

NEW DATA AND REMARKS ON THE OCCURRENCE
OF *MICROMUS LANOSUS* (ZELENÝ, 1962) (NEUROPTERA: HEMEROBIIDAE)
IN POLAND

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ABSTRACT: New chorological and ecological data on *Micromus lanosus* from Poland are presented against the background of previous knowledge of the occurrence of this rare species. Distribution map of *M. lanosus* in Poland and general view of collected female and male specimens are given.

KEY WORDS: Neuroptera, Hemerobiidae, *Micromus lanosus*, new data, Poland.

Micromus lanosus is one among the four Polish and Central European species belonging to the genus – *Micromus* RAMBUR, 1842 (Czechowska and Dobosz 1990, Aspöck et al. 2001) and one of the rarest and least numerously captured lacewing in Poland. It has been recorded at five localities and only five specimens were collected so far.

During research on the neuropteran fauna in the Opawskie Mountains and Góra Świętej Anny (Mount St. Ann) Landscape Parks in the Opole Province two specimens of *M. lanosus* were found. The captured material is deposited in the collection of Department of Biosystematics at the Opole University.

Eastern Sudetes Mts¹: Opawskie Mts, Pokrzywna [XR77], Olszak Mt., alt. 370 m, 12.07.2008, 1♀ (Fig. 1a), from *Corylus avellana* L., in maple-linden slope forest (*Aceri-Tilietum*), leg. T. Blaik. New to the fauna of the region.

Upper Silesia: Góra Świętej Anny [BA99], the nature reserve of the same name, alt. 330 m, 22.08.2008, 1♂ (Fig. 1b), at light, leg. T. Blaik.

M. lanosus has been relatively recently described for a European hemerobiid (Zelený 1962). The range of the species in Europe extends from the Pyrenees into the western coast of the Black Sea, except for the Mediterranean Sea Region, and contains the Alpine and Carpathian distribution centers (Aspöck et al. 1980). The total range is still not sufficiently known, all the more so as the species could be incorrectly determined as

¹ Regional division according to *Catalogus faunae Poloniae*, published by the MiIZ, PAS in Warsaw.

a very similar *M. paganus* (Linnaeus, 1767). In the last twenty years new records from Montenegro (Saure 1989), Ukraine (Zakharenko 1991), Turkey (Ari and Kiyak 2003) and Poland have been published.

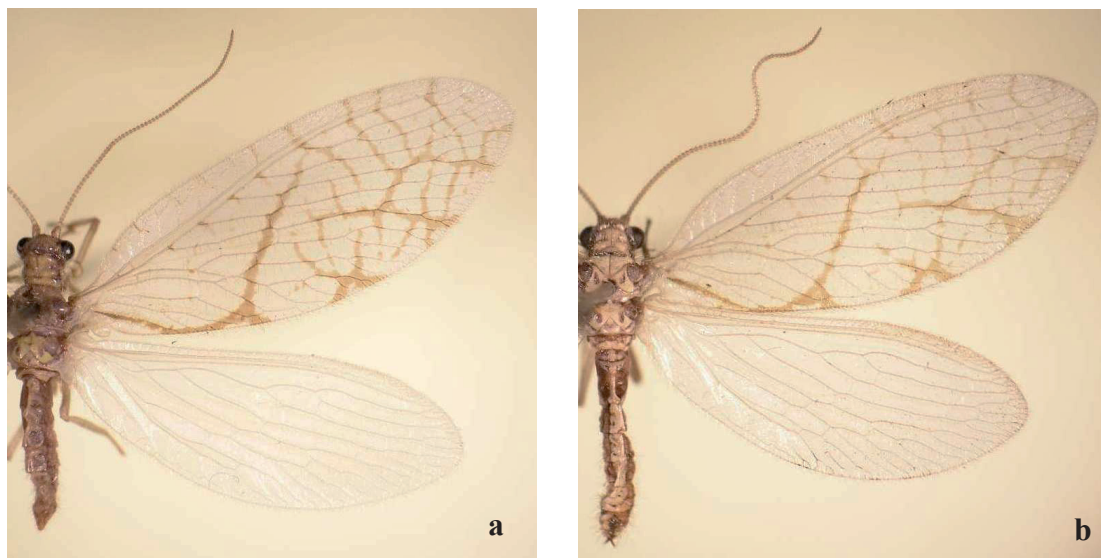


Fig. 1. *Micromus lanosus* (ZELENÝ, 1962): a - female, 12.07.2008, Pokrzywna; b - male, 22.08.2008, Góra Świętej Anny.

The species was added to the Polish fauna by Dobosz (1988) on the ground of museum specimen of male collected July 14, 1950 in Czorsztyn [DV57], in the Pieniny Mts. Later examination of local Neuroptera collections distinctly pre-date that record; the oldest specimen of male from Wola Justowska [DA24] (nowadays a part of Kraków) has been found in the collection of Antoni Waga, dating back to the middle of the 19th century (Dobosz 1991). The three last sites, where *M. lanosus* was noted after 1990 are as follows: the nature reserve “Segiet” [CA48] in Bytom (Dobosz and Maciąg 1996), Jagniątków [WS52] in the Karkonosze National Park (Dobosz 1998) and the nature reserve “Wysokie Bagno” [FD94] near Białowieża in the Białowieża Primeval Forest (Dobosz 2001) (Fig. 2).

Ecological data from Poland are scarce. Except a terse information from the Karkonosze Mts, where one female of *M. lanosus* was collected at light trap in lower subalpine forest, between September 16, 1991 and September 28, 1991 (Dobosz 1998), the only one note, concerning to more detailed habitat connections, has been given. In the “Segiet” reserve one male of the species was captured July 19, 1993 in ecotonal zone, during sweeping of *Rubus* sp. and lower branches of *Acer* sp., at well exposed to the sun edge of sparse beech wood (Dobosz and Maciąg 1996).

The new place of capture in the Opawskie Mts was situated at foot of the south-facing slope, fairly steep descending to the stream. The specimen was swept at edge of forest from branches of hazel, on shaded, north side of the shrub. The forest stand consisted of a mosaic of *Acer* spp., *Tilia* spp., *Carpinus betulus* L. and *Fagus sylvatica* L. Structurally similar habitat in the “Góra Świętej Anny” reserve comprises worked-out limestone quarry overgrown with maple and linden coppice and xeric grass with *Crataegus* sp. New observations confirm general pattern of ecological preferences of *M. lanosus*, inhabiting edges and shrub level of deciduous forests, growing on warm, not dry habitats (Aspöck et al. 1980; Vas et al. 2001). Not numerous records from Poland indicate

a connection of the species with maple-linden- and beech-stands, what corresponds to literature data (e.g. Tröger 2007; Zelený 1962, 2008). Its occurrence on *Quercus* spp. has not been reported so far (e.g. Zakharenko 1991; Vas et al. 2001; Ari and Kiyak 2003).

M. lanosus was noted in Poland from the middle of July to the second half of September. Three specimens of the five, for which collecting dates are known, have been collected between July 12 and July 19. Peak of imago activity and comparatively high frequency in July and early August are regular features of its seasonal phenology, but September records are exceptionally rare (second generation?) (Aspöck et al. 1980; Tröger 2007).



Fig. 2. Distribution of *Micromus lanosus* (Zelený, 1962) in Poland. New localities (triangles), localities from literature (spots).

The European range of *M. lanosus* and the first outline of its distribution in Poland, show the species supposedly reaches the northern limit of its range in the country. The majority of localities in Poland is situated in upland and mountain areas, south to 51° North latitude.

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