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ARTHROPODS OF MEDICAL IMPORTANCE IN AUSTRALIA AND THE PACIFIC ISLANDS

by

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FOREWORD

This report is one of the end-products of a series of studies that began in 1952 when the Office of **The** Quartermaster General awarded a contract to Cornell University for summarization of distributional data for insects and other arthropods of medical importance. The studies were planned in cooperation with personnel of the Office of the Surgeon General and the U. S. Department of Agriculture. Dr. Bernard V. Travis, Professor of Medical Entomology and Parasitology at Cornell University, has been the principal investigator since the inception of the series. A thorough search was made of the entomological literature, and for each country and major geographical region of the world a "summary report" was prepared, listing the reported occurrences and habitat data for medically important arthropods. These summary reports were placed on file at the Natick Laboratories and the Military Entomology Information **Service**, Walter Reed Army Medical Center, Washington, D. C., where they are available for loan and reference.

By 1964 it became evident that changes in the field of entomology--both in knowledge acquired and in the distributions of some species--required updating of the material contained in the country summary reports. It was decided also that the material would be more useful if consolidated on a continental rather than a country basis. Contracts were let with Cornell University for accomplishing these two tasks simultaneously, and the present report for Australia and the Pacific Islands is the fourth report resulting from this work. It will be followed by similar studies for North America and Europe.

The distributions of the most important species have been mapped by the University of Pittsburgh's Department of Geography. The maps will be published in an Atlas of Medically Important Arthropods, to supplement this and the other continental summaries.

The contract under which this work was accomplished was supported by funds from the Office of the Chief of Research and Development, Department of the Army. This contract was monitored by Dr. William C. Robison, Chief of the Geography Division, Earth Sciences Laboratory. Dr. John J. Pratt, Jr., Head of the Applied Entomology Group, Pioneering Research Laboratory, was alternate project officer.

The following members of the staff at Cornell University assisted the authors in preparing this compilation: Eveline H. Aron, Editha G. Gagni, Isabel Valiela, Erika F. Zeballos and Ruth E[illegible]een, Librarian, Depa[illegible]ment of Entomology. Priscilla R. Lawrence typed the manuscript.

The Earth Sciences Division is pleased to be able to present the results of the labors of Dr. Travis and his co-workers for the use of Army specialists in preventive medicine, public health officers, and entomologists.

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ABSTRACT

The occurrence of insects and other arthropods of medical importance in Australia, New Zealand, New Guinea, and the islands of Oceania is summarized on the basis of a review of most of the available references in the scientific literature. The report includes, for each major group of arthropods, a listing of species and subspecies with biological and distributional data, tabulations of diseases or disease organisms transmitted, and literature citations.

The groups of arthropods included, with the number of species or subspecies in parentheses, are:

Mosquitoes (828), Black flies (58), Sand flies (6), Midges (44), Horse flies (750), Biting flies (7), Non-biting flies (9), Fleas (88), Bugs (2), Urticating and vesicating arthropods (13), Ticks (108), Mites (69), and Miscellaneous arthropods (18).

ARTHROPODS OF MEDICAL IMPORTANCE IN AUSTRALIA AND THE PACIFIC ISLANDS

INTRODUCTION

1. Format of this report

As will be seen from the Abstract and the Table of Contents, the data in this report are presented according to arthropod groups.

For each arthropod group the data are presented in tables, one or two as required. In Table 1, which is the basic table for each arthropod group, are listed the arthropods, biological data, distribution, and documentary references. In Table 2 are summarized the disease organisms said by the authors to be transmitted by the arthropods.

After the above-mentioned tabular material there is, for each arthropod group, a section of Literature Cited, containing the complete citation referred to in the basic table (Table 1). The number of citations used to document the recorded data was reduced to the minimum so that for each fact recorded, there is only one reference cited. Thus the references used constitute only a very small portion of those reviewed for the regional report.

The format of the data sections of the report is explained below. At the end of this Introduction there are brief explanatory comments on synonymy, interpretation of statements, and the order of listings for any particular species in Table 1.

2. Table 1 explained

For each group of arthropods (mosquitoes, black flies, etc.) its basic table, Table 1, lists for each species and subspecies the distribution (island or islands), together with any biological data, and the reference documenting each entry. We will explain this table by considering entries under each column heading in turn.

a. SPECIES

Under the first heading, SPECIES, is entered: genus, species, subspecies (if any), and describer.

The format for a typical entry under SPECIES is somewhat variable, depending on the information available for each arthropod group. Typically, the genera and species are listed in alphabetical order in each group. No entries are made for subgenera. However, the subspecies, varieties and forms are listed as they appear in the publications. The describer's name is given unless the author has not listed the name and it is not clear from the literature what the describer's name should be.

See note on synonymy in this Introduction under "5. Special comments."

b. BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION

The basic data of Table 1 are presented under these headings. The entries in the table are made in the same order as the heading indicates, and are separated by the same punctuation mark, ";". "No data" is indicated "---"; that is, there may be no data on BREEDING HABITATS or ADULT ACTIVITY. Under DISTRIBUTION, the third category of information, a number is entered; this number represents an island or islands, which may be identified by consulting the Index of Islands immediately following this Introduction.

For example, the entry for the second item on page 2 (---;---32) means that there are no data on BREEDING HABITATS or ADULT ACTIVITY for Australia (number 32 under DISTRIBUTION, as identified in the Index of Islands) for the particular species, although the indicated reference (Edwards, 1924) shows the species occurs there.

Further comments on each part of this heading follow:

BREEDING HABITATS: No entry is made (as indicated by "---") unless the author makes clear and specific statements. The data concerning the biology of the immature forms are quite sparse, except for mosquitoes.

ADULT ACTIVITY: Again, no entry is made (as indicated by "---") unless the author makes clear and specific statements. Except for mosquitoes, the authors present little biological data for adult arthropods.

DISTRIBUTION: As indicated by the heading, the third category of information is DISTRIBUTION and the entry in the table consists of one or more numbers. These numbers represent an island or islands as indicated above and many be identified by referring to the Index of Islands. All entries in this report use these numbers (in the DISTRIBUTION column of both Table 1 and Table 2) instead of the island name. For example, 32 is the number for Australia. Where the authors have not recorded a specific island, an inclusive number is used. For example, 205 is the number for Micronesia. For explanation of symbols attached to the island numbers in this column, see paragraph c immediately below.

c. Symbols attached to the island number or to a reference date

In the DISTRIBUTION column, the island number may have a symbol attached to it, e.g., 32* or 32°. In the DATE column, the date may have a symbol attached to it, e.g., 1913†

Symbol * after an island number indicates that the species is said by the author to transmit a disease organism to man. For example, on page 2 of this report, the third entry ends with ". . . 32*". This means that the species in Australia (island 32 in Index) are said to transmit a disease organism to man. When this symbol is used, the species of arthropod and the disease transmitted are entered in the table immediately following; that is, such entries in Table 1 are summarized in Table 2. Where two asterisks (**) appear, they refer to two separate diseases.

Symbol ° after the island number indicates that the species is said by the author either to bite or directly annoy man. For example, on page 2 of this report the first entry ends " . . . 32°". This means that this particular species in Australia (island 32 in the Index) is said by the author to either bite or annoy man. These entries are not summarized, as are those marked "*" (see paragraph above).

Symbol † after a reference date indicates that the record is an unconfirmed entry. For example, on page 201 of this report the 5th listing ends under DATE " . . . 1926†". This means that the particular entry "---;---; 32,222," (country 32 is Australia and 222 is New Zealand in the Index of Islands) needs further confirmation. This symbol is also used in Table 2, with the same meaning, but it is there attached to the island number in the DISTRIBUTION column. See paragraph 3 below.

d. (GENERAL STATEMENTS)

In addition to the three main categories of information as described above, the column heading indicates that there may be general statements. If so, this entry is made after those of the three main categories and is enclosed in parentheses, exactly as the column heading indicates. This may be a statement for either the various islands or countries or for the various species. For example, on page 2 of this report, the last listing ends " . . . (Vecto. of Dengue)". On page 7, the first listing ends " . . . (Tree holes and bamboo").

e. AUTHOR and DATE

Every entry in Table 1 is documented by an author (or a senior author) and date of publication. The AUTHOR and DATE (year of publication) are entered in the last two columns of Table 1. Explanation of symbol "*" which may be attached to DATE is given in paragraph c above. (The complete literature citation is given, for each arthropod group, in the section immediately following the tables.)

3. Table 2 explained

As noted above in paragraph 2c, all listings marked "*" in a table are summarized for the particular species of arthropod, in the table immediately following, giving the island or islands where occurring, and the disease or disease organism transmitted.

Table 2 summarizes such items for Table 1. For example, on page 2 of this report (Mosquitoes, Table 1) the third entry ends " . . . 32*". We note on this page and on page 3, under the same species, other listings ending : 97*, 107*, 134*, 219* 220*, 283*. All these listings are summarized at the beginning of Table 2, page 104. Besides the SPECIES and the DISTRIBUTION, the table also gives information on DISEASE ORGANISM. Countries in these columns are discussed below.

a. SPECIES and DISTRIBUTION

The SPECIES is, of course, that indicated in Table 1, and the DISTRIBUTION column summarizes all the numbers (i.e., islands that are marked "*" under DISTRIBUTION in Table 1 for this particular species.

b. DISEASE OR DISEASE ORGANISM

Under this heading there are four subheadings (VIRUS & RICKETTSIA; PROTOZOA; HELMINTHS; OTHER). The subheading itself may be broken down, where necessary. For example, on page 104 (Mosquitoes, Table 2), the first subcolumn (VIRUS & RICKETTSIA) is broken down as: Dengue and Yellow fever, with numbers indicating the appropriate distribution.

4. Literature Cited section explained

At the end of each arthropod section there is a complete list of Literature Cited, as referred to in the last column of Table 1 (AUTHOR and DATE).

The abbreviations of the publications follow the World List of Scientific Periodicals.

5. Special comments

a. A note on synonymy

The problem of attempting to straighten out synonymy of scientific names is beyond the scope of this report. Except for a few species, the scientific names, as used by the authors, are entered in the tables. In a few cases we have followed the synonymy of an acceptable monograph. As there is no universal agreement among taxonomists, the responsibility for synonymy must be referred to the interpretation of each specialist.

b. A note on interpretation of statements

An attempt has been made to avoid interpreting the published statements. This has been found difficult in matters concerning disease transmission; thus it is often clearer if we use the author's own words. In general, it has been found that few authors make unqualified statements concerning the vectors. Also, as one might expect, most of the statements are based on epidemiological evidence and not on actual transmissions.

c. Order of listings for same species in Table 1

If there is more than one island number for a single entry, the numbers are arranged in ascending order. For example, on page 2 the 8th listing for DISTRIBUTION reads: "32, 50, 83, 107, 114,...314."

When there is more than one entry (that is, citation with Author and Date) under a single species and describer, the various entries are listed in ascending order of island number, based on the first (lowest, as explained above) number for each entry. For example, on page 2, under *Aédes aegypti* (Linnaeus), the first 5 listings are 32; the next listing starts with 32 and continues, 50, 83, etc. through 314 . The next listing is 50. The next listing begins with 66, and so on.

INDEX OF ISLANDS

In 1962 a world-wide Geographic Index was published* listing countries, islands, and major regions in alphabetical order, and assigning to each a number. The following list consolidates the islands of the Pacific area included in this report, as shown on the adjacent map. This report covers Australia, New Zealand, New Guinea, and all the islands of the central and south Pacific known as Oceania. This includes the islands comprising the State of Hawaii. All other islands of the South Pacific (such as those of Indonesia, the Galapagos Islands, and the islands in the vicinity of Antarctica) are included in the reports for Asia or Latin America.

Only a few of the islands or island groups of the Pacific are also independent countries. The present list comprises New Zealand, Western Samoa, Nauru, and Tonga (a quasi-independent state), in addition to the continent of Australia.

All the numbers of the Pacific countries and islands or island groups are listed in order. For example, 32 stands for Australia; 66 stands for the Caroline Islands. Where the authors have not recorded a specific island, an inclusive title is entered, e.g., 205 for Micronesia. This is the principal purpose of the Index: to identify the island or islands represented by numbers under DISTRIBUTION (Table 1 or Table 2).

The Index also includes at least the major synonyms. The synonymy is preceded by a dash (the numbers appear with the main entries). For example, the first entry in the Index is " - Austral Islands or Tubuai Islands." The main listing is (in both numerical and alphabetical order) "315. Tubuai Islands or Austral Islands."

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*B. V. Travis, Herbert H. Casewell, Jr., William B. Rowan, Helle Starcke, and Carl W. Ross: Classification and coding system for compilations from the world literature on insects and other arthropods that affect the health and comfort of man, Technical Report ES-4, Quartermaster Research & Engineering Center, Natick, Massachusetts, 1962, 259 pp.

