

ADDITIONS AND CORRECTIONS TO WOLCOTT'S «INSECTS OF PUERTO RICO»

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and

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WOLCOTT, in 1948, published an annotated list, "The Insects of Puerto Rico", as a revision of a former check list, "Insectae Portoricensis". These two papers represent the most complete records of the insects of Puerto Rico. New records of the insects for the island have been published since 1948, but no attempts have been made to compile these records into a useful list. Moreover, a revision of the literature available disclosed the need for corrections and changes in names in Wolcott's lists. Our publication is intended to be a compilation of this information. Rather than publishing just a list, we have used Wolcott's work as a basis and made corrections and changes in names wherever needed. This revision is up to May 1966.

The revision of some of the families included in this paper was made by some specialists from the United States National Museum at Washington. Their names and the families that they revised are as follows: Dr. Doris Blake - Chrysomelidae; Dr. Richard H. Foote - Tephritidae; Dr. Curtis W. Sabrosky - Asteidae, Anthomyiidae, Anthomyzidae, Calliphoridae, Chloropidae, Lauxaniidae, Milichidae, Sarcophagidae, Sphaeroceridae, and Tachini-

dae; Dr. G. C. Steyskal - Agromyzidae, Neriidae, Otitidae, Phoridae, Pyrgotidae, and Richardiidae; Dr. Alan Stone - Chaoboridae, Culicidae, Dixidae, Psychodidae, Sciaridae, and Tabanidae; Dr. Willis W. Wirth - Asilidae, Bombyliidae, Ceratopogonidae, Ephydriidae, Phoridae, Stratiomyidae, and Syrphidae. Their names also appear immediately after the names of the families which they revised. They are responsible for the changes they respectively suggest. Their cooperation is greatly appreciated and we feel that without their assistance we could not have fulfilled our goal.

Some new records were obtained from the Zoological Record and the Biological Abstracts, and from many publications screened during the course of our work. Wherever the information was obtained in the abstracted form, the original papers were secured and consulted. Other new records were obtained from the collections of insects of Puerto Rico kept at the Biology Department of the University of Puerto Rico at Mayagüez, and at the United States National Museum.

In "The Insects of Puerto Rico" the 3675 species listed are distributed among 21 orders and 273 families. The list does not include the families in the following orders: Thysanoptera, Collembola, Embioptera, Corrodentia, Mallophaga, Ephemeroptera, Trichoptera, Anoplura, and Thysanura. Wolcott considered the

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Fulgoroidea as one family and the Order Strepsiptera as the family Stylopidae of the Coleoptera. This was the accepted practice at the time he completed his work. The order Zoraptera was not included in his work.

The monographs published by Caldwell and Martorell (23, 24), Flint (44), Medina Gaud (69), Ramos (78), and Smith (93) add many new species and new records to our insect fauna. Since these monographs are readily available, we will not consider these additions to our insect fauna except when modifications are necessary.

Medina Gaud (69) lists 66 species in the order Thysanoptera, of which 13 are new records and 7 are new species. Smith (93) lists 45 species of aphids, of which only 15 are new records for the island. Flint (44) lists 35 species of Trichoptera distributed in 22 genera; 22 of the recorded species are described as new and two as new records. Ramos (78) lists 22 species as new out of a total of 37 species for the families Cicadidae, Kinnaridae, Membracidae, and Cercopidae. Caldwell and Martorell (23) list 141 species in the Fulgoroidea (except Kinnaridae), of which 13 are new records and 70 new species. They deleted 28 names which they considered were misidentified or species whose synonymy was not clearly established. In their revision of the Cicadellidae (24) they recorded 135 species, of which 55 are new species and 14 are new records for the island.

These six monographic papers add 233 new names to Wolcott's lists, which together with the 359 new records listed in this publication add to a total of 4,267 species. On the other hand seven names are deleted for a total of 4,260 records for Puerto Rico.

The lists that follow are arranged in alphabetical order. The numbers that appear in parenthesis after each species refer to the literature cited.

I. Order THYSANURA

A. Family JAPYGIDAE

1. *Neojapyx insulanus* Silvestri 1948, listed in (91).
2. *Parajapyx (Grassjapyx)* sp., listed (49).

II. Order COLLEMBOLA

(Families not given.)

1. *Brachystomella agrosa* Wray 1953, as new species (117).
2. *Dicranocentrus (Dicranocentruga) jataca* Wray 1953, as new species (117).
3. *Dicranocentrus (Dicranocentrella) marrias* Wray 1953, as new species (117).
4. *Dicranocentroides (Dicranocentrophia) sabana* Wray 1953, new subgenus and new species (117).
5. *Folsomia sylvia* Wray 1953, as new species (117).
6. *Isotoma minor* Schaffer, new record (117).
7. *Lepidocyrtus caprilesi* Wray 1953, as new species (117).
8. *Portachorutes marnbatus* Wray 1953, as new species (117).
9. *Pseudosinella subfusa* Wray 1953, as new species (117).
10. *Sphyrotheca aleta* Wray 1953, as new species (117).

III. Order DERMAPTERA

A. Family LABIDURIDAE

1. *Euborellia plebeja* (Dohrn), det. T. H. Hubbell, from Guánica and Ponce, in DB (Department of Biology) collection.

IV. Order ORTHOPTERA

A. Family ACRIDIDAE

1. *Orphulella bolloui* (Rehn), det. T. H. Hubbell, from Guánica Insular Forest and Mayagüez, in DB collection.
2. *Scyllina cyanipes* (Fabricius), det. T. H. Hubbell, from Mayagüez, in DB collection.

B. Family GRYLLIDAE

1. *Hygronemobius alleni* (Morse), new record (55).
2. *Oecanthus allardi* Walker and Guernsey 1960, (106).
3. *Oecanthus niveus* (Degeer), det. by Guernsey, in DB collection.

V. Order MALLOPHAGA

A. Family MENOPONIDAE

1. *Colpocephalum* (prob. *turbinatum* Denny 1842), det. T. Clay; host: *Columba livia*, in DB collection.

B. Family PHILOPTERIDAE

1. *Columbicola columbae* (Linn. 1758), det. T. Clay; host: *Columba livia*, in DB collection.
2. *Oxylipeurus dentatus* (Sugimoto 1935), det. T. Clay; host: *Gallus*, in DB collection.

VI. Order ODONATA

A. Family LIBELLULIDAE

1. *Tholymis citrina* Hag., in DB collection, det O. S. Flint.

VII. Order TRICHOPTERA

A. Monographed by Flint (44).

B. Family RHYACOPHILIDAE

1. *Atopsyche trifidus* Denning 1948, as new record (33).

VIII. Order THYSANOPTERA

A. Monographed by Medina Gaud (69).

B. Family HETEROTHRIPIDAE

1. *Heterothrips oneillae* Medina Gaud 1963, as new species (71).

C. Family THIRIPIDAE

1. *Echinothrips caribeanus* Hood 1954, as new species (58).

IX. Order ANOPLURA

A. Family HEMATOPINIDAE

1. *Hopopleura oenomydis* Ferris, as new record (48).

X. Order HOMOPTERA

A. Family ALEYRODIDAE

1. *Trialeurodes abutilonea* (Haldeman), as new record (79).
2. *Trialeurodes vaporariorum* (Westwood), as new record (79).

B. Family APHIDAE

1. Monographed by Smith (93).
2. *Acyrtosiphon bidenticola* Smith as new species (94).
3. *Amphorophora comemelinensis* Smith 1960, as new species (94).
4. *Aphis craccivora* Koch, as *A. medicaginis* in Wolcott p. 150 (93).
5. *Hyalomyzus jussieae* Smith 1960, as new species (94).

