

## Research Note

### NEW RECORDS OF, AND NOTES ON, INSECTS (INSECTA) FROM PUERTO RICO<sup>1,2</sup>

New insect records from Puerto Rico are herein reported. Voucher specimens were deposited at the Museum of Entomology, Department of Crop Protection, Agricultural Experiment Station, Río Piedras, Puerto Rico. Accession numbers are provided with the abbreviations PR Acc. No. Voucher specimens of whiteflies and part of the coccinellids were deposited in the arthropod collections of the Division of Plant Industry, Florida Department of Agriculture and Consumer Services, Gainesville, Florida. Vouchers deposited in Florida were identified under accession numbers bearing the abbreviations PR or Y followed by a number.

Species and families are listed in alphabetical order.

#### ORDER COLEOPTERA FAMILY BOSTRICHIDAE

##### *Micrapate* sp.

Collected at Bayamón, Road. 2, km. 15.5, infesting rattan lamps imported from Chile, South America, on 12 July 1988; D. Spinet, (PR Acc. NO. 120-88).

#### FAMILY COCCINELLIDAE

##### *Brachiacantha bistrispustulata* (F.)

Collected at Isabela Agric. Expt. Sta. on *Ipomoea batatas* foliage, 3 Apr. 1990, S. Medina-Gaud (PR Acc. No. 32-90). Also col-

lected at same place, on *Xanthosoma* sp. infested with *Aleuroglandulus malangae*, 23 May 1990, S. Medina-Gaud, R. Franqui, F. D. Bennett (PR 160).

##### *Decadiomus* n. sp.

Collected at Isabela Agric. Expt. Sta., on papaya, 23 May 1990, F. D. Bennett (PR 203); in San Juan, El Condado, predating on *Philephedra tuberculosa* infesting *Mimosa pudica*, 20 Nov. 1988, F. D. Bennett (PR 204-205). Also collected in San Juan, on *Codiaeum variegatum* with mites, mealybugs and scales, 4 June 1990, (PR 206-212) and in Mayagüez, on *Citrus*, 25-31 May 1990, F. D. Bennett (PR 213-217). Also collected in Barceloneta, on sea grape infested with whiteflies, 20 May 1990, F. D. Bennett (PR 218) and in San Juan, on *Codiaeum variegatum* infested with mites, mealybugs and scales, 4 June 1990, F. D. Bennett (PR 219-224).

##### *Diomus* sp.

Collected at Mayagüez, PR Campus, on citrus, 31 May 1990, F. D. Bennett (PR 303). Also collected in San Juan on an unidentified plant together with aphids and coccids, 28 Nov. 1987, F. D. Bennett (PR 250).

##### *Nephaspis magnopunctata* Gordon

Collected at Isabela Agric. Expt. Sta., on papaya foliage attacked with whiteflies, 23 May 1990, F. D. Bennett (PR 299-302).

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<sup>2</sup>The authors thank Dr. A.B. Hamon, Division of Plant Industry, Florida Department of Agriculture and Consumer Services, Gainesville, Florida; and Dr. Charles O'Brien, Florida Agric. & Mech. University, Tallahassee, Florida, for the identification of whiteflies and weevils, respectively. Also to Drs. E.E. Grissel, M.E. Schauff, R.W. Carlson, P.M. Marsh, A. Wijeskara, G. Gordh, R.W. Carlson, J. Pakaluk, A.S. Menke, and S. Nakahara, Systematic Entomology Laboratory, BBII, US Department of Agriculture, for determining of specimens. Thanks are also extended to members of the Department of Crop Protection for providing specimens for this study.

Also collected at same place on *Xanthosoma* sp. predated on *Aleuroglandulus malangae*, 23 May 1990, F. D. Bennett (PR 297) and at Barceloneta, on sea grape with whiteflies, 20 May 1990, F. D. Bennett (PR 298).

*Nephus* sp.

Collected in San Juan, on *Codiaeum variegatum* leaves with mites, scales and mealybugs, 4 June 1990, F. D. Bennett (PR 245 & 249).

