## Japanese Agricultural Standard for Organic Plants

(Notification No. 1605 of the Ministry of Agriculture, Forestry and Fisheries of October 27, 2005) (Preliminary Translation)

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## (Purpose)

Article 1 The purpose of this standard is to establish the criteria of production methods for organic plants.

### (Principles of Production of Organic Plants)

Article 2 Organic plants shall be produced in either of the following methods:

- (1) To produce organic plants in fields with cultivation management methods so as to reduce the load from agricultural production on the environment as much as possible, by avoiding the use of chemical synthetic fertilizers and substances for plant pest and disease control in principle and exercising the farmland productivity derived from original soils (including productivity derived from agricultural and forestry products, in case of fungi production) in order to sustain and enhance the natural recycling function of agriculture; or
- (2) To harvest organic plants by methods so as not to interfere in preserving the ecosystem in collection areas (areas for collecting plants growing naturally; hereafter the same).

#### (Definition)

Article 3 In this standard, terms listed on the left side of the table are defined on the right side.

Term	Definition
Organic plants	Plant products produced by the criteria in the next Article, limited to foods
Organic plants	and beverages.
	Fertilizer and soil improvement substances (except for those listed in
Prohibited	Attached Tables 1), substances for plant pest and disease control (except for
substances	those listed in Attached Table 2), and other materials that are used to plants,
substances	soil or fungi(except for natural substances, or substances originated from
	natural substances without the use of chemical treatment).
Recombinant	Technology to create recombinant DNA by connecting DNA through
DNA	breakage and recombination using enzyme, transferring it into living cells
technology	and replicating it.
Cultivation	Places where funcions cultured timed down or naturally grown
sites	Places where fungi are cultured, tuned down or naturally grown

#### (Criteria of Production Methods)

Article 4 The criteria of the production methods for plant products are as follows.

Items	Criteria
Fields	The necessary measures shall be taken in fields, so as to prevent prohibited substances from drifting and flowing from surrounding areas. Field shall satisfy any of the following requirements.  1 The criteria of "Seeds or seedlings to be used in fields," "Manuring practice in fields," "Control of noxious animals and plants in fields or cultivation sites" and "General management" have been applied for fields for no less than three years before the

	first harvesting of perennial plants, and no less than two years before the sowing or planting of the other plants than perennial plants (in case of newly developed fields or fields which have not been used for cultivation, and in which prohibited substances have not been used for no less than two years, these criteria shall be applied for fields for no less than one year before the sowing or planting).  2 In the field in the conversion period (the field which has already converted as specified in 1 and not yet satisfied the requirements specified in 1; hereafter the same), the criteria of "Manuring practice in fields," "Seeds_or seedlings to be used in fields," "Control of noxious animals and plants in fields_or cultivation sites" and "General management" have been applied for the field for no less than one year before the first harvest after converted.
Cultivation sites	The necessary measures shall be taken in cultivation sites, so as to
Cultivation sites	prevent prohibited substances from drifting and flowing from surrounding areas, and prohibited substances shall not be used for no less than two years in the sites before the launch of cultivation.
Collection area	The collection area shall be protected from drifting and flowing prohibited substances from surrounding areas and prohibited substances shall not be used for no less than three years in the collection areas before collecting plant products.
Seeds or	1 Seeds or seedlings (full bodies or parts of seedlings, nursery stocks,
seedlings to be	scions, stocks and other plant bodies (except for seeds) used for
used in fields	propagation; hereafter the same) shall comply with the criteria of "Fields," "Collection areas," "Manuring practice in fields," "Control of noxious animals and plants in fields or cultivation sites," "General management," "Management of raising seedlings" and "Management concerning harvest, transportation, selection, processing, cleaning, storage, packaging and other post-harvest processes."  2 In case of a difficulty to obtain seeds or seedlings prescribed in 1, or necessity for maintenance and renewal of varieties, seeds or seedlings without prohibited substances may be used. Furthermore in case of a difficulty to obtain these seeds or seedlings, or necessity for maintenance and renewal of varieties, any seeds for seed propagation plants and the youngest available seedlings for vegetative propagation without synthetic fertilisers and pesticides that are effective in fields after the sowing or planting (except for those listed in Attached Tables 1 or 2) (except for seedlings intended for edible sprouts within the year of planting) may be used.  3 In case of a difficulty to obtain seeds or seedlings prescribed in 1 and 2 and following cases, seeds or seedlings without synthetic fertilisers and pesticides that are effective in fields after the sowing or planting (except for those listed in Attached Tables 1 or 2) may be used:  (1) in the absence of seeds to saw or seedlings to plant due to disasters, pests or diseases etc.  (2) in the absence of seeds' supply but seedlings' supply.  4 Those seeds or seedlings prescribed in 1 to 3 shall not be produced by recombinant DNA technology. And those seeds or seedlings prescribed
	in 1 to 3 shall include those enclosed in tape form in agricultural substances (those obtained from recycled textile derived from cotton