C. Family CICADELLIDAE

1. Monographed by Caldwell and Martorell (23).
2. *Dikraneura althaearosaeae* Caldwell 1951, as new species (26).
3. *Elabra aureovittata* (De Long), as *Alebra* in Wolcott, p. 123; as new combination (119).
4. *Empoasca wolcottii* Young 1953, as new species (118).
5. *Habralebra alliodorae* (Caldwell) (26).
6. *Laevicephalus nigripennis* (De Long), det. D. A. Young, in DB collection.
7. *Omegalebra cordiae* (Osborn), as *Protalebra* in Wolcott, p. 124; as new combination (119).
8. *Omegalebra lenticula* (Osborn), as *Protalebra* in Wolcott, p. 125; as new combination (119).
9. *Paralebra similis* (Baker), as *Protalebra* in Wolcott, p. 125; as new combination (119).
10. *Protalebra nexa* McAtee, as *P. insularis* in Caldwell (26); as new synonymy (119).
11. *Protalebrella brasiliensis* (Baker), as *Protalebra* in Wolcott, p. 124; as new combination (119).
12. *Rabela tabebuiae* (Dozier), as *Protalebra* in Wolcott p. 124, and Caldwell (26); as new combination (119).
13. *Rhabdotalebra brunnea brunnea* (Oman), as new record (119).
14. *Trypanalebra ziczac* (Osborn), as *Protakbra* in Wolcott p. 125, and Caldwell (23); as new combination (119).

D. Family DELPHACIDAE

1. Monographed by Caldwell and Martorell (24).
2. *Anchidelphax havanensis* (Crawford), as *Delphacodes* in Wolcott, p. 144,

and Caldwell (24); as new genus and new combination by Fennah (42).

3. *Caenodelphax teapae* (Fowler), as *Delphacodes* in Wolcott, p. 144 and Caldwell (24); as new genus and new combination by Fennah (42).
4. *Sogatella furcifera* (Horvath), as *Sogata* in Wolcott, p. 144, and Caldwell (24); as new combination (42).
5. *Sogatodes albolineosus* (Fowler), as *Delphacodes* in Wolcott, p. 144, as new combination (42).
6. *Sogatodes approximatus* (Crawford), as *Sogata approximata* in Wocott, p. 143, as new combination (42).
7. *Sogatodes cubanus* (Crawford), as *Sogata cubana* in Wolcott, p. 143, and Caldwell (24); as new combination (42).
8. *Sogatodes orizicola* (Muir), new record by Kramer (63) as *Sogata*; new combination (42).

E. Family DERBIDAE

1. Monographed by Caldwell and Martorell (24).
2. *Syntames* sp., det. P. W. Oman, in DB collection.

F. Family FLATIDAE

1. Monographed by Caldwell and Martorell (24).
2. *Capistra basalis* (Caldwell), as *Melormenis* in Caldwell (24), as new combination by Fennah (42).
3. *Capistra magna* (Caldwell), as *Melormenis* in Caldwell (24), as new combination (42).
4. *Capistra roscida* (Caldwell), as *Melormenis* in Caldwell (24), as new combination (42).
5. *Capistra zyxa* (Caldwell), as *Melormenis* in Caldwell (24), as new combination (42).
6. *Ilesia duplicata* (Caldwell), as *Flatormenis* in Caldwell (24), as new combination (42).
7. *Ilesia nefuscata* (Caldwell), as *Flatormenis* in Caldwell (24), as new combination (42).
8. *Ilesia stylata* (Caldwell), as *Flatorme-*

nis in Caldwell (24), as new combination (42).

9. *Parthenormenis virginia* (Caldwell); as suspected by Caldwell his genus *Puer-tormenis* is a synonym of *Parthenormenis* Fennah as pointed out by Fennah (42).

G. Family PSYLLIIDAE

1. *Carsidara concolor* Crawford, new record (25).
2. *Euceropsylla heyugramsa* Caldwell, as new species (25).
3. *Euceropsylla martorelli* Caldwell, as new species (25).
4. *Euceropsylla torus* Caldwell, as new species (25).
5. *Euceropsylla xerxa* Caldwell, as new species (25).
6. *Euphalerus antillensis* Caldwell, as new species (25).
7. *Heteropsylla cubana* Crawford, as new record (25).
8. *Heteropsylla huasachae insulata* Caldwell, as new subspecies (25).
9. *Heteropsylla reducta* Caldwell, as new species (25).
10. *Mitrapsylla cambalachensis* Caldwell, as new species (25).
11. *Mitrapsylla unga* (Caldwell), as *Arytaina* in Wolcott, p. 145; as new combination (25).
12. *Mitrapsylla vulgaris* Caldwell, as new species (25).
13. *Paurocephala heterotrichi* Caldwell, as new species (25).

H. Family TROPIDUCHIDAE

1. Monographed by Caldwell and Martorell (24).
2. *Ladella nepallata* Caldwell, det. D. Young, in DB.
3. *Ladellodes stalli* (Fennah), as *Tangia unguistata* Uhler in Wolcott, p. 133 and *Ladella stalli* Fennah in Caldwell (25); as new genus and combination by Fennah (42).

XI. Order HEMIPTERA

A. Family ANTHOCORIDAE

1. *Poronotellus constricts* (Stal), det. R. I. Sailer, in the senior author's (JMC) collection.

B. Family ARADIDAE

1. *Acaricoris clausus* Drake and Kormilev, as new species (36).
2. *Aglaocoris nutalii* Drake and Maldonado, as new germs and species (38).
3. *Eretmocoris disparis* Drake and Maldonado, as new species (38).

C. Family BELOSTOMATIDAE

1. *Belostoma subspinosum subspinosum* (P. de B.), as *B. boscii* Baker in Wolcott, p. 222; as new synonymy (64).
2. *Lethocerus (Benacus) griseus* (Say), as new record (73).

D. Family COREIDAE

1. *Burtinus luteomarginatus* Maldonado, as new species (65).
2. *Jadera sanguinolenta* (Fabricius), det. R. I. Sailer, in JMC collection.
3. *Niestlrea sidae* (Fabricius), sense of Barber 1939, det. R. I. Sailer, from Guánica, in JMC collection.
4. *Xenogenus extensis* Distant, as *Exogenus extensum* in Wolcott, p. 878, det. R. I. Sailer, in JMC collection.

E. Family CORIXIDAE

1. *Centrocorixa nigripennis* (Fieber), det. R. I. Sailer, in JMC collection.

F. Family CRYPTOSTEMMATIDAE

1. *Cryptostemma pratti* Usinger, as new species (104).

G. Family CYDNIDAE

1. *Amnestus sexdentatus* Froeschner, as new species (53).
2. *Dallasiellus (Dallasiellus) lugubris* (Stal), as *Geognathus reversus* Barber and Bruner in Wolcott, p. 189, as new synonym (53).
3. *Pangaeus (Pangaeus) piceatus* Stal, new record (53).

4. *Tominotus communis* (Uhler), as *Aethus* in Wolcott, p. 189; as new combination (53).

H. Family LYGAEIDAE

1. *Antilocoris pallidus* Uhler, det. R. I. Sailer, in the collection of the United States National Museum (USNM).
2. *Exptochiomera dissimilis* Barber, as new species (6).
3. *Nysius californicus* Stal, det. R. I. Sailer, from Ponce, in JMC collection.
4. *Nysius scutellatus* Dallas, det. R. I. Sailer, in JMC collection.
5. *Pachybrachius serripes* (Fabr.), det. R. I. Sailer, in JMC collection.
6. *Pamphantus pellucidus* Slater, as new species (92).

