

## Production of edible fish

Directive of the label-commissions «Production» (LCP) of 25/07/2000

### 1. GENERAL RULES

#### 1.1 Reproduction/Breeding

- a) Purchased young fish and eggs must come from other organic operations. Young fish must be produced either in Switzerland or in the adjacent countries. Until December 31, 2005, the purchase of non-organic young fish and eggs is allowed. In this case, the supplier must confirm that the young fish meet the general requirements of organic farming (see example in the appendix of this directive).
- b) The fish must have been bred at least 2/3 of their life on the organic operation in order to be sold as fully organic.
- c) Warm breeding, inspected hatching and initial feeding of the brood are allowed (thereby an energy concept providing for economically bearable economy measures and possibilities of the use of renewable energy sources, as well as closed water cycles must be submitted).
- d) The permitted anaesthetics for the stripping off are listed in the «list of auxiliary inputs for fish-farming».

#### 1.2 Pond/Fish Farm

- a) The fish farm must be looked after daily.
- b) The ponds must be secured against the escaping of the fish, respectively against the incoming of fish from outside, particularly in the case of non endemic fish species (eg. rainbow-trout).
- c) Fish farms must identify 7% of its surface as compensatory ecological areas (see art. 2.4.1 of BIO SUISSE standards). Aquatic areas (such as marshland, reeds, frog ponds) must preferably be created. Net cage operations in open water are exempted of this obligation.
- d) The ponds must be equipped with retreating facilities and shelters and favour a behaviour of the fish in accordance with the physiological and behavioral needs of each species (eg. constitution of swarms, territorial behaviour). Pools can be structured by screens hung into the water (easily removable for cleaning). The requirements of the structuring of the ponds can be increased on the basis of new ethological findings.
- e) If water is taken out of a creek for the breeding in ponds, the legal requirements with regard to residual water quantities must be complied with. The creek must be passable for fish respectively made passable in case of newly built equipment.

#### 1.3 Water quality

- a) Inlet and outlet: The inlet must not be (or only little) charged anthropogenously. In case of doubt, eg. if the inlet comes from intensively farmed areas, the harmlessness must be proved with water samples. The LCP can define additional requirements of the water quality of the inlet.  
The water quality of the outlet must at least meet the requirements of the Swiss Ordinance on Water Protection (requirements for fish farms). If necessary, the floating substances must be retained in a deposit pool. The water quality must be permanently checked by means of water samples of the in- and outlet (at least twice a year, particularly in case of low water-level and after heavy precipitation).
- b) Ponds: Temperature, pH, oxygen and ammonia content of the water must be adapted to the specific needs of each fish species and must be measured in regular periods adapted to the conditions (at least once a month) and at the problematic hours of the day.
- c) For the oxygen enrichment of the inlet or of the ponds, the following measures are allowed: cascades, sieve towers, water-wheels, fountains, circulating pumps. An artificial ventilation of the installation with

liquid O<sub>2</sub> is not allowed, respectively may only be carried out temporarily and in exceptional cases in extreme weather conditions (obligation to register with LCP), for transporting aims and for the breeding of young fish in breeding houses.

- d) Sedimented foodstuff residues or faeces must be taken out and be handed over to another organic operation within a distance of 20 km. If there is no organic operation within this distance, the substances may be handed over to a non-organic farm operation or an organic operation farther away with the authorization of the LCP.

#### **1.4 Feed**

- a) For feed production, the extruding technology is allowed.
- b) For quality and health reasons, the fat content of the feed must not exceed 15%.
- c) The coloring additives in the feed must be natural substances (eg. shrimp shells, phaffia-yeast). Its use must be declared when the fish are sold.
- d) Otherwise art. 3.1.7 – 3.1.9 and art. 3.11.5 of the BIO SUISSE standards apply. As for feed labelled with the «BUD for auxiliary inputs», the respective directive applies. Fishmeal or fishoil produced according to art. 3.11.5 is classed with the organic part. On the other hand all vegetable parts of the feed must come from organic farming.

#### **1.5 Hygiene and health**

- a) Mechanical-physical methods (cleaning with high pressure) are preferable. Burned lime may be used to disinfect the ponds. The use of chlorinated lime is explicitly forbidden.
- b) The permitted agents to disinfect containers and equipment as well as for the self-treatment of the fish are listed in the «list of auxiliary inputs for fish-farming».
- c) Chemotherapeutic treatments may only be carried out upon consultation with a veterinarian who is specialized on fish farming or with the FIWI (Center for Fish- and Game Medicine of the University of Berne). See also art. 3.1.11 of the standards.
- d) Dead fish must be immediately removed from the ponds.

