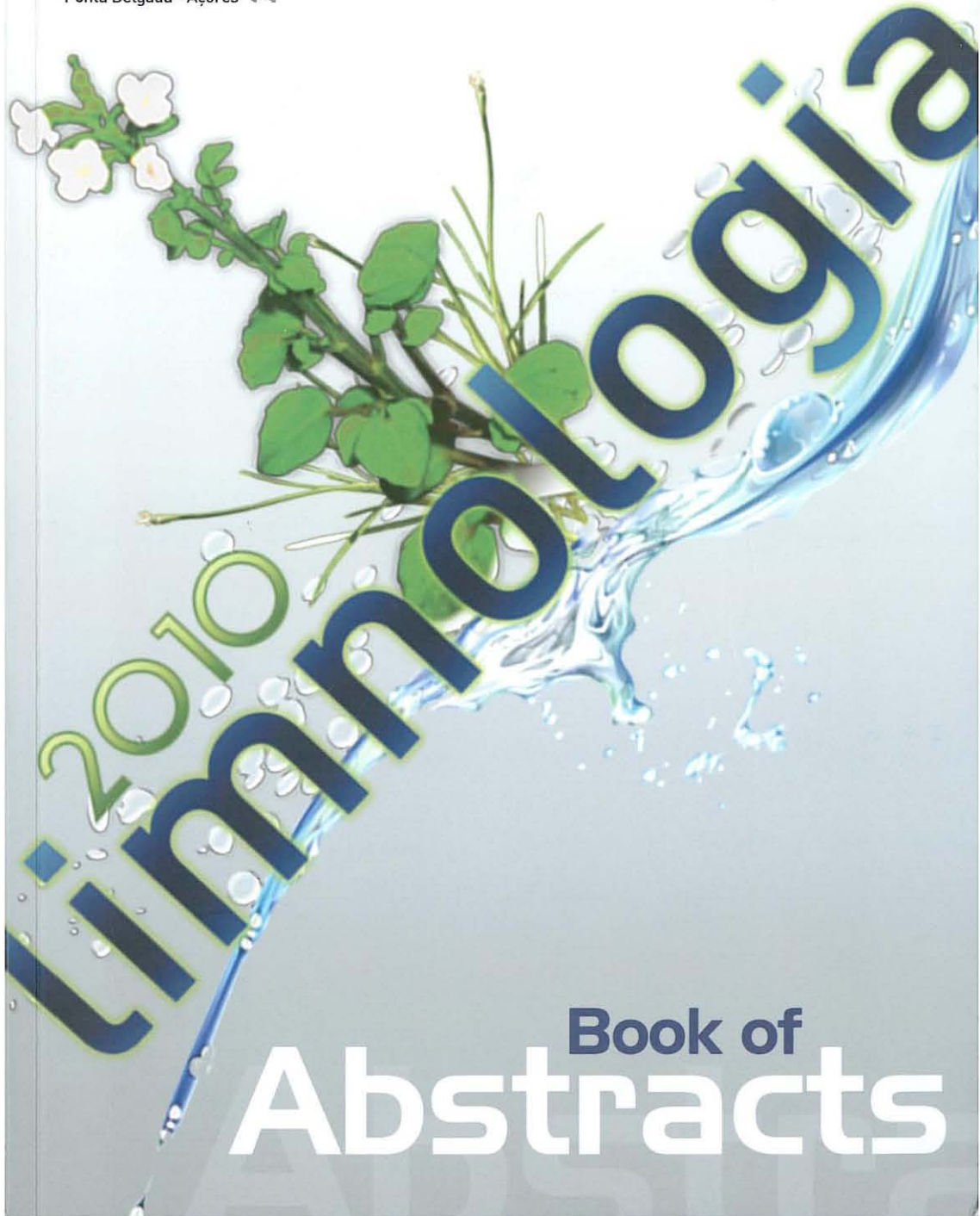


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casos muestran una dinámica hidrogeomorfológica específica que favorece el desarrollo de determinados procesos alterológicos que, en última instancia, condicionan el cuadro ecológico de cada una de ellas.

Key-words: procesos alterológicos, dinámica hidrogeomorfológica, lagunas, Doñana.

#### T2-O17

### ENVIRONMENTAL AND CRUSTACEAN ZOOPLANKTON ASSEMBLAGES VARIATIONS IN A RESERVOIR DURING FOUR HYDROLOGICAL YEARS

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Azibo is a meso-eutrophic reservoir located in the Portuguese part of R. Douro catchment (Latitude: 41°34'32, 25"N; Longitude: 6° 53'51, 63"W; altitude: 624m). As it is utilized mainly for recreation and for some urban water supply the water level variations are not very accentuated. This fact allows the evaluation of the effects of environmental variations and of other disturbance phenomena on the reservoir limnology without the interference of water level fluctuations. Therefore, the purpose of the present study is to evaluate the effects of precipitation variation in reservoir limnology and in the crustacean zooplankton assemblage. In doing so, variation of environmental parameters as well as of crustacean zooplankton abundances was assessed in four hydrological years: 2000/2001, 2001/2002, 2007/2008 and 2008/2009. It should be stressed that these years presented distinct precipitation patterns. Significant differences between years in which precipitation was considered as covariate were found for conductivity, temperature, total phosphorous and water transparency. The CCA forward selection approach revealed a strong contribution of water temperature, conductivity and total phosphorous to the observed significant association between crustacean zooplankton assemblage and environmental variables. Besides, the distribution of samples scores in this ordination space reflected a clear distinction between the samples obtained in 2000/2001-2001/2002 and those obtained in 2007/2008- 2008/2009. This fact can be partially explained by the larger relative abundances of *Daphnia* and *Diaphanosoma* observed in both latest hydrological years.

Key-words: Reservoir, Precipitation, Crustacean Zooplankton Assemblage, Environmental Parameters.

#### T2-O18

### DIVERSITY OF ZOOPLANKTON SPECIES (BRANCHIOPODA AND COPEPODA) IN THE ALTO GUADALQUIVIR WETLANDS: RELATIONSHIP WITH TEMPORALITY AND SALINITY

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Aquatic ecosystems are favourable systems for studying biodiversity. They support unique floral and faunal elements that contribute to the maintenance of biodiversity to landscape scale. However, most of them are threatened by several human activities that promote their degradation and disappearance. In the present study, we focus on analyzing the zooplankton community (branchiopods and copepods) in a set of 35 wetlands located in the Alto Guadalquivir region (southeast of Spain), that comprise a wide range in salinity and temporality. To test the dependence of the crustacean composition with temporality and salinity variability, a correspondence analysis was carried out. In addition, index of singularity and species accumulation models were used. Results from this study complete previously inventories performed by several authors in the study site, adding a total of 46 new species. Temporary lakes showed the major number of species and values of singularity. Species richness predicted by accumulation curves and their richness estimators (ICE, Chao2 and Jackknife 2) evidenced similar number of species to that observed in the present study. In conclusion, the temporality was the key variable controlling species richness in the wetlands, but other factors such as salinity affect both, the species richness and the presence of certain zooplankton species. Finally, it is important to note that in a relatively small area we found a high species richness remarking the need for conserving and protecting the study wetlands.

Key-words: diversity, zooplankton, Alto Guadalquivir, temporality, salinity.

#### T2-O19

### ESTUDIO DEL ESTADO TRÓFICO EN EL LIMNOEMBALSE DE COLA DE PAREJA (GUADALAJARA, ESPAÑA): COMPARACIÓN DE LOS ÍNDICES TSI Y EQR

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