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Deep-sea chondrichthyan composition and abundance in Andaman waters, Indian EEZ- preliminary results based on exploratory survey

RAVI RANJAN KUMAR, S. VENU, BINEESH K.K, AKHILESH K V, BASHEER V S

Department of Ocean Studies and Marine Biology, Pondicherry University,

Port Blair Campus, Andaman Islands – 744 112

Email:raviranjan1750@gmail.com

Deep-sea chondrichthyan diversity and abundance of Indian waters is poorly known and that of Andaman waters are least studied. Data collected during the fishery and oceanographic surveys of FORV *Sagar Sampada* were analyzed to understand the deep-sea chondrichthyan resource abundance and distribution around Andaman Islands of Indian EEZ. Two deep-sea fishery surveys were conducted during 2015 (Cruise no. 334 leg I) and 2016 (Cruise no. 349 leg II) to explore the fish diversity and fishing grounds. Seven deep-sea bottom trawl surveys were conducted using HOT and HSDT-II nets, covered latitudes between 11°-13.80°N and longitudes 93.19° E, at depths ranging from 160-1300 m. Catch composition in both cruises showed significant deep-sea chondrichthyan contribution with maximum observed in cruise no. 349 (10.26%) and followed by (6.77%) in cruise no. 334 of total catch 122.4 (74.32%) and 41.2 (25.67%) respectively. Four deep-sea sharks and single species of ray contributed to the species composition during the exploratory surveys. *Bythaelurus hispidus* showed dominance in both cruises with (15.05%) and (29.82%) followed by *Plesiobatis daviesi* (28.16%), (6.70%), *Eridacnis radcliffei* (27.18%), (5.72%) in cruise 334 and cruise 349 respectively. *Centrophorus* sp. were present only in cruise II (12.25%) at a depth of 520 m. *Squalus* sp. showed very minimal contribution with value of 0.49% and 0.41% of total catch of chondrichthyans. The maximum number of species were recorded from the Latitude 11°-13.80° at depth range 301-500 m followed by the Latitude 11°-12° at a depth range 150-300 m. *Bythaelurus hispidus* and *Eridacnis radcliffei* showed distributed at Latitude 11°-13.80° at a depth range from 301-500 m followed by 150-300 m. Studies on deep sea chondrichthyan are very rare and limited. An extensive study needed to undertake to explore and understand the continental slope along the coast of Andaman and Nicobar Islands.

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