

A List of Philippine Mosquitoes
(Diptera: Culicidae)

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ABSTRACT. An updated list of the mosquitoes recorded from the Republic of the Philippines is provided. The list contains 279 species, subspecies, and varieties. Geographic distributions and pertinent references are incorporated within the taxonomic listing.

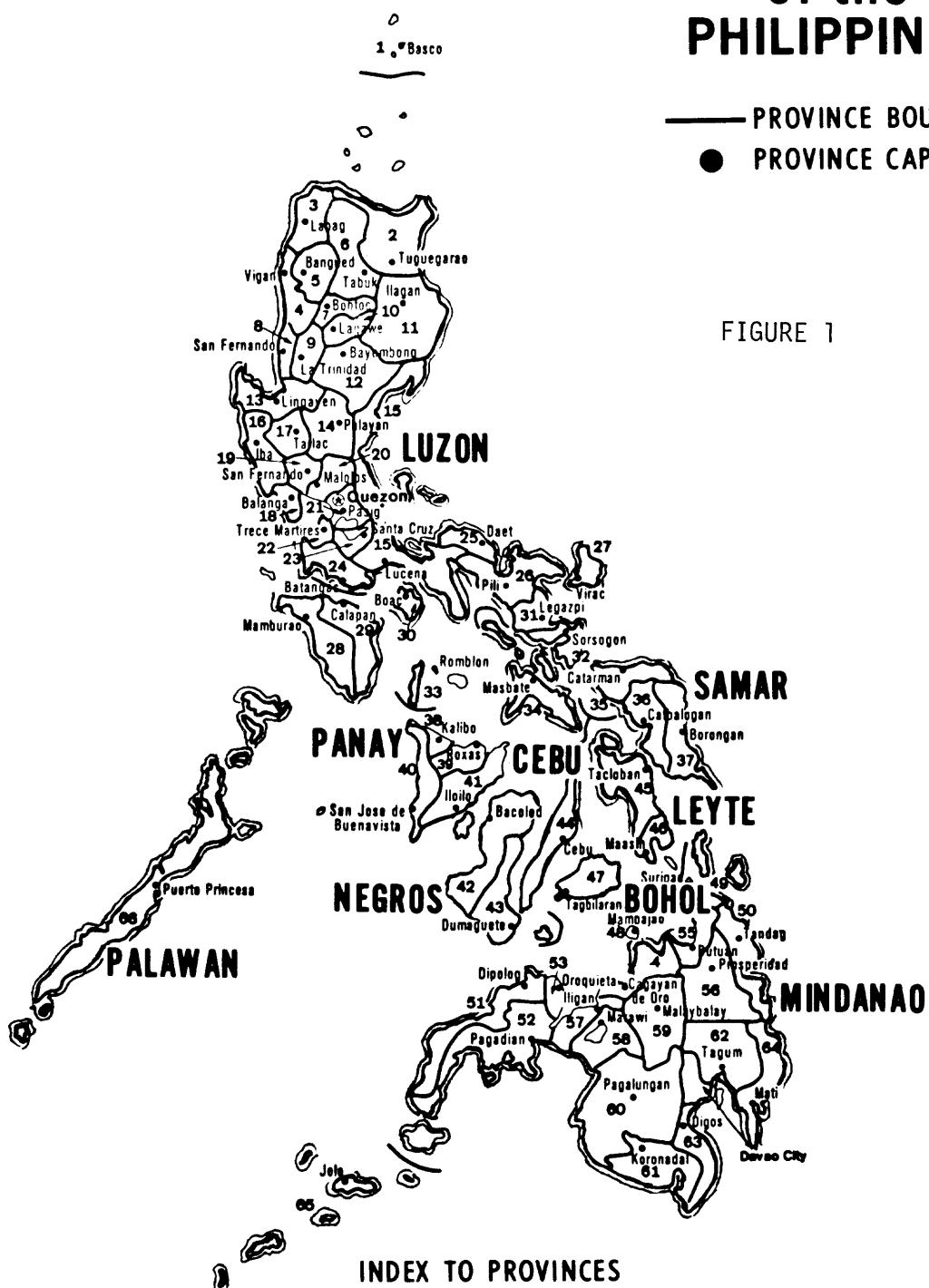
The number of Philippine mosquitoes recorded in the literature has increased from the two species noted by Osten-Sacken (1882) to the 279 species, subspecies, and varieties listed here. The Philippine Culicidae were last reviewed by Basio (1971, 1974). Basio's works are not well known because they were published in journals with a limited distribution. Since Basio's publications, there have been significant publications in culicid taxonomy which have affected the faunal list of the Philippines: Abercrombie (1977); Harrison and Scanlon (1974, 1975); Huang (1978b, 1979); Knight (1978); Knight and Stone (1977); Mattingly (1980); Miyagi (1980); Miyagi, Toma and Tsukamoto (1983); Miyagi, Toma and Rivera (1983); Peyton (1977); Ramalingam (1974); Reinert (1970, 1974, 1976a, 1976b, 1981, 1982); and Sirivanakarn (1972, 1976, 1977a). Our list includes these changes, reflecting 35 specific or subspecific additions of which 15 are new descriptions, 7 are new records, and 17 are resurrections from synonymy. Supraspecific additions are the genus *Mimomyia* (Mattingly 1971) and the subgenera *Belkinius* (Reinert 1982), *Ingramia* (White 1974), *Rachionotomyia* (Mattingly 1980), and *Tricholeptomyia* (Mattingly 1980). Forty species have been reassigned to these new taxa. Thirteen species and the subgenera *Rachisoura*, *Ravenalities*, and *Skusea* listed by Basio have been deleted. Pertinent literature and Philippine distribution, based primarily on published reports and locally examined specimens, are included within our list. New locations, previously unpublished, are indicated by an asterisk. Other (worldwide) distribution for the listed species is available in the Catalogue of the Mosquitoes of the World (Knight and Stone 1977) and the supplement (Knight 1978) to that publication. Format for citing geographic distribution is as follows: specific locations are in regular type, provinces are underlined, and major islands or island groups are in capital letters. A map of the Republic of the Philippines is provided with major islands, provinces, and cities noted (Figure 1).

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REPUBLIC of the PHILIPPINES

— PROVINCE BOUNDARY
● PROVINCE CAPITAL



INDEX TO PROVINCES

1. Batanes	15. Quezon	28. Mindoro Occidental	41. Ililo	54. Misamis Oriental
2. Cagayan	16. Zambales	29. Mindoro Oriental	42. Negros Occidental	55. Agusan del Norte
3. Ilocos Norte	17. Tarlac	30. Marinduque	43. Negros Oriental	56. Agusan del Sur
4. Ilocos Sur	18. Batangas	31. Albay	44. Cebu	57. Lanao del Norte
5. Abra	19. Pampanga	32. Sorsogon	45. Leyte	58. Lanao del Sur
6. Kalinga-Apayao	20. Bulacan	33. Romblon	46. Southern Leyte	59. Bukidnon
7. Mountain	21. Rizal	34. Masbate	47. Bohol	60. Cotabato
8. La Union	22. Cavite	35. Northern Samar	48. Comoguin	61. South Cotabato
9. Benguet	23. Laguna	36. Samar	49. Surigao del Norte	62. Davao del Norte
10. Ifugao	24. Batangas	37. Eastern Samar	50. Surigao del Sur	63. Davao del Sur
11. Isabela	25. Camarines Norte	38. Aklan	51. Zamboanga del Norte	64. Davao Oriental
12. Nueva Vizcaya	26. Camarines Sur	39. Capiz	52. Zamboanga del Sur	65. Sulu
13. Pangasinan	27. Catanduanes	40. Antique	53. Misamis Occidental	66. Palawan
14. Nueva Ecija				

SUBFAMILY ANOPHELINAE

Genus *Anopheles* Meigen

1. *acaci* Baisas 1946
Clark Air Base, Pampanga, Llavac, Infanta, Quezon, Mt. Banahaw, Los Baños, Laguna, LUZON.
2. *baezai* Gater 1933
Los Baños, Laguna, LUZON; Iwahig, PALAWAN; MINDANAO.
3. *balerensis* Mendoza 1947
Baler, Quezon, LUZON.
4. *bengalensis* Puri 1930
LUZON.
5. *ejercitoi* Mendoza 1947
Baler, Quezon, LUZON.
6. *fragilis* (Theobald) 1903
LUZON; MINDANAO.
7. *franciscoi* Reid 1962
Widespread.
8. *gigas* var. *formosus* Ludlow 1909
Camp John Hay, Benguet, Mountain, LUZON.
9. *lesteri* Baisas and Ju 1936
Widespread.
10. *lindesayi* ssp. *benguetensis* King 1931
LUZON; Mt. Apo, Davao, MINDANAO.
11. *manalangi* Mendoza 1940
LUZON; MINDANAO.
12. *peditaeniatus* (Leicester) 1908
Widespread.
13. *pilinotum* Harrison and Scanlon 1974
LUZON; MINDANAO; NEGROS; PALAWAN.
14. *pseudobarbirostris* Ludlow 1902
Widespread.
15. *pseudosinensis* Baisas 1935
Nueva Ecija, Laguna, LUZON; Naujan, Oriental Mindoro, MINDORA;
Lanao del Sur, MINDANAO.