I. Family MIRIDAE

1. *Antias minuscula* Carvalho, as new species (28).

J. Family NABIDAE

1. *Aphelonotus simplex* Uhler, det. R. I. Sailer, in JMC collection.
2. *Metatropiphorus belfragii* Reuter, det. R. I. Sailer, from Guánica, in JMC collection.
3. *Velidia berytoides* Uhler, det. JMC, in JMC collection, from El Yunque.

K. Family NEIDIDAE

1. *Jalysus reversus* Van Duzee, det. R. I. Sailer, from Mayagüez, in DB collection.

L. Family NOTONECTIDAE

1. *Buenoa albidus* (Champion), det. R. I. Sailer, in JMC collection.
2. *Buenos antigone antigone* (Kirkaldy), det. R. I. Sailer, in JMC collection.
3. *Buenos platycnemia* (Fieber), det. R. I. Sailer, in JMC collection.

M. Family PENTATOMIDAE

1. *Galgupha vinculata insulata* McAtee and Malloch, det. R. I. Sailer, in JMC collection.
2. *Mecidea longula* Stal, det. by R. I. Sailer, in JMC collection.

N. Family REDUVIIDAE

1. *Bactrodes spinulosus* Stal, det. R. I. Sailer, from Maricao State Forest, in JMC collection.
2. *Ghilianella borincana* Maldonado, as new species (67).
3. *Ghilianella monense* Maldonado, from Mona Island, as new species (66).
4. *Oncerotrachelus* sp., probably new, in JMC collection.
5. *Ploiaria albipennis* McAtee and Malloch, from Mayagüez, in JMC collection.
6. *Tagalia inornatus cubensis* McAtee and Malloch, det. R. I. Sailer, in JMC collection.

O. Family SALDIDAE

1. *Saldula sulcata* (Barber), as *Micracanthia* in Wolcott, p. 220, det R. I. Sailer, in JMC collection.

P. Family TINGIDAE

1. *Acantochila spinacosta* Van Duzee, as new record (68).
2. *Leptopharsa consiricta* (Champion), as new record (70).

Q. Family VELIIDAE

1. *Merragata foveata* White, as new record (37).
2. *Mesovelvia amoena* Uhler, as new record (29).
3. *Microvelvia albonotata* Champion, as new record (37).
4. *Microvelvia argusta* Drake and Maldonado, as new species (37).
5. *Microvelvia hinei* Drake, as new record (37).
6. *Microvelvia longipes* Uhler, as new record (37).
7. *Microvelvia mimula* White, as new record (37).
8. *Microvelvia portoricensis* Drake, as new species (34).
9. *Microvelvia tateiana* Drake, as new species (34).
10. *Microvelvia zillana* Drake and Hottes, as new species (35).
11. *Rheumatobates minutus* Hungerford, as new record (37).
12. *Telmatometra ujhelyii* Esaki, as new record (37).

13. *Telmatometra whitei* Bergroth, as new record (37).

14. *Trochopus plumbea* (Uhler), as *Rhagovelia* in Wolcott, p. 220; as new combination (29).

XII. Order COLEOPTERA

A. Family ANTHICIDAE

1. *Vacusus vicinus* (La Ferte), as *Anthicus vicinus* in Wolcott, p. 30 I, as new combination (107).

B. Family BRUCHIDEA

1. *Sennius* sp., det. J. M. Kingsolver, in DB collection.

C. Family BUPRESTIDAE

1. *Acmaeodera boharti* Van Dyke, as new species (105).
2. *Peronaemis cupricollis* Fischer, as new species (43).

D. Family CANTHARIDAE

1. *Belotus* sp., det. T. J. Spilman, in DB collection.

E. Family CARABIDAE

1. *Calosoma (Castrida) sayi* Dejean, as new record (54).

F. Family CERAMBYCIDAE

1. *Batocera rubra* Linnaeus, as new record (116).

G. Family CHRYSOMELIDAE (notes by D. H. Blake).

1. *Acalymma bivitata* (Fabr.), det. D. M. Weisman, in DB collection.
2. *Alethexius inornata* Blake, as new species (11).
3. *Andrector ruficornis* (Olivier), det. D. M. Weisman, in DB collection.
4. *Aphthona crucifera* Blake, as new species (20).
5. *Aphthona inornata* Blake, as new species (12).
6. *Aphthona lamprocyanea* Blake, as new species (20).
7. *Aphthona lepta* Blake, as new species (20).

8. *Apraea cyanella* (Blake), as new name (13) to *Glyptobregma cyanellum* described from Ponce (10).
 9. *Apraea portoricensis* (Blake), recorded (8).
 10. *Argopistes coronatus* Blake, as new species (13).
 11. *Chalcosicya crotonis* var. *acuta* Blake, as new variety (14).
 12. *Chalcosicya crotonis* var. *angularis* Blake, as new variety (14).
 13. *Chalcosicya crotonis* var. *parguerensis* Blake, as new variety (14).
 14. *Chalcosicya crotonis* var. *septentrionalis* Blake, as new variety (14).
 15. *Chalcosicya wolcotti* (Bryant), recorded (14).
 16. *Hadropoda fuscomaculata* Blake, as new species (16).
 17. *Halticidea barberi* Baker, new name for *Dicoelotrachelus violaceus* Blake (13), originally described from Ponce (10).
 18. *Hemilactica portoricensis* Blake, as new species (20).
 19. *Lactica megaspila* Blake, as new species (9).
 20. *Longitarsus atypicus* Blake, as new species (20).
 21. *Longitarsus chlanidotus* Blake, as new species (20).
 22. *Longitarsus cylindricus* Blake, as new species (20).
 23. *Longitarsus oakleyi* Blake, as new species (20).
 24. *Longitarsus subtilis* Blake, as new species (20).
 25. *Megistops bryanti* Blake, as new species (15).
 26. *Megistops dissita* Blake, as new species (15).
 27. *Megistops tabebuiae* Blake, as new species (15).
 28. *Metachroma amplicolle* Blake, as new species (7).
 29. *Metachroma fenestratum* Blake, as new species (7).
 30. *Metachroma metrium* Blake, as new species (7).
 31. *Metachroma nanum* Blake, as new species (19).
 32. *Phaedon barberi* Blake, as new species (16).
 33. *Pseudodisonycha portoricensis* Blake, as new species (18).
 34. *Strabala ambulans puertoricensis* Blake, as new subspecies (17).
- H. Family COCCINELIDAE
1. *Diomus roseicollis* Mulsant, det. E. A. Chapin, in DB collection.
- I. Family CURCULIONIDAE
1. *Apion martinezi* Marshall, as new record (61).
- J. Family MELOIDAE
1. *Pseudozonitis marginata* (Fabricius), as *Zonitis guanicana* in Wolcott, p. 321, as synonym (90).
 2. *Pseudozonitis obscuricornis* (Chevrolat), as *Zonitis smythi* in Wolcott, p. 321, as synonym (90).
- K. Family MONOMMIDAE
1. *Hyporhagus wittneri* Freude, as new species (50).
- L. Family PHALACRIDAE
1. *Stilbus* sp., det. J. M. Kingsolver, in DB collection.
- M. Family SCARABAEIDAE
1. *Ataenius abditus* (Hald.), det. O. L. Cartwright, who on second examination compared it with the type and thinks it is not *abditus* but a species close to it and may be new, from Cabo Rojo, in the USNM.
 2. *Ataenius miamii* Cartwright, det. O. L. Cartwright, from Cabo Rojo, previously reported by J. A. Ramos from Mona Islands, in USNM collection.
 3. *Ataenius darlingtoni* Hinton, as new record (27).
 4. *Ataenius picinus* Harold, as new record (27):
- N. Family SCOLYTIDAE
1. *Corthylus* sp., det. D. M. Anderson, in DB collection.
 2. *Neodrycoetes portoricensis* Schedl, as new species (89).

