Tentative Translation

# JAS 0018

### JAPANESE AGRICULTURAL

STANDARD

Organic algae

Date of Establishment: 2021-12-7

Ministry of Agriculture, Forestry and Fisheries

#### Precautions for using English version of JAS

This English translation has been made by the drafting party etc., based on the original text (Japanese version), and has been posted on the website of the Food and Agricultural Materials Inspection Center (FAMIC), Incorporated Administrative Agency, with permission of the publisher of the original text (Ministry of Agriculture, Forestry and Fisheries).

The translation is made in consideration of technical contents, but it is aimed to provide information when using JAS original text, and is not recognized as having the same effects as the original text.

If there is any doubt in the translation, please follow the original.

FAMIC is not responsible for inconvenience by using only the translation.

Food and Agricultural Materials Inspection Center, Incorporated Administrative Agency

#### Contents

Ρ	а	σ	e
1	a	ട	L

1	Scope1
2	Normative references1
3	Terms and definitions1
4	Principle2
5	Production criteria
5.1	General management
5.2	Aquaculture farm
5.3	Collection area
5.4	Seeds and seedlings to be used in the aquaculture farm4
5.5	Aquaculture density on the aquaculture farm4
5.6	Management of substances that turn into nutrients on the aquaculture farm4
5.7	Pest control on the aquaculture farm and at the collection area4
5.8	Management of the collection area
5.9	Management for harvesting or collecting, transport, preparation, storage, packaging and
	other processes after harvesting or collecting4
6	Labeling

#### Foreword

This Japanese Agricultural Standard has been established by the Minister of Agriculture, Forestry and Fisheries through deliberations at the Council for the Japanese Agricultural Standards according to the proposal for establishment of Japanese Agricultural Standard submitted by Food and Agricultural Materials Inspection Center (FAMIC), an independent administrative agency, with the original bill attached, based on the provision of Article 4, paragraph (1) of the Act on Japanese Agricultural Standards.

Attention is drawn to the possibility that some parts of this Standard may conflict with patent rights, applications for a patent after opening to the public or utility model rights. The Minister of Agriculture, Forestry and Fisheries and the Council for the Japanese Agricultural Standards are not responsible for identifying any of such patent rights, applications for a patent after opening to the public or utility model rights.

JAPANESE AGRICULTURAL STANDARD (Tentative Translation)

JAS 0018 : 2021

### Organic algae

#### 1 Scope

This Standard specifies organic algae.

#### 2 Normative references

There are no normative references in this Standard.

#### 3 Terms and definitions

For the purposes of this Standard, the following terms and definitions apply.

#### 3.1

#### algae

algae produced in seawater, brackish water or fresh water (including phytoplankton)

#### 3.2

#### organic algae

algae produced in accordance with this Standard

#### 3.3

#### aquaculture

intensive cultivation of algae, for the purpose of harvesting

#### 3.4

**marine aquaculture** aquaculture on the sea surface

#### 3.5

#### inland water aquaculture

aquaculture on the surface of inland water

#### 3.6

#### land-based aquaculture

aquaculture in an aquaculture farm on land

#### 3.7

#### aquaculture farm

place where marine aquaculture, inland water aquaculture or land-based aquaculture is conducted

#### 3.8

#### collection area

place where algae growing in the wild are collected

#### 3.9

#### growing period

period from zoospores, fertilized eggs or other early stages of growth to the first harvest

#### 3.10

#### chemical treatment

#### either of the following:

- a) to change a compound into a substance with a different structure by chemical means (excluding combustion, calcining, melting, dry distillation and saponification; the same applies hereinafter);
- b) to add a substance obtained by chemical means (including cases in which the final product does not contain the substance).

#### 3.11

#### prohibited substance

substance other than natural substances (including substances derived from natural sources which have not undergone any chemical treatment)

Note 1 to entry: Substances that are removed after use, such as fishing gear, are not included in prohibited substances.

#### 3.12

#### recombinant DNA technology

technology that produces recombinant DNA molecules, which are pieces of DNA joined together by cutting apart and rejoining DNA using enzymes or the like, inserts the molecules into living cells, and causes them to replicate

#### 3.13

#### cultural control

pest control through systematic implementation of the selection of varieties, adjustment of season in which seeds and seedlings are introduced, and other operations normally carried out as part of the management of algae, with the aim of suppressing the occurrence of harmful animals and plants

#### 3.14

#### physical control

pest control by manual or mechanical means, etc.

