



## JOINT FAO/WHO FOOD STANDARDS PROGRAMME

### CODEX COMMITTEE ON FOOD LABELLING

Forty-third Session

Ottawa, Ontario, Canada

9 – 13 May 2016

#### PROPOSED DRAFT REVISION OF THE *GUIDELINES FOR THE PRODUCTION, PROCESSING, LABELLING AND MARKETING OF ORGANICALLY PRODUCED FOODS: ORGANIC AQUACULTURE* (Comments at Step 3)

(Comments submitted by Argentina, Brazil, Canada, Chile, Colombia, Costa Rica, European Union, India, Iran, Japan, Malaysia, New Zealand, Norway and United States of America)

#### ARGENTINA

##### Foreword:

##### Paragraph 4

*The following wording is proposed:*

4. *These guidelines set out the principles of organic production at the farms, **preparation, and the elaboration**, storage, transport, labelling and marketing **stages**, and provides an indication of accepted permitted inputs for soil fertilizing and conditioning, **plant** pest and disease control and **of the production systems** and **the substances to be used** as food additives and processing aids. For labelling purposes, the use of terms inferring that organic production methods have been used are restricted to products derived from operators under the supervision of an inspection body or authority.*

##### Justification:

- The term “elaboración” is the one used [Translator’s Note (TN) In Spanish] when referring to Food processing. [TN This comment appears to reflect a linguistic preference in Spanish for the term “elaboración” over the term “preparación” and applies only to the Spanish version]
- The present concept of “pests” is wide and does not refer only to plants.
- The significance intended is that pests and diseases affect the production system in general, may this be vegetable or animal.

##### Paragraph 7

We propose to modify the wording as follows:

7. Organic food production is a holistic **production** management system which promotes and enhances ~~agro and aquatic~~ **the health of the** ecosystems and particularly biodiversity, **and** biological cycles, ~~and soil or water biological activity~~. ~~It emphasizes the use of management practices in preference to the use. It gives priority to the use of certain management practices in preference over the incorporation~~ of off-farm inputs, taking into account that regional conditions will require locally adapted systems. This is accomplished by using, where possible, cultural, biological and mechanical methods, as opposed to using synthetic substances, to fulfil any specific function within the system. An organic production system is designed to:

- a) Enhance biological diversity within the whole system;
- b) increase ~~the soil or water~~ biological activity **of the production ecosystems**;
- c) maintain long-term soil fertility or quality of the aquatic environment;
- d) recycle wastes of plant and animal origin in order to return nutrients **to the ecosystem** ~~to the land~~, thus minimizing the use of non-renewable resources;

- e) Rely **on the use of** renewable resources and in food production systems **and** locally **organized produced feeds**; [TN An additional change to the Spanish text regarding the term 'food production' – replacing "alimentarios" for "de alimentos" - applies only to the Spanish text]
- f) Promote the healthy use of soil, water and air as well as minimize all forms of pollution thereto that may result from food production practices; [TN An additional change to the Spanish text regarding the term 'food production' – replacing "alimentarios" for "de alimentos" - applies only to the Spanish text]
- g) Handle food products with emphasis on careful processing methods in order to maintain the **organic integrity and vital intrinsic** qualities of the **organic** product at all stages; [TN An additional change referring to the term 'food' i.e. food products – replacing "alimentarios" for "alimencios" applies only to the Spanish text]
- h) **conserve** natural ~~agro and aquatic~~ resources of **the production medium**;
- i) Become established on any existing farm through a period of conversion, the **appropriate** length of which is determined by site-specific factors such as the history of the ~~specific~~ land or aquatic medium **in question** and type of ~~crops, livestock, or aquatic organism to be produced~~ **organisms that will be produced**.

**Justification:** The modifications intend to improve the wording as follows:

- The term "production" is eliminated from the expression "holistic **production** management system" as the sentence refers to food production and is repeated,
- The expression "~~and the soil or water biological activity~~" is eliminated as it is included in "biological cycles".
- Item b) The term "**production ecosystem**" is used to refer to the biological activity either in land or in aquatic systems.
- item d) The expression ..."return nutrients **to the ecosystem**....." as it covers all environments in which the activities take place (land, air and water).
- Item e) The appropriate expression is "**use of** renewable resources" as they are used as inputs in the production systems of foods that are **produced** at the local level.
- Item f) The [Spanish] term "alimentaria" is replaced by "de alimentos" as that is the appropriate term [TN The proposal only applies to the Spanish version.]
- Item g) The [Spanish] expression "productos alimentarios" [TN referring to food products] is replaced by "productos **alimencios**" as it simplifies the writing and is more precise [TN This proposal only applies to the Spanish version]; the term "organic integrity" is eliminated as this concept is not defined in international fora; "vital" is replaced by "**intrinsic**" as that is the correct term, as
- It improves and simplifies the wording.
- Item h) is expressed in a generic manner,
- Item j) the term "organisms" is added as it covers all the different productions.

## Paragraph 9

We propose modifying the wording as follows:

"An **integral essential** component of certification..."

**Justification:** This is understood to be the correct adjective as inspections must be made to approve certification.

## Paragraph 10

We propose modifying the wording as follows:

*Apart from a small portion of food commodities marketed directly from the farm to consumers, most products find their way to consumers via established trade channels. [TN The proposal only applies to the Spanish version substituting the translation of farm from "granja" to "finca"]*

**Justification:** The term "granja" [TN Spanish for farm] is substituted by "**finca**" [TN In the Spanish version only] as that is the term used in the Guidelines and as a way of making the wording uniform when referring to the establishment where the productive activities take place.

## Section1. Scope

We propose the following wording:

1.1 *These guidelines apply to the following products which carry, or are intended to carry, descriptive labelling referring to organic production methods:*

- a) *unprocessed plants and plant products, algae ~~and their products~~ ~~and their products~~, **animals livestock** and livestock products, and aquaculture animals and animal products to the extent that production principles and specific inspection rules for them are introduced in Annexes 1 and 3; and*
- b) *Processed agricultural crop, livestock and aquatic products<sup>2</sup> intended for human or animal consumption derived from (a) above.*

**Justification:** We propose to specify **algae products** in the scope of these Guidelines as there are several products obtained from algae, among which mention is made of phycocolloids or hidrocolloides polysaccharides of the phaeophytes and rhodophytes that form colloidal substances when dispersed in water. The most important ones are alginates, agar, laminarin, fucoidan, galactans, and carrageenan, with food and pharmaceutical industry uses, among others.

It is understood that algae products must be included within the scope of the Guidelines, as plant and livestock products are.

- We propose changing "animals" by "livestock" to be in accordance with the title of Annex 1 B1 "Livestock and Livestock Products" [TN Applies only to the Spanish version with the term "animales" changed to "ganado".]

## Section1. Scope

### Point 1.2.

We propose eliminating the term "biodynamic"

1.2 *A product will be regarded as bearing indications referring to organic production methods where, in the labelling or claims, including advertising material or commercial documents, the product, or its ingredients, is described by the terms "organic", ~~"biodynamic"~~, "biological", "ecological", or words of similar intent including abbreviated forms which...*

**Justification:** The production methods for biodynamic products are not the same than the production methods for organic products. We understand therefore that it is not appropriate to allow a biodynamic product or ingredient to be described in its label, claims or publicity as if it was an organic product or ingredient. This is in line with what was established in these Guidelines, Section 2, point 2.1. Description.

## Section 2. Description and Definitions

### 2.1. Description

We propose the following wording:

*Foods should only be referred to as organic if they come from an ~~organic agriculture~~ **organic production** system employing management practices...*

**Justification:** Allows covering all productive activities, not just crops but also livestock.

### • 2.2 Definitions

#### "Algae"

We propose substituting the definition of algae by the following:

**Algae means both large macroalgae and microalgae ~~aquatic seaweed~~ occurring both naturally and under cultivation in aquatic environments, both of salt water as well as fresh water ~~and also phytoplankton, microalgae and blue-green algae (such as Spirulina).~~**

**Justification:** The present definition is wide covering, as it includes both microalgae as well as fresh and salt water microalgae without specifying any type of algae in particular.

- The elimination of "phytoplankton" is due to the fact that phytoplankton is a "microalgae".

- **“Aquaculture”**

We propose the following wording:

**Aquaculture** means the farming of aquatic organisms involving intervention in the rearing process to enhance production and ~~the individual or corporate ownership~~ of the stock being cultivated.

**Aquatic organisms include fish finfish, shellfish (crustaceans and molluscs), aquatic plants and algae, but exclude mammals, reptiles, birds and amphibians.**

**Justification:**

- The correct term for [TN For fish in Spanish] is “peces” as “pescado” is that which has already been subject to fishing. [TN This first part of the comment applies only to the Spanish version]
- The terms **“crustaceans and molluscs”** should be used as the term shellfish makes alludes to marketing.

- **“~~Closed~~ Recirculation system”**

We propose the following wording:

**~~Closed~~ Recirculation system** means a type of enclosed containment system, with very limited and managed barrier-connection to open waters, and systems to treat the effluent water to enable its **circulation for reuse**.

**Justification:** It is not appropriate to use the term “Closed” in the name of the definition, as it is a containment system with some connection to open waters.

- **“Containment system”**

We propose the following wording

**Containment system** means ~~equipment for growing aquaculture animals or algae~~ **the facilities for the production of aquatic organisms** which minimises the risk of **their** dispersal ~~of the aquatic organism concerned~~ - examples are, cages (net pens), ponds and tanks, ~~long-line and rafts holding suspended ropes with the organisms attached and net bags for shellfish.~~

**Justification:**

- The term “facilities” is more appropriate than “equipment”.
- Reference is made to “aquatic organisms” according to the rest of the Guidelines.
- Long lines are fishing equipment and not production equipment.
- The rafts with hanging ropes do not prevent nor minimize the dispersal risk.

- **“Food product/product of agricultural or aquatic origin”**

We propose the following wording:

**“Food product/product of agricultural or aquatic origin** means.....” [TN Comment applies only to the Spanish version for proper gender concordance, changing “acuática” to “acuático”.]

**Justification:** Proper wording in Spanish.

- **“Veterinary drug”**

We propose the following wording:

**“Veterinary drug”:** means any substance applied or administered to any food-producing animal, such as meat or milk-producing animals, poultry, fish, **crustaceans and molluscs** or bees, whether used for therapeutic, prophylactic or diagnostic purposes or for modification of physiological functions or behaviour.

