Spermophora senoculata on Sicily/Italy (Araneae: Pholcidae)

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The genus *Spermophora* Hentz, 1841 (Araneae: Pholcidae) currently includes forty-six species in total (World Spider Catalog 2019), mainly spread across Africa, Asia, Northern Australia and some Pacific Islands (Huber 2005). However, the systematic position of many of these species remains significantly problematic as the genus is highly polyphyletic. Today, the existing literature records indicate *S. senoculata* to be widespread across the Mediterranean basin. It is currently considered to be present in the following countries around the Mediterranean Sea: Israel (Zonstein et al. 2015), Turkey (Demir & Seyyar 2017), Greece including Crete (Deltshev 2011, Bosmans et al. 2013), Croatia and Montenegro (Nentwig et al. 2019), Slovenia (Kostanjšek & Kuntrer 2015), Italy (peninsular and Sardinia) (Pantini & Isaiia 2018), Malta (Pfliegler et al. 2017), Tunisia (Dimassi et al. 2016), France including Corsica (Pétillon et al. 2007, Lissner 2016), and Spain including the Balearic Islands (Cardoso & Morano 2010). Interesting examples of populations found in natural areas in the Mediterranean were reported by Senglet (1971), who wrote about the presence of *S. senoculata* on Crete under stones around the ruins of Knossos and in a cave, and Brignoli (1979a), who recorded its presence under stones on Crete in the Botanical Garden of Bologna (Italy) under a fallen log (P.Di Pompeo leg.).

However, only in the last 20 years an astonishing 38 new species, currently considered to belong to *Spermophora*, were described (Huber 2001, 2003a, 2003b, 2005, 2009b, Senglet 2008, Huber & Warui 2012, Huber & Kwapong 2013, Yao & Li 2013, Huber et al. 2014). Many others were attributed to other genera, including new similar genera that 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). Widespread 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).

The specimens were stored in the personal collections Dentici and Di Pompeo. They were photographed using a Canon MP-E 65 mm f/2.8 1–5× Macro Photo lens along with a Canon 1300D reflex camera. The program CombineZP was used to fuse images. Determination: Huber (2002), Nentwig et al. (2019). Other taxonomic studies dealing with *Spermophora* and related groups (see Introduction) were also consulted.

### Results


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* (Dugès, 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 pulex* (Scopoli, 1763) are among the most successful of relevance to temperate regions (Huber et al. 2005).
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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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References
Demir H & Seyyar O 2017 Annotated checklist of the spiders of Turkey. – Munis Entomology & Zoology 12: 433-469.

2009a).