

## FIRST RECORD OF *WALCKENAERIA CLAVICORNIS* (ARANEAE, LINYPHIIDAE) IN THE NETHERLANDS

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### ABSTRACT

#### First record of *Walckenaeria clavicornis* (Araneae, Linyphiidae) in the Netherlands.

An adult male *Walckenaeria clavicornis* Emerton 1882 (*unicornis*-group of species in *Walckenaeria*) was found on 5 February 1998 at about 35 m distance from a parking place on the Amsterdam University grounds in the Netherlands. It was hiding in a dark small cavity in wet ground under a dark plate of synthetic material on ground level. As this species was never found before, neither in the Netherlands, nor in countries bordering the Netherlands, we suspect that it may have been transported in a car from a European country where it does occur, perhaps from Great Britain, Switzerland, or Austria. Thus, people of our University which visited Great Britain or Austria may have enclosed a wandering *W. clavicornis* male in their car, or people coming from other universities and visiting our university may have done so.

Key words: new fauna record, *Walckenaeria clavicornis*

### SPECIES DETERMINATION OF OUR *WALCKENAERIA CLAVICORNIS* MALE

Our *Walckenaeria clavicornis* specimen conformed to the drawings and sketches of the species keys published by Wunderlich (1972), Heimer & Nentwig (1991), and Roberts (1987) in its quite oblong rectilinearly narrowing prosoma towards the rear when viewed from the lateral side (including the shape of the frontal protuberance on the prosoma). It conformed, further, in its pedipalp characteristics, and in the oval shape of its sternum (which is typical for the genus *Walckenaeria* and is not found in other linyphiid genera). The sketch I made (first author) when catching our specimen in 1998 also closely matched these keys. The shape of its prosoma protuberance in lateral view was clearly different from the shape of the very closely related *W. karpinskii* as illustrated in Wunderlich (1972). Unfortunately, our specimen could not be preserved because it was almost completely consumed by mites when found dead. It had stayed alive in captivity during a little more than two months. In addition to its morphological characteristics it also showed a behavioural trait which is typical for the genus *Walckenaeria*, i.e. a rather short predation latency time (approximately 30 hours) for araneophagy when killing and consuming another spider (young stage of *Enoplognatha ovata*). In an earlier study (Heuts & Brunt 2005) we have given details on araneophagy in the genus *Walckenaeria* in comparison with spiders of other genera.

Efimik & Esyunin (1996) separated *Walckenaeria korobeinikovi* sp.n. from *W. clavicornis* within the *unicornis*-group (subgenus *Cornicularia* Menge, 1869). It is very unlikely that our specimen was *W. korobeinikovi* when assessing the data given by Tanasevitch (pers. com. 2009) and receiving the advice of Wunderlich (pers. com. 2009) to consult Tanasevitch, the Russian expert on the taxonomy of *W. clavicornis* and closely allied species of the *unicornis*-group. Tanasevitch ascertained us that *W. clavicornis* is widely distributed in Western and Central Europe, whereas *W. korobeinikovi* occurs in Russia (e.g. in the Urals) and more to the East in Siberia. Hence, we believe that our *W. clavicornis* male had been transported by car from a European country not bordering the Netherlands, such as Great Britain, Switzerland, or Austria. Tanasevitch also ascertained us that *W. korobeinikovi* is a separate species because the pedipalpal characteristics of the adult males show little variation and are always distinguishable from those of *W. clavicornis*, although the epigynes of the females can hardly be told apart in the two species.

### DISTRIBUTION, HABITAT AND SEASONAL OCCURRENCE OF *W. CLAVICORNIS*

We consulted the articles with the species key and also the natural distribution of *W. clavicornis* on the internet site of Fauna Europaea (Van Helsdingen 2009). Its European distribution comprises Iceland, Great Britain and Northern Ireland, the Irish Republic, Norway, Sweden, N. Russia, Spitsbergen, Finland, Switzerland, Liechtenstein, Austria, Italy, Greece (Crete). So far there are no records from the adjacent countries Germany and Belgium. Further to the East it also occurs e.g. in Siberia up to the Kamchatka Peninsula and north-east China. Heimer & Nentwig (1991) mention a quite humid and dark habitat in crevices at ground level and states that adults can be found in summer. Roberts (1987) states that *W. clavicornis* is probably widespread in Great Britain and occurs on fairly high ground. Efimik & Esyunin (1996: 69) mention that *W. korobeinikovi* dwells in dwarf *Betula* stands within the Urals and has been found in various moist biotopes in Siberia. However, these authors give no details of the biotopes of *W. clavicornis* (p. 69-70).

### CONCLUSION

*Walckenaeria clavicornis* is a new species to the Netherlands. It has not been found so far in the countries bordering the Netherlands. It was probably transported in a car from a European country where it does occur, perhaps from Great Britain, Switzerland, or Austria. The fact that it was found close to a parking place of the University of Amsterdam where people from various countries come to visit gives support to this hypothesis. In table 1 we give a few examples of interesting (mainly linyphiid) species found on parking places.

Table 1. Important spider species found on car parking places with details for each species.

	Location of car parking	Hypothetical country of origin	Number and sex of found specimens	Remarks
<i>Walckenaeria clavicornis</i>	University of Amsterdam	Great Britain, Austria, or Switzerland	1 adult male	other specimens never found in the Netherlands
<i>W. nudipalpis</i>	University of Amsterdam	Netherlands	1 adult male	occurs on several locations in the Netherlands
<i>W. atrotibialis</i>	University of Amsterdam	'Gooise hei' in the Netherlands	1 adult male	quite common in the Netherlands
<i>Bolyphantes luteolus</i>	'Libellebos' in Uithoorn	Netherlands	1 adult male	rare in the Netherlands
<i>Allomengea vidua</i>	University of Amsterdam	marshy areas in the Netherlands	1 adult female	quite common in the Netherlands
<i>Lessertia denticchelis</i>	'De Scheg' in Uithoorn	dunes of the Wadden Islands in the Netherlands	1 adult female	very rare in the Netherlands
<i>Bianor aurocinctus</i>	'Gooise hei' in Huizen	more eastern locality in the Netherlands	1 adult male	very local distribution in East Netherlands

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