	linter without chemically synthesized materials added in production).
Fungus spawn	I Fungus spawn shall comply with the criteria of "Cultivation sites," "Collection areas," "Cultivation management in cultivation sites," "Control of noxious animals and plants in fields or cultivation sites," "General management," and "Management concerning harvest, transportation, selection, processing, cleaning, storage, packaging and other post-harvest processes," or that is prescribed in the following cases.  2 Fungus spawn that is cultured by the substances prescribed in 1 and 2 of the criteria of "Cultivation management in cultivation sites." In cases of a difficulty to obtain these fungus spawn, fungus spawn cultured by the substances produced without prohibited substances during cultivation may be used. 3 In cases of a difficulty to obtain fungus spawn prescribed 2, fungus spawn cultured by natural sources, or substances derived from natural sources without the use of chemical treatment may be used. 4 In cases of a difficulty to obtain fungus spawn prescribed 2 and 3, fungus spawn cultured by substances for cultivation of fungus spawn listed in Attached Table 3 may be used.
	5 Those fungus spawn prescribed in 1 to 4 shall not be produced by recombinant DNA technology.
Manuring practice in fields	Soil fertility shall be maintained and enhanced only by the compost derived from by residues of plants produced in the mentioned fields, or methods effectively utilizing biological functions of the organism inhabiting and growing in fields or in surrounding areas. In cases where the soil fertility cannot be preserved and promoted only by methods utilizing biological functions of the organism inhabiting and growing in the mentioned fields or in the surrounding areas, fertilizers and soil improvement substances listed in Attached Table 1 (those without chemically-synthesized substances added in processing and produced without recombinant DNA technology in raw materials; hereafter the same) may be used, or living organisms (except those by recombinant DNA technology) may be introduced.
Cultivation management in cultivation sites	Substances for producing fungi shall comply with the criteria prescribed in 1 to 3. For fungi cultivated with compost, substances listed in Attached Table 1 may be used as fungi cultivation medium, in case of difficulty obtaining those prescribed in 1 to 3.  1 Substances of wood origin such as raw lumber, powdery sawdust, wood chips, and wood piece shall be produced by felling trees in certain areas which are prevented from prohibited substances drifting and flowing from surrounding areas, and not prohibited substances used for no less than three years, and not chemically treated after felling.  2 Substances of non-wood origin shall be only from the following items:  (1) Plants (those cultivated in accordance with the "Criteria of Production Methods" of this Article);  (2) Processed foods (those produced in accordance with the "Criteria of Production Methods" of Article 4 in the Japanese Agricultural Standard for organic processed foods (Notification No.1606 of the Ministry of Agriculture, Forestry and Fisheries of

