

**EVALUATION OF GROWTH AND BREEDING PERFORMANCES
OF *Puntius reval* (RED FIN BARB), WITH DIFFERENT FEEDS
UNDER THE AQUARIUM CONDITION**

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Puntius reval is a newly identified highly threatened, endemic fresh water fish species found in Sri Lanka. This study was carried out to determine the best feed type out of Moina (T_1), Ox – heart (T_2) and Pellet feed (T_3), to optimize the growth and reproductive performances of *P. reval*.

Fish (*P. reval*) were collected from Aththanagalu Oya, with a total body length of 20-25 mm and stocked in cemented tanks (5'x 3'x 3'). Three experimental feeds were used in the study. Feed consumption, total body length and body weight were recorded monthly. Acceptability of feeds was determined by visual observations. Water quality parameters were measured with two weeks intervals. After four months, fish were stocked in glass tanks (2'x 1'x 1') to evaluate the breeding performances. Number of laid and fertilized eggs and survivals were recorded in their 1st spawning. Specific growth rates (*SGR*), feed conversion efficiency (*FCE*), fertilization rate of eggs and survival rate of fry were calculated. Complete Randomized Design (*CRD*) was used and data were analyzed by SAS computer software. Subsequently means were compared using Duncan's New Multiple Range Test.

According to findings, *SGR* was not significantly different ($P > 0.05$) among the treatments where as *FCE* was significantly different ($P < 0.05$) in T_1 . The fertilization rate was significantly high ($P < 0.05$) in fish, those fed with T_1 and T_3 than that of T_2 . Significantly high ($P < 0.05$) survival rate was observed in T_3 than T_1 and T_2 . According to the cost benefit analysis, most profitable feed type was T_1 . Visual observations were proved that T_2 was the highly preferable feed among others. Finally, it can be concluded that, better growth and reproductive performances can be achieved by feeding Moina to *Puntius reval* under aquarium condition.

Key words: Growth and reproduction, Moina, Ox-heart, Pellet feed, *Puntius reval*