Literature Cited

CLENCH, H. K. 1970. New or unusual butterfly records from Florida. Jour. Lepid. Soc. 24: 240–244.

KIMBALL, C. P. 1965. The Lepidoptera of Florida. Gainesville.

MILLER, L. D. Reports on the Margaret M. Cary-Carnegie Museum expedition to Baja California, Mexico, 1961. 6. Family Hesperiidae (Lepidoptera). Ann. Carnegie Mus. (In press).

A NEW SPECIES OF PIRUNA FROM TEXAS (HESPERIIDAE)

HUGH AVERY FREEMAN
1605 Lewis Drive, Garland, Texas

During the summer of 1968 J. E. Hafernik collected rather extensively in the Big Bend area of Texas. Among the many very interesting species that he collected were two specimens of an undescribed species of *Piruna* that is here described.

Piruna haferniki Freeman, new species

MALE (Upper side): Primary dark brownish-black, with seven white, hyaline spots; a prominent, oval, spot in space 2 and midway between this spot and base of wing another much smaller spot in same space. In space 3, a small, round, spot situated directly under apical spot in space 6. Three well developed apical spots of approximately same size in spaces 6, 7, and 8, forming a straight line; lower spot directed toward an area between apex and mid termen of wing. A small, upper cell spot. Fringe light brown, uncheckered.

Secondary dark brownish-black, unmarked. Fringe light brown, uncheckered.

MALE (Under side): Primary brown, slightly lighter in the apical region. White,

hyaline spots present and better defined than on upper side.

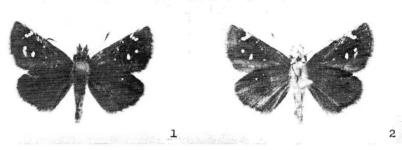
Secondary dark brown with a heavy overscaling of purplish-gray scales over basal half of wing and extending from anal fold along outer margin to space 5. A slightly ferruginous area extending above space 5 along outer margin to apex. Throughout discal area from space 1 to costa an area without overscaling; here brown ground color forming a broadly triangular area darker than the remainder of the wing. No spots present.

BODY: Thorax dark brownish-black above, lighter brown beneath. Abdomen dark brownish-black above, lighter brown beneath. Head brown, with a few yellowish, hair scales present. Palpi white at base, yellowish at termen, dark grayish on lateral sides. Legs golden brown. Antennae, both shaft and club, dark brownish-black above, lighter beneath; club especially pale beneath, yellowish. Apiculus golden.

Wing measurements. Primaries: base to apex, 11 mm; apex to outer angle, 7.5 mm; outer angle to base, 9 mm. Secondaries: base to end of vein 3, 9.5 mm; center of

costa to anal angle, 7.5 mm. Total expanse: 23 mm.

Type Material: Holotype, male, Green Gulch, Big Bend National Park, Brewster County, Texas, elev. 5700 ft., 4 August 1968 (J. E. Hafernik) in the American Museum of Natural History, New York. One male paratype, same location and collector, 24 July 1968, at present in my collection.



Figs. 1 and 2. Upper and under side of *Piruna haferniki* Freeman, holotype, male, Green Gulch, Big Bend National Park, Brewster County, Texas, elev. 5700 ft., 4 August 1968 (J. E. Hafernik).

Superficially on the upper side *P. haferniki* resembles *P. cyclosticta* (Dyar); however the maculation is much better developed in *haferniki*. There are two basic features in *haferniki* which readily separate it from any other *Piruna*: (1) In all other species of *Piruna*, the apical spot in space 7 is either smaller than the other two or else absent, whereas in *haferniki* it is approximately the same size as the others; in all other *Piruna* the line formed by the apical spots is directed toward the center of the outer margin of the wing instead of between this area and the apex as it is in *haferniki*. (2) No other *Piruna* has the unusual purplishgray overscaling on the under side of the secondaries leaving the darker brown discal area which is present in *haferniki*.

There are basic differences in the genitalia, especially the uncus, separating *haferniki* from the other known species of *Piruna. P. haferniki* is a member of the *brunnea* complex which contains *brunnea* (Scud.), *cyclosticta* (Dyar), and *pirus* (Edw.), and can be readily distinguished from these three species by the above characteristics.

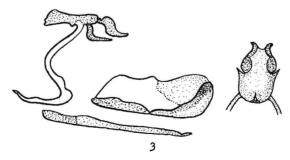


Fig. 3. Piruna haferniki, male genitalia of paratype, Green Gulch, 24 July 1968 (Hafernik).

Acknowledgments

The author wishes to thank the American Philosophical Society for a grant which is making research on the Hesperiidae possible. The photographs of the adults used in this article were made by Mr. William L. Skinner, Physics Teacher, Hillcrest High School, Dallas, Texas.

Literature Cited

Draudt, M. 1924. Hesperiidae. In Macrolepidoptera of the World. Ed. by A. Seitz, Vol. 7. Stuttgart.

Evans, W. H. 1955. A catalogue of the American Hesperiidae indicating the classification and nomenclature adopted in the British Museum. Part 4. Hesperiinae and Megathyminae. London.

Godman, F. D. and O. Salvin. 1887–1901. Biologia Centrali-Americana. Insecta. Lepidoptera–Rhopalocera 2: 244–637.

OBSERVATIONS ON SOME PHYCITINAE (PYRALIDAE) OF TEXAS WITH DESCRIPTIONS OF TWO NEW SPECIES

André Blanchard

P.O. Box 20304, Houston, Texas

The latest revision of the Phycitinae is that of Heinrich (1956). It includes a description and figures of genitalia of every New World species known at the time of its publication. It makes it possible, for anyone who can dissect genitalia, to identify a very large proportion of his captures and to call for expert advice in difficult cases only.

In trying to classify my Phycitinae I have been puzzled by several species which do not appear to be included in Heinrich's monograph. For all of these, except two, I have only one specimen or specimens of only one sex. These will have to wait a little longer. This paper offers a description of the two new species of which I have males and females; it also includes an annotated list of some species which Heinrich had not seen from Texas or even from the United States.

Zamagiria kendalli A. Blanchard, new species

Male: Tongue well developed. Antennae brown, shortly ciliate, a deep sinus at base of shaft, fringed with heavy scale tufts, bearing on each of the three upper segments a claw-like, well-sclerotized process (Fig. 3). Head slightly depressed between antennae and in upper part of front. Labial palpi recurved ascending, first segment whitish, second segment sprinkled with brown scales, very long, broadly dilated and hollowed within to hold maxillary palpi, third segment minute (Fig. 3a). Maxillary palpi in the form of large aigrettes. Head, collar and disc of thorax dark