

## A NEW SCHOENOBINE GENUS AND SPECIES (PYRALOIDEA)

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**Carectocultus** A. Blanchard, **new genus**

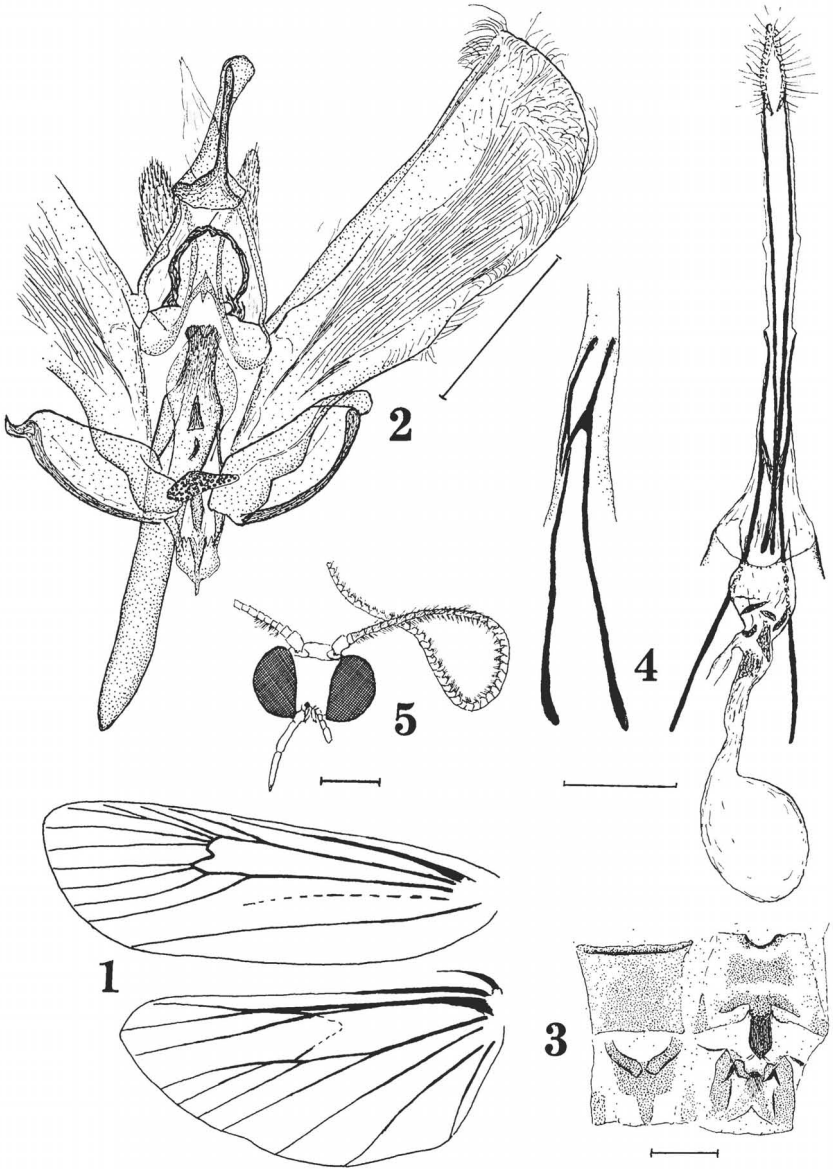
**Head** (Fig. 5): Eyes bulging, slightly larger in diameter than height of head. Front rounded, about  $\frac{1}{2}$  an eye diameter wide. Tongue short. Labial palps porrect, slightly downcurved, clothed with long scales, exceeding front by about one eye diameter, second segment longest. Maxillary palps about  $\frac{1}{2}$  as long as labial palps, triangularly tufted. Male antennae clothed with scales dorsally and dorsolaterally, ciliate; length of bristles slightly larger than diameter of shaft. Female antennae thinner, pubescent.

**Thorax:** Legs long; with femur folded alongside coxa and tibia alongside femur, the male's hindlegs exceed the tip of abdomen by the four distal segments of the tarsus; female's hindlegs shorter, only reach tip of abdomen. Forewing (Fig. 1): cell  $\frac{3}{5}$  the length of wing; Sc well separated from radius;  $R_1$  and  $R_2$  from cell;  $R_3$  and  $R_4$  stalked over  $\frac{1}{2}$  the length of  $R_4$ ;  $M_2$  and  $M_3$  separately from lower outer angle (or rather bend) of cell;  $Cu_1$  from before the bend;  $Cu_2$  from well basad of  $Cu_1$ ; basal half of first anal is at most a shadow on a stained wing preparation but nothing remains of the distal half. Hindwing (Fig. 1): cell about  $\frac{1}{2}$  as long as wing; discocellular vein deeply angled-in; Rs anastomosed with Sc over a short length but leaving upper outer angle of cell separately;  $M_1$  connate with Rs;  $M_2$  and  $M_3$  shortly stalked from lower outer angle of cell;  $Cu_1$  from near angle;  $Cu_2$  from cubitus  $\frac{2}{3}$  distance from base.

