

Finfish seed collection in Krishna and West Godavari Districts, Andhra Pradesh

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Marine finfish culture using locally available wild seed is gaining importance in Andhra Pradesh. Fishes such as Asian seabass, milk fish and different species of mullets are the major species available in sufficient quantities in the wild. Understanding the availability of the wild seeds in the backwaters of Krishna and West Godavari districts, aquaculture of those fishes has been established in most of the coastal districts of Andhra Pradesh. Part-time seed collection operations are being practiced by fishermen in several fishing villages from these districts. Traditional methods of fish seed collection employed are based on tidal patterns. There are two major methods of seed collection depending on the location. The fish seeds are collected using scoop nets during low tide time from the water pools in the mangroves. The fish seeds are also collected with drag net or seine net in the backwaters and sea shore areas. During high tide, nets are installed with poles, near periphery of the estuary. The fish seeds get collected in the net during low tide and when water recedes further they are collected by the fishermen. The seed collection is mainly practiced during March to May for Asian seabass, March to July for milk fish and throughout the year for mullet. Large scale seed collection is being followed for Asian sea bass and milk fish.

The collected seeds are stocked in small ponds near the seed collection sites. Normally these seeds are less than 2 cm in size and they are separately stocked in *Hapas* or released directly to the pond of 1-2 acre in size. The ponds for seed rearing are prepared with two different depths, the deeper

portion in the periphery and shallow depth in the middle. Rice bran is used as feed for milk fish while *Tilapia* juveniles are fed to sea bass. Interestingly, small branches of a plant, commonly known as 'babul' (*Acacia nilotica*, 'Nalla thumma' in telugu), is placed at different places of the pond. This is used as aggregation device for the fish seeds. In addition, the epiphytic algae and zooplankters that accumulate in it are feed for both milk fish and seabass. The stocked fishes are allowed to grow for 1-2 months and then sold to fish farmers for culture. Generally milk fishes are sold at the size of 3-5 cm, but seabass are grown to a comparatively bigger size. While catching the fish from the pond, the branches are removed slowly and the cast net operated in the same site so that more numbers of fish gets entrapped in the net.

The selling price for milk fish seed (1 inch size) is around ₹ 60,000 -70,000 for 1 lakh seeds. The 1-2 inch sized sea bass is sold at around ₹ 25 /seed while a bigger sized sea bass seed (100 g) costs around ₹ 80-100 per piece. The price of mullet seed is comparatively less and it costs ₹ 10 for 100 g of seed. The seed prices varies depending on the size and demand of the seeds. Mostly, the collected seeds are transported within Andhra Pradesh and to some places in Tamil Nadu, Karnataka and Maharashtra. In addition to finfish seed, the collection of mud crab and prawn seeds is also progressing well in these districts and most of the families in the villages are actively involved in collection of fish seed as a part time occupation.