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# NEW RECORDS OF NOCTUID MOTHS FROM FLORIDA (LEPIDOPTERA: NOCTUIDAE)

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**ABSTRACT.**—New Florida records are reported for 30 species of Neotropical Noctuidae, with most of the new records also new for the continental United States fauna.

**KEY WORDS:** *Achaea, Aglaonice, Anacardiaceae, Anomis, Bleptina, Callopistria, Condica, distribution, Elaphria, Elousa, Epidromia, Eulepidotis, Euscirrhopterus, Gonodonta, hostplants, Hypena, Leucania, Litoprosopus, Macristis, Metalectra, Mimophisma, Mocis, Myrtaceae, Neotuerta, Paectes, Pseudaletia, Ptichodis, Spodoptera, West Indies.*

This paper reports 30 species of Noctuidae collected in Florida, primarily extreme southern Florida, of which 26 represent new records for the continental United States. Most of these Neotropical species have not been illustrated previously and were not included in the North American MONA checklist (Hodges *et al.*, 1983). Some of these species are now established in south Florida, particularly the Florida Keys and the Homestead, Dade Co., area. One species, *Metalectra geminicincta* Schaus, described from Cuba and Mexico, is unusual in being established in central and north Florida but as yet not recorded from south Florida.

All dates for collections of species are those of the author except where stated otherwise.

## 1. BLEPTINA ARAEALIS (Hampson)

Fig. 1

*Nodaria arealis* Hampson, 1901. Bahamas.

Monroe Co.: N. Key Largo, 6 Dec 1986 (1♂), 16 Feb 1987 (1♀), 30 Mar 1987 (1♀), 8 Jan 1988 (1♂); No Name Key, 26 Mar 1987 (1♂). Det. M. S. Adams.

## 2. PHYSULA ALBIPUNCTILLA Schaus

Fig. 2

*Physula albipunctilla* Schaus, 1916. Cuba.

Dade Co.: Fuchs Hammock (Homestead) and Navy Wells Pineland Preserve. Monroe Co.: N. Key Largo and Big Cypress Natl. Preserve. Numerous records both at MV light and at bait dating from 5 May 1980. Det. M. S. Adams.

## 3. AGLAONICE HIRTIPALPIS (Walker)

Fig. 3

*Bleptina hirtipalpis* Walker, 1859. Venezuela.

Dade Co.: Fuchs Hammock (Homestead), numerous records dating from 15 Aug 1984. Monroe Co.: Big Cypress Natl. Preserve, several records during 1988 and 1989. Det. M. S. Adams.

## 4. MACRISTIS GEMINIPUNCTALIS Schaus

Fig. 4

*Macristis geminipunctalis* Schaus, 1916. Cuba.

Dade Co.: Fuchs Hammock (Homestead) and Charles Deering Estate (Miami). Monroe Co.: Long Key St. Rec. Area, Bahia Honda St. Rec. Area, and N. Key Largo. Numerous records both at MV light and at bait dating from 18 Jan 1985. Det. M. S. Adams.

## 5. HYPENA SUBIDALIS Guenée

Fig. 5

*Hypena subidalis* Guenée, 1854. Brazil.

Monroe Co.: Long Key St. Rec. Area, 18 Jan 1985 (1♀); Bahia Honda St. Rec. Area, 20 Feb 1988 (1♀), M. S. Adams, coll. Det. R. W. Poole.

## 6. METALECTRA GEMINICINCTA Schaus

Fig. 6

*Metalectra geminicincta* Schaus, 1916. Cuba and Mexico.

This species is listed by Kimball (1965) under McD 3652.1, with the male specimen referred to being taken at Camp Rucker, Ozark, Alabama, 2 Apr 1943 (J. G. Franclemont, coll.). This species is not uncommon in north and central Florida, but as yet no specimens have been taken in south Florida. Final determination was made by D. C. Ferguson by comparison with the Schaus type in the USNM. The male genitalia are atypical of North American species of *Metalectra*, since the valvae are strongly asymmetrical in *M. geminicincta*. Franclemont suggests that this species may ultimately be placed in another genus.

## 7. GONODONTA BIDENS Geyer

Fig. 7

*Gonodonta bidens* Geyer, 1832. Cuba.

