

Ostracods from artificially natural habitats: troughs

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Total of 34 ostracod species collected from 107 troughs of six cities (Bolu, Erzincan, Gaziantep, Kahramanmaraş, Ordu, Van) between summers of 2006 and 2010 in Turkey were described. The mean numbers of species was 2.25 species per trough. Maximum numbers of species was six. The most common four species with cosmopolitan characteristics (*Heterocypris incongruens*, *Ilyocypris bradyi*, *Psychrodromus olivaceus*, *Candona neglecta*) occurred from 59, 48, 34, and 26 different troughs, respectively. UPGMA dendrogram separated these species into a different clustering group. First axis of Canonical correspondence analyses (CCA) was able to show about 51% of the variations between 15 species and 5 environmental variables. Of which, altitude ($p = 0.008$, $F = 2.389$) and redox potential ($p = 0.034$, $f = 2.230$) were the two most effective factors on species. Tolerance and optimum estimates of the species were relatively high for different variables. Species found from these artificially environments were mostly common from different habitats. Shannon-Wiener Index tabulated the four most common species with high index values. Nevertheless, considering that troughs are the habitats transformed most likely from natural springs or related habitats (e.g., underground waters), such conversion apparently has negative effect on species richness. Results suggest that troughs can have high ostracod richness but evenness can be biased for the most common species as is the case in our study. Usefulness of troughs are discussed.

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