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107. Fiji Islands
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121. Gilbert Islands
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315. Tubuai Islands or Austral Islands

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- Western Samoa, included in Samoa Islands, 263

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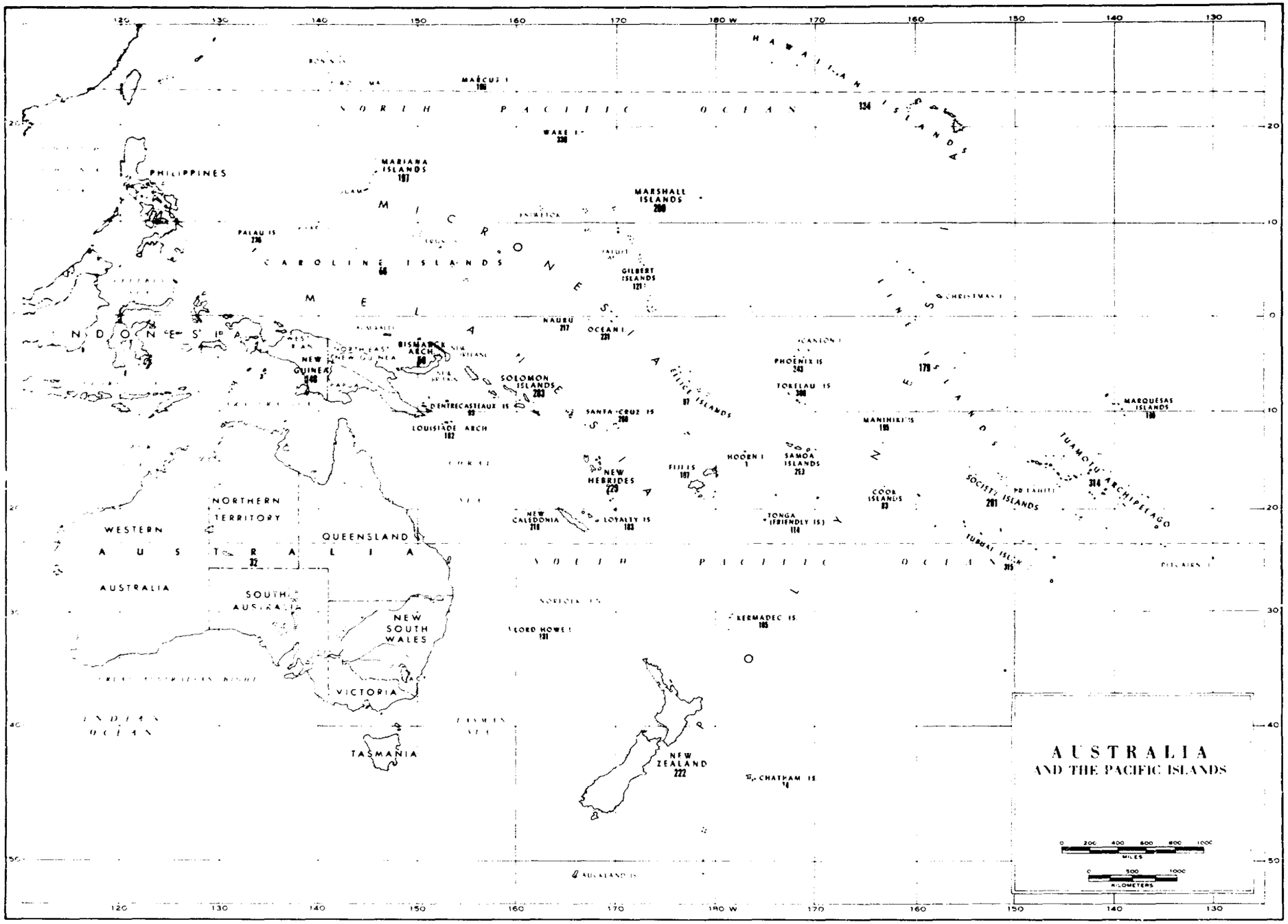
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ARTHROPOD DATA

A. MOSQUITOES

The mosquito entries include information on the biology of the larvae and adults in addition to distribution and disease transmission. As might be expected, the mosquitoes constitute a large assortment of species in Australia and the Pacific Islands. The extremely diverse ecological conditions provide habitats that are occupied by about 328 species or subspecies. The tabulations will show that some of the species have a large documentation of their biology. Usually such species are of great economic importance because they are important vectors. For some species there is almost no information except distributional data. Such species are usually uncommon or else are thought to be of little significance as vectors.

So many mosquitoes will bite man that an effort has been made to make a complete listing of mosquito species and subspecies. The synonymy is a difficult problem in this group; thus, many species and subspecies in the lists are not valid names.

TABLE 1 - MOSQUITOES

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
AEDES *aculeatus* (Theobald)	Shallow depression pools, clear fresh dark brown water; ---; 32°	Marks	1949
	---; ---; 32	Edwards	1924
aegypti (Linnaeus)	Rain water tanks, wells, roof gutters; bites indoors day and night, carrier of yellow fever, all year; 32*	Cooling	1924
	Artificial containers; ---; 32	Lee	1944
	---; experimental transmission of dengue; 32	Roy & Brown	1954
	---; common in houses, capable of transmitting dengue; 32°	Siler et al.	1926
	---; bites day and night, Feb., March and Nov.; 32°	Taylor	1943a
	---; ---; 32, 50, 83, 107, 114, 121, 134, 148, 197, 219, 220, 263, 281, 283, 314 (Vector of yellow fever)	Kumm	1931
	Artificial containers; Aug.; 50	Laird	1946
	Artificial container; ---; 66. Tree holes; ---; 114. ---; ---; 134*. Coconut and breadfruit tree holes, artificial container; possible vector of dengue; 197. Rainwater cisterns, coconut half on edge of woods; in houses mostly at sunset and sunrise; 200. Coconut husks and shells, water butts, top of cut bamboo, small open concrete drain, artificial container; ---; 263 (Domestic, artificial container, tree holes, coconut shells, cut bamboo, rainwater, chlorinated drinking water, slightly brackish water, partially shaded containers, bite mainly at night, incriminated vector of yellow fever and dengue)	Bohart & Ingram	1946
	---; all year; 66. Artificial container; July, Aug., Oct.; 197. Artificial container; June, July; 200. ---; Dec.; 330 (Near human habitations, artificial containers, tree holes, coconut shells, cut bamboo, chlorinated drinking water and slightly brackish well water, shaded rainwater collections, bites at night, possible vector of dengue and yellow fever)	Bohart	1957
	---; ---; 66, 197, 200 (Vector of dengue)	Farner	1944

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
AEDES aegypti (Linnaeus) (cont.)	---; ---; 83, 97, 107, 114, 183, 217, 219, 220, 263, 281, 283, 314, 315 (Domestic species, largely confined to seaports, in artificial containers of all types, rarely in tree holes or leaf axils of plants, predominantly diurnal feeders, but will bite man readily in artificial light, also in total darkness, important vector of dengue)	Belkin	1962
	Hollow tree stumps, coconut shells, taro pits, artificial containers; bites day and night; 97*°	Venner	1944
	Artificial containers; enters houses, May-June; 107*	Lever	1943
	---; in houses, common, bites by day, Dec.-Feb.; 107°	Lever	1943 a
	Drains, artificial containers within and around houses; bites by day; 107	Paine	1943
	---; ---; 121 (Cisterns, artificial containers)	Smart	1943
	---; ---; 148, 203, 205, 245 (Artificial containers, occasionally in leaf axils, leaves, bamboo stumps, tree holes, coconut shells in immediate vicinity of human dwellings, active by day)	Farner et al.	1946
	---; active during day and evening, experimentally infected with dengue; 179°	Ross	1948
	Rainwater, brackish water, cisterns, coconut shells, plant leaves; diurnal, domestic; 197°. ---; abundant; 200°	Farner	1944
	Fields; ---; 197	Travis	1947
	Semi-permanent rain pools, in flooded basements of homes; Feb.-May; 219*. Artificial containers; ---; 220*, 283*	Perry	1948
	Artificial containers near houses, flower vases in cemeteries; enters houses, suspected vector of dengue; 219	Oman & Christenson	1947
	Water-holding plants, tree holes; ---; 219	Williams	1943
	---; in houses, bites man readily; 220°	Perry	1946
	---; naturally infected with non-periodic *Wuchereria bancrofti*; 263, 281	Raghavan	1961
	---; common, enters houses; 281	Galliard et al.	1949

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
AEDES *aegypti aegypti* (Linnaeus)	---; ---; 32, 50, 66, 107, 114, 121, 134, 148, 197, 219, 220, 236, 238, 263, 281 (Domestic water containers, neutral or alkaline)	Knight et al.	1944
aegypti queenslandensis (Theobald)	---; ---; 32	Knight et al.	1944
	---; ---; 219	Mattingly	1957
agrihanensis Bohart	Coconut tree holes; June, Aug.; 197	Bohart	1957
albilabris Edwards	Tree holes, bamboo, leaf axils of various plants including *Pandanus* and palms, coconut shells and husks, artificial containers including canvass; ---; 283	Belkin	1962
	Coral pools with high organic content; ---; 283	Perry	1949
albirostris (Macquart)	---; ---; 222	Taylor	1934 a
albitarsis Taylor	Creek; ---; 32	Taylor	1944
	---; ---; 148	Lee	1944
alboannulatus (Macquart)	Ground and rock pools, clear or muddy water exposed to the sun; bites by day; 32°	Dobrotworsky	1965
	Swamps, rock pools and sublittoral rock pools; rarely bites except in shady gullies; 32	Mackerras	1928
	Fresh water in rock pools, occasionally in brackish marshes;---; 32	Lee	1944
	Fresh water lagoons, wells; ---; 32	Edwards	1924
	Artificial containers; ---; 32	Ferguson	1926 a
	---; May-Aug.; 32	Minter	1950
	---; ---; 32, 50 (Rock pools, wells, grassy rain-water pools)	Knight et al.	1944
albolineatus (Theobald)	Fresh, clear, murky, and foul water with organic debris, artificial containers; in shady jungle by day; 50	Laird	1946
	Rot holes in trees; ---; 50	Taylor	1934
	---; ---; 50, 148, 197, 283 (Tree holes, coconut shells and husks, bamboo stumps, fallen leaves and artificial containers, seldom attracted to man)	Steffan	1966

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
AEDES albolineatus (Theobald) (cont.)	---; ---; 50, 283 (Rock holes)	Knight et al.	1944
	---; ---; 134	Stone et al.	1959
	Coconut husks, leaf axils of taro, wild in path of forest, axils of leaves of Sago palm, tree holes, artificial containers; ---; 283	Paine & Edwards	1929
albopictus (Skuse)	---; ---; 32 (Coconut shells, ditches, pools, rivulet, bites day and night, indoors and outside, efficient intermediary host of dengue, incomplete development of *Wuchereria bancrofti*)	Taylor	1943
	---; ---; 32, 148 (Tree holes, bamboo, leaf axils of several plants, rock pools, artificial containers, bites man)	Steffan	1966
	---; ---; 32, 107, 134, 148, 281, 314 (Vector of yellow fever)	Kumm	1931
	---; ---; 83, 199 (Tree holes, rock holes near dwellings, water butts and artificial containers, experimental transmission of yellow fever, vector of dengue)	Smart	1943
	Axils of *Bilbergia, Crimun, Alocasia* and *Pandanus*, lower forest zone and urban sections; ---; 134°. Tree holes, artificial containers; bite vigorously during the day, suspected vector of dengue; 197° (Tree holes, cut bamboo, rock holes, leaf axils, artificial containers in weedy ditches, semi-domestic, under leaves, severe pest in wooded areas and bite during the day, vector of dengue)	Bohart & Ingram	1946
	Fresh water; ---; 134	Pemberton	1943
	Wells; ---; 134	Anonymous	1944
	---; Aug.-Nov.; 134	Bonnet & Worcester	1946
	---; ---; 134, 148, 197, 203, 205, 245 (Temporary water collections, bamboo and tree stumps, tree holes, leaf axils, coconut shells, rock pools, ditches and artificial containers close to human dwellings, rarely enters houses, bites at twilight and shady places by day)	Farner et al.	1946
	---; ---; 134, 197 (*Nepenthes*, considered to be an efficient vector of dengue, frequently a serious pest)	Belkin	1962
	---; ---; 134°. Tree holes, coconut shells, artificial containers; Mar., July-Sept., Nov.; 197°	Bohart	1957
	Tree holes and bamboos; ---; 148	Brug	1931

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
AEDES albescutellatus (Theobald)	---; ---; 32, 50, 148, 283 (Shallow pools on the edge of jungle, wheel ruts, bite during the evening)	Steffan	1966
	---; bite by day in shady jungle and forest; 50°	Laird	1946
	---; ---; 134, 197	Knight & Hull	1952
	Flooded swamp areas, wood pools, rock holes and potholes in stream bed; bite in daytime in forest areas; 283°	Belkin	1962
alocasicola Marks	Axils of *Cunjevoi*; ---; 32	Knight & Marks	1952
	---; bites occasionally in rain forest; 32°	Marks	1948
alternans (Westwood)	Brackish and fresh water pools and swamps; bites by day; 32°	Dobrotworsky	1965
	---; May; 32	Minter	1950
	---; ---; 32, 148, 219 (Brackish and salt water swamps, fresh ground pools)	Lee	1944
	---; ---; 32, 148, 219 (Mangrove swamps, salt marshes, rarely fresh marshes, predaceous)	Knight et al.	1944
	---; ---; 32, 148, 219 (High tide and inland marshy pools, predaceous, bites man chiefly at sundown)	Steffan	1966
	---; ---; 183. ---; anthropophilic; 219 (Swamps and swampy pools, brackish or fresh, on the coast or inland)	Belkin	1962
	Brackish pools; ---; 219	Perry	1950
alticola Bonne-Wepster	At 2850-3800 meters elevation; ---; 148	Bonne-Wepster	1948
andersoni Edwards	Sparsely wooded areas, tea-tree scrub, clean, shallow raodside ditches and excavations, pools and peat swamps; bites by day, Mar. and Sept.; 32°	Dobrotworsky	1965
	---; Oct.-Feb.; 32	Mackerras	1927 a
andrewsi Edwards	---; ---; 179	Stone et al.	1959
anggiensis Bonne-Wepster	---; ---; 148	Steffan	1966