Dade Co.: Fuchs Hammock (Homestead), 17 Oct 1981 (1♂). Det. M. S. Adams.

## 8. ANOMIS LURIDULA Guenée

Fig. 8

*Anomis luridula* Guenée, 1852. "North America."

Dade Co.: Charles Deering Estate (Miami), 25 Apr 1989 (1♂, 1♀), 7 Sep 1989 (1♂), 29 Nov 1989 (2♂), 20 Dec 1989 (2♂). Monroe Co.: N. Key Largo, 11 Mar 1991 (2♂). Det. R. W. Poole.

This species is not in Kimball (1965) but the MONA checklist lists it as 8549. According to Franclemont (pers. comm.), there

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Fig. 1-15. 1. *Bleptina arealis* (Hampson) ♂, N. Key Largo, Monroe Co., 6 Dec 1986 (size = 13mm). 2. *Physula albipunctilla* Schaus ♂, Fuchs Hammock, Dade Co., 24 Jan 1987 (size = 27mm). 3. *Aglaonice hirtipalpis* (Walker) ♂, Fuchs Hammock, Dade Co., 31 Mar 1985 (size = 23mm). 4. *Macristis geminipunctalis* Schaus ♂, Deering Estate, Dade Co., 29 Nov 1989 (size = 16mm). 5. *Hypena subidalis* Guenée ♀, Long Key St. Rec. Area, Monroe Co., 18 Jan 1985 (size = 25mm). 6. *Metalectra geminicincta* Schaus ♂, San Felasco Hammock, Alachua Co., 20 Apr 1988 (size = 18mm). 7. *Gonodontia bidens* Geyer ♂, Fuchs Hammock, Dade Co., 17 Oct 1981 (size = 35mm). 8. *Anomis luridula* Guenée ♂, Deering Estate, Dade Co., 29 Nov 1989 (size = 32mm). 9. *Litoprosopus haitiensis* Hampson ♂, Bahia Honda St. Rec. Area, 20 Feb 1988 (size = 47mm). 10. *Eulepidotis metamorpha* Dyar ♂, Bahia Honda St. Rec. Area, Monroe Co., 12 Mar 1989 (size = 25mm). 11. *Eulepidotis striae puncta* (Herrich-Schäffer) ♀, Fuchs Hammock, Dade Co., 11 Nov 1984 (size = 22mm). 12. *Epidromia pannosa* Guenée ♂, Bahia Honda St. Rec. Area, Monroe Co., 5 Sep 1989 (size = 42mm). 13. *Epidromia pyraliformis* (Walker) ♂, Bahia Honda St. Rec. Area, Monroe Co., 6 Jan 1989 (size = 34mm). 14. *Elousa albicans* Walker ♀, No Name Key, Monroe Co., 1 Apr 1984 (size = 26mm). 15. *Achaea ablunaris* (Guenée) ♀, N. Key Largo, Monroe Co., 1 Dec 1989 (size = 45mm).

exist two specimens taken by Mrs. Forsyth in Florida City, Dade Co., and identified as *A. luridula* by A. G. Richards, Jr.

#### 9. LITOPROSOPUS HAITIENSIS Hampson

*Litoprosopus haitiensis* Hampson, 1926. Haiti.

Monroe Co.: Bahia Honda St. Rec. Area, 20 Feb 1988 (1♂); N. Key Largo Hammocks St. Bot. Site, 28 Oct 1989 (1♀), C. Stevens, coll. Det. J. G. Franclemont.

Fig. 9

#### 10. EULEPIDOTIS METAMORPHA Dyar

*Eulepidotis metamorpha* Dyar, 1914. Cuba.

Monroe Co.: Bahia Honda St. Rec. Area, 12 Mar 1989 (1♂). Det. M. S. Adams. There is one previous record of this species reported from North America: a male specimen labelled "S. Fla." and mentioned by E. L. Todd (1961).

Fig. 10

#### 11. EULEPIDOTIS STRIAEPUNCTA (H.-S.)

*Palindia striaepuncta* Herrich-Schäffer, 1868. Cuba.

Dade Co.: Fuchs Hammock (Homestead), 11 Nov 1984 (1♀). Det. M. S. Adams.

