

Water Quality Determination of River Systems in Antalya Basin by Biomonitoring

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Abstract : For evaluation of water quality of the river systems in Antalya Basin, macrozoobenthos samples were taken from 22 determined stations by a hand net and identified at family level. Water quality of Antalya Basin was determined according to Biological Monitoring Working Party (BMWP) system, by using macrozoobenthic invertebrates and physicochemical parameters. As a result of the evaluation, while Aksu Stream was determined as the most polluted stream in Antalya Basin, Isparta Stream was determined as the most polluted tributary of Aksu Stream. Pollution level of the Isparta Stream was determined as quality class V and it is the extremely polluted part of stream. Pollution loads at the sources of the streams were determined in low levels in general. Due to some parts of the streams have passed through deep canyons and take their sources from nonresidential and non-arable regions, majority of the streams that take place in Antalya Basin are at high quality level. Waste water, which comes from agricultural and residential regions, affects the lower basins of the streams. Because of the waste water, lower parts of the stream basins exposed to the pollution under anthropogenic effects. However, in Aksu Stream, which differs by being exposed to domestic and industrial wastes of Isparta City, extreme pollution was determined, particularly in the Isparta Stream part.

Keywords : Antalya basin, biomonitoring, BMWP, water quality

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