On a previously unreported historical stowaway selenopid originally found on Guernsey, Channel Islands (Araneae: Selenopidae)

Danniella Sherwood[1,2,*] & Giraldo Alayón García[1,2,3,4]

[1] Arachnology Research Association, London, United Kingdom
[2] Fundación Ariguanabo, San Antonio de los Baños, Cuba
[3] Museo Nacional de Historia Natural, La Habana, Cuba
[4] Research Associate, American Museum of Natural History, New York
* Corresponding author: danni.sherwood@hotmail.com

Abstract : A selenopid specimen detected in Guernsey, Channel Islands in the 1950s but previously unreported in the literature is illustrated and reported based on examination of the adult female specimen, which was deposited at the Natural History Museum, London.
Key words: Araneae, Selenopidae, stowaway, museums, fruit, Channel Islands.

Sobre una araña selenópida polizón encontrada originalmente en Guernsey, Islas del Canal (Araneae: Selenopidae)
Resumen: Se reporta e ilustra un ejemplar de selenópido detectado en Guernsey, Islas del Canal, en la década de 1950 pero que aún no se había publicado. Se trata de una hembra adulta depositada en el Museo de Historia Natural de Londres.
Palabras clave: Araneae, Selenopidae, polizón, museos, fruta, Islas Anglonormandas.

Several species of the genus *Selenops* Latreille, 1819 have been recorded as stowaways. Comstock (1940) noted a specimen of *Selenops aissus* Walckenaer, 1837 found in a banana importation facility in New York, USA. Muma (1953) recorded the novel taxon *Selenops candidus* Muma, 1953, and the prior-described species *Selenops insularis* Keyserling, 1881 and *Selenops galapagoensis* Banks, 1902 as stowaways, the two former taxa from bananas imported to New York and the latter from a fruit importation facility in Seattle, USA. Schmidt (1971) reported *Selenops mexicanus* Keyserling, 1880 and *Selenops* sp. as having been imported with bananas in Germany. Crews (2011) reported a specimen of *S. aissus* from Alabama, USA noting it was probably a stowaway, and recorded *S. mexicanus* as a stowaway in St. Maartens. She also synonymised *S. galapagoensis* and *Selenops tehuacanus* Muma, 1953 (see below) with *S. mexicanus*. Vetter *et al*. (2014) recorded *Selenops ecuadorensis* Berland, 1913, S. *mexicanus*, *S*. cf. *tehuacanus* (but see above) and *Selenops* sp. as stowaways imported into North America. Crews, Baert & Carmichael (2016) used molecular analyses to show that *S. mexicanus* colonised the Galapagos within the last half-century. Van Keer (2007) and Kekenbosch (2008) discuss the case of a specimen of *Selenops radiatus* Latreille, 1819 imported to Belgium with wood from Africa which bit an import facility worker.

Whilst recurating and sorting specimens in the Natural History Museum, London (NHMUK) in June 2022 the senior author discovered a jar containing a single female selenopid specimen identified as *S. radiatus*, which carried label data indicating it was imported with bananas to Guernsey, Channel Islands (Figs. 1–2). No record could be found of this specimen being formally mentioned in the prior literature (i.e. as *S. radiatus*) and it is unclear who first determined the specimen.

Subsequent re-examination of the specimen confirmed it was instead a member of the Isopodus Group (*sensu* Crews *et al*., 2021) with similarities to *Selenops arikok* Crews, 2011 based on the morphology of the epigyne (Figs. 3–5). The epigyne lacks a sclerotized septum, the copulatory ducts extend to the lateral edges of the epigynal plate, and the epigynal pockets are separated – this combination of characters ally the specimen to *S. arikok* and exclude it from being *Selenops curazao* Alayón, 2001, *Selenops bullerengue* Crews, Torres & Galvis, 2021 or *S. isopodus* when following the key of Crews *et al*. (2021). However, the NHMUK specimen has a smaller median field and the epigynal pockets are less developed in comparison to previously published illustrations of *S. arikok* (cf. Figs. 3–4 *vs*. Crews, 2011: 153, fig. 1 and Crews *et al*., 2021: 72, figs. 18, 20) and it is unclear whether this is interspecific or intraspecific variation.

