

**Preliminary study of the performance of crude illipe oil (*Shorea macrophylla*) as a dietary lipid source for riverine cyprinid *Tor tambroides***

**ABSTRACT**

Illipe *Shorea macrophylla* is a riverine fruit naturally eaten by Malaysian mahseer *Tor tambroides* and other riverine cyprinids. The effects of crude illipe oil on the growth performance, body composition and fatty acid profile of juvenile *T. tambroides* were investigated in this study. Juveniles fed on five test diets (0, 1.25, 2.5, 3.75 and 5% illipe oil) for 12 weeks in triplicate groups. Crude palm oil was used as the control. In general, no significant differences in survival, growth performance, body indices and lean portion were observed among different treatments. Significantly higher lipid and gross energy retention values were found in fish given 0% illipe oil than those given 2.5 and 2.5–5% illipe oil. The highest muscle n-3 and n-6 polyunsaturated fatty acid retention values were found in juveniles given 0% illipe oil. The overall results demonstrated that illipe oil could be successfully included in the diet of Malaysian mahseer, and probably other riverine carps, without any negative effects on growth performance and whole body proximate composition. However, it was slightly inferior to crude palm oil in the retention of dietary lipid, energy and muscle n-3 and n-6 polyunsaturated fatty acids for the feeding of *T. tambroides*.

**Keyword:** Growth; Fatty acid; Mahseer; *Tor tambroides*; Illipe oil; *Shorea macrophylla*