**Justification:** According to the definition of aquaculture animals in the concept of “aquatic organisms”.

### Section3 Labelling

#### Paragraph 3.3.

We propose the following wording:

3.3 The labelling and claims .....

- a) such indication show clearly that they relate to a method of food production and are linked with the name of the food product in question, unless such indication is clearly given in the list of ingredients; [TN The

*changes proposed apply only to the Spanish version where the term “alimentario” - in food product – is replaced by “alimenticio”.*]

**Justification:** Use the [TN Spanish] term “alimenticio” when referring to those foods that have the property of nourishing and not “alimentario” which refers to something in relation to the diet. [TN Applies only to the Spanish version]

### Paragraph 3.6.

We propose including “between” to clarify the wording:

“.....in particular for products containing between 95% and 70% of organic ingredients”

**Justification:** Better wording.

## SECTION 4: RULES OF PRODUCTION

### Paragraph 4.2

We propose the following wording:

4.2 *Organic processing methods require the following for the preparation of products referred to in paragraph 1.1(b):*

- a) *They must satisfy at least the requisites of Annex 1;*
- b) *Substances listed in Annex 2, Tables 3 and 4 or substances approved by individual countries that meet the criteria established in Section 5.1 may be used as ingredients of non-agricultural origin or processing aids insofar as the corresponding use is not prohibited in the relevant national requirements concerning the preparation of food products and according to good manufacturing practice. [TN The changes proposed apply only to the Spanish version where the term “alimentario” - in food product – is replaced by “alimenticio”. See several other similar cases i.e. 3.3 a]*

**Justification:** Use the term “alimenticio” when referring to those foods that have the property of nourishing and not “alimentario” which refers to something in relation to the diet. [TN Affecting only the Spanish text as mentioned above]

### Paragraph 4.4

We propose the following wording:

4.4 *By derogation of the provisions of paragraphs 4.1 (a) and 4.2 (a), the competent authority may, with regard to the provisions on livestock production at Annex 1, provide for more detailed rules as well as for derogations for implementation periods in order to permit gradual development of ~~organic farming practices~~ the organic production systems.*

**Justification:** It allows to cover all activities involved in these Guidelines (crops, livestock and aquaculture production).

## SECTION 5. REQUIREMENTS FOR INCLUSION OF SUBSTANCES IN ANNEX 2 AND CRITERIA FOR THE DEVELOPMENT OF LISTS OF SUBSTANCES BY COUNTRIES

### Paragraph 5.1.d

We propose including the following at the end of the first sentence:

.....d) *if they are used for the purpose of cleaning and disinfection of ponds, cages, buildings and installations used for aquaculture production, on condition of:*

- ~~they are being~~ **essential** *for the control of a harmful organism or a particular disease for which other biological, physical, or breeding alternatives and/or effective management practices are not available; and*
- *Their use ~~takes would take~~ into account the potential harmful impact on the environment, the ecology (in particular non-target organisms), aquatic organisms and the health of consumers; and*

**Justification:** It improves the wording.

## SECTION 6. INSPECTION AND CERTIFICATION SYSTEMS

### Paragraph 6.8

We propose the following wording:

6.8 An organic operator ~~of the organic crop~~ has to present an organic management plan to a certification body for verification during inspection. The plan must be updated annually.

**Justification:** It is understood that the organic management plan must be applicable to all activities undertaken by the operator (crops, livestock and aquaculture).

## ANNEX 1. PRINCIPLES OF ORGANIC PRODUCTION

### A2. AQUATIC PLANTS, ALGAE AND THEIR PRODUCTS

#### Paragraph 1.

We propose the following wording:

*The operation and management of the organic production of aquatic plants, organic algae and their parts whether in containment systems or not, should be consistent with the principles of organic **farming production**.*

**Justification:**

-The paragraph should be able to cover all the products in this Section (Section A2).

- It is understood that, when referring to the principles, it should be done in a wide sense (not only for those of organic agriculture).

#### Paragraph 3.

~~**3. Harvested** Algae, aquatic plants and their products, harvested and/or collected can be sold as ~~organic production~~ algae organically produced when these Guidelines have been complied with. ~~The criteria for site selection of aquaculture animal units in Section B2 of these guidelines should be applied as appropriate to production units for aquatic plants and algae. For the purpose of site selection of the production units for aquatic plants and algae, the criteria established for site selection of aquaculture animal units in Section B2 4. Of these guidelines should be applied as appropriate.~~ The criteria for conversion of plant and plant products in these guidelines (Annex I.A, 1-4) should be applied as appropriate to aquatic plants and algae production units. If a competent authority agrees to a conversion period shorter than 12 months, it should be at least the length of a production cycle. In addition, the following criteria for conversion must be applied to algae and aquatic plants production units:~~

a) For collection systems: 6 months

b) For cropping systems: 6 months or a total production cycle, choosing which ever period is the longest."

**Justification:**

- We propose to include "and/or collected" as collection is also an accepted practice for obtaining products.

- We propose to include as well "aquatic plants and their products" as they fall within the scope.

- When referring to the location where the production units for aquatic plants and algae shall be established the sentence is reworded to improve understanding, indicating the mention of "B2" in more detail as it is "B2 Paragraph 4".

- The conversion periods regarding plants and plant products included in Annex I, A 1, paragraphs 1 to 4 are excessive for the production of algae and aquatic plants (2 years are mentioned there). For example, the observations regarding brown microalgae (Undaria sp.) that reach maximum biomass at 5.5 months for the 1<sup>st</sup> generation, and 3.5 months for the 3<sup>rd</sup> and following generations. After these periods there is stagnation in the size and a reduction in weight or loss of biomass. Those periods indicate the productive cycles.

- It is understood that a 6 month period is sufficient for the purpose of the operators understanding the organic production principles and for them to apply the practices and procedures for such production systems.

#### Paragraph 4

We suggest the following wording:

4. Both farming and collection of algae **and aquatic plants** should be carried out in areas which meet the criteria of paragraph 4 and ~~6~~ 7 of Section B2.

#### Justification:

- We propose to include as well “**aquatic plants**” as they fall within the scope.
- The mention to Paragraph 6 should be eliminated as it is wrong; given the subject referred, mention should be made of Paragraph 7.

#### Paragraph 6

The following wording is suggested:

The collection in the wild of **algae, aquatic plants** and their parts should be done in a sustainable manner ~~to maintain good quality growing material~~ **to minimize the impact over the ecosystem.**

#### Justification:

- We propose mentioning the “subject” of the collection.
- The expression “growing material” is eliminated as it may create confusion, as the paragraph refers to the collection.
- The objective of doing a sustainable collection is not only to preserve the specie being collected but also to not change the environment as a whole, thus giving the sentence a wider sense.

#### Paragraph 7

We suggest the following wording:

Farming of **algae and aquatic plants** should be carried out in a sustainable manner at all stages from collection of seedlings in the wild to harvesting. [The application of supplementary fertilizer, **meaning those listed in Table 1B of Annex 2**, using natural organic compounds to the growing area should be restricted to ~~pond~~ **cultivation in confined areas.**] Ropes and other equipment used for growing aquatic plants and algae should be re-used or re-cycled where possible. Removal of bio-fouling organisms should be by physical means only.

#### Justification:

- We propose including algae and aquatic plants” to complete the concept.
- We propose specifying that reference is made to Table 1B of Annex 2 as it deals with fertilizers and conditioners of fish ponds.
- The term “confined areas” is wider than “ponds” and covers them.

#### Paragraph 9

Justification: The sentence is considered incomplete and the role of the products that would be mentioned in Table 2 D of Annex 2 is not clear.

9. [Only in cases of imminent or serious threats to aquatic plants and algae recourse may be had to products referred to in Annex 2, Table 2D.]

### **B2. AQUACULTURE ANIMALS AND THEIR PRODUCTS**

#### General principles

#### Paragraph 3

We propose the following wording:

The **management** plan, as referred to in section 6.8, should cover nutrient discharge, if applicable, and the repair and surveillance of technical **equipment equipping**. The organic management plan may also include a water quality monitoring scheme for early detection of potential contaminants from unlikely events ~~of in~~ the harvest **and/or growing areas**. [TN There is an additional observation by Argentina, which only applies to the Spanish text, regarding the correct translation of the term events.]

#### Justification:

- Corrected due to an idiomatic expression

- The examples are eliminated from the text
- It is understood that the organic management plan (mentioned in Section 6.8) should be developed, may it be an activity of collecting aquaculture animals or a growing activity.

#### Paragraph 4

We propose the following wording for the last sentence of the paragraph:

*“.....The boundaries of the production unit **should-must** be clearly defined and marked appropriately...”*

**Justification:** We consider that such condition should be compulsory.

#### Paragraph 6

We propose the following wording

*“Substances permitted for use as fertilizers and conditioners of the aquatic environment for the cultivation of aquaculture animals (fish and shellfish fish, crustaceans and molluscs) are listed in Annex 2, Table 1B.”*

#### **Justification:**

- We propose to specify that we are making reference to Table 1B of Annex 2, as the subject is fertilizers and conditioners of fish ponds.
- It is understood that the aquatic environment is fertilized and conditioned, which favours the growth of aquaculture animals
- The correct term for [TN For fish in Spanish] is “peces” as “pescado” refers as that which has been subject to fishing.

#### **Origin of stock**

#### Paragraph 9

9. *Breeds adapted to local conditions **without evidence of adverse effects on local habitat or native species** shall be chosen. Selection criteria should include their vitality and resistance to pests and diseases. Following the conversion period if organic aquaculture animals are not available, juvenile non-organic aquaculture stock, **including wild sources**, may be introduced for on-growing in the **organic holding. These animals may be commercialized as organic**, provided that the latter two thirds of their production cycle or 90% of their final biomass is under organic management and providing the stock is healthy. Breeding stock should come from organic production units. **If these are not available, they should be submitted to organic management where the parent stock have been under organic management** for at least three months prior to their use **breeding**. For crustaceans, in cases where organic breeding stock is not available, wild caught parent stock may be used, provided that they are kept under organic management before breeding.*

#### **Justification**

- The proposal allows to make it clear that juvenile animal created in not organic holdings which are introduced to organic holdings, may be marketed as organic products if they comply with the requirements established in paragraph 9.
- The mention of “parent stock” is eliminated as it refers to a previous generation of parentals.