*Olla v-nigrum* Mulsant

Collected at Juana Díaz, Fortuna Agric. Expt. Sta., on eggplant foliage, attacked by *Bemisia tabaci* and aphids, 22 May 1990, F. D. Bennett (PR 33-36). Also at same place and host plant, 2 June 1990, S. Medina-Gaud & A. Nieves (PR Acc. No. 103-90).

*Pentilia* sp. prob. *discors* Gorham

Collected in Mayagüez, on citrus tree infested with *Parlatoria ziziphi* and *Unaspis citri*, 28-31 May 1990, F. D. Bennett (PR 148-156), also in Mayagüez, feeding on *Unaspis citri*, 25 May 1990, F. D. Bennett (PR 157-159).

*Stethorus utilis* (Horn)

Collected in Mayagüez, on citrus tree, 28-30 June 1990, F. D. Bennett (PR 123), in San Juan, on *Codiaeum variegatum*, infested with mites, mealybugs and scales, 4 June 1990, F. D. Bennett (PR 120-121). Also collected at Juana Díaz-Fortuna Agric. Expt. Sta. on papaya infested with whiteflies, 22 May 1990, F. D. Bennett (PR 309); in Isabela, on papaya leaves, 23 May 1990, F. D. Bennett (PR 118-119); at Loíza-Medianía Baja, on *Jatropha* sp., 21 May 1990, F. D. Bennett (PR 122); and in Mayagüez on a citrus tree, 28-30 May 1990, F. D. Bennett (PR 123). *Stethorus* spp. are mite predators.

**FAMILY CURCULIONIDAE**

*Conotrachelus sapotae* Barber

This species was recorded previously by Medina-Gaud et al.<sup>3</sup> as *Conotrachelus* sp. reared from *Achras zapota* fruits at the

Fortuna Agric. Expt. Sta. According to Charles W. O'Brien, Professor of Entomology at the Florida Agric. & Mech. University at Tallahassee, FL. this species was described from Cuba from the same host plant from which it was reared in Puerto Rico.

Many specimens are deposited in our collection, reared from "nispero" collected at Fortuna Agric. Expt. Sta. on different dates, 29 May 1986, 10 July 1986, S. Medina-Gaud & A. Segarra (PR Acc. No. 352-86 & 384-86) and at the same place, 29 April 1987, S. Medina-Gaud (PR Acc. No. 48-87).

*Trichobaris bridwelli* Barber

Specimens of this species were collected at Juana Díaz-Fortuna Agric. Expt. Sta., on eggplant foliage; 17 Jan. 1991, S. Medina-Gaud & E. Vargas (PR Acc. No. 9-91).

According to C. W. O'Brien, this species was described from southern United States, from Texas to Florida and up to North Carolina. It breeds on jimsonweed, in the genus *Datura*. This is a plant of disturbed areas and grows along roadsides and in other dry areas. At the Fortuna Agric. Expt. Sta., on the southern coast, *Datura stramonium* is a very common weed among the cultivated field plots. This species develops in the pods of *Datura*, but adults feed on the tender foliage of *Datura* and also on eggplant foliage.

**FAMILY LATHRIDIIDAE**

*Cartodere constricta* (Gyllenhal)

Specimens collected in San Juan, on the paper and cartons wrapping furniture inside a truck, on 7 June 1991, Jose B. Sáez (PR Acc. No. 22-91), determined by S. Medina-Gaud and confirmed by J. Pakaluk (USNM). Also collected in San Juan in carton and drums containing cellulose flour from Berlin, New Hampshire, shipped to Las Piedras for McNeill Consumer, J. Jeannot, 14-15 Aug. 1991 (PR Acc. No. 58-91). This species is a cosmopolitan scavenger beetle, known as the plaster beetle.

**FAMILY LYCTIDAE**

*Minthea rugicollis* (Walker)

Specimens of this species were collected at Juana Díaz-Fortuna Agric. Expt. Sta., boring drywood, on 18 Feb. 1987, H. Ortiz (PR Acc. No. 111-87).

**FAMILY PHALACRIDAE**

*Acylomus* sp.

Collected at Trujillo Alto, Bo. Carraizo, on vegetation, 29 June 1987, N. Virkki (PR Acc. No. 106-87).

