

Summary - Bio Suisse Standards: Aquaculture

Disclaimer:

This document is to be used as a simplified information note only and does not replace the more comprehensive and complete requirements in the Bio Suisse standards. In case of any discrepancies between this document and the official standards, the information in the standards will prevail.

Requirements not relevant to imported species have been omitted.

For processing, storage and trade, separate requirements apply.

1. Farm Level – finfish

In aquaculture, the ecological balance may not be disturbed, natural populations may not be threatened and the basic principles of sustainability must be upheld. Fish must be reared for long periods in order to achieve high-quality flesh and to prevent intensive farming.

1.1 EU organic certification

- The operation must already be certified according to the EU organic regulation (Council Regulation (EC) 834/2007, Commission Regulation (EC) 889/2008)

1.2 Feed

- aquaculture operations are permitted to purchase all of their feed
- Feed must be certified according to Soil Association or Naturland. Theoretically, feed could also be certified according to Bio Suisse, however, in practice this rarely applies to feed outside of Switzerland.
- Synthetic antioxidants, e.g., ethoxyquin, BHA, and BHT, are prohibited.
- Fish processors are required to manage and be in possession of the following information:
 - All feed types must be analysed for BHT, BHA, and Ethoxyquin. Analysis methods used must assure a detection limit of 1 mg/kg or lower.
 - Each batch of fish must be analysed for BHT, BHA, Ethoxyquin, and Ethoxyquin dimer. Analysis methods used must assure a detection limit of 0.01 mg/kg or lower.
 - Note that Bio Suisse has set up the following orientation levels:
 - 3 mg/kg in feed, fish meal or fish oil (all synthetic antioxidants, alone or in combination)
 - 0.01 mg/kg Ethoxyquin and 0.02 mg/kg Ethoxyquin dimer in fish

1.3 Species selection

- Genetically modified or triploid fish are prohibited.
- Only species adapted to regional conditions and naturally occurring in the region may be farmed, no introduction of exotic species
- The specific requirements of the fish species concerned must be met (e.g. structure, stocking density, water quality). The fish may not be exposed to unnecessary strain or stress during rearing, transport or slaughter.

1.4 Medication/Treatments, Fish Health & Hygiene

- Veterinary medicines, vaccines and other immunological veterinary medicinal products, which contain GMOs, may not be used.
- The possibility of vaccinating the fish as a preventive measure is permitted.
- Limited use of medication (e.g. antibiotics, parasiticides) is permitted and follows the current provisions in the EU organic regulations

- Waiting period: the number of degree-days for the active substances must be doubled. If no waiting period is indicated, then a generic 1,000 degree-days apply
- Dead fish must be removed from the pond or facility without delay.

1.5 Water quality during production

- Inflow: The inflow may not be anthropogenically polluted or if so, water sample analyses must show that the water is safe to use.
- Outflow: water quality must meet local requirements. Where appropriate, suspended particles must be collected in a sedimentation basin or mechanical filter and removed.
- Water for production: temperature and the pH, oxygen and ammonia levels of the water must meet the specific requirements of the fish species concerned, and must be measured at regular, appropriate intervals (at least once a month) and at sensitive times of day.
- Artificial aeration with liquid oxygen is not permitted except for in extreme weather conditions. Mechanical movement of water to increase aeration is permitted.
- Unconsumed feed and fish feces sedimentation must be utilized by the operation itself or delivered to another organic farming operation within a 20-km radius. If there are no other organic farming operations within this radius, exceptions can apply.

1.6 Stocking density

Stocking densities follow the current provisions in the EU organic regulations e.g. 10 kg/m³ for salmon raised in ocean net-cage farms, 15 kg/m³ for gilthead seabream/sea bass, and 10 kg/m³ for pangasius.

1.7 Artificial illumination

- Artificial illumination is prohibited.

1.8 Transport

- Live fish must be supplied with sufficient oxygen during transport; artificial aeration with liquid oxygen is permitted.
- Live fish must be transported unfed.
- Transport duration: maximum 10 hours (exception: well-boat transfers with continuous good water exchange can be extended up to a maximum of 36 hours).
- Transport density:
 - maximum of 200 kg fish / 1000 litres of water or
 - 125 kg fish / 1000 litres if the transport is longer than 2h
- Sorting, handling and the time fish spend outside of water must be kept to a minimum.

1.9 Stunning/slaughtering

- It must be ensured that stunning remains effective up until the onset of death.
- The following stunning methods are permitted: percussive, electrical, and the use of natural plant-based products such as clove oil. Deviations from this apply where species-specific recommendations exist:
 - Species-specific recommendations
 - Percussive or electrical stunning methods are used for salmonids, followed by slaughtering by the means of gill incision and bleeding.
 - Electrical stunning is used for seabass and seabream*, preferably within the medium water, followed by slaughtering by the means of gill incision and bleeding, or asphyxiation in ice water.

