material must have a

specified source and evidence that it is not contaminated.

3.21 Prohibited for use

Materials or methods that are not allowed in organic production systems.

3.22 Certification

The procedure by which an independent third party gives written assurance that a clearly identified production or processing system is methodically assessed and conforms to specified requirements. Certification is based on standardized certification-oriented inspections, which include field inspections, quality control system auditing and product testing.

3.23 Direct source organism

The specific plant, animal, or microbe that produces a given input or ingredient, or that gives rise to a secondary or indirect organism that produces an input or ingredient.

4 Major Objectives of Organic Production and Processing

Based on the ideal and principle of sustainable development that harmonizes social economy with environment, organic production and processing is intended to realize the following objectives through trade of organic product:

- 4.1 Produce sufficient quality food to meet the demand of the society.
- 4.2 Increase cycling of biomes and material (including micro-organism, soil, soil fauna and flora, plants and animals) in the farming system so as to maintain and raise long-term fertility of the soil;
- 4.3 Care for all physiological requirements and living habits of poultry and livestock living in the natural environment and keep in balance crop production and animal rearing;
- 4.4 Make as much use as possible regenerable resources within the local production system to promote rational utilization and protection of water resources and others;
- 4.5 Maintain biodiversity of the production system and the surrounding environment, including protection of habitats of wild plants and animals;
- 4.6 Develop a sustainable aquatic products production system;
- 4.7 Minimize pollution of various forms through producing biodegradable organic products;
- 4.8 Improve organic producers' and processors' income, satisfy their basic needs, and endeavor to keep the production, processing and sales distribution developing towards justness, fairness and ecologically rationality.

5 Basic Requirements of Organic Certification

5.1 For farm

5.1.1 Scope

A farm applying for OFDC certification should be an agricultural production unit with clearly specified boundaries, ownership and management right. Once having passed organic certification, the farm can sell all the vegetative and animal products from its fields as organic.

In case that there are both organic production and conventional production in the farm, the operator must appoint full-time employees to manage and operate the land for organic production, and moreover, the operator should take effective measures to separate plants and animals from the certified fields and those from the non-organic (including conventional and in-conversional) fields. The measures include separate harvest, separate transport, separate processing, separate storage and complete audit-trailing records. Meanwhile, the operator should lay a cause to convert the conventional farm fields into organic within at least 5 years following the first certification of any portion of that farm and submit the written conversion plan to OFDC for verification.

Types of the farms OFDC may accept for certification include:

a) State- or Collective-run Organic Farm

It refers to a farm whose land is under the State or collective ownership and servitude.

b) Individual Managed Organic Farm under Lease

It refers to a tract of land an individual or a household has leased from the local government.

c) Company Managed Organic Farm under Lease

It is a tract of land a company has leased from the local government (over township level). If the company hires local farmers in the field, the farmers' conventional farm fields elsewhere are not counted as parallel production as long as the company does not purchase any produce from the farmers. If the land the company has leased is still managed by farmer households in accordance with the requirements of the company and the company purchases the produce from the farmers, the conventional crops the farmers have somewhere else ought to be regarded as parallel production.

d) Farmers Group Organic Farm

This is a tract of land, within a certain area, consisting of small farm fields run by their respective farmer households, who willingly follow the pattern of organic farming and have established a rigid organizational management system including an audit trailing system. In this case, the land within this area as a whole can be taken as an independent organic farming unit. OFDC permits all of the above types of organic farms (units) to expand, but the new recruited land should enter the organic conversion immediately.

Converted land and animals shall not get switched back and forth between organic and conventional management.

5.1.2 Parallel production

The same crop variety or product cannot be sold as OFDC-certified if the same crop variety or product is also produced elsewhere on the farm using materials or methods that do not conform to these standards. Exemption will only be provided when:

- a) Growers own or operate multiple farms and the parallel production occurs on farms which do not share equipment or transportation systems, or
- b) Growers notify OFDC of the type(s) of crops involved in the parallel production systems, enforce a plan for production, harvest and storage of crops that ensures that there will be segregation of the OFDC-certified crop from the conventional crop, and has complete and comprehensive record keeping systems for organic and conventional product.

5.1.3 Conversion

The change from conventional production to organic production calls for conversion, the sowed or harvested crops or born animals after the conversion can be sold as organic. During the conversion period, the operator should manage the farm fully in line with the requirements for organic production. After one year of conversion, the crops growing in the fields can be sold as organic-in-conversion.

A conversion period usually begins with the application for certification. If the applicant can present authentic written document and historical data of land use, which will have to be checked and affirmed by the OFDC Certification Committee, the date the operator actually began his/her organic management can be taken as the start of the conversion period. The documents that can be reviewed as support for start of conversion should include:

- a. Land renting contract or agreement; and
- b. History documentation of farm management.

In addition, the written statement and related report of news media also can be referred in affirming conversion period. Wasteland in exploitation should be provided authorizing files by senior government above county level.

Once a certified farm returns conventional, it has to undergo conversion again before being eligible for organic certification.

5.1.4 Buffer zone

If an organic farm has fields under possible pollution from neighboring conventional fields, buffer zones or physical barriers have to be set up in between the organic and conventional fields so as to ensure the organic fields freedom from pollution.

5.1.5 Farming history

An applicant must hand in a whole set of information about land use of all the field plots of his/her farm, production methods, materials or substances used, harvest and post-harvest treatment of crops and crop yields of recent four years (including the application year) and the current production practices as well.

5.1.6 Production and management plan

5.1.6.1 In order to maintain and improve soil fertility, and reduce incidence of pest, plant diseases and weed, the organic producer shall formulate a strict site-specific non-perennial crop rotation program, which should include at least one leguminous crop (for nitrogen fixation) or green manure crop.

5.1.6.2 The organic producer shall formulate and implement a practical and feasible soil building program so as to raise soil fertility and minimize reliance on input of off-farm sources.

5.1.6.3 The organic producer shall formulate an effective pest, crop disease and weed control plan including application of agricultural, biological, ecological and physical control measures.

5.1.6.4 The organic producer shall take effective measures to ensure that his/her farming practices will neither pollute the soil or crops, nor undermine local ecosystem.

5.1.6.5 The organic producer shall work out an effective eco-environmental protection program including planting of trees and turf, control of soil erosion, setting-up of habitats and protective zones of natural predators, and conservation of biodiversity.

5.1.7 Internal quality control

5.1.7.1 The organic producer shall keep a complete file of production management and sales records, covering sources and amounts of on-farm and off-farm inputs used or purchased, and an end-to-end process of plantation, management, harvesting, processing and selling of crops.

5.1.7.2 The organic animal farm shall keep a complete file of production management and sales records, covering sources and amounts of all feed, additives, medicines, etc..

5.1.7.3 The organic animal farm shall keep a complete file of records covering an end-to-end process from birth to slaughter of each animal or each lot of poultry.

5.1.7.4 Animals that have been treated with conventional medicines must be distinctly tagged, indicating name of the medicine and date of its use.

5.1.7.5 The operator shall take appropriate actions on complaints related to the compliance with certification requirements, and keep a record of the complaints and the corrective actions taken.

5.1.8 Genetic engineering

5.1.8.1 In organic production system or for organic products, the deliberate use or negligent introduction of genetically modified organisms (GMOs) and products derived thereof shall be prohibited, including plants, animals, seeds, pollen, propagation materials, and farm inputs such as fertilizers, soil amendment products, vaccines and plant protection materials.

5.1.8.2 On farms with simultaneous organic and conventional production the use of genetically engineered organisms is not permitted on the conventional part.

5.1.8.3 Inputs shall be traced back one step in the biological chain to the direct source organism (see definition) from which they are produced to verify that they are not derived from GMOs.

5.1.8.4 Contamination of organic product by GMOs that results from circumstances beyond the control of the operator may alter the organic status of the operation and/ or product.

5.1.9 Inspection

Organic-certification-oriented inspection at least once a year for each parcel of land

(including wild plant gathering zones under certification) is to be conducted while crops are still growing in the field and animals living in the pens. When inspecting farms with parallel production, the inspector must conduct an extra inspection through all the process from growing, harvest, transport, storage to selling. In response to recommendations of the Certification Committee, OFDC may decide to dispatch inspectors at any time to make unannounced inspections on organic operators' production, processing or trade.

5.1.10 Laboratory testing

In the following cases, samples of soil, water and crops are to be taken for analysis and test for residues of prohibited materials or substances and of pollutants.

- a. When a farm is making its first application for certification;
- b. When a piece of land under inspection is suspected to have been applied with forbidden substances;
- c. When the land is suspected to be contaminated with prohibited substances that the farmer once used in the past.

For farm fields nearby industrial zones, air samples shall be taken for pollutant analysis. Concentration of pollutants must be in line with relevant standards for environmental quality and for food hygiene.

5.2 For processor, handler and trader

5.2.1 Scope

Processor/handler/trader applying for certification must be an operator with clearly defined ownership and management right. An organic trader/retailer involved in domestic marketing and foreign import and export businesses must have relative government-recognized qualification.

5.2.2 Parallel operation

It is permissible that a processor/handler/trader can handle organic and conventional products of the same variety simultaneously, providing that efficient measures be taken to ensure clear separation of organic processing from conventional one, and avoid organic products in contact with or commingling with conventional products, or in contact with prohibited substances.

5.2.3 Raw material and processing technology

5.2.3.1 All raw materials for processing/handling must come from organic production systems.

5.2.3.2 Processing technologies adopted shall be able to maintain as much nutrient elements as possible in the organic food as well as organic integrity of the product.

5.2.4 Storage, transport, packaging and labeling

The operation must be in compliance with the standards specified for storage, transport, packaging and labeling in Chapter 14 and 15 of this Standards.

5.2.5 Environment

5.2.5.1 If pollution sources or potential pollution sources do exist in the surroundings of the processing, handling, or storage unit, it is essential to take efficient measures to ensure

that the product in processing/handling/storage will not be affected.

5.2.5.2 Impact of the processing/handling/trading on the environment shall be minimized.

5.2.6 Genetic engineering

5.2.6.1 The deliberate use or negligent introduction of any genetic engineering techniques or products thereof is prohibited.

5.2.6.2 Processing aids and ingredients shall be traced back one step in the biological chain to the direct source organism *(see 3.2.3 definition) from which they are produced to verify that they are not derived from GMOs.

5.2.6.3 Contamination of organic product by GMOs that results from circumstances beyond the control of the operator may alter the organic status of the operation and/ or product.

5.2.7 Internal quality control

5.2.7.1 The operator must work out and implement its internal quality control measures.

5.2.7.2 The operator must keep a complete file of records encompassing end-to-end processes from purchase of raw materials, through processing, storage, transport, packing, and on through the distribution system, with related invoices and receipts attached, and set up a sound audit trail system using lot numbers, serial numbers, or the like.

5.2.7.3 The operator shall take appropriate actions on complaints related to the compliance with certification requirements, and keep a record of the complaints and the corrective actions taken.

5.2.8 Inspection

Organic-certification-oriented inspection is to be conducted for a processor at least once a year. Products covered by the OFDC certification will be inspected during the whole production chain. Especially the following activities require inspection of OFDC:

- 1 preparation/processing (the operations of preserving and/or of agricultural products, including slaughter and cutting of livestock products)
- 2 packaging
- 3 labelling (any words, particulars, trade marks, brand names, pictorial matter or symbols on any packaging, document, notice, label, board or collar if referring to OFDC certification)
- 4 storage of products unless they are finally packaged
- 5 export of products

Storage and transportation of products which are not only finally packaged are under the responsibility of the owner of the product who has to be certified by OFDC. The inspection thereof will be covered by the certified operator.

