

# **Organic Agricultural Product and Organic Agricultural Processed Product Certification Management Regulations**

## **(Appendix 1)**

### **The Certification Criteria for Organic Agricultural Products and Organic Agricultural Processed Products<sup>1</sup>**

#### **Part I Common criteria**

##### **1. Packaging**

- (1) Packaging methods and materials should be based on a principle of simplicity to avoid over-packaging. Regardless of the size and specification, all of the packagings should be labeled with complete required information, and the products must be irreplaceable without the seal opened or destroyed.
- (2) Packaging materials should be biodegradable, recyclable or reusable. However, ordinary packaging materials may be used if the foregoing packaging materials are not available or not applicable.
- (3) Packaging materials containing germicides, preservatives, fumigants, pesticides, migrating fluorescent agents, prohibited substances, and other contaminating material materials are prohibited.
- (4) Carbon dioxide and nitrogen used as packaging fillers and vacuum packaging are allowed.
- (5) Printing inks and adhesives that are harmless to human health should be used whenever possible.
- (6) The store of packaging materials should be kept sanitary and clean to avoid contamination from non-organic or non-allowable substances.

##### **2. Storage**

- (1) Organic agricultural products shall be kept free from contaminations during storage. Store room must be clean, sanitary, bright, firm, capable to prevent the intrusion of hazardous pest, and is not residue of harmful substances.
- (2) Besides room temperature storage, the use of environment control by regulating the air, temperature, and humidity in storage is allowed.

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<sup>1</sup> Hereinafter referred to as this Criteria.

(3)When organic agricultural product and non-organic agricultural products are stored in the same store room, they should be distinctively labeled and well separated to avoid mix-up. The store of organic products should be arranged in a way that is easily traceable and recognizable.

### 3. Transportation and delivery

- (1)The transportation vehicles shall be thoroughly washed and kept clean before loaded with organic agricultural products and during the transportation to avoid contamination.
- (2)Labels and relevant instructions on the outer packaging of organic agricultural product should be able to stay intact during transportation and delivery.
- (3)When organic agricultural products and non-organic agricultural products are transported or delivered together, the products must be appropriately packaged, kept separately, and readily marked to avoid product confusion.

### 4. Records

- (1) Relevant operation records, receipts and vouchers that are sufficient to prove the organic integrity of the products are required.
- (2)The records of cleaning and management of the facilities, equipments, and site shall be kept.
- (3)When organic agricultural products and non-organic agricultural products are produced in the same production unit or are certified by more than one certification body, the operator should implement autonomous management like keeping the records of quantities produced, marks used and sales by properties and certification bodies and accept the joint audit of different certification bodies.

### 5. Rule for the use of organic agricultural materials and the raw material/additive for organic agricultural processing

- (1)The natural substances which are not listed in the Tables of this criterion as prohibited natural substances can be used.
- (2)Only the chemicals listed in the Tables of this criterion as permitted chemicals can be used.

## **Part II Processing, packaging and distribution**

### 1. Scope

- (1) Processing: The producing procedure such as heating, dry, smoking, mixing, grinding, tableting, stirring, separation, distillation, extraction, fermentation, pickling, dehydration, shelling, milling, or freezing of organic raw materials, or others sufficient to change the physical or chemical characteristics, or be capable of actual transformation of the original

<p>product.</p> <p>(2) Packaging: The selection, washing, cutting, or packaging of organic raw materials, where the process does not change the physical or chemical characteristics of the original product.</p> <p>(3) Distribution: Sale of an organic agricultural product or organic agricultural processed product after substantially changing the original packaging or original labeling, which includes entrusting other operators to produce products and market them in the name of the entruster.</p>
<p>2. Requirement for the staff: Those engaging in organic processing, packaging, or distribution should designate a manager for each production process who has received at least 12-hour training in corresponding operational fields every 3 years. The manager should be in charge of overseeing his respective production process and should fully participate in the audit by certification bodies.</p>
<p>3. Environmental conditions</p> <p>(1) There are no harmful gases, radioactive matter, sources of spreading pollution, trash dumps, or potential major breeding grounds of harmful organisms near the factory (farm).</p> <p>(2) The factory (farm) shall have sanitation and waste management plans in order to maintain the cleanliness of facilities, equipment, and sites.</p>
<p>4. Harmful organism control</p> <p>(1) The following preventive measures shall be taken as the first priority:</p> <ul style="list-style-type: none"> <li>a. Elimination of habitats, food sources, and breeding areas for harmful organisms.</li> <li>b. Measures preventing harmful organisms from entering processing facilities and equipment.</li> <li>c. Control of environmental conditions. For instance, control of temperature, humidity, illumination, and ventilation to prevent the propagation of harmful organisms.</li> </ul> <p>(2) Adoption of biological, physical, or mechanical control measures. For instance, use of sex pheromones, insect trap, paper stickers, or solar disinfection.</p> <p>(3) If the foregoing harmful organism prevention and control measures are ineffective, the factory (farm) can use the harmful organism control materials listed in Table 1. However, the materials in Table 1 should not come into direct contact with organic raw materials or final products.</p> <p>(4) If the agriculture operators can submit evidence proving that the harmful organism control materials listed in Table 1 are not effective, they will be allowed to use alternative preparations, materials, or methods that contain no radioactive matters, fumigants, or genetically-modified organisms, given those matters are not in direct contact with organic</p>

raw materials and final products. In addition, a plan to use should be submitted beforehand to the certification body for review, and the certification body will verify if all items of the above requirements are met before issuing approval.

#### 5. Production process

- (1) The operator shall adopt necessary measures to prevent the mixing of organic and non-organic agricultural products, and shall avoid organic agricultural products in direct contact with the prohibited substances.
- (2) Organic agricultural products are preferably produced at independent sites. If a single production site must be used for producing non-organic products, its facilities, equipment, and areas must be cleaned between production of organic products and non-organic products; and there must be adequate time separation in-between.
- (3) Biological, physical, or mechanical methods may be used to produce organic agricultural products. The methods used shall, as a rule, preserve the natural ingredients and nutritional value of the organic products.
- (4) Radiation treatment, fumigants, or filtration equipment that may contain or produce hazardous substances may not be used in the production process.
- (5) Any waste produced in the production process shall not have a negative impact on the ecological environment.
- (6) The use of raw materials, food additives, and other substances shall comply with the following regulations:
  - a. The same raw material should not be simultaneously used in the mix form of organic, organic conversion period and non-organic source.
  - b. The use of food additives and other substances listed in Table 2 is allowed. However, the use shall be based on the minimum amount required for production and comply with relevant laws and regulations.
  - c. The use of water and salt during the production process shall comply with drinking water quality standards and relevant sanitation standards.
  - d. The use of mineral substances (including trace elements), vitamins, amino acids, and pure substances extracted from plants or animals is prohibited. However, such substances may be used when required by law, or when a product is extremely lacking in nutrients and the prior consent of the certification body has been obtained.
  - e. The use of raw materials, food additives, or other substances containing genetically-modified organisms (GMO) is prohibited.
  - f. When organic raw materials are available, non-organic raw materials must not be used.

If a particular organic raw material is not available, other organic raw materials with the same function should be used. Non-organic natural raw materials can only be used when the organic raw materials with the same function are not available. As for the availability of organic raw materials, it should be determined by the certification body based on the formula provided by the agriculture operators and the related website information. Non-organic natural raw materials can only be used after certification body has confirmed the compliance with the regulations.

6. The following methods are used to calculate the organic raw material content:

- (1) Solid products: Divide the total weight of organic raw materials in the product (excluding water and salt) by total weight of the raw materials (excluding water and salt).
- (2) Liquid products: Divide the total volume of organic raw materials in the product (excluding water and salt) by the total volume of the raw materials (excluding water and salt). If the product consists of a reconstituted liquid concentrate, the organic raw material content shall be calculated from the concentration of raw materials in the liquid concentrate.
- (3) Products consisting of solid-liquid-gas mixtures: Divide the total weight of organic raw materials in the product (excluding water and salt) by the total weight of the raw materials (excluding water and salt).
- (4) Expression made by rounded integers.

### **Part III Crops**

1. Conditions for the production environment:

- (1) While holding the ownership of the production land or the right to manage, agricultural operators shall also conform to the following conditions in their production:
  - a. Production land: An adequate contamination prevention measure like fencing or buffer zone shall be in place, so that organic cultivation is free from being contaminated.
  - b. Mushroom farm: A farm shall take necessary measures to prevent the drift or influx of prohibited substances.
  - c. For wild plants and their parts that grow naturally in natural territories, forests, and agricultural zones, gathering them is deemed as an organic way of production, given that such gathering activities would not impact the stability of natural habitats or preservation of local species.
- (2) Agricultural operators shall properly manage the production materials used to maintain or improve the composition in organic matters of soil. All production materials and application methods that could lead crops, soil, or water sources to be contaminated by heavy metals or prohibited substances shall be avoided.

- (3) There shall be good soil management and water/soil conservation implemented, to ensure the sustainability of water and soil resources.
- (4) For perennial plants, it is preferable that cover crops are planted in the surrounding area or the habitat of natural enemies of pests be kept. This prevents soil from being exposed and increases local bio-diversity.
- (5) This Criteria only applies to crops that are cultivated in a soil-based environmental system. Plants rooting in mineral solutions or inert medium like perlite, gravel, and mineral cotton filled with mineral nutrient solutions are categorized as hydroponic cultivation and thus not eligible for organic certification application.
- (6) Sprouts or sprouting vegetables that are cultivated in pure water, with no substances added, are not categorized as hydroponic cultivation and thus eligible for organic certification application.

2. Farming area of short-term crops requires a two-year conversion period before it can be certified organic. Long-term crops (like perennial fruit trees or tea trees) and gathering operation require a three-year conversion period. During the conversion period, organic cultivation and gathering shall be performed in accordance with this Criteria. Conversion period is subject to extension at the discretion of the certification body. Agricultural operators may present supplementary information, like crop testing reports or records of environment-friendly cultivation that no chemical pesticides, fertilizers have been used and no GMO crops have been planted, for conversion-period reduction, and the certification body will make determination on the basis of those claims.

