



PRO TENCH

Intensive and sustainable culture of the freshwater species tench

The Challenge

In Central and Eastern Europe, the freshwater fish species tench (*Tinca tinca*) has been cultivated extensively in ponds for more than 500 years. However, due to its limited spawning period (May to August) the fish is not available on the market year round. Despite production in semi-intensive systems, the first year is characterised by very slow growth with a high percentage of fish death. In addition, spawning does not occur before the fourth year. Were tench to be cultured intensively to develop a profitable industry these issues would need to be resolved. However, the culture of tench also has some advantages over other species - it can tolerate low levels of oxygenation and can withstand high population/stocking densities.

Intensifying tench production would be a response to the need for promoting and diversifying freshwater aquaculture, thus increasing the sustainable production of a wide range of species. It would also contribute to the creation of stable employment in rural regions.

Project Objective

The aim of this project is to develop and optimize a procedure for the artificial reproduction of the freshwater fish tench presently restricted to seasoned production.

Key Points

- To achieve the objectives, the partners worked together to:
- assure a good rate of continuous fry production;
- adjust the food composition to tench requirements;
- produce a protocol to guarantee the survival and adequate growth rate of juveniles, and;
- improve environmental conditions (light and temperature) so as to improve fish welfare.

EATiP Thematic Area of Relevance

- TA1: Product Quality, Consumer Safety and Health
- TA2: Technology and Systems
- TA3: Managing the Biological Lifecycle
- TA4: Sustainable Feed Production
- TA5: Integration with the Environment
- TA6: Knowledge Management
- TA7: Aquatic Animal Health and Welfare
- TA8: Socio-Economics and Management

Key Words

Tench, Artificial reproduction,

Project Information

Contract number:
512575
Duration:
26 months (01/01/2005 – 02/01/2007)
Coordinator:
Mr. Modesto Durán,
GESINFIN sl,
Calle Velázquez 1,
10600 Plasencia (Cáceres),
Spain
Tel:
+34 927 421 338
E-mail:
modestod@iies.es
Project website:
<http://project.idetra.com/protench>
this website is no longer available



Output Highlights

Tench reproduction

New knowledge was gained on the conditions and methods required for artificial reproduction of tench, thus ensuring the continuous availability of high quality gametes of tench.

Optimal feeding

The appropriate energy ratio for tench feeds was obtained, which will enable the formulation of a least cost diet which can support the growth production and health of the fish.

Economical Farming conditions

Taking into account environmental and animal welfare aspects, the different aspects needed for the intensive and profitable farming of tench were evaluated, based on practical knowledge.

Transport

Finally, optimal conditions for live transport of tench were established, taking animal welfare into account, but reducing costs.

The Full Report

For a description of the research project, visit <http://project.ivdetra.com/protench>

The final report can be downloaded from the CORDIS web site at http://cordis.europa.eu/search/index.cfm?fuseaction=lib.document&DOC_LANG_ID=EN&DOC_ID=129703451&q=