

<https://doi.org/10.11646/zootaxa.4254.3.7>  
<http://zoobank.org/urn:lsid:zoobank.org:pub:B353019D-2667-4F0E-9B8E-25ECFC3B0338>

## The identity of *Arhodia egenaria* Walker, 1866 (Lepidoptera, Mimallonoidea, Mimallonidae) and a new synonym of *Cicinnus melsheimeri* (Harris, 1841)

RYAN A. ST LAURENT<sup>1,3</sup> & TIMOTHY L. MCCABE<sup>2</sup>

<sup>1</sup>McGuire Center for Lepidoptera and Biodiversity, Florida Museum of Natural History, University of Florida, 3215 Hull Road, Gainesville, FL 32611-2710, USA. E-mail: [rstlaurent@flmnh.ufl.edu](mailto:rstlaurent@flmnh.ufl.edu)

<sup>2</sup>New York State Museum, 222 Madison Ave, Albany, NY 12230, USA. E-mail: [timothy.mccabe@nysed.gov](mailto:timothy.mccabe@nysed.gov)

<sup>3</sup>Corresponding author

The holotypes of *Arhodia egenaria* Walker, 1866 and *Cicinnus primolus* Schaus, 1928, **syn. n.**, were examined. Both names are junior synonyms of *C. melsheimeri* (Harris, 1841). *Cicinnus melsheimeri* (as *Perophora egenaria*), sensu Hampson, 1904, is a misidentification of *C. bahamensis* St Laurent & McCabe, 2016.

In their description of *Cicinnus bahamensis* St Laurent & McCabe, 2016 (Fig. 1), a species so far known only from the Bahamas, the authors failed to mention the previous literature report of Mimallonidae from the Bahamas by Hampson (1904). Hampson listed one mimallonid (=Perorphoridae) from the Bahamas: *Perophora egenaria* (Walker, 1866), from Abaco, Nassau [New Providence], and Andros islands. Some of these specimens were located by the first author in The Natural History Museum, London, U.K. (NHMUK) and were included as paratypes in the description of *C. bahamensis*. At the time of the description of *C. bahamensis*, both authors were aware of the name *egenaria*, and had examined the holotype, recognizing it as a synonym of *C. melsheimeri* (Harris, 1841) in accordance with Schaus (1928), Gaede (1931), and Becker (1996). However, the authors of *C. bahamensis* were unaware of Hampson's reference to a Bahamian mimallonid at the time. Therefore, we provide this correspondence to figure *C. bahamensis* together with the holotype of *Arhodia egenaria* (Fig. 2) and additional specimens of *C. melsheimeri* (Figs. 3, 4).

*Cicinnus melsheimeri*, described from Pennsylvania, USA, a rather variable species, is characterized by the pale gray coloration, with pinkish undertones, blood-red accented veins, and heavy stippling by dark brown petiolate scales over the entirety of all wings. The forewing postmedial line is straight, well-defined, and sharply angled towards the costa. No hyaline patches are present on the wings. These characteristics, combined with the accentuated, mesally convex, brown-edged margin of the forewings, and falcate apices are unique in the genus. This species is the only member of its genus reported from the eastern United States, found in forested areas where its host plant, various species of *Quercus* (Fagaceae), are found (Franclemont 1973). The name *egenaria* was synonymized with *C. melsheimeri* by Kirby (1892), and maintained in this synonymy by (Schaus 1928, Gaede 1931, Becker 1996). In Walker's (1866) original description of *A. egenaria*, a type locality was not given. The holotype of *A. egenaria* does not bear locality information, but a label included in the tray, not pinned with the specimen, where the type is stored at the NHMUK reads: "Type Locality [USA (Ga)], syn. *egenaria* Walker." This information supports maintaining this name as synonymous with *C. melsheimeri*, particularly in consideration of the external appearance and apparent locality of this specimen, such that no other *Cicinnus* species have been reported from the United States (Franclemont 1973).

