Spermophora senoculata on Sicily/Italy (Araneae: Pholcidae)

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Spermophora senoculata on Sicily/Italy (Araneae: Pholcidae)

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Abstract. The pholcid spider Spermophora senoculata (Duèges, 1836) is recorded for the first time on the Mediterranean Island of Sicily (Italy) from indoor heated and non-heated habitats of two cities. This species is associated with mostly anthropogenic habitats around the globe. Uncertainty remains about where its native distribution range is located.

Keywords: exotic species, house spiders, synanthropic

Zusammenfassung. Spermophora senoculata auf Sizilien/Italien (Araneae: Pholcidae). Die Zitterspinne Spermophora senoculata (Duèges, 1836) wird erstmals für die Mittelmeerinsel Sizilien (Italien) gemeldet, aus geheizten und ungeheizten Räumen aus zwei Städten. Diese Art ist weltweit mit anthropogenen Habitaten assoziiert. Es ist weiterhin unklar wo ihr natürlicher Ursprung liegt.

Material and methods

The specimens were collected by direct sampling at three localities: (1) ITALY, Sicily, Palermo, Mondello, 38.1953°N, 13.3350°E, 5 m a.s.l., room of a house and a non-heated building, 2. Nov. 2018, 1 ♀, 1 ♂, 3 ♀♀, E. Schifani leg.; (2) ITALY, Sicily, Santa Lucia del Mela, 38.1412°N, 15.2834°E, 250 m a.s.l., room of a house, 21. Nov. 2018, 1 ♀, 3 ♀♀ L. Alleruzzo leg.; (3) ITALY, Sicily, Palermo, 38.1480°N, 13.3150°E, 70 m a.s.l., non-heated building, 20. Mar. 2019, 4 ♀♀ A. Dentici leg.

Immature and adult females were collected at all three sites, and an adult male was collected in Mondello (Fig. 1). Reproduction was witnessed once, inside a heated room in Mondello, where an adult female was observed surrounded by twenty-one newly hatched spiderlings.

Discussion

The type species of the genus Spermophora, S. senoculata (Duèges, 1836), is the only one to have attained global distribution due to human-mediated dispersal (Huber 2005). Unfortunately, the identity of its native range is not yet understood. It may be a Mediterranean (Huber et al. 2017) or a Middle-Eastern species (Nentwig et al. 2019), while its closest relatives are probably native to Western Asia (Huber et al. 2018). Currently, S. senoculata is well-distributed across Europe (without the northern parts, the northernmost record is from Belgium) and North America and east to Japan (Huber 2000, Nentwig 2015, World Spider Catalog 2019), and was also observed in South America (Laborda & Simó 2008). Widely regarded as a synanthropic species, it is usually found inside buildings across most of its range (e.g. Huber 2000, 2005, Blick et al. 2004).

Many pholcid species have successfully spread across continents outside their native range as a result of human activities. The Asian Pholcus phalangioides (Fuesslin, 1775) and the Mediterranean Holocnemus pluchei (Scopoli, 1763) are among the most successful of relevance to temperate regions (Huber 2000, 2005, Blick et al. 2004).
2009a). At least sixteen pholcid species have been introduced in Europe, making Pholcidae the second most species-rich introduced family in the continent, placed between the much larger families Salticidae Blackwall, 1841 and Theridiidae Sundevall, 1833 (Van Keer & Van Keer 2001, Kobelt & Nentwig 2008, Huber et al. 2015, Nentwig 2015, Huber et al. 2017). Among them, a second species of Spermophora, S. kerinci Huber, 2005, native to South-eastern Asia (Huber et al. 2017). A catalogue of all currently known species from the Greek island of Crete. – Niewsbrief van de Belgische Arachnologische Vereniging 28, Supplement 1: 1-147
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Fig. 1: Details of Sicilian specimens of Spermophora senoculata (Dugès, 1836) from Palermo, Mondello, (Italy). Left to right: adult female, dorsal view of the prosoma; adult female, epigyne; adult male, pedipalp in lateral view (photos by E. Schifani)
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