In addition to morphological differences, it must be noted that *S. arikok* was described from Aruba, which did not export bananas during the time period the specimen was found, and therefore direct importation with bananas from Aruba to the Channel Islands is not a realistic provenance for this specimen. Thus, it is possible this specimen, if indeed originating from imported bananas, is instead a closely related but undescribed species from nearby Colombia or Venezuela, which did export bananas to Europe during the time period. Another possibility, if it is *S. arikok s.s.*, is that it was a stowaway with other types of goods on a ship which visited Aruba, but simply found near to and/or assumed to be from bananas when detected in Guernsey. Given the above, we therefore tentatively report the specimen as *Selenops* aff. *arikok*. This is a new stowaway record at both the family and generic level for the Channel Islands.

References

ALAYON GARCIA, G. 2001. Especie nueva de *Selenops* (Araneae: Selenopidae) de Curazao, Antillas Holandesas. *Solenodon,* **1**: 17–20.

BANKS, N. 1902. Papers from the Hopkins Stanford Galapagos Expedition; 1898-1899. VII. Entomological Results (6). Arachnida. With field notes by Robert E. Snodgrass. *Proceedings of the Washington Academy of Sciences,* **4**: 49–86.

BERLAND, L. 1913. Araignées. In: *Mission du Service géographique de l'armée pour la mesure d'un arc du méridien équatorial en Amérique du Sud (1899-1906)*. Paris 10, 78–119.

COMSTOCK, J. H. 1940. *The spider book, revised and edited by W. J. Gertsch*. Cornell Univ. Press, Ithaca, 727 pp

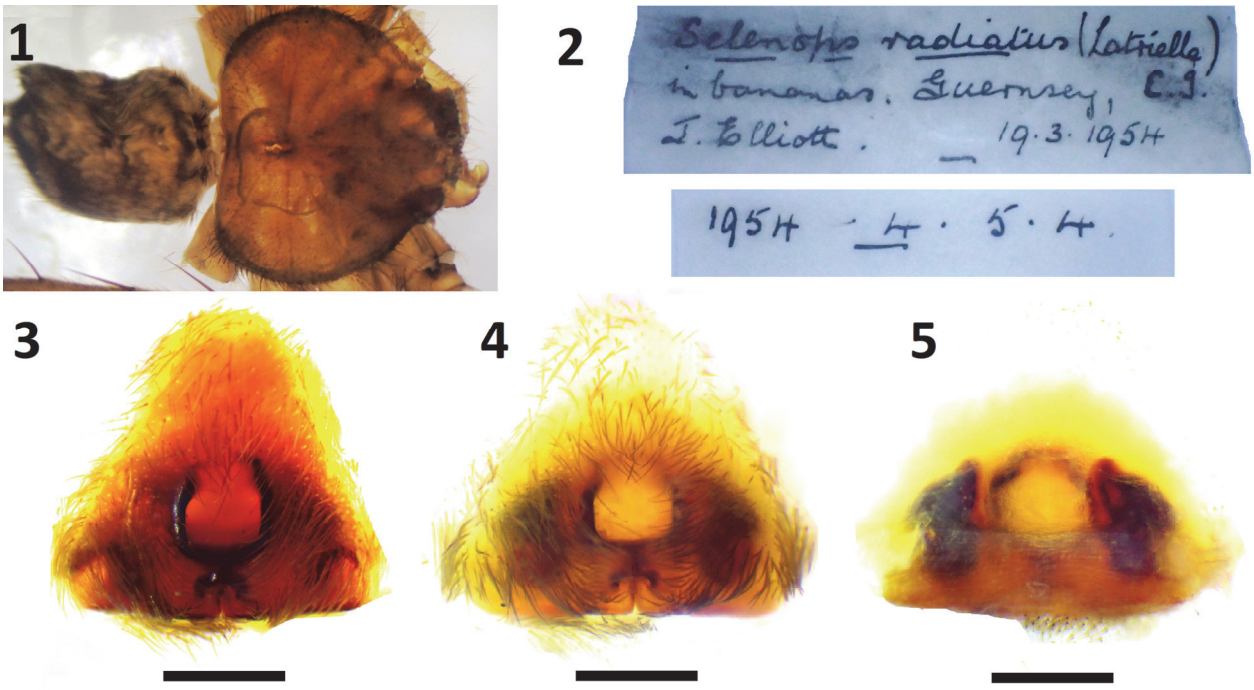
CREWS, S. C. 2011. A revision of the spider genus *Selenops* Latreille, 1819 (Arachnida, Araneae, Selenopidae) in North America, Central America and the Caribbean. *ZooKeys,* **105**: 1–182.

