## TWO ADDITIONS TO THE SYNONYMY OF SCOPULA SIDERARIA (GUENEE) (LEPIDOPTERA, GEOMETRIDAE)<sup>1</sup>

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Scopula sideraria (Guenée) is a common, day-flying geometer of the subfamily Sterrhinae, ranging in higher elevations from southern British Columbia to San Diego County, California. Because of the great variation in color from dark brown to bright orange, and in hair scaling of the body, this species has been known under several names. In my revision of the genus Scopula (Covell, 1970) I included S. californiaria Packard, S. pacificaria Packard, and S. chretieni Barnes and Benjamin in the synonymy of S. sideraria. I neglected, however, to examine Holarctias magnetaria Guenée and H. rubrolinearia Packard to see if they were conspecific with S. sideraria. At the suggestion of Dr. W. C. McGuffin I have now done so, and am convinced that such is the case. Consequently, I am here transferring H. magnetaria and H. rubrolinearia to Scopula from Holarctias Prout, and designating a lectotype for S. rubrolinearia.

Acidalia magnetaria (Guenée, 1857, p. 450) was described on the basis of two males from "Californie" sent to Guenée by Lorquin. These types are missing and presumed lost, as neither McGuffin nor I have been able to find them in any of the following institutions: Canadian National Collection, British Museum (Natural History), Paris Museum, American Museum of Natural History, and U. S. National Museum of Natural History. However, the original description seems to fit only two possible species: *Holarctias sentinaria* (Geyer) and Scopula sideraria (Guenée). Since H. sentinaria is not known from California (McGuffin, 1967b), and since the original description of H.

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magnetaria seems to indicate close similarity to S. sideraria ("Cette espèce est à la Sideraria, ce que la perochraria est à l'Ochrata."), I agree with McGuffin's suggestion (personal correspondence) that the two are probably conspecific.

*H. magnetaria* was indicated as probably belonging in *Holarctias* Prout by Barnes and McDunnough (1916, p. 173), and placed in that genus in their *Check List* (1917, p. 102). McDunnough (1938, p. 144) continued *H. magnetaria* as a second North American *Holarctias*; however, McGuffin (1967a, 1967b) considered specimens labelled *H. magnetaria* to be *Scopula*, and was thus the first recent author to eliminate *H. magnetaria* as a second North American *Holarctias*. Since he made no official placement of *H. magnetaria*, I hereby synonymize *H. magnetaria* to *S. sideraria*. In so doing I must point out that the description of *H. magnetaria* precedes that of *S. sideraria* by one page in Guenée (1857); however, in the interest of uniformity and stability I am invoking Article 24 and Recommendation 24A of the *International Code of Zoological Nomenclature*, and retaining *sideraria* as the valid name for the species.

Acidalia rubrolinearia (Packard, 1873, p. 28) was based upon a male and a female collected by Edwards. This name was first synonymized to *H. magnetaria* in Dyar ("1902" [1903], p. 295), and was continued thus in the check lists of Barnes and McDunnough (1917) and McDunnough (1938). McGuffin (1967a, 1967b) did not treat the name.

Both type specimens are in the Museum of Comparative Zoology at Harvard University. I have found them to be conspecific with *S. sideraria*, the lectotype male of which is in the U. S. National Museum (see Covell, 1970, p. 190). I designate as lectotype of *A. rubrolinearia* the female bearing the following pin labels: "California," "A.S. Packard Type" (printed label), "Acidalia rubrolineata Pack. Type" (in Packard's handwriting), "218," "Type 2258 (M.C.Z. type number on red label), and "C. V. Covell female genitalia No. 695." The lectoallotype male bears the following pin labels: "218 Califor.," "218 Calif.," "A. S. Packard Type" (printed), "Acidalia rubrolineata Pack., Cal. (Edwards)" (in Packard's handwriting), and "C. V. Covell male genitalia No. 696." The female was chosen because, of the two, it alone had been labelled "type" by Packard in his own handwriting.

The formal citation of synonymy for *Scopula sideraria* is now as follows:

## Scopula sideraria (Guenée)

Acidalia sideraria Guenée, 1857, p. 451.

Acidalia magnetaria Guenée, 1857, p. 450, NEW SYNONYMY.

Acidalia californiaria Packard, 1871, p. 390.

Acidalia pacificaria Packard, 1871, p. 391.

Acidalia rubrolinearia Packard, 1873, p. 28, NEW SYNONYMY.

Acidalia bucephalaria Barnes and McDunnough, 1918, p. 135, pl. 23, fig. 2 (preoccupied name; not bucephalaria Chrétien, 1909).

Acidalia chretieni Barnes and Benjamin, 1923, p. 17 (replacement name for bucephalaria Barnes and McDunnough).

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ABSTRACT.—Holarctias magnetaria and H. rubrolinearia are synonyms of Scopula sideraria.—Charles V. Covell, Jr., Department of Biology, University of Louisville, Louisville, KY 40208.

Descriptors: Lepidoptera; Geometridae; Scopula sideraria, new synonymy.



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