

A NEW SPECIES OF ABAGROTIS (LEPIDOPTERA, NOCTUIDAE).

By JOHN G. FRANCLEMONT, Ithaca, New York

The new species described here was first set aside by Benjamin in the Barnes Collection, and later a series was reared by Crumb and sent to the United States National Museum. Recently it became necessary to check over all the material of the *placida* and *nefascia* groups of *Abagrotis*, and at that time it was found that the species was not confined to the western part of the United States and Canada, but also occurred in the East.

Abagrotis crumbi n. sp.

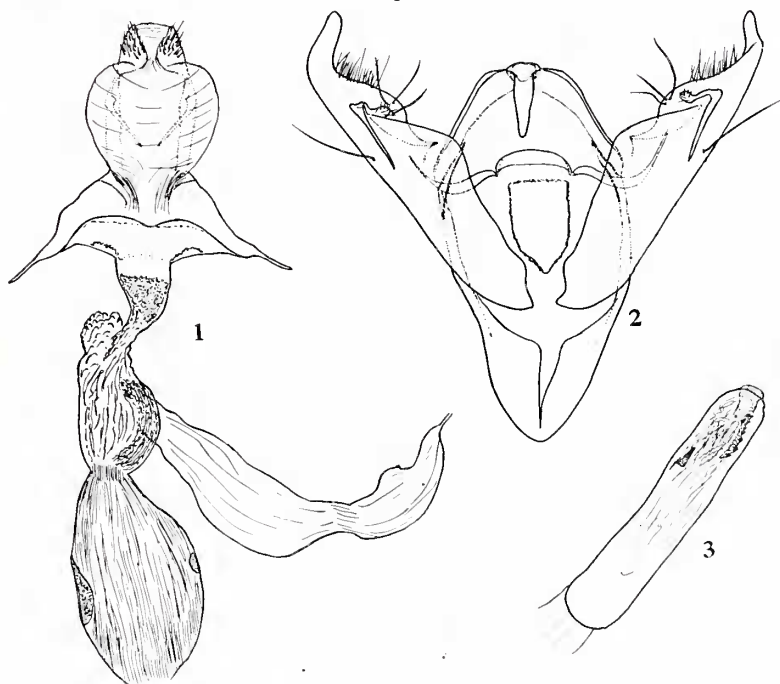
Superficially this species resembles small specimens of *variata* Grote, but it averages smaller and is somewhat narrower winged, with a resultant habitus like that of *placida* Grote and *forbesi* Benjamin, agreeing with the latter in its silken appearance.

Head pale purplish gray, contrasting with thorax; thorax and fore wings concolorous, variable individually, some shade of tan, chestnut-brown or olivaceous with a conspicuous silken sheen, more or less powdered with pale purplish gray scales, which fill the terminal space making it pale and strongly contrasting; basal line, when distinct, wavy, geminate, the included space purplish gray; t. a. and t. p. lines marked by dark dots on the costa, geminate, filled with pale purplish gray; t. a. line wavy; t. p. line ex-curved around cell, then incurved in the submedian interspace; orbicular round, usually slightly darker than the ground color, outlined by pale purplish gray; reniform similar, but of the usual shape; claviform, at most, only faintly indicated by an outline of pale purplish gray scales, usually obsolete; median shade often faintly visible, more frequently obsolescent or obsolete; subterminal line pale, irregular, inwardly defined by the darker subterminal space, and outwardly by the pale purplish gray terminal area; terminal line composed of irregular dark dots; fringe dark with a pale interline; hind wings fuscous brown, scarcely paler basally, fringe paler, with a fuscous interline and luteous base. Beneath: ground color whitish, heavily powdered and obscured by fuscous, appearing dark; fore wing with a strong, black oblique dash on the costa marking the otherwise faint common line, the costal and terminal areas paler than the disc; hind wing with a faint discal mark.

Expanse: 31-38 mm.

Male genitalia (Figures 2 and 3): The genitalia of this species

combine the characters of several others. The general appearance of the valves, tegumen and vinculum is almost identical with those of *duanca* Smith (see: Benjamin, Bull. Southern California Acad. Sci., vol. 20, p. 141, fig. 11); the uncus is similar to that of *variata*; the arms of the transtilla are narrow like those of *duanca* and *dodi* McDunnough, not broad as in *placida* and *alternata* Grote; the vesica is armed with a stout spine which sometimes possesses a slight sclerotization at its base, with a sclerotized band armed with small teeth, and with much fine spiculation which more or less as-



1. *Abagrotis crumbi* Franclemont, female genitalia, Tieton, Washington. Fig. 2. *Abagrotis crumbi*, Type, male genitalia, aedoeagus removed. Fig. 3. *Abagrotis crumbi*, Type, aedoeagus.

sumes a striated appearance as in *forbesi*.

Female genitalia (Figure 1): The genitalia are similar to *forbesi*, but the ductus bursae is distinctly less heavily sclerotized, and there are usually two signa on the bursa.

Type: Male; White Swan, Washington, June 5, 1933 (S. E. Crumb), in the Collection of the United States National Museum. USNM Type No. 54946.

Paratypes: 14 males and 13 females from White Swan, Ellensburg, Yakima, Tieton, and Cashmere, Washington. All bear June and July dates and were reared by S. E. Crumb. In the Collection of the United States National Museum.

Additional specimens are in the National Museum Collection from the following localities: Vernon, British Columbia; Truckee, California; Jemez Springs and Fort Wingate, New Mexico; Prescott, Arizona; Provo, Vineyard, and Eureka, Utah; Glenwood Springs, Oak Creek Canyon, and Lavetta, Colorado.

Abagrotis crumbi race **benjamini** n. subsp.

Similar to the typical race, but the markings are a little less distinct, and the color is generally duller. All the specimens are a rather uniform tannish brown with a contrasting purplish gray terminal area.

Male genitalia: Somewhat larger than the typical race.

Female genitalia: The ductus bursae more heavily sclerotized; general characteristics similar to those of *forbesi*.

Type: E. N. Y. [East New York, New York], July 17, 1900 (A. C. Weeks), in the Collection of the United States National Museum. USNM Type No. 54947.

Paratypes: 2 males and 3 females from East New York, New York (A. C. Weeks), and East River, Connecticut (Chas. R. Ely), in the Collection of the United States National Museum; 3 males, Martha's Vineyard, Massachusetts (F. M. Jones), in the Franclemont Collection.

Associated with these is a single specimen in the National Collection from the J. B. Smith Collection, but without locality or date of capture.

This description was drawn up while the writer was employed by the Division of Insect Identification, Bureau of Entomology and Plant Quarantine, United States Department of Agriculture, Washington, D. C.

NOTICE

The Department of Engineering Physics of Cornell University will give a special course in "Techniques and Applications of the Electron Microscope" from June 13 to June 25, 1955. Inquiries should be addressed to Professor Benjamin M. Siegel, Rockefeller Hall, Cornell University, Ithaca, New York.