



Maro sublestus Falconer, 1915 (Araneae, Linyphiidae) – a species new to the fauna of Poland

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Abstract: A rare spider species, *Maro sublestus* Falconer, 1915 (Linyphiidae) is reported from Poland for the first time. It was found in the Karkonosze National Park, in a wet habitat. Some taxonomic comments are included in the paper.

Key words: *Maro sublestus*, new record, taxonomy, Poland

INTRODUCTION

The taxonomic position of the genus *Maro* has not been established for a long time. Saaristo (1971) in a review paper on the genus *Maro* concluded that this genus is closely related to the genera *Agyneta*, *Microneta* and *Centromerus* in conformity with the opinions expressed by Parker & Duffey (1963). Moreover, the genera *Maro* and *Oreonetides* are regarded as relicts of mixed Arcto-Tertiary forests (Eskov 1991).

At present 12 species of the genus *Maro* are known. Their occurrence is limited to the northern hemisphere. The majority of species (10) occur in Europe and Asia, while *Maro amplus* Dondale et Buckle, 2001 and *Maro nearcticus* Dondale et Buckle, 2001 occur in the New World, in the USA and Canada. The species known from Europe include: *Maro lehtineni* Saaristo, 1971, *Maro lepidus* Casemir, 1961, *Maro minutus* O.P.- Cambridge, 1906 and *Maro sublestus* Falconer, 1915. The European species are characterised by small size (1–1.5 mm), although *M. lepidus* can reach up to 1.8 mm (Heimer & Nentwig 1991). They are usually of pale colour and do not show pronounced sexual dimorphism (Saaristo 1971).

The *Maro* species most commonly met in Central Europe is *M. minutus*, which, because of its small size often was misidentified with other species of the same genus (Saaristo 1971). Hitherto, only *M. minutus* has been known from Poland, reported from mountainous areas in the south-western part of the country (Woźny et al. 1988). Recently, it was also reported from Roztocze, Masurian Lakeland (Staręga 1988, 1996) and in the Polesie and Biebrza National Parks (Stańska et al. 2002, Kupryjanowicz 2003).

DISTRIBUTION AND ECOLOGY

M. sublestus is a rare European species reported from single localities mainly in Northern and Central Europe, although in Finland and Great Britain it has been found in rather great numbers (Saaristo 1971, Harvey et al. 2002). It is known also from Belgium, Czech Rep., Estonia, Ireland, Germany, Norway, Switzerland and Russia (Ural) (several authors).

According to Eskov (1991), many species of the genus *Maro* belong to the boreo-mountainous spiders. Most probably *M. sublestus* is a species of a similar type of occurrence, as indicated by the high number of its localities in the North of Europe and preference of cold and wet habitats. In Great Britain it has been recorded from wet litter of

birch and willow also on wet heath and in fens on peat (Harvey et al. 2002). It has often been found among mosses: *Hylocomium*, *Pleurozium* and *Sphagnum* in marsh areas and wet meadows, also in small *Sphagnum* patches in spruce forests (Saaristo 1971). Other authors (Vilbaste 1964, Miller 1966, Moritz 1973, Helsdingen 1996, Ratschker 1998) found this species in wet litter with moss in highly shaded forests and in marshes. Many of its localities in Central Europe are in mountains, also in subalpine zone (Moritz 1973, Ratschker 1998, Kůrka & Vaněk 2001, Buchar & Růžička 2002, Blick 1996, 2004). Adult individuals are met in summer and autumn (Heimer & Nentwig 1991).

TAXONOMIC REMARKS

M. minutus and *M. sublestus* are very similar spiders of a small body size, pale colour and are found in similar habitats. Genital structures of the female are small (epigyne length – approx. 130 μm), with complex copulatory ducts. Characters helpful in identification of the female are: ratio length/width of epigynal plate, distance between spermathecae, shape of epigynal plate in lateral view, shape of black/dark pattern of the ocular area and size of AME (anterior median eyes). Drawings of the female genital structure of *M. sublestus* are given in Figs 1–4.