16. *samarensis* Rozeboom 1951
SAMAR.
17. *vanus* Walker 1859
Subic Bay, Zambales, LUZON; Lake Lanao, Lanao del Sur, MINDANAO.

Subgenus *Cellia* Theobald

18. *annularis* Van Der Wulp 1884
Widespread.
19. *balabacensis balabacensis* Baisas 1936
Balabac Island, PALAWAN.
20. *balabacensis baisasi* Colless 1957
Sierra Madre Mountain, LUZON.
21. *cristatus* King and Baisas 1936
Titunod, Kolambugan, Lanao del Norte, MINDANAO.
22. *filipinae* Manalang 1930
Spotty distribution throughout the archipelago.
23. *flavirostris* (Ludlow) 1914
Widespread.
24. *indefinitus* (Ludlow) 1904
Widespread.
25. *karwari* (James) 1902
Widespread.
26. *kochi* Doenitz 1901
Widespread.
27. *kolambuganensis* Baisas 1932
Kolambugan, Lanao del Norte, MINDANAO.
28. *limosus* King 1932
Widespread.
29. *litoralis* King 1932
Widespread along seashore.
30. *ludlowae* (Theobald) 1903
Widespread.
31. *maculatus* Theobald 1901
Widespread.

32. *mangyanus* (Banks) 1906
LUZON; MINDORO; MINDANAO.
33. *parangensis* (Ludlow) 1914
Parang, Cotabato, MINDANAO.
34. *philippinensis* Ludlow 1902
Widespread.
35. *riparis* King and Baisas 1936
Kolambungan, Lanao del Norte, MINDANAO.
36. *subpictus* Grassi 1899
Widespread.
37. *tessellatus* Theobald 1901
Widespread.
38. *vagus* Doenitz 1902
Widespread.

SUBFAMILY CULICINAE

Genus *Aedeomyia* Theobald

Important reference: Tyson 1970a.

Subgenus *Aedeomyia* Theobald

39. *catasticta* Knab 1909
Widespread.

Genus *Aedes* Meigen

Important references: Abercrombie 1977. Huang 1977, 1978a, 1978b, 1979. Knight 1968. Knight and Hull 1951, 1952. Mattingly 1958a, 1958b, 1959, 1961, 1965. Reinert 1970, 1973, 1974, 1976a, 1976b, 1981, 1982. Tyson 1970b.

Subgenus *Aedimorphus* Theobald

40. *alboscutellatus* (Theobald) 1905
Northern LUZON; SAMAR; LEYTE; PALAWAN; MINDANAO; MINDORO; Tawi-Tawi Island, SULU.

41. *caecus* (Theobald) 1901
Panitian, MINDORO.
42. *louisii* (Theobald) 1910
Calapan, Oriental Mindoro, MINDORO.
43. *pampangensis* (Ludlow) 1905
Widespread in LUZON; Mahaplag, LEYTE; San Jose, Occidental Mindoro, MINDORO; Zamboanga, MINDANAO.
44. *punctifemoris* (Ludlow) 1921
Central LUZON.
45. *vexans* (Meigen) 1830
Widespread.

Subgenus *Belkinius* Reinert

46. *aurotaeniatus* Edwards 1922
Victoria, Oriental Mindoro, MINDORO; Mt. Siya-Siya, Canlaon Volcano, Negros Occidental, NEGROS.

Subgenus *Cancraedes* Edwards

47. *curtipes* Edwards 1915
Angeles, Pampanga, LUZON; Iwahig Penal Colony, PALAWAN.
48. *masculinus* Mattingly 1958
PALAWAN.
49. *palawanicus* Mattingly 1958
Puerto Princesa, PALAWAN.

Subgenus *Christophersiomyia* Barraud

50. *ibis* Barraud 1931
San Jose, Nueva Ecija, Alcola, Cagayan, LUZON.

Subgenus *Diceromyia* Theobald

51. *meronephada* (Dyar and Shannon) 1925
LUZON; Osmeña, SAMAR; Tacloban, LEYTE; NEGROS.

Subgenus *Edwardsaedes* Belkin

52. *imprimens* (Walker) 1860
San Jose, Occidental Mindoro, MINDORO; Puerto Princesa, PALAWAN;
Port Banga, Ft. Pikit, MINDANAO.

Subgenus *Finlaya* Theobald

53. *ananae* Knight and Laffoon 1946
Bicol Area, LUZON; Ducong, Basey, Pintanahon, Osmeña, SAMAR;
Lago-Lago, Mt. Tobi, Dagami, Tacloban, LEYTE.
54. *banksi* Edwards 1922
Montalban, Rizal, LUZON; Baco*, Occidental Mindoro, MINDORO.
55. *croceus* Knight and Laffoon 1946
Subic Bay, Zambales, LUZON.
56. *flavipennis* (Giles) 1904
Clark Air Base, Pampanga, Mt. Makiling, Los Baños, Laguna, LUZON;
Abuyog, Lago-Lago, Tacloban, LEYTE; Basey River, SAMAR; Pasonanca,
Isabela, Basilan Island, Zamboanga del Sur, MINDANAO.
57. *harperi* Knight 1948
Subic Bay, Zambales, LUZON
58. *jugraensis* (Leicester) 1908
Balabac Island, PALAWAN.
59. *lacteus* Knight 1946
Cape Melville, Balabac Island, PALAWAN.
60. *laoagensis* Knight 1946
Laoag, Ilocos Norte, LUZON.
61. *leucomeres* (Giles) 1904
Clark Air Base, Pampanga, LUZON.
62. *leucopleurus* Rozeboom 1946
Irahuan River, PALAWAN.
63. *luteus* (Ludlow) 1905
Clark Air Base, Pampanga, LUZON
64. *luzonensis* Rozeboom 1946
Subic Bay, Zambales, LUZON.
65. *medleri* Knight and Laffoon 1946
Los Baños, Laguna, Jinamoc Island, LUZON; Pintanahon, Osmeña,
Calicoan Island, SAMAR; Tacloban, LEYTE; Zamboanga, MINDANAO.

66. *melanopterus* (Giles) 1904
Clark Air Base, Pampanga, Los Baños*, Laguna, LUZON; Puerto Princesa, PALAWAN.
67. *niveus* (Ludlow) 1903
Subic Bay, Zambales, Batangas, LUZON; Oras, SAMAR; Puerto Princesa, Irahuan River, Tagburos, PALAWAN.
68. *paradissimilis* Rozeboom 1946
Cape Melville, Balabac Island, Irahuan River, PALAWAN; Ngolos, Calicoan Island, SAMAR; Lago-Lago, Baybay, Libyo, Dinagat, Diit River, Tacloban, LEYTE.
69. *poicilius* (Theobald) 1903
Widespread.
70. *rizali* (Banks) 1906
Llavac, Infanta, Tayabas, Quezon, LUZON; Canlaon Volcano, Mt. Siya-Siya, NEGROS; SAMAR; LEYTE; Lanao, MINDANAO.
71. *saperoi* Knight 1946
Subic Bay, Zambales, LUZON.
72. *saxicola* Edwards 1922
PALAWAN.
73. *sherki* Knight 1947 (1948)
Baguio, Benguet, [Knight and Stone 1977 list Davao]; Baco*, Occidental Mindoro, MINDORO.
74. *sorsogonensis* Banez and Jueco 1966
Sorsogon, LUZON.
75. *stonei* Knight and Laffoon 1946
Ducong, Basey River, Mt. Lobi, Dagani, LEYTE.