27 October 2005)); (3) Feeds (those produced in accordance with the "Criteria of Production Methods" of Article 4 in the Japanese Agricultural Standard for organic feeds (Notification No. 1607 of the Ministry of Agriculture, Forestry and Fisheries of 27 October 2005)); and (4) Excrements of livestock and poultry raised in accordance with "Criteria of Production Methods" of Article 4 in the Japanese Agricultural Standard for organic livestock products (Notification No.1607 of the Ministry of Agriculture, Forestry and Fisheries of 27 October 2005). 3 Spent logs and spent culturing beds produced in the production process which comply with the criteria of 2 (1) shall be reused for such as composts and feeds to sustain and enhance the natural recycling function. Control of Noxious animals and plants shall be controlled only by cultivation noxious animals methods (control by intentionally conducting operations generally and plants in performed as parts of selecting species and varieties, adjusting time for fields or planting, and other cultivation management of plants so as to suppress cultivation sites the emergence of noxious animals and plants); physical methods (control by light, heat, sound, and others, methods of using mulches derived from used papers (those without chemically synthesised materials added in production) or plastic mulches (those intended to be removed after use), or manual or mechanical methods); biological methods (control by microorganisms suppressing the proliferation of microorganisms which cause diseases, predators, plants with repellent function, or plants with effects of suppressing the emergence of noxious animals and plants, or by improving the environment suitable for growing those microorganisms, predators and plants); or an appropriate combination of these methods. In case of imminent or serious threat to plants and where cultural physical, biological controls, or any appropriate combination of them are not effective, substances for plant pest and disease control listed in Attached Table 2 (except for those produced by recombinant DNA technology; hereafter the same) may be General Soil, plants and fungi shall not be put any prohibited substances. management Management of In case of raising seedlings (except for raised in fields), only soils listed raising in 1 to 3 below shall be used and necessary measures shall be taken in seedlings the field, so as to protect from drifting and flowing prohibited substances from surrounding areas. In addition, they shall be managed in accordance with the criteria of "Manuring practice in fields," "Control of noxious animals and plants in fields or cultivation sites" and "General management." 1. Soil which meets the criteria of "Fields or collection areas." 2. Soil protected from drifting and flowing prohibited substances from surrounding areas and without the use of prohibited substances for no less than two years before and after harvesting. 3. Fertilizers and soil improvement substances listed in Attached Table 1 Products shall be controlled in such a manner as not being mixed with Management other plants than those produced following the criteria of "Fields," concerning "Cultivation sites," "Collection areas," "Seeds or seedlings to be used harvest, transportation, in fields," "Fungus spawn," "Manuring practice in fields," selection, "Cultivation management in cultivation sites," "Control of noxious

animals and plants in the fields or cultivation sites," "General processing, management" or "Management of raising seedlings" ("the criteria of cleaning, storage, "Fields," etc."; hereafter the same). 2 Only physical methods or methods utilizing biological functions packaging and (except those by recombinant DNA technology; hereafter the same) other shall be used for controlling noxious animals and plants or quality post-harvest processes preservation and improvement. In case of a difficulty to control them in ordinary means, following materials may be used. (1) For controlling noxious animals and plants: Substances for plant pest and disease control listed in Attached Table 2 and chemical agents listed in Attached Table 4 (Mixture with plant products shall be prevented). (2) For quality preservation and improvement: Substances for preparation listed in Attached Table 5 (except those produced by using recombinant DNA technology). Ionizing radiation shall not be executed. Plants produced in compliance with the criteria of "Fields" etc. and the provision 1 to 3 above, shall be controlled so as not to be exposed to substance for plant and disease control, detergent, disinfectant and other chemicals.

(Labeling of Names of Organic Plants)

Article 5 Names of organic plants shall be labeled by methods as follows.

- (1) "有機農産物" (which means organic plant in Japanese.)
- (2) "有機栽培農産物" (which means organically grown plant in Japanese.)
- (3) "有機農産物○○" or "○○(有機農産物)" (which means organic plant ○○ or ○○ (organic plant).)
- (4) "有機栽培農産物○○" or "○○(有機栽培農産物)" (which means organically grown plant ○○ or ○○ (organically grown plant) in Japanese.)
- (5) "有機栽培⊙" or "⊙⊙(有機栽培)" (which means organic farming ⊙⊙ or ⊙⊙ (organic farming) in Japanese.)
- (6) "有機○○" or "○○(有機)" (which means organic ○○ or ○○(organic) in Japanese.)
- (7) "オーガニック○○" or "○○(オーガニック)" (which means organic ○○ or ○○(organic) in Japanese.)

