

**Benthic Macroinvertebrate of Koycegiz Lake (Mugla, TURKEY)**Huseyin SASI<sup>1</sup>, Mine AKMAN<sup>2</sup><sup>1</sup> BasicSciences Department, Fisheries Faculty, Muğla Sıtkı Koçman University, Turkey<sup>2</sup> Institute of Science, Muğla Sıtkı Koçman University, Turkey

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**Aim of Study:** Koycegiz Lake is important wetland area and has given myriad of benefit in West Mediterrean Basin. The aim of this study was to provide that the physico-chemical datas were evaluated and the water quality classes were determined in chosen stations on Koycegiz Lake. Also, benthic makroinvertebrates in Lake were determined by the evaluation of biological datas.

**Materials and Methods:** This study was carried out between October 2009 and July 2010 on Koycegiz Lake in Mugla Province. Water samples were taken from seven stations on Koycegiz Lake seasonally and investigated about the physico-chemical characteristics. Benthic macroinvertebrate were also collected from those seven stations of Koycegiz Lake. Water samples and macroinvertebrates were collected at the same time. Temperature, dissolved oxygen, pH, electrical conductivity parameters were measured in the field. Water quality levels were determined according to Klee (1991).

**Results and Discussion:** According to the study results, it was detected that Koycegiz Lake has 2<sup>nd</sup> class water quality and it is a characteristic eutrophic lake. As a benthic macroinvertebrates, 6 taxa belong to classes Crustacea, 11 taxa belong to classes Gastropoda, 3 taxa belong to classes Bivalvia, 2 taxa belong to classes Polychaeta, 1 taxa belong to classes Hirudinea and 9 taxa belong to classes Insecta were identified. The collected benthic macroinvertebrates were identified according to their species or genus levels. Then Frequency, Dominancy were calculated (Kocatas, 1994), and Similarity analysis were done (Birol, 2007).

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**Keywords:** Koycegiz Lake, Water quality, Benthic macroinvertebrate, Gastropoda.