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***Steatoda nobilis* (Araneae: Theridiidae) in South America: a new alien species for Chile**

Andrés Taucare-Ríos, Daniela Mardones, Álvaro Zúñiga-Reinoso¹

Abstract—The arrival and establishment of the spider *Steatoda nobilis* (Thorell) (Araneae: Theridiidae) in Chile is reported. This record is the first for this alien species in the Southern Hemisphere. A brief diagnosis to recognise the species is provided and the possible ways of entry of this spider to Chile are discussed.

The cosmopolitan genus *Steatoda* Sundevall is one of the most familiar genera in the Theridiidae (Araneae). This genus includes over 120 recognised species, distributed around the world (World Spider Catalog 2015), including many cosmopolitan species that are found among human populations worldwide. Many spiders of the genus are often mistaken for widow spiders (*Latrodectus* Walckenaer; Araneae: Theridiidae), and are known as false black widows; however *Steatoda* are significantly less harmful to humans (Isbister and Gray 2003). *Steatoda* species are small to medium-sized spiders characterised by the presence of a large colulus and the abdomen is generally dark, often with a light band around the anterior margin (Levi 1957).

The spider *S. nobilis* (Thorell) (Araneae: Theridiidae) is an invasive species native to the Canary Islands and Madeira, and has been introduced across Europe (Kulczycki *et al.* 2012). This spider first arrived in the United Kingdom before 1879, perhaps through cargo sent to Torquay, United Kingdom (Jackson 1907; Snazell and Jones 1993) and later expanded its distribution to other countries in Europe. In the United Kingdom, it has a reputation as one of the few local spider species which is capable of inflicting a painful bite to humans with most bites resulting in symptoms similar to a bee or wasp sting (Warrell *et al.* 1991).

Since arriving in the United Kingdom, this spider has been reported in Spain (Melic 1994), Portugal (Cardoso 2000), southern France (Kovoor and Muñoz-Cuevas 2000), and Italy (Kulczycki *et al.* 2012). Recently this spider has been reported as an established invasive species in Ventura County, California, United States of America, where the route of introduction into North America was presumably by sea transportation, possibly through the goods brought from Europe (Vetter and Rust 2012). This spider is strongly synanthropic and is most commonly found on the undersides of trash cans, horizontal supports of wooden fences, potted plants, and patio furniture in buildings (Kulczycki *et al.* 2012; Vetter and Rust 2012), which facilitates their establishment and subsequent dispersion by the humans.

Although *S. nobilis* is a widely recognised invasive species and has dispersal ability, this species has not been reported from South America. In this context, the objective of this work is to record the arrival and establishment of *S. nobilis* in Chile (Fig. 1), the first record for the Southern Hemisphere.

Steatoda nobilis specimens were observed in Concepcion-Talcahuano (36°50'S, 73°3'W) and Temuco (38°45'S, 72°40'W) in south-central Chile, cities are separated by ~300 km (Fig. 1A).

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