

Gastropoda, Oligochaeta and Chironomidae Limnofauna of Van Lake Basin, TurkeyNaime ARSLAN¹, Deniz MERCAN¹, Burcu BARIŞIK¹, Deniz Anıl ODABAŞI²¹Department of Biology, Faculty of Art and Science, Eskişehir Osmangazi University, Eskişehir, Turkey² Department of Basic Sciences, Faculty of Marine Science and Technology, Çanakkale Onsekiz Mart University, Çanakkale, Turkey
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Aim of the study: Lake Van, which is situated in Eastern Anatolia, is not only the world's largest soda lake by area but also is the world's fourth-largest closed lake by volume. It is a close basin but has includes a large number of lakes and river (such as lakes Nazik, Nemrut, Sodali, Gövelek, Keşiş, Küçük and Aygır); however, there has been no study about their invertebrates fauna. In order to determine Gastropoda, Oligochaeta and Chironomidae limnofauna in Lake Van Basin, this research was conducted in October 2011, June 2012 and June 2014.

Material and Methods: Eight lakes in Van Lake Basin (Nazik, Nemrut, Sodali, Gövelek, Keşiş, Küçük, Aygır and Van lakes) were studied in October 2011, June 2012 and June 2014. Benthic invertebrates were collected from the lakes by hand net (with 500 µm mesh size) and Ekman grab (one haul per station at depths of 1–12 m). All collected samples were fixed in 4% formaldehyde in the field and then transferred to 70% ethyl alcohol. Temperature, dissolved oxygen, and pH of sampling sites were measured *in situ*.

Results: In this study, 2164 benthic invertebrate individuals belonging to 60 taxa (2 gastropoda, 13 Oligochaeta and 45 Chironomidae species) were identified from eight lakes. The highest number of species were detected in lake Keşiş (27 taxon), while the fewest species were detected in Lake Van (5 taxon). In the study area, the most frequent species are determined as; belonging to Gastropoda *Melanopsis costata* (62.5%), belonging to Oligochaeta *Psammoryctides albicola* (50%) and belonging to Chironomidae *Cricotopus* (*C.*) *fuscus* (75%), *Cladonytarsus mancus* (62.5%) and *Polypedilum scalaenum* (50%). All the species identified are new records for eight lakes.

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Keywords: Van Lake Basin, Oligochaete, Chironomidae, Gastropoda.