TWO NEW PHYCITINAE (LEPIDOPTERA: PYRALIDAE) FROM TEXAS AND ALABAMA

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Abstract.—Salebriaria atratella and Anderida peorinella, two new species of phycitine pyralids, are described. Adults, wing venation (of A. peorinella only), and male and female genitalia are figured.

The following two new species in the pyralid subfamily, Phycitinae, are described from examples collected by the authors in Texas and Alabama. Although this subfamily was revised comparatively recently (Heinrich, 1956), at least 60 new species and 7 new genera have been described from America north of Mexico since this revision. There is little doubt that many more remain undescribed, especially from the American tropics. Phycitines frequently suffer from neglect, both from collectors and in museum drawers, perhaps because they are obscurely colored and marked and determinations are largely dependent on genitalic dissection. However, the male and female genitalia are highly variable within the subfamily and usually provide good characters for species determination. The wing venation is also quite variable among the genera, and was used by Heinrich as the basis for his scheme of classification. In the author's experience, adult phycitines are readily attracted to ultraviolet light. In most Texas habitats, they often constitute a large percentage of smaller moths collected in the author's light traps. The larvae exhibit a wide range of habits, including foliage feeders, stem borers, feeders on scale insects, and pests of stored cereal products.

Salebriaria atratella, Blanchard & Knudson, New Species Figs. 1-6

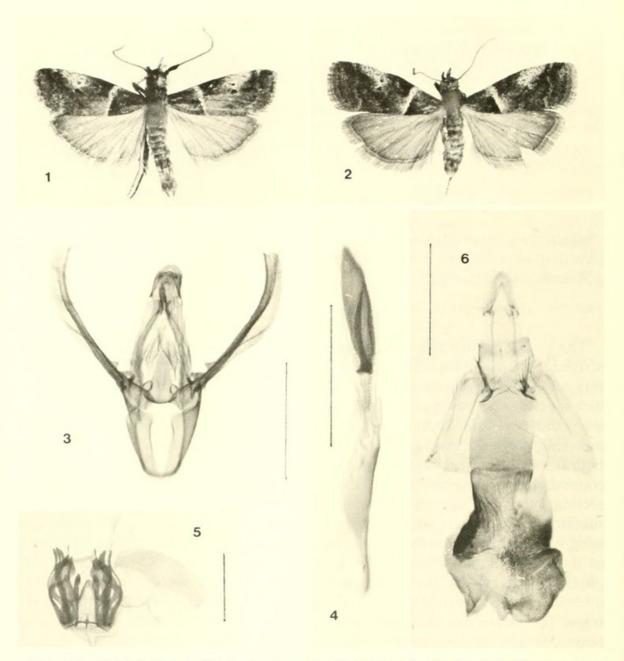
Head.—Front dark fuscous; vertex whitish ochreous; labial palpi upcurved, extending above vertex by ½ eye diameter, dark brown dorso-laterally, pale ochreous ventrally. Short third segments of labial palpi fuscous. Maxillary palpi dull orange aigrettes. Antennae light brownish ochreous, with black scale tuft in sinus at base of flagellum in male.

Thorax medium fuscous dorsally, ochreous ventrally.

Abdomen medium fuscous, with bands of ochreous scales at posterior margins of segments.

Length of forewing.—Males: (N = 4), 6.6-6.9 mm, average 6.8 mm. Females: (N = 10) 6.7-7.8 mm, average 7.2 mm.

Forewing.—Ground color dark fuscous, more intense basad of antemedial line and over middle of costal margin. Antemedial line white, outwardly oblique from



Figs. 1–6. Salebriaria atratella. 1, Holotype male. 2, Paratype female, Hunt Co. Texas. 3, Male genitalia (aedeagus removed) of paratype, on slide ECK 955, Hunt Co., Texas. 4, Aedeagus with partially everted vesica, same specimen and slide as Fig. 3. 5, Compound tufts on 8th abdominal segment of male paratype, same specimen and slide as Fig. 3. 6, Female genitalia of paratype, on slide ECK 951, Anderson Co., Texas, 14-VIII-82. Line in 3–6 = 1 mm.