CREWS, S. C., L. BAERT & A. CARMICHAEL 2016. Spider Stowaways: Molecular Data Support the Synonymization of *Selenops galapagoensis* with *Selenops mexicanus* (Araneae: Selenopidae) and Indicate Human-Mediated Introduction to the Galápagos Islands. *Pacific Science,* **70**(2): 223–232.

CREWS, S. C., W. GALVIS, R. A. TORRES, M. A. GUTIERREZ-ESTRADA, J. SARMIENTO & L. A. ESPOSITO 2021. The flattie spiders of the *Selenops isopodus* species group (Araneae: Selenopidae) with a review of *Selenops* records from Colombia. *Zootaxa,* **4964**(1): 61–82.

KEKENBOSCH, R. 2008. Un cas de morsure de *Selenops radiatus* Latreille, 1819 (Araneae: Selenopidae). *Nieuwsbrief Belgische Arachnologische Vereniging,* **23**(1): 28–29.

KEYSERLING, E. 1880. *Die Spinnen Amerikas. Laterigradae*. [Erster Band]. Bauer & Raspe, Nürnberg, 283 pp., pl. 1–8.



Figs. 1–5: Habitus, data label and genitalia of *Selenops* aff. *arikok* female (BMNH 1954.4.5.4) found on Guernsey, Channel Islands. **1** habitus, dorsal, **2** data labels, **3** epigyne, ventral view, uncleared, **4** epigyne, ventral view, cleared, **5** vulva, dorsal view, cleared. Scale bars = 1mm.

KEYSERLING, E. 1881. Neue Spinnen aus Amerika. III. *Verhandlungen der Kaiserlich-Königlichen Zoologisch-Botanischen Gesellschaft in Wien,* **31**: 269–314.

LATREILLE, P. A. 1819. [Articles sur les araignées]. In: *Nouveau dictionnaire d'histoire naturelle, appliquée aux arts, à l'agriculture, à l'économie rurale et domestique, à la médecine, etc. Nouvelle Édition*. Deterville, Paris, Tome 30-36.

MUMA, M. H. 1953. A study of the spider family Selenopidae in North and Central America and the West Indies. *American Museum Novitates,* **1619**: 1–55.

NENTWIG, W., T.BLICK, R. BOSMANS, D. GLOOR, A. HÄNGGI & C. KROPF 2022. *Spiders of Europe, version 08.2022*. Online at: https://www.araneae.nmbe.ch

SCHMIDT, G. 1971. Mit Bananen eingeschleppte Spinnen. *Zoologische Beiträge (N.F.),* **17**: 387–433.

VAN KEER, K. 2007. Exotic spiders (Araneae): Verified reports from Belgium of imported species (1976-2006) and some notes on apparent neozoan invasive species. *Nieuwsbrief Belgische Arachnologische Vereniging,* **22**(2): 45–54.

VETTER, R. S., R. L. CRAWFORD & D. J. BUCKLE 2014. Spiders (Araneae) found in bananas and other international cargo submitted to North American arachnologists for identification. *Journal of Medical Entomology,* **51**(6): 1136–1143.

WALCKENAER, C. A. 1837. *Histoire naturelle des insectes. Aptères. Tome premier*. Roret, Paris, 682 pp., pl. 1–15.

WORLD SPIDER CATALOG. 2022. *World Spider Catalog, version 23.5*. Natural History Museum Bern, online at: http://wsc.nmbe.ch