#### Paragraph 10

*“.....For species that cannot spawn naturally in captivity spawning may be induced using exogenous releasing hormones [TN The comment received from Argentina applies only to the Spanish text where the term “induce” should have been translated as “inducir” rather than “introducir”]*

**Justification:** Use of the appropriate term.

#### **Production rules for husbandry and breeding**

#### Paragraph 11

We propose replacing “should” by “must”, so the wording would read:

11. *The production unit **should must** provide sufficient space for the animals' needs in terms of stocking density. The aquatic animals **should must** be provided with water with a flow rate and temperature which meets to the physiological requirements of the species with sufficient oxygen and, in the case of filter feeding animals, other nutritional factors for their needs. The temperature and light conditions **should must** be suitable for the species concerned in the particular geographic location of the production unit. When netting*

is used it should be kept clean by physical means **or using substances specified in Annex 2, Table 2B, only to the extent that the quality of aquatic environment cannot be maintained by physical means.**

**Justification:** It is understood these should be compulsory actions.

#### Paragraph 12

We propose the following wording:

12. Maximum stocking density ~~must be reflective of~~ **must not affect** the natural behaviour of the species and in keeping with good welfare .....

**Justification:** It uses the correct term.

- **Paragraph 13:** We propose the following wording:

13. Containment systems, when used, particularly cages (net pens) **should must** be designed, constructed, located and operated to suit the requirements of the species cultivated, ~~minimize the risk with the purpose of minimizing escapes~~ and other negative environmental impacts and to prevent the entry of predatory species.

**Justification:** Better wording.

#### Paragraph 15

We propose the following wording:

15. Breeding conditions **should must** reflect the natural situation as closely as possible, in terms of ambient conditions, using appropriate ~~strains~~ **lines** for the **specific** type of breeding **in question**. Manual sorting or selection, manual ~~stripping~~ **obtaining** of gametes and artificial incubation of eggs is allowed. [Polyploidy ~~when it is chemically induced and cloning, artificial hybridization and use of single sex strains are is~~ prohibited]. **The use of single sex organisms, in compliance with the techniques allowed, and also artificial hybridization, are permitted.**

**Justification:** It is understood that both practices, the use of single sex organisms and artificial insemination, should be allowed.

The use of single sex organisms is a common practice for those species that have a better production performance depending of the sex (i.e. Trout) and it is a necessary practice for those other species that reach very early sexual maturity (i.e. Tilapia) generating an overpopulation in the growing enclosures, which makes it difficult to reach a commercial size. Therefore, it is necessary to select of single sex individuals and to raise them afterwards.

The production of hybrids happens spontaneously in nature. The hybridization allows, in certain species, to accelerate the manifestation of hybrid vigour through the selection of the parental stock, obtaining fish with better characteristics than their parentals, such as a higher resistance to pathogens and certain environmental conditions.

Tilapia production is given as an example as it has been one of the most developed world wide during the last few years. This specie is of commercial importance and its production has been encouraged in many countries. One of the problems presented by the production of these species is their high rate of proliferation, as they breed at an early age (in some cases from their third month of age onward), spawning multiple times during the year, with all their accumulated energy be used basically for these spawnings. Furthermore, their maternal instinct leads them to keep the eggs in their mouth, thus not being able to eat during the incubation period forcing them to use their energy reserves to survive.

The search for Tilapia hybrids is a management for this specie that has been taking place since 1970. It aims at improving the genetic characteristics with the goal of obtaining a higher percentage of males, easy capture, better use of trophic levels, improving the presentation and increase in the percentage of filet.

Artificial hybridization, resulting from human involvement, is accepted in organic production and is not forbidden in these Guidelines in the case of plants or animals (bovines, horses, goats, etc.). It is understood therefore that an equal treatment should exist for aquaculture organisms.

In agreement with what has been previously said, in "Section 2 Description and Definitions, 2.2 Definitions, specifically in the definition of "genetic engineering/genetic modification techniques" the hybridization technique as cause of genetic engineering organisms is excluded, thus being understood that hybridization is a technique allowed in the Guidelines.

## Nutrition

### Paragraph 16 Regarding feeds for carnivorous aquatic animals:

We suggest substituting item a) a1) by the following wording:

~~“...a) a1) organic feed products of aquacultural origin...”~~

**“...a) a1) products of organic aquaculture for feed manufacturing**

**Justification:** Clear declaration

We propose to correct the numeration.

~~“a.5) a.6) organic feed material of non-aquatic origin as allowed by national legislation; ...”~~

**Justification:** This point has to be renumbered after the inclusion of item a.4).

## Health care

### Paragraph 20

*“ ..... To control ectoparasites such as sea lice, appropriate **production control** methods (and cleaner fish if available) should be used where possible, rather than parasiticides .....”*

**Justification:** Adapt the wording as the sentence refers to the **control** of the ectoparasites.

## ANNEX II

Shaw Centre, 55 Colonel By Drive, Ottawa, Ontario, Canada 1. Any substances used in an organic system for soil **and aquatic environment** fertilization and conditioning, pest and disease control, for the health of livestock and aquaculture animals and quality of the animal products, or for preparation, preservation and storage of the food product should comply with the relevant national regulations.

**Justification:** Adapt the wording to the scope of these guidelines.

3. Where substances are required for primary production they should be used with care and with the knowledge that even permitted substances may be subject to misuse and may alter the **production ecosystem of the soil or farm**.

**Justification:** Adjust the wording to the scope of the guidelines (which includes both land and aquatic ecosystems).

## ANNEX II

### Table 1B

**Substances and organisms used as fertilizers and conditioners of aquaculture ponds in the production enclosures of aquatic organisms**

#### Substances

#### ~~1.5 Bacteria, molds and enzymes~~

#### **1.5 Bioremediation Organisms**

#### Description, composition requirements and conditions for use

If substances are not from organic sources, they need to be recognized by a certification body or competent authority.

#### **Justification:**

- We add the term **“organisms”** to the title as organisms are included in the table (bacteria, molds).

-We substitute “aquaculture ponds” by **“production enclosures”** as it is a term that covers the different production structures.

- We propose replacing ~~“1.5. Bacteria, molds and enzymes”~~ by **“1.5. Bioremediation Organisms”**. This is a wide term and includes microorganisms, fungi and plants or the enzymes derived from them to clean up an environment that has been altered by contaminants

## ANNEX 3

### MINIMUM INSPECTION REQUIREMENTS AND PRECAUTIONARY MEASURES UNDER THE INSPECTION OR CERTIFICATION SYSTEM

#### A. PRODUCTION UNITS

##### Paragraph 3

We propose the following wording for the paragraph:

*“Production according to these guidelines should take place in a unit where the land parcels, production areas, farm buildings and storage facilities for crop and livestock and aquaculture ~~and algae production~~ sites are clearly separate from ~~those of~~ any other unit which does not produce according to these Guidelines; preparation and/or packaging workshops .....*”

**Justification:** - It is understood, when “aquaculture” are mentioned, that this includes both aquaculture animals as well as aquatic plants and algae.

##### Paragraph 4

We propose the following wording for the paragraph:

*4. a) a full description of the unit and/or collection areas, showing the storage and production premises, land parcels, and aquaculture ~~algae~~ sites and, where applicable, premises where certain preparation and/or packaging operations take place...*”

##### **Justification:**

- The appropriate term [TN in Spanish] is “recolección” [TN This comment only applies to the Spanish version where the English term “collection” had been inaccurately translated as “recogida” instead of “recolección”].

- It is understood that, when “aquaculture sites” are mentioned, it includes both aquaculture animals as well as aquatic plants and algae.

##### Paragraph 5

We propose the following wording:

*5. Each year, before the date indicated by the certification body or authority, the operator should notify the official or officially recognized certification body or authority of its schedule of production of crop, ~~products,~~ ~~and~~ livestock ~~and aquatic products~~ giving a breakdown by land parcel/herd, ~~or~~ flock, ~~or~~ hive or aquatic areas and instalations.*

**Justification:** Aquatic activity is included, in concordance with the scope established in the Guidelines, as well as the corresponding mention of aquatic areas and installations.

##### Paragraph 12

We propose the following wording:

*Where an operator runs several production units in the same area (parallel cropping), units in the area producing ~~crops, plant products and/or algae, crop products or algae~~ those not covered by Section 1 should also be subject to the inspection arrangements ...*

**Justification:** It improves the wording.

##### • Paragraph 13

We propose the following wording:

*“In organic livestock and aquaculture production, all livestock on one and the same production unit must be reared in accordance with the rules laid down in these Guidelines. However, livestock not reared in accordance with these Guidelines may be present on the organic ~~unit~~ holding provided that they are separated clearly from livestock produced in accordance with these Guidelines... ..”*

**Justification:** It is believed that an involuntary mistake has been made in the Spanish translation that should refer to the “organic holding” as indicated in the English version, thus not changing the original meaning of the paragraph.

## **BRAZIL**

### **General Comments**

Brazil supports the revision of the Guidelines for the Production, Processing, Labelling and Marketing of Organically Produced Foods to include aquaculture and seaweed.

Although Brazil supports the intention to develop lists for substances allowed in organic aquaculture, we understand that the inclusion of these substances should follow the structured process for review of the Guidelines established by CCFL. This approach would guarantee an adequate assessment of these substances in relation to the general criteria outlined in Section 5 of the Guidelines.

### **Specific Comments**

~~5.2 ... [If these substances mentioned above are not available from such methods and technologies in sufficient quantities, then those substances that have been chemically synthesized may be considered for inclusion in exceptional circumstances.]~~

**Rationale:** Brazil does not support the inclusion of this section. It is not consistent with principles of organic production. This proposal would apply to all types of substances mentioned in section 5 and the exceptional circumstances are not clearly defined. Besides, this amendment is outside the scope of the inclusion of aquaculture in the Guidelines.

## **CANADA**

### **General Comments**

Generally, we believe that the proposed revised *Guidelines for the Production, Processing, Labelling and Marketing of Organically Produced Foods* provide a strong basis for consideration by the plenary.

We support the addition of aquatic plants in the definition of aquatic organism and in Annex 1, A.1

### **Specific Comments**

We have specific comments in the following areas:

- Origin of stock - hormonal treatment
- Breeding
- Nutrition
- Additions to Table 2B

### **Section 2: Description and Definitions**

#### **Definition of closed recirculation system**

Canada supports the revised definition for “closed recirculation system”.

#### **Annex 1: Principles of Organic Production**

##### **B.2 Aquaculture Animals and their Products**

###### **Conversion period for operators**

**Para 8:** Canada supports removal of the square brackets

###### **Origin of stock:**

###### **Paragraph 10** (hormonal treatment)

Canada supports the text in this paragraph and the removal of the square brackets, with the following text added before the last sentence in paragraph 10:

**Single-sex populations are permitted. Brood stock treated with hormones shall lose organic status for human consumption but may continue to be used within the organic system.**

Hormonal treatment should only be used as reproductive aids in those cases where captive breeding would not occur otherwise.

