

SYNONYMY OF NEOTROPICAL CULICIDAE¹

(DIPTERA)

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The opportunity of examining types of Neotropical *Culicidae* in the collections of the British Museum (Natural History) in London and the United States National Museum in Washington, D. C. have enabled the author of this paper to establish some synonymies in this group, made through comparison of type material and notes taken at the time.

He feels that, in the majority of cases, such synonymies are correct and would be glad to receive suggestions from those who do not agree with some of them so that further study can be undertaken.

He wishes to thank all those who have helped him, especially Drs. Alan Stone of the Bureau of Entomology and Plant Quarantine in Washington and P. F. Mattingly of the British Museum (Natural History) in London who have helped him in every way possible, giving him valuable suggestions.

In the following lists the valid species, and those which have hitherto been considered as synonyms but are now re-validated, are given in one column, while their corresponding synonyms are given in the other column.

Valid species	Synonyms
<i>Corethrella ananacola</i> Dyar, 1926.	<i>Corethrella inca</i> Lane, 1939.
<i>Corethrella appendiculata</i> Grabham, 1906.	<i>Corethrella arborealis</i> Snn. & Del Ponte, 1927.
<i>Lutzomiops amazonica</i> (Lane, 1939).	<i>Lutzomiops coutinhoi</i> (Lane, 1942).
<i>Lutzomiops davisi</i> (Snn. & Del P.), 1927.	<i>Corethrella (Lutzomiops) nigra</i> Lane, 1939.
<i>Toxorhynchites (Toxorhynchites) quadeloupensis</i> (Dyar & Knab, 1906).	<i>Toxorhynchites (Toxorhynchites) horei</i> (Gordon & Evans, 1922) and <i>Toxorhynchites (Toxorhynchites) tucumanus</i> (Brethés, 1926).
<i>Toxorhynchites (Toxorhynchites) theobaldi</i> (Dyar & Knab, 1906).	<i>Toxorhynchites (Toxorhynchites) hypoptes</i> (Knab, 1907).
<i>Anopheles (Arribalzagia) mediopunctatus</i> (Theobald, 1903).	<i>Anopheles (Arribalzagia) costalimai</i> Fonseca & Ramos, 1943 (in Coutinho). ²

¹The present paper was made possible through a grant from the John Simon Guggenheim Memorial Foundation, New York, U.S.A.

²The type is a male. The fourth hind tarsal has a single ring. The ninth tergite of male genitalia has two tapering prolongations which are not strongly curved. The inner lobe of claspette has three setae, the outer one two differentiated setae. As can be seen it shows characters of both *mediopunctatus* and *costalimai*. We deem that the characters given for the separation of these two species are not fixed but show variation within the species. For this reason we consider them synonyms.

