

## ***Hypocephalus dahl* is a junior synonym of *Microneta pusilla* (Araneae, Linyphiidae)**

**Holger Frick & Wojciech Starega**

**Abstract:** Comparison of the detailed species-specific original drawings of *Microneta pusilla* Menge, 1869 with the holotype of *Hypocephalus dahl* (Lessert, 1909) and the record of one female close to the type locality of *Microneta pusilla* in Gdańsk, Poland indicate that *Hypocephalus dahl* is a **junior synonym** of *Microneta pusilla*. *Hypocephalus pusillus* (Menge, 1869) is therefore proposed as the valid name for this species. Here we discuss the taxonomic status of both species and present a distribution map that accounts for records in Poland.

**Key words:** Central Europe, Poland, spiders, taxonomy

The status of the nominal taxa *Microneta pusilla* Menge, 1869 and *Hypocephalus dahl* (Lessert, 1909) have long been obscure. Both names were used before and after WUNDERLICH (1972) synonymised these species and also after MILLIDGE (1978) declared *M. pusilla* a *nomen dubium*. FRICK (2007) summarised all available data about the two nominal species. However, soon after this publication, the second author of the present article discovered a new record of one female close to the type locality of *M. pusilla*, which again raised questions about the nomenclatural status of *H. dahl* and *M. pusilla*.

### **Results and Discussion**

#### **Systematics**

The recent record of one female close to the type locality of *M. pusilla* indicates that *H. dahl* is indeed a junior synonym of *M. pusilla*. A closer look at the original drawings of MENGE (1869) revealed that they are detailed enough to recognise this species. They show the tip of the embolus, which clearly differentiates it from other *Hypocephalus* species. Comparison of these figures with the holotype of *Hypocephalus dahl* (Lessert, 1909) showed that they are conspecific (see FRICK 2007 for disposition of types). Consequently, we suggest resurrecting *M. pusilla* and accordingly consider *Hypocephalus*

*pusillus* (Menge, 1869) to be the valid name for this species.

However, the following arguments should briefly be discussed: First, no type material of *M. pusilla* is available. We tried to find the material on which Menge based his descriptions of *M. pusilla* without success. Some of his material was given to other collections before World War II. Checking the collections of the Natural History Museum of Stockholm (SE) and the Museum of Comparative Zoology in Cambridge (USA) – which are known to harbour such material – revealed no specimens of this species. If the remaining material was still in Gdańsk at that time, it disappeared towards the end of World War II (Kraus in litt.). Absence of types is very common in zoological nomenclature and in our opinion it is not reason enough *per se* to declare a name a *nomen dubium* if detailed figures with distinct characters are available. This condition is met in the present case. Therefore, MILLIDGE'S (1978) declaration of *M. pusillus* as *nomen dubium* solely because of the absence of a name-bearing type is not followed here.

The designation of a neotype for *M. pusillus* could therefore be suggested. The International Code of Zoological Nomenclature proposes the following conditions, under which a neotype should be designated (article 75.1): “no name-bearing type specimen is believed to be extant” and “that a name-bearing type is necessary to define the nominal taxon objectively” (INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE 1999). While the first condition is most probably met, the second is not due to the presence of detailed species-

Holger FRICK, Natural History Museum Bern, Bernastrasse 15, CH-3005 Bern & University of Bern, Zoological Institute, Baltzerstrasse 6, CH-3012 Bern. E-Mail: holger.frick@gmx.li

Prof. Dr. Wojciech STAREGA, University of Podlasie, Institute of Biology, Prusa 12, PL-08-110 Siedlce. E-Mail: wojstar@op.pl

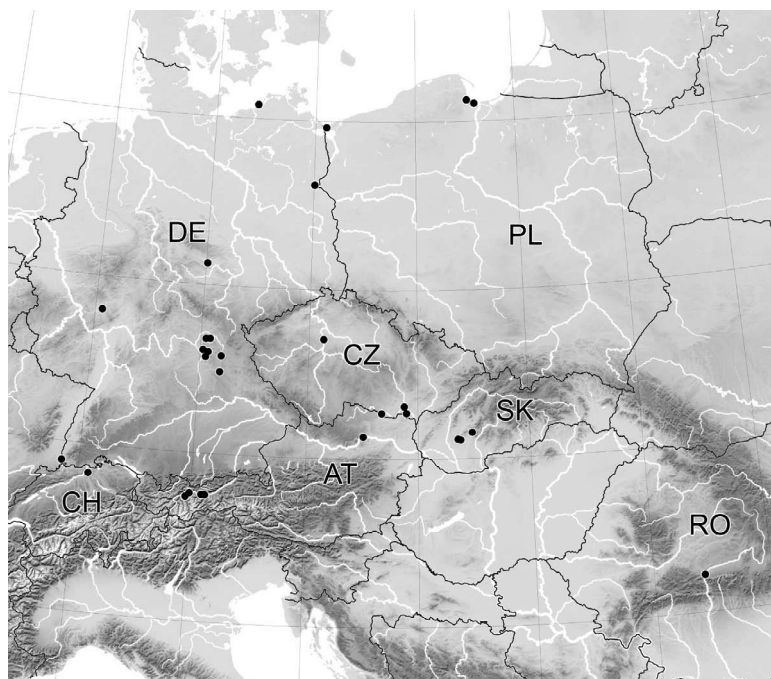


Fig. 1: Distribution map of *Hypocephalus pusillus* (Menge, 1869).

specific figures based on the original type series. Additionally, designating a female neotype for a species with distinct male copulatory organs but minor differences in the female copulatory organs seems suboptimal.