### 3. Parallel production:

When organic and non-organic crop are cultivated at the same time, the organic crops, production materials, and products shall be entirely separated from non-organic ones. A proper identification and signifying system shall be implemented, with production records of both segments kept separately and made available to certification bodies for review.

#### 4. Crops, varieties and seeds, seedlings

- (1) Selection shall prioritize crop types or varieties that are adaptable to the environment and have better pest resistance. Such activities shall be carried out on the principle of promoting bio- and genetic-diversities for greater ecological fidelity in the production environment.
- (2) No GMO-seeds and seedlings are allowed to be used.
- (3) Organic seeds and seedlings shall be used.
- (4) Aside from sprouts and sprouting vegetables, for those crops with no organic seeds or seedlings available, other types of seeds and seedlings are allowed to be used, given that they are not treated with synthetic chemicals or plant extracts or mineralogical materials that are harmful to human bodies (hereinafter referred to as “Unprocessed”); but the processes involved synthetic chemicals specified in this Criteria as allowable is exempted. For the above crops with no organic seeds and seedlings and Unprocessed, operators shall propose a plan to use conventional seeds and seedlings to the certification body, and only after the certification body confirms the unavailability, the operators may proceed with their use.

#### 5. Weed and Pest Management

##### (1) Weed control

- a. Preventative control: To reduce the amount of weed seeds in mixture with seeds for cultivation and the contamination of agri-machinery and irrigation water to inhibit the spread of weed in fields.
- b. Cultural control: To rotate between wet and dry cultivation, different crops, or different planting intervals.
- c. Weed population control: To apply high density plantation, sowing, transplanting or plant selected autogenic weeds or other grass varieties and green manure crops to maintain the grassland condition of the land.
- d. Cover Crops and Mulches:
  - (a) Using cut weeds (unflowered or without seed sprouted), remainders of crops, or other types of organic materials (manure, paddy husk, or peanut shell) as cover.
  - (b) Use of polyethylene, polypropylene and other polycarbonate-based plastic mulches.
  - (c) Planting green manure crops during fallow periods or conducting sod cultivation, and propagating Azolla in wet paddy fields as cover.
  - (d) Those who adopt this method shall not use crop residues and bio-materials containing pesticides, radioactive substances or excessive heavy metals as well as

polyvinyl chloride. The used plastic mulches shall be disposed of in an environmentally responsible manner, and the practice of burning it onsite is strictly prohibited.

- e. Weeding: Manual weeding, mechanical plough, drying, flooding, etc.
- f. Grazing poultry and livestock: Grazing poultry and livestock on the field for weed control.
- g. Allelopathy: Use of any direct or indirect chemical effect of secondary metabolites released by non-GMO plants to suppress the germination, growth or development of themselves or neighboring plants.
- h. Microbial herbicide: Application of non-GMO bio-organism or materials based on pathogenic micro-organisms (e.g. fungus) of weeds.

(2) Pest control

- a. Plowing control:
  - (a) Crop rotation or intercropping of non- host crops.
  - (b) Mix-cropping with synergetic crops.
  - (c) Repellent plants.
  - (d) Fence plants.
  - (e) Using pest resistant cultivars that are non-GMO.
  - (f) Using predatory animal (such as chicken, duck, etc.).
- b. Physical control:
  - (a) Using high-temperature or solar energy for soil sterilization, but stubble burning in the field is not allowed.
  - (b) Using materials containing no synthetic chemical substances like paper bag, plastic cloth, and non-woven fabric bag as protection.
  - (c) Wrapping the stem bottom of fruit trees with gunny bag, straw to prevent long-horned beetle.
  - (d) To set up ditch, physical traps.
  - (e) Using colored paper stickers and moth-attracting lamp.
  - (f) Selecting seeds with salt solution and warm water, treatment with high or low temperature.
- c. Biological control:
  - (a) Releasing natural enemy.
  - (b) Non-GMO formulation of microorganism.

(3) Use of any genetically modified formulation or material by spraying it on edible parts of



the crop is prohibited.

- (4) All of food materials can be used as weed and pest control materials. The other materials should comply with the regulations of Table 3 “Permitted Chemicals or Prohibited Natural Substances for Weed and Pest Control”.

6. Soil and fertility management:

- (1) Analysis of soil samples should be conducted in a timely fashion to understand the physical and chemical properties of soil and fertilization condition to serve as a basis for fertility management and rationalization fertilizing. The measures used should be capable of preventing the loss of nutrients and avoiding the accumulation of heavy metal and pollutants.
- (2) Cultivation system: To protect the biodiversity of the region and maintain soil fertility, adequate crop rotation, intercropping, fallowing, etc. should be considered.
- (3) Plant body: Use non-GMO plants for covering, plowing on the spot or off-site application, and they should be organically cultivated.
- (4) Use of fertilizers:
- a. It is preferred to use self-produced organic fertilizer; permission of certification body is required for outsourcing organic fertilizers.
  - b. Direct use the urine or feces of human, poultry or livestock is prohibited. If they are necessary to be used, they should be composted with fully fermentation.
  - c. The use of chemical fertilizers (with micronutrient contents) and microorganism or composite fertilizers containing chemical fertilizers are prohibited. The inclusion of micronutrients is permitted only after a plan to use is filed and approved by certification body through assessment verifying that the soil or the plant tissue is lacking that particular micronutrient.
  - d. Use of any GMO formulation or material by spraying them directly on edible parts of the crop is prohibited.
- (5) Soil fertilization control materials should comply with the regulations of Table 4 “The Permitted Chemicals or Prohibited Natural Substances for Soil Fertility Improvement”.

7. Growth regulation, harvest, preparation, storage and packaging:

- (1) Expose irradiation and fumigants is prohibited during crop cultivation, harvest and postharvest handlings.
- (2) To ensure the organic agricultural products are free from any contaminants from non-organic agricultural products, harvesting and postharvest handlings, preparation, storage and packaging must be separated from conventional agricultural products.

- (3) The operators of agricultural products primarily process their raw organic products, the procession shall be certified. Preventing harmful organism, processing procedures, and counting the content of organic materials of organic products is require with accordance to the Item 4 to Item 6 of Part II of this Criteria.
- (4) Growth regulation techniques including and not limited to training, pruning, grafting, girdling, and root pruning are allowed.
- (5) Preparation and storage techniques including and not limited to temperature are allowed.
- (6) Growth regulation, harvesting, preparation, storage and packaging materials should comply with the regulations of Table 5 “The Permitted Chemicals or Prohibited Natural Substances for Growth Regulation, Cropping, Preparation, Storage and Packaging”.

#### **Part IV livestock Products**

##### **1. General Principles**

- (1) Organic livestock production shall comply with related rules in the Certification Criteria of Organic Agricultural Products and Organic Agricultural Processed Products (hereinafter referred to as this Criteria.)
- (2) Livestock production shall proceed without affecting natural ecological balance, and shall contribute to organic agriculture system in the following aspects:
  - a. To improve and maintain soil fertility;
  - b. To protect plant communities and ecology with adequate pasturage;
  - c. To maintain biodiversity and promote plant-animal and animal-soil interdependence;
  - d. To increase diversity of agricultural production system.
- (3) Organic livestock production shall follow the natural behavior of animals and provide necessary production conditions such as access to land, sunlight and fresh air.
- (4) Livestock shall be provided with enough organic corps and feeds.
- (5) The number of livestock shall consider the following factors: feeds production, adaptability of livestock to local environment and impact to the environment, nutrition balance, as well as livestock health.
- (6) The management of organic livestock shall base on the following principles:
  - a. reproduction by natural breeding and artificial insemination;
  - b. protection of animal health and welfare;
  - c. reduction of stress;
  - d. pay attention to biosecurity;
  - e. Prohibition of use of chemically synthesized allopathic veterinary medical products and antibiotics unless authorized by a veterinarian.

## 2. Definitions

- (1) Crop land: land that plant crops used for livestock feeds.
- (2) Pasture land: land for pasture to grow or land for livestock to pasture.
- (3) Outdoor production area: open space, other than animal housing, for animal daily activities and exercises.
- (4) Replace: to bring in livestock from outside of farm because of sales, natural selection, natural disaster, serious illness, etc.
- (5) Organic feeds: including crops, processed products, by-products, matching feeds, animal source feeds, etc. The feeds shall comply with related requirements in this Criteria or in “Imported Organic Agricultural Products and Organic Agricultural Processed Products Management Regulations.”
- (6) Phytotherapeutic: therapeutic methods using plant extracts and essences.
- (7) Homeopathic: therapeutic methods using diluted remedies to induce autoimmune of patient to cure disease. The remedies used shall not be chemically synthetic medicines or antibiotics.
- (8) Allopathic: Therapeutic methods using substance, which may cause problems such as drug resistance, chemical derivatives, or drug residual, to directly, eliminate symptoms of disease.

## 3. Conversion

- (1) The conversion for crops land and pastureland shall be at least 2 years.
- (2) The conversion for pastureland or outdoor production area used by non-herbivore species shall be at least 1 year.
- (3) The conversion period of organic livestock shall comply with the following requirements:
  - a. 6 months for livestock for milk production;
  - b. Conversion period of livestock for meat production:
    - (a) not less than 6 months for calf, goats and pigs;
    - (b) not less than 12 months for beef cattle;
    - (c) Not less than 10 weeks for poultry.
  - c. 6 weeks for layer;
  - d. Others: over 3/4 of their production life cycle.
- (4) If livestock are reared prior to the transition of pastureland, the complete production unit, including livestock and pastureland, can be converted simultaneously.

## 4. Parallel production

- (1) Where organic and non-organic livestock production is operated in the same time at farm,

organic corps, livestock, materials, and production shall be separated from non-organic production area, and proper distinguishing and marking system shall be established.

- (2) Production records for organic and non-organic production shall be maintained separately.
- (3) If organic-prohibited materials make contact with land or livestock of organic production, the farmer shall report to the certification body, and the land or livestock shall be put through conversion period.