Subgenus *Geoskusea* Edwards

76. *baisasi* Knight and Hull 1951
Mangarin Bay, San Jose, Oriental Mindoro, MINDORO; Osmeña and Pintanahon, SAMAR; Iwahig, Penal Colony, PALAWAN; Zamboanga, MINDANAO.

Subgenus *Lorrainea* Belkin

77. *omesii* (Ludlow) 1903
Pampanga, Los Baños, Laguna, Sorsogon, LUZON; Oras, Calamian Island, PALAWAN; SAMAR, LEYTE; MINDANAO.

78. *fumidus* Edwards 1928
Pampanga, LUZON; Culion Island, PALAWAN.

Subgenus *Mucidus* Theobald

79. *ferinus* Knight 1947
Subic Bay, Zambales, LUZON; LEYTE; San Ramon Penal Colony Farm,
Zamboanga del Sur, MINDANAO.
80. *laniger* (Wiedemann) 1820
Calapan, Oriental Mindoro, MINDORO; Ludlow Barracks, Pettit
Barracks, Parang, Cotabato, Zamboanga, MINDANAO.
81. *quadripunctis* (Ludlow) 1910
Dulag, Tacloban, LEYTE; Parang, Cotabato, MINDANAO.

Subgenus *Neomelaniconion* Newstead

82. *lineatopennis* (Ludlow) 1905 *
Camp Gregg, Bayambang, Pangasinan, Pampanga, Zambales, LUZON.

Subgenus *Ochlerotatus* Lynch Arribalzaga

83. *vigilax ludlowae* (Blanchard) 1905
LUZON; Mangarin, Occidental Mindoro, MINDORO; PANAY; MINDANAO.

Subgenus *Paraedes* Edwards

84. *ostentatio* (Leicester) 1908
Mt. Makiling, Laguna and Quezon, LUZON; San Jose, Occidental Mindoro, MINDORO; Bacungan, PALAWAN.
85. *pagei* (Ludlow) 1911
San Jose, Occidental Mindoro, MINDORO; Fort Pikit, Malabang,
Lanao del Sur, San Francisco, Agusan del Sur, MINDANAO.

Subgenus *Rhinoskusea* Edwards

86. *longirostris* (Leicester) 1908
Clark Air Base, Pampanga, and Los Baños, Laguna, LUZON; Lapit-Lapit,
Sanga-Sanga, Tawi-Tawi, SULU.
87. *wardi* Reinert 1976
Widespread.

Subgenus *Stegomyia* Theobald

88. *aegypti* (Linnaeus) 1762
Widespread.
89. *aegypti* var. *queenslandensis* (Theobald) 1901
Balian*, Pangil*, College of Agriculture*, Laguna, LUZON; Bongao*
Island, SULU.
90. *albolineatus* (Theobald) 1904
Pampanga, Los Baños, Laguna, LUZON; SAMAR; Balabac Island, PALAWAN.
91. *albopictus* (Skuse) 1894
Widespread.
92. *alcasidi* Huang 1972
Widespread.
93. *arboricola* Knight and Rozeboom 1946
Shohoton Springs, Basey River, SAMAR.
94. *bambusicola* Knight and Rozeboom 1946
Culion Island, PALAWAN.
95. *boharti* Knight and Rozeboom 1946
Laguna*, LUZON; Baco*, Occidental Mindoro, MINDORO; Osmeña, SAMAR.
96. *desmotes* (Giles) 1904
Clark Air Base, Pampanga, LUZON; LEYTE; NEGROS; PALAWAN.
97. *gardnerii* (Ludlow) 1905
Widespread.
98. *hoogstraali* Knight and Rozeboom 1946
Subic Bay, Zambales, LUZON.
99. *impatibilis* (Walker) 1859
San Jose, Occidental Mindoro, MINDORO.
100. *laffooni* Knight and Rozeboom 1946
San Ramon, Zamboanga del Sur, MINDANAO.
101. *mediopunctatus* (Theobald) 1905
Zambales, LUZON; PALAWAN.
102. *pauillus* Stone and Farner 1945
Widespread.
103. *platylepidus* Knight and Hull 1951
Puerto Princesa, Cape Melville, Balabac Island, PALAWAN.

Subgenus *Verrallina* Theobald

104. *adustus* Laffoon 1946
Cape Melville, Balabac Island, PALAWAN.
105. *butleri* Theobald 1901
Tacloban and Palo, LEYTE; Culion Island, Iwahig, Basbas Island, Puerto Princesa, PALAWAN.
106. *complystylus* Laffoon 1946
Quezon, LUZON; San Jose, Occidental Mindoro, MINDORO; Tacloban, LEYTE; Balsahan, Irahuan River, Cape Melville, Balabac Island, PALAWAN; San Ramon, Zamboanga del Sur, MINDANAO.
107. *dux* Dyar and Shannon 1925
Clark Air Base, Pampanga, Subic Bay, Zambales, Camp Nichols, Rizal, San Jose, Bulacan, Manila, LUZON; Caminawit Point, MINDORO; SAMAR; Zamboanga, MINDANAO.
108. *hamistylus* Laffoon 1946
San Jose, Occidental Mindoro, MINDORO; Cape Melville, Balabac Island, PALAWAN.
109. *johsoni* Laffoon 1946
Tanaun, LEYTE; Isabela, Basilan Island, Pasonanca, San Ramon, Zamboanga del Sur, MINDANAO.
110. *macrodixoa* Dyar and Shannon 1925
Tayabas, Infanta, Quezon, LUZON; San Jose, Occidental Mindoro, MINDORO; Tacloban, LEYTE; Kabakan Mercedes, Parang, Cotabato, MINDANAO.
111. *margarsen* Dyar and Shannon 1925
Subic Bay, Zambales, Camp Eldridge, Los Baños, Laguna, Tungking, Mangga, San Jose, Bulacan, LUZON; San Jose, Kabakan, Zamboanga del Norte, MINDANAO.
112. *nigrotarsis* (Ludlow) 1908
Subic Bay, Zambales, Infanta, Quezon, Camp Nicols, Wack-Wack, Rizal, Calauan, Laguna, LUZON; Osmeña, SAMAR; Abuyog, Tacloban, LEYTE; San Ramon, Zamboanga del Sur, MINDANAO.
113. *nubiculus* Laffoon 1946
Sibulan River, Mt. Apo, Davao, MINDANAO.
114. *panayensis* Ludlow 1914
Iloilo, PANAY; Calicoan Island, SAMAR; Culion, San Pedro, Cape Melville, Balabac Island, PALAWAN; Basbas, Zamboanga, MINDANAO.

115. *philippinensis* Delfinado 1968
Mahaplag, LEYTE.
116. *robertsi* Laffoon 1946
Tacloban, LEYTE.
117. *uncus* (Theobald) 1901
Irahuan River, Puerto Princesa, Cape Melville, Balabac Island,
Culion Island, PALAWAN; Cotabato, MINDANAO.

Genus *Armigeres* Theobald

Important references: Baisas 1965. Delfinado 1966. Thurman 1959.

Subgenus *Armigeres* Theobald

118. *apoensis* Bohart and Farner 1944
Sibulan River, Mt. Apo, Davao, MINDANAO.
119. *aureolineatus* (Leicester) 1908
Mantalingajan, Pinigisan, PALAWAN.
120. *azurini* Basio 1971
Mt. Makiling, Laguna, LUZON.
121. *baisasi* Stone and Thurman 1958
Widespread.
122. *ejercitoi* Baisas 1935
Baguio, Benguet, LUZON; Minaluang and Bal-Ason, Misamis Oriental,
Mt. McKinley, Davao, Daragawan, Cotabato, San Francisco, Agusan,
MINDANAO.
123. *joloensis* (Ludlow) 1904
LUZON; LEYTE; SAMAR; MINDORO; PALAWAN; MINDANAO; SULU
124. *malayi* (Theobald) 1901
Bulacan, Laguna, and Rizal, LUZON; NEGROS ORIENTAL; LEYTE
Calicoan Island, SAMAR; PALAWAN; Misamis Oriental, Davao,
Cotabato, MINDANAO; Siasi Island, SULU.
125. *manalangi* Baisas 1935
Bulacan, Laguna, LUZON; San Jose, Occidental Mindoro, MINDORO;
Mt. Empagatao, MINDANAO.
126. *setifer* Delfinado 1966
Mantalingajan, Pinigisan, PALAWAN.

127. *subalbatus* (Coquillett) 1898
LUZON; SAMAR; PALAWAN; MINDANAO; JOLO.