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
AEDES			
annandalei (Theobald)	---; ---; 148 (Tree holes and bamboo)	Steffan	1966
antipodeus (Edwards)	Slime in mud; country and bush, day and night biter, all year; 222°	Graham	1939
	Ground pools, most active in cold water; ---; 222	Belkin	1962
aobae Belkin	Large tree hole in deep shade; ---; 220°	Belkin	1962
argenteus Poiret	---; ---; 32**, 107**. Tanks, flower vases; enter houses; 283	Lever	1934
	---; ---; 50, 83, 134. Occasionally in coconut husks, broken bamboos and tree-wells, artificial container; all year; 263	Buxton & Hopkins	1927
	Artificial containers; Dec.; 148	Holland	1933
	---; ---; 222	Edwards	1924
	Artificial containers; ---; 263	Buxton & Hopkins	1925
	---; common; 263	Edwards	1928
	Plantations in water drawn from tanks inadequately screened, water used in flower vases, ant traps, coconut husks; ---; 283	Paine & Edwards	1929
argenteitarsis Brug	Fallen palm leaves in shaded sago swamp and rain forest; ---; 148	Steffan	1966
argyronotum Belkin	Tree holes, rock holes and rock pools in small shaded streams; sylvan; 283	Belkin	1962
ashworthi Edwards	Fresh water swamps; ---; 32, 148	Lee	1944
aurantius (Theobald)	---; ---; 148 (Pig wallows, clear, marshy pools, grassy swamp pools)	Lee	1944
aurantius chrysogaster (Taylor)	Shallow rock pools with decaying vegetation; ---; 32	Knight et al.	1944
	---; ---; 32, 148 (Shallow rock pools with decaying vegetable matter, puddles, crab pot hole, coral depression, highly polluted artificial hole)	Steffan	1966

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
AEDES			
aurantius nigrescens Edwards	---; ---; 148, 283 (Muddy algal ditch, hoof print, predaceous)	Knight et al.	1944
aureostriatus (Doleschall)	Tree holes and bamboo stumps; ---; 148	Lee	1944
auridorsum Edwards	Tree holes; ---; 32	Lee	1944
	---; bites during day; 32°	Marks	1948
aurimargo Edwards	---; ---; 32, 148 (Tree holes and coconut shells)	Steffan	1966
australiensis (Theobald)	Tree holes; bites at night in vine scrub; 32°	Marks	1948
	Fallen palm fronds in forest; ---; 32	Lee	1944
	---; ---; 148	Cooling	1924 a
australis (Erichson)	Shallow snow pools at 6,000 feet altitude; ---; 32°	Cooling	1924 a
	Salt waters, rock and ground pools; ---; 32	Dobrotworsky	1965
	---; ---; 32, 181, 222 (Only in salt or brackish rock pools, slightly above high-tide mark, bites man readily)	Belkin	1962
azureosquamatus Bonne-Wepster	---; at 100 meters elevation, Apr., Aug.-Sept.; 148	Bonne-Wepster	1948
bancrofti Taylor	---; ---; 32	Lee	1944
bancroftianus Edwards	Fresh water pools with vegetation, creeks and roads; bites by day; 32°	Dobrotworsky	1965
	---; ---; 32	Lee	1944
becki Belkin	Crab holes; ---; 283	Belkin	1962
bifoliatus King & Hoogstraal	---; May; 148	Steffan	1966
biocellatus (Taylor)	Shaded tree holes in dark reddish brown water, hollow pipe; occasionally bites; 32°	Marks	1948
	Tree and stump holes; ---; 32	Knight & Marks	1952
	In scrub on river bank; ---; 32	Ferguson	1926 a
	---; rare; 32	Mackerras	1928
bougainvillensis Marks	Leaf axils of *Sararanga* and *Pandanus*; ---; 283	Belkin	1962

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
AEDES			
britteni Marks & Hodgkin	---; ---; 32	Stone et al.	1959
brugi Edwards	---; ---; 148	Edwards	1924
burnetti Belkin	Leaf axils of *Freycinetia storkii, F. milnei*; ---; 107	Belkin	1962
burpengaryensis (Theobald)	Well; ---; 32	Edwards	1924
buxtoni Belkin	---; ---; 283	Belkin	1962
cacozelus Marks	---; ---; 32	Stone	1963
caecus (Theobald)	From a whirlpool in an inlet; ---; 148	Brug	1931
	---; ---; 148 (Open jungle pools)	Knight et al.	1944
cairnsensis (Taylor)	---; ---; 32	Edwards	1924
calabyi Marks	---; ---; 32	Stone	1963
calcariae Marks	Pits under uprooted trees; bites in shade or during cloudy weather, Dec.; 32°	Dobrotworsky	1965
camptorhynchus (Thomson)	Brackish and fresh water swamps in open country; bites by day and after sunset; 32°	Dobrotworsky	1965
	Shady brackish river overflow; ---; 32	Knight et al.	1944
	---; Oct.-March and Aug.; 32	Mackerras	1927_a
	---; rare; 32	Mackerras	1928
candidoscutellum Marks	Tree holes in rain forest, clear water; Feb., June, Sept.; 32	Marks	1948
	---; ---; 32, 148 (Tree holes and rock pool)	Knight & Marks	1952

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
AEDES *carmenti* Edwards	---; ---; 32, 50, 148 (Shaded, shallow, temporary jungle pools, bites in forest areas during the day)	Steffan	1966
	---; bite by day in shady jungle and rain forest, enters houses; 50°	Laird	1946
	---; Apr., Aug.; 148	Bonne-Wepster	1948
	Shallow, heavily shaded temporary jungle pools which are frequently flushed, shallow rain pools; bites man voraciously in forested areas during the day; 283°	Belkin	1962
	Pools, crab holes in mangrove area; ---; 283	Paine & Edwards	1929
	---; common, enters houses; 283	Edwards	1924
chathamicus Dumbleton	---; ---; 222	Stone	1963
chionodes Belkin	---; ---; 283	Belkin	1962
chrysogaster (Taylor)	Shallow, shaded rock pool with decaying vegetation; ---; 32	Taylor	1927
clelandi (Taylor)	Fresh water pools with or without vegetation, polluted rabbit burrows, tea-tree scrub; bites by day, July, Sept.-Nov.; 32°	Dobrotworsky	1965
	---; ---; 32	Edwards	1924
clintoni Taylor	---; ---; 148	Knight & Marks	1952
concolor Taylor	Rock pools of varying salinity; bites chiefly at dusk; 32°	Mackerras	1928
	---; ---; 222	Knight et al.	1944
continentalis Dobrotworsky	Rain water pools, small swamps with grassy edges exposed to the sun; bites by day, Sept., Nov.-Feb. 32°	Dobrotworsky	1965
cooki Belkin	Coconut shells, *Pandanus* axils, cisterns, artificial containers; suspected vector of filariasis; 83	Belkin	1962
crucians (Walker)	---; ---; 32	Edwards	1924

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
AEDES *cuccioi* Belkin	Rot holes at base of tree growing in a stream bed, rock pools and pot holes in stream bed, flooded stream, small clear swampland stream, flooded area along a creek; near a sandy pool in a stream bed; 283	Belkin	1962
culiciformis (Theobald)	---; ---; 32, 50, 148	Steffan	1966
cunabulanus Edwards	---; Nov.-Feb.; 32	Mackerras	1927a
cunninghami Taylor	---; ---; 32	Taylor	1944
daggyi Stone & Bohart	Crab and lobster holes in fresh water swamps, brackish water near the ocean; ---; 220	Perry	1946
	Ground pools; ---; 220. ---; ---; 283	Stone & Bohart	1944
daliensis (Taylor)	---; ---; 32	Lee	1944
dasyorrhus King & Hoogstraal	---; ---; 148, 283 (Holes in horizontal tree trunks projecting into or over ocean water, containing salt water spray, artificial containers, tin cans in mangrove area, tires by a dock)	Belkin	1962
derooki Brug	---; ---; 148 (River bed rock pool)	Knight et al.	1944
digoelensis Brug	---; ---; 148	Taylor	1934a
dobodurus King & Hoogstraal	Cup fungi in rain forest, artificial container in forest near sea level, fallen palm leaves, sago leaves, fallen tree hole; ---; 148	King & Hoogstraal	1946
dobrotworskyi Marks	Leaf bases of sword grass, among large patches of grass in swampy bush and along rivers; bites man usually in face, Nov.-Mar.; 32°	Dobrotworsky	1965
dorseyi Knight	Tree holes, coconut shells, artificial containers; in woods, Aug., Nov.-Dec.; 236	Bohart	1957
dybasi Bohart	Pitcher plants, taro axil, *Nepenthes mirabilis*; bites by day, Mar., May, Aug., Nov., Dec.; 236°	Bohart	1957
edgari Stone & Rosen	Shallow temporary ground pools of fresh water; efficient laboratory host for the Tahitian strain of *Wuchereria bancrofti*, bites man at night; 281°	Belkin	1962
edwardsi (Barraud)	---; ---; 283	Lee	1944
edwardsi *tulagiensis* Edwards	---; ---; 268	Edwards	1926
	---; ---; 283	Knight et al.	1944

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
AEDES			
edwardsi var. *tulagiensis* Edwards	---; ---; 283	Barraud	1934
elchoensis Taylor	---; ---; 32	Lee	1944
fasciatus Fabricius	---; ---; 32 (Vector of yellow fever)	Martini	1930
fergusoni (Taylor)	---; ---; 32	Cooling	1924 a
fijiensis Marks	Mostly in *Pandanus* leaf axils and less common in axils of *Alocasia indica* and *Freycinetia* sp.; nocturnal and bites man vigorously and persistently, suspected vector of non-periodic *Wuchereria bancrofti*, naturally infected with filarial larvae; 107°	Belkin	1962
	---; naturally and experimentally infected with non-periodic *W. bancrofti*; 107	Raghavan	1961
fimbripes Edwards	Crab holes; ---; 50	Edwards	1924
	Ground pools; ---; 50	Taylor	1934
	---; ---; 148 (Crab holes)	Steffan	1966
	Crab holes; ---; 220	Buxton & Hopkins	1927
finlaya *fijiensis*	---; naturally infected with *Wuchereria bancrofti*; 107	Manson-Bahr	1959
flavifrons (Skuse)	Ground pools with or without vegetation in the sun or partly shaded, pits under uprooted trees; bites during the day, common; 32°	Dobrotworsky	1965
flavipennis Giles	---; ---; 283	Taylor	1934 a
foliformis King & Hoogstraal	---; April-May, Aug., Dec.; 148	Steffan	1966
franclemonti Belkin	Leaf axils of broad-leaf *Pandanus*; ---; 283°	Belkin	1962
freycinetiae Laird	Leaf axils of *Freycinetia milnei* and *Pandanus*; ---; 107	Belkin	1962

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
AEDES *funereus* (Theobald)	Tea-tree swamp; bites day and night; 32°	Bearup & Laurence	1947
	Fresh water swamps; ---; 32	Lee	1944
	---; ---; 32, 50, 148, 283 (Fresh water swamps, bites man)	Steffan	1966
	Pandanus swamp; bites by day in shady jungle; 50°	Laird	1946
	---; ---; 50, 144 (Coasts in vicinity of mangrove and scrub	Hill	1925
	Muddy ditch with some algal scum and water in hoof marks, large and shallow rain water pool containing dead coconut leaves just above the beach; ---; 283	Paine & Edwards	1929
	---; common and annoying in coconut grove area and jungle, bites by day; 289°	Oman & Christenson	1947
funereus *funereus* (Theobald)	---; ---; 32, 148	Knight et al.	1944
funereus *ornatus* (Theobald)	---; ---; 32, 50, 220, 283 (Irrigation ditches, partially shaded rainwater pools, hoof marks)	Knight et al.	1944
	Swampy areas; bites by day in jungle and rain forest; 50°	Laird	1946
	Grassy pools; ---; 50, 148, 220	Lee	1944
	---; ---; 50, 148 (Grass covered plantation drains, jungle coastal and inland localities, bites by day and night)	Hill	1925
	Road ruts, wallows, occasionally ditches; viciously bites man by day in jungle; 220°	Perry	1946
	Grass covered drains; swamps; 220°	Buxton & Hopkins	1927
	---; ---; 268	Lever	1934
	Temporary rain water pools on the ground, shallow grassy pools, muddy ditches, water collected in hoof marks; bites in the afternoon, outdoors; 283°	Paine & Edwards	1929
fuscipalpis Belkin	Leaf axils of *Pandanus*; ---; 283	Belkin	1962
fuscitarsis Belkin	Leaf axils of broad and narrow-leafed *Pandanus*; ---; 283	Belkin	1962

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
AEDES			
futunae Belkin	Tree holes in deep forest, coconut half in bush area; ---; 1°	Belkin	1962
gahniccla Marks	Axils of sword grass in coastal swamps; bites late afternoon in dry scrub; 32°	Marks	1948
	Axils of *Gahnia* and *Pandanus*; ---; 32	Knight & Marks	1952
gani Bonne-Wepster	*Nepenthes*; ---; 148	Knight & Marks	1952
geoskusea Amos	Mangrove crab and mud-lobster holes; ---; 107	Lever	1945
gracilelineatus Bonne-Wepster	---; ---; 148	Steffan	1966
gressitti Bohart	*Pandanus* axil; Feb., Aug.; 236	Bohart	1957
guamensis Farner & Bohart	Natural and artificial containers close to habitations, tree hole, jungles; rests on vegetation, bites in woods in mornings, Oct., Dec.; 197°	Bohart	1957
	Tree hollows, coconut husks and shells, carabao wallow, water drum, water tank; common and troublesome in the forests; 197	Farner & Bohart	1945
	Cut bamboo and taro leaf axils; rarely bites man; 197°	Marks	1954
gurneyi Stone & Bohart	Tree holes and stumps, leaf axils also *Pandanus*, artificial containers; ---; 283	Belkin	1962
hakanssoni Knight & Hurlbut	Banana stump, tree holes, coconut shells, canoe, artificial containers; Jan., July; 66	Bohart	1957
	---; ---; 66, 283 (Coconut shells, tree holes, artificial containers)	Marks	1954
hebrideus Edwards	---; ---; 50, 148, 220, 236 (Tree holes, coconut shells, shallow wells, taro leaves, artificial containers)	Farner et al.	1946
	---; ---; 66, 148, 220, 268, 283 (Tree holes, coconut husks and shells, artificial containers, taro leaf axils, attack readily, persistent diurnal biters, suspected vector of dengue)	Belkin	1962