Valid species

Synonyms

- Culex (Lutzia) bigoti* Bellardi, 1862.
- Culex (Culex) delys* Howard, Dyar & Knab, 1915. Here revalidated.
- Culex (Culex) dolosus* (Arribalzaga, 1891).
- Culex (Culex) coronator* Dyar & Knab, 1906.
- Culex (Culex) apicinus* Philippi, 1865.
- Culex (Culex) articularis* Philippi, 1865.
- Culex (Culex) corniger* Theobald, 1903.
- Culex (Culex) virgultus* Theobald, 1901.
- Culex (Micraedes) conserrator* Dyar & Knab, 1906.
- Culex (Melanoconion) nigrimacula* Lane & Whitman, 1943.
- Culex (Melanoconion) fur* Dyar & Knab, 1907. Here revalidated.
- Culex (Melanoconion) spissipes* (Theobald, 1903).
- Culex (Melanoconion) albinensis* Bonne-Wepster & Bonne, 1920.
- Culex (Melanoconion) pilosus* (Dyar & Knab, 1906).
- Culex (Melanoconion) comminator* Dyar, 1920.
- Culex (Melanoconion) thomasi* Evans, 1924.
- Culex (Melanoconion) clarki* Evans, 1924. Here revalidated.
- Culex (Melanoconion) iolambdis* Dyar, 1918.
- Culex (Melanoconion) nigrescens* Theobald, 1907.
- Culex (Melanoconion) vomerifer* Komp, 1932.
- Uranotaenia pulcherrima* Arribalzaga, 1891.
- Culex (Lutzia) pattersoni* Shannon & Del Ponte, 1928.
- Culex (Culex) bilineatus* Theobald, 1903.
- Culex (Culex) albertoi* Anduze, 1943.
- Culex (Phalangomyia) atticola* Martini, 1931.
- Culex (Phalangomyia) archegus* Dyar, 1929.
- Culex (Culex) rigidus* Senevet & Abonnene, 1939 and *Culex (Culex) pseudojanthinosoma* Senevet and Abonnene, 1946.
- Culex (Culex) declarator* Dyar & Knab, 1906.
- Culex divisor* Dyar & Knab, 1906.
- Culex (Melanoconion) punctisacularis* Senevet & Abonnene, 1946.
- Culex (Melanoconion) chrysonotum* Dyar & Knab, 1908 and *Culex (Melanoconion) theobaldi* Lutz, 1904.
- Culex (Choeroporpa) maroniensis* Bonne-Wepster & Bonne, 1920.
- Culex (Melanoconion) hesitator* Dyar & Knab, 1907.
- Culex (Melanoconion) distinguendus* Dyar, 1928.
- Culex (Melanoconion) tournieri* Senevet & Abonnene, 1939.
- Culex (Melanoconion) equinoxialis* Floch & Abonnene, 1945.
- Culex (Melanoconion) implicatus* Senevet & Abonnene, 1939.
- Culex (Melanoconion) portesi* Senevet & Abonnene, 1941.
- Uranotaenia urania* Shannon & Del Ponte, 1928.

Valid species	Synonyms
<i>Mansonia (Rhynchotaenia) nigricans</i> (Coquillett, 1904).	<i>Mansonia (Rhynchotaenia) neivai</i> Lane & Coutinho, 1940.
<i>Orthopodomyia fascipes</i> (Coquillett, 1905).	<i>Orthopodomyia townsendi</i> Lima, 1935.
<i>Psorophora (Psorophora) lineata</i> (Humboldt, 1820).	<i>Psorophora (Psorophora) genu-maculata</i> , Cruz, 1907.
<i>Psorophora (Psorophora) howardii</i> Coquillett, 1901	<i>Psorophora (Psorophora) simplex</i> Martini, 1935.
<i>Psorophora (Janthinosoma) champerico</i> (Dyar & Knab, 1906).	<i>Psorophora (?) pisces</i> Lassman, 1944.
<i>Psorophora (Janthinosoma) ferox</i> (Humboldt, 1820).	<i>Psorophora (Janthinosoma) febrigi</i> Edwards, 1922.
<i>Aedes (Ochlerotatus) scapularis</i> (Rondani, 1848).	<i>Aedes (Ochlerotatus) euplocamus</i> Dyar & Knab, 1906.
<i>Aedes (Ochlerotatus) crinifer</i> Theobald, 1903.	<i>Aedes (Ochlerotatus) iguazu</i> Shannon & Del Ponte, 1928.
<i>Aedes (Ochlerotatus) milleri</i> Dyar, 1922.	<i>Aedes (Ochlerotatus) orocetor</i> Martini, 1931.
<i>Aedes (Finlaya) argyrothorax</i> Bonne & Bonne-Wepster, 1920.	<i>Aedes (Finlaya) terrenus homeopus</i> Dyar, 1922.
<i>Aedes (Howardina) fulvithorax</i> (Lutz, 1904).	<i>Aedes (Howardina) tachirensis</i> Anduze, 1947.
<i>Wyeomyia (Dendromyia) argenteorostris</i> (Bonne-Wepster & Bonne, 1920).	<i>Wyeomyia albocaerulea</i> Senevet & Abonnene, 1939.
<i>Wyeomyia (Dendromyia) chalconecephala</i> Dyar & Knab, 1906.	<i>Wyeomyia (Dendromyia) luciae</i> Senevet, Chabelard & Abonnene, 1942.
<i>Wyeomyia (Dendromyia) melanocephala</i> Dyar & Knab, 1906.	<i>Wyeomyia (Dendromyia) grenadensis</i> Edwards, 1916.
<i>Wyeomyia (Dendromyia) claso-leuca</i> (Dyar & Knab, 1908).	<i>Wyeomyia (Dendromyia) agyrtes</i> Dyar & Knab, 1909.
<i>Wyeomyia (Dendromyia) confusa</i> (Lutz, 1905).	<i>Wyeomyia (Dendromyia) flui</i> Bonne & Bonne-Wepster, 1920.
<i>Wyeomyia (Dendromyia) pseudopecten</i> Dyar & Knab, 1906.	<i>Wyeomyia (Dendromyia) rorotae</i> Senevet, Chabelard & Abonnene, 1942.
<i>Sabethes (Sabethoides) chloropterus</i> (Humboldt, 1820).	<i>Sabethes (Sabethoides) imperfectus</i> (Bonne-Wepster & Bonne, 1920).
<i>Sabethes (Sabethinus) identicus</i> Dyar & Knab, 1907.	<i>Sabethes (Sabethinus) lutzianus</i> Lane & Cerqueira, 1942.

