

Unusual presence of sea cucumbers in coastal waters off Kochi, south-west coast of India



During the routine pre-monsoon sampling conducted off Kochi in the 5–40 m depth zone on 19th April 2023, an unusual presence of sea cucumbers belonging to the genus *Holothuria*, was observed. Around 60 number of specimens were found in the sediment samples and in the trawl net as accidental catch during the experimental trawling conducted along the inshore waters at 20 m depth (10° 1'34.80"N, 76° 6'27.18"E). The specimens were released back to the sea immediately after taking photographs and careful examination. They were brownish-white in colour and ranged between 30-50 mm in length. No significant relationship was discernible between the observed sea

cucumber densities and sediment characteristics such as texture (77.3 % clay, 4.5% sand and 22.6% silt) and organic carbon content (2.2%). This unusual occurrence is significant as there were no previous reports of sea cucumbers from coastal waters off Kochi. Sea cucumbers belonging to the class Holothuroidea under the phylum Echinodermata, are benthic marine invertebrates found throughout the world's oceans. Their crucial role in the marine ecosystems by consuming decomposing organic matter and converting it into recyclable nutrients. Also, the feeding and excretion activities of sea cucumbers induces the alkalinity of sea water, which helps to buffer ocean acidification. In India,

approximately 200 sea cucumber species are found all of which are listed in Schedule 1 of Wildlife (Protection) Act, 1972, making their collection, trade, or any form of utilization a punishable offence. Along the Indian coast, sea cucumbers are found particularly in Gulf of Mannar, Palk Bay, Andaman and Nicobar Islands, Lakshadweep and Gujarat coasts (Asha *et al.*, 2019). The coastal waters of Kerala, particularly around the districts of Thiruvananthapuram and Kollam, have also reported occurrences of sea cucumbers (Deepa & Biju Kumar, 2011).

Reena V. Joseph*, Lavanya Ratheesh, L. Sreeshanth, Aju K. Raju, Shelton Padua, R. Ratheesh Kumar and K.S. Sobhana | ICAR-Central Marine Fisheries Research Institute, Kochi