(Notes) General names of plants shall be filled in "oo."

- 2 Notwithstanding the previous provision, as for products produced in fields under the conversion period, the description "under the conversion period" shall appear adjacent to the name or commodity name.
- 3 Notwithstanding 1., as for plants harvested in collection areas, the description of one of the examples (1), (3), (6), or (7) of 1. above shall appear.

Attached Table 1 Fertilizers and soil improvement substances

Fertilizers and soil improvement substances	Criteria
Materials derived from plants and plant residues	Those without the use of chemical treatment after cutting or trimming.
Materials derived from fermented, dried or baked excrements	Those derived from livestock and poultry excrements.

By-products of food & textile industries of plant, animal and fish origin	Those derived from natural sources, or natural sources without the use of chemical treatment (except for organic solvent extraction of oil).
Processed animal products from slaughterhouses or fish industries	Those derived from natural sources, or natural sources without the use of chemical treatment.
Materials derived from fermented leftover food	Those prevented from mixing other material than leftover food.
Bark compost	Those derived from natural sources, or natural sources without the use of chemical treatment.
Methane fermented digestive liquid (except for composted sludge)	Those obtained from organic sources such as animal excrements by methane fermentation under anaerobic conditions. However, those derived from human excrements should not be used for edible parts of food crops.
Guano	
Dried algae, including powdered form	
Vegetation ash	Those derived from natural sources, or natural sources without the use of chemical treatment.
Calcium carbonate	Those derived from natural sources, or natural sources without the use of chemical treatment (including calcium magnesia carbonate).
Potassium chloride	Those formed by pulverizing or washing and refining the natural ore or those produced from sea water or lake water without the use of chemical treatment.
Potassium sulfate	Those derived from natural sources, or natural sources without the use of chemical treatment.
Potassium magnesium sulfate	Those formed by washing and refining the natural ore.
Natural rock phosphate	Cadmium should not exceed 90mg/kg P <sub>2</sub> O <sub>5</sub> .
Magnesium sulfate	Those derived from natural sources, or natural sources without the use of chemical treatment.
Magnesium hydroxide	Those formed by pulverizing the natural ore.
Calcined magnesia	
Gypsum (calcium sulfate)	Those derived from natural sources, or natural sources without the use of chemical treatment.
Sulphur	
Calcium oxide (including unslaked lime)	Those derived from natural sources, or natural sources without the use of chemical treatment.
Calcium hydroxide (Slaked lime)	Those derived from Calcium oxide written above.
Trace elements (manganese,	Limited to the case that the crop is unable to grow
boron, iron, copper, zinc, molybdenum and chlorine)	normally because of shortage of trace elements.
Stone meal	Those derived from natural sources, or natural sources without the use of chemical treatment and not contaminating soil with harmful heavy metal or other substances included in sources.
Charcoal	Those derived from natural sources, or natural sources without the use of chemical treatment.
Peat	Those derived from natural sources, or natural sources without the use of chemical treatment. As for soil improvement substances, peat shall be only used for soil for raising seedling.