The first author has examined photos (Fig. 3) of the holotype of *C. primolus* Schaus, 1928, deposited in Museum für Naturkunde der Humboldt-Universität zu Berlin, Germany (MNHU). The name *C. primolus* is also based on a specimen lacking locality information. Despite the absence of locality information, this specimen clearly represents the widespread North American species *C. melsheimeri*, and displays external characteristics wholly within the range of variation of this species (St Laurent pers. obs. in comparison with hundreds of *C. melsheimeri* specimens). *Cicinnus melsheimeri* can be confused with no other species in the genus, the first author has examined nearly all type specimens of *Cicinnus* species. Daniel Herbin (pers. comm.) who supplied photos of the holotype, has independently come to the same conclusion. Thus, we here synonymize the name *C. primolus* **syn. n.** with *C. melsheimeri*.



**FIGURES 1–4.** Adult females of *Cicinnus*, a=dorsal, b=ventral. 1. Paratype of *C. bahamensis*, Bahamas, Great Exuma, Simon's Point [Cornell University Insect Collection, Ithaca, NY, USA] [Specimen previously figured in St Laurent & McCabe 2016]. 2. Holotype of *Arhodia egenaria*, no locality (NHMUK). 3. Holotype of *Cicinnus primolus*, no locality (MNHU). 4. *Cicinnus melsheimeri* USA, New Jersey, Ocean Co., Lakehurst, Wrangle Brook Rd (Cornell University Insect Collection, Ithaca, NY, USA). Scale bar = 1 cm.

## Acknowledgments

We offer our sincere thanks to Daniel Herbin (France) for his photos of the holotype of *C. primolus*. We would also like to thank Alessandro Giusti (NHMUK) for supplying images of the holotype of *Arhodia egenaria* and Wolfram Mey (MNHU) for offering access to specimens. Three anonymous reviewers provided helpful comments and suggestions.

## References

- Becker, V.O. (1996) Mimallonidae. In: Heppner, J.B. (Eds.), *Atlas of Neotropical Lepidoptera, Checklist. Part 4B. Drepanoidea, Bombycoidea, Sphingoidea*. Association for Tropical Lepidoptera & Scientific Publishers, Gainesville, pp. 17–19.
- Franclemont, J.G. (1973) Mimallonoidea (Mimallonidae) and Bombycoidea (Apatelodidae, Bombycidae, Lasiocampidae). In: Dominick, R.B., Ferguson, D.C., Franclemont, J.G., Hodges, R.W. & Munroe, E.G. (Eds.), *The moths of North America north of Mexico fasc. 20.1*. E.W. Classey Ltd. and Richard B. Dominick Publ., London, pp. 1–86.
- Gaede, M. (1931) Pars 50: Mimallonidae. In: Strand, E. (Ed.), *Lepidopterorum Catalogus*. W. Junk, Berlin, pp. 2–19.
- Hampson, G.F. (1904) The Lepidoptera-Phalaenae of the Bahamas. *Annals and Magazine of Natural History*, 7 (14), 165–188.  
<https://doi.org/10.1080/03745480409442991>
- Harris, T.W. (1841) *Report on the insects of Massachusetts, injurious to vegetation*. Folsom, Wells & Thurston, Cambridge, 459 + viii pp.
- Kirby, W.F. (1892) *A synonymic catalogue of Lepidoptera Heterocera. (Moths) : Vol. 1. Sphinges and bombyces*. Gurney & Jackson, London. 951 + xii pp.
- Schaus, W. (1928) Familie Mimallonidae. In: Seitz, A. (Ed.), *Die Gross-Schmetterlinge der Erde. 6. Die amerikanischen Spinner und Schwärmer*. A. Kernen, Stuttgart, pp. 635–672.
- St Laurent, R.A. & McCabe, T. (2016) The Mimallonidae (Lepidoptera, Mimallonoidea) of the Caribbean Basin, with the descriptions of two new species. *Zootaxa*, 4084 (4), 557–571.  
<https://doi.org/10.11646/zootaxa.4084.4.6>
- Walker, F. (1866) *List of the Specimens of Lepidopterous Insects in the Collection of the British Museum. Vol. 35*. Edward Newman, London, pp. 1535–2040.  
<https://doi.org/10.5962/bhl.title.58221>