

Insufficient knowledge of so-called 'rare' spiders in Germany - a brief comment

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ABSTRACT

Records of some so-called 'rare' spider species from Germany are compiled and briefly commented. It appears that at least some of the species studied reach their western and/or northern borders of distribution in eastern Germany.

INTRODUCTION

The bulk of western and central European spider fauna is well documented. New country records and some new descriptions are published each year. At the same time it seems strange that for many species numerous and considerable gaps in knowledge exist with respect to the distributional patterns and to the areal borders. This has an immediate impact on zoogeographical studies. A closer look shows that many species are either sparsely or not recorded for longer periods, sometimes for decades. Such species are often called 'rare' though it seems difficult or even impossible to define that term reasonably. Probably, it would be better to state that distinct species are locally distributed. In any case, we need much more data on several spider species for zoogeographic analyses, nature conservation and landscape management.

MATERIAL AND METHODS

The spiders have been collected mainly in Brandenburg (eastern Germany), especially in the areas of the Oder river valley near the German-Polish border, in the landscape of the 'Uckermark' north of Berlin, and near the town of Luckenwalde (south of Berlin).

In addition to continuous collecting activities over the years, an intensive research programme was initiated in 1985 in order to re-evaluate the spider fauna of that area.

The spiders were collected using the following methods: pitfall traps, Malaise traps, manual collecting on the ground, sweeping vegetation and beating bushes and trees.

RESULTS

A very high number of endangered and partly rare species is still present in the eastern part of Germany, as compared to other regions. Among them there are spiders which deserve special attention since this is (most probably) the western and/or northern borders of distribution. This can be exemplified by a list of species which have not been recorded in northwestern Germany (Tab. 1).

Tab. 1. East German spider species with undefined borders of distribution (ref. to Fründ *et al.* 1994).

Species	Reports in North Western Germany
<i>Agelena gracilens</i> C. L. Koch	none
<i>Alopecosa schmidtii</i> (Hahn)	none
<i>Drassyllus pumilus</i> (C. L. Koch)	none
<i>Entelecara berolinensis</i> (Wunderlich)	none
<i>Euryopis laeta</i> (Thorell)	none
<i>Heliophanus dubius</i> C. L. Koch	1 rep.: Martens 1983
<i>Hyposinga heri</i> (Hahn)	none
<i>Lepthyphantes decolor</i> (Westring)	1 rep.: Fründ 1994
<i>Lepthyphantes midas</i> Simon	none
<i>Marpissa radiata</i> (Grube)	1 rep.: Bösenberg 1897
<i>Mecynargus foveatus</i> (F. Dahl)	none
<i>Micaria dives</i> (Lucas)	none
<i>Oxyopes heterophthalmus</i> Latreille	none
<i>Pellenes nigrociliatus</i> L. Koch	none
<i>Sitticus zimmermanni</i> (Simon)	none
<i>Synageles hilarulus</i> (C. L. Koch)	none
<i>Tapinocyba biscissa</i> (O. P.-Cambridge)	none
<i>Thanatus atratus</i> Simon	none
<i>Xysticus ninnii</i> Thorell	none
<i>Xysticus striatipes</i> (L. Koch)	none
<i>Zelotes aeneus</i> (Simon)	none

Species listed in bold deserve a special comment:

Linyphiidae

Entelecara berolinensis (Wunderlich, 1969)

German records: Wunderlich (1969), 1M, Berlin, pitfall trap, oak wood, F unknown, v. Broen (unpubl. 1995), 1M, Brandenburg, Oder river valley, pitfall trap, wet grassland (*Alopecuretum pratense*).

Habitat preference: bark of trees?, wet grassland with trees?

Distribution: not clear, Germany.

Lepthyphantes midas Simon, 1884 (= *L. carri*)

Roberts (1987): 'extremely rare'.

German records: Martin (unpubl., 1988) 1M, near Dessau/ distr. Magdeburg, in coll. MNH Berlin, det. Moritz, Malten (1994) 8MM, 3FF, Frankfurt/Main, old willows, v. Broen (unpubl. 1995), 1M, leg. Burger, Eichhorst/Brandenburg, old oak.

Habitat preference: old trees, under bark, in crevices and caves, seems to need special microclimatic conditions.

Distribution: Great Britain, France, Germany.

Tapinocyba biscissa (O. P.-Cambridge, 1872)

Palmgren (1977): 'apparently an eastern immigrant'; not rare but rarely recorded.

German records: Wiehle (1960, 1961), v. Broen (1985).

Habitat preference: poor grassland, meadows, between grassroots.

Distribution: Finland, Poland, the Czech Republic, east Germany, western borderline of distribution not clear.

Oxyopidae

Oxyopes heterophthalmus Latreille, 1804

German records: v. Broen (1995), 10MM, 8FF, Luckenwalde/Brbg.

Habitat preference: heather (*Genisto-Callunetum typicum*).

Distribution: South England, France, Austria, Romania, Croatia, Macedonia, Germany, northern border of area not clear.

Gnaphosidae

Gnaphosa inconspicua Simon, 1878

Ref.. Ovtstharenko *et al.* (1992).

German records: Grimm (1985), sub *Gnaphosa* spec., 1M, Hessen, v. Broen (unpubl. 1959), 1M, Saalfeld/Thüringen, in coll. MNH Berlin, Framenau (1995), 6MM, 10FF, Bayern.

Habitat preference: Limestone rocks, road stone areas with poor plant covering.

Distribution: Russia, Mongolia, China, Nepal, Italy, Spain, the Czech Republic, Germany, northern border not clear.

Philodromidae

Thanatus atratus Simon, 1870

Ref. Kronstedt (1983), poorly documented species.

German records: v. Broen (unpubl., 1995), 4MM, Luckenwalde/Brandenburg, Corynephorum, pitfall traps, Bruhn *et al.* (1994) sub *T. vulgaris* Simon?

Habitat preference: dry and sandy habitats with poor plant covering, esp. silver grass.

Distribution: Northern species, border of distribution not clear.

CONCLUSIONS

The species mentioned should attract more attention to data collection - especially on their distribution, population density and ecological demands due to the endangered status of some species.

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