

Hong Kong Organic Resource Centre Certification Limited

Organic Production and Processing Standard 2004



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HONG KONG ORGANIC RESOURCE CENTRE**

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The terms appeared in Appendix 6.1 Definitions will be marked with asterisk (*) in the text.

Chapter 1

Overview

1.1 About Hong Kong Organic Resource Centre Certification Limited

“Hong Kong Organic Resource Centre Certification Limited” (abbreviated as “ORC-Cert”) is an independent incorporated certification agent managed by “Hong Kong Organic Resource Centre” (abbreviated as “HKORC”). Its duties include the establishment of a local organic production and processing standard and a certification system; the development and management of “Hong Kong Organic Resource Centre Certification Limited - Hong Kong Organic Production and Processing Standard” (abbreviated as “this standard”); the processing of applications for organic certification; the award of certificates to organic products that are produced and processed in accordance with this standard; and the monitoring and management of the use of ORC-Cert organic certification seals.

1.2 About Hong Kong Organic Resource Centre

To cope with the increasing demand for healthy food and environmental protection, many countries have actively been developing organic farming since the 1990’s. Coupled with the shrinking growth of the local farming industry owing to urbanization and economic transition, the Government has been assisting the local farming community to develop organic farming since 2000. A new direction has been charted to develop a new market with higher returns. In order to allow organic market growing healthily and rapidly, a set of organic standards and a certification system is needed. With funding supports from the Agricultural Development Fund of Vegetable Marketing Organization, HKORC was hence established in December 2002. It is the first local certification body of organic products set up under the Agricultural Development Fund to facilitate the development of organic farming.



We envision HKORC as an independent organic certification agent with the devotion in increasing the awareness of farmers, consumers and the general public about the role of certification in the production and marketing of organic products, and promoting the sustainable development of organic farming in Hong Kong so as to ensure a safe and quality food supply and an ecologically balanced living environment for our future generations.

We serve with professionalism, dedication and unselfishness in establishing and operating a set of fair, impartial and transparent organic standards and certification system for the organic farming community. And, we provide technical support, trade and marketing information to the organic sector; and knowledge on organic farming and consumer information to the consumers.

1.3 Organizational Structure of ORC-Cert

ORC-Cert is comprised of the Board of Directors, Executive Committee, Certification Board, Standard Board and ORC-Cert staff. Members of the Board of Directors come from HKORC Governing Board. The Board serves as the body for final appeal of certification decisions.

The Standard Board is formed by farmers, environmentalists/scientists, government and HKORC co-organizers. The Board is responsible for the formulation or revision of a set of organic standards applicable to Hong Kong.

The Certification Board is consisted of farmers, retailers, environmentalists/scientists, consumers, government, worthy personages and HKORC co-organizers. The Board is responsible for the formulation or revision of the certification system applicable to Hong Kong. Furthermore, the Board, base on this standard, assesses if the operation of the applicant complies with the organic integrity and makes decisions about certification status.

The Executive Committee is made up of a representative from each of the 3 HKORC co-organizers. It is responsible for managing ORC-Cert staff to execute the entire system.

1.4 About “ORC-Cert – Organic Production and Processing Standard”

The formulation and revision of “ORC-Cert – Organic Production and Processing Standard” is a continuous and important duty of the Standard Board. As the number of organic producers, sellers and consumers is increasing and the market for organic products is developing progressively, this standard provides a reliable, objective, localized platform which is recognized by different sectors of the society.

All the ORC-Cert certified organic products shall meet or exceed this standard. In order to ensure the production processes of the ORC-Cert certified products comply with our standards, ORC-Cert will arrange periodic and unannounced inspections to the applicants. The system may develop mutual trust between the producers and the consumers.

The following organic standards were referenced during the formulation of this standard:

1. *Guidelines for The Production, Processing, Labelling and Marketing of Organically Produced Foods (GL32 – 1999, Rev.1 – 2001)*. FAO/WHO Codex Alimentarius, 2001.
2. *IFOAM Basic Standards for Organic Production and Processing*. International Federation of Organic Agriculture Movements, 2002.
3. *International Certification Standards*. Organic Crop Improvement Association International, 2002.
4. *OMRI Generic Materials List*. Organic Materials Review Institute, 2002.
5. *Organic Agriculture Standards*. Organic Agriculture Certification Thailand, 2000.
6. 《有機生產標準》，香港：香港有機農業協會，2002。
7. 《有機作物生產守則》，香港：漁農自然護理署，2000。
8. 《有機耕種守則及有機驗證章則》，香港：幼聯大自然教育中心，2002。
9. 《有機認證標準》，南京：中國國家環境保護總局有機食品發展中心，2002。



This standard is drafted by the Standard Board and is reviewed and approved by the Governing Board after an extensive public consultation. The process of formulation is transparent and representational, with the local conditions and various factors seriously considered. Apart from this, in order to address the changing needs in aspects like knowledge, technology, material supply, environment and law, the standards are subject to review so as to cater for the benefits of producers and consumers.

This standard is a set of operational rules that producers or processors who apply for the organic certification must follow. This is not intended to use laboratory test result as the only indicator for “organic products”. Organic production focuses on whether the procedures for food productions could cater for the balance and conservation of the ecological environment. This standard provide guidance to method and material used for organic production and processing and, thus may guarantee the product quality. Furthermore, this standard only examines the compliance of the operation of the applicants with this standard. The compliance of the operations with the relevant legal requirements in the territory is out of ORC-Cert’s legitimate authority.

1.5 Structure

This standard’s chapters are presented in 2 parts, namely principles and standards:

- Principles: Principles are the instructive statements of the chapter. The standards under each principle are the specific ways to actualize that principle. The principle is written in *italic* in this standard, located between the chapter heading and the standards.
- Standards: Standards are the minimum requirements for ORC-Cert certification. Operation of an applicant for organic certification must comply with the requirements of the relevant standards in order to enable its product being labeled as “organic”. Each standard, located under the chapter heading and principle, is numbered.

