

CMFRI achieves breakthrough in mariculture captive breeding



Kochi, April 22: In a breakthrough in mariculture development in the country, the ICAR-Central Marine Fisheries Research Institute (CMFRI) has successfully developed seed production technology for 'golden trevally' (Gnathanodon speciosus), a high-value marine fish.

The development is expected to open a new avenue for sustainable seafood production and boost India's mariculture activities, including

sea cage farming. Scientists at CMFRI's Visakhapatnam regional centre achieved successful bloodstock development, captive breeding, and larval rearing of the fish after five years of research.

Golden trevally or golden kingfish is an ideal candidate species for mariculture (marine aquaculture) due to its faster growth rate, good meat quality, and huge demand for both consumption and ornamental purposes. The farm-gate value of the fish is Rs 400-500 per kg. It is a reef-associated fish and lives in the company of larger fish like skates, sharks, groupers, etc. Interestingly, juveniles of this species act as pilots for sharks. It is a silver-grey fish with yellowish coloration on the belly, scattered black patches, all fins coloured yellow, and a black tail.

A. Gopalakrishnan, Director, CMFRI, said this is a significant milestone in Indian mariculture. "Golden trevally is an ideal candidate for sea farming due to its desirable qualities. Given the declining trend of its landings, the success in captive breeding of this fish has greater significance as it will offer opportunities for sustainable fish farming through mariculture practices, including sea cage farming. The technology will also contribute to wild stock restoration efforts through the sea-ranching initiative," said Gopalakrishnan. In India, fish landing observations show that the golden trevally is landed predominantly in the reef area fishing grounds of Tamil Nadu, Puducherry, Kerala, Karnataka, and Gujarat.