Subgenus *Leicesteria* Theobald

128. *digitatus* (Edwards) 1914
Laguna, LUZON; San Jose, Occidental Mindoro, MINDORO; Bal-Ason,
NEGROS ORIENTAL; Lanao, MINDANAO.
129. *flavus* (Leicester) 1908
Mt. Banahaw, Lucban, Tayabas, Quezon, LUZON.
130. *magnus* (Theobald) 1908
La Union, Batangas, LUZON; San Jose, Occidental Mindoro,
MINDORO; MINDANAO.
131. *omissus* (Edwards) 1914
San Jose, Occidental Mindoro, MINDORO.

Genus *Coquillettidia* Dyar

Important reference: Delfinado 1966.

Subgenus *Coquillettidia* Dyar

132. *aureosquamata* (Ludlow) 1909
Parang, Ludlow Barracks, Cotabato, MINDANAO.
133. *crassipes* (Van der Wulp) 1881
Central LUZON; San Jose, Occidental Mindoro, MINDORO; Lake Mainitin,
Surigao, Ludlow Barracks, Parang, Fort Pikit, Cotabato, Pettit
Barracks, Zamboanga, MINDANAO.
134. *nigrosignata* (Edwards) 1917
Siasi Island, Tawi-Tawi Island, Tarakan, North Batu-Batu, SULU.
135. *ochracea* (Theobald) 1903
Clark Air Base, Pampanga; Los Baños, Laguna, LUZON; San Antonio,
SAMAR; Tacloban, LEYTE; Ludlow Barracks, Cotabato, MINDANAO.

Genus *Culex* Linnaeus

Important references: Cagampang-Ramos 1979. Delfinado 1966.
Sirivanakarn 1972, 1975, 1976, 1977a, 1977b.

Subgenus *Culex* Linnaeus

136. *alis* Theobald 1903
Subic Naval Base, Zambales, LUZON; Osmeña, SAMAR.
137. *annulirostris* Skuse 1889
Widespread.
138. *bitaeniorhynchus* Giles 1901
Widespread.
139. *edwardsi* Barraud 1923
John Hay Air Base, Baguio, Benguet, Clark Air Base, Pampanga, LUZON.
140. *fasyi* Baisas 1938
Benguet Otok, Chico River, Bontok, Mountain, Baguio City, Benguet, LUZON.
141. *fuscocephala* Theobald 1907
Widespread.
142. *gelioides* Theobald 1901
Widespread.
143. *incognitus* Baisas 1938
Widespread.
144. *infula* Theobald 1901
Central LUZON; Cadiz, NEGROS; Rizal, Palo, Lago-Lago, Baybay, Dulag, Loreto, Dinagut, Tacloban, Pinamuan Gulf, Jinamoc Island, LEYTE; MINDANAO; Tawi-Tawi Island, SULU.
145. *luzonensis* Sirivanakarn 1976
Dalton, Imugan, Nueva Vizcaya, Baguio, Benguet, Mountain, Subic Naval Base, Zambales, LUZON.
146. *mimulus* Edwards 1915
Tacloban, LEYTE; Balabac, Puerto Princesa, Tagburos, Iwahig, Irahuan River, Balsahan River, Bacungan, PALAWAN; San Francisco, Agusan, Isabela, Basilan Island, Zamboanga del Sur, MINDANAO; Muni, Jolo Island, SULU.
147. *orientalis* Edwards 1921
Laguna, LUZON; Balabac Island, PALAWAN.
148. *philippinensis* Sirivanakarn 1976
Tay-Tay, Rizal, LUZON; Osmeña, SAMAR; Zamboanga, MINDANAO.
149. *pseudovishnui* Colless 1957
Widespread.

150. *quinquefasciatus* Say 1823
Widespread.
151. *sinensis* Theobald 1903
Wack-Wack, Rizal, Pampanga, Bulacan, LUZON; Calacad, SAMAR.
152. *sitiens* Wiedemann 1828
Widespread.
153. *tritaeniorhynchus* Giles 1901
Widespread.
154. *vishnui* Theobald 1901
Widespread.
155. *whitei* Barraud 1923
San Fabian, Pangasinan, Subic Naval Base, Zambales, Laguna, Clark Air Base*, Pampanga, LUZON; Mt. Lobi, LEYTE.
156. *whitmorei* (Giles) 1904
Baguio, Benguet, Zambales, Pampanga, Rizal, Laguna, LUZON; San Jose, Occidental Mindoro, MINDORO; Guirang and Calacad, SAMAR; LEYTE.

Subgenus *Culiciomyia* Theobald

157. *delfinadoae* Sirivanakarn 1973
Tawi-Tawi, Sangir Island, SULU.
158. *fragilis* Ludlow 1903
Camansi, Santol, La Union, Subic Bay, Zambales, LUZON; San Jose, Occidental Mindoro, MINDORO; SAMAR; Carigara, Jinamoc Island, LEYTE; Puerto Princesa, PALAWAN; San Francisco, Agusan, Parang, Cotabato, MINDANAO.
159. *nigropunctatus* Edwards 1926
La Union, Pampanga, and Zambales, LUZON: Jinamoc Island and Leyte Gulf, LEYTE; Osmeña, SAMAR; Bacungan and Iwahig Penal Colony, PALAWAN; Parang, Cotabato, and San Ramon, Zamboanga del Sur, MINDANAO.
160. *pallidothorax* Theobald 1905
San Jose, Occidental Mindoro, MINDORO.
161. *papuensis* (Taylor) 1914
Puerto Princesa, PALAWAN; Mt. McKinley, Davao, MINDANAO.

162. *spathifurca* (Edwards) 1915
Caminawit Pt. and Calapan, Oriental Mindoro, MINDORO; Abuyog and Jinamoc Island, LEYTE; Calicoan Island, SAMAR; Parang, Cotabato, MINDANAO.

Subgenus *Eumelanomyia* Theobald

163. *baisasi* Sirivanakarn 1972
Osmeña, SAMAR; Kolambungan, Lanao del Norte, MINDANAO.
164. *brevipalpis* (Giles) 1902
Agoo, Balaoan, Camansi, La Union, Baguio City, Benguet, Subic Bay, Zambales, Mt. Makiling, Laguna, LUZON; San Jose, Occidental Mindoro, MINDORO; Irahuan River, Rosa, PALAWAN; MINDANAO.
165. *cataractarum* Edwards 1923
Mt. Makiling, Laguna, LUZON.
166. *foliatus* Brug 1932
Subic Naval Base, Zambales, Dingalan Bay, Tayabas, Quezon, LUZON; San Jose, Occidental Mindoro, MINDORO; Osmeña, SAMAR; Baybay, Lago-Lago, LEYTE; Iwahig, Puerto Princesa, PALAWAN; Parang, Cotabato, Kolambungan, Lanao del Norte, MINDANAO.
167. *hinglungensis* Chu 1957
San Jose, Occidental Mindoro, MINDORO; San Pedro, Puerto Princesa, Culion Island, PALAWAN.
168. *latifoliatus* Delfinado 1966
Mt. Makiling, Laguna, LUZON; San Jose, Occidental Mindoro, MINDORO; Balsahan River, Cabayugan, Marble Mountain, Panitan, PALAWAN.
169. *laureli* Baisas 1935
San Jose, Nueva Ecija, Subic Naval Base, Zambales, Batangas, San Pablo City, Calauan, Laguna, LUZON; San Jose, Occidental Mindoro, MINDORO; San Antonio, Osmeña, Guirang, Sohotan, SAMAR; Baybay, Lago-Lago, Tacloban, LEYTE; Iwahig, Puerto Princesa, PALAWAN; Mercedes, Quimpot, Zamboanga, Bukidnon, Lanao, MINDANAO.
170. *okinawae* Bohart 1953
Trinidad, Benguet, San Fernando, La Union, Mountain, LUZON.
171. *uncinatus* Delfinado 1966
Osmeña, SAMAR.
172. *yeageri* Baisas 1935
Iwahig, Bacungan, Quezon, Panitan, PALAWAN.