Fig. 11

#### 12. EPIDROMIA PANNOSA Guenée

*Epidromia pannosa* Guenée, 1852. Brazil.

A very common species in Monroe Co. on No Name Key and at Bahia Honda St. Rec. Area. Records date back to 2 Apr 1983. Det. M. S. Adams.

Fig. 12

On No Name Key, a single larva was found on *Psidium longipes* (Myrtaceae, long-stalked stopper). Larvae in my lab fed on *Eugenia axillaris* (Myrtaceae, white stopper), *Metopium toxiferum* (Anacardiaceae, poisonwood), *Rhus copallina* (Anacardiaceae, southern sumac), and *Psidium guajava* (Myrtaceae, guava). Photographs of male and female adults, and the genitalia, can be found in an article by M. Alma Solis (1986).

#### 13. EPIDROMIA PYRALIFORMIS (Walker)

*Thermesia pyraliformis* Walker, 1858. Dominican Republic.

A common species in Monroe Co. on No Name Key, Long Key St. Rec. Area, and Bahia Honda St. Rec. Area. Records date back to 3 Mar 1983. Det. M. S. Adams.

Fig. 13

#### 14. ELOUSA ALBICANS Walker

*Elousa albicans* Walker, 1858. Dominican Republic.

Monroe Co.: No Name Key, 1 Apr 1984 (1♀). Det. M. S. Adams.

Fig. 14

#### 15. ACHAEA ABLUNARIS (Guenée)

*Ophisma ablunaris* Guenée, 1852. Colombia.

Monroe Co.: N. Key Largo Hammocks St. Bot. Site, 1 Dec 1989 (1♀). Det. J. G. Franclemont.

Fig. 15

Prof. Franclemont (in litt.) informs me that the species name, *Achaea ablunaris*, was originally listed as McD 3417 in the McDunnough (1938) checklist, but the southern Texas specimens that this listing was based on were misidentified and are in fact another species, *Mimophisma delunaris* (Guenée). *Mimophisma delunaris* is listed in the MONA checklist as 8723, but *Achaea ablunaris* is not listed. As Prof. Franclemont points out (in litt.), the genus *Mimophisma* has unspined mid- and hind tibiae, whereas in *Achaea* the mid- and hind tibiae are spined. My specimen has spines on the mid- and hind tibiae and is the true

*A. ablunaris*.

#### 16. MOCIS CUBANA Hampson

*Mocis cubana* Hampson, 1913. Cuba.

Dade Co.: Charles Deering Estate (Miami), 29 Nov 1989 (1♀). Monroe Co.: No Name Key, many dates beginning 2 Apr 1983; Bahia Honda St. Rec. Area, 17 Dec 1989 (2♂). Det. M. S. Adams.

Fig. 16

#### 17. PTICHODIS IMMUNIS (Guenée)

*Phurys immunis* Guenée, 1852. Guadeloupe, St. Thomas, Martinique.

Monroe Co.: Bahia Honda St. Rec. Area, 3 Mar 1989 (1♀). Det. M. S. Adams.

Fig. 17

#### 18. PAECTES LUNODES (Guenée)

*Ingura lunodes* Guenée, 1852. French Guiana, Brazil, Honduras.

Dade Co.: Charles Deering Estate (Miami), 1 May 1989 (1♂), 27 Apr 1989 (1♀). Det. J. G. Franclemont.

Kimball (1965) listed *P. lunodes* as McD 3231.1 and stated that "*lunodes* was reported by Grossbeck (1917, p. 65) but since the larva was on *Bursera simaruba (gummifera)*, the record presumably belongs to *P. burserae*, whither it has been transferred." Both Prof. Franclemont and I have examined the male genitalia of *P. lunodes* and *P. burserae* and found them to be similar yet distinct, as also listed by Poole (1989). Hence, *P. lunodes* should be considered a member of the Floridian fauna.

Fig. 18

#### 19. NEOTUERTA HEMICYCLIA (Hampson)

*Tuerta hemicycla* Hampson, 1904. Bahamas.

Monroe Co.: Windley Key, 5 Jun 1982 (1♀). Det. M. S. Adams. There is a previous record of this species reported from North America: one specimen collected by H. V. Weems, Jr., in Monroe Co., in 1966, as noted by Todd (1966). Also from Monroe Co.: Tavernier, Key Largo, 17 Jun 1974 (1♀), J. B. Heppner, coll.