#### 5. Origin of animals

- (1) Livestock shall be managed in accordance with this Criteria from the date of birth and organic livestock reared shall come from the organically-managed female livestock.
- (2) Breeding livestock may be brought in from conventional farms with a yearly maximum of 10% of the same species of breeding livestock on the farm.
- (3) Under any of the following situations and after having been approved by certification bodies, the maximum quantity of breeding livestock from conventional farms may increase to 40%:
  - a. Serious natural disasters or accidents causing more than 25% loss of livestock;
  - b. More than 30% of expansion of the farm;
  - c. Change of species of reared livestock in farm.
- (4) Male breeding livestock can be brought in from non-organic farms, but shall be organically managed immediately.
- (5) Livestock farms during conversion period may, when organic livestock is not available, purchase the following livestock from non-organic farms:
  - a. Less than 2 days old chick for meat production;
  - b. Less than 12 weeks old pullets or ducks for the egg production;
  - c. Less than 2 weeks old for other poultry;
  - d. Weaning livestock that meets animal health requirements.
- (6) Replace or expansion of livestock other than breeding livestock shall be approved by certification bodies. If the livestock is brought in from non-organic farm, it cannot be sold as organic products unless it complies with Item 5 and Subparagraph 3 of Item 3 of this Criteria. The total number of animals in the farm after replaces or expansion shall not exceed the maximum capacity of the farm.

#### 6. Production process

- (1) Feeds and nutrition
  - a. Organic feeds and feed additives shall be used for animal nutritional needs.
  - b. The use of organic feeds and feed additives shall be approved by certification bodies,

and the processing of these feeds shall be clearly separated from that of non-organic feeds.

- c. Feed materials from animal origin can only be used if they are listed in Table 6, and shall be approved by certification bodies.
- d. Fodder preservatives shall be used after they are certified by certification bodies. The followings may be used:
  - (a) Probiotics and enzyme;
  - (b) By-products of food industry;
  - (c) Derivative plant products through fermentation;
  - (d) Non-Genetically modified organisms (GMO's) fodder preservatives.
- e. Ruminants must be fed at least 50% of the dry matter in daily rations in the form of roughage, fodder or silage.
- f. The ratio of organic feeds for ruminants and non-ruminants shall be over 85% and 80%, respectively. If the feeds were from conversion holdings, its ratio shall be permitted up to a maximum of 30% of the dried matter. If the feeds were from the holding itself, the ratio can be increased to 60%. This ratio shall not apply to feeds from its own holdings where livestock reared prior to the transition of pastureland and convert simultaneously with the land. The ratio of organic feeds in daily ration shall be over 75% of the dried matter, and shall not contain any genetically modified organisms (GMO's) or products from them.
- g. Livestock cannot be sold as organic products, if the ratio of organic feeds does not comply with the previous item.
- h. Prohibited materials in organic feeds and water are shown in Table 7.

## (2) Management

- a. Based on the natural behavior of animals, the earliest weaning time is 90 days for calf, 60 days for sheep and goats, and 42 days for piglet.
- b. The young of mammal species shall be fed with organic milk from the same species. Under special situations and approved by certification bodies, non-organic milk not containing antibiotics or chemically synthesized compounds or milk based substitute can be used.
- c. During organic livestock production, the following biotechnologies are prohibited to be used:
  - (a) Embryo transfer technique;
  - (b) Hormones used for inducing estrous and labor, with the exception of veterinary

- prescription for curing reproduction interference of individual livestock;
  - (c) Use of genetically modifying produced breed or strain of animals.
  - d. Temporary indoor holding space shall be provided under the following situations:
    - (a) Serious weather conditions;
    - (b) Reproduction period:
      - Calf and lamb: born to 7 days after weaning;
      - Cow and ewe: the last one fifth of pregnancy period to parturition;
      - Piglet: born to weaning;
      - Sow: from 3 months in pregnancy to weaning of the piglets.
    - (c) Last part of fattening period: 3 months before marketing or one fifth of life cycle, whichever is less;
    - (d) Risk of livestock health, safety, and welfare;
    - (e) Soil or water being polluted.
  - e. Photoperiod of laying hens shall not exceed 16 hours per day.
  - f. While implementing appearance change for the welfare, health and recognition of animals or safety purpose, it must be implemented at the stage of young animal or young bird by experienced staff familiar with the actual operations. The pain and stress of animals should be minimized. The following procedures for appearance changes should be conducted under the permission of certification body:
    - (a) Tooth clipping (not exceeding the 1/3 of the top) and tail docking for pigs;
    - (b) Beak trimming for young poultry before 10-day-old, not exceeding the 1/3 of the tip;
    - (c) Castration and dehorning for young livestock.
- (3) Environment
- a. All animals shall not be put in cages, and shall have free access to outdoor space. The size of group shall not cause harmful effects on animal behavior.
  - b. Herbivores shall be provided with a good pastureland or an exercise ground.
  - c. Group raising livestock, shall not be confined individually, except at situations that are approved by certification bodies, such as sick or farrowing animals, or breeding male, young animals.
  - d. The environment shall be adequate for animal growth or production in terms of providing shade, cover, shelter, exercise areas, fresh air, and nature sunlight and free from pathogenic organisms contamination.
  - e. Animal growth or production area shall have proper protective measures to ensure safety of animals from outside predators.

- f. The facilities of outdoor production area shall comply with the following principles:
    - (a) To prevent prohibited materials fly in or drift along from surrounding area by applying necessary measure;
    - (b) To provide proper cover or shelter to prevent animals from serious weather conditions, if animal housing could not provide free access to indoor;
    - (c) To have suitable water source in outdoor production area for waterfowls;
    - (d) To prevent damage to vegetation and soil caused by over grazing by using rotation grazing or low stocking density. The minimum stocking density of outdoor production area for different livestock is listed in Table 8.
  - g. The housing of livestock shall provide a clean, comfortable, and sufficient space that animals can lay down or rest; and fulfill the following requirements:
    - (a) Livestock have free access to feeding and watering;
    - (b) The structure of housing shall provide proper insulation, ventilation, and natural light;
    - (c) The housing shall, based on species and group sizes, have proper resting space and enough exits for livestock and shall have perches for poultry;
    - (d) The housing and equipments shall have routine cleaning and disinfection and only use materials listed in Table 6. Excrements and leftover or split feeds shall be routinely removed to ensure environmental hygiene;
    - (e) The materials of housing and equipments shall not be hazardous to animals and human;
    - (f) The bedding and ground for animal resting shall be kept dry. If there is a possibility that livestock may eat the bedding materials, the bedding material shall comply with rules in this Criteria;
    - (g) The stocking density of livestock shall depend on species, breeds, and age, and consider their comfort and welfare. The minimum housing space for different livestock is listed in Table 8.
  - h. The environment for pasture production shall comply with Part III of this Criteria.
- (4) Health care
- a. Selection of organic livestock shall be those breeds or strains that are adapted to local conditions and resistant to diseases and parasites.
  - b. Housing and pastureland shall conform to anti-epidemic conditions so as to prevent outbreak and spread of diseases. In addition, the space must be adequate.
  - c. Legitimate and necessary vaccine is permitted.

- d. The producer of an organic livestock operation must observe the following requirements:
  - (a) Not to use veterinary medicine, except vaccine, in the absence of illness;
  - (b) Not to use chemically synthetic parasiticides to livestock for meat products, or to other livestock on routine basis;
  - (c) For an animal that is injured or sick, to have it be treated immediately, if necessary put in isolation with a suitable housing.
- e. In organic farm, the use of veterinary medicine to treat animals shall comply with the following principles:
  - (a) Therapeutic effective phytotherapeutic, homeopathic products, vitamins, and trace elements shall be used preferentially;
  - (b) If the use of above products is not effective in combating illness or injury, and avoiding suffering or stress to the animal, chemically synthesized allopathic veterinary medical products or antibiotics may be used under the responsibility of a veterinarian;
  - (c) The use of chemically synthesized allopathic veterinary medical products or antibiotics for preventive treatments is prohibited.
- f. If organic livestock use chemically synthesized allopathic veterinary medical products, the following rules shall apply:
  - (a) The withdrawal period of such medical products must be twice the legal withdrawal period, and no less than 48 hours;
  - (b) If the productive lifecycle of animal is more than one year, the treatment shall not be more than two courses of treatment within one year;
  - (c) If the productive lifecycle of animal is less than one year, the treatment shall not be more than one course of treatment;
  - (d) Livestock for meat products shall not have any such treatment.

Livestock not complying with the above rules shall not be sold as organic products. This shall not apply if the animals are put through conversion period and approved by certification bodies.

## 7. Pest control and compost management

- (1) Pest control shall adopt preventive measures, such as biological control or proper pasture rotation plan. If the preventive measure is not effective, non-chemical methods shall be in preference of using. Only when the above measures fail to prove effective control,



<p>techniques and materials complying with this Criteria can be permitted to be used.</p> <p>(2) Organic farm shall have compost management plan, which includes manure collection, processing, and usage.</p> <p>(3) The fertilizer collection, processing, and usage shall comply with the following rules:</p> <ol style="list-style-type: none"> <li>Not to pollute crops, soil, water, and environment;</li> <li>Not to adversely affect growth of crops;</li> <li>Not to cause risks in weeds spread, pest outbreak or jeopardizing environment hygiene;</li> <li>Not to burn or apply any techniques violating this Criteria;</li> <li>To produce compost in accordance with related rules in compost processing, and to use materials complying with this Criteria.</li> </ol>
<p>8. Transportation, slaughter, collection and packing of livestock products</p> <p>(1) Animal welfare of livestock shall be considered during transport, slaughter and product collection.</p> <p>(2) Before or during transport, use of any synthesized tranquilizer or electrical goads is prohibited.</p> <p>(3) To ensure organic livestock products not mixed with or contaminated by non-organic products, the collection, processing, storage and packaging of organic livestock products shall be separated from non-organic livestock products.</p> <p>(4) Packaging, storage, transport and marketing of livestock products shall comply with related rules in this Criteria.</p>
<p>9. Techniques and materials permitted to be used in production of organic livestock products shall comply with the requirements stated in Table 6.</p>
<p>10. Production records and related documents</p> <p>Organic livestock producers shall fill up detailed and accurate records based on practical operation, and keep all related trade documents. The records shall be clear, accurate, and traceable, and shall include the following items:</p> <p>(1) Basic information, including the name and address of farm, name, address and telephone number of producer, certified area and registration number, certified livestock products, and name of the certified bodies, etc.;</p> <p>(2) Location diagram of livestock production, crops production and storage shall include the following items and routinely updated:</p> <ol style="list-style-type: none"> <li>Production block, direction, farm address, and registration number;</li> <li>Roads, storehouses, buildings, surrounding vegetation and major topographical marks</li> </ol>

and surface features to be used to identify the farm;

c.Species of livestock and types of feed crops;

d.Rivers, wells, trenches and other water sources;

e.Pollution blocking facilities and buffering zone;

f.Conditions and types of crops in neighboring areas.