Subgenus *Lophoceraomyia* Theobald

173. *cinctellus* Edwards 1922
LUZON; San Antonio, SAMAR; Palo, Dulag, Diit River, Buruguin, LEYTE.
174. *cubitatus* Colless 1965
Puerto Princesa, PALAWAN; San Francisco, Agusan, MINDANAO.
175. *fulleri* (Ludlow) 1909
Ludlow Barracks, Parang, Kabakan, Cotabato, San Francisco, Agusan, MINDANAO; Jolo Island, SULU.
176. *gibbulus* Delfinado 1966
San Jose, Occidental Mindoro, MINDORO; Brooks' Pt., Uring-Uring, PALAWAN.
177. *infantulus* Edwards 1922
Agoo, La Union, Subic Naval Base, Zambales, Mt. Makiling, Laguna, LUZON; San Jose, Occidental Mindoro, MINDORO; Osmeña, SAMAR; Palo, Lago-Lago, Baybay, LEYTE; Parang, Cotabato, MINDANAO.
178. *josephinea* Baisas 1935
San Jose, Occidental Mindoro, MINDORO; Osmeña, SAMAR; Santa Rosa, Tacloban, Diit, Lago-Lago, Baybay, Dagamit, and Mt. Lobi, LEYTI; Ludlow Barracks, Parang, and Kabakan, Cotabato, Pasonanca, Zamboanga del Sur, San Francisco, Surigao, MINDANAO.
179. *kuhnsi* King and Hoogstraal 1955
Baguio City, Benguet, Dalton, Nueva Vizcaya, Subic Bay, Zambales, Mt. Makiling, Laguna, Calaca, Batangas, LUZON; San Jose, Occidental Mindoro, MINDORO; Fabrica, Negros Occidental, Balinsayao, Lago-Lago Bay, LEYTE; Kolambungan, Lanao del Norte, Mt. Apo, Davao, Wenes, Cotabato, MINDANAO; Mampallan, Talipaw, Indanan, JOLO.
180. *lavatae* Stone and Bohart 1944
Baguio City, Benguet, Dalton, Nueva Vizcaya, Munoz, San Jose, Nueva Ecija, Subic Naval Base, Zambales, Mt. Makiling, Laguna, LUZON; San Jose, Occidental Mindoro, MINDORO; Osmeña, SAMAR; Tacloban, LEYTE; Mt. Malino, Irahuan River, Puerto Princesa, PALAWAN; Indanan, JOLO.
181. *macdonaldi* Colless 1965
San Jose, Occidental Mindoro, MINDORO.
182. *mammififer* (Leicester) 1908
Subic Naval Base, Zambales, Mt. Makiling, Laguna, LUZON; San Jose, Occidental Mindoro, MINDORO; Osmeña, SAMAR; Dagami, Lago-Lago Bay, LEYTE; Gingoog, Misamis Oriental, Kolambungan, Lanao del Norte, Davao, MINDANAO; Iwahig, Irakman, Balsahan River, PALAWAN.

183. *minor* (Leicester) 1908

Trinidad, Mountain, Dalton, Nueva Vizcaya, Tayabas, Quezon, Subic Naval Base, Zambales, Mt. Isarog, Camarines Sur, LUZON; Osmeña, Calaccad, Sohoton, SAMAR; Lago-Lago, Baybay, LEYTE; Mat Malino, Irahuan River, Iwahig, Puerto Princesa, PALAWAN; Jolo Island, SULU.

184. *paraculeatus* Sirivanakarn 1977

Diit River, Tacloban, LEYTE; Parang, Cotabato, MINDANAO.

185. *quadripalpis* (Edwards) 1914

Mt. Makiling, Laguna, LUZON; Puerto Princesa, Iwahig, Cabayuyan, Ludlow Barracks, PALAWAN.

186. *reidi* Colless 1965

Uring-Uring, Brooks Point, PALAWAN.

187. *rubithoracis* (Leicester) 1908

Subic Naval Base, Zambales, LUZON; San Jose, Occidental Mindoro; MINDORO; Tacloban, Palo, LEYTE; Jolo Island, SULU.

Subgenus *Lutzia* Theobald

188. *fuscanus* Wiedemann 1820

Widespread.

189. *halifaxii* Theobald 1903

Subic Bay, Zambales, Clark Air Base, Pampanga, Calauan, Laguna, LUZON; San Jose, Occidental Mindoro, MINDORO; Sohoton Spring, Osmeña, SAMAR; Lake Mainit, Surigao, San Francisco, Agusan, Pasonanca, San Ramon, Zamboanga del Sur, Cotabato, MINDANAO; Cape Melville, Balabac Island, Culion Island, Irahuan River, PALAWAN.

Genus *Ficalbia* Theobald

Important reference: Mattingly 1957.

190. *ludlowae* Brunetti 1920

Cudarangan, MINDANAO.

Genus *Heizmannia* Ludlow

Important reference: Mattingly 1970.

Subgenus *Heizmannia* Ludlow

191. *scintillans* Ludlow 1905
Clark Air Base, Pampanga, LUZON.

Genus *Hodgesia* Theobald

Important reference: Delfinado 1966.

192. *malayi* Leicester 1908
Los Baños, Laguna, LUZON; San Jose, Occidental Mindoro, MINDORO;
Santa Rosa, LEYTE; Titunod Creek, Kotambungan, Lanao del Norte,
MINDANAO.
193. *quasisanguinae* Leicester 1908
San Jose, Occidental Mindoro, MINDORO; Lanao, San Francisco,
Agusan, MINDANAO.

Genus *Malaya* Leicester

Important reference: Wharton 1947.

194. *genurostris* Leicester 1908
Clark Air Base, Pampanga, LUZON; Ludlow Barracks, Parang
Cotabato, MINDANAO.
195. *leei* (Wharton) 1947
Ludlow Barracks, Cotabato, MINDANAO.

Genus *Mansonia* Blanchard

Important references: Delfinado 1966. Wharton 1978.

Subgenus *Mansonoides* Theobald

196. *annulata* Leicester 1908
Ludlow Barracks, Ft. Pikit, Cotabato, MINDANAO.
197. *annulifera* (Theobald) 1901
Clark Air Base, Pampanga, San Fabian, Mangit, Batangas, Camp
Eldridge, Los Baños, Laguna, Ft. McKinley, Rizal, Mountain,
LUZON; Reina Regente, Ludlow Barracks, Parang, Cudarangan,
Cotabato, MINDANAO.

198. *bonneae* Edwards 1930
Clark Air Base, Pampanga, LUZON; Gunnam, Marirong, Kambing, PALAWAN.
199. *dives* (Schiner) 1868
San Jose, Occidental Mindoro, MINDORO; San Francisco, Agusan, MINDANAO.
200. *uniformis* (Theobald) 1901
Widespread.

Genus *Mimomyia* Theobald

Important references: Delfinado 1966. Mattingly 1971. White 1974.

Subgenus *Etorleptiomya* Theobald

201. *elegans* (Taylor) 1914
Kabakan, Cotabato, MINDANAO.
202. *luzonensis* (Ludlow) 1905
Bayambang, Pangasinan, Subic Naval Base, Zambales, Camp Nichols, Rizal, Pampanga, LUZON; San Jose, Occidental Mindoro, MINDORO; Kabakan, Cotabato, MINDANAO.

Subgenus *Ingramia* Edwards

203. *deguzmanae* (Mattingly) 1957
Baguio City, Benguet, Cagayan, LUZON; San Jose, Occidental Mindoro, MINDORO; NEGROS; Mt. McKinley, Davao, Lanao, Surigao, MINDANAO.

Subgenus *Mimomyia* Theobald

204. *chamberlaini* Ludlow 1904
Munoz Agricultural School, Nueva Ecija, Natividad, San Miguel, Tayug, Pangasinan, Rizal, Calauan, Laguna, LUZON; San Jose, Occidental Mindoro, MINDORO; LEYTE.
205. *chamberlaini* issp. *metallica* (Leicester) 1908
LUZON.
206. *hybrida* (Leicester) 1908
Munoz Agricultural School, Nueva Ecija, LUZON; Cudarangan, MINDANAO.

Genus *Orthopodomyia* Theobald

Important reference: Zavortink 1971.

207. *andamanensis* Barraud 1934
Cape Melville, Balabac Island, PALAWAN.
208. *anopheloides* (Giles) 1903
Baguio, Benguet, Mountain, Laguna, LUZON; San Jose,
Occidental Mindoro, MINDORO; NEGROS; LEYTE; PALAWAN.
209. *madrensis* Baisas 1946
Mt. Isarog, Camarines Sur, Baguio, Benguet, Laguna, LUZON; PALAWAN.

Genus *Topomyia* Leicester

Important references: Delfinado 1966. Miyagi 1980.