3. *Pterocyclon opacifrons* Schedl, as new species (88).

O. Family TENEBRIONIDAE

1. *Loxostethus unicolor* Triplehorn 1952, as new species (103).

XIII. Order STREPSIPTERA

1. *Triozocera mexicana* Pierce, det. T. J. Spilman, from Maricao in light trap, in DB collection.

XIV. Order DIPTERA

A. Family AGROMYZIDAE (notes by G. C. Steyskal).

1. *Japanagromyza inaequalis* (Malloch), as *Agromyza* in Wolcott, p. 526 (98).
2. *Liriomyza melampyga* (Loew), as *Agromyza* in Wolcott, p. 526 (52).
3. *Liriomyza pusilla* (Meigen), as *Agromyza* in Wolcott, p. 527.
4. *Melanagromyza caerulea* (Malloch), as *Agromyza plumiseta* Malloch on page 527 and as *A. caerulea* Malloch on p. 525 (98).
5. *Melanagromyza floris* Spencer, recorded (98).
6. *Melanagromyza caudalis* Spencer, recorded (98).
7. *Melanagromyza mallochi* (Hendel), recorded (98).
8. *Melanagromyza minima* (Malloch), as *Agromyza* in Wolcott, p. 526.
9. *Melanagromyza virens* (Loew), *Agromyza* in Wolcott, p. 527.
10. *Ophiomyia insularis* (Malloch), as *Agromyza* in Wolcott, p. 526 (98).
11. *Ophiomyia lantanae* (Froggart), recorded (98).
12. *Phytobia (Amauromyza) maculosa* (Malloch), as *Agromyza* on page 526 (98).
13. *Phytobia (Calycomyza) allecta* (Melandner). new record (98).
14. *Phytobia (Calycomyza) cassia e* (Frost), recorded (52).
15. *Phytobia (Calycomyza) ipomaeae* (Frost), as *Agromyza* in Wolcott, p. 526 (98).

16. *Phytobia (Calycomyza) jucunda* (Wulp), as *Agromyza* in Wolcott p. 526 (52).

17. *Phytobia (Calycomyza) lantanae* Frick, recorded (98).

18. *Phytobia (Phytobia) setosa* (Loew), as *Agromyza* in Wolcott, p. 527 (52).

19. *Phytobia (Phytobia) xanthophora* (Schiner, as *Agromyza* in Wolcott, p. 528 (98).

20. *Phytobia (Poemyza) angulata* (Loew), as *Agromyza neptis* in Wolcott, p. 527 (52).

B. Family ANTHOMYIIDAE (notes by Curtis W. Sabrosky)

1. All Anthomyiidae listed by Wolcott, except *Fucellia*, are Muscidae.
2. In "A Catalog of the Diptera of North America North of Mexico", Agriculture Handbook No. 276, Agricultural Research Service, United States Department of Agriculture, 1965 the dung flies listed by Wolcott on page 497, as Scopeumatidae (Cordyluridae or Scatophagidae), belong in the subfamily Scatophaginae of the Anthomyiidae.

C. Family ANTHOMYZIDAE (notes by Curtis W. Sabrosky).

1. This family appears in Wolcott, p. 525, as Geomyzidae.
2. *Mumetopia nigrimana* (Coquillet), as *Anthomyza nigrimanus* in Wolcott, page 525.

D. Family ASILIDAE (notes by Willis W. Wirth).

1. *Plesioma leptogaster* Loew, from Mona Island, collected by W. Cross, in the USNM collection, appears in Wolcott as *Plesioma* sp. near *indecora* Loew, p. 453.
2. *Proctacanthus danforthi* Curran, as new record (32).

E. Family ASTEIIDAE (notes by Curtis W. Sabrosky).

1. *Loewimyia* n. sp., from Ramey Air Force Base, Aguadilla, det. by Sabrosky, in USNM collection.

2. *Phlebotomera peculiaris* Sabrosky, as new species (84).
 3. *Sigaloessa* should be used instead of *Crepidohamma*; the specimen mentioned by Wolcott, p. 523, as *Crepidohamma bicolor* is *Sipaloessa r i c a* Curran.
- F. Family BIBIONIDAE.
1. *Philia quinquespinæ* Hardy 1961, as new species (56).
- G. Family BOMBYLIIDAE (notes by Willis W. Wirth).
1. *Anthrax*, correct name for *Spogostylum*, p. 450 in Wolcott.
 2. *Anthrax oedipus* Fabricius is the correct name for what is listed as *A. irroratus* Fabricius. The latter is North American only.
 3. *Ligyra cerberus* (Fabricius) is the correct name of *Hyperalonia cerberus* (Fabricius) as listed on page 450 by Wolcott.
 4. *Neodiplocampta roederi* (Curran) is the correct combination for *Diplocampta roederi* Curran on page 452 in Wolcott.
 5. *Villa adusta* (Loew), as *Anthrax* on page 450.
 6. *Villa bigradata* (Loew), as *Anthrax* on page 450.
 7. *Villa eumenes* (Osten-Sacken). det. by W. W. Wirth, from Mona Island.
- H. Family CALLIPHORIDAE (notes by Curtis W. Sabrosky).
1. *Cochliomyia*, correct name for *Callitroga*, pages 489-490 in Wolcott.
 2. *Cochliomyia hominivorax* (Coquerel) correct name for *Callitroga americana* (Cushing and Patton), p. 489.
- I. Family Ceratopogonidae (notes by Willis W. Wirth).
1. *Atrichopogon obscurus* Ewen 1958, as new record (40).
 2. *Atrichopogon saundersi* Ewen 1958, as new record (40).
 3. *Atrichopogon warmkei* Wirth 1956, as new record (112),
4. *Bezzia punctipennis* (Williston), as *Ceratopogon* on page 427 in Wolcott.
 5. *Ceratopogon (Brachypogon) impar* (Johannsen), as *Helea*, p. 427 in Wolcott.
 6. *Culicoides insignis* Lutz, as *C. inamollae* Fox and Hoffman, p. 426 in Wolcott.
 7. *Forcipomyia fuliginosa* (Meigen), as *F. eriophora* (Williston), *F. flava* Williston, and *F. propinqua* (Williston), p. 427 in Wolcott (113).
 8. *Forcipomyia (Pterobosca) fusicornis* Coquillet (60).
 9. *Forcipomyia (Trichohelea) oligarthra* Saunders 1956 as new record (87).
 10. *Forcipomyia varipennis* Wirth and Williams 1957 (1 15).
 11. *Forcipomyia (Warmkea) aerea* Saunders 1956, as new species (87).
 12. *Forcipomyia (Warmkea) b i c o l o r* Saunders 1956, as new species in (87).
 13. *Forcipomyia (Warmkea) spinosa* Saunders 1956, as new species (87).
 14. *Monohelea multilineata* (Lutz), det. W. W. Wirth, from Tortuguero, in USNM collection.
 15. *Stilobezzia beckae* Wirth, det. W. W. Wirth, from Tortuguero, in USNM collection.
 16. *Stilobezzia bicolor* Lande, det. W. W. Wirth, from Bayamón and Añasco, in USNM collection.
- J. Family CHAOBORIDAE (notes by Alan Stone).
1. Genera *Chaoborus* (as *Chaobrus* in Wolcott), *Corethrella*, and *Corethra* listed by Wolcott in the Culicidae, pages 428-429, should be placed in Chaoboridae.
- K. Family CHIRONOMIDAE
1. *Orthocladius* sp., det. W. W. Wirth, in DB collection.
- L. Family CHLOROPIDAE (notes by Curtis W. Sabrosky).
1. *Cenioscinella pleuralis* (Beck), det. C. W. Sabrosky, in DB collection.