(3)Organic livestock production plan:

a.Details of all organic livestock, including species, origin, quantity, and dates of brought in;

b.Records of medical products usage, including methods of livestock identification, quantity, diagnosis, date and types of medicine used, methods of management and date of sale;

(4)Sources, characteristics, quantities, usage and proof of purchase of raw materials, which include:

a.Materials for livestock production;

b.Materials for crop production (including seeds and seedlings);

c.Feeds;

d.Veterinary medical products;

e.Materials for pest control;

f.Other processing materials.

(5)Sale records of livestock products, including:

a.Species, quantities, slaughter weight or age, destination, and marks of livestock products;

b.Name of buyer and sale receipts.

(6)Other processing records, which include cutting, packaging, labeling, storage, and transport of products;

(7)Cleaning records of processing, storage, and transport equipments as well as prevention records of harmful pests in slaughterhouses, cutting and packaging plants;

(8)Records of customers or consumers complaints about organic products;

(9)Other records related to traceability of product organic integrity.

## **Part V Aquatic Plants**

1.Conditions for the production environment

(1)The cultivation or harvest areas must have adequate fencing or buffering zones to prevent pollution from outside thus avoiding the aquatic plants of organic cultivation from being contaminated.

<p>(2)The cultivation water quality must meet the requirements set forth by the Environmental Protection Administration, Executive Yuan, in the Surface Water Classifications and Water Quality Standards as first class aquatic production use water.</p> <p>(3) The heavy metal contents in the cultivation bottom soil must be lower than the standard of soil pollution control. For the cultivation soil with heavy metal contents reach the monitoring standard, the certification organization should periodically track it while conducting re-evaluation.</p> <p>(4)The cultivation or harvesting activities shall not damage the environmental resources to ensure sustainable use of resources.</p>
<p>2. Outdoor areas for the production of aquatic plants are required for a 2-year transition period before it can acquire organic certification. During the transition period, organic cultivation needs to be implemented in accordance with this Criteria.</p>
<p>3. Seeding</p> <p>(1)Use of any genetically modified seedling is prohibited.</p> <p>(2)During the seeding cultivation process, no synthetic chemical substance shall be used.</p> <p>(3)Conventional seeding can be used only when certified seeding cannot be obtained.</p> <p>(4)The use of synthetic chemical substance for sterilization at the site of seeding facilities is prohibited, except these synthetic substances are permitted for use in accordance with this Criteria.</p>
<p>4. Weeds control</p> <p>(1)Weeds must be adequately controlled by physical or biological prevention methods while no synthetic chemical substance is permitted to be used.</p> <p>(2)Use of any GMO's preparations or materials is prohibited.</p>
<p>5. Fertility management</p> <p>(1)Analysis of water samples should be conducted in a timely fashion to understand the fertilization condition to serve as a basis for fertility management.</p> <p>(2)The use of chemical fertilizers (including trace elements) and of microorganism preparation materials and organic compound fertilizers which are blended with chemical fertilizers or containing pesticides are prohibited.</p> <p>(3)Mineral fertilizer must be used in its natural composition and there shall be no chemical processing to increase its solubility or effectiveness.</p>

(4)Use of any GMO's preparations or materials is prohibited.
<p>6.Pest control</p> <p>(1)The use of synthetic chemical substance or plant extract harmful to human health or mineral materials is prohibited except these synthetic substances are permitted for use in accordance with this Criteria.</p> <p>(2)Use of any GMO's preparations or materials is prohibited.</p>
<p>7.Cropping, preparation, storage and packaging</p> <p>(1)After cropping, the use of additives or synthetic chemical substances is not allowed for the processing, nor is radiation processing allowed.</p> <p>(2)To ensure the organic aquatic plants are free from any mixing or contamination by the non-organic aquatic plants, the cropping process and preparation, storage and packaging after the cropping must be separated from the handling of general aquatic plants.</p> <p>(3)The aquatic products business operators that use their self-produced organic aquatic products as raw materials for primary processing may have their processing procedure certified at the same time, of which the harmful biology prevention, processing procedure, and the calculation method for organic matter contents shall be in accordance with this Criteria in Item 4 to Item 6 of Part II.</p>
<p>8. Practices and materials:</p> <p>In accordance with this Criteria in Part III.</p>
<b>Part VI Aquatic Animals</b>
<p>1.General Principles</p> <p>Organic aquaculture production shall proceed without affecting natural ecological balance, and shall take into account the animal welfare and shall contribute to basic production principle on healthy and well-managed environment.</p>
<p>2.Definitions</p> <p>(1)Life cycle: the sequence of life stages that an animal undergoes from birth to the desired market size.</p> <p>(2)Organic feeds: including crops, processed products, by-products, formula feed, animal feed sources origin.</p> <p>(3)Phytotherapeutic: therapeutic methods using plant extracts and essences for improving animal health.</p> <p>(4)Homeopathic: therapeutic methods using diluted remedies to induce autoimmune of animals</p>

<p>to cure disease.</p> <p>(5)Allopathic: therapeutic methods using substance or antibiotics to directly eliminate symptoms of disease.</p>
<p>3.Organic conversion period</p> <p>(1)The conversion period of the organic production unit from non-organic aquaculture shall be at least one life cycle of the organism or 12 months from the date operator/producer apply for organic certification to its certification bodies. However, provided the operators/producers had adopted organic aquaculture production before applying for organic certification and with relevant supporting documents, they may apply to the certification bodies to shorten the conversion period.</p> <p>(2)During conversion period the production process for organic aquaculture cannot be converted to non-organic aquaculture.</p> <p>(3)Provided the organic producers want to discontinue organic aquaculture certification during the conversion period they should inform the certification bodies to withdraw certification procedures.</p>
<p>4.Parallel production</p> <p>(1)The organic aquaculture production units shall be obviously separated from non-organic production area.</p> <p>(2)Production records for organic and non-organic production shall be maintained separately.</p>
<p>5.Origin of the aquatic animals</p> <p>(1)Organic aquatic animals shall be raised and managed organically from birth and the seedlings shall come from organic production of broodstock or wild populations.</p> <p>(2)Prohibited use of genetic resources as follows:</p> <ul style="list-style-type: none"> <li>a.Genetically modified organisms;</li> <li>b.Polyploid;</li> <li>c.Hybridization;</li> <li>d.All-female aquaculture.</li> </ul> <p>(3)Non-organic seedlings can be used before 1 January 2023, however a minimum of two-thirds of the animal life span shall have been under conditions certified as organic by the time of harvest.</p> <p>(4)Broodstock breeding</p> <ul style="list-style-type: none"> <li>a.Broodstock breeding is subject to at least one complete cycle of organic production, and should ensure the organic management practices in accordance with this Standard at least 12 months before the hatching.</li> </ul>

- b. The management plan for broodstock breeding should be established and includes the following:
  - (a) Production unit (batch) management plan;
  - (b) Conversion timetable and management practices.
- c. The requirements for organic fry (eggs): a clear separation to prevent cross-contamination or mixed with other substances.

## 6. Production process

### (1) feeds

- a. The use of organic feeds and feed additives shall comply with this Standard, and imported organic feed shall comply with “Imported Organic Agricultural Product and Organic Agricultural Processed Product Management Regulations”.
- b. When producers cannot get commercially organic feed and feed additives the certification bodies may certify a viable alternative program of homemade organic feed production, the raw material origins of the feed and feed additives required for the program shall be provided by producers and the production processing should be obviously separated with non-organic feed ingredients.
- c. Feed for aquatic animals should meet the following requirements:
  - (a) The sources are restricted from sustainable supply of marine organisms, byproducts of organic farming;
  - (b) The fishmeal in animal feed shall not exceed 20%.
- d. The following substances are prohibited in the diet for organic aquaculture:
  - (a) Synthetic growth promoting hormone, hormones or attractant;
  - (b) Synthetic antioxidants or preservatives;
  - (c) Synthetic amino acids;
  - (d) Artificial, synthetic or similarly natural pigments;
  - (e) Non-protein nitrogen;
  - (f) Animal excrement;
  - (g) Genetically modified organisms or its products and raw materials;
  - (h) Livestock and their wastes.

### (2) Disease prevention

- a. Selection of organic species shall be those breeds or strains that are adapted to local conditions and resistant to diseases and parasites.
- b. The following materials shall be used to disinfect water bodies and pond bottom in order to prevent the occurrence of aquatic animal diseases:

- (a)Quicklime (calcium oxide);
- (b)Zeolite powder;
- (c)Hydrogen peroxide;
- (d)Sodium hypochlorite(antiformin);
- (e)Acetic acid;
- (f)Citric acid;
- (g)Ethanol;
- (h)Probiotics;
- (i)Tea-seed cake;
- (j)Tobacco (nicotiana).

c.Legitimate and necessary vaccine is permitted.

d.The producers of the organic aquaculture operation must comply with the following requirements:

- (a)Not to use veterinary medicine, except vaccine, in the absence of illness;
- (b)For an aquatic animal that is injured or sick, to have it be treated immediately, if necessary put in isolation with a suitable living unit.

e.In organic farm, the use of veterinary medicine to treat aquatic animals shall comply with the following principles:

- (a)Therapeutic effective phytotherapeutic and homeopathic products shall be used preferentially;
- (b)The use of chemically synthesized allopathic veterinary medical products or antibiotics for preventive treatments is prohibited.
- (c)If the use of above products is not effective in combating illness or injury, chemically synthesized allopathic veterinary medical products or antibiotics may be used under the responsibility of a veterinarian; and the following rules shall apply:
  1. The withdrawal period of such medical products must be twice the legal withdrawal period.
  2. When processing drug treatment, the organically sick aquatic animals should be isolated.