Subgenus *Suaymyia* Thurman

210. *apsarae* Klein 1977
Montible, Puerto Princesa, PALAWAN.
211. *imitata* Baisas 1946
Kidapawan, Cotabato, MINDANAO.

Subgenus *Topomyia* Leicester

212. *argyropalpis* Leicester 1908
Ludlow Barracks, Parang, Cotabato, Davao, MINDANAO.
213. *barbus* Baisas 1946
MINDANAO.
214. *cabrerai* Miyagi, Toma, and Rivera 1983
Mt. Apo, Davao, MINDANAO.
215. *dejesusi* Baisas and Feliciano 1953
Mt. Apo, Davao, MINDANAO.
216. *hernandoi* Baisas and Feliciano 1953
Mt. Apo, Davao, MINDANAO.
217. *pseudobarbus* Baisas 1946
San Miguel, Bulacan, Subic Bay, Zambales, LUZON; Puerto Princesa,
PALAWAN.

Genus *Tripteroides* Giles

Important references: Baisas and Ubaldo-Pagayon 1949, 1952.
Mattingly 1980, 1981.

Subgenus *Rachionotomyia* Theobald

218. *rozeboomii* Baisas and Ubaldo-Pagayon 1953
Pasonanca, Zamboanga del Sur, MINDANAO.

Subgenus *Tricholeptomyia* Dyar and Shannon

219. *apoensis* Baisas and Ubaldo-Pagayon 1953
Sumilao, Maluko, Tagalaon, Bukidnon, Taglawig, Tagum, Mt. McKinley,
Mt. Apo, Davao, MINDANAO.
220. *barraudi* Baisas and Ubaldo-Pagayon 1953
Famy, Laguna, Sierra Madre Mountain, Baler, Quezon, Mountain,
LUZON.
221. *belkini* Baisas and Ubaldo-Pagayon 1953
Bacungan, Puerto Princesa, PALAWAN.
222. *christophersi* Baisas and Ubaldo-Pagayon 1953
Baler, Quezon, Mountain, LUZON.
223. *delpilaris* Baisas and Ubaldo-Pagayon 1953
Mt. Makiling, Los Baños, Laguna, Llavac, Infanta, Baler, Quezon,
LUZON.
224. *microcalis* (Dyar) 1929
Bamban River, Clark Air Base, Pampanga, along Banaue-Bontoc Road,
Mountain, Llavac, Infanta, Baler, Quezon, LUZON.
225. *nepenthicola* (Banks) 1909
Trinidad and along Banaue-Bontoc Road, Mountain, Llavac, Infanta,
Baler, Quezon, Mt. Makiling, Los Banos, Famy, Laguna, LUZON.
226. *woxasi* Baisas and Ubaldo-Pagayon 1953
Sumilao, Bukidnon, MINDANAO.
227. *werneris* Baisas and Ubaldo-Pagayon 1953
Mt. Apo, Mt. McKinley, Davao, MINDANAO.

Subgenus *Tripteroides* Giles

228. *antennalis* Bohart and Farner 1944
Sibulan River, Mt. Apo, Mt. McKinley, Davao, MINDANAO.

229. *claggi* Bohart and Farner 1944
Sibulan River, Mt. Apo, Davao, MINDANAO.
230. *dyari* Bohart and Farner 1944
Laguna, Quezon, LUZON; Davao, MINDANAO.
231. *dyi* Baisas and Ubaldo-Pagayon 1953
Mt. McKinley, Davao, MINDANAO.
232. *erlinda* Baisas and Ubaldo-Pagayon 1953
Mt. McKinley, Davao, MINDANAO.
233. *hoogstraali* Baisas 1947
Mt. Data, Mountain, LUZON.
234. *indeterminatus* Baisas and Ubaldo-Pagayon 1953
Mt. McKinley, Davao, MINDANAO.
235. *intermediatus* Baisas and Ubaldo-Pagayon 1953
Taglawig, Tagum, Davao, MINDANAO.
236. *knighti* Baisas and Ubaldo-Pagayon 1953
Pasonanca, Zamboanga del Sur, MINDANAO.
237. *mabinii* Baisas and Ubaldo-Pagayon 1953
Cotabato, Lanao, MINDANAO.
238. *malvari* Baisas and Ubaldo-Pagayon 1953
Laguna, Quezon, LUZON.
239. *monetifer* (Dyar) 1920
Widespread.
240. *nitidoventer* (Giles) 1904
Widespread.
241. *powelli* (Ludlow) 1909
LUZON; SAMAR; LEYTE; Balabac Island, PALAWAN.
242. *powelli escodae* Baisas and Ubaldo-Pagayon 1953
Mt. McKinley, Davao, MINDANAO; Cape Melville, Puerto Princesa, PALAWAN; JOLO.
243. *powelli laffooni* Baisas and Ubaldo-Pagayon 1953
SAMAR; MINDANAO.
244. *powelli mattinglyi* Baisas and Ubaldo-Pagayon 1953
Irahuan River, Culion, PALAWAN.
245. *reiseni* Basio 1971
Mt. Makiling, Laguna, LUZON.

246. *riverai* Miyagi, Toma, and Tsukamoto 1983
Iwahig, PALAWAN.
247. *simulatus* Baisas and Ubaldo-Pagayon 1953
Banaue, Mountain, LUZON.
248. *sullivanae* Baisas and Ubaldo-Pagayon 1953
Manatanao, Davao, MINDANAO.
249. *toffaeletii* Baisas and Ubaldo-Pagayon 1953
Iwahig, Culion, PALAWAN.
250. *uichancoi* Baisas and Ubaldo-Pagayon 1953
Mt. McKinley, Davao, MINDANAO.

Genus *Uranotaenia* Lynch Arribalzaga

Important references: Delfinado 1966. Peyton 1972, 1977. Peyton and Klein 1970. Peyton and Rattanarithikul 1970.

Subgenus *Pseudoficalbia* Theobald

251. *abstrusa* Peyton 1977
San Jose, Occidental Mindoro, MINDORO.
252. *bicolor* Leicester 1908
Burgos, Mountain, Los Baños, Laguna, Limay, Bataan, LUZON;
Kidapawan, Cotabato, MINDANAO.
253. *confusa* Peyton 1977
San Jose, Occidental Mindoro, MINDORO.
254. *demeilloni* Peyton and Rattanarithikul 1970
Baguio, Benguet, LUZON.
255. *harrisoni* Peyton 1977
San Antonio, Oriental Mindoro, MINDORO.
256. *modesta* Leicester 1908
Calauan, Laguna, LUZON; Kolambigan, Lanao del Norte, MINDANAO.
257. *obscura* Edwards 1915
Burgos, Mountain, LUZON; San Jose, Occidental Mindoro, MINDORO;
K 98 Creek, Ludlow Barracks, Parang, Cotabato, San Francisco,
Ausan, MINDANAO.
258. *pylei* Baisas 1946
Llavac, Laguna, LUZON; Kidapawan, Cotabato, MINDANAO.

259. *rossi* Delfinado 1966
San Jose, Occidental Mindoro, MINDORO.

Subgenus *Uranotaenia* Lynch Arribalzaga

260. *annandalei* Barraud 1926
San Jose, Occidental Mindoro, MINDORO; Titunod Creek, Kolambungan, Lanao del Norte, Parang, Cotabato, MINDANAO.
261. *arguellesi* Baisas 1935
Calauan, Laguna, La Union, Clark Air Base*, Pampanga, LUZON;
San Jose, Occidental Mindoro, MINDORO; Tacloban, LEYTE.
262. *argyrotarsis* Leicester 1908
San Jose, Calicoan Island, Occidental Mindoro, MINDORO; Kabakan, Parang, Cotabato, MINDANAO; Iwahig, PALAWAN.
263. *clara* Dyar and Shannon 1925
San Jose, Occidental Mindoro, MINDORO; Parang, Salimba, Ludlow Barracks, Cotabato, MINDANAO.
264. *falcipes* Banks 1906
Clark Air Base, Pampanga, Bulacan, Rizal, Manila, LUZON; San Jose Occidental Mindoro, MINDORO; Kidapawan, Cotabato, MINDANAO.
265. *heiseri* Baisas 1935
Parang and Kabakan, Cotabato, MINDANAO.
266. *lateralis* Ludlow 1905
Camp Eldridge, Laguna, Camp Nichols, Rizal, LUZON; San Jose, Occidental Mindoro, MINDORO; Tacloban, LEYTE; Kolasi, Kolambungan, Lanao del Norte, Jinamoc Island, Caminawit Ft., Cotabato, MINDANAO.
267. *ludlowae* Dyar and Shannon 1925
Laguna, LUZON; Ludlow Barracks, Parang, Simoay, Cotabato, MINDANAO.
268. *mendiolai* Baisas 1935
Olongapo Road, Zambales, Los Baños, Laguna, Atimonan, Quezon, Bataan, LUZON; San Jose, Occidental Mindoro, MINDORO; Kabakan Kolambungan, Lanao del Norte, MINDANAO.
269. *metatarsata* Edwards 1914
Camp Nichols, Rizal, LUZON.
270. *nivea* Leicester 1908
San Jose, Occidental Mindoro, MINDORO; Ft. Pikit, Kabakan, Parang, Ludlow Barracks, Reina Regente, Cotabato, MINDANAO.
271. *reyi* Baisas 1935
Simoay, Cotabato, MINDANAO.