1.6 Execution

This standard is the basic requirement for organic production and processing. Applicants for organic certification must sign an agreement with ORC-Cert to promise and guarantee the fulfillment of every relevant rule in this standard and to cooperate with the inspectors by allowing them to carry out site inspections. The Certification Board awards certificates of organic certification to producers and processors that meet this standard and signs agreement with them so that they can use the seal of ORC-Cert, according to this standard. When there is any discrepancy between English and Chinese versions, the Chinese version shall be taken as the official version.

1.7 Scope

This standard illustrates every requirement in the production, processing and handling, and labeling of organic products. The scope is as follows:

1. Unprocessed agricultural products;
2. Processed comestible products for humans that are made with one or more agricultural ingredients; and
3. Other products not stated in the above two items but approved by the Certification Board.

Chapter 2

Basic Principles of Organic Production* and Processing*

The basic principles of organic production and processing include:

- 2.1 To produce sufficient food and other products* of high quality.
- 2.2 To work compatibly with natural cycles and living systems through the proper management of soil, plants and animals in the entire production system.
- 2.3 To maintain and promote the recycling of materials within the production and processing systems and to encourage the use of local resources for self-sufficiency and cutting down the demand for external inputs.
- 2.4 To conserve and enhance the long-term fertility and biological activity of soil.
- 2.5 To attach importance to the conservation of ecosystem.
- 2.6 To protect biodiversity* within and outside the production systems, including the protection of wild animals, plants and their habitats.
- 2.7 To use, maintain, and conserve soil, water and other resources in a responsible and sustainable manner.
- 2.8 To encourage a proper balance between crop production and animal husbandry.
- 2.9 To respect animals' biological needs and habits in nature and to provide them with a living environment that suits their natural needs.



- 2.10 To use renewable resources in production and processing systems as much as possible and avoid all sorts of pollution and waste production.
- 2.11 To avoid excessive packaging and to encourage material recycling, and the use of biodegradable* or recyclable materials.
- 2.12 To prohibit the use of any genetically modified organisms* and their derivatives in the organic production and processing systems.
- 2.13 To foster local production and consumption.
- 2.14 To respect, understand, protect and benefit from local knowledge and traditional farming systems.
- 2.15 To ensure that everyone involved in the organic production and processing systems can have sufficient rewards and fulfillment under a safe, secure and healthy working environment.
- 2.16 To foster organic production, processing and distribution systems that are ecologically responsible, socially just and economically sound.

Chapter 3

Standards for Crop Production

3.1 Conversion Period

Conversion to organic production implies the revival of the ecosystem so that soil fertility can be improved. The farmland will then be developed into a vital and sustainable agro-ecosystem.

- 3.1.1 A conversion period is required before product may be labeled as “organic”.
- 3.1.2 During the conversion period, all the provisions on crop production standards (Chapter 3) must be followed.
- 3.1.3 A farm* may be converted to organic production in stages. However, adequate facilities and recording mechanisms are required in order to effectively separate the crops, land, production areas, and storage facilities used for organic production from those used for conventional farming. Inspectors* must be allowed to enter into all the area of the farm for inspection.
- 3.1.4 The conversion periods for the farmland of different types of crops are as follows:
 - 3.1.4.1 In case of farmland cultivating annual crops* (for example, vegetables, cereal, etc.), a conversion period of at least 18 months is required.
 - 3.1.4.2 In case of farmland cultivating perennial crops* (for example, fruit trees), a conversion period of at least 24 months is required.
- 3.1.5 The conversion period starts from the day when the application for organic certification is made.

- 3.1.6 Annual crops that are sown and perennial crops that are harvested after the end of the conversion period can be sold as organic products.
- 3.1.7 Depending on factors such as previous land use, management practice and the environmental condition of the land, the Certification Board may extend the conversion period.
- 3.1.8 If there is adequate documentation to prove that the farmland has been managed using organic methods in compliance with this standard before application for certification, the Certification Board may shorten the required conversion period accordingly.
- 3.1.9 Immediate notification to ORC-Cert is required if there is any significant change in the land use and production in the conversion farm.
- 3.1.10 Products produced on land in conversion can be labeled as “organic (in conversion)*”, but must not be labeled as “organic” nor include similar description.
- 3.1.11 If conventional* practices are reverted to the land that is organic or in conversion, the certification given to the land will be revoked. Reapplication and another round of conversion are required for gaining back the organic certification. However, the Certification Board reserves the right to accept or reject such re-applications.

3.2 Split Production*

Split production is the mode used in a farm where only part of it is certified as organic while the remainder can be (1) conventional, (2) in conversion, or (3) organic but not certified.

- 3.2.1 When managing split production, producers must clearly separate the certified organic crops from all other types of crops throughout the entire production, harvest, storage, transport, processing and packaging process with complete audit trail* documentation.



- 3.2.2 Producers* must allow inspectors access to the records and areas used for non-certified production, as well as those for certified production. The inspector must be granted adequate access to information so that he/she may verify that organic and non-organic products are not being commingled together and that the certified products are not contaminated by prohibited materials.
- 3.2.3 Genetically modified organisms and their derivatives are prohibited on farms with split production in terms of production, storage and trading.
- 3.2.4 Split production may not produce the same crops using both the organic and non-organic production methods at the same time.

