Effect of different days of feeding in a week-basis on growth and body composition of juvenile flounder,

Paralichthys olivaceus

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Flounder in fish farming or feeding trials indoor or outdoor are likely to be fed for 6 days a week due to easy management or convenience. However, no precise data on comparison of fewer days feeding than 6 days feeding a week basis on growth and body composition of flounder is available yet. This study was performed to determine effect of different days of feeding in a week-basis on growth and body composition of juvenile flounder Paralichthys olivaceus. Twenty five juvenile fish (An initial body weight±SD: 37.9±0.26 g) were stocked into nine of circular flow-through tank each. During the acclimation period and throughout the feeding trial, flounder were fed the commercial sinking flounder feed to satiation twice daily as designated. Three treatments of fish with 3 replicates were prepared for this study. Fish in F6 was fed to satiation twice daily for 6 days consecutively and starved for a day during a week, as the control group. Fish in the F5 and F4 treatments was fed to satiation twice daily for 5 and 4 days and starved for 2 and 3 days during a week, respectively. Survival of flounder (%) was not significantly affected by different days of feeding. Weight gain (g/fish) and SGR of flounder in F6 and F5 treatments was significantly higher (P<0.05) than those of fish in F4. Feed consumption (g/fish) of flounder in F6 and F5 was significantly higher (P<0.05) than that of fish in F4. However, feed and protein efficiency ratio for flounder were not significantly affected by different days of feeding. Moisture, protein, lipid and ash content of the whole juvenile flounder were not significantly affected by different days of feeding. In conclusion, growth of juvenile

flounder in F5 was similar to that of fish in F6, but higher than that of fish in F4 during a week-basis. However, no significant difference in feed efficiency ratio, protein efficiency ratio or chemical composition of the whole body of flounder was obtained.

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