

European regulations with specific clauses relating to the control of fish reproduction in an aquaculture context

- **Council Directive 90/220/EEC** of 23 April 1990 on the deliberate release into the environment of **genetically modified organisms**:

This Directive states that genetically modified organisms are organisms whose genetic material has been modified artificially. This does **not include** organisms produced by: **in-vitro fertilisation; conjugation, transduction, transformation** or all other natural processes; **induced polyploidy**. This is important in terms of aquaculture where such methods are used.

- **Council Directive 96/22/EC** of 29 April 1996 concerning the prohibition on the use in stockfarming of certain substances having a **hormonal or thyrostatic action and of β -agonists**, and repealing Directives 81/602/EEC, 88/146/EEC and 88/299/EEC:

This Directive states that substances authorised for synchronizing oestrus and preparing donors and recipients for the implantation of embryos, shall only be administered after examination of the animal by a veterinarian or, under his responsibility.

Prohibitions:

The administering to a farm or aquaculture animal, by any means whatsoever, of substances having a **thyrostatic, estrogenic, androgenic or gestagenic action and of beta-agonists**.

The **placing on the market or slaughter for human consumption** of farm animals or of **aquaculture animals which contain these substances**, or to which these substances have been **administered**, as well as **processed products** derived from such animals.

With regard to aquaculture animals young fish may be treated during the **first three months of life** for the purpose of **sex inversion** (to produce female monosex offspring) with veterinary medicinal products that have an **androgenous** action (i.e. producing neo-males) and are authorized in accordance with Directives 81/851/EEC and 81/852/EEC. This procedure must be carried out on a veterinarian's prescription and under their responsibility. The androgen permitted for use in European aquaculture is **methyltestosterone**.

All treated animals must be destroyed under veterinary supervision and disposed of according to strict regulations.

- **Council Directive 2006/88/EC** of 24 October 2006 on **animal health requirements for aquaculture animals** and products thereof, and on the prevention and control of certain diseases in aquatic animals:

This Directive sets out hygiene requirements, monitoring and inspection procedures. The hygiene status of semen, eggs and embryos is the same as that of the reproductive parents.