3.3 Buffer Zone*

The establishment of buffer zone is to prevent the crops in the production area from external contamination.*

- 3.3.1 If there are potentials for contamination such as the spread of chemical pesticides and fertilizers from adjoining areas (including the non-organic fields in farms with split production), a buffer zone of at least 2 metres must be established between the organic and such areas to prevent contamination of the organic production area.
- 3.3.2 If physical barriers such as hedges, barrier plants or drains are available in the buffer zone, the Certification Board may relax the width requirement on the buffer zone case by case.
- 3.3.3 If necessary, the Certification Board may require a wider buffer zone or additional physical barriers.
- 3.3.4 Plants in the buffer zone must be grown organically but cannot be sold as organic. Therefore,



they must be easily distinguishable from the organic products grown on the farm.

3.4 Choice of Crops and Varieties

The varieties selected should be adaptable to the local environment and tolerant to local pest/diseases, preferably be local varieties.

- 3.4.1 All seeds or vegetative propagation materials used shall be certified organic.
- 3.4.2 Untreated seeds or vegetative propagation materials may be allowed when those organic are commercially unavailable*.
- 3.4.3 Treated seeds may only be used when organic or untreated seeds or vegetative propagation materials are commercially unavailable. However, the source and quantity of the seeds and vegetative propagation materials must be clearly documented in every usage and the purchase receipts must be kept.
- 3.4.4 The source of annual seedling must be cultivated according to this standard.
- 3.4.5 Products that are grown from non-organic, perennial seedlings may be sold as organic only if they have been cultivated according to this standard for at least 12 months.
- 3.4.6 Any use of seeds and planting materials* produced by genetic engineering* is prohibited.

3.5 Diversity in Crop Production

The enhancement of diversity in crop production is important for soil conservation and pest/ disease control.

- 3.5.1 A farm must practise crop rotation* for annual crops which, at minimum includes a diverse



mix of crops along with a leguminous crop or green manure. Producers of annual crops may be exempted from this requirement only if they demonstrate diversity in plant production by other means that are found satisfactory by ORC-Cert.

3.5.2 Aquatic plant culture and greenhouse crops that are not grown on ground may be exempted from crop rotation requirements but must demonstrate enhancement of biodiversity.

3.5.3 Intercropping* must be practised to avoid monoculture.

3.6 Fertility Management

Organic matter, nutrients and other resources within the production system must be returned to the soil in order to enhance or at least maintain its fertility and biological activity. Fertilizers introduced externally to the production system must be regarded as a complement to rather than a substitute for the nutrient cycle.

3.6.1 The use of fertilizers should be maintained at a suitable level without causing problems of overnutrition and pollution.

3.6.2 The sources, quality, quantity and application method of fertilizers shall cause no harm to the environment.

3.6.3 The fertility of the soil can be replenished by allowing the land to lie fallow.

3.6.4 Materials from microbial, plant or animal origin shall form the basis of the fertility management program.

3.6.5 Non-synthetic mineral fertilizers shall only be used as a supplement to the soil fertility enhancement programmes based on techniques such as addition of organic matter, green manuring, crop rotation and nitrogen fixation by plants.



- 3.6.6 Non-synthetic mineral fertilizers must be applied in the form in which they are naturally composed. Besides using water for extraction or mixing with other naturally occurring and allowed materials (Appendix 6.2.1), the use of any other means to increase the solubility of the mineral fertilizers is prohibited.
- 3.6.7 Microorganisms and their derivatives may be used to speed up the process of composting.
- 3.6.8 The compost* applied in the farm must comply with the requirements of Appendix 6.2.1.
- 3.6.9 The use of fertilizers containing genetically modified organisms and their derivatives is prohibited.
- 3.6.10 The use of chemical fertilizers is prohibited. Exceptions may be granted for restricted use as specified in the Appendix (Appendix 6.2.1). This applies only in cases in which the farm can provide sufficient information to prove that the farmland is in lack of certain specific micro-nutrient, together with the consent of the Certification Board.
- 3.6.11 The use of human excrement is prohibited.
- 3.6.12 The use of sewage sludge* and chemical waste is prohibited.
- 3.6.13 Animal manure which has not been composted may only be applied to perennial crops, crops planted not for human consumption or those that will be harvested at least four months later.
- 3.6.14 Materials used in the fertility management (including the adjustment of soil pH) must be in compliance with the requirements listed in Appendix 6.2.1.
- 3.6.15 The farm shall take appropriate measures to prevent soil erosion.

3.7 Pest, Disease, Weed and Growth Management

Organic production system shall minimize crop loss by the use of a preventive farm management program.

3.7.1 Specific measures must be taken in an organic production system to prevent the invasion of pests, diseases and weeds, including but not limited to the following:

3.7.1.1 To adopt appropriate farming practices, such as crop rotation, intercropping, cultivation, fallowing, plowing and green manure planting, etc.

3.7.1.2 To adopt appropriate fertility and irrigation program.

3.7.1.3 To manage and conserve habitats for natural enemies, such as planting hedges and windbreaks, providing nesting sites and ecological buffer zones.

3.7.2 Pests, diseases and weeds may be controlled by means of mechanical, physical or biological measures, including but not limited to the following:

3.7.2.1 To adopt physical measures, such as hand picking, traps, barriers, light, sound, electricity, heat and mechanical methods.

3.7.2.2 To select varieties with resistance to pests and diseases.

3.7.2.3 To grow crops with pest control value (including insect repelling and predator attracting).

3.7.2.4 To use mulch.

3.7.2.5 To release natural enemies.



3.7.2.6 To use visual and physical traps.

3.7.2.7 To use animals, plants, micro-organisms and their preparations.

3.7.3 When preventive, mechanical, physical or biological measures are not effective, the restricted measures may be adopted:

3.7.3.1 To use materials listed in the Appendix 6.2.2 in accordance with the stated requirements.

3.7.3.2 For structure coverings, mulches, insect nets and bags which contain plastic materials, only products based on polyethylene (PE), polypropylene (PP) or other polycarbonates (PC) are allowed. All these must be removed completely from the field with no residues and cannot be burned.