**Male genitalia** (Figs. 2 & 3): Uncus spatulate, enlarged at base. Gnathos thin, nearly as long as uncus, enlarged at base, forming with uncus a mandibulate assembly. Long, flaplike, ciliate socii on each side of the tegumen. Valves long, broadest  $\frac{2}{3}$  distance from base, deeply striated from base to apex, except along costa and sacculus. Transtilla shaped like a horseshoe, heavily sclerotized. Juxta narrow, long. Vinculum narrowing progressively towards short saccus. Attached and articulated to vinculum on each side of it, cephalad from the valve, there is a small spoon-like appendage, clothed with bristle-like scales. Between these appendages and narrowly connected to vinculum, there is a small plate covered with bouquet of long, subparallel, bristle-like scales. Aedeagus as long as combined length of vinculum and tegumen, dilated in distal  $\frac{1}{3}$ - $\frac{3}{4}$  and constricted at apex. Vesica with some darkened, probably sclerotized wrinkles, armed with one cornutus. Eighth abdominal segment with sclerotized plates; seventh segment with a medial scale tuft.

**Female genitalia** (Fig. 4): Corpus bursae bulbous, without signum; ductus bursae about twice as long as diameter of corpus bursae, unsclerotized except in the  $\frac{1}{4}$ - $\frac{1}{3}$  of it, between origin of ductus seminalis and pouch-like ostium bursae, where there are three or four small sclerites; depth and breadth of ostium bursae about three times diameter of ductus bursae. Anterior apophyses as long as combined length of corpus, ductus and ostium bursae; connected together at  $\frac{1}{4}$  their length from their caudal extremity by a V-shaped bridge. Posterior apophyses  $1\frac{1}{2}$  times as long as anterior apophyses. Ovipositor laterally compressed, blade-like.

The new species of Schoenobiinae, the description of which follows, looks so much like *Scirpophaga perstrialis* Hbn. that I first thought that they would fit nicely into the same genus. The examination of the genitalia did not change too much this opinion, since the most obvious



Figs. 1-5. *Carectocultus dominicki*: 1, male wing venation; 2, male genitalia; 3, sclerotization of seventh and eighth abdominal segment of male; 4, female genitalia and dorsolateral view of anterior apophyses; 5, denuded head of a male specimen.

difference between the male genitalia is in the shape and degree of sclerotization of the transtilla (very little sclerotization in *perstrialis*); the difference between female genitalia is mostly a matter of the length of the collar and ovipositor apophyses, which are much shorter in *perstrialis* than in the new species. I would probably have decided to describe the new species as a *Scirpophaga* if I had not become suspicious of the proper classification of *perstrialis* in *Scirpophaga*, which is a European genus. The British Museum (Natural History) let me have a pair of *Scirpophaga praelata* Scopoli for dissection. The examination of wing venation and genitalia of that pair left me with absolutely no doubt: neither *perstrialis* nor the new species can fit under *Scirpophaga*. The differences between female genitalia, particularly, are definitely irreconcilable: at least one new genus was needed. I did not try to make the description of it broad enough to cover both species, as I have some doubts that they are congeneric.

Forbes (1923; p. 525), in his characterization of the Schoenobiinae, writes about the venation of the forewing: "1st. A developed tubular vein at margin, with interspaces of the normal width between it and the veins above and below it; usually curving down to inner margin." This character, which he uses in his key to the subfamilies of the Pyralidae, would eliminate "*Scirpophaga perstrialis*" as well as the new species although I have no doubt that they are true Schoenobiinae.

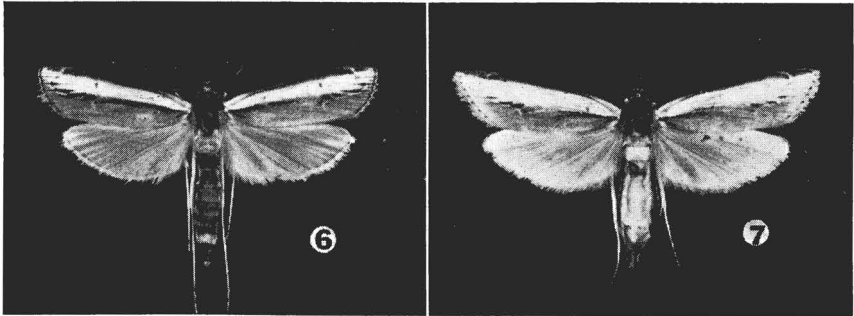
### **Carectocultus dominicki** A. Blanchard, **new species**