Second, one might argue that the junior synonym (*H. dabli*) has been used by many more scientists than the senior synonym *M. pusilla* (see FRICK 2007) and should therefore be retained for the sake of nomenclatural stability. Here, we find decisive regulations in the International Code of Zoological Nomenclature (INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE 1999). Following article 23.9.1 of the code, the junior synonym has priority only if it is in prevailing usage, i.e. the following conditions are both met: the senior synonym “has not been used as a valid name after 1899” and that the junior synonym has been used “in at least 25 works, published by at least 10 authors in the immediately preceding 50 years and encompassing a span of not less than 10 years”. While the second condition holds the first is obviously not met, because *H. pusillus* was used by various authors until 1995 (FRICK 2007: table 1a). Consequently, the species epithet *pusillus* has priority.

### Distribution in Poland

The distribution of *H. pusillus* has been summarised in FRICK (2007) including the records in Poland, of which only the regions (voivodship) were known. Since then, new information on the records in Poland are available and are presented here including a completed distribution map (Fig. 1):

- MENGE (1869: 232), the same specimens are mentioned in PRÓSZYŃSKI & STARĘGA (1971: 143) and STARĘGA (1983: 195): Pomerania, Gdańsk, Studzienka (woodland in Gdańsk), (54°22'21"N, 18°36'22"E), leg. A. Menge; Pomerania, Gdańsk, Jaśkowa Kopa (hill in Gdańsk), (54°21'53"N, 18°34'57"E), leg. A. Menge.
- STARĘGA (1983: 195 – sub *M. pusillus*), the province (voivodship) is the only information available. The localities in former provinces Kalisz, Nowy Sącz and Wrocław were erroneously cited and refer to other species, the only new one is: West Pomerania, Szczecin province: Świnoujście, Uznam island (~53°54'N, ~14°16'E), under clusters of plants on sand dunes, 23.X.1977 (3 ♂/2 ♀), leg. B. Siemieniako (unpublished M. Sc. thesis of B. SIEMIENIAKO, Poznań University).
- Staręga (new locality): Pomerania, Gdańsk-Górki Wschodnie (54°21'43"N, 18°48'15"E), dunes on the seacoast, in dry alluvial, 10.VII.1986 (1 ♂), leg. W. Jędrzyckowski, det. W. Staręga.

### Acknowledgements

We would like to thank Prof. Otto Kraus (Hamburg, DE), Torbjörn Kronstedt (Stockholm, SE), Laura Leibensperger and Prof. Herbert Levi (both Cambridge, USA) for hints and help concerning the disposition of Menge's material. Barbara Siemieniako (Poznań, PL) is acknowledged for providing unpublished data. For helpful comments on the taxonomic status of the discussed species we are thankful to Theo Blick (Hummeltal, DE), Izabela Hajdamowicz (Siedlce, PL), Hannes Baur, Christian Kropf (both Bern, CH) and to Jason Dunlop (Berlin, DE) for correcting the English. For discussing the topic we are grateful to Prof. Peter van Helsdingen (Leiden, NL) and Prof. Otto Kraus (Hamburg, DE).

**Literature**

- FRICK H. (2007): First record of *Hypsocephalus dabli* (Lessert, 1909) in Switzerland with a review of its distribution, ecology and taxonomy (Araneae, Linyphiidae). – *Arachnologische Mitteilungen* 35: 35-44
- INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE (1999): International Code of Zoological Nomenclature. Fourth edition, The International Trust for Zoological Nomenclature, London. 306 pp.
- MENGE A. (1869): Preussische Spinnen. III. Abteilung. – *Schriften der Naturforschenden Gesellschaft in Danzig (N.F.)*, Band 2, Heft 2, Artikel 11: 219-264, Pl. 44-49
- MILLIDGE A.F. (1978): The genera *Mecopisthes* Simon and *Hypsocephalus* n.gen. and their phylogenetic relationships (Araneae: Linyphiidae). – *Bulletin of the British arachnological Society* 4: 113-123
- PRÓSZYŃSKI J. & W. STAREGA (1971): Pająki – Aranei. *Catalogus faunae Poloniae*, 33. Państwowe Wydawnictwo Naukowe, Warszawa. 382 pp.
- STAREGA W. (1983): Wykaz krytyczny pajaków (Aranei) Polski. – *Fragmenta Faunistica (Warszawa)* 27: 149-268
- WUNDERLICH J. (1972): Zur Spinnenfauna Deutschlands, XII. Neue und seltene Arten der Linyphiidae und einige Bemerkungen zur Synonymie (Arachnida: Araneae). – *Senckenbergiana biologica* 53: 291-306