The inspection should be carried out while the processor/handler/trader is in operation if possible. In cases where an operator participates in processing/handling/trading both organically and conventionally, the inspector must conduct extra inspection on the non-organic section. In response to the need for management, OFDC may decide to dispatch inspectors at any time to make unannounced inspections.

6 Crop Production

6.1 Conversion

6.1.1 For annual crops, the conversion period is usually set not less than 24 months and for perennial crops, not less than 36 months.

6.1.2 There shall be at least a 12-month conversion period prior to pastures, meadows and products harvested therefrom, being considered organic.

Lands newly reclaimed from wilderness or from land deserted for years will have to undergo a conversion period of at least 12 months.

6.2 Choice of Crop varieties

6.2.1 Organic seeds and seedlings are the first choice.

6.2.2 Conventional seeds and plant materials that have not been treated with prohibited materials or substances may be used when certified organic seeds or plant materials are not available (for instance, at the initial stage of organic cultivation).

6.2.3 Crop varieties adaptable to the local soil and climate conditions and resistant to crop pest and diseases are to be chosen. In making choice, the operator should take into full account the issue of preserving crops' genetic diversity.

6.2.4 Any GM-related crops are prohibited. For crops where commercial cultivation of GMO species has been approved by the government, the producer shall provide sufficient proof that the species they used or plan to use are not GMOs.

6.3 Crop rotation

6.3.1 Crop rotation systems consisting of at least 3 crops each should be adopted. And each system must have a leguminous crop or green manure crop.

6.3.2 In only one-crop-a-year regions, a two-crop rotation system may be adopted, but one of the two must be a leguminous crop.

6.3.3 It is prohibited to grow the same crop for years in a row in a same field, but pasture grass, perennial crops and rice in certain areas with special geographic and climatic conditions are exceptions.

For perennial crops, an organic operator shall grow green manure etc. in the orchard as floor cover and/or maintain refuge plantings in or around the orchard to avoid soil erosion and enhance biodiversity of the orchard.

6.4 Building-up of Soil Fertility

6.4.1 It is encouraged to grow leguminous crops to build up soil fertility.

6.4.2 In making soil building-up plan, it is essential to ensure application of an enough amount of organic manure to maintain soil fertility and bioactivity therein.

6.4.3 It is advocated to adopt the practice of keeping fields in fallow to restore soil fertility.

6.4.4 All manure used in the farm shall have no detrimental impact on the crops and

environment. And moreover, they should come mainly from organic farm systems. The importation of manures from off site shall be no greater than 15 tons per hectare annually. Exceptions can be made by certification committee for isolated intensive crops, for farms in a period of focused soil building, or farms where other extra need for nutrients and soil organic matter can be proven.

6.4.5 In building up soil fertility, materials or substances permitted or restricted for use are listed in Appendix A.

6.4.6 Non-synthetic mineral fertilizers and bio-fertilizers may only be used as supplements in building up soil fertility and can not be a replacement of nutrient cycling in the system. Mineral fertilizers shall be applied in their natural composition and shall not be rendered more soluble by chemical treatment. 6.4.7 In organic vegetable production, it is essential to choose proper organic manure, and to apply vegetable-specific manure in a scientific way. It is important not to over-dose organic manure lest that the content of nitrite in the vegetable should exceed related standards.

6.4.8 Manures containing human excrement (feces and urine) shall not be used on vegetation for human consumption, except where they are from clearly defined sources and all sanitation requirements listed in Appendix A.2 are met. They shall not be in contact with edible parts of crops. Application of human excrements on leafy crops, tuber crops and root crops is prohibited.

6.4.9 Microbes used as additive in composting should come from nature, instead of from genetic engineering.

6.4.10 It is forbidden to use Chilean Nitrate (sodium nitrate), synthetic fertilizers (such as urea), and sewage sludge in soil building.

6.4.11 Where there is reason to expect high concentrations, fertilisers and soil conditioners shall be analysed, before spreading, for their content of heavy metals or other contaminating factors. This always applies in the case of mined rocks or by-products of industry such as basic slag, fly ash, etc. Heavy metal levels in the fertilizers should comply with the limits set in following table. As an exemption, the Cd content in mined phosphate shall comply with the restriction in Appendix A.

Contaminant factor	Limit in the fertilizer or soil conditioner (mg/kg)
Mercury	5
Cadmium	5
Arsenic	75
Lead	250
Copper	250
Chromium	250
Nickel	200
Zinc	500

6.5 Pest, disease and weed control

6.5.1 pests, diseases and weeds shall be controlled by a combination of the following measures:

- a. Choice of disease and pest resistant species or varieties;

- b. Proper plans for management of water and soil fertility, crop rotation and multi-crop interplanting.
- c. Protection of natural predators through positive measures like setting up hedges, artificial nests.

6.5.2 Thermic weed control and physical methods for pest, disease and weed management are permitted.

6.5.3 Thermic sterilization of soils to combat pests, diseases is restricted to circumstances where a proper rotation or renewal of soil cannot take place. Permission may only be given by OFDC Certification Committee on a case by case basis.

6.5.4 Only in cases of immediate threat to crops, materials or substances listed in Appendix B may be used.

6.5.5 Any formulated input shall have only active ingredients in Appendix B, and all other components shall meet the criteria of Appendix C. Formulated products with only active ingredients in Appendix B, but with other components that have not been reviewed against the above criteria may be used until 2005.

6.5.6 It is prohibited to use GMOs and their derivatives.

6.5.7 It is prohibited to use synthesized crop protectants and growth regulators.

6.6 Control of contamination

6.6.1 All equipment from conventional farming systems shall be properly cleaned and free from residues before being used on organically managed areas.

6.6.2 For protected structure covering, plastic mulches, fleeces, insect netting and silage wrapping, only products based on polyethylene and polypropylene or other polycarbonates are allowed. These shall be removed from the soil after use and shall not be burned on the farmland. The use of polychloride-based products is prohibited.

6.6.3 The use of synthetic growth regulators is prohibited.

6.6.4 OFDC may de-certify a farm field because of residues of undesirable substances in soil or crop, e.g. residues of previously used pesticides and herbicides. or excessive concentrations of heavy metals above related national standards.

6.7 Control of soil erosion and preservation of biodiversity

6.7.1 Positive measures should be taken to control soil erosion, soil desertification, and excessive or irrational use of water resources. In exploiting soil and water resources, full consideration shall be given to their sustainability.

6.7.2 Necessary measures shall be taken to control soil salinization and alkalization.

6.7.3 Adequate attention shall be paid to preservation of biological habitats and biodiversity.

6.7.4 Adequate attention shall be paid to protection of natural predators and their habitats.

6.7.5 It is encouraged to use straws for mulching or to adopt multi-crop interplanting to minimize exposure of the soil.

6.7.6 It is recommended to make full use of crop straws. Disposal of straws by burning is

prohibited (exemption may be granted to burning of plants for disease control).

6.7.7 Land preparation by burning vegetation is prohibited.

6.7.8 Over exploitation of wild resources is prohibited.

6.7.9 It is prohibited to destroy primary ecosystems for development of organic cultivation.

6.8 Irrigation

6.8.1 The quality of irrigation water in organic farming must meet the Standards for Irrigation Water Quality (GB5084-92).

6.8.2 Effective measures should be taken to separate the irrigation and drainage system for organic fields from that for conventional ones so as to ensure that no water will seep or flood into organic fields from conventional ones.

7 Food Processing, handling and trading

7.1 Ingredients, Additives and Processing Aids

7.1.1 All raw materials used for organic processing must be certified by OFDC or OFDC-recognized organizations and shall represent not less than 95% of the final product in weight or volume.

7.1.2 In cases where an ingredient of organic origin is not available in sufficient quality or quantity, conventional non-synthetic materials may be accepted, but may not exceed 5% of the final product in weight or volume. However, the non-organic ingredients shall be non-GMOs and get approval from OFDC that updates each year. Once conditions ripe for acquisition of organic ingredients certified by OFDC or OFDC-recognized organizations, these non-certified ingredients should be replaced instantly. All processors who use non-organic ingredients must hand in a plan for turning the ingredients they use into 100% organic.

7.1.3 It is not allowed to have an ingredient of both organic and conventional sources in the organic product.

7.1.4 Table salt and water may be exempt from certification as long as they are up to the national hygiene standards for foodstuff. But they shall not be counted as organic raw material specified in Item 7.1.1.

7.1.5 Natural pigments, spices and additives specified in the "Hygiene Standards for Use of Foodstuff Additives"(GB2760-86) are acceptable. But synthetic ones are prohibited.

7.1.6 Ingredients and aids listed in Appendix F of the Standards are acceptable, but ingredients of non-natural sources outside the range are generally not allowed. Materials not included in Appendix F shall be evaluated according to Appendix G Criteria for the Evaluation of Additives and Processing Aids before use in organic food processing.

7.1.7 Minerals (including trace elements), vitamins and similar isolated ingredients shall not be used. Exception may be allowed where their use is legally required or where severe dietary or nutritional deficiency can be demonstrated.

7.1.8 Preparations of micro-organisms and enzymes commonly used in food processing may be used, with the exception of genetically engineered micro-organisms and their products. Processors shall use micro-organisms grown on substrates that consist entirely of organic ingredients and substances on Appendix F, if available. This includes cultures that are prepared or multiplied in-house.

7.1.9 It is prohibited to use any genetic engineering products as ingredient, additive or aid in organic food processing.

7.2 Processing

7.2.1 A formalized sanitation program must be in place and conform to local and national health codes. Programs must be in place that provides proper sanitation for:

- a. The facilities exterior (dumpsters and waste collection areas, old equipment storage, landscape and parking areas).
- b. The facilities interior (including processing, packaging and warehouse areas).

- c. Processing and packaging equipment (programs to prevent unwanted yeasts, molds, and bacteria).
- d. Employee hygiene, including sanitation in lunchrooms, break areas, and restrooms.

7.2.2 An organic food processing plant shall be equipped with special facilities exclusive for organic food processing. If the facilities have to handle both organic and non-organic products, they should be cleaned thoroughly after handling conventional products, leaving no residue of any detergents detectable. If thorough cleaning of facilities is impossible, a small quantity of organic raw materials shall be processed to clean up the remaining substances from conventional processing either after the organic conversion or conventional processing or before the beginning of organic processing; in other words, purge process. Products from purge process shall not be sold as organic or organic in conversion products.

7.2.3 The technology adopted for organic product processing shall not undermine major nutrients in the food. Mechanical, freezing, heating, microwave treating, smoking and microbial fermentation are acceptable treating methods, and so are technologies of extraction, condensation, sedimentation and filtration. But for extraction and condensation, no other agents are allowed than water, alcohol, animal and plant oils, vinegar, carbon dioxide, or nitrogen that are up to the national hygiene standards for foodstuff.

7.2.4 Water used in processing shall meet the criteria in related standards for water quality.

7.2.5 Wastes discharged from the plant shall be kept in compliance with related standards.

7.2.6 Ionizing radiation is not allowed for use in food processing and storage.

7.2.7 Filtration techniques that chemically react with or modify organic food on a molecular basis shall be restricted. Filtration substances shall not be made of asbestos nor may they be permeated with substances that may negatively affect the products.

7.2.8 Ethylene gas is permitted for ripening.

7.2.9 Crop production, processing and handling systems shall return nutrients, organic matter and other resources removed from the soil through harvesting by the recycling, regeneration and addition of organic materials and nutrients.

