

Brachyarthrum limitatum fieber (hemiptera: heteroptera: miridae) new to southern Europe

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Brachyarthrum limitatum Fieber (Hemiptera: Heteroptera: Miridae) new to Southern Europe

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Abstract: *Brachyarthrum limitatum* Fieber 1858 was so far only recorded from Central and Northern Europe. Its presence in Southern Europe is herein documented based on a series of specimens housed in the collection of the Museo cantonale di storia naturale di Lugano. (Switzerland). The studied specimens were collected on the Monte Bré, a locality close to the Italian border, which let assume that *B. limitatum* is probably as well present in neighboring regions.

Key words: Insecta, Heteroptera, Miridae, Switzerland, Cantone Ticino

***Brachyarthrum limitatum* Fieber (Hemiptera:Heteroptera:Miridae) in Canton Ticino, Svizzera, nuovo nell'Europa meridionale**

Riassunto: La specie era stata sin'ora trovata nel Centro e Nord Europa. La sua presenza nel Sud Europa è stata appurata dall'esame di una serie di esemplari conservati nella collezione del Museo cantonale di storia naturale di Lugano. Gli esemplari studiati furono raccolti in località Monte Bré che è molto vicina al confine italiano: pertanto è assai probabile una presenza anche nelle regioni del circondario.

Parole chiave: Insecta, Heteroptera, Miridae, Svizzera, Cantone Ticino

INTRODUCTION

The Heteroptera collection of the Museo cantonale di storia naturale di Lugano (MCSN) represents the fauna of true-bugs in the Cantone Ticino. The collection was built by different studies during the last 30 years by Joachim Otto, Rezbanyai Reser and Isabella Giacalone-Forini. Among the undetermined material, the mirid species *Brachyarthrum limitatum* Fieber 1858 could be reported for the first time for the Southern part of the Alps: it was, so far, only known from Central and Northern Europe.

MATERIALS

CANTONE TICINO – “Lugano, MonteBrè-Ost, 835 m” (as in the original label), 21-30.6.1984, 4 spec. light-trap, leg. Rezbanyai Reser (MCSN).

Diagnosis

Brachyarthrum is a monospecific genus (Aukema & Rieger 1999). It can be distinguished by males and females having thin and pale pubescence on dorsal surface (Fig. 1); the throat is short and oblique; eyes wide, tylus prominent; general coloration of legs pale; posterior tarsi with third segment longer as second segment; tibial thorns brown; rostrum exceeds the intermediate coxae.



Figure 1: *Brachyarthrum limitatum* (foto P. Dioli)

Fieber (1858) in the original description says: "Ockergelblich, weisslich behaart. Leib, Kopf und Fühler schwarz. Nacken und Fühlerglied 4 rostroth. Schnabel gelb. Hüften weisslich. Schildgrund braun. Cuneus orange rötlich. Membran blassrauchbraun. Zellrippe bräunlich, die Binderippe und eine Winkelinie an derselben weiss. Corium ockergelblich. Schienbeine schwachbedornt. Klauenglied schwarz".

Redescription based on the studied material as followed:

Male: Dorsal coloration brown or blackish brown; ventral surface black.; head and antennae black; anterior part of pronotum yellowish; basal part of the cuneus yellowish or yellowish red; legs yellow or yellowish red; tibia with brown thorns; general body shape elongated; head 0.67 times as wide as width of pronotum; vertex almost as wide as eye; second antennal 1.5 times longer than width of pronotum and longer than third and fourth segments together. Length: 4.4 to 4.8 mm.

Female: Dorsal coloration yellowish or reddish brown; ventral surface black; head blackish, often pale colored medially; antennae and legs as in male; pronotum, and hemelytres monochrome; membrane brown greyish, veins yellowish grey; general body shape. oblong-oval; vertex slightly wider than eye; second antennal segment slightly longer than width of pronotum, and shorter than third and fourth together. Length: 4.3 to 4.8 mm.

General Distribution: The species was described from Bohemia (Fieber, 1858). According to Aukema and Rieger (1999) (Fig.2) it is documented from Austria, Byelorussia, Czech Republic, Denmark, Finland, France, Great Britain, Germany, Luxembourg, Moldavia, The Netherlands, Norway, Poland, Russia (North European Territory), Slovenia, Sweden, Switzerland (Northern parts), Ukraine. In Asia: Mongolia, O-Russia and West Siberia.

Its occurrence is very sparse (Wagner & Weber, 1964).

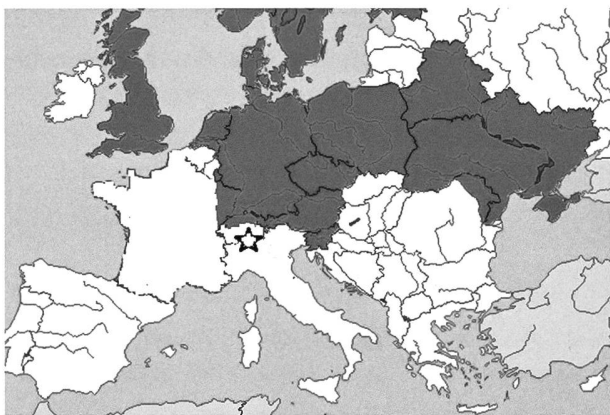


Figure 2: General distribution in Europe ("grey") and the new record ("star") in the Southern part of the Alps.

BIOLOGY AND ECOLOGY

Brachyarthrum limitatum lives on Salicaceae as *Populus tremula* Linnaeus (Göllner-Scheiding, 1972, Kerzhner, 1978) and *Populus laurifolia* Ledebour (Kerzhner, 1978). The adults in Great Britain were found in June and July, eggs hibernate, larvae, which hatch out in May or early June, are in the last instar grey with a distinct greenish tinge. (Southwood & Leston, 1959).

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