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Fish larval nutrition and feed formulation: knowledge gaps and bottlenecks for advances in larval rearing

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Abstract

Despite considerable progress in recent years, many questions regarding fish larval nutrition remain largely unanswered, and several research avenues remain open. A holistic understanding of the supply line of nutrients is important for developing diets for use in larval culture and for the adaptation of rearing conditions that meet the larval requirements for the optimal presentation of food organisms and/or microdiets. The aim of the present review is to revise the state of the art and to pinpoint the gaps in knowledge regarding larval nutritional requirements, the nutritional value of live feeds and challenges and opportunities in the development of formulated larval diets.

Keywords

Author Keywords: enrichment; fish larvae; formulated diets; live feed; nutrient requirements

KeyWords Plus: HALIBUT HIPPOGLOSSUS-HIPPOGLOSSUS; SEABREAM SPARUS-AURATA; COD GADUS-MORHUA; FREE AMINO-ACIDS; GILTHEAD SEA BREAM; BASS DICENTRARCHUS-LABRAX; YOLK-SAC LARVAE; ESSENTIAL FATTY-ACIDS; CARP CYPRINUS-CARPIO; ROTIFER BRACHIONUS CAYMAN

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