Fig. 19

#### 20. EUSCIRRHOPTERUS POEYI Grote

*Euscirrhopterus poeyi* Grote, 1866. Cuba.

Monroe Co.: N. Key Largo, 3 Jul 1987 (1♀), L. C. Dow, coll.; Bahia Honda St. Rec. Area, 4 May 1988 (1♀). Det. M. S. Adams. Also from Monroe Co.: Tavernier, Key Largo, 17 Jun 1974 (1♀), J. B. Heppner, coll.

Fig. 20

#### 21. DYPTERYGIA PUNCTIRENA (Walker)

*Hadena punctirena* Walker, 1857. Dominican Republic.

Monroe Co.: N. Key Largo, 15 Mar 1985 (1♂); No Name Key, 13 Mar 1986 (1♂). Det. J. G. Franclemont.

Hampson (1908) placed this species in *Perigea*, and Poole (1989) placed it under *Perigea* of authors. Franclemont (in litt.) believes that it should be placed under *Dypterygia*, and that is where it is also placed in the USNM collection.

Fig. 21

#### 22. CALLOPISTRIA JAMAICENSIS (Möschler)

Fig. 22

*Eriopus jamaicensis* Möschler, 1886. Jamaica.

Monroe Co.: No Name Key, 1 Mar 1987 (1♂). Det. D. C. Ferguson.

#### 23. SPODOPTERA ANDROGEA (Stoll)

Fig. 23

*Phalaena Noctua androgea* Stoll, 1782. Surinam.



Fig. 16-30. 16. *Mocis cubana* Hampson ♂, Bahia Honda St. Rec. Area, Monroe Co., 17 Dec 1989 (size = 42mm). 17. *Ptichodis immunis* (Guenée) ♀, Bahia Honda St. Rec. Area, Monroe Co., 3 Mar 1989 (size = 29mm). 18. *Paectes lunodes* (Guenée) ♂, Deering Estate, Dade Co., 1 May 1989 (size = 25mm). 19. *Neotuerta hemicycla* (Hampson) ♀, Windley Key, Monroe Co., 5 Jun 1982 (size = 31mm). 20. *Euscirrhopterus poeyi* Grote ♀, Bahia Honda St. Rec. Area, Monroe Co., 4 May 1988 (size = 50mm). 21. *Dypterygia punctirena* (Walker) ♂, N. Key Largo, Monroe Co., 15 Mar 1985 (size = 33mm). 22. *Callopistria jamaicensis* (Möschler) ♂, No Name Key, Monroe Co., 1 Mar 1987 (size = 24mm). 23. *Spodoptera androgea* (Stoll) ♀, Big Cypress Natl. Preserve, Collier Co., 7 Apr 1989 (size = 47mm). 24. *Elaphria deltoides* (Möschler) ♂, Deering Estate, Dade Co., 20 Dec 1989 (size = 19mm). 25. *Condica punctifera* (Walker) ♂, Fuchs Hammock, Dade Co., 5 Feb 1988 (size = 27mm). 26. *Pseudaletia sequax* Franclemont ♂, Fuchs Hammock, Dade Co., 12 Nov 1987 (size = 43mm). 27. *Leucania dorsalis* Walker ♂, Fuchs Hammock, Dade Co., 18 Nov 1984 (size = 31mm). 28. *Leucania inconspicua* Herrich-Schäffer ♂, Long Key St. Rec. Area, Monroe Co., 31 Mar 1984 (size = 33mm). 29. *Leucania opalisans* (Draudt) ♂, Fuchs Hammock, Dade Co., 5 Oct 1985 (size = 36mm). 30. *Leucania senescens* Möschler ♂, Fuchs Hammock, Dade Co., 15 Feb 1987 (size = 32mm).

Monroe Co.: No Name Key, 19 Mar 1987 (1♂). Dade Co.: Charles Deering Estate (Miami), 25 Apr 1989 (1♀), 27 Apr 1989 (2♂); Fuchs Hammock (Homestead), 27 Nov 1984 (1♀). Collier Co.: Big Cypress Natl. Preserve, 7 Apr 1989 (1♀). Det. D. C. Ferguson.

