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## Diel migration of microzooplankton Tintinnid in Masinloc Oyon-Bay Marine Reserve

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Diel vertical migration (DVM) is considered as a general characteristic of the zooplankton community. During the night, most of the zooplankton have a high occurrence in the surface layer of the water to feed on phytoplankton and descends during the day to avoid predators, however, reverse patterns also occur to other organisms. Tintinnids, a cosmopolitan group of microzooplankton, have been observed to be abundant on the upper layers both in coastal and open seas. This study aimed to assess the diel migration of tintinnids in marine environment and test if they follow the zooplankton general diel characteristic. Tintinnids were collected on the month of July 2017 at 8 stations in Masinloc-Oyon Bay. Plankton net with 20 $\mu$ m mesh size was horizontally towed at 1-meter depth for 10mins with a speed of 1.5-2.0 knots. Vertical tows were also performed by lowering the net at 1 meter above the bottom to the surface. Night sampling was done at 9pm-4am while the day-time collection was conducted at 9am-4pm. Both sampling periods were conducted during high tide with a depth range of 11-21 meters. One of the noteworthy findings of this study is the recorded visibility of tintinnids in the surface layers both in the night and day-time collection. No significant difference was observed between night and day-time abundances using horizontal tow. A significant difference was recorded between night and day-time abundance with vertical tow. The results suggest that tintinnids might deviate from the generalized diel characteristic of the zooplankton community. This current work presented a potential area of interest about tintinnids distribution pattern.

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