

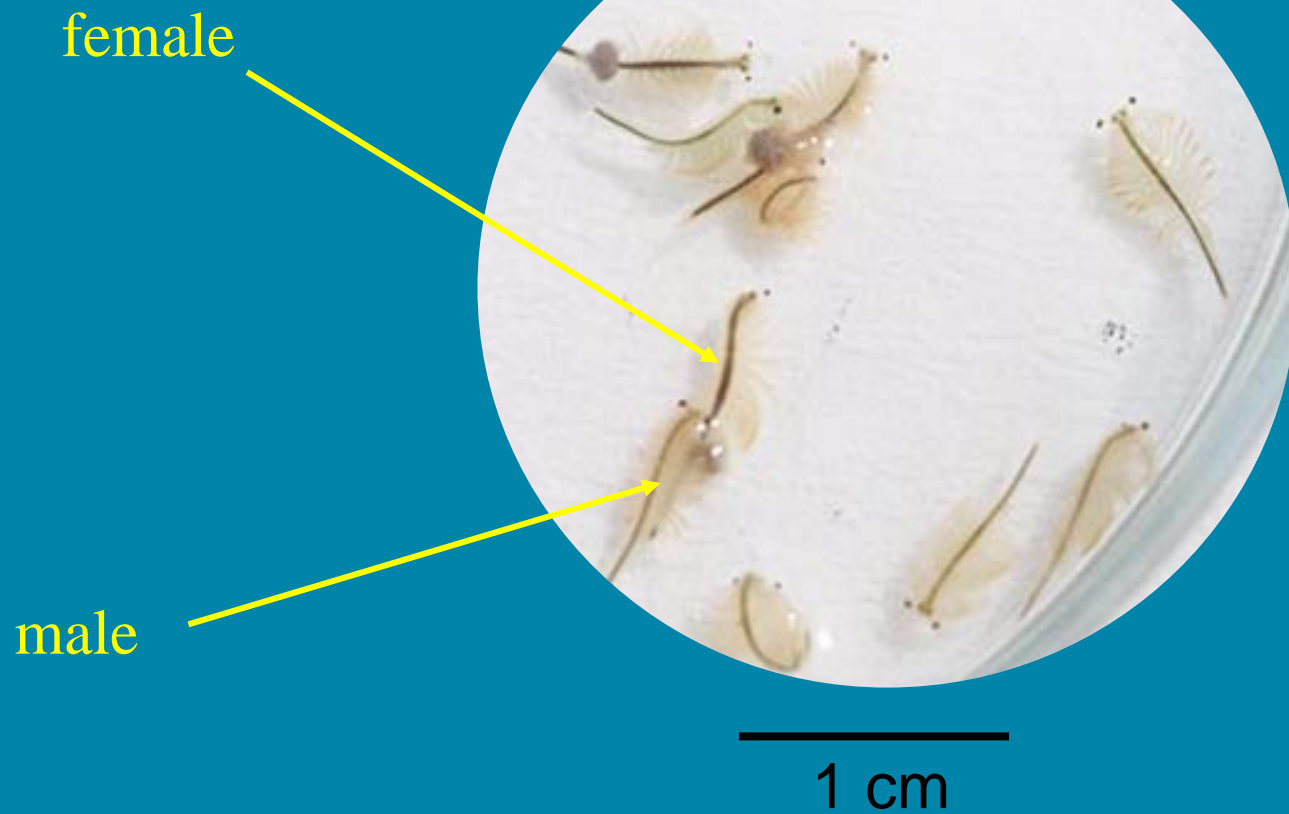
# Laboratory of Aquaculture & Artemia Reference Center