2. *Conioscinella solutu* (Beck), det. Sabrosky, in USNM.
3. *Conioscinella trilineata* (Duds), det. Sabrosky, from Yauco-Lares road, Km 22, DB collection.
4. *Conioscinella tripunctata* (Curran), as *Oscinella* Wolcott, p. 523.
5. *Ectecephala* sp, det. Sabrosky, in USNM collection.
6. *Hippelates currani* Aldrich, as *H. collusor* in Wolcott, (p. 519).
7. *Hippelates dorsalis* Loew, det. Sabrosky, in USNM.
8. *Hippelates magnipalpoide*s (Curran), as *Oscinella* in Wolcott, p. 522.
9. *Monochaetoscinella anonyma* (Williston), as *Oscinella* in Wolcott, p. 522.
10. *Rhodesiella* sp., det. Sabrosky, in USNM collection.
11. *Stenoscinis limitata* (Beck), as *Oscinella* in Wolcott, p. 522.
12. *Trigonoma fossulatum* (Loew), as *Chloropisca atra* in Wolcott, p. 518.

M. Family CULICIDAE (notes by Alan Stone).

1. *Aedes obturator* Dyar and Knab, det. A. Stone, recorded from Mona Island by J. Maldonado Capriles, may not be this species.
2. *Aedes (Ochlerotatus) condolegens* Dyar and Knab. Tulloch, 1937, listed this species but the USNM does not have the specimens under this name, so, the determination can not be confirmed.
3. *Aedes (Ochlerotatus) scapularis*, recorded by Tulloch in 1937, no specimens were found to confirm his determination.
4. *Aedes (Ochlerotatus) serratus* was reported by Tulloch as *A. nubilus*.
5. *Aedes (Ochlerotatus) sollicitans* (Walker), as *A. (Taeniorhynchus) sollicitans* in Wolcott, p. 436.
6. *Aedes (Ochlerotatus) taeniorhynchus* (Wiedemann), as *A. (Taeniorhynchus) taeniorhynchus* in Wolcott p. 436.
7. Genera *Chaoborus*, *Corethrella*, and *Corethra* placed by Wolcott in this family. pages 428-429. should be placed in the family Chaoboridae.
8. *Culex (Culex) chidesteri* Dyar, det.

R. W. Brain, from Mayagüez, in USNM collection.

9. *Culex iolambis* Dyar, new record (77).
10. *Culex sardinerae* Fox 1953, as new species (46).
11. Genus *Dixa*, placed by Wolcott in this family, should be placed in family Dixidae.
12. *Psorophora (Grabhamia) confinnis* (Lynch), as *P. (Janthinosoma) confinnis* in Wolcott, p. 433.
13. *Psorophora (Grabhamia) insularia*, det. A. Stone, reported by J. Maldonado Capriles from Mona Island, in USNM and DB collection.
14. *Psorophora (Grabhamia) pygmaea* Theobald, as *P. (Janthinosoma) pygmaea* in Wolcott, p. 434.
15. *Toxorhynchites (Lynchiella) portoricensis* Roeder, as *T. (Toxorhynchites) portoricensis* in Wolcott, p. 432.
16. *Uranotaenia socialis* Theobald, det. A. Stone; from Mayagüez, Loiza, Sabana Grande, and Laguna Cartagena, in USNM collection. "...all of our West Indian Material seems to be *socialis* rather than *sapphirina*, although Galindo et al, 1954, thought *sapphirina* occurred in *Puerto Rico* based on Pratt's figures."

N. Family DIXIDAE (note by Alan Stone).

1. This family is not listed by Wolcott; genus *Dixa* placed by Wolcott in the Culicidae, p. 428-429, should be placed here.

O. Family DOLICHOPODIDAE

1. *Chrysotus magnipalpus* Van Duzee, det. W. W. Wirth, from Yauco-Lares road, Km 22, in USNM collection,
2. *Chrysotus niger* Aldrich, det. W. W. Wirth, from Yauco-Lares road, Km. 22, in DB collection.
3. *Coeloglutus concavus* Aldrich, det. W. W. Wirth, from El Yunque, in USNM collection.
4. *Condyllostylus chrysoprasius* (Walker), as *Sciapus* in Wolcott, p. 457, det. W. W. Wirth, in USNM.
5. *Paraclius difficilis* Becker, det. W. W. Wirth, in DB collection.

6. *Sympycnus* sp., det. W. W. Wirth, from El Yunque, in DB collection.
7. *Thrypticus violaceus* Van Duzee, det. W. W. Wirth, in DB collection.

P. Family DROSOPHILIDAE

1. *Amiota steganoptera* Malloch, as new record (110).
2. *Clastopteromyia calvacantii* Frota, det. W. W. Wirth, from Adjuntas, in USNM collection.
3. *Diathoneura* sp. A, as new record (102).
4. *Diathoneura* sp. B₁, as new record (102).
5. *Diathoneura dubia* (Sturtevant), new record (102).
6. *Diathoneura metallica* (Sturtevant), det. W. W. Wirth, from Adjuntas, in USNM collection.
7. *Diathoneura opaca* (Williston), as new record (102).
8. *Drosophila* sp. A., as new record (102).
9. *Drosophila annularis* (Sturtevant), det. W. W. Wirth, from El Yunque, in USNM collection.
10. *Drosophila* sp. B₂, as new record (102).
11. *Drosophila calloptera* Schiner, as new record (102).
12. *Drosophila canapalpa* Patterson and Mainland, as new record (102).
13. *Drosophila cardini* Sturtevant, as new record (102).
14. *Drosophila dumni* Townsend and Wheeler 1955, recorded (102).
15. *Drosophila equinoxialis* Dobzhansky, as new record (102).
16. *Drosophila mediodiffusa* Heed and Wheeler 1957, as new species (57).
17. *Drosophila metzii* Sturtevant, det. W. W. Wirth, from Guilarte Peak, Adjuntas, in USNM.
18. *Drosophila mirim* Dobzhansky and Pavan, as new record (102).
19. *Drosophila mulleri* Sturtevant, det. W. W. Wirth, from El Yunque, in DB collection.
20. *Drosophila nebulosa* Sturtevant, as new record (102).

21. *Drosophila ornatipenis* Williston, det. W. W. Wirth, in DB collection.
22. *Drosophila puracanalinea* Wheeler, recorded (110).
23. *Drosophila paramediotriata* Townsend and Wheeler, as new record (102).
24. *Drosophila peninsularis* Patterson and Wheeler (102).
25. *Drosophila sturtevanti* Duda, as new record (102).
26. *Drosophila tristriata* Heed and Wheeler, as new species (57).
27. *Drosophila tropicalis cubana* Townsend, as new record (102).
28. *Drosophila victoria* Sturtevant, as new record (102).
29. *Drosophila willistoni* Sturtevant, as new record (102).
30. *Leucophenga* sp. A₃, as new record (102).
31. *Leucophenga neovaria* Wheeler 1960, as new species (108).
32. *Leucophenga undulata* Henderl, as new record (102).
33. *Mayagueza argentifera* Wheeler, as new genus and species (109).
34. *Microdrosophila quadrata* (Sturtevant), as new record (102).
35. *Mycodrosophila nigropleura* Wheeler and Takada 1963, as new species (111).
36. *Neotanygastrella tricoloripes* Duda, as new record (102).