Genus *Zeugnomyia* Leicester

Important reference: Delfinado 1966.

272. *aguilari* Baisas and Feliciano 1953
Mt. Apo, Davao, MINDANAO.
273. *fajardoi* Baisas and Feliciano 1953
Mt. Apo, Davao, MINDANAO.
274. *gracilis* Leicester 1908
Ube, Laguna, LUZON.
275. *lawtoni* Baisas 1946
Llavac, Infanta, Quezon, LUZON; Wenes, Calinan, Davao, MINDANAO.

SUBFAMILY TOXORHYNCHITINAE

Genus *Toxorhynchites* Theobald

Important reference: Belkin 1962.

Subgenus *Toxorhynchites* Theobald

276. *amboinensis* (Doleschall) 1857
MINDORO; Hacienda Louisiana, Mailum, NEGROS; Guimaras Island, CEBU; Galong and Iloilo, PANAY; Margosatubig, Zamboanga del Sur, MINDANAO.
277. *gigantulus* (Dyar and Shannon) 1925
Clark Air Base, Pampanga, Limay, Bataan, San Andres, Rizal, Laguna, LUZON.
278. *nepenthis* (Dyar and Shannon) 1925
Los Baños, Laguna, LUZON.
279. *splendens* (Wiedemann) 1819
Clark Air Base, Pampanga, Los Baños, Laguna, San Andres, Rizal, LUZON; NEGROS; CEBU; PALAWAN.

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LITERATURE CITED

- Abercrombie, J. 1977. Medical entomology studies - IX. The subgenus *Christophersiomyia* of the genus *Aedes* (Diptera: Culicidae). Contr. Am. Ent. Inst. (Ann Arbor) 14(2):1-72.
- Baisas, F. E. 1965. Additional notes on Philippine Mosquitoes, Part I: *Armigeres baisasi* Stone and Thurman 1958 and *Armigeres joloensis* (Ludlow) 1904. USAF Fifth Epidemiological Flight Tech. Rpt. 17065. 33 pp.
- Baisas, F. E. and F. H. Dowell. 1965. Keys to the adult female and larval anopheline mosquitoes of the Philippines. J. Med. Ent. 4:11-23.
- Baisas, F. E. and A. Ubaldo-Pagayon. 1949. Notes on Philippine mosquitoes, XV. The chaetotaxy of the pupae and larvae of *Tripteroides*. Philipp. J. Sci. 78:43-73.
- _____. 1952. Notes on Philippine mosquitoes, XVI. Genus *Tripteroides*. Monogr. Inst. Sci. Tech., No. 2, Manila, 198 pp.
- Basio, R. G. 1971. The mosquito fauna of the Philippines (Diptera: Culicidae). Nat. Mus. Philippines Monogr. No. 4, Manila, 198 pp.
- _____. 1974. Mosquito studies in the Philippines: A selected bibliography (1882-1974). Bur. of Quarantine, Dept. Hlth., Manila, 88 pp.
- Belkin, J. N. 1962. The mosquitoes of the South Pacific (Diptera: Culicidae). Univ. of Calif. Press, Berkeley and Los Angeles, 2 vol., 608 pp. and 412 pp.
- Cagampang-Ramos, A. 1979. A new record of *Culex (Culex) edwardsi* Barraud from the Philippines (Diptera: Culicidae). Mosq. Syst. 11:213-214.
- Cagampang-Ramos, A. and R. F. Darsie. 1970. Illustrated keys to the *Anopheles* mosquitoes of the Philippine Islands. USAF Fifth Epidemiological Flight Tech. Rpt. 70-1, 49 pp.
- Delfinado, M. D. 1966. The culicine mosquitoes of the Philippines, tribe Culicini (Diptera: Culicidae). Mem. Am. Ent. Inst. 7:1-252.
- Harrison, B. A. and J. E. Scanlon. 1974. *Anopheles (An.) pilinotum*, a new species name in the *eitkenii* complex for *An. insulaeflorum* from the Philippines and Eastern Indonesia (Diptera: Culicidae). Mosq. Syst. 6: 32-40.

- _____. 1975. Medical Entomology Studies - II. The subgenus *Anopheles* in Thailand (Diptera: Culicidae). Contr. Am. Ent. Inst. (Ann Arbor) 12(1):1-307.
- Huang, Y-M. 1977. Medical entomology studies - VII. The subgenus *Stegomyia* of *Aedes* in Southeast Asia. II - The *edwardsi* group of species. III - The *w-albus* group of species (Diptera: Culicidae). Contr. Am. Ent. Inst. (Ann Arbor) 14(1):1-111.
- _____. 1978a. The identity of two species of *Stegomyia* belonging to the *Aedes albolineatus* group (Diptera: Culicidae). Mosq. Syst. 10:197-210.
- _____. 1978b. Redescription and subgeneric position of *Aedes meronephada* (Dyar and Shannon) with notes on the subgenus *Diceromyia* (Diptera: Culicidae). Mosq. Syst. 10:334-341.
- _____. 1979. Medical entomology studies - XI. The *Stebomyia* of *Aedes* in the Oriental Region with keys to the species (Diptera: Culicidae). Contr. Am. Ent. Inst. (Ann Arbor) 15(6):1-46.
- Knight, K. L. 1968. Contributions to the mosquito fauna of Southeast Asia. IV. Species of the subgroup *Chrysolineatus* of group D, genus *Aedes*, subgenus *Finlaya* Theobald. Contr. Am. Ent. Inst. (Ann Arbor) 2(5):1-45.
- _____. 1978. Supplement to a catalog of the mosquitoes of the world (Diptera: Culicidae). Thomas Say Found., Ent. Soc. Am. 6 (Suppl.): 1-107.
- Knight, K. L. and W. B. Hull. 1951. The *Aedes* mosquitoes of the Philippine Islands. I. Keys to species. Subgenera *Mucidus*, *Ochlerotatus*, and *Finlaya* (Diptera: Culicidae). Pacif. Sci. 5:211-251.
- _____. 1952. The *Aedes* mosquitoes of the Philippine Islands. II. Subgenera *Skusea*, *Christophersiomyia*, *Geoskusea*, *Rhinoskusea*, and *Stegomyia* (Diptera: Culicidae). Pacif. Sci. 6:157-189.
- Knight, K. L. and A. Stone. 1977. A catalog of the mosquitoes of the world (Diptera: Culicidae). 2nd ed. Thomas Say Found., Ent. Soc. Am., vol. 6: 1-611.
- Lane, J. 1972. The pupa of species of *Malaya* Leicester from Asia and Australasia (Diptera: Culicidae). Proc. Ent. Soc. Wash. 74:411-414, illus.
- Lang, J. R. and A. C. Ramos. 1981. Ecological studies of mosquitoes in banana leaf axils in central Luzon, Philippines. Mosq. News 41(4):665-673.
- Mattingly, P. F. 1957. The culicine mosquitoes of the Indomalayan Area. Part I. Genus *Ficalbia* Theobald. Brit. Mus. (Nat. Hist.), London, 61 pp.