7.3 Pest control

7.3.1 Organic processor, handler, and trader should use the following measures to prevent pest:

- a. Eliminate the pest habitats in the processing site.
- b. Prevent the pest access to facilities.
- c. Control the temperature, humidity, light, and atmosphere to prevent the pest breeding.

7.3.2 Traps by means of mechanics, pheromones, aroma and glue, physical barrier, diatomaceous earth, and sound/light/electric devices are acceptable as insect-controlling facilities or materials.

7.3.3 Materials or substances listed as permitted or restricted for use in Appendix B are accepted.

7.3.4 In case of emergency of serious insect infestation in the processing and storage areas, preparations from Chinese medicinal herbs can be used for spray and fumigation. Sulfur may only be used in a restricted way. Fumigation with ethylene oxide, methyl bromide, aluminum phosphide or other substance not contained in Appendix B is prohibited.

7.3.5 In the case of fumigation to processing and storing facilities, raw materials, semifinal and final products for organic production shall be moved out from the processing and storing facilities. No product may be brought into the area of treatment, either for storage or processing for a minimum of 7 days. Persistent or carcinogenic pesticides and disinfectants are not permitted.

7.3.6 The direct use or application of a prohibited method or material renders that product no longer organic. The operator shall take necessary precautions to prevent contamination, including the removal of organic product from the storage or processing facility, and measures to decontaminate the equipment or facilities.

8 Animal Husbandry

8.1 Conversion

8.1.1 The fodder production of a livestock production unit must comply with the requirements on organic crop production, undergoing conversion periods established for organic crop production. However, the conversion period can be shortened to one year for grasslands used as open air runs by non-herbivore species.

8.1.2 The animals or poultry and the products thereof can be sold as organic products only after the end of conversion period, which varies with the species of animals:

- 1 12 months in case of bovine, equidae, camels, sheep, goat, and pig for meat production;
- 2 6 months in the case of animals for milk production;
- 3 10 weeks for poultry for meat production, brought in before they are 3 days old;
- 4 6 weeks in the case of poultry for egg production.

8.2 Origin of the animals

8.2.1 When organic poultry or animals are not available, it is permissible to brought in conventional ones, subject to the following conditions:

- 1 3 day old chickens for meat production; 2 weeks for any other poultry;
- 2 18 week old hens for egg production;
- 3 Piglets up to 6 weeks and after weaning;
- 4 Dairy calves up to 4 weeks old that have received colostrum and are fed a diet consisting mainly of full milk.

8.2.2 Breeding stock may be brought in from conventional farms with a yearly maximum of 10% of adult animals of the same species on the farm. The Certification Committee may allow exceptions under the following circumstances, which in any case can not exceed 40%. Moreover, the brought-in stock has to undergo conversion.

- a. Unforeseen severe natural or man-made events;
- b. Considerable enlargement of the farm;
- c. Establishment of a new type of animal production on the farm;
- d. Small holdings.

8.2.3 Male breeding stock may be from any source, but have to be reared in line with the organic pattern after they are brought in.

8.2.4 All animals or poultry brought in shall be free from contamination of genetic engineering product, including GM breeding materials, medicines, metabolic and biological regulators, feed and additives.

8.3 Feed

8.3.1 Livestock should be fed with organic feed and forage certified by OFDC or OFDC-recognized organizations. At least 50% of the feed shall come from the farm unit itself or be produced in cooperation with other organic farms in the region.

8.3.2 During the first year of organic management, fodder produced on the farm unit can be used as organic feed for livestock, but can not be sold as organic.

8.3.3 When organic feed is in short supply, Certification Committee may allow farms to purchase conventional feed and forage, of which the consumption can not exceed the following percentage of the annual total consumption of organic feed.

- 1 For herbivores, 10% (based on dry matter);
- 2 For non-herbivores, 15% (based on dry matter);

For all animals, the daily intake of conventional feed can not exceed 25% (based on dry matter) of their daily total feed consumption.

OFDC may allow exceptions with specific time limits and conditions in the following cases:

- a. Unforeseen severe natural or man-made events;
- b. Extreme weather conditions;
- c. Regions in their initial development stage of organic production.

The use of conventional feed shall be recorded in detail.

8.3.4 All ruminants shall have daily access to roughage adequate to meet their basic need for nutrients.

8.3.5 Young stock from mammals shall be provided maternal milk or organic milk from their own species. Operators may provide non-organic milk when organic milk is not available.

Operators may provide milk replacers or other substitutes only in emergencies provided that they do not contain antibiotics, synthetic additives or slaughter products. Young stock shall be weaned only after the following minimum time:

- a. 6 weeks for pig, sheep and goat;
- b. 3 months for calves and horses.

8.3.6 Agricultural ingredients in companion animal feed must be certified organic.

8.3.7 The following products shall be prohibited:

- a. Animal by-products to ruminants.
- b. Droppings, dung, or other manure even if processed.
- c. Feed (e.g. soy and rape seed meal) subjected to solvent (e.g. hexane) extraction or the addition of other chemical agents.

8.3.8 It is not allowed to use GMOs or their derivatives in the production of any feedstuff, feed ingredient and feed additives.

8.4 Feed additives

8.4.1 Fodder preservatives such as the following may be used:

- a. bacteria, fungi and enzymes;
- b. by-products of food industry (e.g. molasses);

- c. plant based products.

Synthetic chemical fodder preservatives such as acetic, formic and propionic acid and vitamins and mineral are permitted in severe weather conditions.

8.4.1 Materials or substances listed as permitted for use in Appendix C can be used.

8.4.2 Natural minerals, like magnesium oxide, green sand, and trace elements are acceptable additives.

8.4.3 Vitamins to be added should come from germinated grains, fish liver soil, brewer's yeast or other natural materials or substances.

8.4.4 With permission from OFDC, materials or substances listed as restricted for use in appendix C can be used.

8.4.5 The following products shall be prohibited:

- a. Synthetic growth promoters, growth suppressants, or stimulants (including antibiotics, hormones, and trace elements used to stimulate growth) implanted, injected, or ingested.
- b. Synthetic appetisers.
- c. Preservatives, except when used as a processing aid.
- d. Artificial coloring agents.
- e. Urea and other synthesized nitrogen compounds.
- f. Pure amino acids.
- g. Genetically engineered organisms or products thereof.

8.4.6 It is prohibited to use any genetic engineering products as additive.

8.5 living conditions

8.5.1 Conditions for livestock and poultry husbandry (stock, pens etc.) shall meet the livestock's biological and ethological needs and ensure::

- a. sufficient room for free movement and rest; animals have sufficient space to stand naturally, lie down easily, turn around, groom themselves and assume all natural postures and movements such as stretching, and wing flapping;
- b. adequate natural daylight;
- c. provides for insulation, heating, cooling and ventilation of the building that can avoid excess sunlight, temperature, rain and wind, and permits air circulation, dust levels, temperature, relative air humidity, and gas concentrations to within levels that are not harmful to the livestock;
- d. adequate natural bedding, if appropriate;
- e. ample access to fresh water and feed according to the needs of the animals; the quality of drinking water shall meet the requirements in Appendix C.1;
- f. poultry, rabbits and pigs shall not be kept in cages;
- g. no construction materials or production equipment shall be used in a way that may significantly harm human or animal health.

- h. on the condition that health of the animals will not be affected (e.g. they will not bite or fight against each other), it is required to keep at least two animals of the same species in one pen.
- i. animals are protected from predation by wild and feral animals.

8.5.2 When necessary, daytime can be prolonged by artificial lighting. But this shall not lead to a day length longer than 16 hours.

8.5.3 All animals shall have access to pasture or an open-air exercise area or run, whenever the physiological condition of the animal, the weather and the state of the ground permit. Such areas may be partially covered.

Animals may be temporarily confined because of inclement weather or absences of pasture due to temporary or seasonal conditions. Such animals shall still have access to an outdoor run.

Animals may be fed with carried fresh fodder where this is a more sustainable way to use land resources than grazing. Animal welfare shall not be compromised.

8.5.4 Landless animal husbandry system and/or any confinement-based production that restrict expressing of animal's natural behaviors are prohibited.

8.5.5 Herd/flock animals shall not be kept individually with the exception of adult male animals, sick animals and those in late pregnancy.

8.6 Prevention/Control of diseases

8.6.1 Disease prevention in organic livestock production shall be based on the following principles:

- a. The selection of appropriate species and breeds;
- b. The application of animal husbandry practices appropriate to the need of each species, encouraging their resistance to disease and prevention of infection factors;
- c. The use of high quality feed together with regular outdoor exercise to strengthen their natural defence to disease.
- d. Ensuring an appropriate density of livestock, thus avoiding overstocking and any resulting animal health problems.

8.6.2 Detergents and disinfectants listed in Appendix E.2 are allowed to use in livestock buildings and installations, so are rodenticide and materials or substances listed in Appendix B.

8.6.3 Areas to be disinfected shall be empty of livestock, and manure shall be physically removed regularly.

8.6.4 Natural therapies, such as the use of plant preparations, acupuncture, and homeopathy, are acceptable.

8.6.5 When the risk of diseases is known to exist in the farm environment and cannot be controlled by other techniques, vaccinations (including vaccination to stimulate production of maternal antibodies) are permitted. Legally required vaccinations are also allowed. The vaccines shall not be genetically modified.

8.6.6 If an animal becomes sick or injured despite preventative measures that animal shall

be treated promptly and adequately, if necessary in isolation and in suitable housing. Producers shall not withhold medication where it will result in unnecessary suffering of the livestock, even if the use of such medication will cause the animal to lose its organic status.

In such cases, the operator may use chemical allopathic veterinary drugs or antibiotics under the supervision of a veterinarian, and the animals or products thereof can be sold as organic only after they have experienced withholding periods not less than double of that required by legislation, or a minimum of 48 hours, whichever is longer

8.6.7 The use of substances to promote growth or production, including antibiotics, coccidiostatics, and other growth stimulants, and the use of hormones to control regeneration behaviors of animals (e.g. induction or synchronisation of oestrus, superovulation) are prohibited. Hormones, however, can be used to treat individual animals for curing diseases under the supervision of a veterinarian.

8.6.8 The operator shall keep records of veterinary medicinal products used (indication of active pharmacological substances involved), together with details of the diagnosis, the dosage, the method of administration, the duration of the treatment, , and the legal withdrawal period. The animals that have been medicated shall be labeled with tag, one by one for large-sized animals and lot by lot for small-sized and poultry.

8.7 Non-therapeutic operation

8.7.1 Non-therapeutic operations are prohibited. The following exceptions are accepted, only if animal suffering is minimized and anesthetics are used where appropriate.

- a. Castration for the purpose of maintaining quality of the product or out of traditional product practices (meat-type pigs, bullock, capons);
- b. Dehorning;
- c. Tail docking of lambs to prevent myiasis;
- d. Ringing.

8.7.2 The following non-therapeutic operations are prohibited

- a. Tail cutting (except lambs);
- b. Debeaking;
- c. Clipping wing feathers;
- d. Wing burning;
- e. All others not clearly defined as permissible.

8.8 Breeding

8.8.1 Natural breeding is encouraged.

8.8.2 Propagation methods of various forms are tolerated, provided they do not unduly restrict genetic pool.

8.8.3 Embryo transfer techniques and cloning are prohibited.

8.9 Transportation and slaughter

8.9.1 Organic animals should be clearly identifiable during the transportation.

8.9.2 There should be a person designated to maintain the welfare of the animal during loading, unloading, transportation, holding and slaughter, and ensure the animal be handled calmly and gently.