Q. Family EPHYDRIDAE (notes by W. W. Wirth).

1. *Athyroglossa atra* (Williston), as *Discomyza dubia* Williston in Wolcott, page 516 (30).
2. *Athyroglossa laevis* (Cresson), incorrectly spelled *Anthyroglossa* in Wolcott, p. 518.
3. *Brachydeutra neotropica* Wirth 1964, as new species (114).
4. *Ceropsilopa nasuta* Cresson, as new record (30).
5. *Cressonomya aciculata* (Loew), as *Plagiopsis* in Wolcott, p. 518.
6. *Cressonomya skinneri* (Cresson), as *Psilopa* in Wolcott, p. 517.

7. *Glenanthe litorea* Cresson, det. W. W. Wirth, in DB.
 8. *Helaeomyia nigra* (Willston), from San Juan, det. W. W. Wirth, in USNM collection.
 9. *Hydrochasma incisum* (Coquillett), as *H. leucoprocta* (Loew) in Wolcott, p. 517,
 10. *Limnellia quadrata* (Fallen), det. W. W. Wirth, from Yauco-Lares road, km 22, in USNM collection.
 11. *Nostima abbreviata* Cresson, det. W. W. Wirth, in DB collection.
 12. *Nostima gilvipes* (Coquillett), as *Hydrellia* in Wolcott, p. 517.
 13. *Nostima niveivenosa* Cresson, det. W. W. Wirth, from Yauco-Lares road, Km 22, in DB collection.
 14. *Ochthera loreta* Cresson, det. W. W. Wirth, from Cartagena Lagoon, in USNM collection.
 15. *Paralima multipunctata* Williston, as *P. ciliata* in Wolcott, p. 517.
 16. *Parathyroglossa nitida* (Williston), as *Athyroglossa* in Wolcott, p. 517
 17. *Paratissa semilutea* (Loew), det. W. W. Wirth, from Guánica, in USNM collection. Literature up till now lists this species as *P. pollinosa* (Williston).
 18. *Physemops* sp., det. W. W. Wirth, from Yauco-Lares road, Km 22, in USNM collection.
 19. *Polytrichophora borinqueni* Cresson, det. W. W. Wirth, Yauco-Lares road, Km 22, in USNM collection.
 20. *Scatella obscura* Williston, det. W. W. Wirth, from Cartagena Lagoon, in USNM collection.
 21. *Zeros calverti* (Gresson), det. W. W. Wirth, from El Yunque, in USNM collection.
 22. *Zeros fenestralis* (Cresson), as *Ilythea* in Wolcott, p. 517.
 23. *Zeros obscurus* (Cresson), det. W. W. Wirth, from Utuado, in USNM collection.
- R. Family HIPPOBOSCIDAE
1. *Ornithoica confluent* (Say), host: African cattle egret, *Bubulcus ibis*, in DB collection,
- S. Family LAUXANIDAE (notes by Curtis W. Sabrosky).
1. *Physegenua obscuripennis* (Bigot), det. C. W. Sabrosky, in DB collection. This is the only one species of this genus in the West Indies. Puerto Rican record of *Ph. ferruginea* and *Ph. vittata*, Wolcott, p. 499, all refer to *obscuripennis* (31).
 2. *Physoclypeus coquilletti* (Hendel), as *Caliope lutea*, *C. scutellata*, and *Minnettia aibonito* in Wolcott, p. 500-501.
- T. Family LONCHAEIDAE
1. *Dasyops* sp., det. C. W. Sabrosky, in USNM collection.
 2. *Silba* sp., as *Carpolochea* in Wolcott, p. 499.
- U. Family MICROPEZIDAE TYLIDAE.
1. *Nerius cinereus*, placed by Wolcott in this family, p. 513, should be placed in Family Neriidae.
 2. *Grallipeza scurra* (Enderlein), as *Systellapha* in Wolcott, p. 513.
 3. *Taeniaptera munda* (Wulp), as *Calobata* in Wolcott, p. 514.
 4. *Tylos limbata* (Roeder), as *Micropeza* in Wolcott, p. 513.
- V. Family MILICHIIDAE (notes by C. W. Sabrosky).
1. *Milichiella* — the series from San Juan on *Chalcas exotica*, recorded by Wolcott in p. 529, is, in part at least, a new species near *Milichiella bisignata* Melander.
 2. *Pholeomyia myopa* Melander, as *P. indecora* in Wolcott, pages 529-530 (86).
 3. *Pholeomyia politifacies* Sabrosky 1949, recorded (86).
- W. Family MUSCIDAE (notes by C. W. Sabrosky and G. C. Steyskal).
1. All Anthomyiidae listed by Wolcott, pp. 495-497, except *Fucellia*, are Muscidae.
 2. *Bithoracochaeta despecta* Walker, listed by Wolcott in the Anthomyiidae, p. 496, is a synonym of *B. leucoprocta* (Wiedemann) (59).

3. *Cyrtoneurina rescita* (Walker), det. G. C. Steyskal, in DB collection.
4. *Graphomya stipata* Walker and *G. maculata* Scopoli, listed by Wolcott, p. 489. in the Sarcophagidae are Muscidae.
5. *Limnophora (Gymodia) debilis* (Williston), det. C. W. Sabrosky, in DB collection.
6. *Lispe nasoni* Stein, as new record (95).
7. *Neodexiopsis cavallata* Snyder 1957 (96), as new species.
8. *Neodexiopsis crassicururus* Snyder, as new species (96).
9. *Neodexiopsis crispiseta* Snyder, as new species (96).
10. *Neodexiopsis discolorisexus* Snyder, as new species (96).
11. *Neodexiopsis ditiportus* Snyder, as new species (96).
12. *Neodexiopsis ebenifemur* Snyder, as new species (96).
13. *Neodexiopsis maldonadoi* Snyder, as new species (96).
14. *Neodexiopsis medinai* Snyder, as new species (96).
15. *Neodexiopsis micans* Snyder, as new species (96).
16. *Neodexiopsis neoflavipes* Snyder, as new species (96).
17. *Neodexiopsis priscipagus* Snyder, as new species.
18. *Scenetes cardini* Malloch, listed by Wolcott, p. 488, in the Sarcophagidae, is a Muscidae.
19. *Spilogona* sp., det. G. C. Steyskal, in DB collection.
20. *Synthesiomyia nudiseta* (Wulp), det. C. W. Sabrosky, in DB collection.

X. Family MYCETOPHILIDAE (FUNGIVORIDAE.)
(Notes by Alan Stone).

1. *Leia biamputata* Edward, det. A. Stone, in DB collection. (In a later report by Dr. Stone, he identified a specimen as *Leia incompleta* (Twin and Curran) and stated: "*Boletina incompleta* Curran. This is a *Leia* rather than a *Boletina* and we have specimens from Puerto Rico determined by John Lane as *Leia biam-*

putata Edward. (Edward's name is later than Curran's." Authors' note.)

2. *Boletina incompleta* Curran should be eliminated from Wolcott's list. (See explanation above.)
3. *Lycoria tritici* (Coquillet) and *L. hartii* Johnansen), placed by Wolcott, p. 440-441, in this family, should be placed in the family Sciaridae as *Bradysia*.