#### **1.6 Husbandry**

- a) Sorting and handling measures and the time during which the fish are kept outside of the water must be reduced to a minimum. The use of sorting machines is allowed. The fish and all surfaces coming into touch with them must permanently be kept wet.
- b) The fish must have the possibility to find shady water areas. At least 10% of each pond must be shaded in permanence.
- c) The density of the stock must be regulated in a way that does not impair the health of the fish or behaviour in accordance with the physiological and behavioral needs of each species. Quantitative limits of the stock are defined in the (species)-specific rules (chapter 2 of this directive).
- d) A long keeping time of the fish is of great importance for a good meat quality of the fish and prevents a too intensive husbandry. A minimum keeping time is therefore stipulated in the (species)-specific rules.

#### **1.7 Harvesting**

The killing of the fish must be carried out in the water or immediately after taking the fish out of the water. It is particularly forbidden to let them choke. The fish must be gutted and processed immediately after killing.

#### **1.8 Registering/Inspection**

- a) A fish journal must be kept. All hygiene-, treatment-, sorting- and handling measures as well as the recorded water quality must be registered therein. The indications of the stock density must be updated at least once a month. The fish journal must be permanently updated and submitted at the inspection.

- b) At the first inspection, the cubic measures of the ponds and the corresponding limits of the stock density are investigated and defined.

## **1.9 Processing and marketing**

The processing must be carried out in compliance with chapter 5 of BIO SUISSE standards and with the LCPM-directive for processing «2. Meat and meat products». In addition, the directives «on-farm processing and purchase of organic products» and «direct marketing» must particularly be complied with.

## **2. (SPECIES)-SPECIFIC RULES**

### **2.1 Breeding of carnivorous lake-/sea-fishes (swarmfish, eg. perch, lake char in ponds and netcages)**

- a) Netcages: Only species living in the respective lake, river or other stretch of water may be kept in netcages. It must be made sure by means of regular checkings that the macro-fauna around the net remains intact. The net must not be water proofed with synthetic agents.
- b) Max. stock density: 20 kg/m<sup>3</sup>
- c) Min. keeping time: perch: 6 months, salmonides: 18 months

### **2.2 Breeding of carnivorous running water fishes (eg. brown trout, rainbow trout, river char) in ponds**

- a) The fish must be kept as far as possible in natural ponds (i.e. with at least a complete natural floor area). The keeping in artificial containers (synthetic or concrete pools) is allowed maximally during half of the lifespan of the fish. The containers must be equipped with habitat features (shelters, running and still water areas; see also point 1.2 d) of this directive).
- b) Max. stock density: 20 kg/m<sup>3</sup>. In running water ponds the stock density may be increased up to max. 30kg/m<sup>3</sup>, if max. 100kg fish are kept per l/sec of the inlet.
- c) Min. keeping time: salmonides: 18 months

### **2.3 Breeding of cyprinides (carp-farming in ponds)**

- a) The carps must be kept in natural ponds (including natural bank areas). Only the keeping of smolts for initial feeding and the conditioning of edible fish are allowed in artificial containers.
- b) The stock should ideally consist of various fish species.
- c) In case of fertilizing, only fertilizer from organic farming may be used. In exceptional cases, stone meal or carbonated lime may also be used.
- d) Max. stock densities of carps and tenches: 3000C1/7000T1 respectively 600C2/2500T2 respectively 1500T3 per ha.
- e) Feeding: The basis of the fish increase is the natural production of the pond. At least 50% of the increase must be achieved through the natural offer of feeding stuffs. For the complementary feeding only the following feeding stuffs are allowed:
- Vegetable organic feed. In case of non-availability, max. 10% of the dry matter (DM) of the whole ration may be non-organic.
  - For the rearing of the brood and additional feeding, max. 10% of the dry matter of the whole ration may consist of fishmeal/fishoil. The origin of the fish meal must comply with art. 3.11.5 of the BIO SUISSE standards. The rearing of the brood is limited to the first summer, the additional feeding to the adolescence (C1 and C2), during max. 2 weeks in spring and 3 weeks in autumn (detailed documentation in the fish journal).

Example

## CONFIRMATION FOR NON-ORGANIC YOUNG FISH AND EGGS

By signing this agreement, the supplier confirms that the delivered non-organic young fish/eggs have not been subject to any of the below mentioned treatments, respectively do not present any of the below mentioned distinctive marks. In case of untrue indications respectively non-compliance with the present agreement, the supplier can be made liable for compensation. The supplier is particularly liable for damages, if the supply of non-conformous young fish/eggs results in sanctions against the purchaser.

### Not permitted distinctive marks/treatments:

- Genetically modified eggs or eggs deriving from polyploidization, ray treatment (monosexing) or gynogenesis.
- Young fish from countries outside Switzerland and its adjacent countries.
- Prophylactic treatment with chemotherapeutics, antibiotics or hormones.
- Feeding with antibiotics, growth promoters, hormones, genetically modified feed, feed components or additives.

young fish/eggs (species)	delivered number	date of delivery	signature

### Purchaser of young fish/eggs:

name, surname:..... No of the operation:.....  
Address, place:.....

### Supplier of young fish/eggs:

name, surname:.....  
Address, place:.....

place, date and signature of the supplier:  
.....

**This form must be kept in the operation**