#### 3.15

#### biological control

pest control through the introduction of living organisms that prey on harmful animals and plants, living organisms that repel harmful animals and plants, or living organisms that have the effect of suppressing the growth of microorganisms causing disease or the generation of harmful animals and plants, or by establishing an environment suitable for the growth of those beneficial living organisms

#### 3.16

#### water environment

hydrological phenomena, water quality, sediment at the bottom of water, and other water-related environment

#### 4 Principle

In order to maintain and improve the water environment, organic algae are to be produced either by:

- a) cultivation in an aquaculture farm, using a management method that minimizes the environmental load resulting from the production, on the basis of avoiding the use of prohibited substances;
- b) collection at a collection area, using a method that does not hinder the maintenance of the

ecosystem of the collection area.

#### 5 Production criteria

#### 5.1 General management

**5.1.1** Algae shall be managed so as not to be contaminated with prohibited substances.

**5.1.2** Fishing gear, such as ropes, for culturing or collecting algae, shall be reusable products, as far as possible.

**5.1.3** The removal of bio-fouling organisms shall be done only by physical means or by hand. Removed bio-fouling organisms shall be moved to outside of the area under control, if necessary.

#### 5.2 Aquaculture farm

**5.2.1** The aquaculture farm shall be a place where necessary measures are taken to prevent contamination with prohibited substances, and shall be clearly separated from an aquaculture farm or collection area that does not conform to this Standard. In addition, the aquaculture farm shall be managed in accordance with this Standard during the following periods; provided, however, that this does not apply to the production of land-based aquaculture in which facilities that have been drained and cleaned, and not contaminated with prohibited substances, are used:

- a) When the growing period of algae is less than 6 months, at least 6 months before the harvest;
- b) When the growing period of algae is 6 months or more, at least the growing period of the algae before the harvest.

NOTE Separation such as by distance between aquaculture farms, by tidal flow, or by water distribution system can be considered as the state of being clearly separated.

**5.2.2** The maximum density of algae that can be controlled without negative effects on the environment shall be determined for every aquaculture farm.

NOTE Aquaculture densities such as the one according to an aquaculture area improvement plan, based on the Sustainable Aquaculture Production Act (Act No. 51 of 1999), are considered as examples of the maximum density, but are not limited to these.

**5.2.3** At a new aquaculture farm where 20 t or more of algae are cultured per year, an environmental impact assessment of the effects of the aquaculture shall be made.

NOTE Environmental impact assessment could include compliance with the water quality criteria for fisheries, determined by Japan Fisheries Resource Conservation Association, a public interest incorporated foundation, and the act of monitoring, with appropriate indices such as total nitrogen, COD, pH, that a good environment is maintained, etc.

#### 5.3 Collection area

**5.3.1** The collection area shall be an aquatic area without the risk of being contaminated with prohibited substances, and shall be clearly separated from an aquaculture farm or collection area that does not conform to this Standard. In addition, prohibited substances shall not have been used at the area for at least 6 months prior to collection.

**5.3.2** The amount of resources of algae that are to be collected shall have been estimated before collecting for the first time in accordance with this Standard.

**5.3.3** At a new collection area where 20 t or more of algae are collected per year, an environmental impact assessment of the effects of the collecting shall be made.

#### 5.4 Seeds and seedlings to be used in the aquaculture farm

**5.4.1** When seeds and seedlings are introduced into an aquaculture farm, only those seeds and seedlings that conform to the criteria of **Clause 5** (excluding **5.4**) shall be used.

**5.4.2** If it is difficult to obtain the seeds and seedlings specified in **5.4.1**, seeds and seedlings shall be collected at a natural marine area or aquatic area.

**5.4.3** If it is difficult to obtain the seeds and seedlings specified in **5.4.1** and **5.4.2**, seeds and seedlings produced without using prohibited substances may be used.

**5.4.4** If it is difficult to obtain the seeds and seedlings specified in **5.4.1** through **5.4.3**, seeds and seedlings other than those specified in **5.4.1** through **5.4.3** may be used.

**5.4.5** Recombinant DNA technology shall not have been used on the seeds and seedlings specified in **5.4.1**, **5.4.3** and **5.4.4**.

#### 5.5 Aquaculture density on the aquaculture farm

On the aquaculture farm, aquaculture shall be carried out at a density that does not exceed the maximum density determined by the provision of **5.2.2**.