Y. Family NERIIDAE (note by G. C. Steyskal).

1. *Nerius cinereus* Roeder, placed by Wolcott in Family Tylidae, p. 513, should be placed in this family. (Dr. Steyskal has published a note giving his reasons for calling the Puerto Rican species *Antillonerius cinereus* (Roeder) and synonymizing the genus *Imrenerius* (100). Authors' note.)

Z. Family OTITIDAE (notes by G. C. Steyskal).

1. Wolcott's list of Otitidae should be divided into several families as follows:
 - a. Pyrgotidae: *Pyrgota*.
 - b. Otitidae: *Xanthacrona*, *Acrostica*, *Euxesta*, *Tetanops*, *Notogramma*, *Chaetopsis*.
 - c. Richardiidae: *Setellia*, *Epiplatea*, *Macrostenomyia*.
2. *Acrostica paliipes* Grimshaw, is a synonym of *A. apicallis* Williston as listed in Wolcott, pp. 502-503,
3. *Acrostica rufiventris* Hendel, from Utuado, in USNM.
4. *Euxesta juncta* Coquillet, det. G. C. Steyskal, in DB.
5. *Euxesta latifascia* Schiner, from Mayagüez, in USNM.
6. *Euxesta quadrivittata* (Macq), det. R. H. Foote, from Salinas, in DB collection.

AA. Family PHORIDAE (notes by W. W. Wirth and G. C. Steyskal).

1. *Chaetopleurophora formosa* Borgmeier, recorded (21).
2. *Chonocephalus jamaicensis* Brues, as new record (22).
3. *Dohrniphora cornuta* (Bigot), as *D. venusta* Coquillet in Wolcott, p. 461.

4. *Dohniphora dispar* Enderlein, det. Borgmeier, from Mayagüez, in USNM collection.
5. *Puliciphora borinquensis* Wheeler, as new species (22).
6. *Woodiphora magnipalpis* (Aldrich), new record (22).
- BB. Family PSYCHODIDAE (note by A. Stone).
1. *Psychoda savaiiensis* Edwards, El Semil, Villalba, det. A. Stone, in USNM collection,
- CC. Family PYRGOTIDAE (Note by G. C. Steyskal).
1. Genus *Pyrgota*, listed by Wolcott in Family Otitidae, p. 502, should be placed in this family.
- DD. Family RICHARDIIDAE (note by G. C. Steyskal).
1. Genera *Epiplatea*, *Macrostenomyia*, and *Setellia*, listed by Wolcott in Otitidae, p. 506, should be placed in this family.
- EE. Family SARCOPHAGIDAE (notes by C. W. Sabrosky).
1. *Scenetes* and *Graphomya*, placed by Wolcott in this family, pp. 488-489, should be placed in the Muscidae.
2. *Amobia floridensis* (Townsend), as *Pachyophthalmus* in Wolcott, p. 488.
3. *Camptops diversipes* (Coquillet), as *Harpagopyga* in p. 488.
4. *Sarcodexia lambens* (Wiedemann), as *Sarcophagi* on p. 483.
- FF. Family SCATOPSIDAE
1. *Scatopse fuscipes* Meiden, as new record (72).
- GG. Family SCIARIDAE (note by Alan Stone).
1. *Bradysia tritici* (Coquillet) and *B. hartii* (Johannsen) as *Lycoria* of the family Mycetophilidae, belong here; Wolcott, pp. 440-441.
- HH. Family SCIOMYZIDAE
1. *Dictya insularis* Steyskal 1954, as new species (99).
- II. Family SEPSIDAE (notes by G. C. Steyskal).
1. All Puerto Rican species of this family belong in the genus *Palaeosepsis*, except *discolor* Bigot, which is a "species dubia", the author's names should be in parentheses, Wolcott, p. 515.
2. *Palaeosepsis pusio* and *P. insularis* are distinct species, Wolcott, p. 515.
- JJ. Family SIMULIIDAE
1. *Simulium wolcotti* Fox 1953., as new species (47).
- KK. Family SPHAEROCERIDAE (BORBORIDAE) (note by C. W. Sabrosky).
1. *Leptocera angulata* (Thomson) and *L. venalicia* (Osten-Sacken) are the same species, the former having priority, pp. 497-498 in Wolcott.
- LL. Family STRATIOMYIDAE (notes by W. W. Wirth).
1. *Brachycara slossonae* (Johnson), as *Euryneurasoma* in Wolcott, p. 446.
2. *Cyphomyia chlybea* (Wiedemann), as *Neorondania* in Wolcott, p. 445.
3. *Cyphomyia marginata* Loew, det. W. W. Wirth, from Río Piedras, in USNM collection,
4. *Microchrysa bicolor* (Wiedemann), as *Sargus* in Wolcott, p. 445.
5. *Nothomyia nigra* James, det. W. W. Wirth, from Fort Buchanan, El Yunque, Salinas, and Arecibo, in USNM.
6. *Nothomyia viridis* Hine, det. W. W. Wirth, from Salinas and Yauco-Lares road, Km 22, in DB collection.
7. *Odontomyia dorsalis* (Fabricius), as *Eulalia* in Wolcott, p. 446.
8. *Sargus lateralis* Macquart, as *Macrosargus* in Wolcott, p. 445.
9. *Sargus lucens* Loew, as *Georsargus* in Wolcott, p. 445.
10. *Sargus notatus* Wiedemann, det. W. W. Wirth, from Mayagüez and Maricao, in DB collection.
11. *Sargus schwarzi* (Curran), as *Pedicecella* in Wolcott, p. 446.

MM. Family SYLVICOLIDAE.

1. *Sylvicola* sp. near *fumata* (Knab), det. A. Stone, in DB collection.

NN. Family SYRPHIDAE (notes by W. W. Wirth).

1. *Baccha deceptor* Curran, det F. M. Hull, in USNM collection, as *B. stenogaster* Williston in Wolcott, p. 464.
2. *Baccha rica* Curran, det. W. W. Wirth, from Mayagüez, in USNM collection.
3. *Baccha scutellata* (Loew), det. W. W. Wirth, from Mayagüez USNM collection.
4. *Eristalis agrorum* (Fabr.), as *E. cubensis* in Wolcott, p. 468.
5. *Mesograptia* - 16 species listed as *Mesogramma* in pp. 464-466.
6. *Mesograptia luna* (Hull), det. W. W. Wirth, from Mayagüez, Yauco-Lares road, Km 22, and Guajataca, in USNM collection.
7. *Mesograptia rufocincta* (Curran), det. Wirth, from Mayagüez, in USNM collection.
8. *Xanthandrus cubana* Fluke, det. W. W. Wirth, from Mayagüez, in USNM collection.

OO. Family TABANIDAE (notes by Alan Stone).

1. The five species listed as in *Tabanus* (*Stenotabanus*) should be placed in the genus *Stenotabanus*, pp. 447-448.
2. *Stenotabanus laevicallus* (Szil.), det. A. Stone, from Guánica State Forest, in DB collection.

PP. Family TACHINIDAE (LARVAEVORIDAE) (notes by C. W. Sabrosky).

1. *Acaulona erythropyga* Sabrosky, as new species (80).
2. *Angiorhina crudelis* Wiedemann, det. Sabrosky, in DB collection.
3. *Archytas marmoratus* (Townsend), as *A. incerta* (Macquart), in Wolcott, p. 483 (83).
4. *Calpodomyia linearis* Townsend, det.

Sabrosky, from San Juan, in USNM collection.