**24. ELAPHRIA DELTOIDES (Möschler)** Fig. 24

*Erastria deltoides* Möschler, 1880. Surinam and Jamaica.

Numerous records from Dade, Monroe, and Collier Counties, dating back to 1983. Recorded from Highlands Co. in 1990. Det. M. S. Adams.

**25. CONDICA PUNCTIFERA (Walker)** Fig. 25

*Celaena punctifera* Walker, 1857. United States.

A very common species in Dade Co. at Fuchs Hammock, near Homestead. Records date back to 11 May 1978. Det. M. S. Adams.

This species is superficially very similar to *Condica vecors* (Guenée) but the male genitalia are very distinct. This species is not listed in the MONA checklist; however, Kimball (1965) mentions the species (McD 2619.1) on page 98 as follows: "Recorded from Florida: Dyar (1902, p. 111), but Hampson (1908, p. 341) said, 'The locality U.S.A. is a mistake.' However, as he does record it from the Bahamas, it should be looked for." Now we have confirmed records of *C. punctifera* in Florida. I suspect that Kimball's records for *C. vecors* from the Homestead area are really *C. punctifera*. The more well-known genus *Platysenta* has recently been synonymized with *Condica* by Poole (1989).

**26. PSEUDALETIA SEQUAX Franclemont** Fig. 26

*Pseudaletia sequax* Franclemont, 1951. Mexico.

Not uncommon in Dade, Monroe, and Collier Counties. Not mentioned by Kimball (1965). In the MONA checklist it is listed as 10438.1 for a single specimen recorded from Gainesville, Florida. The species is superficially very similar to *Pseudaletia unipuncta* (Haworth), but the male and female genitalia are distinctive.

**27. LEUCANIA DORSALIS Walker** Fig. 27

*Leucania dorsalis* Walker, 1856. Dominican Republic.

A very common species in Dade and Monroe Counties, with my records dating back to 1984. My determinations were confirmed by M. S. Adams and J. G. Franclemont.

This species has been long overlooked due to its close superficial resemblance to *Leucania infatuans* Franclemont. However, both male and female genitalia are very distinctive. Poole (1989) has listed *L. dorsalis* as a synonym of *Leucania humidicola* Guenée, but following study of photographs of the adult and the genitalia of the holotype of *L. dorsalis*, sent by the British Museum (Natural History), London, England (BMNH), both Franclemont and Adams are in agreement that *L. dorsalis* is a distinct species.

**28. LEUCANIA INCONSPICUA H.-S.** Fig. 28

*Leucania inconspicua* Herrich-Schäffer, 1868. Cuba.

Monroe Co.: Long Key St. Rec. Area, 31 Mar 1984 (1♂). M. S. Adams confirmed my determination.

**29. LEUCANIA OPALISANS (Draudt)**

*Cirphis opalisans* Draudt, 1924. Colombia.

A common species in Dade, Monroe, and Collier Counties, and probably occurs throughout Florida. Kimball (1965) listed the species as McD 1991.1.

M. S. Adams has determined this species based on the original description plus figures in Seitz (1906-54), and informed me that he was unable to locate Draudt's holotype and that the type has probably been destroyed.

**30. LEUCANIA SENESCENTS Möschler**

Fig. 30

*Leucania senescens* Möschler, 1890. Puerto Rico.

Common in Dade, Monroe, and Collier Counties, and has recently been collected in Highlands Co. Kimball (1965) listed the species as McD 1991.2. Determinations were made by M. S. Adams and J. G. Franclemont.

Franclemont has seen the holotype and agrees that my specimens are surely *L. senescens*, and that *L. senescens* is not a synonym of *L. latiuscula* Herrich-Schäffer as stated by Poole (1989).

**REMARKS.**— Of the 30 species listed herein, 8 species should be considered rare strays, while the other 22 species have continued occurrence or are even established in Florida. The strays are as follows: *Gonodonta bidens* (7), *Eulepidotis metamorpha* (10), *E. striaepuncta* (11), *Elousa albicans* (14), *Achaea ablunaris* (15), *Ptichodis immunis* (17), *Callopistria jamaicensis* (22), and *Leucania inconspicua* (28).

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