

# A NEW FLORIDA *CHRYSENDETON* MOTH (LEPIDOPTERA: PYRALIDAE: NYMPHULINAE)

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**ABSTRACT.**— *Chrysendeton nigrescens* n. sp. is described from northern Florida.

**KEY WORDS:** aquatic moths, bog habitat, *Chrysendeton nigrescens* n. sp., Nearctic, Neotropical, Panama, West Indies.

The genus *Chrysendeton* is one of a number of genera of aquatic moths in the subfamily Nymphulinae, with 20 species now recognized in the New World (Munroe, *in prep.*). Primarily Neotropical, only four species now occur in the Nearctic and three of these are southeastern United States and Florida moths (Lange, 1956; Munroe, 1972). The new species described below has only recently been discovered in northern Florida, mainly associated with pitcher plant bogs. The life history of none of the *Chrysendeton* species has been elucidated.

## *Chrysendeton nigrescens* Heppner, new sp.

**Diagnosis.**— This dark species (Fig. 1) is similar to some Neotropical species but cannot be mistaken for any of the Nearctic species, particularly by its overall blackish coloration, the prominent orange fascia at the termen, and the lack of prominent forewing silvery marks midwing.

**Description.**— Forewing length: 3.7-4.1mm ♂, 4.3-5.2mm ♀.

**MALE.**— *Head:* shining fuscous; neck ventrally white; labial palpus fuscous, with white at base ventrally; maxillary palpus whitish; antenna fuscous, alternating with brown segments, and densely pubescent. *Thorax:* fuscous; venter fuscous. *Forewing:* fuscous entire wing to 3/4; central wing area bordering dorsal margin white, overlaid with numerous fuscous scales; apical quarter with brown wedge from costal margin, bordered distally by a white wedge, followed distally by a larger orange wedge bordering the termen and extending to near the tornal angle; tornal area with a silvery mark on a dense fuscous field; fringe fuscous; venter with only white and orange marks repeated. *Hindwing:* white heavily overlaid with fuscous scales; termen with 4 black spots merging from apex to tornus, each with a central silver spot and intervened by orange marginal spots; venter same; fringe fuscous. *Abdomen:* fuscous. *Male genitalia* (Fig. 2): tegumen broad and rounded; vinculum small and rounded with no saccus; uncus extended as an extremely long and slender point; gnathos with broad base narrowing to slender point (somewhat more than half length of uncus), with 1 inner tooth at tip; valva slender and unsclerotized, with few setae except for near dorsal apical region and at saccular angle; anellus bell-shaped, with narrow dorsal extension on a broad base; aedeagus elongate, with at most 1 cornutus (indistinct).



Fig. 1. *Chrysendeton nigrescens* Heppner, n. sp.: Holotype ♀.

**FEMALE** (Fig. 1).— Same as for male. *Female genitalia* (Fig. 3): ovipositor very elongate and sharply pointed papilla anales; apophyses extremely long and slender, with posterior pair nearly twice length of anterior pair; ostium bursae a simple elongated sac from a round antrum, with fine ridge-like lines towards constriction of ostium before entrance of ductus seminalis; ductus bursae short, gradually widening from ostium constriction to bulbous-shaped corpus bursae; no signum evident.

**Types.**— *Holotype* ♀: FLORIDA.— nr. Sumatra, [Appalachicola Natl. For.], Liberty Co., 26 May 1990, J. S. Kutis (FSCA; JBH 1987). *Allotype* ♂: Blackwater River St. Park, Santa Rosa Co., Florida, 7 Aug 1989, D. Matthews & T. Lott (FSCA; JBH 1985).

*Paratypes* (3♂, 23♀): FLORIDA.— *Franklin Co.:* Hickory Landing Cpgd., [Appalachicola Natl. For.], 1 Sep 91 (1♂, 1♀ - HDB; 2♂, 1♀ - JSK).

*Liberty Co.:* Nr. Sumatra [Appalachicola Natl. For.], 24 May 1991 (14♀, J. S. Kutis (JSK); 2 Jun 1990 (3♀), H. D. Baggett (HDB); 15 Sep 1990 (1♀), J. S. Kutis (JSK); 15 Sep 1990 (3♀), R. Gillmore (RG).

**Distribution.**— Known only from northern Florida, primarily from habitats near pitcher plant bogs.

**Flight Periods.**— Thus far at least two flight periods are evident: May-Jun, Aug-Sep.

**Hosts.**— Unknown.

**Remarks.**— This remarkable new *Chrysendeton* is distinctly darker than any of the other three species of the southeastern United States, primarily due to lack of the distinctive silvery