8.9.3 Organic animals be provided with conditions during transportation and slaughter that reduce and minimize the adverse effects of:

- 1 stress;
- 2 loading and unloading;
- 3 mixing different groups of animals or animals of different sex;
- 4 quality and suitability of mode of transport and handling equipment;
- 5 temperatures and relative humidity;
- 6 hunger and thirst; and
- 7 the specific needs of each animal.

8.9.4 Any contact (by sight, sound or smell) of organic animals with dead animals or animals in slaughtering process should be avoided.

8.9.5 The handling during transport and slaughter shall be calm and gentle. The use of electric sticks and such instruments is prohibited. No chemically synthesized tranquilizers or stimulants shall be given prior to or during transport.

8.9.6 When transport is by axle, the journey time to the slaughterhouse shall not exceed 8 hours. Where there is no organic slaughterhouse within 8 hours travel time the animal may be transported for a period in excess.

8.9.7 Slaughter shall be effected in slaughterhouses approved by regulatory sanitary quarantine agencies.

8.9.8 Shackling, hoisting, or slaughtering prior to having rendered the animal unconscious is prohibited. Exceptions may be granted due to religious and cultural reason.

8.9.9 Organic and conventional animals shall be slaughtered separately and then stored separately with clear marks.

8.10 Environmental impact

8.10.1 It is essential to ensure that the population of livestock reared in the farm will not exceed the maximum carrying capacity of the farm per se and its cooperative units. Its feed production capacity, animal health and impact on the environment should be taken into full account when deciding its carrying capacity. If overgrazing has already caused detrimental impact on the environment, the farm will not be certified.

8.10.2 It should be ensured that the farm's capacity of waste storage facilities is large enough to prevent water bodies from contamination of animal waste through direct discharge, surface runoff or soil percolation.

9 Bee-keeping and Processing of Bee Products

9.1 Conversion

9.1.1 Beekeeping has to undergo at least 12 months conversion before certified organic.

9.1.2 During the conversion period the wax shall be replaced by organically produced wax. Where no prohibited products have been previously used in the hive and there is no risk of contamination of wax, replacement of wax is not necessary.

In cases where all the wax cannot be replaced during a 12-month period, the conversion period may be extended with the approval of OFDC.

9.2 Siting of the apiaries

9.2.1 The apiaries shall be located in organic agricultural fields or areas of natural vegetation where no chemical substances have ever been applied for the most recent three years.

9.2.2 The area should have sufficient nectar and pollen sources and clean water sources.

9.2.3 The apiaries shall be set up far from conventional farm fields and from places liable to pollution, for instance, major towns or cities, industrial zones, highways, railroads, landfill sites, incinerators, etc. (at least 3 kilometers).

9.3 Feeding of bees

9.3.1 At the end of the production season hives must be left with reserves of honey and pollen sufficiently abundant for bee to survive the winter.

9.3.2 Throughout the season, the bees shall be provided with sufficient certified organic feed, better from the same production unit.

9.3.3 When bees are in starvation and can not get feed:

- a. Before August 24, 2002, they can be fed with conventional sugar syrup or molasses.
- b. After August 24, 2002, they can be fed only with organic sugar syrup or molasses.

9.3.4 Artificial feeding may be performed only between the last honey harvest and 15 days before the start of the next nectar or honeydew flow period.

9.4 Prevention / control of disease

9.4.1 The health and welfare of the hive shall be primarily achieved by hygiene and hive management.

9.4.2 Keep strongest hives and destroy weak hives.

9.4.3 Preference is given to phyto-therapeutic and homeopathic treatment in case of disease occur. Where preventative measures fail, veterinary medicinal products may be used provided the following materials or substances can be used to control pest and diseases.

- a. Steam, direct flame and caustic soda for hive disinfection
- b. Lactic, oxalic and acetic

- c. Formic acid
- d. Essential oil
- e. Elemental sulfur
- f. Bacillus Thuringiensis
- g. Menthol to control tracheal mite parasite.

9.4.4 Keep obviously diseased hives in isolation.

9.4.5 Beehives and materials used by seriously infected bees shall be destroyed.

9.4.6 The use of antibiotics or allopathic chemically synthesized medicinal products is prohibited, except when the health of the whole colony is endangered. The treated beehive shall be removed immediately and put into re-conversion, and the bee products of that year cannot be sold as organic.

9.4.7 The operator shall keep records of veterinary medicinal products used (indication of active pharmacological substances involved), together with details of the diagnosis, the dosage, the method of administration, the duration of the treatment, , and the legal withdrawal period.

9.4.8 allopathic chemically synthesized medicinal products are prohibited to use for disease preventing purpose.

9.4.9 It is strictly prohibited to use any veterinary drugs to treat bees during nectar or honeydew flow period.

9.4.10 The practice of destroying the male brood is permitted only to contain infestation with Varroa jacobsoni (mites).

9.5 Beeswax and beehive

9.5.1 Beeswax to be used for organic apiaries shall come from organic bee keeping units. But for apiaries in conversion non-organic beeswax may be used with permission from OFDC in the case that no organic beeswax are available either in the market or from other sources.

9.5.2 Appropriate methods shall be adopted in processing organic beeswax that is intended for organic apiary.

9.5.3 Beeswax of unknown sources is prohibited in organic honey production.

9.5.4 Each beehive shall primarily consist of natural materials such as wood untreated with chemicals. Use of construction materials with potentially toxic effects are prohibited.

9.6 Harvesting/treatment of honey

9.6.1 Chemical bee repellents are prohibited. Bee blower or smoker may be used to remove bees from hives. Acceptable smoking materials should be natural or from materials that meet the requirements of the standards.

9.6.2 Methods for beehive management and honey extraction shall be based on protection and upkeep of bee colonies. It is forbidden to destroy the bee colony after honey extraction.

- 9.6.3 Heat to not more than 47°C/116°F and keep this process as short as possible.
- 9.6.4 Mechanical means are preferred to heating to uncap combs.
- 9.6.5 Gravitational deposition of impurities from the honey is preferred, while filtration with a fine mesh filter is prohibited.
- 9.6.6 The surface of all utensils in contact with honey shall be of anti-corrosive materials such as stainless steel, glass, ceramics, china, or be coated with beeswax or coatings permissible in foodstuff and beverage packaging and then re-coated with beeswax.
- 9.6.7 Honey extraction facility should be bee tight to prevent robbing and the spread of disease.
- 9.6.8 Extracting facilities shall be well lit with facilities to wash down daily with copious amounts of fresh, clean, hot water.
- 9.6.9 Accumulated numbers of bees in extracting area should be allowed to gather and then washed down with water and disposed of or put in a nearby hive.
- 9.6.10 Honey barrels must be of a known origin, washed, and stored inside. If not new, they should have previously been used in food service. Preferably they should be coated with beeswax. Oxidized barrels are prohibited.
- 9.6.11 Floors and walls must be sealed from insects and rodents. Presence of insect pests such as flies in extracting facility will not be permitted.
- 9.6.12 The extracting rooms and packaging rooms shall be properly sealed to prevent intrusion of harmful insects.
- 9.6.13 For pest and parasite control, in addition to the above-described techniques of beeswax coating, only the physical methods such as trapper and electrical insect killer can be used in pest control.
- 9.6.14 The use of chemical agents such as calcium cyanide as fumigant is prohibited.

9.7 Storage of honey, frame, wax, and beehives

- 9.7.1 Finished honey products require stable storage temperature and airtight package so as to avoid deterioration of the honey in quality.
- 9.7.2 Honey can be stored for a maximum of 2 years before sold as organic.
- 9.7.3 Naphthalene (moth balls) is prohibited for the control of wax moths in storage of honey and honey products.

9.8 Rearing of queens and bees

- 9.8.1 Cross breeding of bee families is encouraged.
- 9.8.2 To prevent spreading of diseases, it is encouraged to rear their own queens.
- 9.8.3 Purchase of traditional bee colonies is acceptable but not allowed to exceed 10% of the bee colonies of the whole apiary.
- 9.8.4 Breeding of bees in a selective way is acceptable, but artificial insemination is prohibited.
- 9.8.5 Killing colonies of bees in fall is prohibited.

9.8.6 Wing clipping is not allowed.

9.8.7 The replacement of queen bees involving the killing of the old queen is permitted.

10 Special Crops

10.1 Edible mushrooms

10.1.1 Medium

10.1.1.1 Only materials from organic farm or from certified natural source may be used in the cultivation of edible mushrooms.

10.1.1.2 All supplements like synthetic fertilizers and pesticides are prohibited.

10.1.1.3 Log and spores site coatings used to prevent moisture loss shall be food-grade products. Petroleum-based coatings, latex and oil paints are prohibited.

10.1.2 Spores

Choices of appropriate spores with known sources shall be made. Certified organic spores are preferable if available.

10.1.3 Insects and weed fungi

10.1.3.1 Preventative management shall be adopted such as sanitation, proper airflow and removal of affected blocks.

10.1.3.2 During non-cultivation period dilute chlorine bleach used as a disinfectant is acceptable.

10.1.3.3. Use of physical controls (traps and physical barriers with addition of pheromones or attractants, spray of diatomaceous earth, insecticidal soap solutions and other OFDC-approved natural pesticides), and biological controls (natural predators and parasites) are acceptable for pest control.

10.1.3.4 The use of any synthetic pesticides is prohibited.

10.1.4 Management of cultivation site

A mushroom cultivation site must have a buffer strip above 30m separating the site from the adjoining conventional farm field to avoid agricultural drift. The use of herbicides in or around the site is prohibited.

10.1.5 Water

Only clean water from wells, streams and ponds may be used to soak the wood medium. Use of tap water in urban areas is also acceptable. Contaminated water is prohibited for use.

10.1.6 Handling

Harvesting, storage and shipping procedures that ensure freshness and nutritional quality of the product to a maximum extent are encouraged.

10.2 Tea

10.2.1 Soil management of tea garden

10.2.1.1 Tea trees shall be planted in the area thick in soil layer, and high in bioactivity, with appropriate pH.

10.2.1.2 When a tea garden has a slope of 15-25 degrees, the garden shall be built up into leveled terrace fields in line with the requirements for soil and water conservation.

10.2.1.3 Inter-planting of leguminous green manure crops and/or forage crops between tree rows is encouraged in tea gardens in young age, or cutting back or root pruned.

10.2.1.4 By taking advantage of deep plowing, the prunings and weedings can be incorporated into the soil or just used as mulch around the tree roots so as to ameliorate soil physical and chemical properties and optimize soil bioactivity.

10.2.1.5 In tea gardens with a high vegetation coverage, minimal or non-tillage shall be exercised. Biological means (e.g. earthworms) are encouraged to improve soil structure and fertility.

10.2.1.6 Garden-specific erosion control measures shall be taken. For instance, mulching the rows in-between the tree lines with straws and other plants.

10.2.1.7 The materials listed in Appendix A is allowed to use in fertilization and soil conditioning.

10.2.1.8 The use of chemical-, petroleum- and amino acid-based herbicides, synergists and soil regulators is forbidden in tea gardens.

10.2.2 Disease, pest and weed control in tea garden

10.2.2.1 Tea trees shall be duly picked and pruned.

10.2.2.2 Plant preparations and microbial preparation listed in Appendix B are allowed for use to control pest and diseases.

10.2.2.3 Measures shall be taken to protect and make use of natural predators, and artificial breeding of predators is allowed.