costal margin at ¼ the distance from base, to dorsal margin at ⅓ the distance from base. Near costal margin, antemedial line is somewhat more diffuse, with white scales extending into basal area. Subterminal line white, weakly represented, nearly vertical and slightly sinuate. Along outer costal margin, just before subterminal line, is a diffuse patch of white scales, extending over upper portion of cell and surrounding upper black discal spot. Lower black discal spot poorly contrasted against ground color. Terminal line black, poorly contrasted against ground color. Along dorsal margin to basal ⅓ are a few orange brown scales and

just beyond antemedial line are a few orange brown scales below fold. Fringe fuscous, with a darker inner band.

Hindwing light fuscous, paler toward base, darker at termen and along veins. Fringe fuscous.

Male genitalia (Figs. 3, 4, 5).—Apical process of gnathos elongate, pointed at tip; sclerotized portion of anellus consisting of an elongate median plate and short, rounded lateral processes; valvae extremely narrow, costa well sclerotized, with apical spine and two short, triangular projections near base. Aedegus (Fig. 4), with vesica extruded, containing large trapezoidal cornutus, closely appressed to narrow pointed cornutus. Compound tufts and sclerotizations of 8th abdominal segment are shown in Fig. 5.

Female genitalia (Fig. 6).—Short, oblique, sclerotized plates lateral to ostium bursae, armed with 4 or 5 slender spines; ductus bursae broad, compressed dorsoventrally, well sclerotized; corpus bursae globular, with extensive scobinate patches and striations.

Holotype (Fig. 1).—♂, Hunt Co., Texas, Lake Tawakoni, Wind Point Park, 15-VII-84, collected by E. Knudson and deposited in the National Museum of Natural History.

Paratypes.—Texas: Same data as holotype, 3 & (genitalia on slides ECK 946, 955, and 958), 5 \(\text{?}; \) Anderson Co., Tennessee Colony, 14-VIII-82, 1 \(\text{?}; \) (genitalia on slide ECK 951); 16-VI-84, 1 \(\text{?}, \) all collected by E. Knudson. Montgomery Co., Conroe, 15-V-70, 2 \(\text{?}; \) (genitalia on slide AB 2399); Tyler Co., Town Bluff, 6-VI-67, 1 \(\text{?}; \) (genitalia on slide AB 1823), collected by A. & M. E. Blanchard. Alabama: Mobile Co., Saraland, 5-IX-82, 1 \(\text{?}; \) collected by E. Knudson.

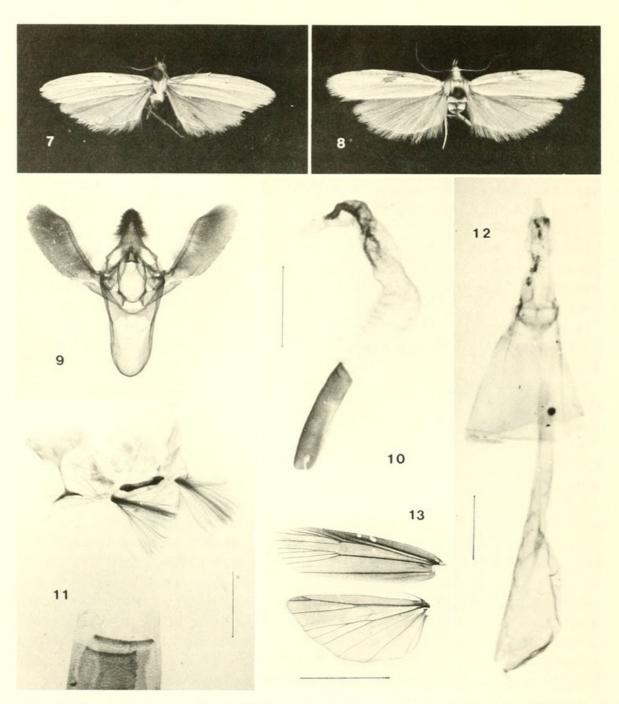
Remarks.—Salebriaria atratella may be distinguished from previously described species of Salebriaria Heinrich by its relatively smaller size and dark coloration with sharply defined, white antemedial line. It is closest in superficial appearance to Salebriaria fructetella (Hulst) and Quasisalebria admixta Heinrich, but is smaller and has less whitish suffusion on the forewing. Both the male and female genitalia are most similar to those of Salebriaria pumilella (Ragonot). From this species, the male genitalia of atratella differ in the much narrower valvae, the differently shaped sclerotization of the anellus, and the large, broad cornutus in the vesica. The female genitalia differ from that of pumilella chiefly in the broader ductus bursae, the more globular corpus bursae, and the presence of spined plates lateral to the ostium bursae. These last mentioned, unusual structures are not found in the other species of Salebriaria. Both the male and female genitalia of Q. admixta are extremely different from S. atratella.

