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### "INSECTAE BORINQUENSES"

A REVISED ANNOTATED CHECK-LIST OF THE INSECTS OF PUERTO RICO

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Insects

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MELVILLE T. COOK, EDITOR

VOL. XX

JANUARY 1936

No. 1

## "INSECTAE BORINQUENSES"

### A Revision of

### "INSECTAE PORTORIGENSIS"

A Preliminary Annotated Check-List of the Insects of Porto Rico, with  
Descriptions of some New Species"

Jour. Dept. Agr. P. R. Vol. 7, No. 1 (January 1924), pp. 313, fig. 2.  
San Juan, March 5, 1924

and

### "FIRST SUPPLEMENT TO INSECTAE PORTORIGENSIS"

Jour. Dept. Agr. P. R., Vol. 7, No. 4 (October 1924), pp. 38-43,  
San Juan, August 1924.

By GEORGE N. WOLCOTT

### INTRODUCTION

The earliest recorded collection of insects in Puerto Rico was made by Andrés Pedro Ledru and is reported in his "Viaje a la Isla de Puerto Rico en el Año 1797", Paris, 1810. Of the forty-six insects listed from Porto Rico under their scientific names, ten can be readily identified:

<i>Termes morio</i> Fabr.=	<i>Nasutitermes costalis</i> Holmgren
<i>Blatta americana</i> L.=	<i>Periplaneta americana</i> Linn.
<i>Grillus assimilis</i> Fabr.=	<i>Grillus assimilis</i> Fabr.
<i>Achaeta grillotalpa</i> Fabr.=	<i>Scapteriscus vicinus</i> Scudder
<i>Cimex victor</i> Fabr.=	<i>Proxys victor</i> Fabr.
<i>Pulex penetrans</i> Linn.=	<i>Dermatophilus penetrans</i> Linn.
<i>Elater phosphoreus</i> F.=	<i>Pyrophorus luminosus</i> Illiger
<i>Passalus pentaphyllus</i> Latreille=	<i>Passalus pentaphyllus</i> Latreille
<i>Scaraboeus tytanus</i> Fab.=	<i>Strataegus barbigerus</i> Chapin
<i>Bembex signata</i> Linn.=	<i>Stictia signata</i> Linn.

and one can guess at the probable identity of many of the others. Considering the time when Ledru wrote, the incompleteness of his list is not surprising, and as he lists many more species than are named, and does not omit mention of smaller and less obvious forms, such as ichneumons and ants, its real importance should not be underestimated, even though its value is mainly historic.

resting on *Chalcas (Murraya) exotica* (I No. 3299), on gandul at Guayama (I No. 4253), in grapefruit grove at Mayagüez (I No. 4236).

**Agromyza maculosa** Malloch—det. J. M. Aldrich

Curran 28-65: at many localities.  
AMC: at Mayagüez vi-30 det Curran.  
Frost 31-76: the following record.  
from leaves of aster (211-22).

**Agromyza melampyga** Loew

Curran 28-65: at Naguabo, Arecibo.

**Agromyza minima** Malloch, J. R., "Revision of Species of *Agromyza*", Ann. Ent. Soc. Amer., Vol. VI, No. 3, p. 328. TYPE from P. R.

**Agromyza neptis** Loew

Coquillett.

**Agromyza parvicornis** Loew—det. W. R. Walton

EEP-43: a leaf-miner in corn. Curran 28-66: at Adjuntas.  
EEWI-248: a minor pest of corn.  
Frost 31-36: the following record.  
from leaves of corn (719-12).

**Agromyza platyptera** Thomson

Curran 28-65: at many localities.

**Agromyza plumiseta** Malloch, J. R., Ann. Ent. Soc. Amer., Vol. VI, No. 3, 324. TYPE from Porto Rico.

**Agromyza pusilla** Meigen

(as *A. diminuta* Walker) Coquillett.  
larvae mining in pea leaf at Cidra (I No. 2006 Leonard 33-121), in cohite leaf at Humacao (I No. 3301), reared from flower heads of *Bidens pilosa* at Guayama (I No. 5046); adults resting on potato leaf at Carolina (I No. 3491).

