Report on incidence of Cepheid jellyfish

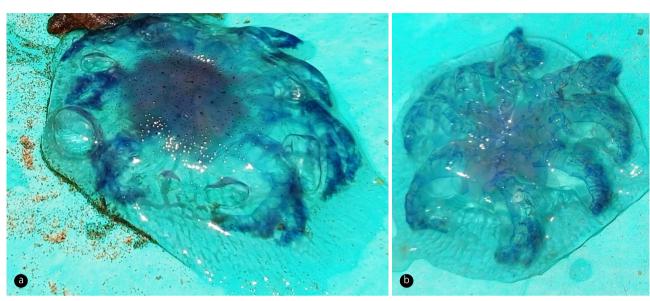


Fig. 1: Cepheid jellyfish, Marivagia stellata (a) Dorsal view (b) Ventral view

Unusual landings of a Cepheid jellyfish was observed at Jeerupalem landing centre, Srikakulam, northern Andhra Pradesh on 11th and 12th April 2023. Based on enquiry, it was found that mass swarming of the Cepheid jellyfish was observed from inshore coastal water. Jellyfish was caught in ring seine operated by outboard FRP boats (OAL-7.5-9.8m; engine capacity: 15HP) at a water depth of 20-30 m and discarded. Altogether 50 boats were operated per day, and each unit discarded an average of 25-30/kg of Cepheid jellyfish. Average commercial catch (mainly Stolephorus commersonnii, Sardinella longiceps and Rastrelliger kanagurta) landed was 60-70 kg/ unit. As per fishermen's view, there is 20-30% reduction in commercial catches per unit due to swarming of jellyfish, and also increase in sorting time. This swarming mostly happens in summer seasons and it

is a great menace for the ring seine fisheries along the coast.

Twenty jellyfish samples were collected, photographed, and identified as the Cepheid jellyfish, Marivagia stellata Galil and Gershwin, 2010 (Fig.1 a&b). The species is characterized by translucent bluish-white bell without a central dome, warts, or knobs on the ex-umbrella surface but with a conspicuous pattern of stars, dots, and streaks clustered on the centre of the exumbrella. Sub-umbrella lacks filaments on the oral disk and between mouths. The bell diameter of the species varied from 90 mm to 120 mm. The sudden appearance of vast numbers of specimens of the species at the same time may be attributed to the fact that the local population have been already established in inshore coastal water and the presence of cryptic sessile, asexually reproducing polypoid stage, which can produce ephyra that grows into free-swimming medusa. The swarming incidence was observed for the first time along the northeast coast of India.

Marivagia stellata was first described from the southeastern Levantine coast of the Mediterranean Sea in 2010. Globally, the species was reported from the Indus River, Pakistan, Israel, Syrian, Srilanka and in Lebanese waters. In India, the species has been reported from the coast of Kerala and Palk Bay, Tamil Nadu. This report indicates that M. stellata is distributed in the western Bay of Bengal also..

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