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RESEARCH REPORTS

Sustainable Aquaculture for a Secure Future

Title: Comparative histological description of the digestive and visual system development of larval chame *Dormitator latifrons* (Pisces: Eleotridae)

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Abstract: This study was focused on the morphological description of chame larvae from one to six days post-hatching (dph), in order to generate information that helps understanding their feeding ability in early stages. The larvae were obtained by hormonal induction of a broodstock, using implants of GnRH synthetic analogues, during the spawning season from September to November 2010. The samples were included in historesin, and stained with hematoxylin-eosin. It was described that, once the larva hatched has a large amount of yolk it is gradually absorbed (from 1 to 3 dph). At day four, there is an open oral cavity with dental structures, the eye development is complete and there was pigmentation on it, the gills are observable and the foregut was differentiated in anterior and posterior intestine, showing the presence of digestive vacuoles in the anterior intestine. By five dph the larvae has developed muscle fibers and a structure identified as the stomach. At sixth dph, it is possible to identify the pancreas, the intestinal folds, and the brush border membrane, and there were food particles and bacteria rests in the gut. Based on the above, it is concluded that the larvae of *D. latifrons* from the fourth dph fully developed organs and systems that help the search of food, so they are capable of starting with exogenous feeding.

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