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

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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 II) and 2016 (Cruise no. 349 leg II) to explore the fish diversity and fishing grounds. Seven deep-sea bottom trawl operations were conducted using HOT and HSDT-IInets, 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 deepsea chondrichthyan contribution with maximum observed in cruise no. 349(10.26%) and followed by (6.77%) 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 racliffesi* (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% total catch of chondrichthyan. 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 *Plesiobatis racliffesi* showed distributed at Latitude 11°-13.80° at a depth range from 301-500 m followed by 150-300 m. Deep sea chondrichthyan are very rare and limited. An extensive study needed to undertake to place and understand the continental slope along the coast of Andaman and Nicobar Islands.