

THE IDENTITY OF TWO MONOTYPIC GEOMETRID GENERA  
WRONGLY ATTRIBUTED TO THE NEARCTIC FAUNA  
(GEOMETRIDAE)

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**ABSTRACT.** *Apolema carata* (Hulst) and *Nyctiphanta laetula* Hulst were described from North America in error. *A. carata* is a synonym of *Pseudopanthera ennomosaria* (Walker) [Asia], and *N. laetula* is a synonym of *Aspitates ochrearia* (Rossi) [Europe]. *Apolema* Hulst and *Nyctiphanta* Hulst are monotypic genera and junior synonyms of *Pseudopanthera* Hübner and *Aspitates* Treitschke respectively.

*Apolema carata* (Hulst), described from Florida, and *Nyctiphanta laetula* Hulst, described from Arizona, have been consecutively listed in all check lists covering North American Geometridae from the time the two generic names were proposed (Hulst, 1896:336) to the McDunnough check list (1938:168). *Apolema carata* was listed for Florida by Kimball (1965:186); both genera were listed most recently by Fletcher (1979:18, 142). I identified *A. carata* in time to eliminate it from the new Check List of the Lepidoptera of America North of Mexico (Hodges et al., in press), but not so with *N. laetula*, which was left at the end of the tribe Lithinini, following earlier authors. No previous author satisfactorily associated the unique type of either species with any known North American geometrid, not surprisingly inasmuch as both have proven to be exotic. Through the kind cooperation of Dr. Frederick H. Rindge of the American Museum of Natural History, I was able to borrow the types and identify them.

The holotype of *Apolema carata* is a specimen of *Pseudopanthera ennomosaria* (Walker, 1862) or something very close to it, probably from India or Pakistan. Thus *Apolema* Hulst, 1896, is a junior synonym of *Pseudopanthera* Hübner, 1823, and its type by original designation and monotypy, *Aspilates carata* Hulst, 1887, should be listed as a junior synonym of *P. ennomosaria* (Walker).

The holotype of *Nyctiphanta laetula* is a specimen of the European *Aspitates* (*Aspilates* Auct.) *ochrearia* (Rossi, 1794). Thus *Nyctiphanta* Hulst, 1896, is a junior synonym of *Aspitates* Treitschke, 1825, and its type by original designation and monotypy, *Nyctiphanta laetula* Hulst, 1896, is a junior synonym of *Aspitates ochrearia* (Rossi).

These names should therefore be referred to the synonymy under *Pseudopanthera* and *Aspitates* as follows:

*Pseudopanthera* Hübner, 1823

*Apolema* Hulst, 1896:336. Type-species: *Aspilates carata* Hulst, 1887:211, by original designation and monotypy. Not new synonymy here because it was mentioned in my introductory comments in the check list (Hodges et al., in press).

*Pseudopanthera ennomosaria* (Walker, 1862)

*Aspilates (sic) carata* Hulst, 1887:211 (new species based on "1 ♂, Fla. Coll. Franck," now in the American Museum of Natural History). Hulst, 1891:71.

*Apolema carata*, Hulst, 1896:336 (new genus proposed for *carata*). Dyar, 1903:315. Smith, 1903:75. Barnes and McDunnough, 1917:114. McDunnough, 1938:168. Kimball, 1965:186. Fletcher, 1979:18.

*Aspilates* Treitschke, 1825

*Nyctiphanta* Hulst, 1896:336. Type-species: *Nyctiphanta laetula* Hulst, 1896:336, by original designation and monotypy. NEW SYNONYMY.

*Aspilates ochrearia* (Rossi, 1794)

*Nyctiphanta laetula* Hulst, 1896:336 (new genus, new species, described from "Arizona, one male," now in the American Museum of Natural History). Dyar, 1903:315. Smith, 1903:75. Barnes and McDunnough, 1917:114. McDunnough, 1938:168. Fletcher, 1979:142. NEW SYNONYMY.

## LITERATURE CITED

- BARNES, WM. & J. H. MCDUNNOUGH. 1917. Check List of the Lepidoptera of Boreal America. Herald Press, Decatur, Illinois. 392 pp.
- DYAR, H. G. 1902 [1903]. A list of North American Lepidoptera and key to the literature of this order of insects. U.S. National Museum Bull. 52:723 pp.
- FLETCHER, D. S. 1979. In I. W. B. Nye. The generic Names of Moths of the World. Vol. 3. Geometroidea. British Museum (Nat. Hist.). xx + 243 pp.
- HULST, G. D. 1887. New species of Geometridae, no. 3. Entomol. Americana 2:185-192, 210-212.
- 1891. In J. B. Smith. List of the Lepidoptera of Boreal America. American Entomol. Soc., Philadelphia. vi + 124 pp.
- 1896. Classification of the Geometrina of North America. Trans. American Entomol. Soc. 23:245-386, pls. 10, 11.
- KIMBALL, C. P. 1965. Lepidoptera of Florida. Arthropods of Florida and Neighboring Land Areas. Vol. 1. Div. of Plant Industry, Florida Dept. Agric., Gainesville. 363 pp., illus.
- MCDUNNOUGH, J. H. 1938. Check list of the Lepidoptera of Canada and the United States of America, part I, Macrolepidoptera. S. California Acad. Sci. Mem. 1:272 pp.
- SMITH, J. B. 1903. Check List of the Lepidoptera of Boreal America. American Entomol. Soc., Philadelphia. vi + 136 pp.