

***Jacksonella falconeri* (JACKSON, 1908), a species newly recorded
in Poland (Araneae: Linyphiidae)**

JANUSZ KUPRYJANOWICZ*, ROBERT ROZWAŁKA**

* University of Białystok, Institute of Biology, Świerkowa 20B, 15-950 Białystok, Poland,
e-mail: kuprzool@uwb.edu.pl

** Department of Zoology, University of Maria Curie-Skłodowska, Akademicka 19,
20-033 Lublin, Poland, e-mail: rrozwalk@biotop.umcs.lublin.pl

ABSTRACT. Two males of *Jacksonella falconeri* (JACKSON) were collected in SE Poland. This is the first report on this species in Poland.

KEY WORDS: spiders, Araneae, habitat preferences, distribution, Poland.

INTRODUCTION

Jacksonella falconeri is one of the smallest spider species (its length reaches only 0.95-1.1mm). It is characterised by tooth-like processes anteriorly on chelicerae (Fig. 1), which is relatively easy to recognize, particularly in males. However, those very typical tooth-like processes are not always used in some of spider identification keys. For example, they are missing in "Spinnen Mitteleuropas" (HEIMER & NENTWIG 1991).

JACKSON (1908) placed this species in genus *Maro* due to the small size of spiders. On the base of different structure of the genital organs than in *Maro*, MILIDGE (1951) transferred this species to a new genus *Jacksonella*.

DISTRIBUTION AND ECOLOGY

There are two known species of *Jacksonella* genus in the world – *J. sexoculata* PAIK & YAGINUMA found in Korea and *J. falconeri* found in Europe. *J. falconeri* is a rare species with poorly described biology, so far known from a few localities in France, Germany, Austria, Switzerland and Latvia (THALER 1972, WUNDERLICH 1972, CANARD 1990, MAURER & HÄNGGI 1990, HÄNGGI et al. 1995, MIKHAILOV 1996). It is widely distributed on the British Isles and the fact that it is found only occasionally is due to its small size and inconspicuous life in soil, underneath stones and in detritus (LOCKET & MILLIDGE 1953, ROBERTS 1993). The environmental preferences of *J. falconeri* are not known well. There are reports of its occurrence in rather dry environments like xerothermic grasslands, mixed deciduous forests – mainly in oak-hornbeam woods and in soil of beech-spruce forests (HÄNGGI et al. 1995). However, they were also found in moist habitats of raised bogs and sedge swamps (HELSDINGEN 1976, KESSLER et al. 1984).

***Jacksonella falconeri* in Poland**

Two males of *Jacksonella falconeri* were collected in SE Poland (Fig. 2). The first male of *J. falconeri* was caught in Barber traps during period 1-22 May 1997 near Machnów Stary, 17km to the south-east of Tomaszów Lubelski (50°21'N, 23°37'E, UTM FA 88). The specimen of *J. falconeri* were found in plant association *Origano-Brachypodietum pinnati*, growing on poorly developed rendzinas. Flora of that plant association was formed by *Brachypodium pinnatum*, *Agropyron caninum*, *Carlina vulgaris*, *Aster amellus*, *Orchis militaris*, *Melaphyrum pratense* and *M. cristatum*, *Muscari comosum*, *Festuca ovina*, *Carex mischelli* and *C. glauca*. Occasionally, few mosses or lichens could be found. In many places the ground was deprived of any vegetation.

On this locality, together with *J. falconeri* following species were found in Barber traps: *Alopecosa solitaria* (HERMAN), *A. aculeata* (CL.), *A. accentuata* (LATR.), *Zora spinimana* (SUND.), *Pachygnatha degerii* (SUND.), *Gnaphosa lugubris* (C.L.K.), *Drassodes pubescens* (TH.), *Drassyllus pusillus* (C.L.K.), *Haplodrassus signifer* (C.L.K.), *Z. electus* (C.L.K.), *Z. latreillei* (SIM.), *Z. petrensis* (C.L.K.), *Agroeca brunnea* (BL.), *A. cuprea* Mge, *Ero aphana* (WALCK.), *Centromerus sylvaticus* (BL.), *Diplocephalus picinus* (BL.), *Erigonoplus globipes* (L.K.), *Metopobactrus prominulus* (O.P.C.), *Stemonyphantes lineatus* (L.), *Tiso vagans* (BL.), *Walckenaeria antica* (WIDER), *W. dysderoides* (WIDER), *Xysticus bifasciatus* C.L.K., *X. cristatus* (CL.), *X. kochi* (TH.), *X. striatipes* L.K., *Ozyptila pullata* (TH.), *O. scabricula* (WESTR.), *Asianellus festivus* (C.L.K.), *Euophrys frontalis* (WALCK.), *Evarcha arcuata* (CL.), *Heliophanus flavipes* (HAHN), *Phlegra fasciata* (HAHN), *Pellenes tripunctatus* (WALCK.), *Talavera aequipes* (O.P.C.).