3.7.4 To avoid using the following methods in organic production:

3.7.4.1 To avoid burning of weeds so as to prevent contamination of crop and the environment.

3.7.4.2 To avoid steam sterilization for pest, disease or weed control. Documentation on specified forms is required for every use.

3.7.4.3 To avoid burning of land for land preparation.

3.7.4.4 To avoid burning of crop residue, except for pest, disease or weed control or other hygienic concerns. Documentation is required for every burning.

3.7.5 The use of the following materials is prohibited in organic production:

3.7.5.1 Synthetic herbicides, fungicides, insecticides, growth regulators or other pesticides.



3.7.5.2 Materials with genetically modified organisms and their derivatives.

3.8 Avoiding Contamination

Effective measures shall be applied to prevent contamination of the products and the environment.

- 3.8.1 A buffer zone must be established if the organic farmland may be contaminated by the adjoining area. The buffer zone must meet the requirements of this standard.
- 3.8.2 Materials containing plastic must be removed after use. Burning of such materials is prohibited.
- 3.8.3 If an organic farm or conversion farm is accidentally contaminated by GMOs (such as seeds or pollen), its products and other possibly contaminated products must be immediately and completely uprooted. The cleared products are prohibited to be sold as organic or organic (in conversion). Products of the same or similar species cannot be grown in the farm within one year after clearance.
- 3.8.4 If a farm is reasonably suspected of being contaminated, Certification Board may take samples of soil, water or plants etc. from it for analysis in order to verify the contamination case.
- 3.8.5 Certification Board may suspend the certification status enjoyed by the farm or the contaminated area if the level of heavy metal or other contaminants* in the soil or the products exceeds safety level.



3.9 Use of Machinery and Equipment

Producers shall ensure that the use of machinery and equipment will not cause negative impacts to the quality of products and the environment.

- 3.9.1 All machinery and equipment that have been used in non-organic farm must be cleaned thoroughly to remove any contaminants (including genetically modified organisms and their derivatives) before being applied in organic production.
- 3.9.2 The use and maintenance of machinery should be monitored to ensure that no contamination to the products or the environment is caused by the hydraulic fluid, fuel or lubricant, etc. of the machinery.
- 3.9.3 The use of heavy machinery should be avoided if they may damage soil structure.

3.10 Irrigation

Water resources should be effectively chosen and utilized to avoid water contamination.

- 3.10.1 Producers shall not excessively exploit and deplete water resources.
- 3.10.2 To utilize water sources that are free from contamination for irrigation.
- 3.10.3 Producers shall apply water in a way that causes no pollution to surface run-off and underground water.



Chapter 4

Processing and Handling* Standards

4.1 Processing and Handling

In the entire processes for organic processing, handling and selling, organic integrity of the products shall be preserved, and should provide consumers with high quality organic products.

- 4.1.1 If a producer processes and/or packs the certified organic products of his/her own farm, the processing/packing operation must be certified by ORC-Cert before products are labeled as “organic”.
- 4.1.2 Organic and non-organic products must be handled separately and cannot be commingled.
- 4.1.3 Equipment and areas that have been used for conventional processing and handling must be cleaned thoroughly before being used for organic processing and handling.
- 4.1.4 All areas and facilities must be clean and sanitary to avoid contamination of areas, facilities and organic products.
- 4.1.5 Only cleansers, sanitizers and disinfectants listed in Appendix 6.2.3 are allowed for use in processing and handling facilities and areas. Rinsing after use of such products must be thorough and must leave no residues.
- 4.1.6 The effluents of processing facilities must not have adverse effects on the environment.
- 4.1.7 The pool used for handling organic crops must not be used for handling conventional crops and measures must be taken to prevent any contamination of pool water.

4.1.8 All repacked food must be certified organic by ORC-Cert or other organic certification agencies.”

4.2 Raw Materials*, Food Additives* and Processing Aids*

Organic processing should use organic ingredients entirely.*

4.2.1 Ingredients must be ORC-Cert certified or certified organic from other recognized organization* except for those materials listed at Appendix 6.2.3. In case where an ingredient of organic origin is commercially unavailable, a processor may use non-organic ingredient but ingredient used must be in compliance with Chapter 5 Organic Product Labeling and every use must be documented with specified forms. The non-organic ingredient must be replaced with organic one as soon as it becomes commercially available.

4.2.2 The use of non-organic and organic sources of the same ingredient in a product is prohibited.

4.2.3 Water used in organic processing and handling must comply with the requirements of World Health Organization Guidelines for Drinking-water Quality.

4.2.4 The use of minerals (including trace elements) or vitamins are not allowed for enhancing nutrient content of the products.

4.2.5 Materials listed at Appendix 6.2.3 are allowed. All materials not listed at Appendix 6.2.3 and GMO-containing materials are prohibited.

4.3 Processing Methods

Processing methods should maintain the natural constituents and nutritional value of the products.



4.3.1 Biological, physical and mechanical methods (e.g. extraction, heating or fermentation) in organic processing are allowed. Any additives, processing aids, or other substances that chemically react with or modify organic foods shall comply with the requirements of Appendix 6.2.3.

4.3.2 Irradiation is prohibited.

4.3.3 Filtering materials, which contain harmful substances or may generate harmful substances are prohibited.

4.4 Pest and Disease Control

The prevention of pest and disease within processing and handling areas and facilities should be accomplished through preventive management program such as cleaning and sanitization.

4.4.1 Measures for controlling pest and disease should be used according to the following priorities:

1. Preventive measures such as elimination of habitat and exclusion;
2. If preventive measures are ineffective, mechanical, physical and biological methods may be used;
3. If the above measures are ineffective, allowed materials listed at Appendix 6.2.2 may be used but contact with organic products is prohibited.

