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Impacts of hydroelectric power stations on Trichoptera assemblages in four rivers in NW Spain.

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Abstract

In this work, we studied Trichoptera assemblages in different rivers in NW Spain affected by hydroelectric power stations, and assessed the influence of environmental variables on the distribution of species. Twenty sites in four rivers were sampled during eight sampling campaigns (2001-2002). The fauna was collected with a quantitative Surber sampler. In addition, several physical, chemical and habitat variables were measured at each site. A distance-based redundancy analysis (dbRDA) was done to investigate the relationship between the assemblages and the environmental variables. Assemblage composition was analyzed by non-metric Multi-Dimensional Scaling (NMDS) and differences between groups were tested using the analysis of similarity (ANOSIM) considering two grouping variables, the river basin and the position of the