



Two new species of Psychodidae (subfamilies Trichomyiinae and Psychodinae) from Germany associated with decaying wood

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Abstract

Two new species of Psychodidae, *Trichomyia stephani* **nov. spec.** (subfamily Trichomyiinae) and *Telmatoscopus thuringicus* **nov. spec.** (subfamily Psychodinae) collected in Germany are described and figured. The larvae, like those of their close relatives are most probably bound to decaying wood. Cutting down in particular old trees finally axes habitats of many endangered red data list species.

Key words: Diptera, Psychodidae, Trichomyiinae, Psychodinae, new species, Germany

Introduction

Within the Psychodidae *sensu lato* all species of one subfamily that should be ranked as separate family, the Trichomyiinae, seem to be bound exclusively to wood. The few larvae discovered were all taken from decaying wood of dead or moribund trees or from tree holes filled partly with rain water and the bottom covered with fine brownish remnants of dead wood. In Europe, in the last two decades specimens were only discovered in protected areas with old tree populations (Withers 2004) and particular methods of forest management. The discovery of a new species of this family was thus surprising, but it was not surprising at all that it was found in a nature conservancy area with coppice management and in the English Garden in Munich with “enclaves” of very old trees. The discovery of the second species was also surprising, but again it was discovered in the National Park ‘Hainich’, a National Park in Thuringia with stands of old trees. Although only adults were collected it is most probable that the larvae of both species live in the habitats mentioned above.

With the so-called ‘imperative of modern forest management’ in times of global change the amount of ‘old’ trees in forests decreases worldwide. However, because a large amount of species, not only insects but even vertebrates are in need of ‘naturally developing’ forests, modern forest management endangers biodiversity on earth. Forests, in particular old-growth forests, have an urgent need for protection, as do single remaining trees. We were lucky to collect in such areas in Germany and to find two new species for science of these rare and remarkable species.