### (3)Living environment

- a.The farm location shall consider the vicinity environment to maintain its ecological balance and biodiversity.
- b.Organic farming areas should be distinctly separated from non-organic farming areas. More than 2 meters buffer zone should be retained in the land-based aquaculture; where

the buffer zone in marine cages should be kept more than 80 meters with the conventional farms. However the surrounding of the farms are subject to the certification bodies to adjust the buffer distance for the purpose of isolation.

- c. The drainage water from the farm cannot affect the ecological environment and the water quality shall comply with the relevant regulations of the waste water.
- d. The material used in the construction and management is not allowed to jeopardize the living organisms or environmental substances.

#### (4) Aquaculture management

- a. Operators shall take adequate measures to prevent escapes of aquatic animals as not lead to locally adverse environmental impacts, and simultaneously prevent other animals getting into the organic aquaculture farms or prey on organically aquatic animals, and shall prevent cultivated species from entering natural water bodies.
- b. Polyculture of aquatic organisms is highly recommended to maintain biodiversity.

#### (5) Production records and related documents:

Organic aquaculture producers shall fill up detailed and accurate records based on practical operation, and keep all related trade documents. The records shall be clear, accurate, and traceable, and shall include the following items:

- a. Basic information, including the name and address of farm, name, address and telephone number of the producer, certified area and registration number, certified aquaculture products, and name of the certified bodies, etc.
- b. The management record of organic aquaculture animal production:
  - (a) The production records of all certified organic aquatic animals including the species, source, quantity and entry date, water quality monitoring information etc.;
  - (b) Records of the drug administration for organic aquatic animal including drugs identification, quantity, diagnosis, date and types of medicine used;
  - (c) Methods of management and date of sale for aquaculture products.

c. Location diagram of organic aquaculture production, feeds variety and storage shall include the following items and routinely updated:

- (a) Farm information and site registration number (fishing rights information);
- (b) Roads, storehouses, buildings, surrounding vegetation and major topographical marks and surface features, or offshore/onshore markers to be used to identify the farm;
- (c) Species of aquatic animals or types of feed;
- (d) Rivers, wells, trenches and other water sources;
- (e) Pollution blocking facilities and buffering zone;



(f) Conditions and types of crops in neighboring areas.

d. The records for sources, characteristics, quantities, usage and proof of purchase of raw materials from all the following items as feeds, veterinary medical products, materials for pest control and other processing materials shall be preserved.

7. Harvest, transportation and slaughter of aquatic animals

- (1) When processing harvest the operator shall take measures as peaceful as possible to reduce the stress and adverse effect of organic aquatic animals.
- (2) The use of any synthesized tranquilizer/sedatives are prohibited either prior to or during transport.
- (3) There shall be someone responsible for the health of organic aquatic animals during transportation.
- (4) The water and stocking density shall be consistent with the needs of aquatic animals during transportation.
- (5) The transportation distance and frequency shall be reduced to a minimum.
- (6) When slaughtering, the use of humane methods or appropriate applications of physical anesthesia as the percussion and electric shock shall be used to lead aquatic animals in a coma immediately.
- (7) Avoid organically aquatic live animals having direct or indirect contact with the dead or slaughtered ones.
- (8) To ensure organic aquatic animals/products not mixed with or contaminated by non-organic animals/products, the collection, processing, storage and packaging of organic animals/products shall be separated from non-organic aquatic animals/products.

# Organic Agricultural Product and Organic Agricultural Processed Product Certification Management Regulations (Appendix 1-Tables)

## The Certification Criteria for Organic Agricultural Products and Organic Agricultural Processed Products<sup>2</sup>

Table 1 “Harmful organism control substances that may be used during processing,  
packaging, and distribution”

Name	Use conditions
1. Alcohols	
(1) Ethanol	Limited to be used as a disinfectant and cleanser.
(2) Isopropanol	Limited to be used as a disinfectant.
2. Wine	
3. Chlorine materials	
(1) Calcium hypochlorite (2) Chlorine dioxide (3) Sodium hypochlorite	1. Limited to be used in disinfecting and cleaning tools and equipment; disinfecting equipment and animal intestines; and washing eggs. 2. Free residual chlorine concentration must comply with drinking water quality standards.
4. Phosphoric acid, lye	Limited to be used in cleaning equipment.
5. Vinegar	
6. Vegetable oil	
7. Lime, Lime sulfur	
8. Diatomaceous earth	Limited to be used in controlling pests and diseases in protective facilities.
9. Fungicide-free soaps, potash (soft soap)	
10. Hydrogen peroxide	
11. Coffee seed meal	
12. Aquatic plant extracts	
(1) Garlic	

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<sup>2</sup> Hereinafter referred to as this Criteria.

(2) Pepper	
(3) Welsh Onion	
(4) Chives	
(5) Neem seed ( <i>Azadirachta indica</i> )	
(6) Lemongrass ( <i>Cymbogon citratus</i> (DC) Stapf.)	
(7) Mint	
(8) Mustard	
(9) African marigold ( <i>Tagetes erecta</i> L.)	
(10) Soap nut tree, Chinese soap berry	
(11) Herbs	
13. Wood ash	
14. Non-GMO microbial pesticides which consist of bacteria (eg. Bt, Bs, Ba), entomopathogenic fungi and viruses.	Exogenous toxin is prohibited.
15. Pyrethrum extract	
16. Boric acid	Limited to be used in container and for the purpose of plant insect pest control.
17. Sex pheromones	Limited to the active reagent containing sex pheromones of pest and for the purpose of plant insect pest control.
18. Chili	Limited to be used as eliminating reagent and for the purpose of plant insect pest.
19. Sodium bicarbonate	
20. Carbon dioxide	

Table 2 “Food additives and other substances that may be used during processing, packaging, and distribution”

Name Use conditions	Name
1. Chlorinated lime	Disinfecting and cleaning the surface contacting food, but the residual of active chlorine should meet the drinking water standards.
2. Chlorine dioxide	
3. Sodium hypochlorite solution	
4. Hypochlorous acid	Limited to the ones produced by the electrolysis of saline solutions. For use as disinfectant in plant-processed products and animal intestines and for egg washing.
5. Hydrogen peroxide	For use as bactericide. This substance only can be used in minced fish surimi products, other foods excluding wheat flour and its products. The usage is counted by the residual amount of H <sub>2</sub> O <sub>2</sub> . No residual H <sub>2</sub> O <sub>2</sub> is allowed in food.
6. L-Ascorbic acid (Vitamin C)	Limited to be used as antioxidants for all foods. The usage amount of ascorbic acid should not exceed 1.3g/kg.
7. DL- $\alpha$ -Tocopherol (Vitamin E)	<p>For use as antioxidant and nutrient additive.</p> <ol style="list-style-type: none"> <li>1. While being used as antioxidant, this substance can be used in all kinds of foods. The usage limit is the same as the nutrient additive, tocopherol (Vitamin E).</li> <li>2. While being used as nutrient additive, it is limited to be used as supplement for the food with insufficient nutrients: <ol style="list-style-type: none"> <li>(1) For the foods in the form of tablet and labeled with daily dietary allowance, the total contents of Vitamin E should not exceed 400I.U. (268mg d-<math>\alpha</math>-tocopherol) in daily dietary allowance.</li> <li>(2) For general foods, the total contents of Vitamin E should not exceed 18mg <math>\alpha</math>-T.E. in daily dietary allowance or 300g of the foods (for the ones not labeled with daily dietary allowance).</li> <li>(3) For baby (auxiliary) foods, the total contents of Vitamin E should not exceed 7.5mg <math>\alpha</math>-T.E. in daily dietary allowance or 300g of the foods (for the ones not labeled with daily</li> </ol> </li> </ol>

	dietary allowance).
8. Sulfite	<p>Potassium sulfite and sodium sulfite can be used as antioxidant or bleach. The following takes potassium sulfite as an example:</p> <p>1. When it is used as antioxidant, it is limited to be used only when it is necessary for food production or food processing:</p> <p>(1) This substance can be used in malt beverage (which containing no alcohol), not more than 0.03g/kg calculated as residual SO<sub>2</sub>.</p> <p>(2) This substance can be used in jam, jelly, peel jelly and fillings of fruit pies, not more than 0.1g/kg, calculated as residual SO<sub>2</sub>.</p> <p>(3) This substance can be used in topping (syrup for pancake, flavored syrup for milk-shake, ice cream and similar products), not more than 0.04g/kg, calculated as residual SO<sub>2</sub>.</p> <p>(4) This substance can be used in the flour confectionary containing glucose syrup, not more than 0.05g/kg, calculated as residual SO<sub>2</sub>.</p> <p>2. When it is used as bleach:</p> <p>(1) This substance can be used in dried apricots, not more than 2.0g/kg, calculated as residual SO<sub>2</sub>.</p> <p>(2) This substance can be used in white raisins, not more than 1.5g/kg, calculated as residual SO<sub>2</sub>.</p> <p>(3) This substance can be used in animal glue, dehydrated vegetables and other dehydrated fruits, not more than 0.50g/kg, calculated as residual SO<sub>2</sub>.</p> <p>(4) This substance can be used in molasses and malt sugars, the usage counted by the amount of residual SO<sub>2</sub>, which should be not more than 0.30g/kg.</p> <p>(5) This substance can be used in food tapioca starch, not more than 0.15g/kg, calculated as residual SO<sub>2</sub>.</p> <p>(6) This substance can be used in candied fruits, shrimps and shellfishes, not more than 0.10g/kg, calculated as residual SO<sub>2</sub>.</p>