Canada agrees with the use of hormones on brood stock with the stipulation that treated organisms could not then be considered organic. Aquaculture animals treated with hormones shall lose organic status for human consumption. As well, brood stock obtained by treatment with hormones shall lose organic status but may continue to be used within the organic aquaculture system. The treated brood stock would need to be clearly identifiable or contained in a separate reading unit to prevent accidental harvest as organic products.

The use of a releasing factor is to cause the fish to release its own natural hormone. Induction is a humane, safe and effective method to assist the fishes' own endocrine system to spawn in a timely and natural fashion. We believe this is consistent with the organic principles.

With respect to the square brackets around "including wild sources", we also support removal of the square brackets and retaining of the text.

### **Production rules for husbandry and breeding:**

#### **Paragraph 14** (closed recirculation systems)

Canada strongly supports the outcome of the 42<sup>nd</sup> session of CCFL, that the Competent Authority should decide whether or not to approve closed recirculation systems after a thorough examination and evaluation of the total environmental viability and compatibility with organic production.

#### **Paragraph 15** (breeding)

Canada proposes that the last sentence, partially in square brackets, include a clear prohibition on cloning and techniques using genetic engineering.

We support the removal of the square brackets around "chemically induced polyploidy" and agree that this should be prohibited. There are alternative methods that are acceptable that involve temperature change and pressure. Polyploidy occurs in nature in fish so it would not be against organic principles to replicate it.

We do not support a prohibition on use of single sex strains, except by any method involving genetic engineering. Single sex populations are used in organic agriculture such as with laying hens and dairy cows and should also be permitted with fish. We support the following text for the last sentence in paragraph 15:

~~Chemically induced polyploidy~~, cloning, artificial hybridization, ~~and use of single sex strains~~ **and techniques using genetic engineering** are prohibited.

#### **Paragraphs 16-19** (nutrition)

16 c. Canada supports the removal of the square brackets; synthetic amino acids should not be permitted.

Paragraph 16 a.4) – Canada does not support an inclusion limit of 60% being placed on feed products derived from whole fish caught in sustainable fisheries without a strong rationale.

We propose the following text for 16 a.4):

a.4) feed products derived from whole fish caught in sustainable fisheries as determined by the competent authority; ~~as an inclusion limit of up to 60%.~~

#### **Table 2B Cleaning and disinfection treatments for organic aquaculture**

The lists of permitted substances, as outlined in section 4 of Annex 2, are not all inclusive or exclusive or a regulatory tool, but provide advice to governmental on internationally agreed inputs. They are indicative lists. The review criteria outlined in Section 5 of the guidelines should be the primary determinant for acceptability or rejection of substances.

Prior to substances being considered by the Committee, they are evaluated through the structured approach established by CCFL. Some substances related to aquaculture that could be added to the list of permitted substances, after providing appropriate substantiation and subject to the evaluation through the structured approach are:

- Chlorhexidine
- Detergents
- Potassium bicarbonate
- Potassium hydroxide
- Potassium peroxymonosulphate sulphate
- Soaps
- Soap-based algicide
- Sodium bicarbonate (baking soda)
- Sodium borate
- Sodium carbonate (soda ash)
- Surfactants

- Thiosulfate
- Ultraviolet
- Vinegar- Wetting agents

## **CHILE**

Chile would like to point out some concerns regarding the text included in Appendix III pertaining the inclusion in that directive of a chapter referring to organic aquaculture, particularly regarding some conceptual definitions that could be improved to create a clearer and precise reference frame.

First of all, both in the foreword as well as in the section regarding the scope, agricultural and aquatic terminology is employed to provide a reference framework for organic food production systems which looks quite limited to us. We propose replacing it by the term “agroforestry or aquatic” with the purpose of also including food products from agroforestry or aquatic and wild recollection origin.

Also in the Scope, the term “biodynamic” is included in Paragraph 1.2 as a synonym of organic, biological and ecological, which should not apply as it is a concept that lacks clarity and precision on this issue, biodynamic certification, which has its own Standard that includes other demands above and beyond organic production. This is the reason why we propose eliminating it as a synonym.

## **Section2**

### **2.1 Description**

Reference is made to the fact that organic foods have been obtained by an organic agricultural system. It should say “organic agriculture and aquaculture”.

### **2.2 Definitions**

Food product/product of **[agroforestry]** or **[aquatic]** origin means any product or commodity, alive, **[in primary production]** or processed, that is marketed for human consumption (excluding water, salt and additives) or animal feed.

Regarding the proposed definition of aquaculture, it could be improved replacing it by the one presented in the document FAO FISHERIES CIRCULAR N°815 REVISION 8, 1996, that indicates that aquaculture is the raising of aquatic organisms, including fish, molluscs, crustaceans and aquatic plants. Its production implies a high degree of intervention in the natural growth processes with the purpose of increasing natural growth, such as regulating densities, feeding, protection from predators, etc. Production also implies individual and corporate ownership of the produced stock.

Phytoplankton, microalgae and blue-green algae are incorporated in the definition of “algae”. It should be taken into account that the definition of phytoplankton includes the group of autotrophic and photosynthetic aquatic organisms that are suspended in the water column and includes microalgae, bacteria and protists depending on the taxonomic rigor one wants to use in the definition. Therefore, to enumerate phytoplankton, microalgae and blue-green algae may be redundant. Furthermore, regarding algae, we suggest making the definition wider and to also consider fresh water algae and avoid the term marine in all aspects, either when referring to algae as well as to aquaculture.

In the definition of “Containment system”, we suggest changing this term for “production unit” as this last term is better associated with aquaculture.

***Production*** means the operations undertaken to supply food products in the state in which they occur on the farm **[or aquaculture crop center]**, including initial packaging and labelling of the product.

Section 6. Point 6.8 **An organic operator has to present an organic management plan to a certification body for verification during inspection. The plan must be updated annually.**

## **COLOMBIA**

### **FOREWORD**

5. Organic food production through organic farming is one among the broad spectrum of methodologies which are supportive of the environment. Organic production systems are based on specific and precise standards of production which aim at achieving optimal agricultural, **livestock** and aquatic ecosystems...

6. “Organic” is a labelling term that denotes products that have been produced in accordance with organic production standards and certified by a duly **authorized** ~~constituted~~ certification body or authority. Organic food production ... and people.

7. Organic food production is a holistic production management system which promotes and enhances agricultural, **livestock** and aquatic ecosystem health, ... j) become established on any existing farm through a period of conversion, the appropriate length of which is determined by site-specific factors such as the history of the land or aquatic medium, and type of crops, livestock, or aquatic organisms to be produced; k) **guarantee a safe product that does not affect public health.**

## SECTION 1. SCOPE

1.2 A product will be regarded as bearing indications referring to organic production methods where, in the labelling or claims, including advertising material or commercial documents, the product, or its ingredients, is described by the terms “organic”, “biodynamic”, “biological”, “ecological”, or words of similar intent **different from natural** including their abbreviated forms which, in the country where the product is placed on the market, suggests to the purchaser that the product or its ingredients were obtained according to organic production methods.

## SECTION 2. DESCRIPTION AND DEFINITIONS

2.1 Description .... This is achieved by a combination of providing good quality organically grown feedstuffs, appropriate stocking rates, animal husbandry systems appropriate to behavioural needs, and animal management practices that minimize stress and seek to promote animal health and welfare, prevent disease and avoid the use of chemical ~~allopathic~~ veterinary drugs (including antibiotics).

### 2.2 Definitions

**Aquaculture** means the farming of aquatic organisms involving intervention in the rearing process to enhance production as well as the individual or corporate ownership of the stock being cultivated. Aquatic organisms include **finfish**, shellfish (crustaceans and molluscs), aquatic plants and algae, but exclude mammals, reptiles, birds and amphibians.

#### Organic:

#### Natural:

**Closed recirculation system** means a type of ~~enclosed~~ containment system, with very limited and managed barrier-connection to open waters, and systems to treat the effluent water to enable its circulation for reuse.

**Food product/product of agricultural or aquatic origin** means any product or commodity, **alive**, raw or processed, that is marketed for human consumption (excluding water, salt and additives) or animal feed. ....” [TN An additional comment by Colombia regarding the translation of “aquatic” applies only to the Spanish version for proper gender concordance, changing “acuática” to “acuático”.]

**Livestock** means any domestic or domesticated animal including bovine (including buffalo and bison), ovine, porcine, caprine, equine, poultry, **aquaculture** and bees raised for food or in the production of food. The products of hunting or fishing of wild animals shall not be considered part of this definition.

**Preparation** means the operations of slaughtering, processing, preserving and packaging of food products ~~and also alterations made to the labelling concerning the presentation of the organic production method.~~

**Production** means the operations undertaken to supply food products in the state in which they occur on the farm, **from the primary production to the consumer**, including initial packaging and labelling of the product, [TN A line, starting a new definition for Veterinary drug seems to be missing here saying “**Veterinary drug** means any substance applied or administered to any food-producing animal] such as meat or milk-producing animals, poultry, fish or bees, whether used for therapeutic, prophylactic or diagnostic purposes or for modification of physiological functions or behaviour.

## SECTION 3. LABELLING AND CLAIMS

3.4 By way of derogation from paragraph 3.3(b),

- certain ingredients of agricultural, **livestock or aquaculture** origin not satisfying the requirement in that paragraph may be used, within the limit of maximum level of 5% m/m of the total ingredients excluding salt and water in the final product, in the preparation of products as referred to in paragraph 1.1(b);
- ~~where such ingredients of agricultural origin are not available, or in sufficient quantity, in accordance with the requirements of Section 4 of these guidelines;~~

3.5. Pending further review of the guidelines, Member Countries can consider the following with regard to products referred to in paragraph 1.1(b) marketed in their territory:

- the development of specific labelling provisions for products containing less than 95% ingredients of agricultural **livestock and aquacultural** ingredients;
- the calculation of the percentages in 3.4 (5%) and in 3.5 (95%) on the basis of the ingredients of agricultural origin (instead of all ingredients excluding only salt and water);
- The marketing of product with in transition/conversion labelling containing more than one ingredient of agricultural, **livestock or aquacultural** origin.

## SECTION 5. REQUIREMENTS FOR INCLUSION OF SUBSTANCES IN ANNEX 2 AND CRITERIA FOR THE DEVELOPMENT OF LISTS OF SUBSTANCES BY COUNTRIES

... b) if they are used for the purpose of plant disease or pest and weed control:

– they should be essential for the control of a harmful organism or a particular disease for which other biological, physical, or plant breeding alternatives and/or effective management practices are not available; and

– Their use should take into account the potential harmful impact on the environment **habitat**, (in particular non-target organisms)...