Bentonite	Those derived from natural sources, or natural sources without the use of chemical treatment.
Perlite	Those derived from natural sources, or natural sources without the use of chemical treatment.
Zeolite	Those derived from natural sources, or natural sources without the use of chemical treatment.
Vermiculite	Those derived from natural sources, or natural sources without the use of chemical treatment.
Calcined diatomaceous earth	Those derived from natural sources, or natural sources without the use of chemical treatment.
Basic slag	By-products by Thomas steel making process.
Slag silicicate fertilizer	Those derived from natural sources, or natural sources without the use of chemical treatment.
Fused magnesium phosphate	Those derived from natural sources, or natural sources without the use of chemical treatment. Cadmium should not exceed 90 mg/kg P <sub>2</sub> O <sub>5</sub> .
Sodium chloride	Mined, or produced from seawater or lake water without the use of chemical treatment.
Aluminum calcium phosphate Calcium chloride	Cadmium should not exceed 90 mg/kg P <sub>2</sub> O <sub>5</sub> .
Vinegar	
Lactic acid	Those obtained by fermenting plants and limited to be used as pH adjusting agent in soil for raising seedling.
By-products of sugar industries	
Granulating agent and anticaking agent for fertilizer	Those derived from natural sources, or natural sources without the use of chemical treatment. In case of a difficulty to manufacture granulating agent and anticaking agent from these substances, lignin sulfonic acid may be used.
Other fertilizers and soil improvement substances	Those including living organisms; a. applied to soil for providing plants with nutrition or improving the soil property; b. applied to plants for providing with nutrition; c. derived from natural sources, or natural sources without the use of chemical treatment (those produced by burning, calcining, melting, dry distillating, and saponifying the natural resources and those produced from natural resources without using any chemical methods and recombinant DNA technology); and d. shall not be effective as pest and disease control.  Those satisfying a. through d. may be used only in the cases where soil fertility cannot be maintained and enhanced by the use of fertilizers and soil improvement substances in this Table.

Attached Table 2 Substances for Plant Pest and Disease Control

Substances for plant pest and disease control	Criteria
Pyrethrum emulsion	Those extracted from Chrysanthemum cinerariaefolium, and without piperonyl butoxide

	as synergist
	as synergist.
Canola oil emulsion	
Petroleum oil aerosol	
Petroleum oil emulsion	
Starch wettable powder	
Fatty glyceride emulsion	
Metaldehyde (granular formulation)	Limited to the use in insect traps.
Sulfur smoking agent	
Sulfur powdered agent	
Sulfur/copper wettable powder	
Wettable sulfur powder	
Lime sulfur powder	
Lentinus edodes mycelium extract liquid	
Sodium hydrogencarbonate wettable	
powder and sodium bicarbonate	
Sodium hydrogencarbonate/ copper wettable powder	
Copper wettable powder	
Copper powdered agent	
Copper sulfate	Limited to the use for preparing Bordeaux mixture.
Calcium oxide	Limited to the use for preparing Bordeaux mixture.
Biopesticide formulation	
Biopesticide formulation/ copper	
wettable powder	
Sex pheromone agent	Limited to the agent containing sex pheromone activity for pest as active ingredient.
Chlorella extract liquid	j i S
Mixed crude medical plant extract liquid	
Wax wettable powder	
Spreader	Limited to agent containing casein and paraffin as active ingredient.
Carbon dioxide fumigant	Limited to the use in storage facilities.
Diatomaceous earth powder	Limited to the use in storage facilities.
Vinegar	Entitled to the use in storage facilities.
Ferric phosphate (granular	
formulation)	
Potassium hydrogen carbonate (water	
soluble powder) Calcium carbonate wettable	Limited to the use for proventing beauful
powder	Limited to the use for preventing harmful effects of copper wettable powder
Milbemectin emulsion	criceis of copper wellable powder
Milbemectin wettable powder	
Spinosad wettable powder	
Spinosad (granular formulation)	
Hydrogenated starch hydrolysate	

# Attached Table 3 Substances for Cultivation of Fungus Spawn Yeast extract, Malt extract, Sugar, Glucose, Calcium carbonate, Calcium sulphate

Attached Table 4 Chemical agents

Substances for preparation	Criteria
Extract from pyrethrum	Those without piperonyl butoxide as synergist. Except for the purpose of pests control for plants.
Sodium silicate	Except for the purpose of pests control for plants
Potash soap (Soft soap)	Except for the purpose of pests control for plants
Ethanol	Except for the purpose of pests control for plants
Boric acid	Limited to be used in containers, and except for the purpose of pests control for plants
Pheromone agent	Limited to those containing sex pheromone activity of insects as an active ingredient, and except for the purpose of pests control for plants
Capsaicin	Limited to be used as a repellent, and except for the purpose of pests control for plants

(Note) The use of chemical agents shall be in accordance with the prescribed usage.

