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TEMPORAL CHANGES IN THE COMPOSITION OF THE
MACROBENTHIC FAUNA OF DRANA LAGOON (EVROS
DELTA,N.AEGEAN SEA) : PRELIMINARY NOTE

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The qualitative and quantitative composition of macrobenthic fauna of Drana lagoon, Evros Delta, was investigated during summer of 1981, 1997 and 1998. Since 1988 Drana lagoon has been isolated from the sea due to the obstruction of each narrow opening. In September 1998, samples were collected in an emerged and in a submerged site, since the major part of the lagoon was drained due to the evaporation for about three weeks. Salinity exceeded 40 in September 1981, varied between 14.8 and 17.0 in July 1997 and between 50.3 and 53.7 in September 1997 and had a value of 11.2 in September 1998.

On the basis of similarity in the fauna composition, at a 23% similarity level, two groups of samples were distinguished. The first group mainly includes September 1981 samples and the second one those of July 1997. Samples collected at the emerged site in September 1998 showed a low similarity to the others. The resistant estuarine gastropod *Hydrobia acuta* was the most dominant species in both sample groups having a mean dominance of 70.8% in September 1981 samples and 73.1% in July 1997 ones. The estuarine bivalve *Abra ovata* and the marine polychaete *Capitella giardi* showed a remarkable mean dominance in September 1981 samples (21.8% and 4.5%, respectively), while the polychaete *Hediste diversicolor* and the amphipod *Gammarus aequicauda*, two resistant estuarine species, in those of July 1997 (16.7% and 9.9%, respectively). This alteration in the fauna composition characterized by an increase of the dominance of the most resistant estuarine species may be the result of lagoon's isolation from the sea. Furthermore, this isolation had as a result the temporary drainage of the lagoon's major part during September 1998, when *H. acuta* showed a 98.1% dominance at the submerged site and was the unique species found at the emerged one.

Number of species and total density had a mean value of 5.7, 3.8 and 4.0 species 0.1m^{-2} and 479, 996 and 364.5 ind. 0.1m^{-2} in Sept. 1981, July 1997 and Sept. 1998 samples, respectively. Species diversity and evenness showed significantly lower values in September 1998 samples (Fisher LSD coefficient, $P < 0.05$). Evenness had a mean value of 0.345, 0.526 and 0.030 in Sept. 1981, July 1997 and Sept. 1998 samples, respectively.