

Effect of dietary lipid level on growth performance of *Garra ceylonensis*, Ceylon stone sucker (Bleeker, 1863)

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Garra ceylonensis is an endemic fish species in Sri Lanka, which is recognized as spafish, and most exported among endemic fish of Sri Lanka. The aquaculture practices of this species are still not reported and literature on nutritional requirements of *Garra* sp. is limited. This study attempted to assess the lipid requirement for sub adult stage of *G. ceylonensis* under aquarium condition. Growth and survival of premature, unsexed, tank bred *G. ceylonensis* was evaluated during a 45 day period. Seven weeks old *G. ceylonensis* (total length and bodyweight were 6.3 ± 0.28 cm and 2.49 ± 0.4 g) were reared in glass tanks (45 x 45 x 45 cm) at a stocking density of 12 fish per tank. The feeding trial was conducted for 45 days in ambient condition and fish were fed on four isonitrogenous (38%) diets with 6% (L6), 9% (L9), 12% (L12) or 15% (L15) lipid level up to satiation twice (0900 hr and 1500 hr) daily. There was no significant difference observed in survival of fish among different treatments. Final total lengths were 6.70 ± 0.49 , 6.65 ± 0.26 , 6.56 ± 0.37 and 6.72 ± 0.25 cm and weights were 3.25 ± 0.56 , 2.98 ± 0.46 , and 3.08 ± 0.50 and 3.15 ± 0.40 g. The final weight of L9 fed fish was significantly different from L6 and final length of L12 fed fish was different from L6 fed fish. Survival was 100% and, the feed conversion ratio were 2.58 ± 0.55 , 3.16 ± 0.30 , 2.99 ± 0.32 and 2.91 ± 0.21 for L6, L9, L12 and L15 respectively. Further, long term studies are needed to evaluate the dietary nutrient requirements of *Garra* under aquarium conditions

Keywords: *Garra ceylonensis*, growth performance, lipid requirement

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