



## Diversity, distribution, ecology and biogeography of caddisflies (Insecta: Trichoptera) in the Krka River (National Park “Krka”, Croatia)

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### Abstract

The caddisflies fauna is poorly known in the karstic area which covers about 50% of the entire territory of the Republic of Croatia. The Krka River is a karstic Mediterranean river with specific travertine barriers and 2 lakes. The spring of the Krka River is located 45 kilometres from the coast. The river flows into the Adriatic Sea near the city of Šibenik. In 1998 and 1999, systematic collecting of Trichoptera was performed in that area, and in 2000, 2005, 2007 and 2009 caddisflies were collected periodically. Sampling was performed at 9 locations representing different types of habitats: springs, travertine barriers, upper, middle and lower parts of the Krka River and lakes. During 16 on-site visits, 4792 adults were collected, belonging to 50 species. Diversity, distribution, ecology and biogeography of this material were analyzed.

**Key words:** fauna, aquatic insects, Mediterranean river

### Introduction

The Republic of Croatia is located in Southeast Europe. Its territory covers ca. 56 000 km<sup>2</sup> of land and 32 000 km<sup>2</sup> of the Adriatic Sea. Three zones can be distinguished based on climate and geomorphology: the continental region between the Sava River and the Drava River with continental climate (hot summers and frosty winters), the central highlands region with typical mountain climate (short summers and long winters with plenty of snow), and the Mediterranean region with Mediterranean climate (warm and long summers and mild, rainy winters). Geomorphologically, a significant part of Croatia is karstic (with calciferous substratum), which covers the central highlands and the Mediterranean parts of Croatia. Ecological, geomorphological and climate features of that area have dominant influence on the hydrological characteristics of rivers and water bodies that occur there. Generally, 2 river basins can be distinguished: the Black Sea basin and the Adriatic basin. Rivers in the Mediterranean region belong to the Adriatic basin (Rogić 1994).