Attached Table 5 Substances for Preparation

Attached Table 5 Subs	stances for Preparation
Substances	Criteria
Carbon dioxide	
Nitrogen	
Ethanol	
Active carbon	
Diatomaceous earth	
Citric acid	
Substances for preparation	
derived from	
microorganisms	
Enzyme	
Albumen albumin	
Vegetable fat and oil	
Preparations of bark	
components	
Ethylene	Limited to be used for afterripening banana and
	kiwifruits.
Potassium aluminium	Limited to be used for afterripening a cross section of
sulphate	bunch of banana from blackening.
Ozone	
Corncob	
Hypochlorous acid water	Those made by electrolysis of saltwater.

Salt	
Vinegar	
Sodium bicarbonate	

The Supplementary Clause

(Schedule)

1. This notification becomes effective 30 days after the publication.

(Interim Measure)

- 2. Grading in accordance with the previous criteria of the Japanese Agricultural Standard for organic plants is permitted for one year after the enforcement of this standard.
- 3. "Prohibited substances for no less than 3 years before and after harvesting" in the criteria of "Management of raising seedlings" in Article 4 in the revised Japanese Agricultural Standard for organic plants shall read "prohibited substances" for 3 years after the publication.
- 4. Notwithstanding the provision of "Seeds or seedlings to be used in fields" in Article 4, if it is difficult to raise fruit and vegetables of Solanaceae and Cucurbitaceae from seeds, or to obtain seedlings complying with the provision to produce konjak potatoes, seeds or seedlings (except for those produced by recombinant DNA technology) without synthetic fertilisers and pesticides that are effective in fields after the sowing or planting (except for those listed in Attached Tables 1 or 2) may be used for a certain period.

The Supplementary Clause (Notification No.1463 of the Ministry of Agriculture, Forestry and Fisheries of October 27, 2006)

(Schedule)

1. This notification becomes effective 30 days after the publication. (Interim Measure)

- 2. Cases where obtaining materials which comply with the provision "those are not produced by recombinant DNA technology in producing its raw materials" in Article 4, section 1. of "Manuring practice in fields in fertilizers and soil improvement substances," is difficult, substances which do not comply with the provision may be used for the certain period. This may be applied to
  - a) "Materials derived from plants and plant residues;"
  - b) "Materials derived from fermented, dried or baked excrements;"
  - c) "By-products of food & textile industries of plant, livestock or fish origin;" and
  - d) "Materials derived from fermented leftover food" in Attached Table 1 in the revised Japanese Agricultural Standard for organic plants ("the revised JAS for organic plants" hereafter)
- 3. Notwithstanding the provision of "General management" in Article 4, if there are no other appropriate management methods, agricultural substances derived from used papers (those without chemically synthesized materials added in production) and in which seeds are enclosed in tape form may be used for 3 years after the publication.
- 4. "For afterripening banana" in the criteria of "Ethylene" in Attached Table 3 shall read "for afterripening banana and kiwifruits" for 3 years after the publication.

The Supplementary Clause (Notification No.1180 of the Ministry of Agriculture, Forestry and Fisheries of August 27, 2009)

Notwithstanding the provision of "Management of raising seedlings" in Article 4, where inevitable for conditioning stickiness of soil for raising onion seedlings, polyvinyl alcohol, polyacrylamide and natural sources with the use of chemical treatment may be used until December 31, 2011.

The Supplementary Clause (Notification No.833 of the Ministry of Agriculture, Forestry and Fisheries of March 28, 2012)

1. With regard to organic plants graded in accordance with the previous criteria of the Japanese

Agricultural Standard when this notification becomes effective, the organic plants then in force shall remain applicable.

2. Notwithstanding the provision of "Management of raising seedlings" in Article 4, where inevitable for conditioning stickiness of soil for raising onion seedlings, polyvinyl alcohol, polyacrylamide and natural sources with the use of chemical treatment may be used for a certain period..

# (Schedule of the last revision)

Notification No.833 of the Ministry of Agriculture, Forestry and Fisheries of March 28, 2012 becomes effective as from April 27, 2012.