**ORDER HEMIPTERA**

**FAMILY LYGAEIDAE**

*Geocoris punctipes* (Say)

This predatory insect was collected at Juana Díaz-Fortuna Agric. Expt. Sta., on eggplant infested with whiteflies and lacewing bugs. It was observed feeding on the lacewing bug *Corythucha gossypii*, 2 Nov. 1989, A. Segarra-Carmona, S. Medina-Gaud & R. Franqui (PR Acc. No. 125-89).

**ORDER HOMOPTERA**

**FAMILY ALEYRODIDAE**

Three new additions to this family were recorded after the Medina-Gaud et al.' publication on new whitefly records from Puerto Rico.

*Aleurodicus dispersus* Russell

Specimens of this species were collected in San Juan, at the Condado Public Park, infesting foliage of the tropical almond, *Terminalia catappa*, on 26 May 1990, F. D. Bennett (Y508).

*Aleurotrachelus atratus* Hempel

Specimens were collected in San Juan at the Condado Public Park, infesting foliage of coconut, *Cocos nucifera*, on 19 May 1990, F. D. Bennett (Y503).

*Paraleyrodes minei* Jaccarino

Specimens of this species were collected in Vega Alta, infesting foliage of lime, *Citrus aurantiifolia*, on 20 May 1990, F. D. Bennett (Y505).

**FAMILY APHIDIDAE**

*Neophyllaphis podocarpi* Tagahashi

Specimens collected in San Juan in different places of the Condado area on the foliage of *Podocarpus macrophyllus*, in 1990, by F. D. Bennett. It is known as the podocarpus aphid.

**FAMILY COCCIDAE**

*Coccus acutissimus* (Green)

This bananalike scale was collected at Juana Díaz-Fortuna Agric. Expt. Sta., on mango foliage, 7 Mar. 1991; S. Medina-Gaud & R. A. Franqui (PR Acc. No. 12-90). Specimens were also collected at the University of Puerto Rico, Mayagüez Campus, on mango foliage, on 2 Mar. 1990, H. Browning & R. Franqui. Most of the scales were localized at base of foliage, generally solitary.

**ORDER HYMENOPTERA**

**FAMILY APHELINIDAE**

*Encarsia* sp. prob. *transversa* Timberlake

Collected at Juana Díaz, Fortuna Agric. Expt. Sta., parasitizing *Bemisia tabaci*, on eggplants foliage, 3 Aug. 1989; A. Segarra & R. Franqui (PR Acc. No. 149-89).

**FAMILY BRACONIDAE**

*Diaretiella rapae* (McIntosh)

Collected at Juana Díaz, at Fortuna Agric. Expt. Sta., parasitizing *Myzus persicae* on eggplant, 5 Aug. 1990, A. Segarra, S. Medina-Gaud & R. Franqui (PR Acc. No. 117-90).

<sup>3</sup>Medina-Gaud, S. et al., 1987. The insects of nispero [*Manilkara zapota* (L.) F. van Rogen] in Puerto Rico. Res. Note, *J. Agric. Univ. P.R.* 71(1):129-132.

<sup>4</sup>Medina-Gaud, S., F.D. Bennet and R.A. Franqui, 1991. New records of, and notes on, whiteflies (Homoptera: Aleyrodidae) from Puerto Rico. Res. Note, *J. Agric. Univ. P.R.* 75(3):297-300.

*Habrobracon* sp. poss. *brevicornis*  
(Wesman)

Collected at Juana Díaz, Fortuna Agric. Expt. Sta, parasitizing *Diaphania hyalinata* larvae, damaging pumpkin leaves 21 June 1990, S. Medina-Gaud (PR Acc. No. 142-90).

#### FAMILY EULOPHIDAE

*Cirrospilus* sp.

Recorded from specimens reared from mined eggplant foliage by the pinworm, *Keiferia lycopersicella*, collected in Mayagüez, A. Segarra, Aug. 1985 (PR Acc. No. 158-85).

*Euplectrus furnius* Walker

Recorded from specimens reared from the larvae of *Spodoptera frugiperda*, attacking rice in Vega Baja fields, 23 July 1986, S. Medina-Gaud, (PR Acc. No. 406-86).