- _____. 1958a. The culicine mosquitoes of the Indomalayan Area. Part III. Genus *Aedes* Meigen, subgenera *Paraedes* Edwards, *Rhinoskusea* Edwards and *Cancraedes* Edwards. Brit. Mus. (Nat. Hist.), London, 61 pp.
- _____. 1958b. A revision of *Paraedes* Edwards and *Cancraedes* Edwards (Diptera: Culicidae). Proc. Roy. Ent. Soc. Lond. (B) 27:76-83.
- _____. 1959. The culicine mosquitoes of the Indomalayan Area. Part IV. Genus *Aedes* Meigen, subgenera *Skusea* Theobald, *Diceromyia* Theobald, *Geoskusea* Edwards and *Christophersiomyia* Barraud. Brit. Mus. (Nat. Hist.), London, 61 pp.
- _____. 1961. The culicine mosquitoes of the Indomalayan Area. Part V. Genus *Aedes* Meigen, subgenera *Mucidus* Theobald *Ochlerotatus* Lynch, *Arribalzaga* and *Neomelaniconion* Newstead. Brit. Mus. (Nat. Hist.), London, 61 pp.
- _____. 1965. The culicine mosquitoes of the Indomalayan Area. Part VI. Genus *Aedes* Meigen, subgenus *Stegomyia* Theobald (Groups A, B and D). Brit. Mus. (Nat. Hist.), London, 62 pp.
- _____. 1970. Contributions to the mosquito fauna of Southeast Asia. VI. The genus *Heizmannia* Ludlow in Southeast Asia. Contr. Am. Ent. Inst. (Ann Arbor) 5(7):1-104.
- _____. 1971. Contributions to the mosquito fauna of Southeast Asia. XIII. Illustrated keys to the genera of mosquitoes (Diptera: Culicidae). Contr. Am. Ent. Inst. (Ann Arbor) 7(4):1-84.
- _____. 1980. An interim reclassification of the genus *Tripteroides* with particular reference to the Australian subgenera. Mosq. Syst. 12:164-169.
- _____. 1981. Medical entomology studies - XIV. The subgenera *Rachionotomyia*, *Tricholeptomyia* and *Tripteroides* (Mabini Group) of genus *Tripteroides* in the Oriental Region (Diptera: Culicidae). Contr. Am. Ent. Inst. (Ann Arbor) 17(5):1-147.
- Miyagi, I. 1980. *Topomyia (Suaymyia) rausi*, a new species of mosquito from the Philippines (Diptera: Culicidae). J. Med. Ent. 17:178-181.
- Miyagi, I., T. Toma, and B. D. Cabrera. 1983. Synonyms of *Topomyia rausi* with *Topomyia apsarae*, with description of the larvae (Diptera: Culicidae). Mosq. Syst. 15:111-116.
- Miyagi, I., T. Toma, and D. G. Rivera. 1983. *Topomyia (Topomyia) cabrerai*, a new species from the Philippines (Diptera: Culicidae). Mosq. Syst. 15:1-4
- Miyagi, T., T. Toma, and M. Tsukamoto. 1983. Description of a new species, *Tripteroides (Tripteroides) riverai* from the Philippines (Diptera: Culicidae). Mosq. Syst. 15:5-17.

- Osten-Sacken, C. R. 1882. Diptera from the Philippine Islands brought home by Dr. Carl Semper. Berl. Ent. Ztschr. 26:83-120, 181-252.
- Peyton, E. L. 1972. A subgeneric classification of the genus *Uranotaenia* Lynch Arribalzaga, with a historical review and notes on other categories. Mosq. Syst. 4:16-40.
- _____. 1977. Medical entomology studies - X. A revision of the subgenus *Pseudoficalbia* of the genus *Uranotaenia* in Southeast Asia (Diptera: Culicidae). Contr. Am. Ent. Inst. (Ann Arbor) 14(3):1-273.
- Peyton, E. L. and J. M. Klein. 1970. Five new species of *Uranotaenia* from Southeast Asia (Diptera: Culicidae). Proc. Ent. Soc. Wash. 72:243-251.
- Peyton, E. L. and R. Rattanarithikul. 1970. Five additional new species of *Uranotaenia* from Southeast Asia (Diptera: Culicidae). Proc. Ent. Soc. Wash. 72:403-415.
- Ramalingam, S. 1974. Some new records of *Anopheles* from Sabah, Malaysia. Southeast Asian J. Trop Med. Pub. Hlth. 5:147-148.
- Reinert, J. F. 1970. Contributions to the mosquito fauna of Southeast Asia. V. Genus *Aedes*, subgenus *Diceromyia* Theobald in Southeast Asia. Contr. Am. Ent. Inst. (Ann Arbor) 5(4):1-43.
- _____. 1973. Contributions to the mosquito fauna of Southeast Asia. XVI. Genus *Aedes* Meigen, subgenus *Aedimorphus* Theobald in Southeast Asia. Contr. Am. Ent. Inst. (Ann Arbor) 9(5):1-218.
- _____. 1974. Medical entomology studies - I. A new interpretation of the subgenus *Verrallina* of the genus *Aedes* (Diptera: Culicidae). Contr. Am. Ent. Inst. (Ann Arbor) 11(1):1-249.
- _____. 1976a. Medical entomology studies - IV. The subgenera *Indusius* and *Edwardsaedes* of the genus *Aedes* (Diptera: Culicidae). Contr. Am. Ent. Inst. (Ann Arbor) 13(1):1-45.
- _____. 1976b. Medical entomology studies - V. The subgenus *Rhinoskusea* of the genus *Aedes* (Diptera: Culicidae). Contr. Am. Ent. Inst. (Ann Arbor) 13(2):1-60.
- _____. 1981. Medical entomology studies - XV. A revision of the subgenus *Paraedes* of the genus *Aedes* (Diptera: Culicidae). Contr. Am. Ent. Inst. (Ann Arbor) 18(4):1-91.
- _____. 1982. *Belkinius*, a new subgenus of *Aedes* and a description of *Ae. (Blk.) aurotaeniatus* Edwards (Diptera: Culicidae). Mosq. Syst. 14:101-121.
- Sirivanakarn, S. 1972. Contributions to the mosquito fauna of Southeast Asia. XIII. The genus *Culex*, subgenus *Eumelanomyia* Theobald in Southeast Asia and adjacent areas. Contr. Am. Ent. Inst. (Ann Arbor) 8(6):1-86.

- _____. 1975. The systematics of *Culex vishnui* complex in Southeast Asia with diagnosis of three common species (Diptera: Culicidae). *Mosq. Syst.* 7:69-85.
- _____. 1976. Medical entomology studies - III. A revision of the subgenus *Culex* in the Oriental Region (Diptera: Culicidae). *Contr. Am. Ent. Inst. (Ann Arbor)* 12(2):1-272.
- _____. 1977a. Redescription of four Oriental species of *Culex* (*Culiciomyia*) and the description of a new species from Thailand (Diptera: Culicidae). *Mosq. Syst.* 9:93-111.
- _____. 1977b. Medical entomology studies - VI. A revision of the subgenus *Lophoceraomyia* of the genus *Culex* in the Oriental Region (Diptera: Culicidae). *Contr. Am. Ent. Inst. (Ann Arbor)* 13(4):1-45.
- Thurman, E. B. 1959. A contribution to a revision of the Culicidae of northern Thailand. *Univ. Maryland Agr. Exp. Sta. Bull. A-100*, 182 pp.
- Tyson, W. H. 1970a. Contributions to the mosquito fauna of Southeast Asia. VII. Genus *Aedeomyia* Theobald in Southeast Asia. *Contr. Am. Ent. Inst. (Ann Arbor)* 6(2):1-27.
- _____. 1970b. Contributions to the mosquito fauna of Southeast Asia. VIII. Genus *Aedes*, subgenus *Mucidus* in Southeast Asia. *Contr. Am. Ent. Inst. (Ann Arbor)* 6(2):28-80.
- Wharton, R. H. 1947. Notes on Australian mosquitoes (Diptera: Culicidae). Part VII. The genus *Harpagomyia*. *Proc. Linn. Soc. N. S. W.* 72:58-68.
- _____. 1978. The biology of *Mansonia* mosquitoes in relation to the transmission of filariasis in Malaya. *Rev. Ed. Bull. Inst. Med. Res. Fed. Malaya* 11:1-114.
- White, G. B. 1974. Priority of *Ingramia* Edwards, 1912, over *Ravenalities* Doucet, 1957 as the name for a subgenus of *Mimomyia* Theobald, 1903 (Diptera: Culicidae). *Mosq. Syst.* 6:239-242.
- Zavortink, T. J. 1971. Contributions to the mosquito fauna of Southeast Asia. IX. The genus *Orthopodomyia* Theobald in Southeast Asia. *Contr. Am. Ent. Inst. (Ann Arbor)* 7(3):1-37.