

Brommella falcigera (Balogh, 1935), a rare European spider

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INTRODUCTION

Six species in the genus *Brommella* are known: *B. bishopi* (Chamberlin et Gertsch, 1958), *B. lactea* (Chamberlin et Gertsch, 1958) and *B. monticola* (Gertsch et Ivie, 1936) from the USA, *B. punctosparsa* (Oi, 1957) from Japan and China, *B. falcigera* (Balogh, 1935) from central Europe, and *B. hellenensis* (Wunderlich, 1994) from Greece.

Brommella falcigera, described for the first time by Balogh in 1935 as *Lathys falcigera* from the Sashegy mountain in Budapest (locus typicus), was subsequently described independently by different authors under different names: *Hahnia fagei* by Dahl (1937), *Lathys incertus* by Miller (1943), *Brommella notabilis* by Tullgren (1948), *Pagomys notabilis* by Chamberlin, Gertsch (1958), and *Lathargenna incerta* by Braun (1963). Present status was proposed by Braun in 1963 and 1964. Additional data on nomenclature and biology of the species were provided by Czajka & Woźny (1970) and Kronstedt (1983). Because of the small number of records the species was treated as rare in Europe, being reported from single localities in Austria, Czech Republic, Germany, Hungary, Italy, Romania, Slovakia, Sweden, and Ukraine, half of them in mountainous areas, at altitudes from 600 to 900 meters above sea level. A full list of distributional data given in Tab. 1 and Map 1. In Poland (Map 2), the species has been found in the Ślęza Massif (Czajka & Woźny 1970), Pieniny Mountains (Staręga 1976) and the Świętokrzyskie Mountains (Staręga 1984).

PHENOLOGY

Adult specimens of *Brommella falcigera* are usually collected from May to July and from September to December, observations in the latter periods (mainly males) took place at the mountainous sites. Phenological analysis indicates that *Brommella falcigera* is an eurychronic species.

ECOLOGICAL REQUIREMENTS

Brommella falcigera specimens occur in the coniferous and deciduous litter, sometimes under stones and in rock fissures. A certain number of records were on well illuminated and dry spots (Staręga 1976, 1984; Kronstedt 1983; Thaler 1986), so some authors have suggested that *B. falcigera* is thermophilic (Buchar 1975; Thaler 1981) and xerothermic (Brown 1964). However, other findings do not support these suggestions, e.g. Dahl (1937) and Martin (1976) found representatives of this species in moss from marshy spots while Czajka and Woźny (1970) found it under wet bark. *B. falcigera* has also been reported from spruce, pine and oak forests (Weiss & Andrei 1989 - *Quercus robur* *Carpinetum*; Esjunin 1993) and oak-beech forests (Czajka & Woźny 1970) at bright illuminated or shaded sites. Hence *B. falcigera* is a species of a wide spectrum of ecological requirements.

Therefore, a question arises if it actually is a rare species. Eurytopy does not foster isolation and consequently cannot be a factor responsible for rarity of occurrence. It is more probable that the representatives of this species have been rarely found because of difficult access to the sites of their occurrence and the relic character of those sites. It may be a species undergoing expansion.

DESCRIPTION OF A NEW LOCALITY IN POLAND

A new site of *B. falcigera* occurrence has been discovered within the Old Polish yew-trees Natural Reserve, named after Leon Wyczółkowski, in Wierzchlas (UTM: CE 03). The reserve is the oldest one in Poland and one of the oldest in Europe, founded in 1827 in order to preserve the natural site of 4,000 specimens of yew trees (*Taxus baccata*), all of them a few hundred years old. The undergrowth is rich in rare plants like: *Cypripedium calceolus*, *Epipactis latifolia*, *Listera ovata*, *Neottia nidus-avis*, *Lilium martagon*, *Daphne mezereum*, *Dentaria bilbifera*, *Melica uniflora*, *Festuca silvatica*. The reserve area is under absolute protection and is inaccessible for tourists (Fig. 1).

A male specimen of *Brommella falcigera* was found on June 12th, 1994 in the litter collected from under a yew tree. From the north and west the site is limited by the lake and from the east by overgrowing peatbog. The layer of trees is occupied mainly by yew trees (*Taxus baccata*), hornbeams (*Carpinus betulus*) and hazel (*Corylus avellana*). The site is on the hill, with a good quality soil and litter of high moisture. *B. falcigera* was accompanied by the following species of spiders: *Clubiona terrestris*, *Lepthyphantes flavipes*, *Microneta viaria*, *Syedra gracilis*, *Abacoproeces saltuum* and *Tapinocyba pallens*.

Tab. 1. A list of *Brommella falcigera* localities.

Country	Locality	Bibliography source
Austria	1. Martinswand	Braun 1963; Thaler 1981; Thaler 1986
	2. Stams	Braun 1964; Thaler 1981
	3. Ötztal Bahnhof	Palmgren 1973
	4. Kramsach	Palmgren 1973
	5. Lienz	Palmgren 1973
	6. Ahrnkopf	Thaler 1981; Thaler 1986
	7. Hehenberg-S-Fuß	Thaler 1981
	8. Ötztal - Brunau	Thaler 1981
	9. Locherboden	Thaler 1986
	10. Klausen - Bad Gleichenberg	Kropf & Horak 1996
Czech Republic	1. Mohelno	Miller 1971
	2. Hády	Miller 1971
	3. Skryje	Miller 1971
	4. Vidnava	Miller 1971
	5. Vranov nad Dyjí	Buchar - unpublished
	6. Tetín - Koda	Buchar 1989
Germany	1. Eschede - Lüneburger Heide	Dahl 1937
	2. Zadlitzbruch - Dübener Heide	Martin 1976
	3. 'Ostufer der Müritz'	Martin 1983
	4. Possenberg	Bauchhenss 1992
Hungary	1. Sashegy mount. (Budapest)	Balogh 1935; Loksa 1966
Italy	1. Trentino - Riva sur Garda	Thaler 1981
Poland	1. Wierchlas, UTM CE 03	Szymkowiak - here
	2. Ślęza Massif, UTM XS 23	Czajka & Woźny 1970
	3. Świętokrzyskie Mts., UTM DB 62	Staręga 1984
	4. Pieniny Mts., UTM DV 67	Staręga 1976
Romania	1. Mihai Bravu (Bucharest)	Weiss & Andrei 1989
Slovakia	1. Plastovce	Miller 1971
	2. Devín (Bratislava)	Gajdoš 1981
	3. Cunovo (Bratislava)	Gajdoš 1994
	4. Biela Skala - Pieniny Mts.	Svatoň 1990
Sweden	1. Karlstadt	Braun 1964; Kronstedt 1983
	2. Bromma - Uppland Province	Tullgren 1948
	3. Tornrör - Öland Province	Kronstedt 1983
Ukraine	1. Chernyi Les - Kirovograd	Esjunin 1993
	2. Kotovskii Les - Kotovsk	Esjunin 1993
	3. Gaidary	Esjunin 1993

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