This is a black species that can be distinguished by its large, very conspicuous second antennal segment as long as or longer than the head. Specimens determined by A. Wijeskara and confirmed by M. E. Schauff.

*Horismemus cockerelli* Crawford

Recorded from specimens reared from a sphingid moth, probably *Erinnys ello*, on the foliage of *Carica papaya*, in Río Piedras, April 1985, S. Medina-Gaud (PR Acc. No. 14-85). Since this species is a hyperparasite, it is probably that it emerged from the cocoons of *Apanteles*, a parasite of the papaya sphingid moth.

*Trichospilus diatraeae* Cherian &  
Margabandhu

Collected at Utuado, Bo. Guaonico, parasitizing *Dismorphia amphiona* spio pupa; pupa collected 16 Jan. 1989, parasites emerged, 1 Feb. 1989, J. A. Bauzá (PR

Acc. No. 69-90). An Asian species, *T. diatraeae* was introduced into Barbados for biological control of Lepidoptera; it has also been reported from Florida and Trinidad by Bennett et al.<sup>2</sup>

#### FAMILY ICHNEUMONIDAE

*Agrypon caribbaeum* Bland

Recorded from specimens reared from the melonworm, *Diaphania hyalinata*, larvae collected at Juana Díaz, Fortuna Agric. Expt. Sta., damaging pumpkin plants in experimental plots, 8 June 1989, S. Medina-Gaud & R. Franqui (PR Acc. No. 107-89).

*Rogas laphygmae* Viereck

Recorded from specimens reared from *Spodoptera frugiperda* larvae, collected in Vega Baja rice fields, doing damage to rice, 23 July 1986, S. Medina-Gaud & A. Pan-toja (PR Acc. No. 387-86).

*Temelucha* sp.

Collected at Juana Díaz, Fortuna Agric. Expt. Sta., on *Diaphania hyalinata*, attacking pumpkin foliage, 17 June 1987, S. Medina-Gaud (PR Acc. No. 75-87).

*Trogomorpha arrogans* (Cresson)

Collected by sweeping at a weedy rice ratoon (rice infested with grass) in Arecibo near Cambalache sugarcane mill, 6 Aug. 1986, S. Medina-Gaud & R. Franqui (PR Acc. No. 393-86).

#### FAMILY PLATYGASTERIDAE

*Inostema* sp.

One specimen collected with other hymenopterans in Santa Isabel, at a mango farm in bloom, on a sticky trap, 17 Feb. 1991, S. Medina-Gaud (PR Acc. No. 46-91). This genus is easily identified by its very peculiar abdomen projecting over its thorax from the first abdominal segment.

<sup>2</sup>Bennett, F.D., H. Glenn, M. Yaseen and R.M. Baranowski, 1987. Records of *Trichospilus diatraeae*, an Asian parasite (Hymenoptera: Eulophidae) from the Caribbean and Florida, *Fla. Entomol.* 70:184-186.

**FAMILY PTEROMALIDAE**

*Acerocephala* n.sp.

Five specimens were collected among scolytiids and other insects, at Santa Isabel, in a mango orchard with mango branches drying because of fire and bored by insects, 21 Aug. 1990, S. Medina-Gaud (PR Acc. No. 259-90). Species of this genus are parasites of wood boring beetles.

**ORDER LEPIDOPTERA  
FAMILY COSMOPTERIGIDAE**

*Pepops ipomoeae* (Busck)

Specimens were reared from field infested, mined foliage of *Ipomoea tiliacea* collected at Las Marias, Rd. 120, km 314, 12 Sept. 1991, E. Vargas (PR Acc. No. 130-92)

**ORDER MALLOPHAGA**

K. C. Emerson provided us the following new records:

**FAMILY MENOPONIDAE**

*Actornithophilus ochraceus* (Nitzsch)

Specimens collected on the semipalmated sandpiper, *Ereunetes pusillus*, on stilt sandpiper, *Micropalama himantopus*, on mangrove cuckoo, *Coecysus minor teres*, and on the southern little blue heron, *Florida caerulea caerulea* at Cartagena Lagoon. K. C. Emerson has seen specimens of this species collected off *Charadrius semipalmatus* from Mayagüez, 21 Oct. 1930.