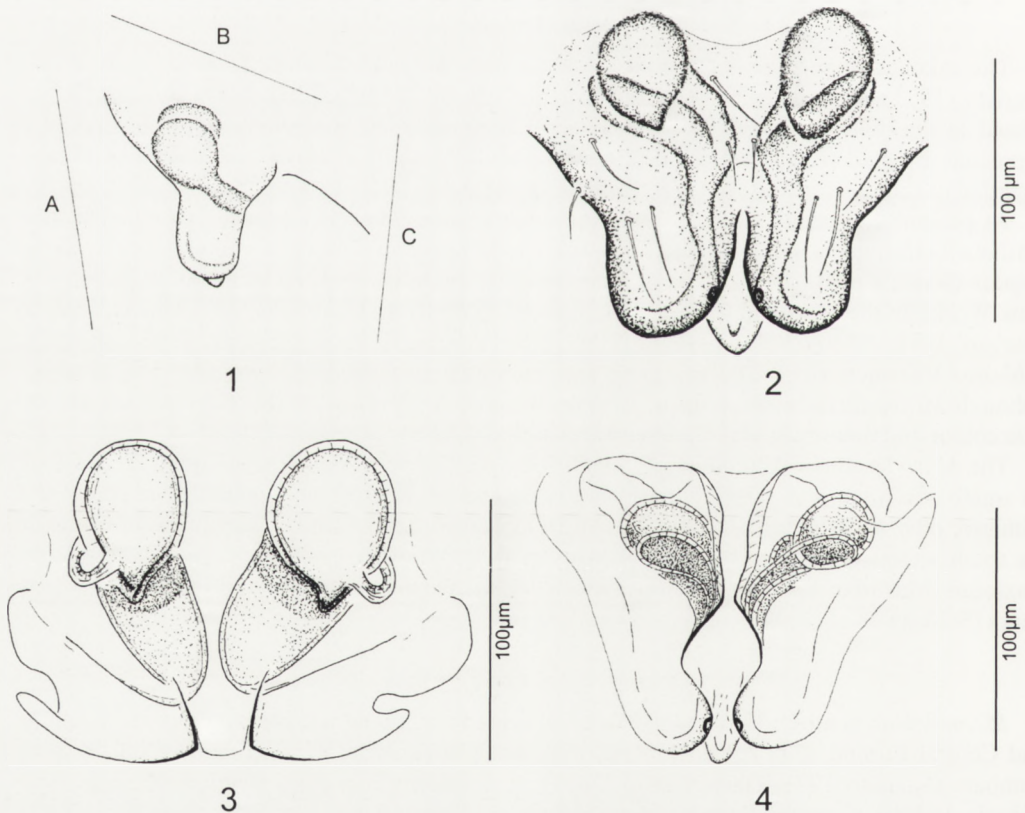


Fig. 1–4. *Maro sublestus* Falconer, 1915, female; 1 – epigyne, view from the left side with the position of drawing planes, 2 – ventral view of epigyne (A), 3 – ventral view of vulval structure (B), 4 – dorsal view of vulval structure (C).

MARO SUBLESTUS IN POLAND

Female of *M. sublestus* was found during the study on the effect of artificial snowing of the skiing route “Śnieżynka” on the natural environment of the Karkonosze National Park in 2000–2002. The sample containing the specimen was collected on August 7, 2001, on “Śnieżynka” route (Szrenica Massif, near Szrenica Rock) (50°47.938'N, 15°30.342'E; UTM WS32) at an altitude of 1169 m a.s.l. The locality was at the ecotone of spruce forest (*Piceetum hercynicum filicetosum*) and non-forest secondary communities with dominant *Vaccinietum myrtylli*, less abundant fern macroforbs (*Athyrietum alpestris*), communities with *Deschampsia flexuosa* and *D. caespitosa* and grasses from the association *Calamagrostion* (Dunajski 2000). The female of *M. sublestus* was collected from wet moss (*Sphagnum*), growing on a very wet area. It was accompanied by representatives of the other spider species: *Ceratinella brevipes* (Westring, 1851) and *Erigone atra* Blackwall, 1833 (Linyphiidae), *Cheiracanthium erraticum* (Walckenaer, 1802) (Clubionidae), *Pardosa riparia* (C. L. Koch, 1833) (Lycosidae), *Robertus scoticus* Jackson, 1914 (Theridiidae).

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STRESZCZENIE

[*Maro sublestus* Falconer, 1915 (Linyphiidae) – nowy dla fauny Polski gatunek pająka]

Maro sublestus został wykazany z mchach *Sphagnum* rosnących na podmokłym podłożu na wysokości 1169 m n.p.m. Stanowisko znajdowało się na skraju boru świerkowego regla górnego zespołu paprociowego (*Piceetum hercynicum filicetosum*) oraz nieleśnych zbiorowisk zastępczych z dominującym borówczyskiem czernicowym (*Vaccinietum myrtylli*) w Karkonoskim Parku Narodowym. Ponadto w artykule zawarto drobne uwagi taksonomiczne.

Accepted: 28 October 2004