Faculty of Bioscience Engineering  
Ghent University, Belgium

Jean Dhont, Research staff  
Patrick Sorgeloos, Director

**Aquaculture and Fisheries Infoday & Networking Event**  
**14-15 November 2007, Brussels**

## How it began: *Artemia*



## Coastal saltworks



## Inland salt lakes

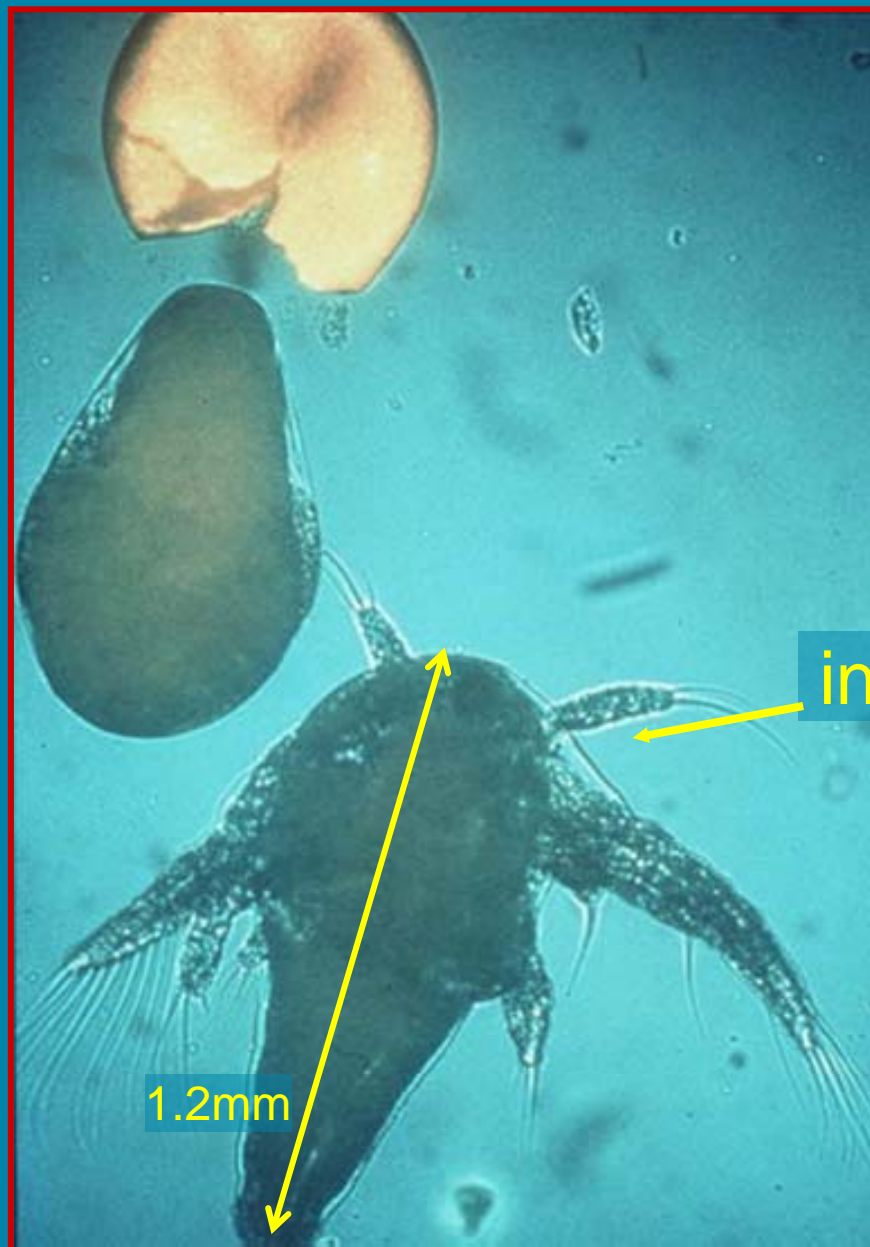


dehydrated *Artemia* cysts  
in dormancy state

0.5 mm



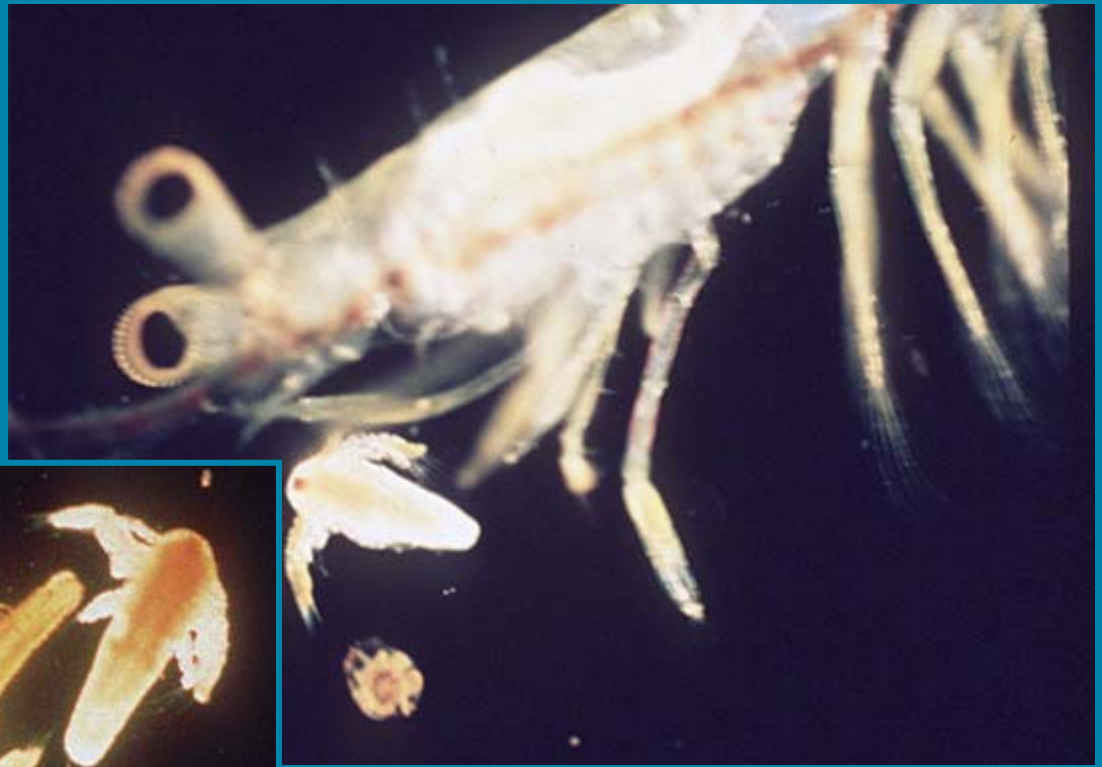
*Artemia*  
hatching



instar I nauplius

1.2mm





# Artemia research



## Biodiversity



## Hatching and life cycle studies



## Bioencapsulation



# SPECIES UNDER RESEARCH

Turbot



Macrobrachium rosenbergii



Penaeid shrimp



cobia



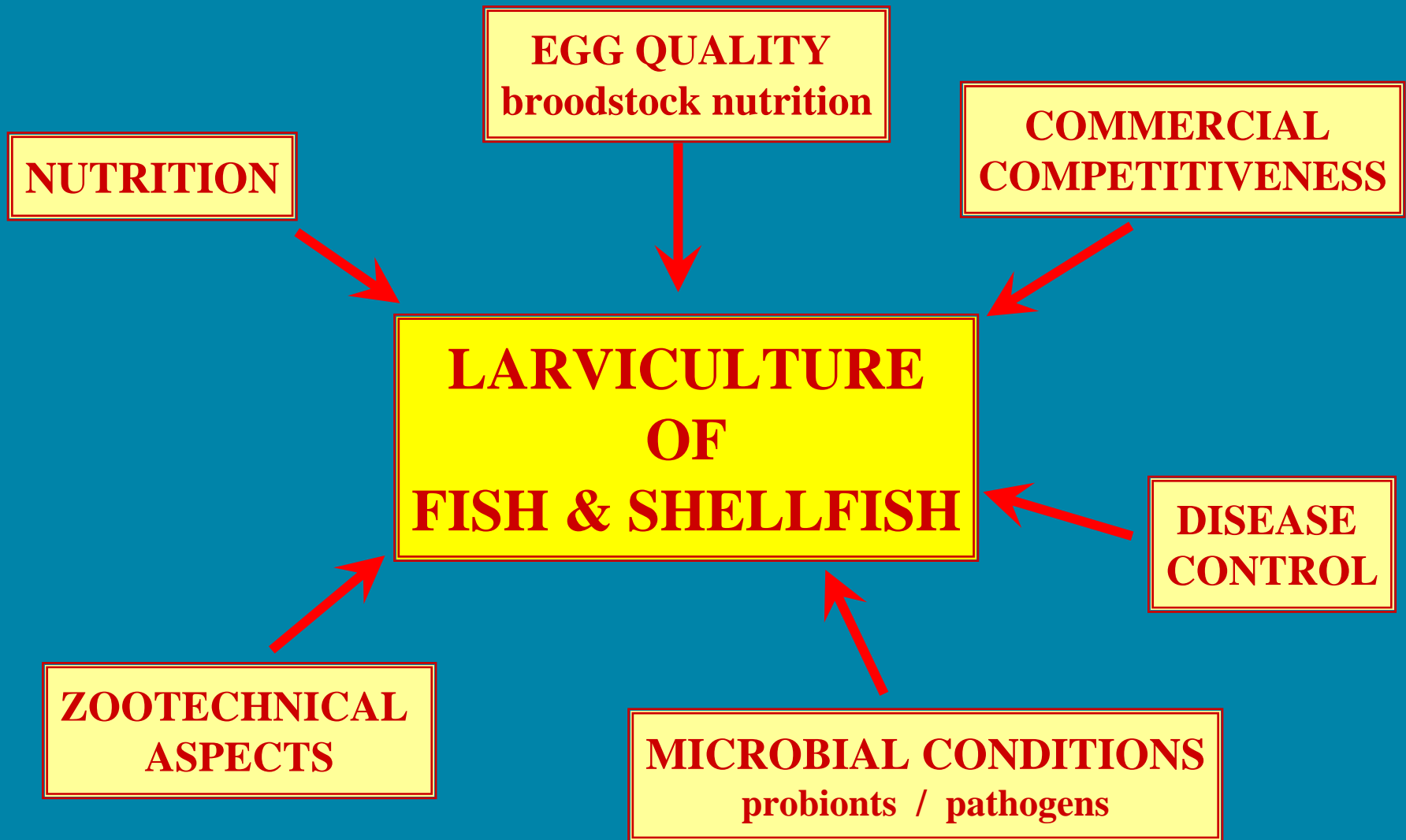
Sea bass



Mud crab : *Scylla* spp.



# research topics





# current research projects

- Artemia culturing biology and strain characterisation
- Husbandry and nutrition of fish and crustacean broodstock