4.4.2 Physical barriers, sound, ultra-sound, light, ultra-violet light, temperature control, controlled atmosphere and etc. are allowed for pest and disease control practices.

4.4.3 Irradiation and materials not listed at Appendix 6.2.2 are prohibited as pest and disease control measures.

4.5 Packaging

Packaging methods and materials should be simple so as to avoid unnecessary packaging and negative impact on the environment, and should maintain the quality of the products.

- 4.5.1 The use of packaging materials that contaminates the products is prohibited.
- 4.5.2 Packaging materials must not contain disinfectants, preservatives, fumigants, insecticides, and/or genetically modified constituents*.
- 4.5.3 Biodegradable, recyclable and reusable packaging materials are recommended.
- 4.5.4 Vacuum packing is allowed.
- 4.5.5 Processors should try to use inks and adhesives which are harmless to human beings.

4.6 Storage

Storage procedures for organic products should preserve product quality.

- 4.6.1 If there is a need to store organic and non-organic product at the same unit, they must be labeled and packaged differently and stored in separated identified place to prevent commingling*.
- 4.6.2 The following storage methods are allowed:
 - controlled atmosphere;
 - temperature control;
 - humidity regulation; and
 - drying.
- 4.6.3 All invoice and storage records for the product in and out must be kept.



4.7 Transport

Transportation of organic products should be able to preserve product quality.

- 4.7.1 When transporting organic and non-organic product together, products must be clearly marked and packaged to prevent commingling.
- 4.7.2 Only allowed materials listed at Appendix 6.2.3 are allowed for conveyances cleaning.

Chapter 5

Organic Product Labeling

Organic products shall be accurately and clearly labeled.

5.1 Products classification

5.1.1 Unprocessed organic agricultural products

5.1.1.1 Products produced from farmland that is ORC-Cert certified may use the “organic” seal of ORC-Cert.

5.1.1.2 Products produced from farmland that applied for conversion according to this standard may use the “organic (in conversion)” seal of ORC-Cert.

5.1.2 Processed organic products

5.1.2.1 Products with not less than 95% of organic ingredients (excluding water and salt) that are certified by ORC-Cert or other recognized organization, and processed and handled by ORC-Cert certified facilities, may use the “organic” seal of ORC-Cert.

5.1.2.2 Products with not less than 70% but not more than 95% of organic ingredients (excluding water and salt) that are certified by ORC-Cert or other recognized organization, and processed and handled by ORC-Cert certified facilities, may use “made with organic” seal of ORC-Cert but cannot be labeled as “organic”.

5.1.2.3 The name and seal of ORC-Cert cannot be used on products with less than



70% of organic ingredients (excluding water and salt) that are certified by ORC-Cert or other recognized organization.

5.2 Labeling

5.2.1 Seal

5.2.1.1 Only organic products that comply with relevant part in this standard may use “organic”, “organic (in conversion)” or “made with organic” seal of ORC-Cert.

5.2.1.2 Using the seal of ORC-Cert as product brand name is prohibited.

5.2.1.3 The diameter of the seal shall not be larger than 12.5% of the length or width (whichever is longer) of the product panel. Moreover, the shape, proportion and color of the seal must be followed.

5.2.2 Product Label*

5.2.2.1 The labels of processed and handled organic products must show the certificate* number and comply with the relevant labeling laws in Hong Kong.

5.2.2.2 The label for “organic (in conversion)” must be clearly distinguishable from the label for “organic”.

5.2.2.3 The name of the person, company and certifier responsible for the production or processing of the product shall be clearly showed.

5.2.2.4 All ingredients of the product shall be listed on the product label in order of their weight percentage. It shall be clear which ingredients are certified



organic and which are not. All additives shall be listed with their full name.

- 5.2.2.5 Using ORC-Cert seal or the certification status for the claim of GMO free or similar description is prohibited. Any reference to genetic engineering on product labels shall be limited to the production and processing in which GMOs are not used.

Chapter 6

Appendices

6.1 Definitions

Annual crop

A crop that will be harvested or cut within 12 months in which it was planted.

Audit trail

A system of documentation of each process including harvest, storage, transport, processing, handling, and sales, which is used for tracing organic products or organic raw materials.

Biodegradable

A complex compound that is able to be decomposed into more elementary compounds by the biochemical action of microorganisms.

Biodiversity

The variety of life forms and ecosystem types, which includes genetic diversity, species diversity and ecosystem diversity.

Buffer zone

A transitional area with identifiable boundary between organic and surrounded non-organic production site that is established to protect the organic production site against the contamination from surrounded non-organic production site.

Certificate

A written assurance issued by ORC-Cert which attests the compliance of the production system of the applicant with the standards of the certification agency. It identifies the name, address of the entity certified, effective date of certification, certification number, types of products and etc.



Commercially unavailable

The documented unavailability of a production input or ingredient in an appropriate form, quality, quantity, or variety due to its price, supply or other reasons.

Commingling

The mixing together, or physical contact between organic products and non-organic products during production, processing, handling, transportation or storage other than the processing of multi-ingredient products which contain both organic and non-organic ingredients

Compost

The decomposition of organic solid substances into stabilized humus by microorganisms under aerobic or anaerobic condition.

Contaminant

Prohibited substance, disease-causing substance or genetically modified organism and its derivative that persists in an organic product and the environment.

Contamination

The introduction of prohibited substance, disease-causing substance or genetically modified organism and its derivative to organic products and ingredients through processing, handling or from the environment.

Conventional

Conventional means any production or processing systems that are not certified organic or organic “in-conversion”.

Crop rotation

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



Farm

A certified farm with clear boundary. This agricultural production unit is under control of or managed (including rent) by one person or collective of people.