....; 13 The use of chemical processes in the context of this Criteria is a transitory measure and should be submitted to revision...

d) If they are used for the purpose of cleaning and disinfection of ponds, cages, buildings and installations used for aquaculture production:

-they are essential for the control of a harmful organism or a particular disease for which other biological, physical, or breeding alternatives and/or effective management practices are not available; and

– Their use should take into account the potential harmful impact on the environment, the **ecology nature**, (in particular non-target organisms), **aquatic organisms from aquaculture** and the health of the consumers;

~~5.2 Countries should develop or adopt a list of substances that meet the criteria outlined in Section 5.1. If these substances mentioned above are not available from such methods and technologies in sufficient quantities, then those substances that have been chemically synthesized may be considered for inclusion in exceptional circumstances~~

## PRINCIPLES OF ORGANIC PRODUCTION A1. PLANTS AND PLANT PRODUCTS

9. The collection of edible plants...

B1 7. Farming should be carried out in a sustainable manner at all stages from collection of **seedlings seeds** in the wild to harvesting. [The application of supplementary fertilizer, i.e. those listed in Annex 2, Table 1, using natural organic compounds to the growing area should be restricted to pond cultivation.] Ropes and other equipment used for growing aquatic plants and algae should be re-used or re-cycled where possible. Removal of bio-fouling organisms should be by physical means only.

## B2. AQUACULTURE ANIMALS AND THEIR PRODUCTS...

7. The certification body or authority must ensure at the outset that the location of the production unit is suitable by conducting an assessment of potential sources of contamination or by substances unacceptable to organic production systems. ~~Buffer zones within or between farms should be established by competent authorities, to separate organic and non-organic production units.~~ **(Not-organic and organic production must not be allowed in the same farm) ...**

2. **Juveniles** grown in not organic units, including wild sources, **may be introduced** for on-growing in the holding, provided that the latter two thirds of their production cycle or 90% of their final biomass is under organic management and providing the stock is healthy. Breeding stock should come from organic production units, where the parent stock have been under organic management for at least three months prior to breeding

The production unit should provide sufficient space for the animals' needs in terms of **stocking seeding** density. The aquatic animals should be provided with water with a flow rate and temperature which meets to the physiological requirements of the species with sufficient oxygen and, in the case of filter feeding animals, other nutritional factors for their needs. The temperature and light conditions should be suitable for the species concerned in the particular geographic location of the production unit. When netting is used it should be kept clean by physical means or using substances specified in Annex 2, Table 2B, only to the extent that the quality of aquatic environment cannot be maintained by physical means.

12. Maximum ~~stocking~~ **seeding** density **must** be reflective of the natural behaviour of species and in keeping with good welfare. Competent authorities, or other recognised bodies may develop and publicise guide values for maximum densities for the species grown under their authority.

~~13. Containment systems, when used, including cages (not pens) should be designed, constructed, located and operated to suit the requirements of the species cultivated, minimize the risk of escapes and other negative environmental impacts and to prevent the entry of predatory species.~~

14. The competent authority should decide whether or not to approve closed **water** recirculation systems after a thorough examination and evaluation of the total environmental viability and compatibility with organic production.

15. Breeding conditions should reflect the natural situation as closely as possible, in terms of ambient conditions, using appropriate ~~strains~~ **seeds** for the specific type of breeding. Manual sorting or selection, manual stripping of gametes and incubation of eggs is allowed. [Chemically induced polyploidy], cloning, [artificial hybridization [and use of single sex ~~strains~~ **seeds**] are prohibited].

20. .... The use of **prophylactic systems and/or preventive** veterinary **drugs** should be limited to two courses of treatment per year, with the exception of vaccines and compulsory eradication schemes. If the specified limits are exceeded the aquaculture animals concerned should not be sold as organic.

21 Hormonal treatment **must not** be used for ~~production or~~ growth in the breeding and finishing **growth** stages. However it may be used at the reproduction stage (reversion).

### ANNEX 3

#### SECTION 6. INSPECTION AND CERTIFICATION SYSTEMS

6.8 During the registration of the unit of aquatic production or of algae collection, **livestock or crop production** by the certified accreditation organism, an operator has to present an organic management plan to that certification body for verification during inspection. The plan must be updated annually

#### COSTA RICA

##### General comments

Eliminate the term “diseases” in all the document.

**Justification:** The term pests already includes insects and diseases.

##### Specific comments

1. Paragraph 5, eliminate the term “optimal”, so it will read:

.... at achieving agro and aquatic ecosystems which are...sustainable,

**Justification:** The term is redundant in the wording as it is determined that the ecosystem should be sustainable from the social point of view.

2. Indent (i) is missing from the indents of Paragraph 7.
3. Paragraph 8. **Conversion period for operations.** Costa Rica is in agreement with the proposed wording and supports the elimination of the brackets.

#### European Union

##### General Comments

- The EU considers that the Proposed Draft Guidelines for the Production, Processing, Labelling and Marketing of Organically Produced Foods: Organic aquaculture, as presented in Appendix III of the report of the 42<sup>nd</sup> Session of the CCFL, represents a good basis for discussions at the physical working group as well as at the next session of this committee.
- The EU considers it necessary for the protection of consumers and the credibility of the organic label that practices which are generally considered not compatible with organic farming are not allowed in organic aquaculture. In particular, the use of hormones – including on broodstock – and the growing of animals in artificial environments with no direct contact with their natural environment or natural sunlight should not be allowed in organic aquaculture. The stocking densities of organically farmed animals should also generally be lower than those in non-organic aquaculture. For the organic label to be meaningful and credible, organic production systems must be recognizably superior to non-organic systems in terms of respecting the farmed animals' health, welfare and behavioural needs, ensuring a harmonious relationship with their environment, and limiting the use of allopathic treatment and

external inputs. If there is no obvious difference between organic and non-organic production methods, consumers will rightly call into question the very nature of the organic label.

- The EU considers that the contents of the tables listing substances approved for fertilizing and conditioning ponds and substances for cleaning and disinfecting, which are currently in square brackets, should only be discussed once an agreement is reached on the text of the proposed Guidelines.

## **Specific Comments**

### **Section 2: Description and definitions**

- In Section 2.2, the EU proposes to delete the definition of "Closed recirculation system", in conjunction with the suggested change to Section B2.14 (please see below). As emerged during the discussions at the 42<sup>nd</sup> session, the term recirculation systems may be used to cover different types of production, including some that are compatible with the principles of organic farming. Therefore, to avoid confusion and address this issue more effectively, the EU suggests making reference only to the specific aspects of some of these production systems which are not compatible with organic farming.

### **Annex 1**

- In Section A2, paragraph 7, the EU suggests redrafting the sentence between brackets as follows: "The application of supplementary fertilizer, ~~i.e. those listed in A2, Table 1~~, using natural organic compounds to the growing area should be restricted to pond cultivation; **only substances listed in A2, Table 1 may be used for this purpose.**" In the EU's view, this would make the sentence clearer.
- In Section B2.8, the EU strongly disagrees on the exclusion of the conversion period for certain types of containment systems. A conversion period should always be applied. The EU asks for the deletion of the current paragraph and to replace it with the previously proposed version of this paragraph:

**"The conversion period should in general be at least one year. In cases where the water has been drained and the facility cleaned and disinfected, a shorter period of six months may apply. In the case of non-enclosed facilities in open waters, a shorter period of three months may apply provided that cages (net pens) have not been treated with prohibited antifoulants and there are no other sources of exposure to prohibited substances. During the conversion period the stock should not be subject to treatments or exposed to products which are not permitted for the production of organic foods."**

- The EU proposes to redraft the first two sentences of section 2.9 as follows:  
"Breeds adapted to local conditions ~~without evidence of adverse effects on local habitat or native species~~ shall be chosen. Selection criteria should include their vitality and resistance to pest and diseases, **as well as their previous presence in the area without evidence of significant adverse effects on local habitat or native species.**"
- In relation to the origin of aquaculture animals (Sections B2.9 and B2.10), the EU strongly believes that the use of exogenous releasing hormones should not be allowed, even for species that cannot spawn naturally in captivity. The prohibition of the use of hormones is a basic principle of organic farming. The EU also considers that a difference should be made between the use of wild juveniles and the use of non-organic farmed juveniles. The distinction between animals used as breeders and animals introduced for on-growing should also be made clearer. To this aim, the EU suggests the following redrafting of these two sections:

B2.9 Breeds adapted to local conditions ~~without evidence of adverse effects on local habitat or native species~~ shall be chosen. Selection criteria should include their vitality and resistance to pest and diseases, **as well as their previous presence in the area without evidence of significant adverse effects on local habitat or native species.** Breeding stock should come from organic production units, where the parent stock has been under organic management for at least three months prior to breeding. ~~For crustaceans,~~ **In cases where organic breeding stock is not available, the Competent Authority may authorize the use of wild caught parent stock may be used,** provided that they are kept under organic management before breeding **and providing their capture is compatible with the sustainable management of the wild stock.**

B2.10 When organic juveniles are not available, the Competent Authority may prescribe **conditions,** a time limit and percentage **for the introduction into organic farms of non-organic juveniles from non-organic hatcheries and nurseries may be introduced** for on-growing **purposes,** provided that the latter two thirds of their production cycle ~~or 90% of their final biomass~~ is under organic management ~~and providing the stock is healthy~~. For bivalve shellfish, **juveniles seed** may be

wild-harvested from outside of the production area, provided **that** such harvesting is permitted by the competent authority, **that there is no significant damage to the environment**, and **that** records are kept to allow it be tracked back to the collection area.