Figs. 1-7

**Male** (Fig. 6): Maxillary and labial palps above dark brown; labial palps beneath white. Front and vertex brown, some white scales behind antennae and eyes. Collar and tegulae brown; thorax darker. Forewing above: a silvery white fascia, between radius and cubitus, extends almost to the outer margin, becoming three-pronged over  $R_5$ ,  $M_1$  and  $M_2$  because of thin intervenular brown dashes. More intervenular short dashes between  $M_2$ ,  $M_3$  and the cubital veins. Lower half of wing becomes progressively paler and duller toward the inner margin. No antemedial line. The white subterminal line starts on costa  $\frac{1}{6}$ - $\frac{1}{7}$  wing length from apex, can be traced even through the white fascia, because of the intervenular dashes adnate to and basad of it; it approaches to within about  $\frac{1}{15}$  wing length of the termen over vein  $M_1$ , then is deeply drawn in and becomes subparallel to the fascia; at a point about  $\frac{2}{3}$  wing length from base it makes a sharp turn toward inner margin and disappears completely before reaching second anal vein; adterminal line of confluent intervenular blackish dots. Terminal line white. Fringe brown, more or less checkered. A small brown spot on discocellular vein. Hindwing above: smoky tan; intervenular darker dots at termen; fringe slightly paler than disk of wing. Wings beneath: brownish; forewing darker except under white fascia; terminal lines and fringes as above. Abdomen above smoky tan, almost black at the tip; beneath yellowish tan.

**Female** (Fig. 7): Same pattern of wing maculation as male, but much paler generally. Abdomen white. Hind wings white.

**Wing expanse:** Male 24.0-29.5 mm, average 27.5 mm; female 28.0-33.0 mm, average 30.5 mm.



Figs. 6-7. *Carectocultus dominicki*: 6, holotype, male, Deutschburg, Jackson Co., Texas, 31 July 1972; 7, paratype, female, Deutschburg, 31 July 1972.

**Male genitalia:** As described for the genus and shown in Figs. 2 & 3.

**Female genitalia:** As described for the genus and shown in Fig. 4.

**Holotype:** Male, Deutschburg, Jackson Co., Texas, 31 July 1972, deposited in National Museum of Natural History (No. 73242).

**Paratypes:** Ocean City, Okaloosa Co., Florida, 17 May 1962, 1 ♀, collected by H. O. Hilton. The Wedge Plantation, McClellanville, South Carolina, 8 June 1971, 1 ♂; 17 June 1971, 1 ♂; 19 June 1971, 1 ♀; 21 June 1971, 2 ♂♂, 2 ♀♀; 26 July 1971, 1 ♀; 28 July 1971, 1 ♂; 30 July 1971, 1 ♀; 31 July 1971, 1 ♂; 2 Aug. 1971, 1 ♀; 9 Aug. 1971, 3 ♂♂; 10 Aug. 1971, 1 ♂, 1 ♀; 19 Aug. 1971, 1 ♂; 30 June 1973, 1 ♀; 2 July 1973, 1 ♀, collected by R. B. Dominick. Deutschburg, Jackson Co., Texas, 31 July 1972, 4 ♂♂, 11 ♀♀; 2 Aug. 1972, 9 ♂♂, 4 ♀♀; 18 Sept. 1973, 1 ♂.

Paratypes are deposited in the National Museum of Natural History, in the British Museum (Natural History), in the Canadian National Collection and in the American Museum of Natural History.

This species is dedicated to Dr. Richard B. Dominick, to whom we owe the publication of the magnificent *Moths of America North of Mexico*, who has collected large numbers of this insect, and who gave me (in litt.) the following information: "Data from the Wedge series of about 150 specimens (all caught at U.V. light) show records beginning just barely in May, ending in September; predominantly in July and August. It would seem to indicate two broods, late June through early July, and then again late July through August . . . a gentle curve with two gentle peaks, beginning May, ending September."

#### ACKNOWLEDGMENTS

It is a pleasure to acknowledge with thanks the gift of a pair of *Scirpophaga praelata* Scopoli by the British Museum (Natural History) and the loan of specimens by Dr. R. B. Dominick and Mr. H. O. Hilton.

#### LITERATURE CITED

- FORBES, W. T. M. 1923. The Lepidoptera of New York and neighboring states. Cornell University, Memoir 68, 729 p.