

# Katholieke Hogeschool Sint-Lieven Aquaculture Research and Education Group



## Burbot, Lota lota (Linneaus, 1758),

## an opportunity for diversification of European Inland Aquaculture

## **AQUA-VLAN**

Aquaculture Research and Education Group

Katholieke Hogeschool Sint-Lieven

> Hospitaalstraat 23 9100 Sint-Niklaas Belgium

jurgen.adriaen@kahosl.be

J.Adriaen\*
W. Meeus
A. De Kimpe
S. Aerts

Research conducted within the framework of



#### Funded by:













In contrast to marine aquaculture, the European inland aquaculture production is stagnating and even declining for some species. One of the possible strategies to enhance inland production could be the diversification of the selected species, trying to aim for high value species, which would make bigger investments possible with an increased production as outcome. Because of its potential fast growth rate and market value, the burbot was selected by AQUA-ERF to investigate its aquaculture potential. Trials concerning the weaning, optimal temperature and nutritional requirements of the burbot were run at the Aquaculture Education and Research Facilities, that was launched in the context of the European Interreg project "AQUAVLAN".



#### **BURBOT**

- Only fresh water fish of the Cod family
- Cold water species/ local species Europe

#### **CONSUMPTION**

- Tasty white fillet
- Liver and eggs considered delicacy
- · Origin of famous Flemish dish
- Eastern Europe, Scandinavia, Russia
- Most production out of fisheries

#### **AQUACULTURE PRODUCTION**

- Limited production based on pond culture
- Angling and restocking programs
- · Little known on optimal culture conditions
- Same or better performance

in Recirculation System (RAS)?

Weaning is a bottleneck

#### **OBTAINED RESULTS AT AQUA-ERF**

- GROW-OUT TRIAL:
  - Better growth at 18°C
  - · Higher density could improve growth
- WEANING TRIALS:
  - Larvae weaned directly on dry feed on DAH 50 with 26% survival
  - No differences in SGR, survival and cannibalism between

Co-fed with artemia and directly dry fed

1-summer old Fingerlings can be weaned with 55% success.

#### References:

\*Żarski, D., W. Sasinowski, D. Kucharczyk, , M. Kwiatkowski, S. Krejszeff, , K. Targońska, (2009). Mass initial rearing of burbot *Lota lota* (L.) larvae under controlled conditions. Pol. J. Natur. Sc. 24, 76–84 \*Trabelsi A., Gardeur J., Teletchea F., Fontaine P. (2011).

Effects of 12 factors on burbot *Lota lota* (L. 1758) weaning performances using fractional factorial design experiment. Aquaculture (2011), doi:10.1016/j.aquaculture.2011.03.027