- Electrical stunning is used for pangasius, followed by slaughtering by the means of gill incision and bleeding.
*stunning may also be carried out using natural plant-based products such as clove oil. In such cases, slaughtering shall not be carried out by asphyxiation in ice water (asphyxiation in ice or slaughtering by gill incision and bleeding would be permissible).
- A detailed slaughter protocol describing the preparation (e.g. caging, crowding, pumping), transport, stunning, killing and control parameters must be submitted to the BSO Certification Body.
- A derogation for stunning and slaughtering in ice water may be requested in justified cases.

1.10 Facility structure

- The entire aquaculture operation must produce organic fish. Parallel production of organic and non-organic fish at the same site is prohibited. A company with several sites may have selected sites certified organic, as long as farm managers working on the organic sites do not have any responsibility at non-organic sites.
- Recirculating (<10% water exchange/day) and closed systems (e.g. RAS) are prohibited, except for juveniles and producing live feed
- The production facility (e.g. pond, cages) must protect against escapes or invasion by unwanted fish species
- Fish may not be exposed to unnecessary strain or stress
- Additional for ponds: operations must reserve 7% of their operational acreage as areas dedicated to the enhancement of biodiversity
- Additional for ponds: At least 10% of the water surface of each pond must be kept in constant shade (except during winter or if the water column is deeper than 2m).
- Additional for ponds: there are sufficient places of retreat and cover to encourage the natural behavior of the fish (such as schooling and territorial behaviour).
- Additional for ponds: If water is diverted from a stream, legal requirements regarding residual water volumes must be met. The stream must remain passable for fish.
- Nets may not be waterproofed with chemically synthesised agents.

1.11 Disinfection and Cleaning

- Approved products and their application follow the current provisions in the EU organic regulations (annex VII)

1.12 Conversion Period

- Fish must spend at least the final 2/3 of their life on an organic operation
- The conversion period follows the current provision in EU organic regulations: animals from aquaculture may not be certified and traded as 'in conversion'.

2. Farm Level – shrimp and mussels

2.1 Naturland certification

- The operation must already be certified according to the standards of Naturland e.V., DE-Gräfelfing

2.2 Facility structure

- The entire aquaculture operation must produce organic shrimp/mussels. Parallel production of organic and non-organic shrimp/mussels is prohibited.

- Recirculating (<10% water exchange/day) and closed systems (e.g. RAS) are prohibited, except for juveniles and producing live feed

2.3 Producer groups

- Producer groups must meet the Bio Suisse requirements for inspections as set forth in the Bio Suisse directives Part V.

3. Juvenile fish / post-larvae – finfish, shrimp and mussels

This applies to the first 3rd (or less) of the life-cycle.

3.1 EU or Naturland organic certification

- ICB AG does not certify this stage. Juvenile stock (e.g. spat, post larvae) must be certified EU or Naturland organic unless juveniles are not available in organic quality.
- Where organic juveniles are not available:
 - there must be a statement from the auditing body confirming the status of non-availability
 - There must be a statement from the supplier confirming juveniles meet “organic requirements” by completing and signing the form *Appendix 1 to part II, section 5.7, respectively the Annex to the Bio Suisse Checklists for Aquaculture*. This confirmation must be available for each batch delivered and submitted to ICB AG as an annex to the checklist.
- The maximum transport time for juvenile fish is 10 hours. Derogations may be sought regarding transport time

3.2 Organic requirements

- genetically modified fish/eggs obtained by means of polyploidization, irradiation (monosexing) or gynogenesis is not permitted
- prophylactic treatment with chemotherapeutic agents, antibiotics or hormones
- feeds containing antibiotics, growth promoters, hormones, or genetically modified feeds, feed components or additives

4. Parent fish

- Parent fish may not be treated with antibiotics, growth promoters or hormones.
- Artificial illumination may not exceed 16 hours in length and is only permitted for breeding purposes.

5. Relevant sections in the Bio Suisse standards for fish, shrimp, and mussels

The following references relate to version 2020.

Part II

- Chapter 5.7:
 - including appendix 1 to Part II
 - excluding 5.7.2

Part V

- Chapter 3.2 Market presence
- Chapter 3.3 Social responsibility
- Chapter 3.8 Policy on residues
- Chapter 4.1.3 Whole-farm approach and definition of a farming operation
- Chapter 4.4.2 Aquaculture