

Freshwater ostracods fauna from Lago di Bordaglia (Friuli Venezia Giulia - NE Italy)

GIANGUIDO SALVI¹, NEVIO PUGLIESE¹, DEBORAH ARBULLA², GIOVANNI
PAOLO FANZUTTI¹

¹Dipartimento di Matematica e Geoscienze, Università degli studi di Trieste;

²Museo Civico di Storia Naturale di Trieste

The research on recent freshwater ostracods of Friuli Venezia Giulia region does not have a firm tradition, and available data mostly rely on occasional investigations (Colizza *et al.*, 1987, 1990). Recently detailed accounts on taxonomy, ecology and geographic distribution of Italian ostracods have been published in Friuli Venezia Giulia (Pieri *et al.* 2009; Stoch 2003, 2004).

In the present study, we analyzed 45 bottom sediments collected in Lago di Bordaglia, a small glacial lake located in the northernmost sector of the Carnic Alps at altitudes of 1750 m a.s.l., during two different summer survey (1991-1992). Bathymetry, physical and hydrochemical variables were measured (pH, Oxygen, Carbonates), sedimentological (textural) analysis was also carried out.

Three ostracod species (*Cypria ophthalmica*, *Cypridopsis vidua* and *Candona candida*) were identified. The most abundant species are represented by *Cypria ophthalmica* followed by *Cypridopsis vidua*. The first results seems to indicate a major relationship between the highest values of carbonate and pH in sediments with high percentages of silt component and biocenosis, meanwhile Oxygen does not seem to indicate precise trends. Biocenosis and thanatocoenosis indicate a preferential distribution (diffusion) in the southern part of the lake related to very shallow waters.

However, it should be noted the broad tolerance of freshwater ostracods in terms of the environmental and ecological variables combined with a high resilience to extreme environments, such could be considered the high mountain lakes.

References

Colizza, E., Fanzutti, G.P. & Pugliese, N., 1987. The diffusion of ostracode fauna in Lake Ragogna (Friuli, Italy). *Biogeography*, 13, 529-537.

Colizza, E., Fanzutti, G.P., Melis, R., Polano, S., Pugliese, N., 1990. Primi risultati sui sedimenti e sulle ostracofaune del lago di Cavazzo o dei Tre Comuni (Udine). Atti tavola rotonda "Ecologia e Paleontologia", *Quaderno del Museo Geologico e Paleontologico di Monfalcone*, 53-77.

Pieri, V., Martens, K., Stoch, F., Rossetti G., 2009. Distribution and ecology of non-marine ostracods (Crustacea, Ostracoda) from Friuli Venezia Giulia (NE Italy). *J. Limnol.* 68, 1-15.

Stoch, F., 2003. Indagini ecologiche e faunistiche sulla meiofauna (Acari e Crostacei) di alcune sorgenti del Parco Naturale delle Prealpi Giulie (Italia nord-orientale). *Gortania, Atti Mus. Friul. St. Nat.*, Udine, 25, 239-250.

Stoch, F., 2004. Prime osservazioni sulla fauna delle acque carsiche sotterranee delle Alpi Carniche. *Mem. Ist. It. Spel.*, s. II, 15, 87-95.