Second male was collected at the area of Żmudź reserve near Chełm (51°10'N, 23°40'E, UTM FB 85) in period between 5-20 May 1998. Tree layer was formed there by purposely planted, 35 years old larch (*Larix decidua*). Brush wood was poorly developed

and consisted of single juniper bushes (*Juniperus communis*), blackthorn (*Prunus spinosa*) and shrub of young larch. Undergrowth was distinguished by high contribution of steppe species: *Brachypodium pinnatum*, *Aster amellus*, *Salvia verticillata* and *Euphorbia cyparissias*.

J. falconeri was collected in that locality together with following spider species: *Theridion impressum* (L.K.), *Minyriolus pusillus* (WID.), *Tapinocyba insecta* (L.K.), *Walckenaeria cucullata* (C.L.K.), *Araneus marmoreus* CL., *Alopecosa pulverulenta* (CL.), *Aulonia albimana* (WALCK.), *Pardosa lugubris* (WALCK.), *P. saltans* TÖPFER-HOFMANN, *Trochosa terricola* TH., *Hahnina nava* (BL.), *H. pusilla* C.L.K., *Liocranoeca striata* (KULCZ.), *Haplodrassus umbratilis* (L.K.), *Micaria pulicaria* (SUND.), *Zelotes petrensis* (C.L.K.), *Drassylus pusillus* (C.L.K.), *Philodromus cespitum* (WALCK.), *Ozyptila pullata* (TH.), *Xysticus cristatus* (CL.), *Dendryphantès rudis* (SUND.), *Heliophanus cupreus* (WALCK.) and *Salticus zebraneus* (C.L.K.).

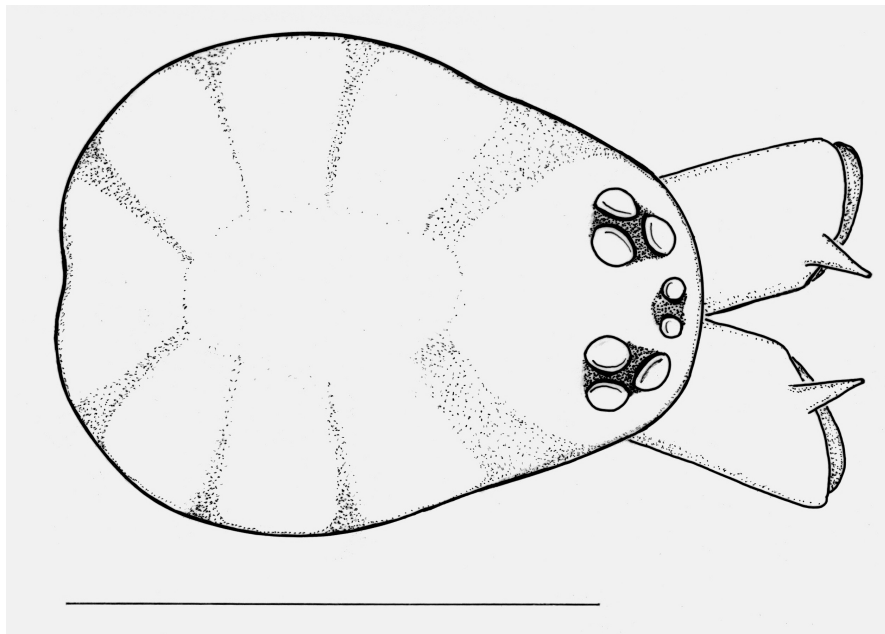


Fig. 1. Cephalothorax of a male *Jacksonella falconeri*, front-dorsal view. Scale bar = 0.5 mm.

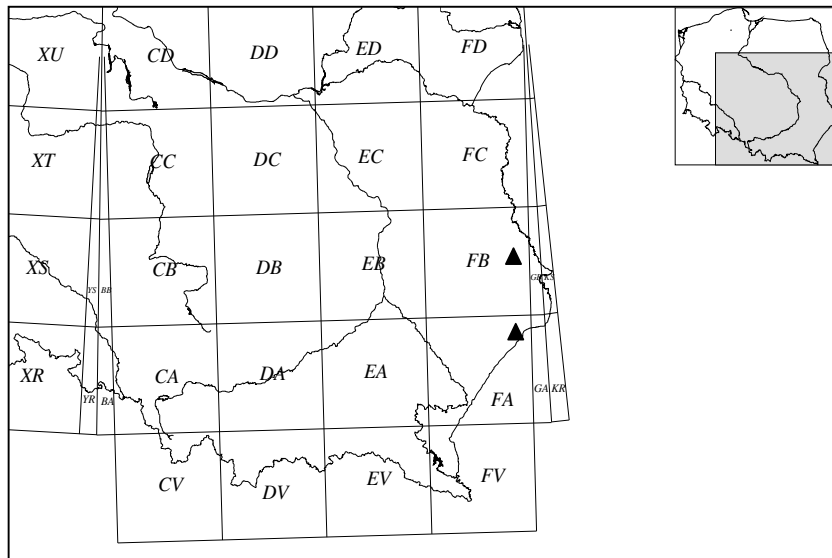


Fig. 2. Localities of *Jacksonella falconeri* (JACKSON) in Poland.

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