

Anthrenus pimpinellae Fabricius, 1775 (Dermestidae): the case for removal from the British list

G.J. Holloway¹, C.W. Foster¹ and M.V.L. Barclay²

¹ Centre for Wildlife Assessment and Conservation, Harborne Building, School of Biological Sciences, The University of Reading, Reading RG6 2AS

² Department of Life Sciences, Natural History Museum, London SW7 5BD

Anthrenus pimpinellae Fabricius has been considered a British species for more than two centuries. Marsham (1802) listed it, without bionomic or distributional information, as *Byrrhus pimpinellae*, alongside two ‘relatives’, ‘*Byrrhus verbasci*’ and ‘*Byrrhus pini*’ (= *Scymnus suturalis* Thunberg (Coccinellidae)). Stephens (1832), using the name *Anthrenus pimpinellae*, states ‘*Rare in Britain; I have taken it in the vicinity of London and I believe it has been captured in Suffolk and in Devonshire*’. Fowler (1889) adds no new information, stating “*Very rare in Britain; recorded by Stephens from London and somewhat doubtfully from Suffolk and Devonshire, and I believe that it has been taken once or twice by other collectors*”. Beaumont (1895) claimed to have reared two specimens of *A. pimpinellae* from a dead maple branch, which is odd since out-of-doors the species appears to breed primarily in the nests of birds (Beal, 1988). It was omitted by Joy (1932) and Shirt (1987), listed by Hyman (1992) as ‘extinct’ and by Peacock (1993) as an ‘import only’. It has been included without comment in most British checklists (Kloet & Hincks, 1945; Pope, 1977; Duff, 2008, 2012). Most information concerning this species in Britain is either anecdotal or repeated from previous sources and the only mentions we could find of actual captures in a two-hundred year period are those of Stephens (1832) and Beaumont (1895).

During GJH’s recent visit to the collections of the Natural History Museum, London, we took the opportunity to search for British specimens of *Anthrenus pimpinellae*, primarily to determine whether they were true *A. pimpinellae*, or should be referred to as one of the closely related species listed in Mroczkowski (1968) and revised in Kadej *et al.* (2007), such as *Anthrenus angustefasciatus* Ganglbauer recently reported from Britain (Foster & Holloway, 2015). The combined collection of James Francis Stephens and Thomas Marsham includes a tray with three specimens standing over the name ‘*pimpinellae*’; none of them bear the white paper disc indicating Marsham’s material, so they can all be assumed to be from Stephens, and most likely include the material he collected near London. However, none of these specimens belong to the *A. pimpinellae* group – they comprise two *Anthrenus verbasci* (Linnaeus) and one *Anthrenus museorum* (Linnaeus). Other outlying historical collections also include no specimens of *A. pimpinellae*, and the main British collection has only a series of six specimens of the *pimpinellae* group from the ‘old BM collection’, a historical reference collection that aimed to have

representatives (whether British or not) of all species reported from the British Isles, and one other specimen without data, labelled ‘Continental Type’. All seven of these are certainly of foreign origin, placeholders or identification vouchers. GJH also attempted to find Beaumont’s specimens in Glasgow, where his material is supposedly housed having been acquired by T.G. Bishop; no ostensibly British specimens of the *A. pimpinellae* group could be traced there either. It seems likely that Beaumont’s *pimpinellae* were another species; his obituary observes that ‘the naming of his captures was always irksome to him’ (Porritt, 1905). It can therefore be suggested that both the published British captures of *pimpinellae* mentioned above (Stephens and Beaumont) are based on misidentifications.

It is curious that the description of *A. pimpinellae* given by Marsham (1802) and Stephens (1832) of a large species with a broad white band across the basal half of the elytra fits *A. pimpinellae* well, but does not match the specimens standing over this name in Stephens’ collection. It seems most likely that Stephens derived his description from other sources and that he found the genus difficult, judging from a high proportion of incorrectly identified *Anthrenus* specimens in his collection.

Considering that there is apparently no British example of *Anthrenus pimpinellae* in the Natural History Museum, even in the J.F. Stephens collection, and that all published records appear to be based on misidentifications, anecdotal evidence, or are repeated from previous authors, we conclude that in the absence of further information *Anthrenus pimpinellae* should be removed from the British list.

References

- BEAUMONT, A. 1895. Insects bred from a dead branch of maple at Blackheath. *Entomologist’s Monthly Magazine* **31**: 281.
- BEAL, R.S. 1988. Taxonomy and biology of Nearctic species of *Anthrenus* (Coleoptera: Dermestidae). *Transactions of the American Entomological Society* **124** (3/4): 271-332.
- DUFF, A.G. (ed.) 2008. *Checklist of Beetles of the British Isles, 2008 edition*. Wells: A.G. Duff.
- DUFF, A.G. (ed.) 2012. *Checklist of Beetles of the British Isles, 2012 edition*. Iver: Pemberley Books.
- FOSTER, C.W. & HOLLOWAY, G.J. 2015. *Anthrenus* (*Anthrenus*) *angustefasciatus* (Coleoptera: Dermestidae), a species new to Britain. *British Journal of Entomology and Natural History Society* **28**: 47-51.
- FOWLER, W.W. 1889. *The Coleoptera of the British Islands* **3**. London: Reeve & Co.
- HYMAN, P.S. (revised PARSONS, M.S.) 1992. *A review of the scarce and threatened Coleoptera of Great Britain*. Part 1. UK Nature Conservation: 3. Peterborough: Joint Nature Conservation Committee.
- JOY, N.H. 1932. *A Practical Handbook of British Beetles*. London: H.F. & G. Witherby.
- KADEJ, M., HAVA, J. & KALIK, V. 2007. Review of the *Anthrenus pimpinellae* species group from Palaearctic region (Coleoptera: Dermestidae: Anthrenini). *Genus* **18**: 721-750.
- KLOET, G.S. & HINCKS, W.D. 1945. *A Checklist of British Insects*. Stockport: Kloet & Hincks.
- MARSHAM, T. 1802. *Entomologia Britannica*. 548pp. London: Wilks and Taylor.
- MROCZKOWSKI, M. 1968. Distribution of the Dermestidae (Coleoptera) of the world with a catalogue of all known species. *Annales Zoologici* **26**: 15-191.

- PEACOCK, E.R. 1993. Adults and larvae of hide, larder and carpet beetles and their relatives (Coleoptera: Dermestidae) and of derodontid beetles (Coleoptera: Derodontidae). *Handbooks for the Identification of British Insects* **5**(3): 1-144.
- POPE, R.D. 1977. Kloet & Hincks. A Check List of British Insects. Part 3: Coleoptera and Strepsiptera. Second revised edition. *Handbooks for the Identification of British Insects* **11**(3), pp. xiv+105.
- PORRITT, G.L. 1905. Obituary: Alfred Beaumont. *Entomologist's Monthly Magazine* **104**: 95-97.
- SHIRT, D.B. (ed.) 1987. *British Red Data Books: 2. Insects*. Peterborough: Nature Conservancy Council.
- STEPHENS, J.F. 1832. *Illustrations of British Entomology; or, a synopsis of indigenous insects containing their generic and specific distinctions; with an account of their metamorphoses, times of appearance, localities, food, and economy, as far as practicable*. Mandibulata. Vol. V. 448 pp. London: Baldwin & Cradock.