10.2.2.4 When the tea garden is closed in late fall, the restrictive use of limesulfur mixture or Bordeaux solution is allowed to reduce incidence of pest and diseases in the following year. Beware of copper accumulation in the soil and tea leaves, when the latter is applied.

10.2.2.5 If diseases or pests affect the tea garden in large area, the affected branches and leaves shall be cut off, removed and disposed outside the garden or in the area isolated from the other tea trees.

10.2.2.6 Manual and mechanical means shall be adopted timely to weed the gardens.

10.2.2.7 Antagonism between plants may be made use of to control weeds.

10.2.2.8 Chemical herbicides are strictly prohibited.

10.2.3 Tea Processing

10.2.3.1 The processing of organic tea shall abide by the State Law for Foodstuff Hygiene and the standards for food processing.

10.2.3.2 Processing of organic tea shall avoid using timber as main fuel in tea processing.

10.2.3.3 Only physical means and natural fermentation are allowed in tea or tea product processing.

10.2.3.4 If possible only certified flower-based perfume, fruit (lemon) and crop oils are used as supplement in tea processing. When certified organic supplement is not available, natural flower-based perfume and oil are acceptable.

10.2.5 Storage and transportation of organic tea

Besides the basic requirements for storage and transportation of organic products, the following items call for attention:

10.2.5.1 In storage organic tea shall be kept dry, with moisture content tallying with the national standard for export tea. The storehouses for organic tea shall be equipped with dehumidifiers and other dehumidifying materials, which shall be replaced regularly. It is essential to prevent the tea from contacting the dehumidifying materials.

10.2.5.2 Positive measures such as ventilation, airtight sealing, moisture absorption, temperature lowering, and periodical monitoring of moisture content in organic tea shall be adopted.

11 Wild Plants

11.1 Wild Plants to be certified shall be growing in a clearly defined sustainable production system.

11.2 Wild plants shall be collected from an area that has been free from contamination of any prohibited material for the most recent three years.

11.3 If chemically synthetic substances were used in the history, the inspector may ask for residue testing.

11.4 Alongside busy roads or in the vicinity of possible pollution sources, a wide enough buffer zone shall be set up.

11.5 The quantities of wild plants harvested or gathered shall not bring about adverse effect on the environment or endanger wild species (plant, fungal or animal species, including those not directly exploited) in the region, or exceed the yield of the sustainable ecosystem.

11.6 The operator who manages the harvesting or gathering of common resource products shall be familiar with the defined collecting or harvesting area.

11.7 The administrator of wild plant collection shall submit a detailed plan for management of the collection to OFDC.

12 Aquaculture

12.1 Conversion

12.1.1 Organic aquatic production units should have an appropriate distance from contamination sources and conventional aquaculture, so as to prevent pollution from outside of the system.

12.1.2 All the related requirements in the organic animal production part of this standard should also be complied. (Include the conversion period, the split and parallel production, the maintenance of the organic management system, the source, breed and breeding of animals, the nutrition, the medicine use, as well as the transportation and slaughtering.)

12.1.3 The conversion period of the production unit shall be at least one year.

12.1.4 Operators shall ensure that conversion to organic aquaculture addresses environmental factors, and past use of the site with respect to waste, sediments and water quality.

12.1.5 The quality of the water used in the operation and the quality of water resource shall be in compliance with the national water quality standard for fishery (GB/T11607-89).

12.2 Aquatic ecosystems

12.2.1 Organic aquaculture management should maintains the biodiversity of natural aquatic ecosystems, the health of the aquatic environment, and the quality of surrounding aquatic and terrestrial ecosystem.

12.2.2 Organic aquatic production should maintain the aquatic environment and surrounding aquatic and terrestrial ecosystem, by using a combination of production practices that:

- a. encourage and enhance biological cycles;
- b. utilize preventive, system based methods for disease control;
- c. provides for biodiversity through polyculture and maintenance of riparian buffers with adequate plant cover.

12.2.3 Aquatic ecosystems shall be managed to maintain and improve landscape and enhance biodiversity quality. Clearing of primary ecosystems is prohibited.

12.2.4 Operators shall take adequate measures to prevent escapes of introduced, or cultivated species and document any that are known to occur.

12.2.5 Operators shall take verifiable and effective measures to minimize the release of nutrients and waste into the aquatic ecosystem.

12.2.6 Fertilizers and pesticides are prohibited unless they appear in Appendices A and B.

12.2.7 No any kind of GMO technology and products should be allowed to use in organic aquaculture.

12.3 Aquatic plants

12.3.1 Organic aquatic plants are grown and harvested sustainably without adverse impacts on natural areas. The act of collection should not negatively affect any natural areas.

12.3.2 Aquatic plant production shall comply with the relevant requirements on ecology and cultivation of this standard.

12.3.3 Harvest of aquatic plants shall not disrupt the ecosystem or degrade the collection area or the surrounding aquatic and terrestrial environment.

12.4 Aquatic animal breeds and breeding

12.4.1 Animals shall be raised organically from birth. If organic animals are not available, brought-in conventional animals shall spend not less than two thirds of their life span in the organic system.

12.4.2 Breeds should be locally adapted and regionally established. For the species that may be reproduced by the farm itself the introduction of non-organic sourced animals must be replaced soonest by the organic ones bred within the farm. For the species that may not be reproduced by the farm itself non-organic animals may only be introduced with no organic animals are available in the same region.

12.4.3 Aquatic animal husbandry should not be dependent on conventional raising systems.

12.4.4 Aquatic animals should be reproduced and bred by natural methods. Artificially polyploid organisms shall not be used.

12.5 Aquatic animal nutrition

12.5.1 Organic aquatic animals should receive their nutritional needs from good quality, organic and other sustainable sources.

12.5.2 Operators should design feed rations to supply most of the nutritional needs of the animal from organic plants and animals appropriate for the digestive system and metabolism of the species.

12.5.3 At least 30% of the ingredients of the feed brought into the operation at annual basis should be organic certified. (No less than 50% after December 31 of 2010).

12.5.4 The biological diversity of areas that are managed and adequate representation of naturally-occurring organisms should be maintained.

12.5.5 Good quality balanced diets should be designed according to the physiological needs of the organism. Animals should be fed according to their natural feeding behavior. Animals should be fed efficiently with minimum losses to the environment.

12.5.6 Systems should be designed so that the production area comprises the entire food chain with minimal reliance on outside inputs.

12.5.7 Animals shall be fed organic feed. A limited percentage of non-organic feed under specific conditions for a limited time may be fed in the following cases:

- a. organic feed is of inadequate quantity or quality;
- b. areas where organic aquaculture is in early stages of development.

12.5.8 In no case may the percentage of non-organic feed of agricultural origin exceed 5% dry matter calculated on an annual basis. While in unpredicted cases the rate may be increased to 15% with the permission of OFDC in advance.

12.5.9 Non-organic aquatic animal protein and oil sources may be used provided they:

- a. are harvested from independently verified sustainable sources;
- b. are verified to have contamination levels below limits established by the standard-setting body, and
- c. do not exceed 70% of the diet. (50% after December 31 of 2010)

At least 50% of the non-organic aquatic animal protein and oil brought into the operation should from sources not suitable for direct human consumption. In unpredictable cases the rate may be reduced to 30% with the permission of OFDC in advance.

12.5.10 Use of the following materials in diet is prohibited:

- a. slaughter products of the same species;
- b. all types of excrements including droppings, dung or other manure;
- c. feed subjected to solvent extraction (e.g. hexane) or the addition of other chemical agents;
- d. amino-acid isolates;
- e. urea and other synthetic nitrogen compounds;
- f. synthetic growth promoters or stimulants;
- g. synthetic appetizers;
- h. preservatives, except when used as a processing aid;
- i. artificial coloring agents.

12.5.11 Animals may be fed vitamins, trace elements and supplements from natural sources. Synthetic vitamins, minerals and supplements may be used when natural sources are not available in sufficient quantity and quality.

12.6 Aquatic animal health and welfare

12.6.1 Organic management practices should promote and maintain the health and well-being of animals through balanced organic nutrition, stress-free living conditions appropriate to the species and breed selection for resistance to diseases, parasites and infections.

12.6.2 The cause of outbreaks of disease or infection should be identified. Management practices, including criteria for choosing a site that can diminish causative events and future outbreaks of disease should be implemented.

12.6.3 Natural methods and medicines should be used as the first choice, when treatment is necessary.

12.6.4 Relevant requirements of section 8.6 of this standard shall be complied.

12.6.5 Prophylactic use of veterinary drugs is prohibited.

12.6.6 Use of chemical allopathic veterinary drugs and antibiotics is prohibited for invertebrates.

12.6.7 Synthetic hormones and growth regulators are prohibited for use to stimulate or suppress natural growth or reproduction of animals.

12.6.8 Stocking densities should not compromise animal welfare.

12.6.9 Water quality, stocking densities, health, and behavior of each cohort (school) and shall be routinely monitored. The operation should be well managed so as to maintain water quality, animal health, and natural behavior.

12.7 Aquatic animal transport and slaughter

12.7.1 Organic animals are subjected to minimum stress during transport and slaughter. A person specifically responsible for the well being of the animals should be present during transport. To avoid unnecessary suffering, organisms should be in a state of unconsciousness before slaughter.

12.7.2 Relevant requirements of section 8.9 of this standard should be complied with.

12.7.3 The live organisms should be handled in ways that are compatible with their physiological requirements.

12.7.4 Defined measures shall be implemented to ensure that organic aquatic animals are provided with conditions during transportation and slaughter that meet animal specific needs and minimize the adverse effects of:

- a. diminishing water quality;
- b. time spent in transport;
- c. stocking density;
- d. toxic substances;
- e. escape.

12.7.5 Aquatic vertebrates shall be stunned before killing. Equipment used to stun animals shall be ensured to be sufficient to remove sensate ability and/or kill the organism and is maintained and monitored.

12.7.6 Animals shall be handled, transported and slaughtered in a way that minimizes stress and suffering, and respects species-specific needs.

13 Textile

13.1 Production of raw materials

The production of textile raw materials must meet the requirements for the production of organic crops.

13.1.1 Mulberry cultivation

Organic mulberry gardens should be located far away from fluorine-emitting plants and other pollution sources. Contaminated mulberry leaves make cocoons non-organic.

13.1.2 Silkworm rearing

13.1.2.1 Healthy disease-resistant species of silkworms are to be selected. It is prohibited to use genetic engineering related silkworm eggs.

13.1.2.2 Mulberry leaves must be gathered from certified organic mulberry gardens.

13.1.2.3 Silkworm houses shall be located at sites dry, high in topography, close to mulberry gardens, and have good aeration and lighting facilities.

13.1.2.4 For sterilization, physical means can be used, such as boiling or steaming tools, exposing the room to sunlight, etc. It is acceptable to use bleach and lime, but they must be cleaned.

13.1.2.5 Containers for carrying mulberry leaves shall be separated from those holding silkworm droppings.

13.1.2.6 It is forbidden to use growth stimulant in silkworm rearing.

13.1.2.7 Adequate supply of mulberry leaves and adequate living space for silkworms shall be ensured.

13.1.2.8 Prevention/control of diseases

- a. Regularly checks of silkworms shall be performed, keeping physically strong ones and kicking out the weak and those late in dormancy.
- b. It is permitted to add disease control substances of biological sources, such as mashed garlic, into mulberry leaves.
- c. When a certain disease infects silkworms in a large scale, the sick shall be removed duly and put into an isolated area for medication.
- d. It is prohibited to use any synthetic drugs, unless health of the worms is under serious threat. Cocoons from those medicated worms may not be sold as organic.