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
AEDES *hebrideus* Edwards (cont.)	Palm boat, coconut shells, old native pot, old mollusk shells, tree trunk, axil of taro leaf; ---; 148. Tree holes, coconut shells, hollows among roots, holes in raised coral, clam shells in a garden, old bottles, shallow wells, rot holes, felled log, tops of drums, bomb crater and artificial containers; suspected vector of dengue; 220 (Bites man)	Farner & Bohart	1945
	Tree holes, coconut shells, fallen fronds of coconut and breadfruit; possible vector of dengue; 220	Perry	1948
	Artificial containers; bites man by day; 220°	Daggy	1945
	Tree holes, coconut shells, tin cans, artificial water catchments; bites by day; 289°	Oman & Christenson	1947
hensilli Farner	Coconut shells, tree holes, rock crevices, fallen coconut fronds, artificial containers; bites man from dawn to dusk in sun or shade, enters buildings to bite, possible carrier of dengue and filariasis; 66°	Bohart	1957
	---; ---; 236, 283 (Coconut shells, tree holes, rock crevices, fallen coconut fronds, artificial containers, bites man)	Marks	1954
	---; ---; 236 (Possible vector of filariasis and dengue)	Bohart & Ingram	1946
hesperonotius Marks	---; ---; 32	Stone	1961
hodgkini Marks	---; ---; 32	Stone	1961
hoguei Belkin	Coconut shells; ---; 283	Belkin	1962
hollandius King & Hoogstraal	Shaded palm leaves, sago swamps, artificial containers, tree holes in rain forest, coconut husks; March-April, Sept., Nov.-Dec.; 148	King & Hoogstraal	1946
hollingsheadi Belkin	Leaf axils of *Pandanus* species; ---; 283	Belkin	1962
horrescens Edwards	Bamboo, tree-ferns, rarely in coconut shells; ---; 107	Marks	1954
	Tree holes, coconut shells, artificial containers; ---; 107	Belkin	1962

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
AEDES *hui* Bohart	Taro axils; at light, bloodsucker, seldom enters houses; 236°	Bohart	1957
humeralis Edwards	---; ---; 32	Cooling	1924 a
hybrida (Taylor)	---; ---; 32	Cooling	1924 a
imperfectus Dobrotworsky	Grassy pools in shade; bites by day; 32°	Dobrotworsky	1965
imprimens (Walker)	---; ---; 50° ---; deep jungle; 148	Knight & Hull	1953
	---; ---; 50, 148, 283 (Temporary pools, flowing water in flooded areas, in deep or partial shade, bites man readily at daytime in and around forested areas, capable of biting through dense and thick clothing and inflict very painful bites)	Belkin	1962
	Partly shaded, leafy woodland pools; ---; 283 (Bites viciously in deep shade during day)	Bohart	1945
	Shaded forest; common, bites by day; 283°	Paine & Edwards	1929
	---; common and annoying in jungle and coconut grove area, bite by day; 289°	Oman & Christenson	1947
incertus Edwards	---; ---; 148	Edwards	1924
inexpectatus Bonne-Wepster	At 1700 meters elevation; ---; 148°	Bonne-Wepster	1948
iwi Marks	---; ---; 32	Stone et al.	1959
josephinae Marks	---; ---; 32	Stone et al.	1959
keefei King & Hoogstraal	---; ---; 32, 148 (Tree holes)	Knight & Marks	1952
kermorganti (Laveran)	---; ---; 148	Knight et al.	1944
	Brackish pools; ---; 219	Perry	1950
knighti Stone & Bohart	Axils of the broadest-leafed *Pandanus*, confined to the lower leaves; ---; 283	Belkin	1962

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
AEDES kochi (Dönitz)	Tea-tree swamp; bites day and night; 32°	Bearup & Laurence	1947
	Leaf axils of *Pandanus* and *Colocasia*; ---; 32, 107, 114, 148, 283	Lee	1944
	---; in scrub in late afternoon; 32*	Marks	1948
	---; naturally infected with *Wuchereria bancrofti*; 32	Taylor	1946
	---; ---; 32, 50, 148, 283 (Coconut bushes, *Pandanus* and taro leaf axils)	Knight et al.	1944
	---; ---; 32, 107, 283 (Axils of *Pandanus* and taro, coconut shells, enters houses)	Stone & Bohart	1944
	---; ---; 32, 148 (*Colocasia*, most persistent biter, day and night, efficient host of *Wuchereria bancrofti*)	Taylor	1943 a
	Leaf axils of *Colocasia* and *Pandanus*; occasionally enters houses, bite in evening and after dawn; 50°	Laird	1946
	---; bites indoors at night; 50°. In axils of *Colocasia*; ---; 148	Taylor	1934
	Leaf axils of *Colocasia*, in or near forest; ---; 107	Edwards	1935 a
	Alocasia; bites at night; 107°	Paine	1943
	---; ---; 114, 148, 283 (Leaf axils of *Pandanus*, banana and taro plants, intermediary host of *Wuchereria bancrofti*)	Taylor	1938
	---; intermediary host of *Wuchereria bancrofti*; 148	Cilento	1940 +
	---; experimental vector of *W. bancrofti*; 148*	Avery	1946
	---; experimentally infected with *W. bancrofti*; 148	Raghavan	1961
	---; ---; 263	Edwards	1924
kochi samoana Grünberg	Coconut shells; ---; 50. ---; ---; 107, 148. Axils of *Colocasia*, common in the cultivated taro and wild *Araceae* on the banks of streams in the rain forest; ---; 263	Buxton & Hopkins	1927
	---; ---; 114, 283	Taylor	1934 a
	Leaf axils of cultivated and wild *Araceae*; bites at night; 263°	Edwards	1928

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
AEDES			
labeculosus Coquillett	---; ---; 32	Cooling	1924a
lamelliferus Bohart & Ingram	Mangrove swamps, in fresh and brackish water of palm axils and tree holes; mangrove swamps, bite at noon and early evening; 66°	Bohart & Ingram	1946
	Artificial container near houses; Jan., July, Dec.; 66. Artificial container; near building, July-Aug., Dec.; 236° (Mangrove swamps with both fresh and brackish water of palm axils and tree holes, biting in or near swamps from midday to early evening)	Bohart	1957
lateralis Theobald	---; ---; 148	Edwards	1924
lauriei (Carter)	Tree holes; ---; 181	Lee	1944
	Hollow of fallen tree; ---; 263	Edwards	1924
leilae King & Hoogstraal	---; March-April; 148	Steffan	1966
lewelleni Starkey & Webb	*Pandanus* axil; Apr., Aug.; 236	Bohart	1957
lineatopennis (Ludlow)	---; ---; 32 (Temporary, rain-filled, grassy ground depressions, light traps, habitually feeds upon human blood)	Knight & Hull	1953
lineatus (Taylor)	---; ---; 32, 50, 148, 219, 220, 268, 283 (Semi-domestic, mostly in temporary ground pools in cleared and partly shaded areas in association with man, less often in undisturbed jungle areas, bites man very readily in the daytime, particularly in shaded areas)	Belkin	1962
littlechildi Taylor	---; ---; 148	Taylor	1933
longiforceps Edwards	Crab holes, temporary flood pool; bites more at night than day; 283°	Belkin	1962
longirostris (Leicester)	Crab holes; ---; 32	Edwards	1924
	---; ---; 32, 148 (Crab holes in mangrove swamps, brackish rock pools, small shady ground pools and artificial containers)	Steffan	1966
lunulatus King & Hoogstraal	Crayfish hole in shaded rain forest; ---; 148	Steffan	1966

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
AEDES *luteifemur* Edwards	Temporary rain pools with vegetation exposed to the sun, pits; bites by day, Sept.-Mar.; 32°	Dobrotworsky	1965
	---; ---; 32	Lee	1944
macintoshi Marks	---; ---; 32	Stone	1961
mackerrasi Taylor	Rock pools, water collection in a canoe; ---; 32	Knight & Marks	1952
	Grassy pool near creek; ---; 32	Knight et al.	1944
macleayanus Mackerras	---; ---; 32	Lee	1944
macmillani Marks	---; bites by day, Feb.; 32°	Dobrotworsky	1965
macrodixoa Dyar & Shannon	---; near river; 148	Brug	1932
maehleri Bohart	Pitcher plant; Mar., Sept., Nov.; 66	Bohart	1957
mallochi Taylor	Tree holes; bites man just before and at dusk; 32°	Dobrotworsky	1965
	---; ---; 32	Knight & Marks	1952
marshallensis Stone & Bohart	---; at light, Jan., Mar., Dec.; 66°. ---; ---; 121° ---; Jan., Mar., June-Aug., Oct.-Nov.; 200 (Coconut shells, tree holes, hollows at the base of coconut fronds, barrels, wells)	Bohart	1957
	Well; ---; 121. Coconut shells, tree holes, hollows at coconut frond bases; bite man during day, in woods, in and around villages, on damp walls; 200°	Bohart & Ingram	1946
	Coconut halves, hollow trees, hollows at base of coconut palm; ---; 200	Farner & Bohart	1945
mccormicki Belkin	Temporary ground pools in deeply shaded jungle and in partially open areas; on tree trunk; 283	Belkin	1962
mcdonaldi Belkin	Shallow temporary pools in densely shaded but open area near a swamp; ---; 283	Belkin	1962
medialis Brug	Pitcher plant; near river; 148	Brug	1932
milnensis King & Hoogstraal	---; ---; 148	Steffan	1966

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
AEDES *milsoni* (Taylor)	Partly shaded ground and rock pools with vegetation; Sept.-Nov.; 32	Dobrotworsky	1965
	Tree holes; ---; 32	Hill	1925
minutae Taylor	---; ---; 32	Cooling	1924a
moloiensis Taylor	---; bites man in late forenoon; 32°	Taylor	1929
	---; ---; 32	Knight et al.	1944
monocellatus Marks	Tree holes; ---; 32	Knight & Marks	1952
multifolium King & Hoogstraal	---; Jan., May; 148	Steffan	1966
multiplex (Theobald)	Fairly shaded ground pools, shallow well, swamps; bites by day, Jan.-Apr.; 32°	Dobrotworsky	1965
	---; ---; 32	Edwards	1924
	---; ---; 148	Steffan	1966
neogeorgianus Belkin	Leaf axils of very narrow-leafed "screw palm", *Pandanus* sp. and taro; ---; 283	Belkin	1962
neomacrodixoa King & Hoogstraal	---; ---; 148	Steffan	1966
neopandani Bohart	*Pandanus* and taro axils, mountainous areas; bites man during the day, Jan., Mar., June, Nov.; 197°	Bohart	1957
nigrithorax (Macquart)	---; bites man by day; 32°	Dobrotworsky	1965
	---; ---; 32	Edwards	1924
nivalis Edwards	Shallow pools, clear or cloudy with decayed leaves exposed to the sun; Oct.-Dec.; 32	Dobrotworsky	1965
	Temporary snow pools at 6000 feet; ---; 32	Knight et al.	1944
	---; bite at dusk, Jan. and Feb.; 32°	Mackerras	1927 a

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
AEDES *nocturnus* (Theobald)	---; ---; 66, 83, 97, 107, 114, 121, 148, 183, 197, 200, 219, 220, 236, 263, 308 (Chiefly in temporary grassy ground pools, puddles and hoof marks, ponds and ditches following rain, bites readily and are a nocturnal pest in settlements following rains)	Belkin	1962
	---; ---; 134 (Artificial containers, temporary grassy ground pools, puddles, hoof prints, ponds and ditches following rains)	Steffan	1966
normanensis (Taylor)	Muddy rock pool in a water hole in a sandy creek bed; forest, day biting; 32°	Mackerras	1927 a
	Fresh, clear, or occasionally muddy water, casual pools or swampy areas, exposed to sun, hoof prints; ---; 32	Marks	1949
	Ground pools; ---; 32	Lee	1944
notoscriptus (Skuse)	Rock holes, roof gutters; enters houses, bites day and night; 32°	Mackerras	1928
	Semi-domestic, artificial containers; in dense scrub; 32	Ferguson	1926 a
	Tree holes, occasionally in rock and ground pools; ---; 32	Dobrotworsky	1965
	---; ---; 32, 50, 148, 183, 219 (Semi-domestic, artificial containers of all types, coconut husks and shells, tree holes and leaf axils of various plants)	Belkin	1962
	Tree hole; bites by day in shady jungle; 50°	Laird	1946
	Tree holes; ---; 148	Brug	1934
	---; ---; 148, 222 (Rock pools)	Lee	1944
	Rock holes, tree holes and artificial receptacles; ---; 219	Perry	1950
	Natural and artificial water containers, swamps, water holes, still and stagnant water rich in organic matter, hollow in rocks and caves, knot and rot holes, axils of nikau leaves, *Astelia* and banana palms in gardens and conservatories; sylvan, in shrubberies and gullies in partial sunshine, in houses, daytime biter, mostly early morning and late afternoon, prefers to bite on legs, Oct.-June; 222°	Graham	1929