**Agromyza setosa** Loew

Coquillett.

**Agromyza viridula** Coquillett, D. W., "New Acalyptate Diptera from North America." Jour. N. Y. Ent. Soc., Vol. X, pp. 190, Dec. 1902. TYPE from Porto Rico.

Curran 28-66: at many localities.  
at Loíza (I No. 3782), in weeds at Cidra (I No. 4285); on gandul leaf at Guayama (I No. 4252); in grapefruit grove at Añaseo (I No. 4267); on cucumber at Caguas (I No. 4865).

**Agromyza virens** Loew—det. J. M. Aldrich

Curran 28-65: at many localities.  
at Mayagüez (I No. 3910, 3911, 4552).

**Agromyza xanthoptera** Schimer—det. J. M. Aldrich  
in orange grove at Mayagüez (I No. 4906).

(*Cryptochaetum iceryae* Williston—introduced, not established Wolcott & Seim 33-216: unsuccessful attempt at introduction due to scarcity of the host, *Icerya purchasi* Maskell, immediately after the hurricane of San Ciprián.

the above sending (155-32); another sending by air-mail, sent from Riverside, California October 31, 1933, received in good condition at Río Piedras on November 7, 1933, adults released as they emerged in the Condado; no recoveries to date from scale collected weekly or citener in this locality.)

**Cerodonta dorsalis** Loew

Coquillett. EEP-43: a leaf-miner in corn.  
EEWI-248: a very minor pest of corn.  
from mine in corn leaf (513-17).

OCHTHIPHILIDÆ

**Leucopsis bella** Loew

Coquillett: from larvae feeding on *Dactylopius citri*.  
IP-234: from *Pulvinaria psidii* Maskell on jobo at Arroyo (173-12).  
Curran 31-13: on Vieques Id. "The larvae are predaceous, feeding on aphids and mealybugs ..."

**Acrometopia maculata** Coquillett

Curran 28-66: from Mona Id.

MILICHIIDÆ

**Eccoptomma montanum** Becker

Curran 28-66: at Mayagüez; re-description.

**Milichiella arcuata** Loew

Curran 28-68: on Desecheo Id.

**Milichiella cinerea** Coquillett

(as *Ophthalmomyia*) Coquillett 00-268: TYPE from P. R.  
Curran 28-68: generic transfer.

**Milichiella lacteipennis** Loew

(as *Ophthalmomyia*) Coquillett.  
also, not in synonymy, (as *Desmometopa halteralis*) Coquillett  
00-267: TYPE from P. R.

Curran 28-67: synonymy, at San Juan, Adjuntas, Manatí, Mayagüez, Guayanilla, and on Mona and Desecheo Ids.  
Curran 31-14: in Vieques Id.  
resting in eggplant at Loíza (I No. 2034), on *Chalcas (Murraya) exotica* (I No. 3305).

**Desmometopa M-nigrum** Zetterstedt

Curran 28-68: at Jayuya.  
on *Chalcas (Murraya) exotica* (I No. 3437); on grapefruit blossoms at Mayagüez (I No. 2388), on grapefruit leaf at Arecibo (I No. 3784).

→ M. argyrocucha

*Desmometopa tarsalis* Loew  
Curran 28-68: on Desecheo Id.

*Pholeomyia indecora* Loew  
(as *Milichia*) Coquillett.  
Curran 28-68: at Mayagüez and on Mona Id.  
on weeds at Caguas (I No. 4284); on *Crotalaria* blossoms  
at Barceloneta (I No. 4025).

HIPPOBOSCIDÆ

*Lipoptera* sp.  
on P. R. Sparrow Hawk at Las Marías xii-26.