	<p>(7) This substance can be used in konjac: for the raw materials not for direct consumption, not more than 0.90g/kg, calculated as residual SO<sub>2</sub>; for the konjac material for direct consumption, not more than 0.030g/kg, calculated as residual SO<sub>2</sub>.</p> <p>(8) This substance can be used in the processed food other the above mentioned food, not more than 0.030g/kg, calculated as residual SO<sub>2</sub>. But the use in beverages (excluding juice), wheat flour and its products (excluding baking products) is prohibited</p>
9. Sodium bicarbonate	For use as leavening agent in all foods when necessary for food production or food processing.
10. Ammonium carbonate	For use as leavening agent and as food quality improvement, fermentation and food processing agents in all foods when necessary for food production or food processing.
11. Ammonium bicarbonate	For use as leavening agent in all foods when necessary for food production or food processing.
12. Potassium Carbonate	<p>1. For use as leavening agent, and as food quality improvement, fermentation and food processing agents in all foods when necessary for food production or food processing.</p> <p>2. For use as chemicals for food industry in all foods when necessary for food production or food processing and to be removed or neutralized in final products.</p>
13. Calcium chloride	<p>1. For use as food quality improvement, fermentation and food processing agents in all foods when necessary for food production or food processing, not more than 10g/kg, calculated as Ca.</p> <p>2. For use as nutrition additive: in the form of tablet and labeled with daily dosage, no more than 1800mg of total calcium in daily intake. It is limited to be used as supplement for the food with insufficient nutritions.</p>
14. Calcium hydroxide	1. For use as food quality improvement, fermentation and food processing agents in all foods when necessary for food production or food processing, not more than 10g/kg,

	<p>calculated as Ca.</p> <p>2. For use as nutrition additive: in the form of tablet and labeled with daily dosage, no more than 1800mg of total calcium in daily intake. It is limited to be used as supplement for the food with insufficient nutritions.</p>
15. Calcium sulfate	<p>1. For use as food quality improvement, fermentation and food processing agents in all foods when necessary for food production or food processing, not more than 10g/kg, calculated as Ca.</p> <p>2. For use as nutrition additive: in the form of tablet and labeled with daily dosage, no more than 1800mg of total calcium in daily intake. It is limited to be used as supplement for the food with insufficient nutrition.</p>
16. Calcium citrate	<p>1. For use as food quality improvement, fermentation and food processing agents in all foods when necessary for food production or food processing, not more than 10g/kg, calculated as Ca.</p> <p>2. For use as nutrition additive:</p> <p>(1) General foods: not more than 1800mg of calcium for foods labeled with daily dosage or for every 300g of food without daily dosage labeling.</p> <p>(2) Infant (supplementary) foods: not more than 750mg of calcium for foods labeled with daily dosage or for every 300g of food without daily dosage labeling.</p>
17. Calcium phosphate, monobasic	<p>1. For use as food quality improvement, fermentation and food processing agents in all foods when necessary for food production or food processing, not more than 10g/kg, calculated as Ca.</p> <p>2. For use as nutrition additive:</p> <p>(1) General foods: not more than 1800mg of calcium for foods labeled with daily dosage or for every 300g of food without daily dosage labeling.</p> <p>(2) Infant (supplementary) foods: not more than 750mg of calcium for foods labeled with daily dosage or for every</p>

	300g of food without daily dosage labeling.
18. Calcium phosphates, tribasic	<p>1. For use as food quality improvement, fermentation and food processing agents in all foods when necessary for food production or food processing, not more than 10g/kg, calculated as Ca.</p> <p>2. For use as nutrition additive:</p> <p>(1) General foods: not more than 1800mg of calcium for foods labeled with daily dosage or for every 300g of food without daily dosage labeling.</p> <p>(2) Infant (supplementary) foods: not more than 750mg of calcium for foods labeled with daily dosage or for every 300g of food without daily dosage labeling.</p>
19. Calcium carbonate	<p>1. For use as food quality improvement, fermentation and food processing agents:</p> <p>(1) Chewing gums and bubble gums: as practically needed.</p> <p>(2) Other foods: No more than 10g/kg calculated as Ca, only for manufacturing or processing purpose.</p> <p>2. For use as nutrition additive:</p> <p>(1) General foods: not more than 1800mg of calcium for foods labeled with daily dosage or for every 300g of food without daily dosage labeling.</p> <p>(2) Infant (supplementary) foods: not more than 750mg of calcium for foods labeled with daily dosage or for every 300g of food without daily dosage labeling.</p>
20. Sodium carbonate	For use as food quality improvement, fermentation and food processing agents in all foods when necessary for food production or food processing.
21. Sodium carbonate, Anhydrous	<p>1. For use as food quality improvement, fermentation and food processing agents in all foods when necessary for food production or food processing.</p> <p>2. For use as chemicals for food industry in all foods when necessary for food production or food processing, and have to be removed or neutralized in final products.</p>
22. Magnesium carbonate	1. Food quality improvement, fermentation and food



	<p>processing agents in all foods when necessary for food production or food processing, no more than 5g/kg.</p> <p>2. For use as nutrition additive: in the form of tablet and labeled with daily dosage, no more than 600mg of total magnesium in daily intake. It is limited to be used as supplement for nutrient deficiency.</p>
23. Magnesium sulfate	<p>1. For use as food quality improvement, fermentation and food processing agents in all foods when necessary for food production or food processing.</p> <p>2. For use as nutrition additive:</p> <p>(1) As supplement in foods for nutrient deficiency. Recommended daily intake level for magnesium is 600mg; no more than 300mg of magnesium in every 300g of foods without daily dosage labeling.</p> <p>(2) As supplement in Infant (supplementary) foods for nutrient deficiency. Recommended daily intake level for magnesium is 105mg; no more than 105mg of magnesium in every 300g of foods without daily dosage labeling.</p>
24. Magnesium chloride	<p>1. For use as food quality improvement, fermentation and food processing agents in all foods when necessary for food production or food processing.</p> <p>2. Foods in tablet form and labeled with daily dosage labelled: no more than 600mg of magnesium in daily intake. It is limited to be used as supplement for nutrient deficiency.</p>
25. Glycerin	<p>1. For use as food quality improvement, fermentation and food processing agents in all foods when necessary for food production or food processing.</p> <p>2. For use as carrier in all foods when necessary for food production or food processing.</p>
26. Bentonite	<p>For use as food quality improvement, fermentation and food processing agents in all foods when necessary for food production or food processing; the residue shall stay under 5g/kg.</p>

27. Diatomaceous earth	<p>For use as food quality improvement, fermentation and food processing agents or others:</p> <ol style="list-style-type: none"> <li>1. This substance can be used in all foods, given that the residue shall stay under 5g/kg, and the use is limited to manufacturing or processing purposes.</li> <li>2. This substance can be used in food service for filtrating aid purpose, no more than 0.1% of frying oil.</li> </ol> <p>The limitation of use:</p> <ol style="list-style-type: none"> <li>1. It is limited to be used only for manufacturing or processing purpose.</li> <li>2. When it is used in the oil which is to fry foods for direct consumption, it should be put on the filter paper for the filtration of frying oil, not adding in frying oil and not for repeative use.</li> </ol>
28. Kaolin	
29. Talc	<p>For use as food quality improvement, fermentation and food processing agents:</p> <ol style="list-style-type: none"> <li>1. Foods in tablet form: as practically needed, and only for manufacturing or processing purpose.</li> <li>2. No more than 5g/kg of residue for all other foods. No more than 50g/kg, when used in chewing gums and bubble gums if bentonite, aluminum silicate, diatomaceous earth, or kaolin is not used. It is only for manufacturing or processing purpose.</li> </ol>
30. Perlite	<p>For use as food quality improvement, fermentation and food processing agents or others:</p> <ol style="list-style-type: none"> <li>1. This substance can be used in all foods, given that the residue shall stay under 5g/kg, and the use is limited to manufacturing or processing purposes.</li> <li>2. This substance can be used in food service for filtrating aid purpose, no more than 0.2% of frying oil.</li> </ol> <p>The limit of use:</p> <ol style="list-style-type: none"> <li>1. It is limited to be used only as filter aids for manufacturing or processing purpose.</li> </ol>

	2. When it is used in the oil which is to fry foods for direct consumption, it should be put on the filter paper for the filtration of frying oil, not adding in frying oil and not for repetitive use.
31. Silicon dioxide	<p>1. For use as quality improvement, fermentation, and processing agent in all foods when necessary for food production or food processing.</p> <p>2. Foods in tablet form and labeled with daily dosage labelled: no more than 600mg of silicon dioxide in daily intake. It is limited to be used as supplement for insufficient nutrition.</p>
32. Carnauba wax	For use as food quality improvement, fermentation and food processing agents for confections (including chewing gum and chocolate products), and foods in tablet forms as practically needed.
33. Beeswax	
34. Citric acid	For use as seasoning agent for all foods as practically needed. It is only for manufacturing or processing purpose.
35. Sodium citrate	For use as seasoning agent for all foods as practically needed. It is only for manufacturing or processing purpose.
36. Potassium citrate	For the use as seasoning agent for all foods as practically needed.
37. Tartaric acid	For use as seasoning agent for all foods as practically needed. It is only for manufacturing or processing purpose.
38. D&DL-sodium tartrate	For use as seasoning agent for all foods as practically needed. It is only for manufacturing or processing purpose.
39. Lactic acid	For use as seasoning agent for all foods as practically needed. It is only for manufacturing or processing purpose.
40. DL-malic acid (Hydroxysuccinic acid)	<p>For use as seasoning agent for all foods as practically needed. It is only for manufacturing or processing purpose.</p> <p>It is not allowed to use for infant food.</p>
41. Potassium chloride	<p>1. For use as nutrition additive for foods as practically needed. It is only for supplement purpose for insufficient nutrition.</p> <p>2. For use as seasoning agent for all foods as practically needed.</p>