The type material of the following species is unrecognizable: *Culex (Melanoconion) alcocci* Bonne-Wepster & Bonne, 1920; *Culex (Melanoconion) macaronensis* Dyar & Núñez-Tovar, 1927; and *Culex (Melanoconion) phlabistus* Dyar, 1920.

We have relegated to subspecific status the following species: *Toxorhynchites superbus* Dyar & Knab, 1906, and *Toxorhynchites separatus* Arribalzága, 1891, as subspecies of *Toxorhynchites haemorrhoidalis* (Fabricius, 1794; and *Anopheles* (*Kerteszia*) *laneanus* Corrêa & Cerqueira, 1944, as a subspecies of *Anopheles* (*Kerteszia*) *cruzi* Dyar & Knab, 1909.

The following subgenera are, by us, here placed as genera: *Lutzomiops* Lane, 1942, *Sayomyia* Coquillett, 1903, *Edwardsops* Lane, 1942, *Schadonophasma* Dyar & Shannon, 1924 and *Neochaoborus* Edwards, 1930.

We consider *Paradixa* Tonnoir, 1924 a synonym of *Dixella* Dyar & Shannon, 1924, *Isostomyia* Coquillett, 1906 a synonym of *Micraedes* Coquillett, 1905, and *Shannoniezia* Fonseca & Ramos, 1940 a synonym of *Arribalzagia* Theobald, 1903.

A NEW BUTTERFLY FROM CUBA

(LEPIDOPTERA, NYMPHALIDAE)

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In their paper on the genus *Anaea* (Journ. N. Y. Ent. Soc., vol. XLIX, No. 4, pp. 328-329) Frank Johnson and Wm. P. Comstock fail to describe the winter form of *A. echemus* (West. & Hewit.), although they note that "there is a difference in the forewing shape noticeable in our series of specimens which suggests that this species also develops seasonal forms." The present writer has obtained numerous specimens collected in the month of January which differ greatly in the shape and coloring of the four wings from the specimens (of both sexes) collected in the same places during the summer months.

I shall, therefore, proceed to describe this new form of *Anaea* belonging to the Cuban fauna.

***Anaea echemus* form *aguayoi*, new form**

(Text figures 1 and 2)

Holotype. Specimen number 3345 in the author's collection, from Ciudadamar, Santiago de Cuba, Oriente, January 18, 1948, collected by Pastor Alayo Dalmau.

Paratype. A specimen in the collection of the American Museum of Natural History, collected by Brother Clemente on the road to the Laguna, Santiago de Cuba, Oriente, January 30, 1944. Several specimens belonging to the collection of the author, collected from Ciudadamar and from the road to the Laguna in Santiago de Cuba, all collected by Pastor Alayo in the month of December in 1944 and in 1948. A specimen collected by the author at Punta de Sabanilla, on the north coast of Matanzas, January 1, 1951.