

Captive Breeding and Larval Rearing of Marine Ornamental Fishes



P. biaculeatus with eggs

India is endowed with more than 200 varieties of export oriented marine ornamental fishes

CMFRI achieved breakthrough in developing a package of technologies on broodstock development, captive breeding and larval rearing of 19 species of marine ornamental fishes (Clown fishes : 9, Damsels : 9 and Dotty backs: 1)

Clown fishes bred under captivity

1. Sebae clown (*Amphiprion sebae*)
2. False clown (*Amphiprion ocellaris*)
3. Maroon clown/ Spine cheek anemone fish (*Premnas biaculeatus*)
4. True pecula/ clown anemone fish (*Amphiprion percula*)
5. Orange anemone fish (*Amphiprion sandaracinos*)
6. Tomato clown (*Amphiprion frenatus*)
7. Clarkii clown (*Amphiprion clarkii*)
8. Red Saddleback anemone fish (*Amphiprion ephippium*)
9. Pink anemone fish (*Amphiprion perideraion*)

Damsels & Dottyback bred under captivity

1. Three spot damsel (*Dascyllus trimaculatus*)
2. Striped damsel (*Dascyllus aruanus*)
3. Blue damsel (*Pomacentrus caeruleus*)
4. Peacock Damsel (*Pomacentrus pavo*)
5. Yellow tail damsel (*Neopomacentrus nemurus*)
6. Green chromis (*Chromis viridis*)
7. Filamentous tail damsel (*Neopomacentrus filamentosus*)
8. One spot damsel (*Chrysiptera unimaculata*)
9. Sapphire devil (*Chrysiptera cyanea*)

1. Redhead Dottyback (*Pseudochromis dilectus*)

Complete package of practices were developed for their hatchery production as an alternative livelihood option for small and large scale fish farmers.

The only alternative for development of a long term sustainable trade of marine ornamental fishes is through hatchery production. Ornamental fish production is more lucrative when compared to other mariculture species, due to their high unit value.

The transfer of technology to public and private sector entrepreneurs is by imparting hands on training through different modes under the Consultancy Processing Cell (CPC).

Advantages of hatchery produced juveniles:

- Reaches marketable size within 2 to 3 months
- High survivability (85 to 95 %)
- Disease free and more resistant in artificial system
- Retains normal colouration
- Easily accepts formulated diets
- Easily adjust to life in aquaria
- Fetches high unit value

Beneficiaries

Hatchery produced seeds are being sold in marginal rates to the farmers, aquarium hobbyists and traders (more than 300 persons) from various parts of India.



A. percula



P. biaculeatus



N. nemurus



A. sebae