- Live food production and nutritional manipulation for fish and shellfish larvae
- Analysis of microbial communities; quorum sensing (focusing on *Vibrio*); microbial bioflocs as feed in aquaculture
- Gnotobiotic culture of Artemia, Brachionus and sea bass larvae
- Gastro-intestinal development in larvae
- Development of alternative technique for disease prevention  
(probiotics, prebiotics, immunostimulants, environmental stress)
- Pathology of WSSV in Penaeid shrimp
- Morphological development of larvae
- Transcriptome analysis in Artemia and fish larvae



# UGent partners in aquaculture R&D

## Faculty of Bioscience Engineering

Biochemical and Microbial Technology – W. Verstraete and N. Boon  
Crop Protection – P. De Clercq  
Agriculture Economics – W. Verbeke  
Applied Analytical and Physical Chemistry – P. Van Der Meeren  
Applied Ecology and Environmental Biology – N. De Pauw

## Faculty of Veterinary Medicine

Virology, Parasitology and Immunology – M. Pensaert and H. Nauwynck  
Morphology – W. Van den Broeck  
Pathology, Bacteriology and Poultry Diseases – A. Decostere

## Faculty of Sciences

Biochemistry, Physiology and Microbiology – P. Vandamme and G. Huys  
Biology – D. Adriaens and W. Vijverman  
Molecular Genetics – D. Inzé and F. Van Breuseghem

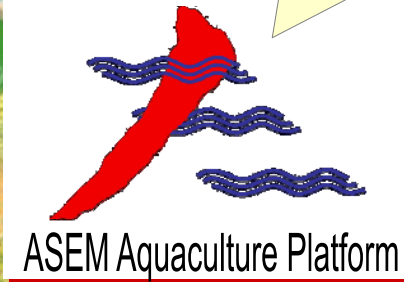


# International cooperation and network projects

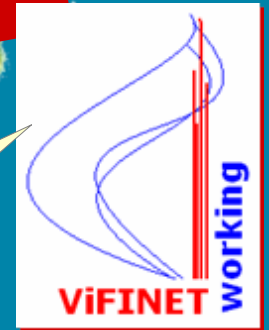
Aquaculture, Fisheries and Aquatic Resource Management Thematic Network in Education & Training



A multi-stakeholder platform for the development of sustainable aquaculture between the EU and Asia



China AquaFishNet



National network for coordinated research & education



# more information

[www.aquaculture.UGent.be](http://www.aquaculture.UGent.be)

# contact

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