42. Alginic acid	For use as pasting agent for foods as practically needed.
43. Sodium alginate	For use as pasting agent for foods as practically needed; no more than 10g/kg.
44. Potassium alginate ( Algin )	For use as pasting agent for foods as practically needed.
45. Calcium alginate ( Algin )	For use as pasting agent for foods as practically needed.
46. Carrageenan	For use as pasting agent for foods as practically needed.
47. Xanthan gum dairy	For use as pasting agent for foods as practically needed.
48. Sodium hydroxide	For use as chemicals for food industry for all foods as practically needed. It should be neutralized or removed in final products.
49. Potassium hydroxide	For use as chemicals for food industry for all foods as practically needed. It should be neutralized or removed in final products.
50. Agar-Agar	Limited to be unbleached.
51. Arabic gum	
52. Guar gum	
53. Locust bean gum or Carob bean gum	When used in processed animal products, it is only for dairy and meat product processing.
54. Gelatin	
55. Pectin	
56. Carbon dioxide	
57. Ethylene	
58. Acetylene	
59. Nitrogen	Only from non-petroleum sources or oil-free grade.
60. Oxygen	Only from oil-free grade.
61. Natural colors	
62. Natural yeast	
63. Activated charcoal	
64. Lecithin	When in liquid form, it is only from not processed by organic solvent.
65. Corn starch (native)	
66. Natural flavors	
67. Enzyme, such as:	1. Only from edible, non-toxic plants, non-pathogenic bacteria

(1) Rennet (2) Catalase (Extract from animal's liver) (3) Animal Lipase (4) Pepsin (5) Trypsin (6) Pancreatin (7) Egg white lysozyme	or healthy animals. 2. Only from not being processed by organic solvent.
68. Casein	For use as pasting agent for foods as practically needed.
69. Glucono- $\delta$ -lactone	For use as seasoning agent for all foods as practically needed, given that it is generally considered safe.
70. L-Ascorbic Acid	For use as antioxidant for all foods, no more than 1.3g/kg. It is only for antioxidation purpose.
71. Tannic acid	This substance can be used in non-alcoholic beverages, no more than 0.005%. It's only for filtering aid purpose.
72. Sulfuric acid	For use as chemicals for food industry for all foods as practically needed. It should beneutralized or removed in final products.
73. Magnesium chloride from seawater (coarse salt)	Magnesium chloride can be used for quality improvement, fermentation and food processing agent and as nutrition additive: 1. For use of quality improvement, fermentation and food processing agent for all foods as practically needed. It is only for manufacturing or processing purpose. 2. For use as nutrition additive for food in tablet form and labeled with daily dosage, no more than 600mg in daily intake. It is only for supplementing purpose for insufficient nutritions.
74. Sodium Hydroxide	For use as chemicals for food industry for all foods as practically needed. It should beneutralized or removed in final products.
75. Potassium Hydroxide	For use as chemicals for food industry for all foods as practically needed. It should beneutralized or removed in final products.

76. L-potassium hydrogen tartrate	For use as leavening agent for all foods as practically needed. It is only for manufacturing processing purpose.
77. Calcium hydrogen phosphate	<p>1. For use of quality improvement, fermentation and food processing agent for all foods as practically needed, not more than 10g/kg calculated as Ca. It is only for manufacturing or processing purpose.</p> <p>2. For use as nutrition additive:</p> <p>(1) For general foods, not more than 1800mg calculated as Ca in daily intake or 300g of the foods (not labeled with daily intake).</p> <p>(2) For baby (supplement) foods, not more than 750mg calculated as Ca in daily intake or 300g of the foods (not labeled with daily intake).</p>
78. Ethanol	
79. Charcoal ash	
80. Flavoring agent	
81. Fumaric acid ((E)-butenedioic acid)	For the use as seasoning agent for all foods as practically need. It is only for manufacturing or processing purpose.
82. Monosodium fumarate (sodium; (E)-4-hydroxy-4-oxobut-2-enoate)	For the use as seasoning agent for all foods as practically needed. It is only for manufacturing or processing purpose.
83. Ozone	It is only for cleaning and infection purpose.

Table 3 “Permitted Chemicals or Prohibited Natural Substances for Weed and Pest Control”

Name	Use conditions and limitations
<p>1. Allowed Chemicals</p> <p>(1) Chitosan</p> <p>(2) Propolis, beeswax</p> <p>(3) Vinegar (brewing vinegar, bamboo vinegar, wood vinegar, rice husk vinegar and etc.)</p> <p>(4) Vegetable oil and its emulsion (neem oil, soybean oil, sunflower oil and etc.)</p> <p>(5) Essential oil (cinnamon oil, citronella oil, camphor oil, tea tree oil and etc.)</p> <p>(6) Seaweed</p> <p>(7) Plant residues: Camellia residues (tea saponin), beadtrees residues, coffee residues, tobacco residues, etc.</p> <p>(8) Plant leachate or natural aquatic extracts: Garlic, chili, welsh onion, chives, neem, lemongrass, mint, mustard, marigold, sapindus pyrethrum</p> <p>(9) Plant ash</p> <p>(10) Plant protection microorganism (Bacillus thuringiensis, Metarhizium anisopliae, Bacillus subtilis, Bacillus subtilis, Trichoderma, etc.)</p> <p>(11) Chlorine-containing substance: hypochlorites, chlorates, chlorine dioxide and etc.</p> <p>(12) Copper-containing substance: copper sulfate, copper hydroxide, cuprous oxide, copper oxychloride, tribasic copper sulfate and etc.</p>	<p>1. The commercial organic agricultural plant protecting materials should comply with Agro-pesticides Management Act. All of them require pesticide registration certificate or should be the announced plant protecting materials excluded from registration.</p> <p>2. While using chlorine-containing or copper-containing substances, decrease the accumulated chlorine or copper as possible.</p> <p>3. While using pheromone, insect-attracting and borax (boric acid), the direct contact with crop is prohibited.</p> <p>4. While using poisonous methyl eugenol, it should be placed in lures and avoid to directly contacting with plant and soil. Before using it, the use plan should be submitted to certification body and it can only be used according to the use plan after the certification body permitted the use plan.</p>

<p>(13) Bordeaux mixture (copper sulfate + lime)</p> <p>(14) Neutralized phosphoric acid</p> <p>(15) Potassium hydrogen carbonate, sodium hydrogen carbonate (baking soda)</p> <p>(16) Calcium carbonate</p> <p>(17) Lime, sulfur, lime sulphur solution</p> <p>(18) Potassium hydroxide</p> <p>(19) Potassium silicate</p> <p>(20) Diatomaceous earth</p> <p>(21) Clay minerals (Kaolinite, Zeolite, montmorillonite and etc.)</p> <p>(22) Mineral oil</p> <p>(23) The insect-attracting or repelling substances which do not contact with crops (pheromone, methyl eugenol, protein hydrolysate, cue lure and etc.)</p> <p>(24) Fatty acid potassium salts (soap salts), saponified natural oil materials which do not contain pesticides</p> <p>(25) Borax (boric acid) poisonous methyl eugenol</p>	
<p>Prohibited Natural Substances</p> <p>(1) Thick Fruit Millettia</p> <p>(2) Plant extracts and mineral materials which are harmful to human body.</p>	



Table 4 “The Permitted Chemicals or Prohibited Natural Substances for Soil Fertility Improvement”

Name	Description of category and use conditions	Limitation
1. Compost	The fertilizers which are produced by the aerobic microorganisms with mixing various straws, leaves, weeds, waste components of mushroom cultivation, bark, wood sawdust, wood chip, coconut fiber and green manure as main components, then added with urine/feces of poultry/livestock and a few of soil and let stand.	<p>1. If the raw materials of self-produced compost originate from the farm its own, the test is not required. If the raw materials are outsourced, the certificate of originate should be submitted and the harmful components should comply with the regulations of “Fertilizer Categories Item Numbers And Specifications” (general compost). To protect the organic integrity, the certification body can conduct sampling and submit the samples of self-produced compost for the analysis of main and harmful components.</p> <p>2. The outsourced compost should pass the test of certification body and receive permission.</p> <p>3. The chemically or radioactively processed materials, crop residues and biomaterials with radioactive or pesticides residue, heavy metal and exotoxin which do not comply with allowable criteria are prohibited.</p> <p>4. Sewer sludge, waste paper, pulp, and genetically-modified biological product/materials are prohibited.</p>
2.Of plant origin	<p>1. The hydrolysis products (plant amino acid, alginic acid) of plant bodies by enzyme (products of natural microorganisms).</p> <p>2. The natural fermented products of plant bodies (peat, peat moss, Herba</p>	<p>1. The ones added with preservatives (including salts) are prohibited.</p> <p>2. The waste or recycled substances from antibiotic production procedure or chemical synthesis are prohibited.</p> <p>3. The materials of this category which are extracted by adequate amount of potassium hydroxide can be used, but the contents of</p>

Name	Description of category and use conditions	Limitation
	<p>Sphagni).</p> <p>3. The meals produced after the oil had been expelled or extracted from plant seeds (such as soybeans, peanuts, linseed, sesame, rapeseed, ramie, coconut meals and etc.). (fertilizer item number No. 5-01)</p> <p>4. The residues of brewery (waste wine lees, distillers' grains or distillers' wort).</p> <p>5. The waste of plant residue during process procedure without addition of spice by food and beverage manufacturer (such as tea residues, coffee residues, bean residues, fruit and vegetable residues), waste residues must not contain the slug from waste water process.</p> <p>6. Products (sugar) and byproducts (bagasse, molasses and sugar filter mud) of sugar industry.</p> <p>7. The stems, scraps and residues produced by tobacco production (the reject not added with spices).</p> <p>8. The residue of grain by</p>	<p>potassium hydroxide in product must not exceed 3%, the humus must not below 1% and the ratio of humus and potassium hydroxide should be at least 3(W/W).</p>