Food additive

Substance added into the food which may change its characteristics including colour, flavour, taste and etc. or may be used for preservation and other specified technical purpose. The substance will persist in the final product.

Genetic engineering

Genetic engineering is a set of techniques from molecular biology by which the genetic material of plants, animals, micro-organisms, cells and other biological units are altered in ways or with results that could not be obtained by methods of natural mating and reproduction or natural recombination. Techniques include, but are not limited to: recombinant DNA, cell fusion, micro and macro injection, encapsulation, gene deletion and doubling. Genetically engineered organisms do not include organisms resulting from techniques such as conjugation, transduction and natural hybridization.

Genetically modified organism, GMO

A plant, animal, or microbe that is transformed by genetic engineering.

Genetically modified constituent

Containing genetically modified organism or its derivative

Handling

Include transport, storage, packaging, repacking, selection, and distribution.

Ingredient

Any substance including raw material, additive, water and salt that is used in food processing and handling, and will present in the final product although possibly in a modified form.

Inspector

A person independent from the decision-making process who is authorized to perform inspections for ORC-Cert.

Intercropping

Intercropping is the process of growing two or more crops together on the same farmland.

Label

Any written, printed or graphic representation that accompanies the product or product packaging, or is displayed near the product.

Organic (in conversion)

Products produced during the time between the start of the organic management and the certification of crops as organic.

Organic production

Production system that is in compliance with this standard.

Perennial crop

A crop that can be harvested from the same planting for more than one crop year.

Planting material

Any plant or plant tissue, including vegetative propagation material or seedling used in plant production or propagation.

Processing

Include but not limited to cooking, baking, heating, drying, mixing, grinding, churning, separating, extracting, cutting, fermenting, slaughtering, eviscerating, pickling, preserving, dehydrating, freezing, dyeing, packaging, canning, jarring, or other enclosing method, other than normal post harvest simple packing of crops within the farm.



Processing aid

Any material intentionally used in processing to fulfill a certain technical purpose which will not persist in final product or may result in the presence of residues or derivatives in the final product.

Producer

A person or an organization who is responsible for crop, feed or livestock production.

Product

Any product, unprocessed or processed, that is marketed for human consumption, animal feed or other use.

Raw material

The main ingredient in final product which is not additive.

Recognized organization

An organization which is approved by a written assurance of ORC-Cert of its organic standards and certifying procedures.

Sewage Sludge

A solid, semisolid, or liquid residue generated during the treatment of domestic sewage in a treatment works.

Split production

A farm or a processing and handling plant where only part of it is using organic method to produce, process or handle crops, livestock or raw materials. The remainder can be non-organic (conventional, non-certified organic or organic (in-conversion)).

6.2 Materials List

Materials Classification

Group I: Allowed

Materials which may be used in organic production system. Materials must be from a known source and shall contain no contaminants, prohibited substances nor GMOs and their derivatives. Use of some allowed materials may be subject to specific annotations as shown in the Materials List.

Group II: Restricted

Operators must obtain approval for use of the restricted materials from ORC-Cert prior to the application of the material. In general, the use of these materials is discouraged. Only under special conditions, the use would be approved.

Group III: Prohibited

Materials which are prohibited to be used in organic production system.

6.2.1 Materials for Soil Management and Fertilization

	Materials	Category	Remark
1	Soybean meal	I	Must be free from genetically modified constituent
2	Peanut cake or peanut cake meal	I	
3	Hoof and horn meal	I	
4	Bone, bone meal, blood meal, meat meal and their mixed produce	I	Materials originated from regions with mad-cow disease records are prohibited
5	Wood, bark, sawdust, wood shavings, wood ash, wood charcoal	I	Sources must be free from contaminants or prohibited materials
6	Fish and fish products	I	Sources must be free from contaminants or prohibited materials
7	Seaweed and seaweed products	I	

	Materials	Category	Remark
8	Plant preparations and extracts	I	Sources must be free from contaminants or prohibited materials
9	Feather meal, wool and fur, hair	I	
10	Egg shell	I	
11	Plant residues and green manure from organic farms	I	'Organic farm' includes those farms other than the applicant
12	Compost made from organic materials produced on organic farms	I	'Organic farm' includes those farms other than the applicant
13	Compost made from plant	I	
14	Compost made from animal excrement	I	
15	Commercially produced organic fertilizers, compost and soil conditioners	I	Commercially produced guano is prohibited
16	Plant materials imported from areas outside the farm	I	Source must be free from contaminants or prohibited materials
17	Biodegradable processing by-products, plant, animal or microbial origin, including by-product of food, feed, oilseed, brewery, distillery	I	
18	Compost made from food waste	I	Must be free from genetically modified constituent
19	Humus from insects	I	
20	Vermicastings / vermicompost	I	Vermicastings and vermicomposting from sewage sludge are not allowed
21	Uncomposted animal excrement	I	Only use on perennials or crops not for human consumptions or applied at least four months before harvesting if the crop is for human consumption
22	Perlite, vermiculite	I	
23	Mineral zeolite	I	
24	Peat moss	I	Prohibited to be used as soil amendment, only permitted for inclusion in potting mixes. Sources must be free from contaminants or prohibited materials
25	Hydrated lime (calcium hydroxide)	I	Use with moderate amount

