

A NEW SPECIES OF *PSOROSINA* DYAR
(LEPIDOPTERA: PYRALIDAE) FROM TEXAS

ANDRÉ BLANCHARD AND EDWARD C. KNUDSON

(AB) 3023 Underwood, Houston, Texas 77025; (ECK) 804 Woodstock, Bellaire, Texas 77401.

Abstract.—*Psorosina fergusonella* is described from eastern Texas. Imagines, male and female genitalia, and venation are figured.

A small series of a new phycitine pyralid was collected by both authors in eastern Texas. Generic assignment proved difficult, but based on the wing venation and genitalia, the heretofore monotypic genus, *Psorosina* Dyar, seemed to be the only possible choice.

Psorosina fergusonella Blanchard and Knudson, NEW SPECIES

Figs. 1-7

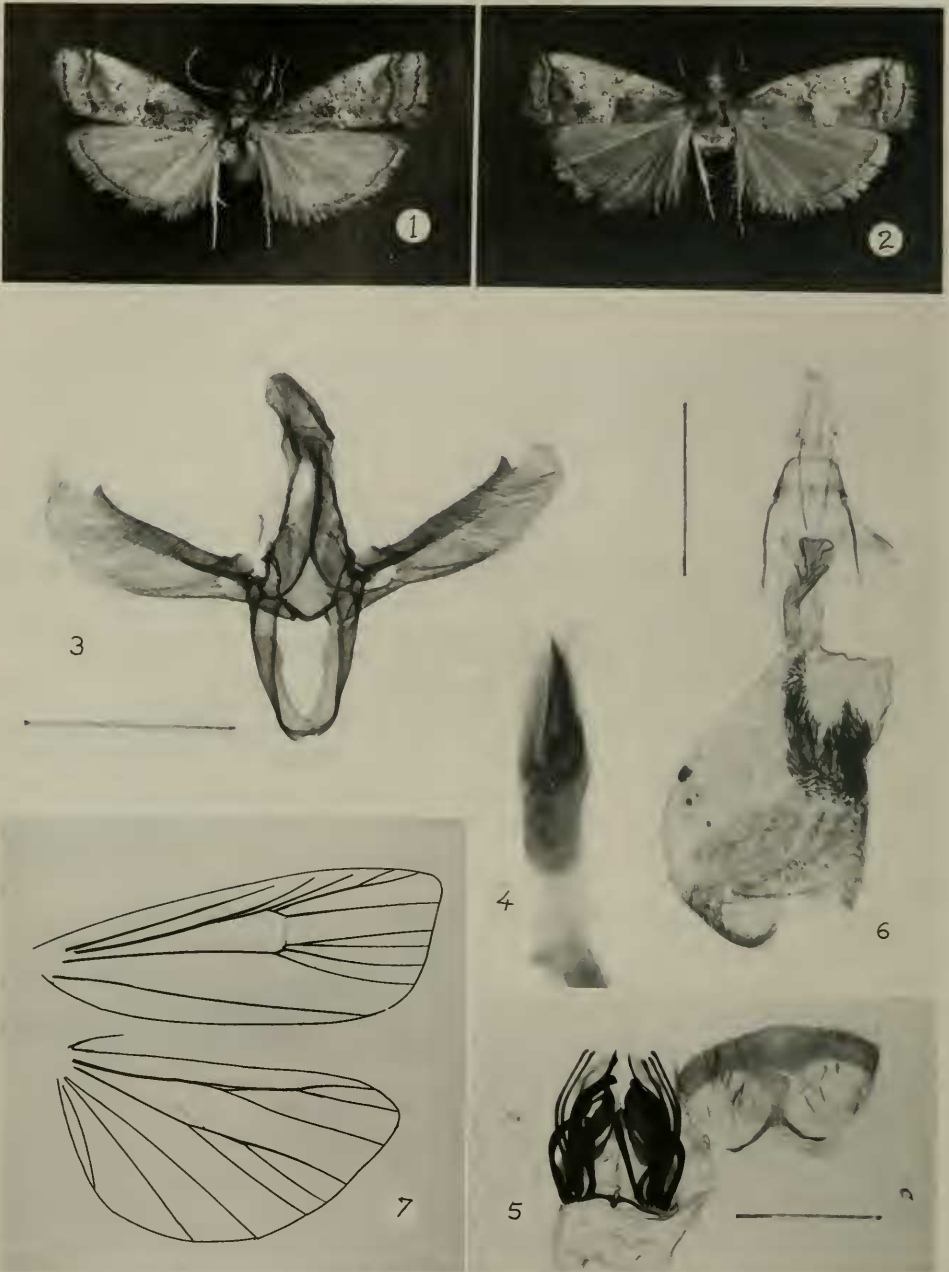
Description.—*Head:* Front and vertex fuscous. Labial palpus upturned, extending above vertex by $\frac{1}{2}$ an eye diameter; smooth scaled, fuscous. Maxillary palpus in male, an aigrette, dull orange; in female, squamous, whitish. Antenna simple, pubescent in male, with basal portion of flagellum expanded to form relatively small sinus with fuscous scale tuft. Each segment of flagellum ochreous and fuscous.

