

## capture based aquaculture

Sujitha Thomas, A. P. Dineshababu, K. M. Rajesh and G. D. Nataraja  
Research Centre of CMFRI, Mangalore

Carangids are highly esteemed food fishes and have been evaluated as potential aquaculture species in different countries. Carangid fishes viz., *Seriola quinqueradiata*, *Caranx mate* and *Trachinotus* spp. are commercially cultured in Japan, Hawaii and USA respectively. Captive breeding and seed production of the silver pompano, *Trachinotus blochii* as well as the successful demonstration of farming of the hatchery produced pompano seed in earthen ponds is one of the breakthrough achievements of the Central Marine Fisheries Research Institute in India.

The concept of capture based aquaculture (CBA) was adopted by the fishermen along the Karnataka coast and the diffusion of the technology in some villages has been phenomenal. Successful adoption of CBA in cages by fishers along the coast is encouraging and more and more fishers are coming forward to take up the culture. Experiments on culture of many potential finfish species have been carried out in cages along the coast. As a part of the CBA programme, Mangalore Research Centre of CMFRI attempted culture of the carangid species, *Alepes djedaba* commonly known as shrimp scad along with the mangrove snapper, *Lutjanus argentimaculatus* in 13 cages of 3 X 2 X 2 m size in Uppunda village, Byndoor, Karnataka. Out of the total 650 fishes stocked, about 60 fishes were shrimp scads. The seeds of both the species were collected



*Alepes djedaba* (Forsskal, 1775)

from the local estuary during second and third week of November 2011. Fishes were fed with trash fish everyday @ 5% body weight. After a culture period of about 240 to 250 days, the shrimp scads reached an average size of 640 g with an average survival of 86.6% which was almost equivalent to the growth of red snapper (average weight 760 g and survival 92%).

The shrimp scad is a large species of scad, growing to 40 cm, but more often seen around 25 cm. It often forms large schools and is carnivorous, consuming a variety of crustaceans and small fishes. The species is primarily an inshore inhabitant of reefs and open sand patches, even in moderately turbid waters. The species is occasionally found in offshore environments and seeds are often caught in the

estuarine areas. There is good demand for this species and it fetches Rs. 250-300/kg. Being a highly priced fish, the inclusion of this species in CBA could help to improve the economic returns of the fisherfolk.

The results of the demonstration suggests that the shrimp scad, *Alepes djedaba* is a promising carangid species for capture based aquaculture in estuaries of Karnataka.