

The Noble False Widow (*Steatoda nobilis*) has established in New Zealand

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Steatoda is a genus of spiders (Araneomorphae, Theridiidae) with a global distribution (WSC., 2025). About 120 species are recognised, several of which are widely distributed in association with humans (synanthropic). Some species are morphologically similar to some *Latrodectus* widow spiders, and so are commonly referred to as false widow spiders. Four introduced species are documented in New Zealand (Hann 1994, Sirvid et al. 2020). Research quality observations on iNaturalist indicate that the most frequently encountered of these species in New Zealand are *S. grossa* and *S. capensis*, which are found in urban and rural settings (Fig. 1).

A fifth species can now be added to this tally of naturalised species. The first record was made in November 2024 by Gavin Picknell, who observed a live male *S. nobilis* in the Camborne area of Porirua, Wellington. The species was found to be abundant in this urban setting and most frequently found under plant pots, tarpaulin, and inside crevices in fencing and outdoor furniture. Males were commonly spotted on exterior walls or roaming on the ground at night.

Following this report, re-examination of existing iNaturalist observations of *S. grossa* revealed some had been misidentified, and in fact, *S. nobilis* had been encountered in Christchurch in October 2024. Additional reports of *S. nobilis* have subsequently occurred in Nelson, Northland and Waikato. Examination of additional photographs (A.M.P.) revealed that *S. nobilis* had been present in Porirua, Wellington, since at least April 2023.

The discovery of *S. nobilis* relied primarily on photographs shared via iNaturalist (<https://inaturalist.nz/>), so we confirmed this identification by morphological examination and comparison of a DNA sequence from an individual collected in Porirua with available published data (Fig. 2). Data

were obtained using standard DNA purification and amplification of a target fragment of the mitochondrial cytochrome oxidase I gene widely used in studies of invertebrate systematics, including spiders (e.g. Vink et al. 2003).

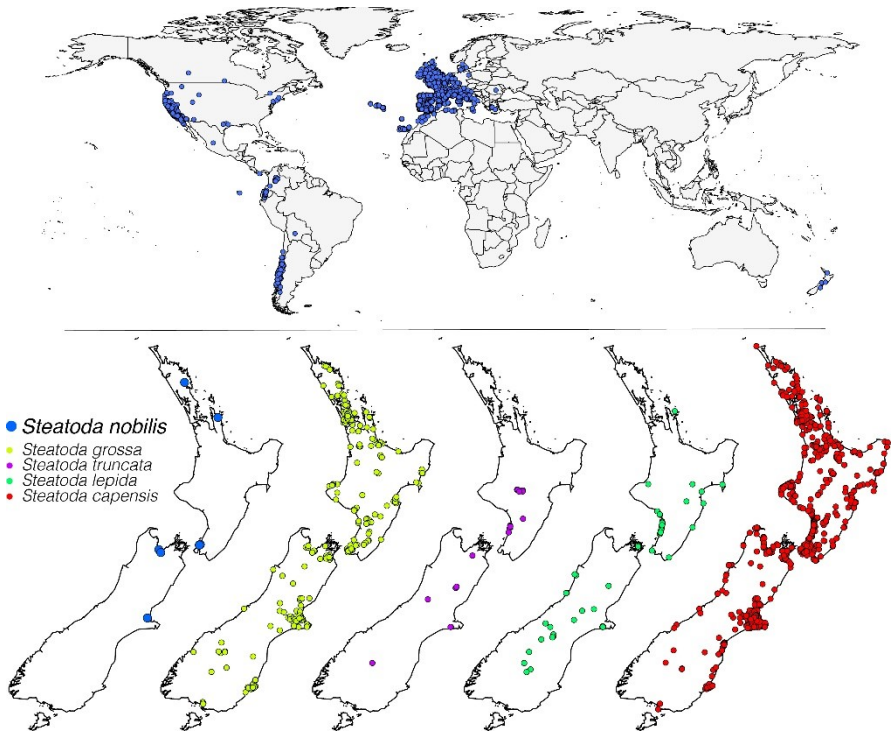


Figure 1. Research quality observations of *Steatoda nobilis* globally and *Steatoda* spiders in New Zealand. Data from iNaturalist, mapped in R environment.

The Noble False Widow (*Steatoda nobilis*) is likely native to Madeira and the Canary Islands (Thorell 1875) but has established in Western Europe, the Mediterranean, and, more recently, Central Europe, California, Ecuador, Colombia, and Chile (Bauer et al. 2019). Research quality observations on iNaturalist of *S. nobilis* globally are presented in Fig. 1. Ecological niche modelling (Bauer et al. 2019) predicted that parts of New

Zealand and South Australia provided suitable climatic conditions for this species, and so its discovery has received interest from European researchers (Pers. comm.).

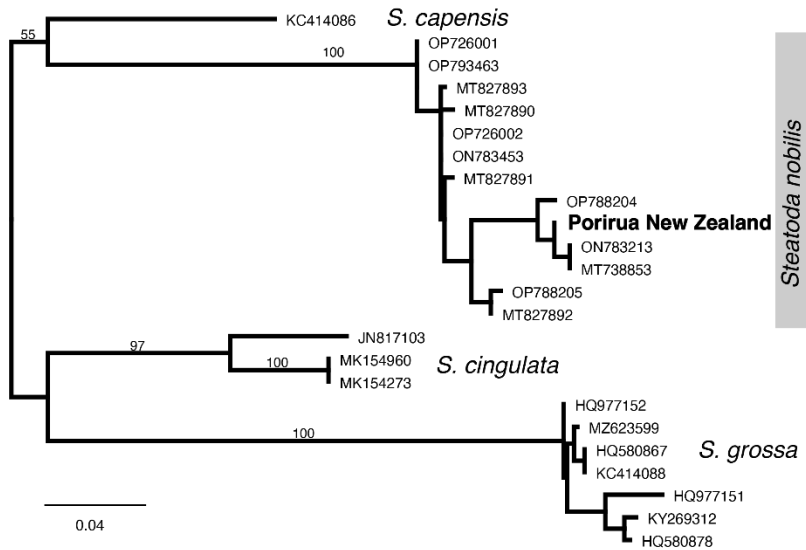


Figure 2. Maximum likelihood phylogeny of 631bp alignment mtDNA COI comprising available data for *Steatoda nobilis* and near relatives. Numbers indicate bootstrap support (%). GenBank accession codes are shown at branch tips.

Steatoda nobilis (Fig. 3) is not aggressive but will bite defensively. The bite has been reported as painful and itchy, resulting in varying degrees of reddening and swelling lasting 2–3 days (Dunbar et al. 2018). More severe cases have been reported, citing additional symptoms such as necrosis and infection, in addition to severe pain requiring opioids, nausea, hypotension, tremor and impaired mobility (Dunbar et al. 2022). Bites generally elicit only moderate symptoms but can be medically significant in severe cases (Dunbar et al. 2022).

The endemic New Zealand spider *Latrodectus katipo* has suffered from displacement by *S. capensis* (Hann 1990). The effects *S. nobilis* may have on native fauna is concerning and remains to be resolved.



Figure 3. *Steatoda nobilis* female (left) and male (right) from Porirua, Wellington, New Zealand.

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