13.1.2.9 Silkworm cocoons shall be sorted and dried duly. It is prohibited to mix cocoons of different grades. The lower grade of cocoons can not be used as raw material for organic silk.

13.2 Processing

13.2.1 Raw materials

13.2.1.1 Organic textile shall be manufactured from 100% organic raw material.

13.2.1.2 In processing raw material into fiber, efforts shall be made to minimize its adverse effect on the environment.

13.2.1.3 Raw materials used as aid in weaving and eventually disposed as waste shall not render any hazard to the environment and mankind.

13.2.1.4 Pentachlorobenzene acid, tetrachlorophenol and polychlorodiphenyl are prohibited as ingredient in any formula of raw materials.

13.2.2 Environmental requirements

13.2.2.1 All textile-processing plants should have established their own environment quality management systems.

13.2.2.2 The processing of textile shall adopt optimal technologies and minimize its impact on the environment.

13.2.2.3 The processing shall not use any substances harmful to the human beings and environment. Any agents to be used shall not contain any carcinogenic, mutagenic and deformative substances or toxicity LD₅₀ less than 2000mg/kg to mammals.

13.2.2.4 It is forbidden to use the substances known to be ease to accumulate and hard to degrade in organisms.

13.2.2.5 Textile processing shall minimize energy consumption and utilize as much regenerable energy as possible.

13.2.2.6 Where separation of organic processing from conventional one would lead to substantial environmental or economic disadvantage, and where there is no risk of the possible contact of an organic product with recycled fluids that have been previously used for conventional production (mercerising, sizing, rinsing etc.), it is permitted to have organic and conventional textiles share the same equipment or process. However, the processor must ensure that the organic textile is not contaminated.

13.2.2.7 The processor shall take effective measures to treat their wastewater and keep it up to the Emission Standards for Wastewater from Textile Dyeing and Finishing Industry (GB4287-92).

13.2.2.8 In the year the first certificate is acquired, the processor should work out a plan for better environment management in production.

13.2.2.9 Surface activating agents used in boiling cocoons or washing wool should be something easy to biodegrade, and the processor should have a matching wastewater treatment installation.

13.2.2.10 The waste slurry shall eventually degrade or at least 80% of it can enter into recycling.

13.2.2.11 In the polishing technological process, it is allowed to use sodium hydroxide or some other alkaline materials, which should be recycled to the utmost.

13.2.2.12 Lubricant oil used in spinning and weaving should be something easy to degrade or something extracted from plants.

13.2.3 Printing and dyeing

13.2.3.1 Dyestuff of biological or botanic origin shall be used if available.

13.2.3.2 Whenever it is possible, heavy-metal-containing mineral dyes shall be excluded. In printing and dyeing only natural thickenings can be used.

13.2.3.3 Only softeners easy to biodegrade are acceptable.

13.2.3.4 To clean printing and dyeing equipment, only cleaning agents that do not contain substances that will form organic haloid compounds may be used.

13.2.3.5 Heavy metal contents in dyestuff are not allowed to exceed the following limits (mg/kg).

Heavy metal	Limit	Heavy metal	Limit	Heavy metal	Limit
Stibium	50	Arsenic	50	Barium	100
Lead	100	Cadmium	20	Chromium	100
Iron	2500	Copper	250	Manganese	1000
Nickel	200	Mercury	4	Selenium	20
Silver	100	Zinc	1500	Tin	250

13.2.4 Technological requirements of finished products

13.2.4.1 Materials of accessories (e.g. lining, adorning, button, zipper, seam, etc.) used shall not render any detrimental effect on the environment. Natural materials are preferred.

13.2.4.2 The finishing process (sand-washing, water-washing, etc) may not use aids hazardous to human bodies and the environment.

14. Storage and Transport

14.1 Storage

14.1.1 In storage, OFDC certified products shall not be subjected to contamination of other materials. It is essential to ensure integrity of the organic products.

14.1.2 Warehouses for OFDC certified organic products shall be kept clean and free of harmful insects and residues of any hazardous materials, and have not been treated with any prohibited materials or substances in the past week.

14.1.3 Besides storage at ambient temperature, the following special conditions of storage are permitted:

- a. Controlled atmosphere
- b. Temperature control
- c. Drying
- d. Humidity regulation

14.1.4 OFDC certified organic products should be stored in organic warehouses. If conditions are not available, a special place should be demarcated in the warehouse for organic products, which shall be packaged and labeled to ensure that they are not mixed up with non-organic ones.

14.1.5 The warehouse should establish a complete file of records covering ins and outs of products with related bills and receipts attached.

14.2 Transport

14.2.1 Transport tools shall be washed clean before handling organic products.

14.2.2 During transportation, organic products shall be kept free from mingling with conventional products and contaminants.

14.2.3 In handling organic products, care shall be taken not to blur or damage the organic logo and related instructions on the package.

14.2.4 A complete file of records shall be kept to cover all the loading, unloading and transporting process with related bills and receipts attached.

15 Packaging and Labeling

15.1 Packaging

15.1.1 It is encouraged to use packaging materials made of wood, bamboo, stems and leaves of plants, and paper. Other packaging materials that are in consistency with hygiene requirements are also acceptable.

15.1.2 Package of organic products shall be simple and practical. Excessive packaging should be avoided. Recycling of packaging materials shall be taken into consideration.

15.1.3 Carbon dioxide and nitrogen are acceptable packing stuff.

15.1.4 Packaging material shall not contaminate organic food.

15.1.5 Packaging materials, and storage containers, or bins that contain a synthetic fungicide, preservative, or fumigant are prohibited .

15.1.6 Organic produce shall not be packaged in reused bags or containers that have been in contact with any substance likely to compromise the organic integrity of product or ingredient placed in those containers .

15.2 Labeling

15.2.1 OFDC organic certification logo is a registered certification trademark and can only be used on OFDC-certified organic products.

15.2.2 If a product has not less than 95% of its ingredients OFDC certified, and is processed and packaged in an OFDC certified processor, it may be labeled as “organic” and bear OFDC logo.

If a product has less than 95% (but not less than 70%) of its ingredients OFDC certified, it may be labeled as “made with organic ingredient” or similar indications, and shall indicate in its label the names and proportions of the certified ingredients, but may not be labeled as “organic” and use OFDC logo.

If a product has less than 70% of the ingredients OFDC certified, it may not be labeled as “organic” or “made with organic ingredient”. The organic ingredients may be labeled as “organic” in the ingredient list and percentage of the ingredient shall be indicated.

15.2.3 A multi-ingredient product shall have on its outer package a printed list of the names and proportions of ingredients, certified or not, in a decreasing order.

15.2.4 OFDC certified organic-in-conversion produces may bear OFDC logo for organic-in-conversion. The name and address of the producer or processor, organic certificate code and the production date shall appear on the panel of the package.

15.2.5 On the outer package of a product, words shall be printed indicating the name and address of the producer or processor, code of the organic certificate, production date and lot number.

15.2.6 Products prepared from wild raw materials complete in compliance with the requirements shall be clearly labeled as “Wild” or “Nature”.

15.2.7 On the tag of the animal companion food it shall be clearly indicate what species of animal and what use this product fit and whether it is adequate in nutrient.

15.2.8 Labels on the product shall not mislead consumers. Organic products shall not be labeled as GMO-free. Any reference to genetic engineering on product labels shall be limited to the production and processing methods themselves having not used GMOs.

15.2.9 The ink used to print the logo or instruction on the outer package of products should not be toxic and pungent.

15.2.10 The OFDC logo, when printed, can be larger or smaller, but must be kept true to its shape and color.

16 Social Justice

16.1 Operators shall have a policy on social justice.

Operators who hire fewer than ten (10) persons for labor may not be required to have such a policy, but shall abide by the following standards.

16.1 An certified operation must comply with the Labour Act of People's Republic of China, protecting all legal rights of its employees, and accepting supervision of official labour services and labour unions at all levels.

16.2 An operation that is based on violation of basic human rights (in cases of clear social injustice) cannot be certified.

16.3 Standards shall require that operators not use forced or involuntary labor.

16.4 Employees and contractors of organic operations have the freedom to associate, the right to organize and the right to bargain collectively.

16.5 Operators shall provide their employees and contractors equal opportunity and treatment, and shall not act in a discriminatory way.

16.6 Children labour shall not be employed, labours employed by organic operators that are under 18 years old shall be provided with educational opportunities.

17 Certification Decision

17.1 Types of certification decision

OFDC Certification Management Department is responsible for the preview of the inspection report. OFDC Certification Committee shall review the inspection reports and related materials supplied by applicants and make a decision on certification, according to the Standards and related procedures. Generally the decisions will be one of the following:

17.1.1 Certification granted

The applicant has already passed conversion, and implemented improvement requirements OFDC Certification Committee raised, and the applicant's production/processing/trading is proved to be all up to the OFDC standards. Therefore, the application can be granted "OFDC Certificate for Organic Farm" and/or "OFDC Certificate for Organic Processing" and/or "OFDC Certificate for Organic Trade". The product covered by the certification application can then be sold as organic.

17.1.2 Conditional certification

The applicant still has something to be improved in his/her production and/or quality control. Only when the applicant has met all the requirements OFDC Certification Committee raised and notified the OFDC Certification Committee in written form that recognized by the Committee, can he/she get the certificate.

17.1.3 Certification denied

The applicant has certain major production links and/or quality control measures falling far below the OFDC Organic Certification Standards. As a result, he/she can not get certified by OFDC. In this case the Certification Committee will send a written notification to the applicant, explaining the causes. The applicant must go on with organic conversion and adopt rectification measures so as to bring the operation and quality control completely up to the Standards. Only by so doing, can he/she reapply for certification.

17.1.4 Organic in conversion certification or verification

If an applicant already began organic conversion in line with the Standards for at least 12 months on his/her farm that had been applied with prohibited material before, and intends to go on with organic farming, he/she may be issued an OFDC Organic in Conversion Certificate. And the products from his/her farm may be sold as organic-in-conversion. The applicant may be issued an OFDC Organic in Conversion Verification in case of less than 12 months conversion; the products from his/her farm cannot be sold as organic in conversion.

17.2 Certificate cancellation

In the following cases, the OFDC Certification Committee shall be obliged to cancel the certificate it issued.

17.2.1 An operation was found to have incomplete production and sales records and has made no improvement.

17.2.2 In processing, the organic product was contaminated by chemical substances, or

treated with radiation or fumigation by prohibited substances, or residues of prohibited materials have been detected in the finished product.

17.2.3 The producer fails to take countermeasures when such problems occur as poor crop quality, decreasing soil fertility, soil erosion, etc.

17.2.4 The certificate was acquired by providing false information to the inspector or the certification committee or by other inappropriate means.

17.2.5 The operator is found in violation of the OFDC regulations for logo use.

17.2.6 The operator fails to pay OFDC stipulated fees or charges related to inspection, certification or use of the logo.

18 Appealing and Complaining

18.1 Appealing

18.1.1 Applicants may appeal to OFDC Quality Management Department where

- a An operator's application is not accepted and handled, though the material the applicant has handed in consists with requirements for application; or
- b An operator disagrees to the decision OFDC has made concerning certification.

18.1.2 Appeals shall be made in written form with clearly indicated requests, reasons and necessary evidence.

18.1.3 OFDC Quality Management Department shall carry out investigations to obtain evidence for verification and pass the result of the investigation to OFDC Certification Committee for making decision.

