PALAEACRITA SPECIOSA HULST (GEOMETRIDAE) IN MINNESOTA

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On April 21 and 22, 1965 I collected a series of what I took to be *Palaeacrita vernata* Peck at a black light in Minneapolis, Hennepin County, Minnesota. In August 1965 I sent 30 individuals to Mr. Bryant Mather, Jackson, Mississippi, who, in turn, referred them to Dr. Frederick H. Rindge, of the American Museum of Natural History, New York. Dr. Rindge determined two of these to be *Palaeacrita speciosa* Hulst. In November 1965 I sent Mr. Mather the remaining 31 specimens and he also referred these to Dr. Rindge.

Dr. Rindge commented (in litt.) on the two specimens in the first group that he had determined as *P. speciosa* Hulst, as follows: "These are the first specimens I've seen of this outside of our type (from Colorado)!" One of the two specimens was retained by Dr. Rindge at the A.M.N.H., the other was returned to Mr. Mather and is now in his collection. Rindge (1955, p. 154) wrote of the Hulst type, in the A.M.N.H. collection: "speciosa Hulst, Paleacrita (1898, Canadian Ento., vol. 30, p. 113, Type male, Glenwood Springs, Colorado, 4-3-1893, W. Barnes)." In response to an inquiry as to the significance of the date "4-3," Dr. Rindge replied (in litt.): "The type specimen of this species is dated '4/3/1893' . . . this can be read as either April 3 or March 4 . . . in Hulst's original description he gives the date as May 3. This is obviously in error. I do not have any additional literature references on this species."

Dr. Rindge commented (in litt.) on the second group as follows: "I was very happy to see the nice series of *vernata* from Minneapolis. The amount of variability here has caused some problem at least as far as I am concerned. You will recall that earlier there were two specimens of what I called *speciosa*. The specimen that was retained agrees quite well with our type from Glenwood Springs, Colorado. Unfortunately, the type does not have an abdomen. In the series from Minnesota the specimens range from an almost immaculate gray to the variegated pattern of *speciosa*. This of course made me wonder just what was going on. I dissected the genitalia of the earlier '*speciosa*' and have just finished studying these structures. They agree perfectly with the normal *vernata*. So now the problem arises as to just what true *speciosa* might be. Unfortunately, I do not have any material in this immediate group from Glen-

wood Springs or anywhere else in Colorado. Forbes (1948) says that *vernata* goes west as far as that state.¹ At this point it looks like *speciosa* may either be a straight synonym of *vernata* or possibly a subspecies of it from the west. Pending the receipt of western material the problem cannot be answered."

In the original description, Hulst (1898) characterized *speciosa* by the whitish gray forewings, with five somewhat diffuse, black cross lines. The type has an expanse of 32 mm, and bears the data: Glenwood Springs, Colo., May 3; from Dr. Barnes.

It now appears that "speciosa-like" specimens occur not only in Colorado in March or April, but also in Minnesota in April. Additional records would be very desirable, especially from Colorado. This series of events emphasizes the desirability of the determination of specimens that could represent rare species yet resemble common ones checked by workers who are qualified to recognize such rare species.

The cooperation of Dr. Rindge, who determined the material and provided comments, and of Mr. Mather, who arranged to submit it for Dr. Rindge's study, passed the results on to me, and gave advice in the preparation of this article is very much appreciated.

LITERATURE CITED

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¹ Palaeacrita vernata is recorded from several western states by Essig (1926, Insects of Western North America) and from Colorado and California by Metcalfe et al. (1951, Destructive and Useful Insects). However, all specimens formerly under this name in the California Insect Survey, University of California, Berkeley, have recently been identified as P. longiciliata Hulst (1898) by Rindge, and the occurrence of vernata in the western states is in doubt. Prentice (1963, Forest Lepidoptera of Canada, Vol. 3) records localities west to Saskatchewan for vernata.—ED.