

Understanding the zonation of ichthyoplankton during southwest monsoon in Western Palawan

Ocean Predict

Western Palawan is a rich traditional fishing ground and spawning area for commercially important fish such as round scads. A study that aims to characterize the zonation of ichthyoplankton and the diversity of fish during the season of southwest monsoon was conducted as support to the ongoing implementation of Closed Season for Roundscads in the region. Twenty- four sampling stations were established from Busuanga to Balabac on June 30, 2016, to July 5, 2016, and were classified based on bottom depth (continental shelf (<200m), continental slope (>200m), and bathyal (>1000m). Ichthyoplankton was collected using a plankton net with a diameter of 50cm and a mesh size of 365 microns. Two types of tows were used, the surface horizontal tow and the oblique tow. Water parameters like temperature, salinity, chlorophyll-a, and dissolved oxygen (DO) concentrations were also gathered and correlated to the abundance of ichthyoplankton. Results showed that ichthyoplankton were abundant on the shelf and scarce at the bathyal zone regardless of the towing method used. However, in terms of diversity, fish larvae were diverse at the slope and least diverse at the bathyal zone. Family Carangidae was the most dominant fish family (11.4%) followed by Apogonidae (8.9%), Gobiidae (8.6%), Myctophidae (8.6%), and Mullidae (8.4%) suggesting a possible spawning season for the fish. Carangidae was found dominant at the shelf and slope while Myctophidae dominated the slope and bathyal zone indicating their zonation in the area. Moreover, water parameters were observed to affect the abundance of ichthyoplankton. These results could be useful for the proper management of fisheries in the area.

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