



<http://dx.doi.org/10.11646/zootaxa.3694.6.5>

<http://zoobank.org/urn:lsid:zoobank.org:pub:0BB86DF5-4D5A-4026-9BB1-CA7B8C4C4998>

The larva of *Psilopteryx psorosa* (Kolenati 1860) (Trichoptera: Limnephilidae) with notes on ecology and zoogeography

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Abstract

The paper gives a description of the hitherto unknown larva of *Psilopteryx psorosa* (Kolenati 1860), subspecies *bohemosaxonica* Mey & Botosaneanu 1985 (Trichoptera: Limnephilidae: Limnephilini, Chaetopterygina; Vshivkova et al. 2007). Information on the morphology of the larva is given and the most important diagnostic features are illustrated. In the context of already available keys, the larva of *P. psorosa bohemosaxonica* keys together with *Pseudopsilopteryx zimmeri* (McLachlan 1876), *Chaetopteryx fusca* Brauer 1857 and *C. villosa* (Fabricius 1798). *Psilopteryx psorosa* is not yet separable from *P. zimmeri* but may be easily separated from the two *Chaetopteryx* species by the median fusion of setal groups *sa*1 at the first abdominal sternum in *P. psorosa* which is lacking in *C. fusca* and *C. villosa*. With respect to distribution, *P. psorosa bohemosaxonica* is present in the Bohemian Forest and the Erzgebirge (Upper Austria, Czech Republic, and Germany). In addition, ecological characteristics are briefly discussed.

Key words: 5th instar larva, description, identification, distribution

Introduction

In his “Atlas of European Trichoptera”, Malicky (2004, 2005) listed 7 species of *Psilopteryx* Stein 1874: *Psilopteryx albanica* Pongrácz 1923 [Albania; according to Malicky (2005), this taxon is uncertain], *P. bosniaca* Marinkovic-Gospodnetic 1971 (Bosnia and Herzegovina), *P. curvicalvata* Botosaneanu 1957 (Romania), *P. montana* Kumanski 1968 (Greece, Romania, and Serbia), *P. psorosa* (Kolenati 1860) (Austria, Czech Republic, Germany, Poland, Slovakia, and Romania), *P. schmidi* Kumanski 1970 (Bulgaria) and *P. turcicus* Çakin 1983 with subspecies *aladagensis* (Turkey). In addition, *P. psorosa* (originally described as *Chaetopteryx psorosa*) was divided into six subspecies (Mey & Botosaneanu 1985) whose separating characters were however considered doubtful by Szczesny (1987). The genus *Psilopteryx* was included in the Limnephilini subtribe Chaetopterygina by Vshivkova et al. (2007).

We are aware of no publications dealing with larval descriptions of genus *Psilopteryx*. Several years ago co-author Hans Malicky made laboratory rearings of eggs of *P. psorosa bohemosaxonica* Mey & Botosaneanu 1985 obtained from females collected in October 1983 in Upper Austria. This material enabled us to resolve reliable diagnostic characters permitting integration of this taxon in the key of Waringer & Graf (2011).

Material and methods

Adults were collected along the Gegenbach, a brook at the border between Austria and Bavaria, near Schwarzenberg am Böhmerwald, Mühlviertel, Upper Austria (48° 45' N, 13° 49' E, 900 m a.s.l.). In the laboratory, females which had already copulated in the field were individually transferred to small plastic boxes lined with wet moss for oviposition. After oviposition, adults were preserved in glass vials containing ethanol (70%) and