18.1.4 The party responsible is to pay all the expenses in handling the appeal according to actual costs involved.

18.2 Complaining

18.2.1 Applicants may make complaints to OFDC Quality Management Department where

- a An applicant has opinions against the behaviors of certain OFDC employees or inspectors; or
- b OFDC charge is thought unreasonable; or
- c An enterprise or an individual uses OFDC organic logo in a wrong way or without authorization, or conducts propaganda that is not true to the fact about OFDC or something related to OFDC; or
- d Any other issues except certification.

18.2.2 The complaint shall be in written complaints with clearly indicated reasons and necessary evidence.

18.2.3 OFDC Quality Management Department shall carry out investigations to obtain evidence for verification and pass the result of the investigation to the OFDC Internal Control Body for making decision.

18.2.4 The party responsible is to pay all the expenses in handling the complaint according to actual costs involved.

19 Revision of the Standards

19.1 OFDC is supposed to convene at least one meeting every two years to discuss the standards. Members of the OFDC Standards Committee, OFDC-certified organic producers/processors/traders, experts in the field of organic farming consultation, agriculture, processing, eco-environment protection, etc. are invited to the meeting to make overall revision to the standards. Except the above-mentioned revision, the Standards can also be modified in some of its sections when necessary.

19.2 Any one can propose an alteration of the standards, but must present a written proposal with reasons.

19.3 The OFDC Standards Committee assumes the responsibility of working out a standards draft.

19.4 The OFDC Standards Committee convenes meetings to discuss the draft or solicits for opinions and comments through various approaches on the draft.

19.5 The OFDC Standards Committee decides the final draft at the meeting or by procedure in writing.

19.6 Only when two-thirds or above of the members of the Committee vote for a certain amended or new clause, can it pass.

19.7 Once the new Standards has passed by the committee, it should be distributed to organic certificate holders within 30 days.

18.8 Three months after the new Standards is promulgated, all the applicants must observe it. When the Standards Committee thinks that the amended clause should be enforced immediately, the three months of transient period can be shortened. When important changes occur, the Standards Committee may set an enforcement schedule for the new Standards that may extend the transient period.

Annex A

Fertilizers and soil conditioners permitted for use in organic crop production

A.1 Fertilizers and soil conditioners permitted for use in organic crop production

Type	Name, composition and requirements	Conditions for use
	Crop straws and green manure	
	Livestock and poultry excrements and composts derived from (including composted farmyard manure)	
	Straws	completely composted with animal excrements
	Livestock and poultry excrements and composts derived from	Complying with the requirements for composts
	Dried farmyard manure and dehydrated livestock and poultry excrements	Complying with the requirements for composts
	Seaweeds and physically produced seaweed products	Not be chemically treated
	Woods, bark, sawdust, wood chips, paring, wood ash, charcoal and humus materials which are not chemically treated.	As covering materials for soil or after composted
	Meats, bones, hair and skin products not adulterated with preservatives	After composted or fermented
	Mushroom culture wastes and earthworm culture substrates composted	Complying with the requirements for composts
	By-products of food industry without synthetic additives	After composted or fermented
	Straw ash	
	Peat without synthetic additives	Prohibited using as soil amendment; only as substrates for potted plant
	Seed cake	Not chemically processed
	Fish meal	No chemically synthesized materials added
	Phosphate rock	Natural or physically produced. Cadmium content less than or equal to 90 mg/kg of P ₂ O ₅
	Potassium rock powder	Natural or physically obtained, and can not be chemically condensed. Chloride content less than 60%
	Borate rock	
	Trace elements	Natural materials or

	materials not chemically treated, no chemically synthesized materials added.
Magnesium rock powder	Natural materials or materials not chemically treated, no chemically synthesized materials added.
Natural sulfur	
Limestone, gypsum and chalk	Natural materials or materials not chemically treated, no chemically synthesized materials added.
clays (e.g. perlite, vermiculite, etc)	Natural materials or materials not chemically treated, no chemically synthesized materials added.
Calcium chloride and sodium chloride	
Basic slag	No chemically treated, no chemically synthesized materials added.
Calcium and magnesium ameliorants	
Hydrated Sulphate	
Biodegradable processing by-products of microbial origin, e.g. by-products of brewery or distillery processing.	
microbiological preparations based on naturally occurring organisms	

A.2 Sanitary requirements for non-hazardous treatment of night soil

A.2.1 sanitary requirements for high temperature compost (source: GB7959-87 Sanitary standard for the non-hazardous treatment of night soil)

Code	Parameter	Sanitary requirements
1	Fermentation temperature	Maximum temperature was maintained at 50~55°C for 5 to 7 days
2	Death rate of ascarid	95 to 100%
3	Coliform	10-1 to 10-2
4	Flies	Fly breeding is controlled effectively that no live maggot, pupa, or newly born flies exist around the compost.

A.2.2 sanitary requirements for marsh gas fermentation

Code	Parameter	Sanitary requirements
1	Airproof storage duration	Above 30 days
2	Fermentation temperature	53 ± 2°C maintained at list 2 days
3	Deposition rate of helminth egg	Above 95%
4	Schistosome egg and hookworm egg	Live eggs may not be observed in the night soil used.
5	Coliform	10-1 for normal temperature marsh gas fermentation, 10-1~10-2 for high temperature marsh gas fermentation
6	Mosquito, flies	Mosquito and flies are controlled effectively that no live maggot, pupa, or newly born flies exist around the compost.
7	Marsh gas residue	

Annex B

Plant protection products and measures permitted for use in organic crop production

Name	Name, composition and requirements	Conditions for use
I. Plant or animal origin	Azadirachtin extracts (neem) and its preparation	
	Natural pyrethrum preparation extracted from <i>Chrysanthemum cinerariaefolium</i>	
	Quassia extracted from <i>Quassia amara</i>	
	Preparations of Rotenone from <i>Derris elliptica</i> , <i>Lonchocarpus</i> , <i>Thephrosia spp.</i>	
	<i>Sophora flavescens</i> Ait and products derived from	
	Plant oils and emulsion	
	Plant preparations	
	Repellent of plant origin (e.g. mint, lavender)	
	Natural seducers and nematocides (e.g. marigold, maidenhair)	
	Natural acids (edible vinegar, wood vinegar and bamboo vinegar, etc)	
	Extracts from mushroom	
	Milk and dairy	
	Bee wax	
	Propolis	
	Gelatine	
Lecithin		
II. Mineral origin	Copper salt (copper sulphate, copper hydroxide, copper oxychloride, copper caprylic acid)	Can not pollute the soil, max 8 kg/ha per year (on a rolling average basis)
	Lime sulfur (calcium polysulfide)	
	Bordeaux liquid	
	Lime	
	Sulfur	
	Potassium permanganate	
	Potassium bicarbonate	
	Sodium bicarbonate	
	Light mineral oil (wax oil)	
	Calcium chloride	
	Diatomaceous earth	
	Clay (e.g. bentonite, pearlite, vermiculite, zeolite, etc.)	
III. Microbial origin	Fungi and fungal preparations, such as <i>beauveria bassiana</i> , <i>Verticillium</i>	
	Bacterial and bacterial preparations, such as <i>Bacillus thuringiensis</i> , Bt	
	Release of parasites, predators and sterilized	

	insects	
	Virus and viral preparations (e.g. granulosis virus)	
IV. Others	Calcium hydroxide	
	Carbon dioxide	
	Ethyl alcohol	
	Salt and brine	
	Soda	
	Soft soap (e.g. fatty acid potassium salt)	
	Sulfur dioxide	
V. Traps, barriers or dispensers	Physical measures (color traps, mechanical traps)	
	Covers (net)	
	Insect pheromones	only in traps and dispensers

Annex C

Criteria to Evaluate Additional Inputs to Organic Agriculture

Appendices A & B look at products for fertilisation and plant pest and disease control in organic agriculture. Appendix C outlines the procedure to evaluate other inputs into organic production.

The following checklist should be used for amending the permitted substance list for fertilisation and soil conditioning purposes:

- The material is essential for achieving or maintaining soil fertility or to fulfil specific nutrient requirements, for specific soil-conditioning and rotation purposes which cannot be satisfied by the practises outlined in Chapter 6 or of other products included in Appendix A.

and

- The ingredients are of plant, animal, microbial or mineral origin which may undergo the following processes:
 - physical (mechanical, thermal)
 - enzymatic
 - microbial (composting, digestion)

and

- Their use does not result in, or contribute to, unacceptable effects on, or contamination of, the environment, including soil organisms

and

- Their use has no unacceptable effect on the quality and safety of the final product.

The following checklist should be used for amending the permitted substance list for the purpose of plant disease or pest and weed control:

- The material is essential for the control of a harmful organism or a particular disease for which other biological, physical or plant breeding alternatives and/or effective management techniques are not available

and

- The substances (active compound) should be plant, animal, microbial or mineral origin which may undergo the following processes:
 - physical
 - enzymatic
 - microbial

and

- Their use does not result in, or contribute to, unacceptable effects on, or contamination of, the environment.
- Nature identical products such as pheromones, which are chemically synthesised

may be considered if the products are not available in sufficient quantities in their natural form, provided that the conditions for their use do not directly or indirectly contribute to contamination of the environment or the product.

Introduction

Inputs should be evaluated regularly and weighed against alternatives. This process of regular evaluation should result in organic production becoming ever more friendly to humans, animals, the environment and the ecosystem.

The following criteria should be used for evaluation of additional inputs to organic agriculture.

C.1. Necessity

Each input must be necessary. Arguments to prove the necessity of an input may be drawn from such criteria as yield, product quality, environmental safety, ecological protection, landscape, human and animal welfare.

The use of an input may be restricted to:

- Specific crops (especially perennial crops)
- Specific regions
- Specific conditions under which the input may be used

C.2. Nature and Way of Production

Nature

The origin of the input should usually be (in order of preference):

- Organic - vegetative, animal, microbial
- Mineral

Non-natural products which are chemically synthesised and identical to natural products may be used.

When there is any choice, renewable inputs are preferred. The next best choice is inputs of mineral origin and the third choice is inputs which are chemically identical to natural products. There may be ecological, technical or economic arguments to take into consideration in the allowance of chemically identical inputs.

Way of Production

The ingredients of the inputs may undergo the following processes:

- Mechanical
- Physical
- Enzymatic
- Action of micro-organisms
- Chemical (as an exception and restricted)

Collection

The collection of the raw materials comprising the input must not affect the stability of

the natural habitat nor affect the maintenance of any species within the collection area.

C.3. Environment

Environmental Safety

The input must not be harmful or have a lasting negative impact on the environment. Nor should the input give rise to unacceptable pollution of surface or ground water, air or soil. All stages during processing, use and breakdown must be evaluated.

The following characteristics of the input must be taken into account:

Degradability

All inputs must be degradable to CO₂, H₂O, and/or to their mineral form.

Inputs with a high acute toxicity to non-target organisms should have a maximum half-life of five days.

Natural substances used as inputs which are not considered toxic do not need to be degradable within a limited time.

Acute toxicity to non-target organisms

When inputs have a relatively high acute toxicity for non-target organisms, restrictions for their use is needed. Measures have to be taken to guarantee the survival of these non-target organisms. Maximum amounts allowed for application may be set. When it is not possible to take adequate measures, the use of the input must not be allowed.

Long-term chronic toxicity

Inputs which accumulate in organisms or systems of organisms and inputs which have, or are suspected of having, mutagenic or carcinogenic properties must not be used. If there are any risks, sufficient measures have to be taken to reduce any risk to an acceptable level and to prevent long lasting negative environmental effects.

