

CULTURE OF BURBOT *Lota lota* (L., 1758): CURRENT STATUS, RESEARCH AND PROSPECTS

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The Belgian Aquaculture industry can be described as very small. Nevertheless fish consumption is increasing, partially thanks to the positive image fish has as a healthy food source. In contrast to some other European countries, Belgium has limited availability of open waters for pond culture or flow through systems. New emerging aquaculture operations will have to rely on RAS technology.

This high cost technology with high capital investments and high operational costs, in combination with high labour costs, makes it impossible to culture species that are already imported from “low cost” countries (tilapia,...). In this view, the European Interreg IV project “AQUAVLAN” has been set up in 2009 to determine the possibilities for an economically viable, sustainable and diversified aquaculture in Flanders and Holland.

As species diversification is a possible way to increase local production, three “new” species are investigated for their potential in RAS. Besides pikeperch (Inagro) and omega perch (KULeuven) the Flemish University College KaHo Sint-Lieven is investigating the culture of burbot (*Lota lota*) in its new Aquaculture Education and Research Facilities (Aqua-ERF).

Burbot can also, besides RAS, be an alternative species for European cold water aquaculture in ponds, raceways,...

This species is regarded as a potential candidate for aquaculture because of the superb quality of the meat and high prices in local markets (Finland 18€/kg on fish market). Two taste experiments with consumer panels confirmed the supreme quality of burbot flesh.

Up to now only few studies have been published that deal with the commercial culture of this species and even most basic knowledge is lacking. The focus of our research is the grow out in RAS but obtained results can also be useful in other types of aquaculture systems.

The unavailability of weaned fingerlings was identified as a major threat for the development of burbot culture. Therefore Aqua-ERF has also started larviculture with successful weaning in 2011.

This presentation aims at overviewing the current status of burbot culture and research. Recent research results obtained at Aqua-ERF (larval culture and weaning, husbandry, feed and feeding) will be discussed as well as future research topics. Finally, prospects for the commercial culture of burbot will be discussed.