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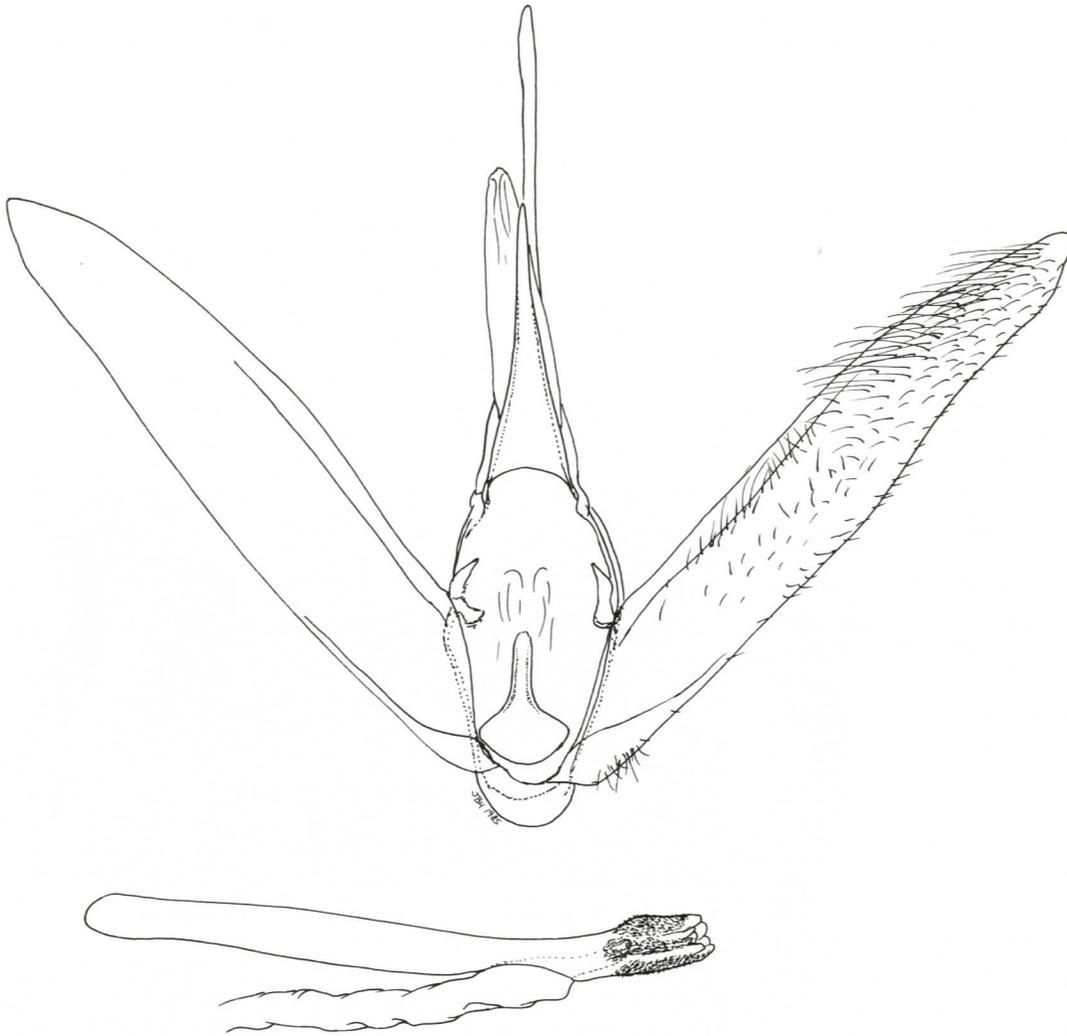


Fig. 2. *Chrysendeton nigrescens* Heppner, n. sp.: Allotype ♂ (JBH 1885); a detail of aedeagus (same scale).

white marks mid-wing. The only species that appear similar to *C. nigrescens* are some of the Neotropical species that are now included in the genus, and particularly *Chrysendeton autobella* (Dyar), from Panama, which differs in the following points: having more orange as forewing markings; a male anellus with a wider dorsal projection; and the female ostium bursae greatly different in being larger and with extensive sclerotizations. The male genitalia of all these species are rather similar, while the female genitalia differ much more.

#### ACKNOWLEDGMENTS

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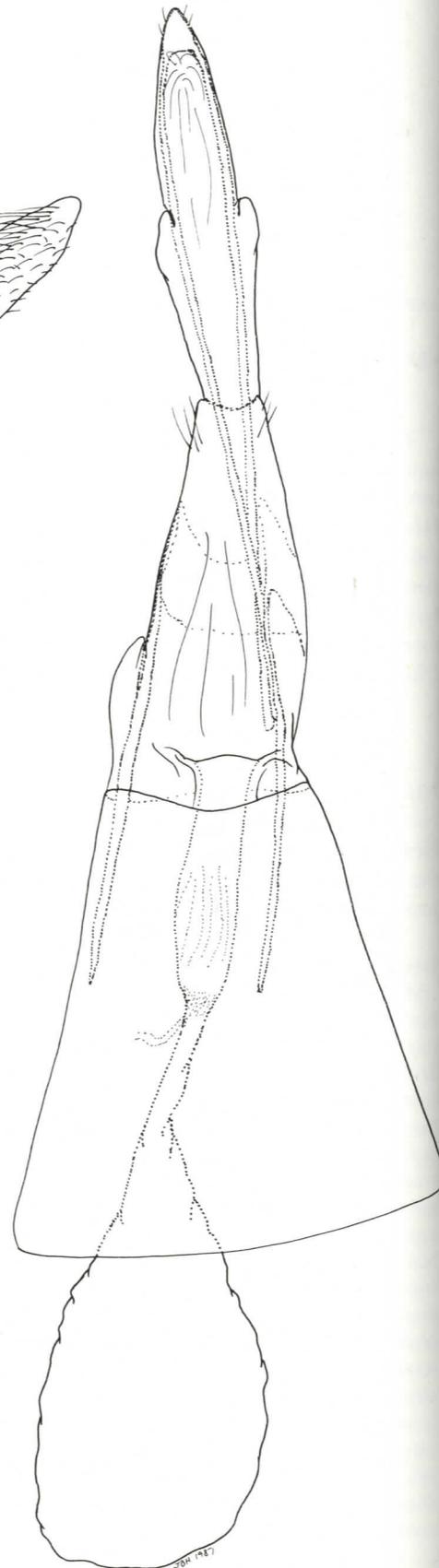


Fig. 3. *Chrysendeton nigrescens* Heppner, n. sp.: Holotype ♀ (JBH 1987).

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