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
AEDES *novalbitarsis* King & Hoogstraal	Small containers, shaded tree holes, rock holes, fallen palm bracts, coconut leaves and husks; ---; 148	King & Hoogstraal	1946
oakleyi Stone	Tree holes, coconut shells during rainy season, trench, road rut, barrels, artificial containers; bloodsucker, May-July, Sept., Nov.-Dec.; 197°	Bohart	1957
	---; Oct.; 197	Bohart & Ingram	1946
	Artificial containers; ---; 205	Farner	1944
occidentalis (Skuse)	Ground and rock pools, brackish marshes, fallen palm fronds, concrete well, holes in fallen logs; ---; 32	Knight & Marks	1952
	Small water pool overgrown with coarse grass above a waterfall; ---; 32	Taylor	1927
	Tree hole; ---; 32	Knight et al.	1944
	---; May-Aug.; 32	Minter	1950
occidentalis milsoni (Taylor)	Ground and rock pools, occasionally in brackish marshes; ---; 32	Knight & Marks	1952
oceanicus Belkin	In taro and *Pandanus*; ---; 114, 263	Belkin	1962
ochlerotatus vigilax	---; naturally infected with *Wuchereria bancrofti*; 219	Manson-Bahr	1959
ornatus (Theobald)	---; common and annoying in jungle and coconut-grove area, bites by day; 289°	Oman & Christenson	1947
painei Knight	---; ---; 50, 283 (Temporary pools in forests and coconut plantations)	Steffan	1966
	Temporary pools in forested areas, coconut plantations; ---; 283°	Belkin	1962
palauensis Bohart	Coconut shell, tree hole, *Pandanus* axil, artificial containers; Aug.; 236	Bohart	1957
palmarum Edwards	Fallen palm fronds, seed pods, snail shell, bamboo; occasionally bite by day in forest; 32°	Marks	1948
	Artificial containers, cup fungi, bamboo, flower spathe; ---; 32	Knight & Marks	1952

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
AEDES *panayensis* Ludlow	---; ---; 148 (Slightly brackish water in canoe, shaded, slightly brackish pool in a Nipa palm swamp, bites man in mangrove swamp during day)	Steffan	1966
pandani Stone	Leaf axils of *Pandanus*; enter houses at night, vicious biter during early morning, by day and late evening; 197°	Bohart & Ingram	1946
	Occasionally in taro; possible disease vector; 197	Bohart	1957
	Fields; ---; 197	Travis	1947
papuensis (Taylor)	Coconut husk, clear water in log cracks; ---; 50	Laird	1946
	---; ---; 50, 283 (Tree holes, rock pools, drum heads, on paper, sunlit ruts and coral pools)	Steffan	1966
	Tree holes, shaded rock pools, sunlit rut with decaying vegetation, sunlit fresh water in coral pool; April, June, Sept.-Oct.; 148	King & Hoogstraal	1946
	Small rock pools with decaying vegetation beside stream; ---; 148	Lee	1944
parasimilis King & Hoogstraal	Crayfish hole in rain forest, pools at edge of swamp; bites man by day; 148°	Steffan	1966
pecuniosus Edwards	Hollow bamboo stems; bites at light, Jan.-Feb.; 32°	Cooling	1924 b
	Tree holes; ---; 32	Lee	1944
perkinsi Marks	Peaty swamp pools in open heath country; bites by day, Apr., Dec.-Feb.; 32°	Dobrotworsky	1965
pernotatus Farner & Bohart	Tree holes, coconut husks, artificial containers; ---; 220	Perry	1946
	Axil of taro leaf; ---; 220	Farner & Bohart	1945
perryi Belkin	Crabholes; ---; 283	Belkin	1962
pipkini Bohart	---; July-Sept.; 66°. ---; Aug.; 236	Bohart	1957
plagosus Marks	---; rare; 32	Dobrotworsky	1965
plumiferus King & Hoogstraal	Buttress of large rain forest tree and tree holes; ---; 148	Steffan	1966

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
AEDES	---; ---; 32	Cooling	1924 a
poecilus (Theobald)	---; ---; 148 (Axils of aroid-type plants, banana, *Abaca* and *Pandanus*, rests in deep shaded thickets and ravines, bites man day or night)	Steffan	1966
polynesiensis Marks	---; ---; 1, 83, 97, 107*, 199, 263, 281, 308, 314, 315 (Semi-domestic, tree holes, coconut husks and shells, artificial containers, crabholes, bites man, diurnal, peak of activity in late afternoon, most important vector of nonperiodic filariasis)	Belkin	1962
	---; naturally infected with *Wuchereria bancrofti*; 83. ---; naturally and experimentally infected with non-periodic *W. bancrofti*; 107. ---; naturally infected with non-periodic *W. bancrofti*; 263. ---; experimentally infected with non-periodic *W. bancrofti*; 281	Raghavan	1961
postspiraculosis Dobrotworsky	Temporary pools with or without vegetation; bites by day; 32°	Dobrotworsky	1965
priestleyi Taylor	---; ---; 32	Edwards	1924
procax Skuse	---; rare; 32	Dobrotworsky	1965
pseudalbopictus (Borel)	---; ---; 219	Stone et al.	1959
pseudomediofasciatus Theobald	---; ---; 32	Cooling	1924 a
pseudonormanensis Marks	Clear, fresh water drain, muddy rock pool, water hole, around grass tufts, shaded trench; bites by day in forest; 32°	Marks	1949
	---; ---; 32	Stone et al.	1959
pseudoscutellaris (Theobald)	---; ---; 83, 114, 263**, 281, 283°, 308, 314. ---; carrier of non-periodic filariasis; 107 (Coconut shells and husks, cacao pods, tree holes, artificial containers, crabholes, holes in lava, cut bamboo, water with high organic contents, in low growing vegetation, under houses, bite all day, particularly on cloudy days and in deep shade, prefers man)	Bohart & Ingram	1946
	---; ---; 97 (Tree holes, coconut husks, cacao pods, small shaded water collections of high organic content, concrete drains, artificial containers)	Knight et al.	1944

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
AEDES *pseudoscutellaris* (Theobald) (cont.)	---; ---; 97*, 107*, 199, 219, 263, 281, 314 (Small collections of water in coconut shells and husks, tree holes, cacao pods, open concrete drains, hollow tops of coconut stumps, tin cans, rot holes, holes in lava, crab holes, wooden drums, bamboo stumps, small containers of water with high organic content, bites by day in shade)	Farner & Bohart	1945
	Tree holes, bamboo, native gongs, crabholes; ---; 107	Belkin	1962
	---; naturally and experimentally infected with non-periodic *Wuchereria bancrofti*; 107, 245, 263, 281	Raghavan	1961
	---; ---; 245*	Oman & Christenson	1947
	Coconut shells, tins, tree holes, ground puddles; bite during day but most active in dense shade at dawn and dusk; 263	Byrd et al.	1945
pulcherrimus (Taylor)	Tree holes; ---; 32	Knight et al.	1944
purpuraceus Brug	---; ---; 32	Lee	1944
	---; near river; 148	Brug	1932
purpureifemur Marks	---; ---; 32	Stone	1961
purpureus (Theobald)	Tree holes; ---; 32	Taylor	1944
	---; river bank; 148	Brug	1932
purpuriventris Edwards	Shaded ground pools, pits, flooded burrows; bites by day in spring and early summer and bites only after sunset, Dec.-Jan.; 32°	Dobrotworsky	1965
	---; ---; 32	Lee	1944
quadrifolium Brug	---; ---; 148	Steffan	1966
quadrispinatus King & Hoogstraal	---; ---; 148	Steffan	1966
quasirubithorax (Theobald)	Tree holes, artificial containers; ---; 32	Lee	1944
	---; ---; 32, 148 (Tree hole, concrete well and rock pool)	Knight & Marks	1952

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
AEDES quasiscutellaris Farner & Bohart	---; ---; 50, 283 (Tree holes, coconut husks and shells, artificial containers, *Pandanus* leaf axils, bites man)	Steffan	1966
	Coconut husks and shells, *Pandanus* leaf axils, artificial containers; in the bush; 283°	Belkin	1962
	Tree holes, coral pockets, water with high organic content; ---; 283	Perry	1949
	Wells, canoes; ---; 283	Knight et al.	1944
	---; common; 283	Perry	1948
	Tree holes, coconut shells, artificial containers; bites by day; 289°	Oman & Christenson	1947
queenslandis (Strickland)	Wells; ---; 32	Edwards	1924
quinquelineatus Edwards	---; ---; 32	Edwards	1922
ratcliffei Marks	---; ---; 32	Stone	1961
reesi King & Hoogstraal	---; ---; 148	Steffan	1966
roai Belkin	Tree holes; ---; 283	Belkin	1962
robinsoni Belkin	Tree fern stump, tree hole; ---; 268	Belkin	1962
rotanus Bohart & Ingram	*Pandanus* leaf axils, tree holes, artificial containers; June, Oct.; 197°	Bohart	1957
rotumae Belkin	Tree holes, coconut shell, artificial containers; in the bush, bites man at night, suspected vector of filariasis; 107°	Belkin	1962
rubiginosus Belkin	---; ---; 283	Steffan	1966
rubrithorax (Macquart)	Woodlands, swamps, ground and rock pools, tree holes and artificial containers; commonly bites man in bushes; 32°	Dobrotworsky	1965
	---; day biter; 32°	Mackerras	1927a
	---; ---; 32	Edwards	1924
rupestris Dobrotworsky	Polluted rock pools in forest; bites by day; 32°	Dobrotworsky	1965

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
AEDES	Irrigated areas; Nov.-Apr.; 32	Dobrotworsky	1965
sagax (Skuse)	---; in tussock near swamp, bite by day and dusk, June and Oct.; 32°	Mackerras	1927a
saipanensis Stone	Leaf axils of *Pandanus* and taro, tree holes, coconut shells, close to village on the shore of lake; bites man during day, July, Sept.-Oct.; 197°	Bohart	1957
samoanus (Grünberg)	---; ---; 1	Stone et al.	1959
	---; ---; 114, 283 (Leaf axils of taro and related plants)	Knight et al.	1944
	Leaf axils of taro, mat grass and *Pandanus*; common, bites by night; 263°	Byrd et al.	1945
	Leaf axils of *Colocasia, Alocasia* and *Cyrtosperma*; ---; 263	Stone & Bohart	1944
	---; artificial lights at night, in villages, suspected vector of filariasis; 263	Belkin	1962
schlosseri Belkin	Leaf axils of *Pandanus*, taro axils; ---; 283	Belkin	1962
scutellaris (Walker)	---; ---; 32, 83, 97, 114, 121, 134, 179, 219, 281, 308, 314 (Tree holes, artificial containers, transmits *Wuchereria bancrofti*)	Smart	1943
	Clear, fresh water occasionally with high organic content in artificial containers, coconut husks; bites readily especially on dull days, inside and outdoors, possible vector of filariasis; 50°	Laird	1946
	---; ---; 50, 66 (Artificial containers, coconut shells and husks, fallen coconut fronds, tree holes, rot holes on logs and split bamboo)	Steffan	1966
	Tree holes; Mar.; 66°. ---; possible vector of dengue; 148°, 220°. ---; Mar., Nov.-Dec.; 236°. ---; ---; 283° (Artificial containers, coconut shells, tree holes, puddles, spathes, leaves, leaf axils, wells, bites during the day in the shade, but feeds at dusk, readily enters buildings)	Bohart	1957
	Tree holes, old tires, clam shells, soapstone drains; Feb.; 107	Lever	1943a
	---; ---; 107*	Farner	1943

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
AEDES scutellaris (Walker) (cont.)	Temporary collections of water, clear and stagnant, empty coconut shells, coconut leaves and fronds on the ground, artificial containers, shaded locations, rarely in puddles, leaf axils of *Pandanus*, rock pools, bamboo stumps, wells; bites by day in cool, shady place, in tents and buildings at dusk; 148[a°]. ---; ---; 220	Penn	1947
	Half coconut shells and rot holes in trees containing water, water containers in native village, house tanks, beached canoes; ---; 148	Taylor	1934
	---; ---; 148, 220, 236, 283 (Coconut shells, husks, fallen fronds, tree holes, rot holes on fallen logs, in split bamboo, artificial containers, hovers about humans in shaded areas near habitations)	Knight & Hull	1952
	---; ---; 199	Edwards	1935
	Coconut husks and shells, tins, tree holes and concrete drains; ---; 263	Barraud	1934
scutellaris andrewsi Edwards	---; ---; 179	Taylor	1934 a
scutellaris gurneyi Stone & Bohart	---; ---; 283	Manson-Bahr	1959
scutellaris hakanssoni Knight & Hurlbut	---; ---; 66	Manson-Bahr	1959
scutellaris hebrideus Edwards	---; experimental vector of dengue; 32°. ---; ---; 148	Mackerras	1946
	---; ---; 220	Taylor	1934 a
	---; ---; 268, 283	Lever	1934
scutellaris hensilli Farner	---; ---; 66	Manson-Bahr	1959
scutellaris horrescens Edwards	Tree holes in ivy swamp; enter houses, bites by day, Feb.-June; 107°	Paine	1943
	Tree holes in forest, coconut husk in plantation; ---; 107	Edwards	1935 a

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
AEDES *scutellaris horrescens* Edwards (cont.)	Bamboo stumps, tree ferns, artificial containers; ---; 107	Lever	1945
	Tree holes containing damp leaf-mould; ---; 107	Lever	1944
scutellaris katherinensis Woodhill	---; ---; 32	Colless	1963
scutellaris marshallensis Stone & Bohart	---; ---; 121, 200	Manson-Bahr	1959
scutellaris pernotatus Farner & Bohart	---; ---; 220	Manson-Bahr	1959
scutellaris polynesiensis Marks	---; ---; 1, 83, 97, 107, 114, 253, 281	Manson-Bahr	1959
scutellaris pseudoscutellaris (Theobald)	Taro pits, hollow tree stumps, coconut shells, artificial containers; bites day and night; 97*°	Venner	1944
	---; possible vector of non-periodic filariasis; 97, 263, 308. Tree holes, coconut shells, leaf axils of *Apinia*, and taro plants, artificial containers; possible vector of filariasis and dengue, semi-domestic, common, Aug.-Oct., Dec.; 107. ---; suspected vector of dengue; 148	Lever	1944
	Brackish water, stagnant stream, rock pools, rock holes, muddy swamp; bite by day and night, enter houses, Feb.-May; 107°	Paine	1943
	---; principal vector of filariasis; 107*, 263*	Levine & Harper	1947
	---; naturally infected with *Wuchereria bancrofti*; 107*	Manson-Bahr	1959
	---; ---; 107, 199, 263, 281 (Broken coconut shells, intermediary host of non-periodic *W. bancrofti*)	Taylor	1938
	Fresh water, artificial containers, coconut shells, tree holes, fallen leaves; domestic daytime biter in shade; 197°	Farner	1944
	Coconut hulls; ---; 197. ---; ---; 205*	Farner	1944a