- In Section B2.12, the EU asks for the reintroduction of the phrase '*and in general be lower than used in conventional farming*', as this is one clear way for consumers to be reassured of the full respect of animal health and welfare. The EU is aware that there are cases where lower stocking densities might not be beneficial to the health and welfare of some species; however, it considers that the use of "in general" would leave Competent Authorities the needed flexibility. The EU also considers that reference should be made to animal health, not only welfare. The text would therefore be modified as follows "Maximum stocking density must be reflective of the natural behavior of species and in keeping with good **health and** welfare, **and in general be lower than used in conventional farming**. Competent authorities, or other recognized bodies may develop and publicise guide values for maximum densities for the species grown under their authority."
- The EU suggests replacing Section B2.14 with the following text: "**Production should be based on natural conditions, including water temperature, oxygen content and natural light. Indoor production systems that are constantly dependent on artificial light, oxygen content and temperature regulation shall only be allowed in hatcheries and nurseries. The Competent authority may authorise limited use of artificial light, oxygen content and temperature control in other production units, provided this is fully compatible with the needs and welfare of the species farmed.**" In the EU's view, this approach would allow exploiting the benefits of outdoor, extensive recirculation systems while at the same time ensuring that intensive indoor systems which are not in line with the organic principles are not allowed. As indicated in the general comment, the EU believes that labelling as "organic" a fish which has spent its whole life in tanks inside a closed building, without any contact with natural water bodies or natural sunlight, would be misleading for consumers, and would seriously risk compromising the credibility of the organic logo.
- In Section B2.15, the EU asks for the deletion of the word "Chemically" before "induced polyploidy", and it supports the removal of square brackets around the phrase '*artificial hybridization and use of single sex strains are prohibited*' at the end of the sentence concerning Breeding. In non-organic farming, poliploidy is artificially induced not only thorough chemical treatment but also through pressure and thermal shocks. In the EU's view, the induction of polyploidy in species that are diploid in nature is not compatible with the principles of organic farming, regardless of the methods used. The resulting last sentence of this section would be: "~~Chemically~~ Induced poliploidy, cloning, artificial hybridization and the use of single sex strains are prohibited."
- In Section B2.16, the EU considers that reference should be made to feed naturally occurring in the environment where the fish are farmed (this is typically the case e.g. in the extensive farming of carp or shrimp in ponds, where the animals take a substantial part of their nutrition from the environment). This was referred to as "natural feed" in a previous version of the document, but the Committee correctly noted that the term was unclear. Therefore, the EU suggests modifying paragraph b as follows: "The feedstuffs should meet the animal's nutritional requirements at the various stages of its development with **feed naturally available in the farming environment**, organic feeds or, if not available, sustainable wild sources of feed."
- In Section B2.16, the EU considers that precedence should be given to organic feed material of plant origin compared to feed from wild caught whole fish. The order should be changed accordingly. In the same Section, the EU suggests deleting the reference to non-organic aquaculture trimmings as a feed source, as these would weaken the separation between the organic and non-organic supply chain.

"Regarding feeds for carnivorous aquaculture animals:

a) they should be provided according to the following order of priority;

a.1) organic feed products of aquaculture origin

a.2) fishmeal and fish oil and ingredients derived from organic aquaculture trimmings

a.3) fishmeal and fish oil derived from trimmings of fish caught for human consumption in sustainable fisheries.

**a.4)** organic feed material ~~of~~ plant or animal origin.

**a.5)** feed products derived from whole fish caught in sustainable fisheries as determined by the competent authority; / ~~at an inclusion limit of up to 60%~~

~~When the above-mentioned feeds are not available, fishmeal and fish oil derived from conventional aquaculture trimmings may be used. The certification body should set time limits for such products:~~

~~a.5) organic feed material of non-aquatic origin as allowed by national legislation;~~

b) the ration may include up to 60% of organic plant material;

c) dead animals from any aquaculture production system should not be used when their death was due to disease or unknown cause."

- The EU considers that hormones must not be used in the breeding of organic animals. Therefore, it asks for the deletion of "for production or growth" at the end of Section B2.21: "Hormones treatment must not be used ~~for production or growth~~".

## Annex 2

- Regarding the tables which have been maintained in square brackets, the EU can agree to the utilization of the structured review process described in paragraph 12 of the Foreword for substances which may appear to be controversial.
- However, as regard Table 2C, which includes the list of substances to be used for pest and disease control, the EU asks to postpone the discussion at a later stage in the step procedure when an agreement on the text of the Guidelines is reached (see point 3 of the General Comments).

The EU is concerned about the listing of "rotenone" as a chemical for use in organic aquaculture. This substance should not be authorized. The EU, in collaboration with the European Food Safety Authority (EFSA), is undergoing its second review of active substances approved for use in Plant Protection Products. As a result, some changes were made to the list of plant protection products which are authorised for use in organic production in the European Union (Implementing Regulation (EU) No. 354/2014). A number of plant protection products have been removed from the list of accepted plant protection products, including rotenone extracted from Derris spp. and Lonchocarpus spp. and Terphrosia spp., due to its high toxicity for fish, humans and the environment.

## INDIA

### Specific Comments

#### Section B2. AQUACULTURE ANIMALS AND THEIR PRODUCTS

##### 1. Paragraph 8: Conversion period for operations:

*"The conversion period should in general be at least one production cycle of the stock aquatic species. In case where the water has been drained and the facility cleaned and disinfected with permitted cleaning materials a conversion period is not required. In the case of non-enclosed aquatic locations a shorter period of three months may apply provided that cages (net pens ) have not been treated with prohibited antifoulants and there are no other sources of exposure to prohibited substances. During the conversion period the stock should not be subject to treatments or exposed to products which are not permitted for the production of organic foods. "*

**The text should be modified as follows:**

***The length of the conversion period would vary depending of the species, method of production, locations and local conditions.*** The conversion period should in general be at least one production cycle of the stock aquatic species. For drainable systems where cleaning and disinfection is carried out the conversion period should be minimum 6 months or one crop whichever is longer and in case of drainable and fallowed, and conversion period should be 12 months. In case of non drainable system which cannot be disinfected , the conversion period should be minimum 24 months (fresh water prawn and carps) in case of open water farming the conversion period should considered a shorter period of 3 months ( by valves).

#### **Rationale:**

The conversion period should take into account the species-specific needs like the husbandry practices and management system, past us of the site with respect to waste sediment, and water quality for welfare of the animal. Adequate separation between the organic and non-organic production unit should be maintained. The reduction in conversion period should not be based on the prior cleaning and disinfection methods only with permitted cleaning material only for the aquatic systems.

## 2. Paragraph 20: Health care

**Phytotherapeutic ( excluding antibiotics), homeopathic or ayurvedic products and trace elements shall be used in preference to chemical allopathic veterinary drugs or antibiotics, provided that their therapeutic effect is effective for the species of animal for which the treatment is intended.**

The text should be modified with the addition of the following sentence to the paragraph above.

***“For inducing spawning of carps use of pituitary gland shall be used”.***

### **Rationale:**

Since exogenous hormone supply is an essential requisite for inducing spawning of carps. Therefore, use of pituitary gland may be considered.

### **IRAN**

Iran supports all efforts to plan sound Programs, and accordingly obtaining Checkpoints, taking the aims, reminded in Article III, into consideration. Based on which Adoption of related Guidelines is under process.

### **JAPAN**

### **Specific Comments**

#### **Appendix III**

We submit the Table 2D which is the list of "SUBSTANCE USED FOR THE PURPOSE OF AQUATIC PLANT DISEASE" on the Proposed Draft Guidelines for the Production, Processing, Labelling and Marketing of Organically Produced Foods: Organic Aquaculture, as we promised submission in 42<sup>nd</sup> session.

The substances listed on Table 2D are chosen according to the Organically Produced Foods at Section 5: REQUIREMENTS FOR INCLUSION OF SUBSTANCES IN ANNEX 2 AND CRITERIA FOR THE DEVELOPMENT OF LISTS OF SUBSTANCES BY COUNTRIES.

In future, we will add some materials as needed.

Table 2D	
SUBSTANCE USED FOR THE PURPOSE OF AQUATIC PLANT DISEASE	
Substance	Description; compositional requirement; conditions of use
Lactic acid	
Citric acid	
Acetic acid	
Malic acid	

*Note:*

Lactic acid included in yogurt, Citric acid included in citrus fruits, Acetic acid included in vinegar and Malic acid included in an apple, a grape.

### **MALAYSIA**

#### **Specific Comment**

##### **i) Table 1B : Substances Used As Fertilizers And Conditioners of Aquaculture Ponds**

Under 1.1, it has been mentioned that “If substances are not from organic sources, they need to be recognized by a certification body or competent authority.

Hence, Malaysia would like to seek clarification on the mechanism to recognize organic if the substances are not from organic sources by a certification body or competent authority. Is there any standard that can be referred to?

##### **ii) Anaesthetic Treatment**

Malaysia would like to suggest using plant based products for anaesthetic treatment such as clove oil and also ice. Treatment for anaesthetic shall be include in either Table 2C: Substances for Pest and Disease Control for Aquaculture or in a new table.

##### **iii) Table 2d**

Malaysia support the development of Table 2D. Malaysia will provide input when the proposal is available.

**NEW ZEALAND****Foreword**

7(b) ...An organic production system is designed to: increase soil or water biological activity

**Comment**

Increasing water biological activity is not necessarily a good objective. Bivalves improve water quality by decreasing biological activity.

**Comment**

7(b) ... An organic production system is designed to: increase soil biological activity or improve water biological activity;

Alternatively:

7(b) ... an organic production system is designed to: improve biological activity in the production ecosystem;)

**Section 6**

6.8 An organic operator has to present an organic management plan to a certification body for verification during inspection. The plan must be updated annually.

**Comment**

6.8 An organic operator must present an organic management plan...

**Annex 1 Section A2**

7. Farming should be carried out in a sustainable manner at all stages from collection of seedlings in the wild to harvesting. [The application of supplementary fertilizer, i.e. those listed in A2, Table 1, using *natural organic compounds* to the growing area should be restricted to pond cultivation.] Ropes and other equipment used for growing aquatic plants and algae should be re-used or re-cycled where possible. Removal of bio-fouling organisms should be by physical means only.

**Comment**

It is unclear what is meant by '*natural organic compounds*'. This reference needs to be more precise. Assuming that it means Annex 2 Table 1B (1), and noting that this table also includes inorganic substances, the square brackets should be reworded as follows:

[Only substances specified in Annex 2 Table 1B (1) may be applied only to pond cultivation operations.]

**Section B2**

3. The plan as referred to in section 6.8 should cover nutrient discharge, if applicable, and the repair and surveillance of technical equipment. The organic management plan may also include a water quality monitoring scheme for early detection of potential contaminants from unlikely events such as an oil spill or other potential contamination of the harvest area.

**Comment**

This paragraph is overly wordy and confusing. New Zealand suggests the following rewrite:

The organic management plan referred to in section 6.8 should cover – as applicable – nutrient discharge, repair and surveillance of technical equipment, and water quality monitoring for early detection of potential contaminants.

New Zealand does not support inclusion of the words "*from unlikely events such as an oil spill*".

7. The certification body or authority must ensure at the outset that the location of the production unit is suitable by conducting an assessment of potential sources of contamination or by substances unacceptable to organic production systems. Buffer zones within or between farms should be established by competent authorities, to separate organic and non-organic production units.

