



Description of three new caddisfly species from Mayotte Island, Comoros Archipelago (Insecta: Trichoptera)

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Abstract

We report five new species records from the Comoros Archipelago. Two of the species are known from outside the Archipelago, *Hydroptila cruciata* Ulmer (Hydroptilidae) and *Anisocentropus voeltzkowi* Ulmer (Calamoceratidae), and three species are described as new to science: *Pisulia stoltzei*, new species (Pisuliidae), and: *Chimarra mayottensis*, new species and *Chimarra koulaeensis*, new species (Philopotamidae). Five species have been previously recorded from the Comoros Islands: *Cheumatopsyche comorina* (Navás), *Macrostemum capense* (Walker), *Cheumatopsyche vala* Malicky (Hydropsychidae), *Hydroptila voticia* Malicky (Hydroptilidae), and *Oecetis atpomarus* Malicky (Leptoceridae). With this report the number of species from the Comoros is doubled. These findings also represent the first records of Trichoptera from Mayotte.

Key words: Pisuliidae, *Pisulia*, Philopotamidae, *Chimarra*, taxonomy, new species

Introduction

The Comoros Archipelago is composed principally of four islands in the northern Mozambique Channel. The westernmost of the four larger archipelago islands, Grande Comore, is located 300 km east of the northern coast of Mozambique. Mayotte Island is the easternmost of the four larger islands, situated approximately 300 km west of the northwestern coast of Madagascar. The youngest of the islands are western Grande Comore and Mohéli (formed about 0.5 million year ago), and the oldest are Anjouan (11.5 million years old) and Mayotte (10-15 million years old) (Warren *et al.* 2003). Mayotte Island is nearly 4 km long and covers an area of slightly less than 42 km². Due to the volcanic origin the Comoros Archipelago, the islands have a fauna and flora that is primarily the result of dispersal from the mainland sources of Madagascar and the African continent (Rocha *et al.* 2005).

The Trichoptera fauna of the Comoros Islands is poorly known, with only five species previously recorded. *Cheumatopsyche comorina* (Navás, 1931) (Hydropsychidae) was the first species described from the islands, and is apparently endemic to Mohéli Island and Anjouan, and the only species recorded from Mohéli Island. Scott (1983) listed *Macrostemum capense* (Walker, 1852) from the Comoros without indicating from which island it was collected. Malicky (1992) described three more species from the archipelago: *Hydroptila voticia* Malicky, 1992 (Hydroptilidae); *Cheumatopsyche vala* Malicky, 1992 (Hydropsychidae); and *Oecetis atpomarus* Malicky, 1992 (Leptoceridae), all from Anjouan Island. No species were previously recorded from Grande Comore or Mayotte Island.

The new species described belong to the families Pisuliidae and Philopotamidae. The Pisuliidae are presently divided into the 2 genera *Silvatares* Navas, 1931 (formerly *Dyschimus* Barnard, 1934), with 10 species, and *Pisulia* Marlier, 1943, with 6 previously described species. The family is restricted to the