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
AEDES *scutellaris* *pseudoscutellaris* (Theobald) (cont.)	---; common, bites by day; 199*°	Mumford & Adamson	1934
	Artificial containers, opened coconuts, sagging canvas, fallen leaves, rot holes in trees; bites by day in dense shade, common, rests in grass, vines, under brush, beneath houses; 263°	Byrd et al.	1945
	Coconut husks, natural and artificial containers of pure water; enters houses, attack man by day, among vegetation by night, naturally infected with *Wuchereria bancrofti*; 281°. ---; ---; 289 (Vector of filariasis)	Galliard et al.	1949
scutellaris *quasiscutellaris* Farner & Bohart	---; ---; 283	Manson-Bahr	1959
scutellaris *scutellaris* (Walker)	---; ---; 32, 66, 220	Colless	1963
	---; ---; 50, 148, 236, 283 (Coconut shells, tree holes, leaf axils, split bamboo, puddle, well, artificial containers, bites man). ---; carrier of dengue; 148	Marks	1954
	Cup fungus, coconut husks; ---; 148	King & Hoogstraal	1946
scutellaris *scutoscriptus* Bohart & Ingram	---; ---; 66	Manson-Bahr	1959
scutellaris *tongae* Edwards	---; ---; 114*	Manson-Bahr	1959
	---; ---; 268	Lever	1934
scutellaris var. *variegatus* Doleschall	---; ---; 283*	Lever	1934
scutoscriptus Bohart & Ingram	Tree holes, artificial containers; Jan., July, Nov.-Dec.; 66	Bohart	1957
	---; ---; 283 (Tree holes, artificial containers, possible vector of non-periodic filariasis)	Marks	1954
sentanius King & Hoogstraal	Hog wallow in sago swamps, shallow boot prints in dense forest; April-June, Dec.; 148	Steffan	1966
senyavinensis Knight & Hurlbut	Common in clear water, axils of palms, artificial containers; trap, Jan.-Feb., July; 66	Bohart	1957

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
AEDES *silvestris* Dobrotworsky	Pools with clear or cloudy water exposed to the sun; bites by day and bites only after sunset during hot weather, Mar., Aug.-Nov.; 32°	Dobrotworsky	1965
similis (Theobald)	---; ---; 32, 148 (Clear pools in marshes)	Lee	1944
	---; vicious, persistent day biters in shaded jungle and rain forest; 50°	Laird	1946
	---; ---; 50	Steffan	1966
simplus King & Hoogstraal	---; edge of forest; 148	Steffan	1966
solomonis Stone & Bohart	Axils of swamp plants; ---; 283	Stone & Bohart	1944
	Leaf axils of *Pandanus*; ---; 283	Steffan	1966
spilotus Marks	Ground pools, shallow and grassy, exposed to the sun or partly shaded with clear or cloudy water; bites by day; 32°	Dobrotworsky	1965
spinosipes Edwards	---; ---; 32	Edwards	1922 a
stanleyi Peters	Tree holes; ---; 148	Steffan	1966
stricklandi Edwards	---; ---; 32	Edwards	1924
	---; bites by day; 32°	Dobrotworsky	1965
subalbirostris Klein & Marks	---; in a hotel; 222	Belkin	1962
subalbitarsis King & Hoogstraal	Shaded rock pools, log holes; ---; 148	Steffan	1966
	Rot holes and artificial containers; ---; 148	Knight & Marks	1952
subaridorsum Marks	Tree stump; bites in open rain forest in late afternoon; 32°	Marks	1948
	---; ---; 32	Knight & Marks	1952
subbasalis Dobrotworsky	Rock pools in river and creek beds with vegetation exposed to the sun or partly shaded; bites by day; 32°	Dobrotworsky	1965
subtilis Stone & Bohart	Crabholes; ---; 107	Stone & Bohart	1944

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
AEDES			
tasmaniensis Taylor	---; ---; 32	Lee	1944
theobaldi (Taylor)	Clear or slightly muddy grassy gutters and hoof-prints; bites day and night in forest, scrub or open country, indoors; 32°	Marks	1949
	Clean or cloudy pools, ditches with grassy edges, irrigated areas; common, all year; 32	Dobrotworsky	1965
theobaldi eidsvoldensis Mackerras	---; bites indoors at dusk and night; 32°	Marks	1949
	---; bites by day; 32°	Mackerras	1927
	---; May-Aug.; 32	Minter	1950
tongae Edwards	Coconut husks, tree holes and wells; ---; 1	Farner et al.	1946
	---; suspected vector of non-periodic filariasis; 114. ---; ---; 283 (Coconut husks and tree wells)	Farner & Bohart	1945
	---; ---; 114°	Belkin	1962
	---; ---; 281	Knight et al.	1944
toxopeusi Bonne-Wepster	At 3800 meters elevation; ---; 148	Bonne-Wepster	1948
tremulus (Theobald)	Wells, casks, tree holes; ---; 32	Edwards	1924
	Artificial containers; ---; 32°	Dobrotworsky	1965
	---; ---; 50, 148 (Tree holes, wells, artificial containers)	Knight et al.	1944
	Tree holes; ---; 14	Edwards	1924
trispinatus King & Hoogstraal	---; ---; 148	Steffan	1966
trukensis Bohart	---; ---; 66	Bohart	1957
tsiliensis King & Hoogstraal	Tree holes; ---; 148	Steffan	1966
tubbutiensis Dobrotworsky	Back waters in creek beds, rock pools exposed to the sun, in wooded country at 1,800 feet elevation; ---; 32	Dobrotworsky	1965

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
AEDES tulagiensis Edwards	*Pandanus* leaf axil, tree hole; ---; 268	Belkin	1962
tulliae Taylor	Creek bed containing pot holes of water; open forest country, bites man in late afternoon; 32°	Taylor	1929
	---; ---; 32	Knight et al.	1944
turneri Marks	---; ---; 32	Stone	1963
uniformis (Theobald)	---; ---; 32	Cooling	1924 a
upolensis Marks	Hole in top of tree fern stump; ---; 263°	Belkin	1962
vandema (Strickland)	---; ---; 32	Edwards	1924
variegatus Doleschall	---; ---; 32, 50, 107, 114, 148, 219, 220, 222, 283 (Old coconut husks and cacao pods)	Edwards	1924
	---; ---; 50, 148 (Half coconuts, rot holes in trees, wells in native gardens and beached canoes, in houses and huts, common and diurnal)	Hill	1925
	---; ---; 97, 121, 245	Roy & Brown	1954
	Tree holes, crabholes, coral rock pools, coconut husks and shells with leaves, leaf axils of *Colocasia indica*, wells, artificial containers; ---; 107. Wells in palms, coconut and bamboo stump, cacao pods, crabholes, drains, holes in lava, artificial containers; ---; 263	Paine	1934
	---; ---; 107, 148*, 179, 219 (Fresh water with decaying vegetable matter chiefly in holes and crevices in trees, in cracks in lava, coconut holes, husks and shells, rest in dry holes, under leaves and bark of trees and in houses by night, intermediate host of *Wuchereria bancrofti*, bites by day)	Cilento	1924
	---; ---; 107*	Edwards	1922
	Tanks, guttering and other domestic waters; Dec.; 148	Holland	1933
	Tree rot holes; ---; 263	Buxton	1926

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
AEDES *variegatus* (Doleschall) (cont.)	In forests; ---; 263	Buxton & Hopkins	1925
	Open coconut husks containing water, leaf axils of Taro, wild in path of forest, tree holes, artificial containers; bites occasionally; 283°	Paine & Edwards	1929
variegatus var. *hebridius* Edwards	Tree holes, coconut shells; bite by day; 220°	Buxton & Hopkins	1927
variegatus var. *pseudoscutellaris* (Theobald)	---; ---; 83, 199, 281, 308. Coconut shells, small cavities in trees, tree-wells; ---; 97. ---; main carrier of non-periodic filariasis; 107. ---; carrier of non-periodic filariasis; 263	Buxton & Hopkins	1927
	---; common in plantations and forest areas, bites by day; 107°	Paine & Edwards	1929
	Coconut husks and shells, rot holes in trees, small tins, cacao pods, concrete drains, in small dark places containing water with organic content; ---; 263°	Edwards	1928
variegatus *tongae* Edwards	Coconut husks and tree wells; possible vector of filariasis; 114.	Buxton & Hopkins	1927
	---; ---; 114*	Manson-Bahr	1959
variegutus (Bigot)	Coconut and cocoa shells, tree holes, shells; ---; 148	Brug	1931
variepictus King & Hoogstraal	Tree holes; ---; 148	Steffan	1966
varuae Belkin	---; ---; 268, 283 (Tree fern stumps, log holes, coconut shell, fallen *Pandanus* leaf, and rain barrels)	Steffan	1966
vexans Meigen	---; ---; 32, 107, 114, 148, 219, 220, 263 (Temporary ground pools, roadside ditches, foul water, grassy pools)	Knight et al.	1944
	---; bite by day; 97°. Shallow water; ---; 107. Tree wells; ---; 114. Shallow pools; ---; 263	Buxton & Hopkins	1927
	Pond margins, rain pools, hoof marks, among grass and vegetation; bites by night, common; 107°	Paine	1943
	Ditch, puddles, ponds; enters houses, Jan.-Feb.; 107	Lever	1943 a
	---; ---; 148, 219, 263 (Wheel ruts, bomb craters, marsh pools with vegetation, creekbed pools)	Lee	1944

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
AEDES *vexans* Meigen (cont.)	---; experimentally transmits Japanese "B" encephalitis; 179	Hammon et al.	1949
	Fresh water pools, ruts; ---; 219	Perry	1950
	Temporary rain puddles, grassy swamps, drainage ditches; ---; 220	Perry	1946
	Artificial container among rocks; night and day biter; 222°	Graham	1939
	On and near coast; ---; 263 (Always in shallow temporary pools and marshes)	Edwards	1928
	---; abundant and annoying in jungle and coconut-grove area, bites by day; 289°	Oman & Christenson	1947
vexans *nocturnus* (Theobald)	---; ---; 32, 107, 148, 219, 220. Tree hole; ---; 114. Temporary rainwater pools, artificial containers; bite at night; 197°. ---; edge of woods at dawn; 200. Partially dried marshes, pig wallows, roadside ditch; ---; 263 (Temporary rain pools, road ruts, roadside ditches, grassy depressions, bite day and night)	Bohart & Ingram	1946
	---; July-Aug.; 66°. ---; bites by day, Mar., June, Sept.-Dec.; 197°. ---; indoors, Dec.; 236° (Ground pools, rain barrels, coconut shells, artificial containers, bloodsucker at night and by day)	Bohart	1957
	---; ---; 97	Stone et al.	1959
	Rainpools with vegetation, marshy hoofprints; ---; 197	Yamaguti & La Casse	1950
victoriensis Taylor	---; ---; 32	Cooling	1924 a
vigilax (Skuse)	Mangrove swamps; enter houses, abundant and most annoying, bite day and night; 32°	Mackerras	1928
	Brackish water, salt marshes, fresh water ground pools; ---; 32	Dobrotworsky	1965
	Tea-tree swamp; ---; 32	Bearup & Laurence	1947
	---; ---; 32, 148 (Fresh and brackish water swamps, sometimes in salt water, fierce biter, especially in the afternoon, relatively poor host of *Wuchereria bancrofti*)	Taylor	1943 a

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
AEDES vigilax (Skuse) (cont.)	---; enter houses, March; 107 (In salt water)	Lever	1940
	---; ---; 107°	Paine	1943
	---; ---; 107, 148, 219, 220, 283 (Salt or brackish water or fresh water, ground pools, tidal swamps, holes in mangrove trees, artificial containers, bites man)	Steffan	1966
	Brackish marsh; ---; 148	Lee	1944
	---; suspected vector of non-periodic filariasis; 183. ---; vector of non-periodic filariasis; 219* (Brackish water in mangrove swamps and salt marshes, also in rock holes and fresh water ground pools, attack man day and night)	Belkin	1962
	Salt and brackish marshes; ---; 219	Oman & Christenson	1947
	---; common and possible vector of dengue; 219	Perry	1948
	---; naturally infected with *Wuchereria bancrofti*; 219	Raghavan	1961
	---; bites day and night, common; 219°	Perry	1950
	Salt water pool; bites viciously during day; 220°	Perry	1946
vittiger (Skuse)	Sunlit clear or cloudy pools with grassy edges, wells; bites by day; 32°	Dobrotworsky	1965
	Clear or muddy water holes, in forest country and near river; sandstone gullies, Jan. and Dec., rare; 32	Mackerras	1927 a
	Margins of small muddy waterholes; ---; 32	Lee	1944
	---; May; 32	Minter	1950
wallacei Edwards	---; ---; 32 (Axils of *Pandanus*, banana, taro and pineapples, enters houses and bites man at night)	Steffan	1966
	Leaf axils of *Pandanus*; common, enters houses, bites man, especially by night, Jan.-Feb.; 50°	Taylor	1934
	Leaf axils of banana, taro and pineapple; enters houses at night; 148°	Marks	1948
wasselli Marks	Shallow, swampy creek with dense vegetation; ---; 32	Marks	1948

