Effect of dietary lipid increments on the growth performance, feed utilization, and carcass proximate composition and intraperitoneal fat of marble goby (Oxyeleotris marmoratus)

Abstract

The present study was conducted to investigate the growth performance and feed utilization of marble goby, Oxyeleotris marmorata, juveniles fed with different levels of dietary lipid. Juvenile fish (initial mean weight 2.76 g) were fed with isonitrogenous diets including 10, 14, 18 and 22% of dietary lipid in triplicate groups for 15 weeks. The results showed that the highest growth performance and feed utilization was observed in fish fed D10. The increase of dietary lipid from 10 to 22% did not improve growth, feed conversion rates, protein efficiency ratio, nitrogen retention efficiency, and apparent digestibility coefficients of protein and lipid (P>0.05). The increase of dietary lipid had significantly increased the whole body and hepatic lipid, hepato-somatic index, visceral-somatic index and intraperitoneal fat levels (P