Chemically synthesised products and heavy metals

Inputs should not contain harmful amounts of man made chemicals (xenobiotic products). Chemically synthesised products may be accepted only if nature identical.

Mineral inputs should contain as few heavy metals as possible. Due to the lack of any alternative, and long-standing, traditional use in organic agriculture, copper and copper salts are an exception for the time being. The use of copper in any form in organic agriculture must be seen, however, as temporary and use must be restricted with regard to environmental impact.

C.4. Human Health and Quality

Human Health

Inputs must not be harmful to human health. All stages during processing, use and degradation must be taken into account. Measures must be taken to reduce any risks and standards set for inputs used in organic production.

Product quality

Inputs must not have negative effects on the quality of the product - e.g. taste, keeping quality, visual quality.

C.5. Ethical Aspects - Animal Welfare

Inputs must not have a negative influence on the natural behaviour or physical functioning of animals kept at the farm.

C.6. Socio-Economic Aspects

Consumers' perception: Inputs should not meet resistance or opposition of consumers of organic products. An input might be considered by consumers to be unsafe to the environment or human health, although this has not been scientifically proven. Inputs should not interfere with a general feeling or opinion about what is natural or organic - e.g. genetic engineering

Annex D

Products permitted or restricted for use as feed additives in animal husbandry

Materials	Conditions for use
Shell meal	
Sea weeds	
Lime stone	
Dolomite	
Marl	
Magnesium oxide	
Green sand	
Selenium	Injection or take-up based on recommended dose
Germinated grains	
Fish liver oil	
Synthetic vitamins and trace element	Restricted for use in case of long winters, mountainous zones, poor forage due to bad weather or for nutritional needs of the animal that cannot be met otherwise. This will be determined by OFDC Certification Committee on a case-by-case basis.
Sea salt	
Crude rock salt	
Whey	
Sugar	
Sugar beet pulp	
Flour	
Syrup	
Enzymes	
Yeasts	
Lactic, acetic, formic and propionic bacteria	For fermentation of fodder
Formic acid, acetic acid, lactic acid, propionic acid	Used only when the weather conditions are not good enough for fermentation

Annex E

Requirements for drinking water quality for organic livestock and poultry production and disinfectors permitted for use in organic animal husbandry

E.1 Drinking water quality for livestock and poultry

		Indicator value	
		Livestock	Poultry
	Chrome (°) ≤	Less than 30°	
	Turbidity (°) ≤	Less than 20°	
	Odor and smell ≤	No peculiar smell and odor	
	Macroscopic objects ≤	Should not contain these objects	
	Total hardness (by CaCO ₃) (mg / L) ≤	1500	
	pH ≤	5.5~9	6.8~8.0
	Total content of dissolved solids (mg/L) ≤	4000	2000
	Chloride (by Cl ⁻) (mg/L) ≤	1000	250
	Sulfate (by SO ₄ ²⁻) (mg/L) ≤	500	250
	Bacteriological index	Total Coliform amounts /100mL ≤	10 in the case of adult livestock, 1 in the case of young livestock and poultry
	Fluoride (by F ⁻) (mg/L) ≤	2.0	2.0
	Cyanide (mg/L) ≤	0.2	0.05
	Total arsenic (mg / L) ≤	0.2	0.2
	Total mercury (mg/L) ≤	0.01	0.001
	Lead (mg/L) ≤	0.1	0.1
	Chromium (Cr ⁶⁺) (mg / L) ≤	0.1	0.05
	Cadmium (mg / L) ≤	0.05	0.01
	Nitrate (by N) (mg / L) ≤	30	30
	Malathion (mg / L) ≤	0.25	
	Demeton (mg / L) ≤	0.03	
	Parathion-methyl (mg / L) ≤	0.02	
	Parathion (mg / L) ≤	0.003	
	Dimethoate (mg / L) ≤	0.08	
	Lindane (mg / L) ≤	0.004	
	Chlorothalonil (mg / L) ≤	0.01	
	Carbaryl (mg / L) ≤	0.05	
2,4-D (mg / L) ≤	0.1		

E.2 Disinfectors permitted for use in organic husbandry

Name	Conditions for use
Soft soap	
Water and steam	
Milk of lime	
Lime	
Sodium hypochlorite	
Sodium hydroxide	
Potassium hydroxide	
Hydrogen peroxide	
Natural plant essence	
Citric acid	
Peracetic Acid	
Formic acid	
Lactic acid	
Oxalic acid	
Acetic acid	
Alcohol	

Annex F

Ingredients of non agricultural origin and processing aids permitted for use in organic food processing

F.1 Non agricultural origin additives and processing aids

Serial number	Substance	Note	Int'l Numbering System
1	Agar	Thickening agent, used in various kinds of food.	406
2	Arabic gum	Thickening agent, used in beverage, chocolate, ice cream, and fruit jam.	414
3	Calcium carbonate	Puffing agent, food additives and processing aids, used in flour, at 30 mg/kg ^{a)}	170
4	Calcium chloride	Coagulation agent, used in soybean products.	509
5	Calcium hydroxide	Food additives for maize flour and processing aids used in sugar.	526
6	Calcium sulphate (natural)	Stabilizer, coagulation agent used in flour and soybean products.	516
7	Activated carbon	Processing aids	
8	Carbon dioxide	Preservative and processing aids that shall come from non-petrol products. Used in carbonic acid beverage and gas alcohol.	290
9	Citric acid	pH adjustment agents that shall be carbohydrate products fermented by microorganism. Used in all kinds of food.	330
10	Bentonite	Clarifying or filtrating aids	
11	Kaolin	Clarifying or filtrating aids	559
12	Diatomite	Filtrating aids	
13	Ethanol	Solvent	
14	Lactic acid	pH adjustment shall not come from GMO organisms. Used in all kinds of food.	270
15	Magnesium chloride (natural)	Stabilizer and coagulation agent, used in soybean products.	
16	Malic acid	pH adjustment that shall not be GMO organisms. Used in all kinds of food.	296
17	Nitrogen	Food preservation, with only non-petrol origin products allowed.	941
18	Perlite	Filtrating aids	
19	Potassium carbonate	pH adjustment agents that shall be allowed only when sodium carbonate can not be used. Used in flour products.	501
20	Potassium chloride	Used in mineral beverage, sport beverage and low-sodium sauce and low-sodium salt.	508
21	Potassium citrate	pH adjustment agents, used in all kinds of food.	332
22	Sodium carbonate	pH adjustment agents, used in flour products and cakes.	500
23	Sodium citrate	pH adjustment agents, used in all kinds of food	331
24	Tartaric acid	pH adjustment agents, used in all kinds of foods	334
25	Xanthan gum	Thickening agents, used in fruit jelly and colorful sources	415

26	Sulfur dioxide	Bleacher, used in wine and fruit wine	220
27	Potassium metabisulphite	Bleacher, used in beers.	224
28	Ascorbic acid (Vitamin C)	Antioxidant, for beer and yeast flour products.	300
29	Lecithin	Antioxidant	322
30	Ammonium phosphate	Processing aids	
31	Pectin	Thickening agents, used in all kinds of food.	440
32	Magnesium carbonate	Processing aids, used in flour processing.	504
33	Sodium hydroxide	pH adjustment agents and processing aids	524
34	Silicon dioxide	Anti-coagulator, used in egg powder, milk powder, cacao powder, cacao grease, sugar powder, plant powder, instant coffee, powdery soup materials and powdery essence.	551
35	Talcum powder	Processing aids	553
36	Gelatin	Thickening agent, used in all kinds of food.	
37	Sodium alginate	Thickening agent, used in all kinds of food.	401
38	Potassium alginate	Thickening agent, used in all kinds of food.	402
39	Ammonium bicarbonate	Puffing agent, used in all kinds of food that need puffing agent.	503
40	Ar	Food preservation	938
41	Egg white albumen	Processing aids	
42	Guar gum	Thickening agent, used in all kinds of food.	412
43	Locust beam gum	Thickening agent, used in fruit jelly, fruit jam and ice cream.	410
44	Oxygen	Processing aids	948
45	Potassium tartrate	Puffing agent, used in yeast powder.	336
46	Tannin	Filtrating aids of alcohol	184
47	Carrageenan	Thickening agent, used in all kinds of food.	407
48	Carnauba wax	Processing aids	903
49	Casein	Processing aids	
50	Isinglass (talc)	Processing aids (filler)	
51	Plant oil	Processing aids	
a): This is the maximum level of this material that shall be used as required by the GB 2760. For substances with no maximum valued specified, the actual level shall be appropriate in accordance with production requirements			

F. 2 Flavouring

- Essential oils: produced by means of solvents such as oil, water, ethanol, carbon dioxide and mechanical and physical processes;
- Natural smoke flavour;
- Natural flavouring preparations: approval is based on the IFOAM Procedure to Evaluate Additives and Processing Aids

F. 3 Preparation of Micro-organisms

- Preparations of microorganisms accepted for use in food processing. Genetically

modified organisms are excluded. .

- Bakers yeast produced without bleaches and organic solvents.

F. 4 Other ingredients

- Drinking water
- Salt
- Minerals (including trace elements) and vitamins where their use is legally required or where severe dietary or nutritional deficiency can be demonstrated.

Annex G

Criteria for the Evaluation of Additives and Processing Aids for Organic Food Products

Introduction

The list in Appendix F is not a comprehensive listing of all materials that are appropriate in organic processing. When materials are not listed in Appendix F, OFDC must determine the acceptability of the material in question. The following aspects and criteria should be used for evaluation of additives and processing aids in organic food products.

G.1. Necessity

Additives and processing aids can only be allowed in organic food products if each additive or processing aid is essential to the production and:

- the authenticity of the product is respected
- the product cannot be produced or preserved without them

G.2. Criteria for the Approval of Additives and Processing Aids

- There are no other acceptable technologies available to process or preserve the organic product.
- The use of additives or processing aids which minimize physical or mechanical damage to the foodstuff which might result from the use of other technologies.
- The hygiene of the product cannot be guaranteed as effectively by other methods such as a reduction in distribution time or improvement of storage facilities.
- There are no natural food sources available of acceptable quality and quantity which can replace the use of additives or processing aids.
- Additives or processing aids do not compromise the authenticity of the product.
- The additives or processing aids do not confuse the customer by giving the impression that the final product is of higher quality than is justified by the quality of the raw material. This refers primarily, but not exclusively, to colouring and flavouring agents.
- Additives and processing aids should not detract from the overall quality of the product.

G.3. Step by Step Procedure for the use of Additives and Processing Aids

1) Instead of using additives or processing aids, the preferred choice is:

- Foods grown under organic conditions which are used as a whole product or are processed in accordance with the IFOAM Basic Standards - e.g. flour used as a thickening agent or vegetable oil as a releasing agent.
- Foods or raw materials of plant and animal origin which are produced only by mechanical or simple physical procedures - e.g. salt.

2) The second choice is:

- Isolated food substance produced physically or by enzymes e.g. starch, tartrates, and

pectin.

- Purified products of raw materials of non agricultural origin and micro-organisms e.g. acerola fruit extract, enzymes and micro-organism preparations such as starter cultures.

3) In organic food products the following categories of additives and processing aids are not allowed:

- "Nature identical" substances.
- Synthetic substances primarily judged as being unnatural or as a "new construction" of food compounds such as acetylated crosslinked starches.
- Additives or processing aids produced by means of genetic engineering.
- Synthetic colouring and synthetic preservatives

Carriers and preservatives used in the preparation of additives and processing aids must also be taken into consideration.