*Ornithoetona erythrocephala* Leach  
(as *Ornithomyia cryptocephala* Leach) Stahl.  
Roeder. Gundlach, "Se encuentra en aves de diferentes familias."  
Coquillett on sparrow hawk.  
AMC: at Lajas III-30 det. Curran, from W. I. Red-tailed  
Hawk at Las Marías III-31.

*Lynchia maura* Bigot—det. J. M. Aldrich  
AMC: at Río Piedras V-30, San Germán 83-24 XII-32, Ma-  
yagüez IX-319 Coamo VII-22: from domestic pigeon.  
from domestic pigeon (8-21).

*Olfersia albipennis* Say  
collected by Mr. Alex Wetmore at Río Piedras, Dec. 22,  
1916.

*Olfersia diomedea* Coquillett  
AMC: from Booby on Desecheo Id., v-27 det. J. M. Aldrich.

*Melophagus ovinus* Linne  
Van Z. (P. R. 91) on sheep.

STREBLIDÆ

*Trichobius dugesii* Townsend  
(as *Strebli vespertilionis* (as Fallen) Fabr.) Gundlach, "Vive  
sobre los murciélagos".  
Coquillett.

*Aspidoptera busckii* Coquillett, D. W., "New Genera and Species  
of Nycteribidae and Hippoboscidae", Can. Ent., Vol. XXXI,  
pp. 333-336, No. 1899. TYPE from Bayamón, P. R., on  
bats (*Artibeus* sp.)

*Pterellipsis araeneae* Coquillett, D. W., 90-334, TYPE from Porto  
Rico: on bats.

SIPHONAPTERA

Cox, O. H.,  
Carrion, A. L., &  
Fox, C.,  
28-

Carrion, A. L.,  
27-

28-

29-

32-

"Rat-Flea Survey of the Port of San Juan,  
Porto Rico—a Preliminary Report".  
Public Health Reports, Vol. 43, No. 11,  
pp. 611-616, 2 charts. Washington, D. C.,  
March 16, 1928.

"Preliminary Report on a Rat and Flea  
Survey of the City of San Juan, Porto  
Rico". P. R. Rev. Public Health &  
Tropical Medicine, Vol. 3., No. 2. pp.  
131-145. San Juan, August 1927.

"Preliminary Report on a Rat-Flea Survey  
of the City of San Juan, Porto Rico.  
Second Paper". P. R. Rev. Public  
Health & Tropical Medicine, Vol. 4, Vol.  
4, No. 2, pp. 84-92. San Juan, August  
1928.

"Third Report on a Rat-Flea Survey of the  
City of San Juan, Porto Rico". P. R.  
Jour. Public Health & Tropical Medicine,  
Vol. 5, No. 2, pp. 158-166, 7 charts.  
San Juan, August 1929.

"Final Report on a Rat-Flea Survey of San  
Juan, Porto Rico". Public Health Re-  
ports Vol. 47, No. 4, pp. 193-201, 5 charts.  
Washington, D. C., January 22, 1932:  
all the entomological data of the above  
papers in summarized in the following  
table:

TABLE 4.—TABULATION OF FLEAS AS TO SPECIES AND SEX

	1926-27	1927-28	1928-29	Total
<i>Xenopsylla cheopsis</i> .....	♂ 1,472 ♀ 1,067	1,484 1,092	1,085 870	4,011 3,029
<i>Echidnophaga gallinacea</i> .....	♂ 4 ♀ 31	1 18	5 34	10 83
<i>Ctenocephalus canis or felis</i> .....	♂ ..... ♀ 1	1 1	2 2	3 4
<i>Pulex irritans</i> .....	♂ ..... ♀ .....	..... 2	1 1	1 3
<i>Leptopsylla musculi</i> .....	♂ ..... ♀ .....	..... 1	..... .....	..... 1

LEPTOPSYLLIDÆ

*Leptopsylla segnis* Schönherr (musculi Duges)  
Carrion 28-: 1 on rat.  
Carrion 32-195: one on 1,005 rats.