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
AEDES	---; bites in late afternoon; 32°	Taylor	1929
wattensis Taylor	---; ---; 32	Dobrotworsky	1965
wilsoni (Taylor)	---; bites by day; 32°	Ferguson	1926a
zonatipes Walker	---; ---; 32, 148, 236. Artificial containers; ---; 66. Partly brackish elevated coral rock holes, containing dead leaves; ---; 220 (Coconut shells, tree holes, artificial containers)	Bohart & Ingram	1946
AEDEOMYIA *catasticta* Knab	Swamps with vegetation; ---; 32	Lee	1944
	---; ---; 32, 66, 148, 197, 283 (In marshy ponds, irrigation reservoirs, along grassy banks of coastal lagoons in full sunlight with dense vegetation)	Delfinado	1966
	Swamps, underwater stems of *Nitella*; Mar., July, Aug., Nov., Dec.; 66. ---; at light, all year; 236	Bohart	1957
	Swampy grounds, river margins with algae; ---; 107	Lever	1945
	Grassy banks of small coastal sunlit lagoon anchored in algae within dense vegetation; ---; 283	Belkin	1962
venustipes (Skuse)	Permanent swamps, vegetated dams and pools; all year; 32	Dobrotworsky	1965
	---; enter houses; 32	Hill	1922
AEDIMORPHUS *australis* var. *dorrini* Taylor	---; rare, enter houses, Dec.; 32°	Hill	1917
ANISOCHELEOMYIA *nivipes* Theobald	---; indoors, May; 32	Hill	1922
	---; July; 32	Taylor	1913
ANOPHELES *aconitus* Donitz	---; ---; 148* (Rice fields, fresh water ponds, canals and occasionally in streams)	Wilcocks	1944
aitkenii James	---; ---; 148	Stone et al.	1959
aitkenii *aitkenii* James	---; ---; 148 (Shaded vegetation at the edge of flowing streams, springs and marshes)	Lee & Woodhill	1944
aitkenii var. *papuae* (Swellengrebel & Swellengrebel)	---; ---; 148	Christophers	1924

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
ANOPHELES amictus Edwards	Sunny or shaded, fresh, muddy running water in pools, trenches, swamp margins with green algae, rock pools, artificial containers; experimentally infected with malaria and *Wuchereria bancrofti*; 32	Bonne-Wepster & Swellengrebel	1953
	Associated with green algae in running water; bites after dusk, March-June; 32°	Mackerras	1927
	Fresh and brackish water; enter houses, possible vector of malaria; 32	Covell	1944
	---; ---; 32*	Raghavan	1961
	---; ---; 32, 148 (Permanent and sunlit waters, intermediary host of *Wuchereria bancrofti*)	Taylor	1938
	---; ---; 32, 148 (Muddy or clear hoofprints, grassy channels, clogged street gutters)	Knight et al.	1944
	In pools with green algae and running water; enter houses and readily bites man; 148°	Russell et al.	1943
amictus amictus Edwards	Shallow muddy pools, exposed or partly shaded to sunlight, swamp margins, among green algae in fresh running water, rock pools, slit trenches, rarely in brackish water; experimentally infected with *Wuchereria bancrofti*; 32°	Lee & Woodhill	1944
	---; experimentally infected with *Plasmodium vivax*, *P. falciparum*, *P. malariae*, bites man in captivity; 32°	Mackerras & Roberts	1947
	---; experimental transmission of malaria, abundant in Feb.-Apr.; 32 (Hoof-holes at the edge of billabongs, soakage holes in dry riverbeds, permanet water holes, drainage and ornamental pools, artificial containers)	Black	1950
amictus hilli Woodhill & Lee	Polluted and brackish water, salt water pools, inland muddy pools, slit trenches and shallow weedy margins of fresh water swamps, exposed and partly shaded; naturally and experimentally infected with malaria, enters houses and tents, active after sunset; 32	Lee & Woodhill	1944
	---; Jan.-April; 32°. ---; around swamp, May-July; 148	Roberts & O'Sullivan	1948
	---; experimentally infected with *Plasmodium falciparum*; 32	Mackerras & Roberts	1947
	---; ---; 32, 148 (Sunny or shaded, fresh, brackish, salt, polluted, muddy water in pools, trenches, swamp margins, artificial containers; enters houses and tents, bites after sunset, naturally and experimentally infected with malaria)	Bonne-Wepster & Swellengrebel	1953

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
ANOPHELES			
annulatus de Rook	Small stream in jungle swamp; ---; 148	Steffan	1966
annulipes Walker	Shallow stagnant pools in creek beds, lagoons, wells, irrigation channels, hoof-holes; bite day and night, indoors, active from dusk until day break, all year; 32°	Hill	1922
	Clean or muddy, ground water, casual or permanent, along banks of creeks and rivers; enter houses, capable of transmitting benign tertian malaria; 32	Taylor	1943a
	Small swamps, soakage and rock pools, clear fresh running water with vegetation; rarely in houses, probable vector of malaria; 32	Mackerras	1928
	Gravel beds on creek banks, swamp margins, wheel tracks, slit trenches, brackish, weedy ponds, artificial containers; experimental transmission of malaria; 32. ---; bites after sunset; 148°	Lee & Woodhill	1944
	Ground pools with vegetation shaded and exposed to the sun, fresh and brackish, clear and slightly muddy water; ---; 32	Dobrotworsky	1965
	---; common, experimentally infected with *Plasmodium vivax, P. falciparum* and *P. malariae*; 32	Mackerras & Roberts	1947
	---; ---; 32*	Taylor	1938
	---; ---; 50*	Manson-Bahr	1959
	In shaded pools in intermittent stream beds, side pools of flowing streams, grassy seepage or overflow areas; ---; 148 (Ground pools of limited depth, rock pools with algae, open or partially shaded fresh or brackish water)	Boyd	1949
annulipes annulipes Walker	Shallow grassy pools, among vegetation on marshy edges, creek, surface wells, rock pools and occasionally brackish water; enter houses; 32*°. ---; ---; 148*	Russell et al.	1943
annulipes mastersi Skuse	---; ---; 32	Russell et al.	1943
annulipes var. *moluccensis* Swellengrebel	Brackish drains and swamps; ---; 50, 283	Buxton & Hopkins	1927

TABLE 1 - MOSQUITOES (continued

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
ANOPHELES atratipes Skuse	Sluggish, slightly muddy creeks with fine silt bottom, with some aquatic vegetaion; sylvan day-biter, Sept.; 32°	Mackerras	1927
	Sandstone gullies, sluggish streams with sandy bottoms; in forest, rare; 32	Russell et al.	1943
	Tea-tree swamps; Oct.-Feb.; 32	Dobrotworsky	1965
	Fresh water swamps with or without vegetation, rock pools; ---; 32	Bonne-Wepster & Swellen-grebel	1953
	---; common; 32	Taylor	1946
atripes (Skuse)	---; ---; 32	Ferguson	1926
bancroftii Giles	Shallow, slow-moving water overgrown with vegetation; rarely enter houses, bites in the evening; 32*°, 148*°	Russell et al.	1943
	Shaded swamps; bites in and out of doors; 32°. Old, cut-off course of river shaded by reeds, algae, *Azolla*; bites man in and out of doors, suspected vector of malaria; 148°	Bonne-Wepster & Swellen-grebel	1953
	---; possible carrier of malaria; 32	Ferguson	1926
	---; ---; 32, 50, 148 (Large bodies of water with vegetation, occasionally in ditches and canals)	Bohart	1945
	---; ---; 32, 148 (Semi-shaded permanent and casual water, intermediary host of malaria)	Taylor	1938
	Partially shaded clear lakes with vegetation; ---; 148*	Farner	1943
	---; Sept., Oct., naturally and experimentally infected with *Wuchereria bancrofti*; 148	Elsbach	1937
	---; ---; 148*	Manson-Bahr	1959
bancroftii bancroftii (Giles)	---; experimentally infected with *Plasmodium vivax* and *P. falciparum*; 32	Mackerras & Roberts	1947
	---; in and outdoors; 32°. ---, ---; 148° (Swamps, in heavy woods and dense aquatic growth)	Boyd	1949

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
ANOPHELES bancroftii bancroftii (Giles) (cont.)	---; experimental transmission of malaria, Feb.-Apr.; 32 (Hoof-holes at the edges of billabongs, soakage holes in dry river beds, permanent water holes, drainage and ornamental pools, artificial containers)	Black	1950
bancroftii pseudobarbirostris Ludlow	Sago and other swamps, heavy vegetation along margins of lagoons and sluggish streams, heavy woods and dense aquatic growth; ---; 148°	Boyd	1949
	Clear pools with aquatic vegetation in shade and with little sunlight in forest; ---; 148	Lee & Woodhill	1944
	---; at 100 meters elevation, Apr.; 148	Bonne-Wepster	1948
barbirostris van der Wulp	---; common; 32	Taylor	1918
	---; naturally and experimentally infected with *Wuchereria bancrofti* and *W. malayi*, natural vector of *W. bancrofti* and experimental vector of *W. malayi*; 148	Raghavan	1961
	---; ---; 148 (Slowly running streams, swamps, ditches and wells with much vegetation, in houses, occasionally bites man)	Steffan	1966
	---; ---; 148 (Shaded clear water of streams and rivers, vegetated ponds and pools, borrow pits, ricefields, wells, salt water swamps, rarely enter houses)	Russell et al.	1943
	---; ---; 148 (Flowing ditches, canals, borrow pits, ricefields, wells, salt water swamps, bites in shade in day, experimentally infected with *Plasmodium vivax*)	Simmons & Aitken	1942
	---; ---; 148 (Semi-shaded permanent and casual water, intermediary host of malaria)	Taylor	1938
barbirostris var. *bancroftii* Giles	Sluggish streams and fresh water swamps with much vegetation; bites day and night, rarely indoors; 32°	Hill	1922
	Shade banks of small lakes; ---; 148**	Wilcocks	1944
barbirostris barbirostris van der Wulp	---; ---; 148 (Ponds, pools, and ricefields with vegetation, bites man)	Hsiao	1945
barbumbrosus Strickland & Choudhury	Partially shaded stagnant water; ---; 148	Lee & Woodhill	1944
	---; ---; 148 (Slow springs in jungle, ricefields, clear and sunny grass fringed streams, shaded stagnant water)	Bonne-Wepster & Swellengrebel	1953
	---; ---; 148 (Vector of malaria)	Farner	1943

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
ANOPHELES			
breinli Taylor	---; ---; 32	Knight et al.	1944
clowi Rozeboom & Knight	Road rut, pools, ditches in sunlight; ---; 148	Bonne-Wepster & Swellengrebel	1953
	---; ---; 283	Boyd	1949
colledgei Marks	---; ---; 32	Stone et al.	1959
corethroides Theobald	---; ---; 32	Christophers	1924
cristatus King & Baisas	---; ---; 148 (Small rock holes in dense shade)	Steffan	1966
derricki Taylor	---; ---; 32	Knight et al.	1944
farauti Laveran	---; ---; 32*, 50*°, 148*°, 220*°, 283*°	Russell	1956
	---; ---; 32, 50, 148, 220. ---; naturally infected with *Wuchereria bancrofti*; 268*. ---; infected with microfilaria of *W. bancrofti*, naturally and experimentally infected with *W. bancrofti*; 283 (River and stream margins with vegetations, springs, seepage areas, ponds, lagoons, and temporary ground pools of all sizes in open coastal areas or in wide river valleys, tolerant to organic pollution and brackish water, artificial containers, highest density in areas occupied by man and abundant in wells, taro gardens, ditches and temporary rainpools, feed on man, enter dwellings, repelled by artificial light, important vector of malaria, efficient vector of filariasis)	Belkin	1962
	---; edge of rain forest, Jan.-June; 148. ---; bed nets, indoors; 220, 283 (Semi-shaded pools with flotage, trailing or emergent vegetation or algae, in fairly thick woods, in vegetation or algae mats along streams and brackish pools, lagoons and mangrove swamps near coast, in saline water, holes in fallen tree trunks, coconut shells, artificial containers, bites man at night in houses)	Boyd	1949

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
ANOPHELES farauti Laveran (cont.)	---; naturally and experimentally infected with *Wuchereria bancrofti*; 148*. ---; naturally infected with *W. bancrofti*; 283	Raghavan	1961
	---; naturally infected with malaria, coastal regions, 800-2250 meter elevation; 148	Bonne-Wepster & Swellengrebel	1953
	Common at 1,100 feet elevation, in rivers, streams, springs, taro gardens, seepage areas, ponds, lake, swamps, marshes, open wells and brackish water, during rainy season, in temporary pools, puddles and road ruts; in houses, artificial shelters, naturally infected with *Wuchereria bancrofti*, possible vector of malaria, bite man usually at night, all year; 220°	Daggy	1945
	Bases of uprooted trees, borrow pits, ditches, hog wallows, coral pools with vegetation during rainy season, occasionally in coconut halves, tree holes, plant axils, potholes with floating mats of duckweed-Lemna; resting in tree buttresses in shaded jungle areas; 220*	Perry	1946
	Along coast, among roots of banyan trees, weeds and grass, artificial containers, on shaded moist walls, moist situations beneath large felled logs; ---; 220. Along coast; in native huts and tents under extremely high temperature in middle of the day; 283 (River and stream margins with vegetation, springs, wells, seepage areas, taro gardens, ponds, lagoons and swamps, all in open coastal areas, puddles, hog wallows, ruts, holes, hoofprints and bases of uprooted trees, bites outdoors from dusk to dawn, rests by day in cool moist shaded spot)	Belkin et al.	1945
	Roadside ruts, fox holes, bomb craters, slit trenches, borrow pits, pools in shaded mangroves, water exposed to sun; ---; 220°. ---; rarely in houses, during day, active at night; 283	Farner et al.	1946
	---; ---; 220*°, 283*°. In sunny, slightly brackish lagoons with emergent vegetation or flotage, temporary water catchments of many kinds, streams, river, ponds, seepage areas, open wells, fresh and tidal swamps and lagoons, man-made catchments, "fox holes", borrow pits, road ditches; by night found in dark portions of native huts or closed tents, by day in cool, moist, shaded places, most important malaria vector; 289*°	Oman & Christenson	1947