	Materials	Category	Remark
26	Natural limestone (calcium carbonate) or gypsum (calcium sulfate)	I	
27	Magnesium rock, kieserite and Epsom salt (magnesium sulfate)	I	Use with moderate amount
28	Mineral potassium (e.g. sulfate of potash, kainite, sylvanite, rock potash)	I	Use with moderate amount
29	Natural phosphates (e.g. pulverized phosphate rock)	I	Use with moderate amount
30	Carbon dioxide	I	Must be non-synthetic carbon dioxide
31	Paper	I	Must exclude glossy paper and colored ink
32	Natural microbiological preparations	I	Must be free from GMO and their derivatives
33	Borax	II	Allowed only to correct documented deficiencies determined by soil. Acceptable only when no natural substitute is available. Use in moderate amount
34	Calcareous and magnesium amendments	II	Allowed only to correct documented deficiencies determined by soil. Acceptable only when no natural substitute is available. Use in moderate amount
35	Trace elements	II	Allowed only to correct documented deficiencies determined by soil. Acceptable only when no natural substitute is available. Use in moderate amount. Synthetic micronutrients in ammonium, chloride, nitrate, or polyphosphate forms are prohibited
36	Basic slag	II	
37	Synthetic fertilizers (e.g. Nitrophoska 13-13-21, Nitrophoska 12-12-17-2, urea)	III	Unless otherwise specifically listed
38	Human excrement	III	1. Standard 3.6.11 states that use of human excrement is prohibited 2. Risk of pathogen spreading
39	Sewage sludge	III	
40	Synthetic phosphate	III	



	Materials	Category	Remark
41	Synthetic potassium salt	III	
42	Synthetic zeolite	III	
43	Commercially produced guano	III	Harmful to the environment when collected and ship to Hong Kong

6.2.2 Materials for Pest, Disease and Weed Management

	Materials	Category	Remark
1	<i>Bacillus thuringiensis</i>	I	
2	<i>Spodoptera litura</i> Nuclear Polyhedrosis Virus (SNPV)	I	
3	Entomopathogenic nematodes (e.g. <i>Steinernema</i> spp.)	I	
4	Microbial pesticides	I	Sources must be free from contaminants, prohibited materials or GMOs and its derivatives
5	Pheromones and insect attractants (e.g. DBM sex pheromone, cuelure)	I	Only allowed to use on traps and dispensers
6	Natural enemies (e.g. release of parasitic wasps)	I	Beware of the effect of introduced species on local ecological balance before releasing natural enemies
7	<i>Beauveria bassiana</i>	I	
8	Natural acids (e.g. vinegar)	I	
9	Melia or Melia extracts (<i>Melia azedarach</i> L.)	I	
10	Neem or Neem extracts (<i>Azadirachta indica</i>)	I	
11	Pyrethrum or Pyrethrum extracts (<i>Chrysanthemum cinerariaefolium</i>)	I	Must be free from piperonyl butoxide
12	Rotenone (<i>Derris elliptica</i> , <i>Lonchocarpus</i> spp. <i>Thephrosia</i> spp.)	I	
13	Plant or natural plant extracts	I	
14	Plant oils	I	
15	Light mineral oils (paraffin)	I	Sources must be free from contaminants or prohibited materials
16	Sulfur	I	
17	Hydrated lime (calcium hydroxide)	I	
18	Baking soda (sodium bicarbonate)	I	
19	Bordeaux mixtures	I	
20	Diatomaceous earth	I	

	Materials	Category	Remark
21	Copper salts (e.g. sulfate, hydroxide, oxychlorine, octanoate)	I	Maximum application rate is 8kg/ha/yr
22	Soft soap	I	
23	Carbon dioxide	I	Must be non-synthetic carbon dioxide. Use as soil treatment is not allowed
24	Animal and plant products (e.g. honey, milk, coffee grounds and cane sugar, but excluding tobacco and nicotine)	I	
25	Beeswax	I	
26	Natural Chitin	I	
27	Physical methods (e.g. chromatic traps, mechanical traps)	I	Protection of non-target species shall be the first priority of consideration
28	Synthetic pesticides, including insecticides, fungicides, herbicides etc	III	Unless otherwise specifically listed
29	Tobacco and tobacco extracts (pure nicotine is also forbidden)	III	Highly toxic

6.2.3 Materials for Processing and Handling

	INS	Materials	Category	Type	Remark
1		Activated carbon	I	Processing aids	
2		Diatomaceous earth	I	Processing aids	For sugar processing, fruit and vegetable products, sweeteners, wine and food filtering only
3		Perlite	I	Processing aids	For filtering only
4		Bleach	I	Cleansers, sanitizers and disinfectants	Only calcium hypochlorite, sodium hypochlorite and chlorine dioxide can be used and allowed as a sanitizer on food contact surfaces. Residual chlorine levels in wash water treated by bleach shall not exceed the recommendation by WHO Guidelines for Drinking-water Quality (currently 5ppm)
5		Hydrogen peroxide	I	Cleansers, sanitizers and disinfectants	For disinfection of processing equipments only. The equipments must be washed with hot water after use
6		Detergents	I	Cleansers, sanitizers and disinfectants	For cleaning of processing equipments and areas only and must wash with hot water after use
7		Casein	I	Processing aids	For wine only
8		Egg white albumin	I	Processing aids	For wine only
9		Isinglass	I	Processing aids	For wine only
10		Gelatin	I	Processing aids	For fruit and vegetable products, and wine
11		Essential oils	I	Food additives; processing aids	Only essential oils produced by means of solvents such as oil, water, ethyl alcohol (ethanol), carbon dioxide can be used

	INS	Materials	Category	Type	Remark
12		Ethyl alcohol (ethanol)	I	Food additives; processing aids; cleansers, sanitizers and disinfectants	Food additives & processing aids: Only organic source is allowed Cleansers, sanitizers and disinfectants: Non-organic source may be used and must wash with hot water after use
13		Vinegar	I	Food additives; processing aids; cleansers, sanitizers and disinfectants	Food additives & processing aids: Only organic source is allowed Cleansers, sanitizers and disinfectants: Non-organic source may be used and must wash with hot water after use
14		Sulphuric acid	I	Processing aids; cleansers, sanitizers and disinfectants	Processing aids: For pH adjustment of water in sugar processing only Cleansers, sanitizers and disinfectants: For cleaning of equipments only and must wash with hot water after use
15		Natural flavourings	I	Food additives	All of the constituents used in the natural flavourings must be from natural sources and have not been chemically modified in a way that makes them different from their natural chemical state. The natural flavourings must not be produced using any synthetic solvent and carrier systems or any artificial preservatives

