

Growth Response of the Fry of Major and Chinese Carp to the Dietary Ingredients in Polyculture System

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Abstract : The aim of present research was to evaluate the effect of dietary protein (soybean) formulated feed on the growth performance of carp fish seed (Rohu, Mori, Grass, and Gulfam) in ponds under polyculture system. Keeping in view the protein requirements of these four carps, they were fed with formulated feed contains 30% of crude protein. The fingerlings were fed once on daily basis at 5% of their wet body weight. A 90 days experiment was conducted in two cemented ponds situated at Fish Seed Hatchery and Research Centre, Rawal Town, Islamabad, Pakistan. Pond1 contain major carps i.e. Rohu and Mori while pond 2 was stocked with Chinese carps i.e. Grass carp and Gulfam. Random sampling of five individuals of each species was done fortnightly to measure the body weight and total body length. Maximum growth was observed in fingerling of Grass carp followed by Mori, Rohu and Gulfam. Total fish production was recorded as Grass 623.45 gm followed by Mori 260.3 gm, Rohu 243.08 gm and Gulfam 181.165 gm respectively. Significantly results were obtained among these four fish species when the corresponding data was subjected to statistical analysis by using two sample t-test. The survival rate was 100%. Study shows that soybean as plant based protein can be easily used as substitute to fish meal without any adverse effect on fish health and fish production.

Keywords : carps, fry growth, poly culture, soybean meal

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