the collection data accompanying a specimen examined by Burns (1964) from Paradise, Arizona, which was reputedly collected in July.

Burgessi has been collected in four additional Texas counties from late March to early May by various collectors as recorded by Burns (1964): Armstrong, Blanco or Burnet, Culberson, and Jeff Davis.

#### LITERATURE CITED

Burns, J. M., 1964. Evolution in skipper butterflies of the genus *Erynnis*. U. Calif. Publ. Ent., 37, 217 pp.

Dos Passos, C. F., 1964. A synonymic list of the Nearctic Rhopalocera. Mem. Lepid. Soc., No. 1.

Freeman, H. A., 1951. Ecological and systematic study of the Hesperioidea of Texas. Southern Methodist Univ. Studies, No. 6.

# MELANIC MOTHS OF THE GENUS OPOSTEGA (TINEOIDEA)

JOHN R. EYER<sup>1</sup>
New Mexico State University, University Park, New Mexico

In connection with examining specimens of *Opostega* from a number of North American museums and several private collections for the purpose of publishing a pictorial key (Eyer, 1964), I noted the presence of melanic individuals of *O. cretea* Meyrick, and *O. quadristrigella* Chambers. Information concerning melanic individuals of North American Opostegidae is, to the author's knowledge, absent in the literature. With the hope that collectors of microlepidoptera will watch for additional examples of such aberrations, especially in light trap collections, photographs and comments concerning their general color and characteristic markings are presented.

In a recent article on melanic tendencies of noctuid and geometrid moths in Pennsylvania, Sharpiro (1964) comments, "Industrial melanism has become standard citation in the literature of genetics and evolution, but relatively little has appeared in the United States on the subject . . . ." Since the melanic specimens of *O. cretea* described here were collected in both industrial and nonindustrial areas and those of *O. quadristrigella* only in nonindustrial areas, further collection and observation is especially desirable.

<sup>&</sup>lt;sup>1</sup> Journal Article No. 242. Agricultural Experiment Station, New Mexico State University, University Park, New Mexico.

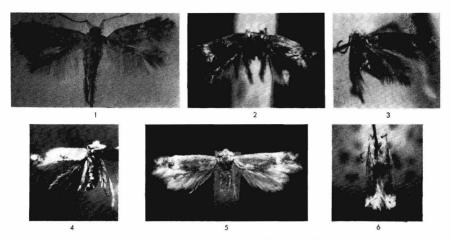


Fig. 1, Opostega cretea Meyr., \$\mathscr{Q}\$, Ottawa, Canada, 17 July 1905; Fig. 2, O. cretea Meyr., \$\mathscr{Q}\$, Fishers, N. Y., 21 July 1933; Fig. 3, O. cretea Meyr., \$\mathscr{Q}\$, Rochester, N. Y. 30 July 1933; Fig. 4, O. cretea Meyr., \$\mathscr{Q}\$, Lake St. Francis, Newago, Quebec, no date; Fig. 5, O. quadristrigella Cham., \$\mathscr{Q}\$?, Balsam, N. C., 19 July 1911; Fig. 6, O. quadristrigella Cham., \$\mathscr{Q}\$, same locality.

# Opostega cretea Meyrick

Example 1. Figure 1; Female, Ottawa, Canada, July 17, 1905 (C. H. Young). This was the first melanic specimen observed by the author. It was in a series of seven specimens borrowed from the Canadian National Museum in 1933. Although it was the only melanic in the series, the genitalia were not removed. As can be seen from the figure, the specimen was badly rubbed and little could be determined about the color of the vestiture of the head and eye caps. The remainder of the specimen was a uniform light chestnut brown. The posterior and apical fringes were in poor condition and the strigils, apical spot, and dorsal spot were not discernible. The entire exoskeleton was darker than that of accompanying specimens with normal white coloration.

Example 2. (Not figured); In a later collection of the C.N.C. borrowed in 1951, another female specimen collected by C. H. Young on June 25, 1932 from the same locality was observed.

Example 3. Figure 2; Female, Fishers, New York, July 21, 1933 (A. B. Klots). This specimen, which was in excellent condition, although not well spread, had forewings dark chestnut brown overlaid with purple to brown scales, especially in the regions of the strigils and dorsal spot; it also had a well-defined apical spot. The patagia were purple—brown. The hindwings were of the same color, but with fewer purple—brown scales. The vestiture of the head and eye caps was yellow—brown and

the flagellum of the antenna darker brown. The thorax and legs were dark brown; the abdomen the same, but more creamy on the lateral surfaces. This specimen is in the collection of the American Museum of Natural History.

Example 4. Figure 3; Male, Rochester, New York, July 30, 1933 (A. B. Klots). This specimen is quite similar to Example 3, but is sufficiently lighter in color to reveal the apical fasciae clearly. The cluster of scales and hairs immediately preceding these are maltese grey, a color which is characteristic of most of the forewing surface on Example 5, described below. The brown hairs of the apical and dorsal fringes of the forewing are also intermixed with the same grey. The patagia are straw-white and the frontal hair tuft and eve caps are silvery white with a touch of straw. This specimen is also in the collection of the A.M.N.H.

Example 5. Figure 4: Female, Lake St. Francis, Newago, Ouebec (no date) (H. S. Parish). In this specimen, maltese grey prevails in the ground color of the forewings, grevish brown in the hind wings. The dorsal spot and fasciae are more clearly visible than in either examples 1 or 3. This specimen is in the collection of Cornell University.

### Opostega ouadristrigella Chambers

Example 1. Figure 5; Female?, Balsam, North Carolina, July 19, 1911 (Annette F. Braun). In this species the melanic coloration of the scales, fringes, and hairs is not shared by the exoskeleton to the same extent as in O. cretea. The overall hue is either grey or yellowish grey and the grey scales and hairs obscure the dorsal spot and four apical strigils almost completely. Several other specimens showing this type of melanism (Fig. 6) and from the same locality are in the private collection of Miss Braun and also in the U.S. National Museum.

Example 2. Female, Black Mountains, North Carolina, "28-VI" (Wm. Beutenmüller). This specimen, which is also deposited in the A.M.N.H., is more yellowish brown than the ones from Balsam, but the general melanistic pattern is similar and a photograph seems unnecessary.

#### LITERATURE CITED

EYER, J. R., 1964. A pictorial key to the North American moths of the family Opostegidae. Jour. Lepid. Soc., 17: 237–242 ["1963"].
Shapiro, A. M., 1964. Melanic tendencies in phalaenid and geometrid moths in Pennsylvania. Jour. Res. Lepid., 3(1): 19–24.