Anderida peorinella Blanchard & Knudson, New Species Figs. 7-13

Head.—Front and vertex yellowish white; labial palpi obliquely upturned, yellowish white on inner surface, outer surface brownish, exceeding front by 1 eye diameter; maxillary palpi filiform, ochreous; antennae simple, ochreous, with very short setae ventrally.

Thorax.—Patagia yellowish white; tegulae and mesonotum slightly darker. Undersurface and legs yellowish white.

Abdomen light yellowish brown.



Figs. 7–13. Anderida peorinella. 7, Holotype male. 8, Paratype female. 9, Male genitalia (aedeagus removed) of holotype. 10, Aedeagus, with inflated vesica, of holotype. 11, Scale tufts and sclerotizations on 8th segment of holotype (sternite to the right). 12, Female genitalia of paratype, on slide ECK 864. 13, Wing venation of male paratype, on slide ECK 976 (by A. Blanchard), Comal Co., Texas. Line in 11–12 = 1 mm.

Length of forewing.—Males: (N = 3), 8.1–11.2 mm, average 9.7 mm. Female: (N = 1), 12.5 mm.

Wing venation as shown in Fig. 13.

Forewing.—Costal half, above median vein, glossy yellowish white, with brownish streaks in intervenular spaces over apical half. Dorsal half below median vein pale brownish yellow, with a darker streak immediately below median vein.

Branches of median vein beyond cell, yellowish white. Apical half of fringe yellowish white, tornal half pale brownish yellow.

Hindwing pale fuscous, fringe yellowish white.

Male genitalia (Figs. 9, 10, 11).—Uncus tapering to a blunt point, heavily setose; gnathos subtriangular, divided slightly at base and apex; transtilla incomplete; aedeagus with inflated vesica shown in Fig. 10. Vesica densely scobinate toward apex. Fig. 11 represents unfolded 8th segment of abdomen of male, with sternite on right, bearing ventrolateral scale tufts.

Female genitalia (Fig. 12).—Ostium bursae broadly funnel shaped, lightly sclerotized; ductus bursae membranous; corpus bursae membranous, without signum.

Holotype (Fig. 7).—∂, Brewster Co., Texas, Big Bend National Park, K-Bar Research Station, 1-IV-84, genitalia on slide ECK 853, collected by E. Knudson and deposited in the National Museum of Natural History.

Paratypes.—Same data as for holotype, 1 \, genitalia on slide ECK 864; Brown Co., Texas, Lake Brownwood State Park, 30-IV-84, 1 \, Comal Co., Texas, Canyon Lake, 20-V-79, genitalia on slide ECK 111, left wings on slide ECK 976, all collected by E. Knudson.

Remarks.—Although Anderida peorinella bears little superficial resemblance to A. sonorella (Ragonot), the only other species in the genus, the structure of the head appendages, male and female genitalia, and wing venation argue strongly for placement in Anderida Heinrich (1956). Except for slight differences in the juxta and vinculum, the male genitalia are virtually identical to those of sonorella. The female genitalia are also very similar to those of sonorella, but lack a signum. Like sonorella, this new species is apparently quite variable in size. The name of the new species was suggested by its superficial resemblance to several Peoriinae which occur in the same region. It is easily distinguished from these by venation, and its well developed tongue.

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