

## عنوان مقاله:

Determination of the inhibitory effects of microdiets used in routine commercial feeding protocols on protease activities of *Argyrosomus regius* (Asso, ۱۸۰۱) larva

## محل انتشار:

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## خلاصه مقاله:

The aim of this study was to determine the inhibitory effects of feed ingredients on protease activities of *Argyrosomus regius* larvae using in vitro techniques. *A. regius* larvae fed on a commercial feeding procedure were sampled thirteen times, during the sampling period (from ۳ to ۳۲ days after hatching (DAH)). The differences observed in protease activities of meagre larvae during the sampling period were statistically significant ( $p < 0.05$ ). The lowest and highest protease activities of meagre larvae were  $5.95 \pm 0.6$  U/mg protein (۱۵ DAH) and  $211.21 \pm 12.56$  U/mg protein (۷ DAH), respectively. The fluctuations observed in protease activities of *A. regius* larvae were between ۱۰ DAH and ۳۲ DAH. Commercial diets such as Orange Start-S (۱۰۰-۲۰۰ $\mu$ ), Orange Start-L (۲۰۰-۳۰۰ $\mu$ ), Orange Nurse-XS (۳۰۰-۵۰۰ $\mu$ ), Orange Grow-S (۳۰۰-۵۰۰ $\mu$ ) and Orange Grow-L (۵۰۰-۸۰۰ $\mu$ ) caused the inhibitions on protease activities in meagre larvae to range from ۱۶ to ۳۲ DAH. The results point to the inadequacy of commercial diets such as Orange Grow-S, Orange Grow-L and suitability of Orange Start-S, Orange Start-L, Orange Nurse-XS for feeding meagre larvae during the weaning stage. For the mass production of quality juveniles, future studies should take into account the inhibitory effects of commercial diets and feed ingredients before the manufacturing process. A similar approach may be used to determine the most suitable commercial diets for use during the weaning stages of marine fish larvae to obtain the best growth performance and survival.

## کلمات کلیدی:

Meagre, *Argyrosomus regius*, Protease activities, Protease inhibitions, Commercial diets, in vitro

## لینک ثابت مقاله در پایگاه سیویلیکا:

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