Thorax: Entirely light reddish violet dorsally, ochreous ventrally.

Venation (Fig. 7): Forewing: Smooth, 11 veins, Cu_2 from below lower outer angle of cell, Cu_1 from angle; M_2 – M_3 very shortly stalked; R_3 – R_5 stalked for $\frac{2}{3}$ of their lengths; R_2 from upper outer angle of cell, R_1 from cell. Hindwing: M_3 absent; Cu_1 – M_2 stalked for $\frac{1}{3}$ of their lengths; Sc–Rs stalked for slightly less than $\frac{1}{2}$ their lengths; discocellular vein incomplete.

Maculation (Figs. 1, 2): Forewing: Ground color dull reddish violet with extensive whitish suffusion over entire costa, extending to dorsal margin near middle. In male, whitish costal area irrorated with black scales, resulting in a bluish gray shade to naked eye. In female, this area feebly irrorated with red scales. Antemedial line faint, white, slightly sinuous and angled slightly outward from costa; margined outwardly by narrow reddish line. Subterminal line conspicuous, white, slightly outwardly angled near middle; margined inwardly with strong reddish line, outwardly with fainter, diffuse, reddish line. Subterminal area suffused with whitish. Discal dots black, separate or confluent. Terminal line black. Fringe fuscous. Hindwing: Fuscous, lighter toward base. Black terminal line. Fringe dark fuscous inwardly, lighter outwardly.

Length of forewing: Male: $n = 2$, 6.4 and 6.8 mm; Female: $n = 3$, 6.5, 6.6, and 6.8 mm.



Figs. 1-7. *Psorosina fergusonella*. 1, Holotype, male, Anderson Co., Texas, Engeling WMA, near Tennessee Colony, 19-VI-82. 2, Paratype female, Harris Co., Texas, Houston, 17-VIII-66. 3, Male genitalia of paratype, from slide ECK 410, same data as holotype. 4, Aedeagus of paratype, from slide ECK 410. 5, Ventral compound tufts of 8th Abdominal segment, from slide ECK 410. 6, Female genitalia of paratype, from slide ECK 418, Harris Co., Texas, Lake Houston, 22-VIII-82. 7, Wing venation of paratype, from slide ECK 418 (female). The segments in Figs. 3, 4, and 6 represent 1 mm.

Male genitalia (Figs. 3–5): Uncus hoodlike, apex rounded; apical process of gnathos a slender hook; transtilla rudimentary; harpe moderately slender, cucullus rounded; heavily sclerotized costa produced into short spine before apex of cucullus; juxta with lateral lobes; vinculum oblong, longer than broad; aedeagus armed with single strong cornutus. Eight abdominal segment of male with compound ventral tufts.

Female genitalia (Fig. 6): Ostium and ductus bursae sclerotized ventrally; ductus seminalis from lobe of bursa adjacent to junction of bursa and ductus bursae; bursa membranous, apical $\frac{1}{2}$ covered with dense mat of fine spines on inner surface; elongate mat of larger, heavily sclerotized spines extending from near junction of bursa and ductus bursae to near middle; 3 plate like signa near middle of bursa, posterior 1 larger than other 2.

Holotype (Fig. 1).—♂, Anderson Co., Texas, Engeling Wildlife Management Area, near Tennessee Colony, 19-VI-82, with genitalia slide ECK 352, collected by E. Knudson and deposited in the National Museum of Natural History, Washington, D.C.

Paratypes.—Same data as holotype, 1 ♂; Harris Co., Texas, Lake Houston, 22-VIII-82, 1 ♀, with slide ECK 418, collected by E. Knudson. Harris Co., Texas, Houston, 17-VIII-66, 1 ♀, with slide A.B. 1810, 26-VIII-66, 1 ♀, with slide A.B. 2038, collected by A. and M. E. Blanchard.

Remarks.—This new species was assigned to the genus *Psorosina* chiefly by virtue of its unique wing venation, which occurs in no other genus of the phycitines. There are also strong similarities in the male genitalia between *Psorosina fergusonella* and *Psorosina hammondi* (Riley), the only other species in this genus. However, there are also several important disparities noted in the new species, some of which depart from Heinrich's (1956) redescription of Dyar's genus. These characters of the new species are as follows: Male with maxillary palpus an aigrette; male antennal sinus reduced; male eighth segment ventral tuft of different form; and female genitalia with ductus bursae sclerotized ventrally, lacking spined plates laterally; bursa with more highly developed signa. In comparison with other phycitine genera, however, these differences can easily be regarded as specific rather than generic. *Psorosina fergusonella* should be easily diagnosed by maculation, wing venation, and maxillary palpi of the male. The new species is named for Dr. Douglas C. Ferguson in appreciation of the great amount of assistance and encouragement he has given to the authors.

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LITERATURE CITED

- Heinrich, C. 1956. American Moths of the Subfamily Phycitinae. U.S. Natl. Mus. Bull. 207, 581 pp.