

The synatropic *Oecobius navus* (Araneae: Oecobiidae) established indoors in southern Finland

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Oecobius navus Blackwall has since 2003 been found in basements in Helsinki and other places in southern Finland. This tiny cosmopolitan spider species or any other member of its family hasn't previously been recorded in Finland or Fennoscandia.

Introduction

The genus *Oecobius* comprises 84 species (Platnick 2013), half of which are described from the Canary Islands where most of them are endemic. The commonest species on the Canary Islands is *O. navus* Blackwall, and it can be found near or under stones and on rock walls (Wunderlich 1987). *O. navus* was originally described from Madeira, but it is a cosmopolitan with the main distribution in tropical and subtropical regions (Wunderlich 1987). In Europe, north of the Alps it is exclusively synatropic (Nentwig et al. 2013). It has been recorded in at least Great Britain, The Netherlands, Belgium (Roberts 1998), Germany (Kielhorn 2008), Estonia (Vilbaste 1987) and Latvia (Sternbergs 1980). The records from Finland are the first ones from Fennoscandia. All known records of the species in Finland are listed in this paper, all but one of which are from the conurbation of the capital city of Helsinki.

Material

Specimens marked with ZMH are deposited in the Zoological Museum in Helsinki (Finnish Mu-

seum of Natural History, University of Helsinki), the rest in the private collection of the author. The coordinates are given in Finnish grid (YKJ).

Oecobius navus Blackwall, 1859

2j (1 reared to ad. ♂) FI N: Helsinki, Mechelininkatu 29, 66755:33846, on floor in basement, 24.2.2003 (Leg. N.R.Fritzén); **1♀1j** (several specimens seen) FI N: Helsinki, Lutherinkatu 2, 66753:33851, on floor in basement, 19.12.2003 (Leg. N.R.Fritzén); **1 exx** FI N: Espoo, Tapiola, Kelohongantie 14, 66759:33778, on floor in basement, 24.2.2004 (Leg. N.R.Fritzén, not collected); **1 exx** FI N: Helsinki, Keijukaistenpolku, 66777:33924, on floor in bathroom, 2004 (Leg. K.Lindqvist, not collected); **1♂** (four specimens seen) FI N: Helsinki, Teollisuuskatu 23, 66776:33863, on floor near wall in basement, 30.11.2007 (ZMH, Leg. T. Pajunen); **1♂** FI Sa: Joutsa 6848:3453, indoors 11.3.2008 (Leg. A. & R. Siloaho); **1j** FI N: Helsinki, Teollisuuskatu 23, 66776:33863, in basement, 31.11.2008 (ZMH, Leg. T. Pajunen); **1♀** FI N: Helsinki, Eira, 667:338, in bathroom, 16.12.2008 (ZMH, Leg. K.Mikkola); **1sub-ad♂** FI N: Helsinki, Keijukaistenpolku, 66777:33924, on floor in basement, 2.3.2009 (Leg. N.R.Fritzén); **2 exx** FI N: Helsinki, Kirkkokatu 10, 66750:33867, on floor in basement, 29.3.2009 (Leg. N.R.Fritzén, not collected); **1 exx** FI N: Helsinki, Pihlajamäki, Vuolukiventie 9, 66821:33895, indoors on wall, 24.4.2009 (Leg. H. Määttänen, photographed, not collected); **1♀** FI N: Helsinki, Tunturinkatu 12, 66754:33850, bathroom on 1th floor, 11.6.2009 (ZMH, Leg. M.Andersson); **1♀** FI N: Helsinki, Keijukaistenpolku, 66777:33924, on floor in basement,

29.10.2011 (Leg. N.R.Fritzén); 1♀ FI N: Espoo, Kivennavantie 9, 66775:33779, in basement, 29.2.2012 (ZMH, Leg. H.Ryhänen); 1♀11j FI N: Helsinki, Minervankatu 2, 66755:33848, on floor near wall in basement, 6.11.2013 (Leg. N.R.Fritzén).

Identification

In Northern and Central Europe, where a single synantropic species of the genus occurs, *Oecobius navus* is, despite its small size of 2–2.5 mm, easy to recognise *in situ* due to its overall habitus (Fig 1.). It is speckled in yellowish-brown to greyish-brown with some darker patches and its carapace is characteristically broad and almost rounded but with a clypeal snout. Diagnostics under microscope is the presence of a cribellum in front of the spinnerets, a calamistrum with a double row of bristles on metatarsus IV and an anal tubercle fringed with long setae. Characteristic for *Oecobius* is also the asymmetrically kidney-shaped posterior median eyes. For figures of the copulatory organs of *O. navus*, see e.g. Roberts (1995).

Biology

Oecobius navus spins a small rounded or star-shaped web of cribellate silk. The web, which has a diameter of only about 3 cm, is often made against an edge of something, e.g. from the floor against a baseboard, but it can also be found on walls over small recesses. The spider rests beneath and sheltered by the web and if it is disturbed it runs away rapidly. When a prey touches the web the spider runs on top of the web and starts circling the prey while ensnaring it with sticky silk to immobilize it. Documentation of preys in the Finnish basements has not been made but according to Glatz (1967) it prefers ants as prey.

Discussion

In Finland there are some 15 spider species mainly occurring indoors but some of which can partly be found outdoors near or on buildings during the



Fig. 1. A subadult male of *Oecobius navus* from a basement in Helsinki in 2009.

summer. Some synantropic species are still expected to be found, for instance *Oonops domesticus* Dalmas (Oonopidae), a species occurring in most central European countries (van Helsingen 2009). A synantropic species that has recently colonised the country and is now spreading is *Pholcus phalangioides* (Fuesslin) (Terhivuo 2002). Compared to this long-legged spider with a rather large web, the tiny *O. navus* is inconspicuous and will probably remain unnoticed by most people. The several findings of *O. navus* as early as 2003–2004, when I had just begun to look for spiders in basements, indicate that the species had been overlooked for at least some time. The smaller synantropic pholcid *Psilochorus simoni* (Berland) is nowadays rather common in basements in Helsinki and has also spread north to Vaasa (Fritzén, unpublished). In 1968, this species was found in Finland (in Tampere) for the first time, and three years later a population in Helsinki was also found (Huhta 1972). However, the total absence of records of *P. simoni* in Finland between 1971 and 2002, when I found it both in a clubroom of the subject association of Swedish-speaking biologists of Helsinki University and on a window sill at the Zoological museum in Helsinki, clearly indicates that no-one had actively been looking for spiders in basements in Helsinki for 30 years. Anyway, it is

likely that *Oecobius navus* has colonised the Helsinki conurbation rather recently since this species has during the last few years been reported to the Zoological museum in Helsinki, also by some non-arachnologists/non-entomologists. The many findings clearly indicate that the species is no occasional visitor but has established populations in Finland

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