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Rearing of pearlspot (*Etroplus suratensis*) larvae using formulated feed and periphyton in the absence of parental care: A partial success

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Etroplus suratensis, commonly called as pearlspot is an ideal fish for farming in brackish water. Getting appropriate quantity of quality seeds is a bottle neck in farming. Our previous attempts on dietary interventions of the adult fish succeeded in recurrent spawning with single pairs under captive conditions using specialised diets. We observed that termination of parental care is mandatory for forcing the pairs for subsequent spawning. But it was challenging to rear the young ones in the complete absence of the parental care. In this experiment we tried sequential termination of parental care from day 1 to day 30 in the interval of 5 days. We used green water system and periphyton based rearing system to simulate the natural conditions to the growing larvae. Larval feeds like artemia nauplii and formulated micro particulate feed were used to feed the first feeding larvae. Larvae grown in the absence of parental care from day 1 survived >95% up to day 5 in the green water. But there was 100% mortality on day 7. Larvae separated from parents on day 5 and day 10 were fed artmeia nauplii for 3 to 5 days and slowly weaned to formulated particulate diet. The survival recorded on 20th day PHF was 10 and 16% for 5th and 10th day respectively. Fourth group of larvae separated on 20th day which fed only with particulate feed survived more than 80%. Research trials are underway to achieve maximum seed production by single pair mating and early parental care termination.

Biography

K P Kumaraguruvasagam has obtained his PhD from CAS in Marine Biology, Annamalai University in year 2006. Latter he served as a R&D manager (nutrition) for Integrated Aquaculture International, USA, in its project centered at Brunei. In 2010 he came back to India, and resumed his post-doctoral research sponsored by UGC and CSIR. In 2012 ICAR offered him a Senior Scientist (Fish Nutrition), and placed at present in Central Institute of Braackish water Aquaculture, Chennai. To his research credit he has published more than 10 papers in peer reviewed international journals.

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