Name	Description of category and use conditions	Limitation
	<p>grinding, threshing, milling (rough rice, rice brans, wheat bran and etc.).</p> <p>9. The dehydration, frozen and grinding products of marine algae, kelp and seaweeds.</p> <p>10. The composted wooden materials which not processed by chemical and radioactive measures (bark, wood sawdust and wood chip).</p>	
3. Of animal origin	<p>1. The hydrolysis products (such as animal amino acid, chitin and etc.) of animal bodies by enzyme (products of natural microorganisms).</p> <p>2. The powder produced from animal blood, bones, hoofs, horns, internal organs of fishes and feathers by steaming, boiling, drying or burning (blood powder, steamed bone powder, meat and bone powder, hoof powder, horn powder, fish powder, feather powder). (fertilizer item number No. 5-04)</p> <p>3. The fertilizer produced with coarse fish, internal organs of fishes or other fish wastes</p>	<p>1. The animal cadaver, waste carcasses or rejects which announced by the Central Competent Authority as suffering from or suspicious as suffering from specific animal infectious diseases must not be processed into fertilizers or as the raw materials of fertilizers.</p> <p>2. The chitin obtained from shells of shrimps and crabs processed by adequate amount of hydrochloric acid and potassium hydroxide can be use, but the contents of potassium hydroxide and hydrochlorine of the products should not exceed 3 % and 2 %, respectively.</p>

Name	Description of category and use conditions	Limitation
	<p>adsorbed by peat or animal or plant materials. (fertilizer item number No. 5-03)</p> <p>4. The products produced by physically drying and grinding by the shells of shrimps, crabs, oysters, conches and fossil. (fertilizer item number No. 4-13)</p> <p>5. Milk powders and egg shells.</p> <p>6. The animal waste produced by food manufacturer during process procedure (the residues not being processed by chemical measures such as craps of aquatic, poultry or livestock reject products, skins, fur, bones, meat, internal organs and etc.), waste residues must not contain the slug from waste water process and should be made into compost.</p> <p>7. The guano phosphorus fertilizer from seabird.</p> <p>8. The compost by earthworm cast.</p>	
4.Charcoals and ashes	1. Natural coals, wood charcoals, bamboo charcoals, carbonized rough rice, carbonized corncob and etc.	<p>1. The usage of silicate slag should not exceed 4 tons/hectare/year.</p> <p>2. The use of ashes collected from industrial process is prohibited.</p>

Name	Description of category and use conditions	Limitation
	<p>2. The ashes obtained by burning animals, plants or minerals, such as bone ashes, wood ashes, palm ashes, dolomite ashes and etc.</p> <p>3. Silicate slag.</p>	
5. Of natural mineral origin	<p>The products obtained by grinding, calcination grinding or water extraction from raw ores 【phosphor ore (fertilizer item number No. 2-09), potassium ore powder, limestone, dolomite (fertilizer item number No. 4-19), gypsum, borate rock, basalt, mica, zeolite, sulfur, vermiculite, perlite, prophries andesite , feldspar, calcite and etc.】</p>	<p>1. The harmful components of natural minerals should comply with the regulations of the same category in “Fertilizer Categories Item Numbers And Specifications”.</p> <p>2. The use of chile saltpeter is prohibited.</p> <p>3. It is prohibited to use chemical measures to elevate the solubility, effectiveness, or slow-release property and etc.</p> <p>4. The use of lime obtained from industrial byproducts is prohibited.</p>
6. Micro organisms materials	<p>1. The beneficial microorganisms which already received fertilizer registration certificate, such as rhizobium, nitrogen-fixing bacteria, phosphate-solubilizing bacteria, potassium-solubilizing bacteria, mycorrhizal fungi and etc.</p> <p>2. The natural microorganisms collected by the farmers.</p>	<p>No chemical fertilizer or substances should be contained.</p>

Name	Description of category and use conditions	Limitation
7.Others	<p>The products comply with this Criteria set in the “Fertilizer Categories Item Numbers And Specifications” of COA, including crude potassium salt fertilizer (fertilizer item number No. 3-04), mixed organic fertilizer (fertilizer item number 5-12) and the other fertilizer categories which comply the standards of this Criteria. The above fertilizer products should all comply the regulations of this Criteria.</p>	

Table 5 “The Permitted Chemicals or Prohibited Natural Substances for Growth Regulation, Cropping, Preparation, Storage and Packaging”

1. Permitted Chemicals

Name	Limitation
(1) Synthetic vinegar (non-natural brewing)	
(2) Ethylene	
(3) acetylene	
(4) Carbon dioxide	
(5) Nitrogen	
(6) Alcohol (Ethanol)	Ethanol (limited to non-industrial use)
(7) Lime	Lime (limited to food grade)
(8) Deoxidizer	The materials contact with products should comply with related food safety hygiene control standards.
(9) Biodegradable plastic (PLA) wrappings	

2. Prohibited Natural Substances

Name	Limitation
Amino acid (chemically extracted)	

Table 6 “Permitted techniques and substances for the production of organic livestock products”

Name	Conditions for use
1. Synthetic substances for disinfecting, cleaning agents, and medical treatment use:	
(1) Alcohol	
a. Ethanol	For use only as disinfectant and cleaning agent and strictly prohibited to use as supplementary feed.
b. Isopropyl alcohol	For use only as disinfectant.
(2) Chlorine-contained substances : a. Calcium hypochlorite. b. Chlorine dioxide c. Sodium Hypochlorite	For use only as sterilization or cleaning of utensils and equipment and the residual of chlorine shall not exceed the threshold value of drinking water.
(3) Chlorohexidine	Veterinarian may use this during surgery. When all germicides fail to cure mastitis, it may be used to soak the breast teat.
(4) Electrolyte without antibiotics	
(5) Glucose	
(6) Glycerol	For use only in soaking teats of livestock and its source must be from hydrolysis of fat or oil.
(7) Iodide	
(8) Hydrogen peroxide	
(9) Phosphoric acid	For use only to clean equipment.
(10) Vaccine	
(11)Aspirin	For use only to reduce inflammation.
2. Synthetic substance used for local treatment, elimination of ectoparasite or local anesthesia	
(1) Iodide	
(2) Hydrated lime	
(3) Mineral oil	For use only in local application or for lubricant



	use.
(4) Copper sulphate	
(5) Diatomite	For use to disinfect ectoparasite.
(6) Vegetable oil	For use to disinfect ectoparasite.
3. Supplementary feed	
(1) Trace minerals	For use only as nutrient enhancement and the varieties and dosage must meet related national standards.
(2) Vitamins	For use only as nutrient enhancement.
(3) Methionine	For use only for poultry.
4. Feed matters from animal origin	
(1) Milk and milk products	
(2) Fishmeal	
(3) Non-vertebra animals produced in organic farms, such as earthworms	Free to be consumed by livestock.
(4) Shells of marine animals	For use as calcium supplement.

Table 7 “Substances prohibited for use in organic livestock feed and water”

Name
1. Synthetic growth hormones
2. Plastic pellets for roughage
3. Preservatives
4. Synthetic coloring agents
5. Urea
6. Livestock slaughter by-products
7. Excrements of livestock
8. Antibiotics and chemicals
9. Supplementary feed that does not permitted by Item 9 of Part IV of this Criteria, or does not follow its rules of usage.
10. Radiation processed, Genetically modified organisms (GMO) or products
11. Industrial waste cultured algae and their products
12. Plants contain Strychnine

Table 8 “Minimum indoor and outdoor areas for organic livestock”

Species	Indoors	Outdoors
Dairy cows	4m <sup>2</sup> /head	4m <sup>2</sup> /head
Fattening cattle	a. Less than 100kg: 1.5m <sup>2</sup> /head b. From 100kg to less than 200kg: 2.5m <sup>2</sup> /head c. From 200kg to less than 350kg: 4.0m <sup>2</sup> /head d. 350kg and above: 5.0m <sup>2</sup> /head	a. Less than 100kg: 1.5m <sup>2</sup> /head b. From 100kg to less than 200kg: 2.5m <sup>2</sup> /head c. From 200kg to less than 350kg: 4.0m <sup>2</sup> /head d. 350kg and above: 5.0m <sup>2</sup> /head
Bulls for breeding	10m <sup>2</sup> /head	20m <sup>2</sup> /head
Sheep or goats	a. Less than 20kg: 0.35m <sup>2</sup> /head b. 20kg and above: 1.5m <sup>2</sup> /head	a. Less than 20kg: 0.5m <sup>2</sup> /head b. 20kg and above: 2.5m <sup>2</sup> /head
Farrowing sows and piglets within 42-day-old	7.5m <sup>2</sup> /nest	2.5m <sup>2</sup> /nest
Fattening pigs	a. Less than 30kg after weaning: 0.6m <sup>2</sup> /head b. From 30kg to less than 60kg: 0.8m <sup>2</sup> /head c. From 60kg to less than 100kg: 1.1m <sup>2</sup> /head d. 100kg and above: 1.3m <sup>2</sup> /head	a. Less than 30kg after weaning: 0.6m <sup>2</sup> /head b. From 30kg to less than 60kg: 0.6m <sup>2</sup> /head c. From 60kg to less than 100kg: 0.8m <sup>2</sup> /head d. 100kg and above: 1.0m <sup>2</sup> /head
Boars for breeding	6m <sup>2</sup> /head	8m <sup>2</sup> /head
Sows for breeding	2.5m <sup>2</sup> /head	1.9m <sup>2</sup> /head
Laying hens (during the laying period)	6 birds/m <sup>2</sup>	4 birds/m <sup>2</sup>
Fattening poultry (over 28 days)	10 birds/m <sup>2</sup>	10 birds/m <sup>2</sup>
Turkey	2 birds/m <sup>2</sup>	2 birds/m <sup>2</sup>
Ducks	10 birds/m <sup>2</sup>	3 birds/m <sup>2</sup>
Geese	5 birds/m <sup>2</sup>	3 birds/m <sup>2</sup>

