

## Species Composition and Seasonal Distribution of Benthic Macroinvertebrates in Zeytinli Dam Lake (Çanakkale/TURKEY)

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**Aim of the study:** This study was carried out in Zeytinli Dam Lake which is located in Gökçeada (Çanakkale). The study area is important being the unique drinking water source for Gökçeada. The aim of the present study was to determine the qualitative and quantitative distributions of benthic macroinvertebrate fauna in Zeytinli Dam Lake.

**Material and Methods:** The five stations were chosen on the field and benthic macroinvertebrate samples were collected twice from each station by using an Ekman-Birge grab (15×15 cm<sup>2</sup>) between June 2010-May 2011, seasonally. In addition, a hand-net (50 x 30 size with 500-µm mesh) was used for sampling in the coast of lake. The collected samples were kept in 70% alcohol, brought to the laboratory and they were sorted and identified to the lowest possible taxonomic level under a stereomicroscope. Samples were examined qualitatively and quantitatively in accordance with Welch's method.

**Results:** As a result of the examination of the collected organisms, it was determined that benthic macroinvertebrates are composed of Chironomidae (35.3%), Oligochaeta (29.4%), and other small groups (35.3%). A total of 17 taxa were detected, 5 taxa from Oligochaeta [*Psammoryctides albicola* (Michaelsen, 1901), *Limnodrilus hoffmeisteri* Claparède, 1862, *Limnodrilus* sp., *Potamothenix hammoniensis* (Michaelsen, 1901), *Stylaria lacustris* (Linnaeus, 1767)]; 5 taxa from Chironomidae [*Cryptochironomus defectus* (Kieffer, 1913), *Cryptocladopelma laccophila* Kieffer, 1922, *Cryptotendipes holsatus* Lenz, 1959, *Polypedium convictum* (Walker, 1856), *P. aberrans* Chernovskij, 1949]; and 7 taxa from other groups [Isopoda, *Asellus aquaticus* (Linnaeus, 1758), Ephemeroptera (*Baetis* sp., *Caenis* sp., *Leptophlebia* sp., *Siphonurus* sp.), and Trichoptera (*Ecnomus* sp., *Hydropsyche* sp.)]. According to seasonal faunistic data, it was observed that benthic macroinvertebrates in the lake were maximum in winter, minimum in autumn and spring.

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