**Comment**

New Zealand suggests the following amendments to this paragraph:

7. The certification body or authority must ensure at the outset that the location of the production unit is suitable by conducting an assessment of potential sources of contamination including substances unacceptable to organic production systems. Buffer zones within or between farms should be established by the certification body or authority ~~competent authorities~~, to separate organic and non-organic production units.

3. The plan as referred to in section 6.8 should cover nutrient discharge, if applicable, and the repair and surveillance of technical equipment. The organic management plan may also include a water quality

monitoring scheme for early detection of potential contaminants from unlikely events such as an oil spill or other potential contamination of the harvest area.

#### **Comment**

New Zealand suggests expanding on what should be included in the organic management plan for aquaculture animal production:

3. The plan as referred to in section 6.8 should cover nutrient discharge, if applicable, and the repair and surveillance of technical equipment. Plans should also cover stock nutrition, health care, handling, stocking densities, and management and husbandry practices, including contingency planning. The organic management plan may also include a water quality monitoring scheme for early detection of potential contaminants from unlikely events such as an oil spill or other potential contamination of the harvest area.

#### **Conversion period for operations**

##### **Comment**

New Zealand suggests that the subtitle to be renamed as follows:

#### **Conversion period for facilities, including animals**

We believe this amended subtitle more accurately reflects the subject matter in paragraph 8.

8. [The conversion period should in general be at least one production cycle of the stock aquatic species. In cases where the water has been drained and the facility cleaned and disinfected with permitted cleaning materials a conversion period is not required. In the case of non-enclosed aquatic locations a shorter period of three months may apply provided that cages (net pens) have not been treated with prohibited antifoulants and there are no other sources of exposure to prohibited substances. During the conversion period the stock should not be subject to treatments or exposed to products which are not permitted for the production of organic foods.]

##### **Comments**

New Zealand suggests that this paragraph be split into two paragraphs to address the conversion of the physical infrastructure and any existing stock separately.

For example:

8A. For existing stock, the conversion period should in general be at least one production cycle. The conversion period for animals whose life cycle is longer than one year should be no less than two thirds of the lifecycle or 90% of the biomass. During the conversion period the stock should not be subject to treatments or exposed to products which are not permitted for the production of organic foods.

8B. For existing facilities, the conversion period should in general be at least one production cycle of the stock aquatic species. A shorter period of three months may be allowed in cases where the water has been drained and the facility cleaned and disinfected with permitted cleaning materials, or in the case of non-enclosed aquatic locations provided that cages (net pens) have not been treated with prohibited antifoulants and there are no other sources of exposure to prohibited substances. No conversion period is required for newly constructed facilities.

9. Breeds adapted to local conditions without evidence of adverse effects on local habitat or native species shall be chosen. Selection criteria should include their vitality and resistance to pests and diseases.

...

##### **Comment**

New Zealand suggests adding the following:

9. Breeds adapted to local conditions without evidence of adverse effects on local habitat or native species shall be chosen. Selection criteria should include the capacity of animals to adapt to local conditions and the farming system, their vitality and resistance to pests and diseases. ...

10. [... For species that cannot spawn naturally in captivity spawning may be induced using exogenous releasing hormones only if other methods are not available. Brood stock treated with releasing hormone shall lose organic status when slaughtered, the offspring will be organic if they have been raised according to this guideline. Genetically modified organisms (GMOs) and stock treated using hormones must not be used.]

##### **Comment**

New Zealand does not support the use of hormones for reproductive reasons in organic aquaculture systems.

We do not believe that the generic criteria in Section 5.1 are met. That is:

- i) the use of hormones for this purpose is not consistent with principles of organic production;

- ii) the use of hormones for this purpose is not necessary/essential for its intended use;
- iii) manufacture, use and disposal of hormones and hormone bathwater will result in, or contribute to, harmful effects on the environment;
- iv) use of hormones for this purpose has a greater negative impact on – especially – animal quality of life; and
- v) alternatives are available in sufficient quantity and/or quality.

13. Containment systems, when used, including cages (net pens) should be designed, constructed, located and operated to suit the requirements of the species cultivated, minimize the risk of escapes and other negative environmental impacts and to prevent the entry of predatory species.

#### **Comment**

New Zealand suggests expanding on, and reformatting, this text:

13. Containment systems, when used, including cages (net pens) should be designed, constructed, located and operated to suit the requirements of the species cultivated, and

- allow the fulfilment of essential biological requirements,
- minimise the risk of injuries and stress,
- allow for prevention and treatment of disease,
- facilitate compliance with relevant fish welfare standards,
- prevent the entry of predatory species,
- minimize the risk of escapes,
- facilitate maintenance of hygienic conditions and water quality, and
- minimise negative environmental impacts.

Where nets are used, mesh size should be appropriate to avoid entanglement.

15. ... [Chemically induced polyploidy], cloning, [artificial hybridization [and use of single sex strains] are prohibited].

#### **Comment**

New Zealand supports the prohibition of chemically induced polyploidy for shellfish, but cautiously considers allowing physical methods.

Artificial polyploidy may confer environmental advantages by producing sterile animals (and thereby protecting the natural biodiversity in the case of escapees), a reduction in aggression, and/or conferring disease resistance (and thereby reducing the need for adding additional inputs into the system).

Polyploidy is a natural, albeit rare, condition and is not the result of genetic engineering.

Physical methods for inducing polyploidy involve the use of a high pressure chamber or a 'temperature shock' (either hot or cold) and are conducted at the very early embryo life stage. In our opinion, this parallels physical castration, which is allowed for terrestrial livestock (Annex 1, Section B, paragraph 27).

However, triploids may be susceptible to health and welfare concerns including deformities, eye cataracts, poorer growth, altered swimming and feeding behaviour and juvenile mortality. In terms of pressure vs temperature induction, triploidy by pressure treatment may be preferred over triploidy by temperature treatment.

If mechanical methods for inducing polyploidy are allowed, potential welfare issues should be considered on a species-by-species basis by the competent authority.

#### **Nutrition**

16. Operators should design a feeding plan that takes the following factors into account:

- a) feed contamination should be avoided in compliance with national regulations or as determined by internationally agreed standards and a precautionary approach should be taken to avoid disease transmission via feedstuffs;
- b) The feedstuffs should meet the animal's nutritional requirements at the various stages of its development with organic feeds or if not available, sustainable wild sources of feed ;

c) use of growth promoters or [synthetic amino acids] is not permitted.

**Comment**

For clarity, New Zealand believes these three factors need to be a standalone clause. That is to say, make the special rules for carnivorous animals into a separate standalone clause (16'). Otherwise, any reference to "clause 16(a)" will be confusing; does it mean the first 16(a) or the second 16(a)?

16'. Regarding feeds for carnivorous aquaculture animals: ...

**Comment**

For clarity, New Zealand suggests the following amendment:

16'. In addition to the general factors listed in clause 16, regarding feeds for carnivorous aquaculture animals: ...

16' (a.5) ...When the above-mentioned feeds are not available, fishmeal and fish oil derived from conventional aquaculture trimmings may be used. **The certification body should set time limits for such products:**

**Comment**

New Zealand does not support the inclusion of this text because we believe this matter is addressed by clause 18: "*Notwithstanding the above, where an operator can demonstrate to the satisfaction of the official or officially recognized inspection/certification body that feedstuffs satisfying the requirement outlined in paragraph 16 above are not available...*"

16' (a.5) organic feed material of non-aquatic origin as allowed by national legislation;

**Comment**

New Zealand believes this text could be merged with clause 16' (a.5) "*organic feed material or plant or animal origin*"

17. If substances are used as feedstuffs, nutritional elements, feed additives or processing aids or in the preparation of feedstuffs for aquaculture animals, ...

**Comment**

The beginning of this paragraph is difficult to read. New Zealand suggests the following rewrite:

If nutritional elements, feed additives or processing aids are to be used as feedstuffs or in the preparation of feedstuffs for aquaculture animals, ...

**Health care**

20. ...

The use of veterinary **drugs** should be limited to two courses of treatment per year, with the exception of vaccines and compulsory eradication schemes. If the specified limits are exceeded the aquaculture animals concerned should not be sold as organic.

**Comment**

New Zealand suggests splitting the last sentence of the last paragraph off to create a new paragraph. And to add an emphasis that withholding veterinary drugs or antibiotics is unacceptable, if this would lead to pain and suffering, as follows:

20. ...

The use of veterinary **drugs** should be limited to two courses of treatment per year, with the exception of vaccines and compulsory eradication schemes.

**Veterinary drugs and antibiotics must not be withheld if this will result in a breach of relevant fish welfare standards.** If the specified limits are exceeded the aquaculture animals concerned should not be sold as organic.

21. Hormonal treatment **must** not be used **for production or growth.**

**Comment**

New Zealand agrees with this text. But we believe it should come under subsection "Production rules for husbandry and breeding" (clauses 11-15), and not here under "Health Care".

22. Harvesting should be carried out with reference to the *Code of Practice for Fish and Fishery Products* (Section 6.3.4 of CAC/RCP 52-2003). .... The provisions on holding and transport in aquaculture production of the *Code of Practice for Fish and Fishery Products* (Sections 6.3.5 and 6.3.6 of CAC/RCP 52-2003) should also apply. ...

#### Comment

New Zealand suggests that the CAC/RCP 52-2003 references to harvesting and transport (7.3), relaying (7.4) and depuration (7.5) of bivalve molluscs are also referenced here.

#### Inspection

#### Comment

New Zealand suggests that the subtitle to be renamed as follows:

#### Record Keeping and Inspection

We believe this amended subtitle more accurately reflects the subject matter in paragraph 24.

#### Annex 2 Tables 1B, 2B, 2C and 2D

#### Comment

New Zealand supports the intention to develop lists for substances allowed in organic aquaculture, and we believe that the inclusion of these substances should follow the structured process for review of the Guidelines established by CCFL. This approach would guarantee an adequate assessment of these substances in relation to the general criteria outlined in Section 5 of the Guidelines. (Paraphrasing Brazil (fl42\_04e))

#### NORWAY

#### (ii) Specific comments:

##### Section 2. Description and definitions

We would especially like to support the proposed definition of closed recirculation system: *“Closed recirculation system means a type of enclosed containment system, with very limited and managed barrier-connection to open waters, and systems to treat the effluent water to enable its circulation for reuse.”*

**Reason:** It is important having a simple definition which does not restrict the development of new technology. We would like to avoid giving too detailed technical requirements in a definition.

##### Annex I. Principles of organic production A2. Aquatic plants, algae and their products

We would like to support the wording and restriction regarding application of supplementary fertilizer in water as proposed in the second sentence in square brackets in paragraph 7. We suggest adding the following sentence in the guidelines after the first sentence in paragraph 7:

“The application of supplementary fertilizer, i.e. those listed in A2, Table 1, using natural organic compounds to the growing area should be restricted to pond cultivation.”

