THE EFFECT OF DIFFERENT FEED TREATMENTS ON SEA BASS (*Lates calcarifer*) ON THEIR GROWTH PERFORMANCES ON THE EARLY GROWTH STAGE

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Asian Seabass, commonly called as the Giant sea perch, is an estuarine species of the family Centropomidae. Seabass are well suited to aquaculture as they are hardy, fast-growing, and universally regarded as a fine table fish.

This research was carried out to develop a formulated feed suitable for the Seabass (*Lates calcarifer*) using locally available low cost sources of protein feed. Sixty five day old Seabass (30±10)g were fed with four feeds formulated with different protein sources such as prepared feed-01 (T1), prepared feed-02 (T2), commercially available feed (T3), and Trash feed (T4) to investigate the effect of feed type on weight gain, length increment, FCR (Feed conversion ratio) and PER (Protein efficiency ratio) of fish. Twelve tanks were randomly allocated into 04 dietary regimes by using Completely Randomized Design (CRD). The fish were fed three times per day at a rate of 3-5% of the biomass.

Results indicated that weight gain (57.43±0.05g) and length increment (5.46±0.05cm) on final day of fish fed by trash fish (T_4) were significantly higher than that of fish fed with other three feeds. The FCR values of T_1, T_2, T_3 and T_4 feed were 0.296±0.03, 0.302±0.03, 0.391±0.03 and 0.535±0.03 respectively. So the FCR values of the fish that fed with formulated feeds (T_1, T_2) were significantly lower than that of other diets. However, the two types of formulated feeds in this experiment gave higher growth performances compare to commercial feed. The price of a kilo of T_1, T_2, T_3 and T_4 feed were Rs.150, Rs.127, Rs.125 and Rs.50 respectively. So production cost of one kilo of Seabass by T_1 was Rs.44.4 and T_2 was Rs.38.4. The cost benefit analysis showed that the most profitable feed type was T_2. From the results it can be concluded that the ration T_2-formulated feed 2 which was produced using locally available raw materials, provides a mean to reduce the feeding cost of the local Seabass farming.

Key words: Commercial feed, Growth, Seabass, Trash fish