

Light and aquatic animals

Many different environmental and physiological parameters have been investigated and monitored to assess their effects on the growth and production of fish and other aquatic animals, and lately also on animal welfare. Though a lot of information is available by now on most important environmental factors, that are already incorporated into production methods and systems, this is not the case with different parameters of light.

Effect of light has been of interest to some aquaculture researchers and developers using the results of science in recent years, yet such attempts have been scarce, sporadic, and have not received much attention, though light has been shown to have a significant effect on fish physiology. The wavelength, length of illumination, colour and intensity of light all affect the function of genes (genetics), growth and sexual maturation (physiology), feed conversion and diet (nutrition), stress responses (immunology) and disease development (health) in fish and other aquatic species of different ages. This suggests that the subject is part of contemporary aquaculture and will become a major issue in the near future.

The aim of the two special sessions is to provide an overview of results already available regarding light, fish and other aquatic species, to enable scientists, producers and all interested to meet up and share their experiences, to raise attention to the topic and to identify the next steps and areas of information need that have the most relevance to be able to improve the welfare and production of aquatic animals.

In the two sessions, we welcome and intend to present proposals from research groups with practical (on-site and/or on-farm) or laboratory results.