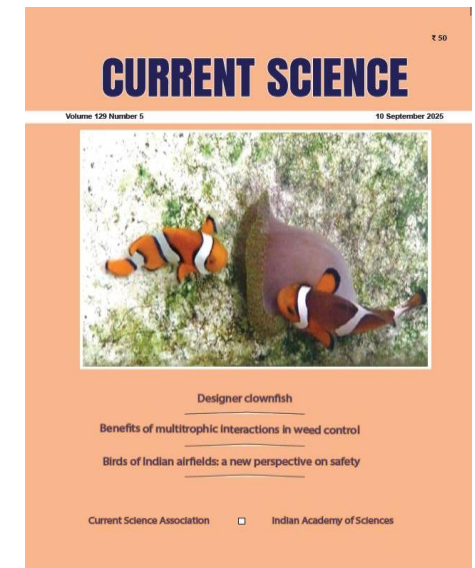


Designer Clownfish

- Achieved by ICAR - National Bureau of Fish Genetic Resources.
- Six-years, selective breeding programme.
- Cross involved: ♂ *Amphiprion percula* x ♀ *Amphiprion ocellaris*
- Hybrid lineage exhibited distinctive colour and pattern variations
- Novel phenotypes included
 - Mis-barring
 - Altered white bands
 - Solid white-and-black pigmentation
- Developed strains are visibly distinct from wild-type parental strains
- High potential for ornamental aquaculture, particularly premium-value markets



Thor hainanensis

Xu & Li, 2014
(Squat shrimp)

- ICAR-NBFGR documented the species as a new distributional record to India from Lakshadweep waters.
- Captive breeding and seed production of the species was standardized
- The produced juveniles were distributed to women beneficiaries for further rearing in community aquaculture units and marketing.
- The species has high potential for ornamental aquaculture and aquarium trade.



Gnathophyllum americanum

Guerin-Meneville, 1855

(Striped bumblebee shrimp)

- Captive breeding and juvenile production of *Gnathophyllum americanum* was developed by the ICAR-NBFGR under captive conditions.
- The species represents a promising candidate species for marine ornamental aquaculture because of its attractive colouration, small size, and potential demand in the aquarium trade.
- Development of captive production technology can support sustainable ornamental aquaculture, while reducing collection pressure on natural populations.
- The species also has potential for integration into community-based ornamental aquaculture and livelihood programmes in coastal and island regions.



Saron marmoratus

(Olivier, 1811)

(Marbled shrimp)

- Captive breeding and seed production technology for *Saron marmoratus* have been developed and standardized by ICAR-NBFGR.
- The species possesses high ornamental value because of its attractive marbled colouration and distinctive morphology.
- Captive production can provide an alternative to collection from natural reef populations and support sustainable utilization of native marine ornamental biodiversity.
- The species has strong potential for integration into ornamental aquaculture and community-based livelihood programmes in Lakshadweep.



Radianthus magnifica

Quoy & Gaimard, 1833
(Sea anemone)

- Asexual propagation technique through bifurcation was developed by ICAR-NBFGR.
- The bifurcation method enables the production of genetically identical propagules through controlled binary fission and regeneration.
- The species possesses high ornamental value, because of its striking colouration, large size, and association with Clownfishes.
- Captive propagation has significant potential to reduce dependence on wild collection and promote sustainable utilization of reef-associated ornamental resources.
- The species is a promising candidate species for marine ornamental aquaculture and could contribute to conservation-oriented and community-based aquaculture initiatives.

