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Macrothele calpeiana (Walckenaer, 1805), an occasional stowaway imported into the United Kingdom with olive trees (Araneae: Macrothelidae)

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Abstract: The first formally reported records of *Macrothele calpeiana* (Walckenaer, 1805) as a stowaway in the United Kingdom are presented.
Key words: Araneae, Macrothelidae, vagrant, introduction, vector, plants, United Kingdom.

***Macrothele calpeiana* (Walckenaer, 1805), un polizón ocasional importado al Reino Unido con olivos (Araneae: Macrothelidae)**
Resumen: Se presentan los primeros registros notificados formalmente de *Macrothele calpeiana* (Walckenaer, 1805) como polizón en el Reino Unido.
Palabras clave: Araneae, Macrothelidae, vagabundo, introducción, vector, plantas, Reino Unido.

Macrothele calpeiana (Walckenaer, 1805) is a charismatic European mygalomorph spider which originates from the southern Iberian Peninsula (Bellvert & Arnedo, 2017), occurs also in Northern Africa (Snazell & Allison, 1989), and which has spread as a stowaway through the commercial trade of olive trees (e.g. Pantini & Isaia, 2008; Fernandéz, 2010; Jiménez-Valverde *et al*., 2011; van Helsdingen, 2011; Bauer & Wendt, 2022) and on at least one citrus tree (Bauer & Wendt, 2022). It is currently reported from five non-native countries: Italy, Belgium, The Netherlands, France, and Germany (Pantini & Isaia, 2008; Fernandéz, 2010; Jiménez-Valverde et al., 2011; van Helsdingen, 2011; van Keer, 2011; Hänggi & Stäubli, 2012; Siaud & Raphaël, 2013; Bellvert & Arnedo, 2017; Bauer & Wendt, 2022) and is a protected species under the Bern Convention and the European Union habitats directive (EUNIS, 2022). Outside of its native range, it has generally not been reported to be established, although one established alien population has been confirmed in Catalonia, Northeastern Spain (Bellvert & Arnedo, 2017).

Hitherto, *M. calpeiana* has not been formally recorded in the published literature as having been detected in the United Kingdom (Lavery, 2019). In 2016 and 2017 respectively, the author received single specimens of spiders discovered dead in the Greater London area, which were subsequently found to be a probable sub-adult female (2017 specimen) and a juvenile (2016 specimen) of *M. calpeiana*. The specimens were discovered with olive trees imported to the UK from the Mediterranean. It is unknown whether the specimens died as a result of pesticide poisoning (van Helsdingen, 2011) or due to other reasons (i.e. sudden shifts in temperature or physiological causes) but both were desiccated and in bad condition. Thus, they were not retained after initial identification. Most recently, on 1st July 2022 the British Arachnological Society was contacted about a large black spider found wandering in a large commercial premises in Reading, United Kingdom. The author was consulted and quickly established that the specimen was an sub-adult female of *M. calpeiana* and it was confirmed that olive trees were on sale at the same premises. The specimen was obtained by the author (Fig. 1) and, in line with Bauer & Wendt (2022) who also retrieved live material, it will be maintained and cared for until the end of its natural lifespan. After death, the specimen will be deposited in the Manchester Museum (MMUE) under the accession number MMUE G7680.1.



Fig. 1. *Macrothele calpeiana* (Walckaener, 1805), sub-adult female initially found wandering in a commercial premises in the United Kingdom. Scale bar = 5mm.

The detection of three different specimens associated with the ornamental tree trade confirms that the situation is similar to that in other nearby countries (Bauer & Wendt, 2022) and that whilst established populations are currently unlikely to form in the United Kingdom outside of heated buildings, given the cold and wet winters, this species is an occasional stowaway for which we must remain vigilant. As noted by Bellvert & Arnedo (2017), it is important that measures be put in place to try and mitigate the risk of further foreign importations of this species to try and prevent the possibility of further established populations being created, as the species might displace native species or alter ecological interactions in native communities (Snyder & Evans, 2006). Bauer & Wendt (2022) discuss the possibility that this species may already have additionally established on Crete, although fieldwork efforts are required to test this hypothesis. An endemic species, *Macrothele cretica* Kulczyński, 1903, occurs on Crete and could be at risk if *M. calpeiana* spreads across the island.

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