*Austromenopon miloni* (Seguy)

Collected on Mona Island from *Phaeton lepturus*, 1 Sept. 1955.

*Calpocephalum tausi* (Ansari)

Collected in Hormigueros, from turkey, 1935 Nov.

**FAMILY PHILOPTERIDAE**

*Pectinopygus garbei* (Pessoa & Guimaraes)

Collected at Caja de Muertos, from *Sula leucogaster*, 23 Mar. 1935, and off *Sula sula*, 1 Sept. 1955.

*Quadriceps fissus* (Burmeister)

Collected in Mayagüez, from *Charadrius semipalmatus*, 21 Oct. 1930.

*Saemundsonia uppalensis*  
(Rudow)

Collected in Mona Island, from *Phaeton lepturus*, Sept. 1955.

**ORDER NEUROPTERA  
FAMILY CHRYSOPIDAE**

*Chrysopa bouvieri* Navas

Collected at Naranjito, Bo. Cedro Arriba, at light, 1 July 1990, A. Nieves (PR Acc. No. 126-90).

*Chrysopa cincta* group sp. nr. *cubana*  
Hagen

Collected at Juana Diaz, Fortuna Agric. Expt. Sta., on eggplant foliage, infested with *Bemisia tabaci*, 21 June 1990, A. Nieves (PR Acc. No. 106-90).

**ORDER THYSANOPTERA  
FAMILY THIRIPIDAE**

*Bregmatothrips* sp.

This species was collected at Santa Isabel, on sticky trap in mango orchard, in bloom, 17 Feb. 1991, S. Medina-Gaud (PR Acc. No. 35-91).

*Frankliniella bruneri* Watson

This species was collected on Vieques Island, on *Leucaena glauca*, 26 Nov. 1962, S. Medina-Gaud (PR Acc. No. 9-62).

**FAMILY PHLAETHRIPIDAE**

*Docessissophothrips* sp.

Collected at Río Piedras, Agric. Expt. Sta., on *Hibiscus rosa-sinensis* stem, Feb. 1969, S. Medina-Gaud (PR Acc. No. 1564).

*Holothrips* sp.

Collected at Utuado, Río Abajo Forest, on ground litter in Berlese funnel, 2 Apr. 1964, S. Medina-Gaud (PR Acc. No. 19-64). The species in this genus are fungus or breakdown products feeders.

*Nesothrips lativentris* (Karny)

Collected at Río Piedras, Agric. Expt. Sta., on *Hibiscus rosa-sinensis* stem, Feb.

1964, S. Medina-Gaud (PR Acc. No. 15-64); in Rio Grande, on sugarcane leaf, 11 Mar. 1964, R. Bonilla (PR Acc. No. 16-64); at Comerio-Bayamón, Rd. 167, km. 16, on mixed vegetation, 17 Feb. 1965, S. Medina-Gaud (PR Acc. No. 3-65); also at Isabela, Playa Jobos, beating vegetation on sand dunes, 29 July 1985, N. Virkki (PR Acc. No. 103-85). This species is a spore feeder.

*Holopothrips*

Collected at Arecibo-Cambalache Forest; on *Tillandsia polystachya* flower spike, 2 Apr. 1964, S. Medina-Gaud & G. Rivera (PR Acc. No. 13-64); at Yauco-Susúa Forest, on *Tillandsia fasciculata* inflorescence, 4 June 1964, S. Medina-Gaud (PR Acc. No. 24-64); also recorded from the Dominican Republic, Santo Domingo, National District, on *Tabebuia* sp., 23 Feb. 1973, S. Medina-Gaud and L. F. Martorell (Acc. No. RD-4-Dominican Republic).

*Podothrips lucasseni* (Kruger)

Collected at Santa Isabel, on a sticky trap in a mango orchard in bloom, 17 Feb. 1991, S. Medina-Gaud (PR Acc. No. 39-91). This is a predaceous species.

*Preeriella* sp.

Collected at Utuado-Río Abajo Forest, on ground litter in a Berlese funnel, 2 Apr. 1964, S. Medina-Gaud (PR Acc. No. 19-64). The species in this genus are fungus or breakdown products feeders.

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