5. *Diaphoropega braueri* (Williston), det. Sabrosky, from San Juan, in USNM collection.
6. *Euphasiopteryx dominicana* (Townsend), det. Sabrosky, from Mayagüez and Maricao State Forest, in DB collection.
7. *Euphasiopteryx ochracea* (Bigot), recorded (81).
8. *Euphorocera tachinomoides* (Townsend), det. Sabrosky, in DB collection.
9. *Goniomima luteola* (Coquillett), as *Belvosia* in Wolcott, p. 478.
10. *Hemisturnia americana* (Curran), as *Anacamptomyia* in Wolcott, p. 480.
11. *Iteuthelaria* sp., det. C. W. Sabrosky, in USNM collection.
12. *Minthozelia* sp., det. C. W. Sabrosky, from Maricao, in USNM collection.
13. *Oedematocera* sp., det. C. W. Sabrosky, from Maricao, in USNM collection.
14. *Ormia lineifrons* Sabrosky, recorded (82).
15. *Ormia wolcottii* Sabrosky 1953, as new species (82).
16. *Pelecotheca* sp., det. by Sabrosky, in USNM collection.
17. *Phaenopsis* n. sp., near *venusta* Rainhart, det. Sabrosky, from Maricao, in USNM collection.
18. *Plectops* sp., det. Sabrosky, from Ponce, Salinas, Maricao, and Km 22 Yauco-Lares road, in USNM collection.
19. *Prorhynchops* n. sp. (not *errans* Curran), det. Sabrosky, from Maricao, in USNM collection.
20. *Siphoactia* sp., det. Sabrosky, from Guánica State Forest, in USNM collection.
21. *Spathidexia antillensis* Arnaud, det. P. H. Arnaud, new record, in DB collection.

QQ. Family TEPHRITIDAE (TRYPETIDAE) (notes by R. H. Foote).

1. *Dioxyna picciola* (Bigot), det. R. H.

Foote, from Km 22 Yauco-Lares road, in DB collection.

2. *Tomoplagia incompleta* (Williston), det. R. H. Foote, from Maricao State Forest, in DB collection.
3. *Tomoplagia propleuralis* Aczel 1955, as new species (1).

RR. Family TETHINIDAE

1. *Rhinoessa xanthopoda* (Williston), det. C. W. Sabrosky, in DB collection.

SS. Family TIPULIDAE

1. *Gonomyia (Gonomyia) subbrevicula* Alexander, new species (3).
2. *Gonomyia (Lipophleps) hoffmaniana* Alexander, as new species (3).
3. *Limonia (Geranomyia) yunquensis* Alexander, as new species (5).
4. *Limonia (Limonia) borinquensis* Alexander, as new species (4).
5. *Limonia (Rhipidia) luquilloensis* Alexander, as new species (4).
6. *Limonia (Rhipidia) pratti* Alexander, as new species (4).
7. *Teucholabis immaculipleura* Alexander, as new species (2).

TT. Family TRIOSCELIDAE

1. *Spilochroa ornata* (Johnson), det. Sabrosky, in DB collection.
2. *Trioscelis* sp., det. C. W. Sabrosky, from Guánica State Forest, in USNM collection.

XV. Order LEPIDOPTERA

A. Family NOCTUIDAE

1. *Gonodonta sicheas* (Cramer), as *G. hesione* (Drury) in Wolcott, p. 617, considered as a synonym (101).
2. *Gonodonta uxoria* (Cramer), as *G. marmorata* Schaus in Wolcott, p. 617, considered as a synonym (101).

B. Family NYMPHALIDAE

1. *Junonia evarete michaelesi* Munroe, as new subspecies (75).

C. Family PYRALIDAE

1. *Alatuncunsia bergii* (Moschler), as *Dichogama* in Wolcott, p. 657, considered as a new combination (76).

XVI. Order HYMENOPTERA

A. Family APIDAE

1. *Centris versicolor* (Fabricius), det. K. V. Krombein, in DB collection.

B. Family BRACONIDAE

1. *Agathis rubricincta* (Ashmead), det. Muesebeck, in DB collection.
2. *Apanteles aciculatus* Ashmead, det. Muesebeck, from Cartagena Lagoon, in DB collection.
3. *Apanteles herbertii* Ashmead, det. Muesebeck, in DB collection.
4. *Apanteles marginiventris* (Cresson), det. Muesebeck, in DB collection.
5. *Aspilota* sp., det. Muesebeck, from Guilarte Peak, in DB collection.
6. *Ceratoteleia* sp., det. Muesebeck, from Adjuntas, in DB collection.
7. *Hormius vulgaris* Ashmead, as new record (72).
8. *Microplitis maturus* Wiedemann, det. Muesebeck, in DB collection.
9. *Orgilus* sp., det. Muesebeck, from Guayanilla and Mayagüez, in USNM collection.
10. *Phanerotoma humeralis*, det. Muesebeck, in DB collection.
11. *Phanerotoma tibialis* (Hald.), det. Muesebeck, from Salinas and Guánica State Forest, in USNM collection.
12. *Rhysipolis* sp., det. Muesebeck, in DB collection.
13. *Stantonia lamprosemae* Muesebeck, det. Muesebeck, in DB collection.
14. *Trissoleus* sp., det. Muesebeck, from Km 22 Yauco-Lares road, in DB collection.

C. Family CHALCIDIDAE

1. *Spilochalcis dorsata* (Cresson), det. B. D. Burks, in DB collection.
2. *Spilochalcis nigrita* Howard, det. B. D. Burks, in DB collection.

D. Family DIAPRIIDAE

1. *Acanthropia crassicornis* Ashmead, det. Muesebeck, in DB collection.

E. Family ENTEDONTIDAE

1. *Euderus varicolor* (Ashmead), det. B. D. Burks, in DB collection.

F. Family EULOPHIDAE

1. *Melittobia* sp., det. B. D. Burks, in USNM collection.
2. *Tetrastichus thripophonus* Waterston, appears in Wolcott, p. 779, in family Tetrastichidae.

G. Family FIGITIDAE

1. *Pseudeucoila* sp., det. L. H. Weld, in USNM collection.

H. Family ICHNEUMONIDAE

1. *Acroricnus tricolor* Mitchell, as new species (74).
2. *Amblyjoppa* sp., det. I. M. Walkley, in USNM collection.
3. *Labrorychus* sp., det. L. M. Walkley, in DB collection.

I. Family POMPILIDAE

1. *Anoplus amethystinus* (Fabricius), det. M. R. Smith, in DB collection.
2. *Pepsis saphirus* Beau., det. K. V. Krombein, in DB collection.
3. *Poecilopompilis hookeri* (Rohwer), det. K. V. Krombein in DB collection, as *Batazonus* in Wolcott, p. 860.

J. Family PTEROMALIDAE

1. *Protolaccus bacchadis* Burks, det. B. D. Burks, in DB collection.

K. Family SPHECIDAE

1. *Chlorion ichneumoneum* (Linnaeus), det. K. V. Krombein, in DB collection, as *Ammobia* in Wolcott, p. 840.
2. *Chlorion singulare* (Smith), as *Ammobia* in Wolcott, p. 841, in DB collection.
3. *Chlorion thomae* (Fabricius), as *Prionyx* in Wolcott, p. 840, in DB collection.

4. *Pluto atricornis* (Mall.), det. M. R. Smith, in DB collection.

5. *Sceliphron assimile* (Dahlberg), det. K. V. Krombein, in DB collection.

L. Family VESPIDIAE

1. *Stenodynerus dejectus* (Cresson), det. K. V. Krombein, in DB collection.

XVIII. Order ZORAPTERA

1. *Zorotypus barberi* Gurney, determined and collected by A. B. Gurney, from a large rotting log in El Yunque, on February 17, 1961; in DB collection.

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