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ABSTRACT BOOK



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EXCESSIVE MICROBIOLOGICAL POLLUTON CARRIED BY DUDEN RIVER IN THE ANTALYA BAY

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Antalya is one of the most preferred residence and tourism destination in Turkey. 640 km long beaches, the local topography, historical places, the mild climate and low prices enable at least 7-month tourism season in Antalya. High numbers of tourism activities have brought benefits in terms of foreign currency and employment.

The seawater quality is mainly under the effect of some land based pollution sources and wastewater discharges. Duden River, which carries the organic and microbiological pollution from its catchment area, is one of the main freshwater inputs into the Antalya Bay. Duden River flows directly into the Lara Region, which has faced a rapid development and intensive urbanization, is one of the main bathing regions in Antalya city. Agricultural activities and incomplete infrastructure have been an important problem of the region.

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To determine the water quality and carrying microbiological pollution loads of Duden River to the Bay, field and laboratory studies have been implemented monthly at the Karpuzkaldiran Bridge, flowing point of the River, through January 2001 and February 2003. During the study, Total, Faecal coliform, Faecal streptecocci and BOD5 loads have been calculated. The results of the study have shown that during the study high amounts of coliform bacteria have been carried to the Bay by Duden River.

KEYWORDS: Antalya Bay, BOD load, Duden River, Faecal Coliform, Faecal streptecocci, Microbiological Pollution, Total coliform.