

**INVESTIGATION OF DISTRIBUTION AND DIET OF MNEMIOPSIS LEIDYI
IN THE IRANIAN COASTS OF THE CASPIAN SEA (GUILAN PROVINCE)**

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ABSTRACT

The alien ctenophore *Mnemiopsis leidyi* which was transported from the Black Sea into Caspian at the end of 1990s has been negatively affecting ecosystem in this new environment. In this study, spatial and temporal distribution of *M.leidy* were studied from a total of 15 stations located along three transects (Lisar, Anzali and Sefidrood) in the western Iranian coasts of the Caspian Sea (Guilan province) during July 2001 to July 2002.

M. leidyi achieved maximum biomass (166.1 g m⁻²) in July 2002. Minimum biomass (3.3 g m⁻²) of the ctenophore were measured in December 2001. The highest biomass was at the station with 20 m bottom depth (97.0 g m⁻²) in autumn and lowest biomass (1.6 g m⁻²) was obtained at a station with a 50 m bottom depth in winter. The highest average biomass 67.25 g m⁻² were measured in Sefidrood region, and the lowest biomass (34.12 g m⁻²) observed in Anzali region. The young specimens (<5 mm) contributed about 94 % to the total abundance of the population. The maximum length was 51-55 mm which was measured in August. The gut content of *M.leidy* in the Caspian Sea include a wide variety of prey, with 86 % of items being zooplankton prey. The maximum prey was Copepoda (34 %) and Cirripedia (18.6 %). The factors affecting the distribution and diet of *M. leidyi* in the study area were discussed.