#### 5.6 Management of substances that turn into nutrients on the aquaculture farm

**5.6.1** Substances that turn into nutrients (nitrogen, phosphorus, etc.) shall not be used in marine aquaculture and inland water aquaculture.

**5.6.2** In land-based aquaculture, only substances that are natural materials that turn into nutrients may be used; provided, however, that the concentration of nutrients in the effluent water shall not exceed the concentration level in the influent water.

#### 5.7 Pest control on the aquaculture farm and at the collection area

**5.7.1** Pests shall be controlled only by using a method of cultural control, physical control, biological control, or a combination of those methods.

**5.7.2** On the aquaculture farm, if pests cannot be effectively controlled as described in **5.7.1**, substances other than prohibited substances may be used.

#### 5.8 Management of the collection area

**5.8.1** In order to maintain and improve the water environment continuously, algae shall be collected in accordance with the predetermined criteria the minimum size of collectable algae, the collecting method, and other matters in advance, in consideration of the amount of algae resources.

**5.8.2** When collecting algae, it shall be ensured that the collection is carried out in an aquatic area that is managed in accordance with this Standard.

NOTE Collecting algae in a managed aquatic area does not include collecting algae that have drifted from outside of the managed area.

## 5.9 Management for harvesting or collecting, transport, preparation, storage, packaging and other processes after harvesting or collecting

**5.9.1** The algae shall be managed in order to prevent the mixing of algae that do not conform to this Standard.

**5.9.2** The cleaning of equipment and facilities, the pest control, and the maintenance and improvement of quality shall be carried out by physical methods or by methods utilizing the functions of living organisms (excluding those using living organisms that are produced by using recombinant DNA technology; the same applies hereinafter); provided, however, if the effects of

physical methods or methods utilizing the functions of living organisms are not sufficient, substances other than prohibited substances may be used to control pests.

**5.9.3** Preparations after harvesting and collecting shall be carried out only by physical methods or by methods utilizing the functions of living organisms; provided, however, that water and salt may be used.

NOTE Preparations include, but are not limited to, selection, washing with water, drying, parboiling and salt curing.

**5.9.4** Irradiation shall not be carried out for the purpose of pest control, preservation of foods, and sanitation.

#### 6 Labeling

**6.1** Names of organic algae, which are categorized as fresh food of Article 2, paragraph (1), item (ii) of the Food Labeling Standards (Cabinet Office Order No. 10 of 2015), shall be declared in accordance with any of the following:

- a) "有機藻類" in Japanese (which means "organic algae");
- b) "有機藻類○○" or "○○ (有機藻類)" in Japanese [which means "organic algae xx" or "xx (organic algae)"];
- c) "有機〇〇" or "〇〇(有機)" in Japanese [which means "organic xx" or "xx (organic)"];
- d) "オーガニック○○" or "○○(オーガニック)" in Japanese [which means "organic xx" or "xx (organic)"].

NOTE 1 A general name of the organic algae, in accordance with the provisions of the Food Labeling Standards, must be placed on "xx".

NOTE 2 When declared as set forth in a), other names must be labeled in accordance with the provisions of the Food Labeling Standards.

**6.2** Names of organic algae, which are categorized as processed food of Article 2, paragraph (1), item (i) of the Food Labeling Standards, shall be declared in accordance with any of the following:

- a) "有機〇〇" or "〇〇(有機)" in Japanese [which means "organic xx" or "xx (organic)"];
- b) " $\pi \pi = \neg \phi \bigcirc \bigcirc$ " or " $\bigcirc \bigcirc (\pi \pi = \neg \phi)$ " in Japanese [which means "organic xx" or "xx (organic)"].

NOTE A general name of the processed food, in accordance with the provisions of the Food Labeling Standards, must be placed on "xx".

**6.3** Names of the ingredients of organic algae, which are categorized as processed food of Article 2, paragraph (1), item (i) of the Food Labeling Standard, shall be declared by the general name of organic algae used with "有機" in Japanese (which means "organic"), etc.

NOTE Names of other ingredients must be declared in accordance with the provisions of the Food Labeling Standards.

**6.4** Notwithstanding **6.1**, algae produced in seawater may be declared as "海藻" in Japanese (which means "seaweed"), instead of "藻類" in Japanese (which means "algae").