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***Reesa vespulae* (Coleoptera: Dermestidae): a rare synanthropic beetle found in a Glasgow tenement**

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Beetles in the family Dermestidae are synanthropic, i.e. they are commonly encountered in and around human habitations, resulting in their reputation as household pests. While some species can be problematic, many seldom occur in large numbers and at least seven of the 39 species established in the U.K. (two additional species are non-established introductions) are primarily recorded in the wild (Duff, 2020). Due to their habit of feeding on food products, textiles and museum specimens, new species of dermestid beetles are highly likely to establish themselves as introductions in the U.K.

Reesa is a monotypic genus of dermestid beetles. *Reesa vespulae* is found widely distributed in the Nearctic region and is an established introduced species in the U.K. (Duff, 2020). It appears to be predominantly synanthropic and has been found among seed, fungi and insect collections in museums and universities (Peacock, 1993). The species was originally described in Minnesota, U.S.A. (Milliron, 1939) in a nest of the wasp *Dolichovespula arenaria*, albeit one that had been housed in a university laboratory for several years. It is possible that it has shifted from feeding on the carcasses and waste of social Hymenoptera, in the warmth of a nest, to the warm conditions and abundant food in buildings. Although it is not clear where this species originated, there appear to have been multiple introduction events that spread it to temperate areas spread around the globe, from America to Europe, Korea, Japan and even as far as New Zealand (Nardi, 2021). Female adults and larvae have been well described (Milliron, 1939; Kadej *et al.*, 2017), although no males have ever been found. In initial experiments, Milliron (1939) hatched pupae into adults that laid viable eggs without mating, suggesting that *Reesa vespulae* can reproduce by parthenogenesis.

There are no records for this species in Scotland listed in the National Biodiversity Network (NBN) Atlas, with only 12 records in total for the rest of the U.K. There are nine records since 2011 listed on iRecord not all of which overlap with the NBN records (NBN, 2024; iRecord, 2024). In addition, Peacock (1993) mentions records for Dunfermline (Fife) and Perth (Perthshire). National Museums Scotland has four specimens in its

collections found in Edinburgh in 1991, and there is a record from Dunfermline (28th May 1981) on the Scottish Insect Records Index (SIRI).

The specimen illustrated here (Fig. 1) was found alive in a Glasgow tenement building on 5th August 2022, indoors near a window, and a second individual was found shortly afterwards. They were identified using the keys in Duff (2020). None have been found at this location since, although several other synanthropic beetle species have been recorded: *Dermestes peruvianus*, *Anthrenus verbasci* and *Niptus hololeucus*. As larval stages have previously been known to destroy museum specimens, it is important to monitor for this beetle when transferring collections (Kadej *et al.*, 2017).



Fig. 1. Specimen of *Reesa vespulae* collected indoors in a tenement flat in Glasgow, Scotland, 5th August 2022. (A) Lateral view (mounting pin present). (B) Dorsal view (mounting pin absent). Both images were produced by focus-stacking (combining photographs of the subject focused at different focal planes). The specimen is ca. 3.5 mm in length and was stored in 70% ethanol before pinning. (Photo: E. Parry)

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