**Reason:** Removing the restrictions for use of fertilizer only for pond cultivation and opening for use in open water, may cause negative impacts for the eco-system and will lower the protection of the environment.

##### B2. Aquaculture animals and their products Conversion period for operations: Paragraph 8

We would like to propose a new wording of this paragraph, to include a requirement for conversion period for all systems and to remove the proposed text to exclude conversion period for certain systems:

"The conversion period should in general be one year or at least one production cycle of the stock aquatic species. In cases where the ~~water has been drained and the facility cleaned and disinfected with permitted cleaning materials~~ a conversion period is not required. facilities have been drained, cleaned and disinfected a conversion period of six months apply. For open water facilities ~~In the case of non-enclosed marine aquatic locations a shorter period of~~ a conversion period of three months apply, provided that cages (net pens) have not been treated with prohibited antifoulants and there are no other sources of exposure to prohibited substances. During the conversion period the stock should not be subject to treatments or exposed to products which are not permitted for the production of organic foods."

**Reason:** The amendments will underline the importance of a requirement for a conversion period in organic aquaculture production. This better reflects that the purpose of sufficient conversion period is to

ensure that the organic products is produced according to the organic regulation, and to prevent content of non-permitted residues in the products.

Origin of stock: Paragraph 9 and 10:

We support the new proposed text in paragraph 9, but we have comments to paragraph 10. We suggest deleting the first sentence in the text in brackets in paragraph 10 about the requirement for a defined time limit and percentage for use of non-organic juveniles.

~~["When organic juveniles are not available, the Competent Authority may prescribe a time limit and percentage of non-organic juveniles for use according to the production of the species."]~~

**Reason:** The lack of organic juveniles in many parts of the world causes difficulties to comply with a defined time limit for the use of non-organic juveniles. The production of organic juveniles for several species is very limited. Rigid constraints to the exchange of juveniles among the regions and countries, due to the horizontal rules on health, also occur. According to the third sentence in paragraph 9, it is possible to use non-organic juveniles if necessary and provided that the latter two thirds of their production cycle or 90% of their final biomass is under organic management. In our opinion is this condition sufficient and appropriate to restrict the use of non-organic juveniles.

Production rules for husbandry and breeding Stocking density: Paragraph 12:

We would like to support the previous wording regards stocking density in paragraph 12, and suggest including a requirement for general lower density in organic production:

"Maximum stocking density must be reflective of the natural behavior of species and in keeping with good health and welfare, and in general be lower than used in conventional farming. Competent authorities, or other recognized bodies may develop and publicise guide values for maximum densities for the species grown under their authority."

**Reason:** There is a lack of science based information about the connection between stocking density, different environmental aspects (water flow, oxygen saturation, type of system etc.) and fish welfare, therefore we suggest that detailed criteria for stocking density are not set by Codex at this point of time. We underline the importance that the stocking density should in general be lower in organic production than in conventional farming. This is general according to organic principles, and could further be easily understood, communicated and is according to consumers' expectation for organic products.

Closed recirculation system: Paragraph 14:

We support the proposed new wording in paragraph 14 about closed recirculation systems:

*"The Competent Authority should decide whether or not to approve closed recirculation systems after a thorough examination and evaluation of the total environmental viability and compatibility with organic production."*

**Reason:** There are several advantages using closed recirculation systems such as less environmental impacts, prevents escapes, prevents ingress of pathogens, recycling/collection of waste nutrients and recycling of water. Re-use of water in such systems is also in line with organic principles of sustainable and responsible use of resources, and is to be encouraged and further explored. Also, there are alternatives for example by using renewable energy resources, and these guidelines should not restrict the development of new technology.

For information has the Norwegian Scientific Committee for Food Safety assessed recirculation systems:

*Risk Assessment of Recirculation Systems in Salmonid Hatcheries*

(<http://www.vkm.no/dav/43a46fa45a.pdf>).

Nutrition: Paragraph 16:

We support the general prohibition of use of synthetic amino acids in the organic aquaculture feed according to paragraph 16 c). We do however support an exception for use of histidine produced through fermentation for salmonid fish.

We would especially like to support the new proposed text in paragraph 16 a.a.4) about the possibility to use feed products derived from whole fish caught in sustainable fisheries, but we propose to delete the text about inclusion limit up to 60%.

~~"16. c): Use of growth promoters or synthetic amino acids is not permitted.~~ **Use of synthetic amino acids is not permitted, except use of histidine produced through fermentation for salmonid fish when**

**the feed sources do not provide a sufficient amount of histidine to meet the dietary needs of the fish and prevent the formation of cataracts.**

“16.aa.4): Regarding feeds for carnivorous aquaculture animals: feed products derived from whole fish caught in sustainable fisheries ~~and as determined~~ **recognized** by the competent authority ~~at an inclusion limit of up to 60%.~~”

**Reason:**

The possibility of using histidine in the diet of salmonid fish should be included, to ensure a high level of animal health and welfare in these species. Taking into account the significant variations in the histidine contents in marine raw materials according to species and season, as well as to the production, processing and storage conditions, the use of histidine produced from fermentation should be allowed ensuring that the dietary requirements of salmonid fish are met.

It is important allowing use of feed products **derived from whole fish caught in sustainable fisheries**, and ensuring access to aquaculture feed that meets the animal’s nutritional requirements and protects good animal health and welfare. We do not however see the matter of necessity to define an upper limit for this use of feed, and in our opinion is it sufficient with the remaining requirements and priority for use of feed in the paragraph. We propose strengthening the wording and including a requirement for the competent authority to recognize the scheme used, with the purpose to ensure feed products from sustainable fisheries. The FAO’s Guidelines from 2009 for the ecolabelling of fish and fisheries products from marine capture fisheries may be used as a reference when assessing the scheme for sustainability. <http://www.fao.org/docrep/012/i1119t/i1119t00.htm>

**Annex 2 and tables 1A, 1B, 2A, 2B, 2C and 2D**

We do also see need for discussion of the different tables. We have not given any comments here on the tables, because the process so far has been on the text and since not all the tables are fully developed yet (e.g. table 2D).

**UNITED STATES OF AMERICA**

**Specific Comments**

**Section 2. DESCRIPTION AND DEFINITIONS**

**2.2 Definitions**

***Aquatic Organisms***

The United States proposes the following amendment to the definition of aquatic organisms:

***Aquatic Organisms*** include finfish, shellfish (crustaceans and molluscs), echinoderms, aquatic plants and algae, but exclude mammals, reptiles, birds and amphibians.

The amendment is intended to clarify that echinoderms are eligible for organic aquaculture production.

**ANNEX 1**

**PRINCIPLES OF ORGANIC PRODUCTION**

**B2. AQUACULTURE ANIMALS AND THEIR PRODUCTS**

**Conversion period for operations**

**Paragraph 8**

The United States supports the removal of the bracketed text. This text indicates that a conversion period is not required in cases where the water has been drained and the facility cleaned and disinfected with permitted cleaning materials.

We see this as analogous to the cleaning and use of equipment and other facilities that may be used in the processing and handling of both organic and conventional food products. Provided that the equipment or facility is adequately cleaned and that the certification body has evaluated and approved this process for the operation, this is adequate to protect the integrity of the organic product.

**Production rules for husbandry and breeding**

**Paragraph 15**

The United States does not support the eligibility of polyploidy animals produced via artificial means, including but not limited to chemically induced polyploidy, to be certified as organic. We understand that some methods used to induce artificially polyploidy and single sex populations include the use of chemicals,

hormones, and temperature or pressure shock. Single sex populations produced via manual sorting should not be prohibited.

We suggest the following replacement text for paragraph 15:

Breeding should reflect the natural situation as closely as possible, in terms of ambient conditions, using appropriate strains for the type of farming. Manual sorting or selection, manual stripping of gametes and incubation of eggs is allowed. Artificial polyploidy induced by chemicals, hormones, temperature or pressure shock is prohibited. Cloning and artificial hybridization is prohibited.

## Nutrition

### **Paragraph 16**

#### **(i) General Comments:**

The United States supports alignment of the nutrition standards for aquatic animals with the provisions already established for organic livestock under the guidelines.

The guidelines for organic livestock at Annex 1, Section B, paragraph 13 currently indicate that all livestock systems should provide the optimum level of 100% of the diet from feedstuffs (including 'in conversion' feedstuffs) produced to the requirements of the guidelines. Only very limited exceptions are provided in the guidelines for use of non-organic feed.

Similarly, the United States does not support broad exemptions for the feeding of non-organic feed to organic aquaculture animals, even when those feeds are derived from wild sources and/or sustainable fisheries. Accordingly, the guidelines should not prioritize use of non-organic feed over organic sources.

#### **(ii) Specific Comments:**

The United States offers the following additional comments:

- Under Paragraph 16(c), the US supports removal of the bracketed text which would not permit the use of synthetic amino acids.
- Regarding feed for carnivorous aquaculture animals, we do not support the prioritization of non-organic feed from sustainable fisheries at paragraph a.4 above the feeding of organic feed material a.5.
- For Item 16(b), the US does not support the 60% limitation on the inclusion of organic plant materials. We are unclear on the scientific basis for establishing a 60% maximum.

### **Paragraph 19**

- The text should read "dry matter basis" rather than "dry matter basic".

## Annex 2, Table 1B, 2A, 2B, 2C

The United States has continued concerns about the process used to determine which materials are included in Annex 2 for use in organic aquaculture. We are also interested in further discussion on the best way to reach consensus on these materials and note that the Committee has established a structured review process for evaluation of substances against the criteria established in Section 5.1 of the Guidelines.

Based on the limited information provided, we have identified a number of substances that were included in the Annex as needing additional discussion as to whether they meet the criteria:

- Iodophores
- Rotenone
- Potassium permanganate
- Povidone iodine

We also note additional text under Paragraph 4 of Annex 2 which states that "The following lists do not attempt to be all inclusive or exclusive or a finite regulatory tool but rather provide advice to governments on internationally agreed inputs."

As this clearly indicates that the tables of materials are indicative lists, we believe that delegations wishing to add materials to the Annex need to submit information to the Committee in accordance with the established structured review process.

We also noted the following:

- Table 2B Cleaning and Disinfection Treatments - The inclusion of "Sodium hypochloride" may be a typographical error and should be listed instead as "sodium hypochlorite".

- 
- The materials “Peroxyacetic acids” and “Peracetic and peroctanoic acids” are both listed. These listings appear to be duplicative.