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The Trichoptera fauna of the Oja River (La Rioja, Spain)

MARÍA VALLADOLID[1]*, JUAN JOSÉ MARTÍNEZ-BASTIDA[2,3] & MERCEDES ARAUZO[2,4]

[1]Department of Biodiversity and Evolutionary Biology, National Museum of Natural History (CSIC), c/ José Gutiérrez Abascal, 2. 28006 Madrid, Spain
E-mail: marval@mncn.csic.es
[2]Department of Environmental Contamination, Institute for Agricultural Sciences (ICA), Center for Environmental Sciences (CSIC), c/ Serrano 115 dpdo., 28006 Madrid, Spain
E-mail: [3]Martinez.Bastida@ccma.csic.es,[4] mercedes@ccma.csic.es
(*) corresponding author

Abstract

The Oja River (La Rioja, Spain), belonging to the Ebro River Basin (NE Spain), encloses 3 different fluvial types (*Mediterranean siliceous mountain*, *Mediterranean calcareous mountain* and *Humid calcareous mountain* rivers) that give rise to a great diversity in the fauna of aquatic macroinvertebrates.

During the years 2003−2009 benthic macroinvertebrates (aquatic stages and adults) were sampled in 7 sites along the river (3 in siliceous stretches, 1 in humid calcareous stretch and 3 in calcareous stretches) in different seasons.

We have found 54 Trichoptera taxa, belonging to 31 genera and 16 families. Hydropsychidae (10 species), Limnephilidae (7 species) and Rhyacophilidae (7 species) were the dominant families. Most of the species have wide European distribution (50%), with the Iberian endemic species (22%) and Central and Western European species (18%) being the 2nd and 3rd groups in importance.

The presence of some relict species in headwaters [*Thremma gallicum* McLachlan, *Larcasia partita* Navas and *Odontocerum albicorne* (Scopoli)] support the inclusion of this geographical area (Sierra de la Demanda, Iberian System Mountains) in the list of European pre-Pleistocene refuges for the Trichoptera fauna.

Key words: benthic macroinvertebrates, caddisfly, endemic species, relict species

Introduction

The aquatic entomofauna of La Rioja (Spain) was studied for the first time in the early 20th century by Navás (1914; 1917a, b), mainly in the mountainous areas of Ortigosa, Valvanera and Sierra de Cameros (Iregua and Najerilla Rivers). García de Jalon (1982a, b, c) in his papers about Spanish Trichoptera provides information about Trichoptera from Iregua and Nájera Rivers. On the other hand, there is scarce information of the aquatic fauna of Oja River: one paper about Coleoptera of the Iberian System that includes Oja River (Valladares *et al*. 2000), and 3 recent papers with preliminary results on aquatic macroinvertebrates (Martínez-Bastida *et al*. 2006; Valladolid *et al.* 2006, 2007).

Knowledge of Spanish Trichoptera has increased in recent years, not only with the description of larvae or new species (Vieira-Lanero 2000) and with the preparation of specific keys (Zamora-Muñoz *et al*. 1992, 1995; Vieira-Lanero 2000; Ruiz *et al*. 2004) but also with the publication of faunistic data (González *et al*. 1992, Ruiz *et al*. 2001, González 2003, Bonada *et al*. 2004). We want

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