

## Nutritive Potential of Mealworm (*Tenebrio molitor*) in the Diet of Olive Flounder (*Paralichthys olivaceus*)

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**Abstract :** Mealworm (*Tenebrio molitor*) was evaluated to investigate the effect of partial or total replacement of fish meal in diets for olive flounder, *Paralichthys olivaceus*. Experimental groups of fish with average initial body weight ( $287.5 \pm 7.24$  g) were fed each with 4 isonitrogenous (52% crude protein) diets formulated to include 0, 7, 17 and 27% (diets 1 to 4, respectively) of fish meal substituted with mealworm. After six weeks of feeding trials, fish fed with diet 3 revealed the highest values for live weight gain (42.10), specific growth rates ( $0.445 \pm 0.089$ ) as well as better feed conversion ratio (12.08) compared to the other group with statistically significant manner ( $p < 0.05$ ). Hepatosomatic index was showed no significant difference in diet 3 compared to the control group. An increase in weight gain and other growth associated parameters was observed in diet 3. These results clearly indicate that 17% of fish meal protein in bastard halibut diet can be replaced by mealworm not only without any adverse effect but also the effect of promoting growth performance.

**Keywords :** mealworm, olive flounder, *Paralichthys olivaceus*, *Tenebrio molitor*

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