	INS	Materials	Category	Type	Remark
16		Natural food colorings	I	Food additives	All of the constituents used in the natural food colorings must be from natural sources and have not been chemically modified in a way that makes them different from their natural chemical state. The natural food colorings must not be produced using any synthetic solvent and carrier systems or any artificial preservatives
17		Natural preservatives	I	Food additives	All of the constituents used in the natural preservatives must be from natural sources and have not been chemically modified in a way that makes them different from their natural chemical state. The natural preservatives must not be produced using any synthetic solvent and carrier systems or any artificial preservatives
18		Vegetable oils	I	Processing aids	Can be used as greasing agent and releasing agent
19		Preparations of microorganisms and enzymes	I	Food additives; processing aids	Except those from GMO and its derivatives
20		Baking soda	I	Food additives	See "Sodium hydrogen carbonate"
21		Ethylene	I	Processing aids	Allowed for ripening only
22		Preparations of bark	I	Processing aids	For sugar processing only
23		Salt	I	Food additives; processing aids	Food additives: Contain no flowing or bleaching agents
24		Water	I	Food additives; processing aids	Must comply with the requirements of World Health Organization Guidelines for Drinking-water Quality

	INS	Materials	Category	Type	Remark
25	170	Calcium carbonates	I	Food additives; processing aids	
26	181	Tannins, Food grade	I	Processing aids	For wine only
27	220	Sulfur dioxide	I	Food additives	For wine only
28	270	Lactic acid (L-, D- and DL-)	I	Food additives; processing aids	Must be naturally fermented products
29	290	Carbon dioxide	I	Food additives; processing aids	Must be derived from oil-free source
30	322	Lecithins	I	Food additives; processing aids	Food additives: Extracted without the use of bleaching chemicals and organic solvents
31	330	Citric acid	I	Food additives; processing aids	Must be naturally fermented products
32	331	Sodium citrates	I	Food additives	
33	332	Potassium citrates	I	Food additives	
34	333	Calcium citrates	I	Food additives	
35	334	Tartaric acid (L(+)-)	I	Food additives; processing aids	
36	336	Potassium tartrates	I	Food additives	For cereals, baked goods and confectionery only
37	341(i)	Monocalcium orthophosphate	I	Food additives	For raising flour only
38	400	Alginic acid	I	Food additives	
39	401	Sodium alginate	I	Food additives	
40	402	Potassium alginate	I	Food additives	
41	406	Agar	I	Food additives	
42	407	Carageenan and its Na, K, NH ₄ , Ca and Mg salts (includes furcellaran)	I	Food additives	
43	410	Carob bean gum	I	Food additives	
44	412	Guar gum	I	Food additives	
45	413	Tragacanth gum	I	Food additives	
46	414	Gum arabic (acacia gum)	I	Food additives	For milk products, fat products and sweets only

	INS	Materials	Category	Type	Remark
47	415	Xanthan gum	I	Food additives	For fat products, fruit and vegetable products, cakes and biscuits only
48	440	Pectins	I	Food additives	Must be unmodified
49	500(ii)	Sodium hydrogen carbonate	I	Food additives	For baked goods and confectionery
50	501	Potassium carbonates	I	Food additives; processing aids	For cereals, baked goods and confectionery
51	503	Ammonium carbonates	I	Food additives	For cereals, baked goods and confectionery
52	504	Magnesium carbonates	I	Food additives	For cereals, baked goods and confectionery
53	508	Potassium chloride	I	Food additives	
54	509	Calcium chloride	I	Food additives; processing aids	
55	511	Magnesium chloride	I	Food additives; processing aids	Food additives: For soy bean products Processing aids: Coagulation agent
56	516	Calcium sulphate	I	Food additives; processing aids	Food additives: For cakes, biscuits, soy bean products and bakers yeast. Carrier Processing aids: Coagulation agent
57	524	Sodium hydroxide	I	Food additives; processing aids	Food additives: For cereals only Processing aids: For pH adjustment of water in sugar processing Prohibited for use in peeling of fruits and vegetables
58	525	Potassium hydroxide	I	Processing aids; cleansers, sanitizers and disinfectants	Processing aids: For pH adjustment of water in sugar processing. Prohibited for use in peeling of fruits and vegetables Cleansers, sanitizers and disinfectants: For cleaning processing plants where adequate rinsing is provided

	INS	Materials	Category	Type	Remark
59	526	Calcium hydroxide	I	Food additives; processing aids	
60	551	Silicon dioxide (amorphous)	I	Processing aids	Allowed only as a gel or colloidal solution for wine, tea-leaf and fruit and vegetable products
61	553(iii)	Talc	I	Processing aids	
62	901	Beeswax (white + yellow)	I	Food additives; processing aids	Food additives: Must be from organic source Processing aids: Releasing agent
63	903	Carnauba wax	I	Processing aids	Releasing agent
64	938	Argon	I	Food additives	
65	941	Nitrogen	I	Food additives; processing aids	Must be from non-oil source
66	948	Oxygen	I	Food additives; processing aids	Must be from non-oil source
67		Asbestos containing filtering material	III	Processing aids	
68		Borax (or sodium tetra borate)	III	Food additives	
69		Saccharin	III	Food additives	
70	621	Monosodium glutamate	III	Food additives	