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
ANOPHELES farauti Laveran (cont.)	Ruts and holes; Aug.-Nov.; 283. ---; ---; 289 (In houses to bite man, vector of malaria)	Harper et al.	1947
	Exposed margins of stream, man-made catchments; in native huts; 283	Perry	1949
	---; bites by night; 283°	Levine & Harper	1947
	---; naturally infected with filaria; 283	Schlosser	1949
farauti farauti (Laveran)	---; ---; 32, 50, 148, 220, 283 (Many types stagnant and slow water, sometimes brackish, coconut shells, artificial containers, prefers open country)	Knight et al.	1944
farauti moluccensis Swellengrebel & Swellengrebel de Graaf	---; ---; 148 (All types water, brackish, fresh, running, stagnant, clean, dirty, coconut shells, artificial containers, in shade or sun)	Knight et al.	1944
incognitus Brug	---; ---; 148	Steffan	1966
insulaeflorum (Swellengrebel & Swellengrebel de Graaf)	---; ---; 148 (In quiet, shaded forest streams, often among debris in small nooks where the water is stagnant, also in exposed situations, seldom comes in contact with man)	Simmons & Aitken	1942
	---; naturally infected with *Wuchereria bancrofti*; 203	Raghavan	1961
jeyporiensis koliensis	---; naturally infected with *Wuchereria bancrofti*; 203	Manson-Bahr	1959
karwari (James)	Sunlit wheels rut along edge of bog, natural depressions, shallow water around grass stems, pitcher plants, shell holes; inside tents, attracted to lights, experimentally infected with malaria, bites readily after dark, Mar.-June; 148°	King & Hoogstraal	1946 a
	---; natural and experimental vector of *Wuchereria bancrofti*; 148*	Raghavan	1961
	---; naturally infected with *W. bancrofti*; 148*	Manson-Bahr	1959

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
ANOPHELES kanwari (James) (cont.)	---; ---; 148*	Russell	1956
	---; ---; 148 (Little streams, springs, seepage areas, ricefields, ponds, in houses, experimentally infected with *Plasmodium falciparum*)	Bonne-Wepster & Swellengrebel	1953
koliensis Owen	---; ---; 50, 148. Temporary pools in grasslands, along edge of jungle and where exposed to sunlight; in tents, huts, active all night, peak after midnight, naturally infected with *Wuchereria bancrofti*; 283	Belkin	1962
	---; Apr., July; 148	Bonne-Wepster	1948
	---; ---; 148, 283 (Semi-shaded pools with flotage, trailing or emergent vegetation or algae, in fairly thick woods, vegetation or algae mats along streams, brackish pools, lagoons and mangrove swamps near coast, in saline waters, holes in fallen tree trunks, coconut shells, artificial containers, bites man at night indoors)	Boyd	1949
	---; ---; 148, 283 (Sunny, temporary and permanent pools at edge of jungle and grasslands, enters houses, nocturnal, possible carrier of malaria)	Bonne-Wepster & Swellengrebel	1953
	Temporary pools along the edge of the jungle, prefer water exposed to sunlight; rests during day in native huts, greatest activity after midnight; 283°	Owen	1945
	---; naturally infected with *W. bancrofti*; 283	Raghavan	1961
	---; ---; 283*	Harper et al.	1947
	Alluvial plain area; possible vector of malaria; 289	Oman & Christenson	1947
longirostris Brug	---; ---; 50, 93, 148 (Swamps, overgrown back waters, seepage pools, wheel ruts, pig wallows, usually in shaded areas, bites man)	Steffan	1966
	Overgrown back waters, sago swamps, seepage pools, wheel tracks, pig styes, shaded or sunny, in or near jungle; in houses; 148°	Bonne-Wepster & Swellengrebel	1953
	Sago swamps, shallow grassy marginal pools, clearing in swamps, pools in jungle or semi-open woods; ---; 148	Boyd	1949

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
ANOPHELES *longirostris* Brug (cont.)	Swampy pools in jungle, near river banks exposed or shaded in sunlight; ---; 148	Lee & Woodhill	1944
	---; experimentally infected with *Plasmodium vivax* and *P. falciparum*; 148	Mackerras & Roberts	1947
longirostris var. *annulate* de Rook	Swamp with vegetation and low growth in the jungle;	Lee & Woodhill	1944
lungae Belkin & Schlosser	---; ---; 32*	Geigy & Herbig	1955
	Sago swamp; May; 148	King & Hoogstraal	1946 a
	---; ---; 148, 283 (Shaded, clear and cool water, jungle seepages, stream margins, pot holes and stream beds, rock holes, dense jungle swamps, temporary pools, muddy hog wallows, during rainy season, in coconut groves on coastal strip, rest in damp or wet places, partially or fully shaded, in jungle)	Bonne-Wepster & Swellengrebel	1953
	Seepage areas in jungle, along margins of streams, pot holes in stream beds, rock holes, temporary pools, prefers shade, "fox holes", hog wallows, old steel helmet, swamps, and coastal lagoons at mouths of streams, cool and clear water with high organic content; rest on trunks and buttresses of large trees in swampy jungle; 283	Belkin et al.	1945
	Coastal swamps and seepage areas, in shade; ---; 289	Oman & Christenson	1947
maculipennis Meigen	---; on a ship in May and Sept.; 222	Graham	1939
mastersi Skuse	---; ---; 32	Edwards	1924
meraukensis Venhuis	Margins of grassy swamps in open country, muddy and clear pools, hoof marks with or without algal growth, in polluted brackish water, back waters of rivers, exposed or partially shaded; indoors at daytime, active after sunset, abundant in Mar.-Apr.; 32°	Lee & Woodhill	1944
	---; experimentally infected with malaria; 32. Shallow pools in swamp, ditches, wheel ruts with algal, rain flooded ricefields, fresh, unshaded water; in houses; 148	Bonne-Wepster & Swellengrebel	1953
	---; experimentally infected with oöcysts of *Plasmodium vivax*; 32	Mackerras & Roberts	1947

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
ANOPHELES nataliae Belkin	Densely shaded springs, seepage areas, small creeks in the coral foothills, on top of floating vegetation or debris and margins of creeks with swift current, jungle streams at the point of emergence from coral caves; ---; 283	Belkin	1962
novaguinensis Venhuis	Pools in sago swamp; enters houses, bites at sundown; 32°	Lee & Woodhill	1944
	Clear, shallow, sunlit water with abundant algal growth; ---; 32. Small pool in sago wood; ---; 148 (Bites in and out of doors at sundown)	Bonne-Wepster & Swellengrebel	1953
palmatus (Rodenwaldt)	---; ---; 148 (Edges of streams, rivers, in swamps, seepage pools and rock holes, shaded with vegetation)	Steffan	1966
papuensis Dobrotworsky	Semi-rock pools, clear, well-shaded streamside pool with emergent vegetation; ---; 148	Steffan	1966
perplexus Taylor	River and creek; enters houses; 32°	Taylor	1943
perplexus perplexus Taylor	---; ---; 32	Knight et al.	1944
perplexus persimilis Taylor	---; ---; 32	Knight et al.	1944
powelli Lee	Shaded shallow swampy pools with vegetation; indoors; 32	Lee	1944 a
	---; rare; 32°	Boyd	1949
pseudobarbirostris Ludlow	---; ---; 32	Smart	1943
	---; ---; 148 (Clear, sunny or densely shaded pools with aquatic vegetation in jungle)	Bonne-Wepster & Swellengrebel	1953
	---; ---; 148 (Vector of malaria)	Farner	1943
pseudostigmaticus Dobrotworsky	Grassy edges of swamps with clean water in ground and rock pools exposed to the sun; ---; 32	Dobrotworsky	1965
punctulatus Dönitz	---; ---; 32, 50, 220, 268, 283 (Carrier of malaria)	Kumm	1929
	---; ---; 32, 50. ---; ---; 148 (Sunlit natural and artificial waters, banks of rivers and creeks, with or without vegetation, drains, trenches, swamps, hoofprints, puddle holes and sometimes brackish water pools, enter houses, bite by day if sky is overcast)	Taylor	1943a

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
ANOPHELES punctulatus Dönitz (cont.)	Temporary rain pools, small depressions, and roadside puddles; ---; 50. Seepage, running grass-covered plantation drains, beached canoes; ---; hole, dammed up stream, hot spring; ---; 220	Lever	1942
	---; ---; 50*	Manson-Bahr	1959
	Collections of exposed water; ---; 148*	Wilcocks	1944
	---; carrier of all three species of *Plasmodium*; 148. Sluggish stream with filamentous algae, taro swamp, stagnant swamps; ---; 220°. ---; ---; 263	Buxton & Hopkins	1927
	---; Jan.-June; 148. ---; bite by day indoors; 220° (Open pools, small pools in clay soil without vegetation, exposed to sun, wheel ruts, borrow pits, slit trenches and bomb craters, overflowed grassy areas and low aquatic vegetation along open stream margin, bites man day and night, in and outdoors)	Boyd	1949
	---; experimental vector of malaria; 148	Ferguson	1926
	---; naturally infected with malaria; 148	Harper et al.	1947
	---; ---; 219	Taylor	1934 a
	In shade or sun, fresh or brackish water, marshes, road edges, coconut groves, cacao plantations; ---; 220	Herivaux et al.	1939
	Sluggish streams with grassy banks, backwaters, small pools, broken bottles, rock holes; bites man by night or in shade by day; 283*°	Hetherington	1933
	Road ruts, temporary pools, margins of streams and sloughs, pot holes in drying stream beds, prefers sunlight, coastal plain near the mouths of rivers; March; 283	Belkin et al.	1945
	Small temporary areas of water, hoof marks or cavities, some in large pools, found in sunlight or shade, large and shallow rain water pool containing dead coconut leaves just above the beach; in houses; 283	Paine & Edwards	1929

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
ANOPHELES punctulatus Dönitz (cont.)	---; naturally infected with *Plasmodium*, found to harbor filarial worms; 283 (Road ruts, temporary pools, exposed margins of streams and sloughs, pot holes in drying stream beds, pools free from ve etation and flotage, prefer sunlight, bites man, active during early hours of day and in dwellings, involved in the transmission of periodic filariasis, naturally infected with malaria)	Belkin	1962
	---; naturally infected with filaria; 283	Schlosser	1949
	---; bites man freely in captivity; 289°	Oman & Christenson	1947
punctulatus farauti Laveran	Brackish water; naturally infected with malaria, enters houses, prefers shade, most active at night, Jan.-April; 32. ---; ---; 50*. Sago palm swamps, pools; hospital, May-Oct.; 148*	Roberts & O'Sullivan	1948
	---; common, bites in captivity, experimentally infected with *Plasmodium vivax*, *P. falciparum* and *P. malariae*; 32*°	Mackerras & Roberts	1947
	---; carrier of malaria; 32, 283	Roy & Brown	1954
	---; ---; 50*, 121*, 283*. ---; naturally infected with *Wuchereria bancrofti*; 220	Manson-Bahr	1959
	---; ---; 50, 148, 283 (Exposed, sunny water collections with or without vegetation, nocturnal, bites man readily, enters houses)	Steffan	1966
	Exposed waters, natural grassy pools, foxholes; in houses, Apr.; 148	King & Hoogstraal	1946 a
	Permanent water, artificial containers; intermediate host of tertian and quartan malaria; 220	Lever	1945
	---; naturally infected with *W. bancrofti*; 283	Schlosser	1949
punctulatus moluccensis Swellengrebel & Swellengrebel de Graaf	Common in low-lying coastal and inland areas, margins of shallow, open, vegetated swamps, brackish shaded water, sunlit muddy wheel ruts, hoofmarks; enters houses after dark to bite man, naturally and experimentally infected with malaria; 32*°. ---; ---; 50*. Brackish, partly shaded water with algal growth and vegetation, pools on sago swamps, jungle margins, at back-waters of creek; enters houses, naturally and experimentally infected with malaria, bites night, Nov., Dec., Jan.; 148°. ---; ---; 220*, 283*	Lee & Woodhill	1944

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
ANOPHELES punctulatus molluccensis Swellengrebel & Swellengrebel de Graaf (cont.)	Lagoons and potholes along river banks; common; 32. ---; feed by day if sky is overcast, feeds freely indoors from mid-afternoon until late at night; 50°. ---; ---; 148 (Sunlit artificial and natural waters, banks of rivers and creeks, with and without vegetation, drains, trenches, swamps, hoofprints, puddle holes and sometimes brackish water pools, follows man, enter houses, important intermediary host of malaria, efficient intermediary host of *Wuchereria bancrofti*)	Taylor	1943 a
	Water bodies exposed to sunlight among vegetation, floating leaves and algae, pig wallow, wheel ruts, swamps, coral pit, stream back waters, seepage pool, wells, treeholes and artificial containers; bites man in and near houses from 6:30 p.m. onward; 50°	Laird	1946
	Wells of villages, open swamps, backwaters of rivers and creeks; Nov.; 50	Taylor	1934
	In open sunlight, pools, puddles, brooks, drainage ditches, ponds, fresh and brackish river banks, hoof prints, artificial containers; in houses; 148	Farner	1943
	Any collection of water open to the sun, and large rivers; ---; 148**	Wilcocks	1944
	Clear streams and sago swamps, green slimy ponds, muddy pig wallows or puddles, drains, buffalo wallow; ---; 148	Holland	1933
	---; experimentally infected and experimental vector of *W. bancrofti*; 148 , 203. ---; naturally infected with *W. bancrofti*; 283*	Raghavan	1961
	---; common; 203	Farner	1944 a
	---; ---; 203, 220 (Active any time of the day, enter houses and bites man, malaria vector)	Covell	1944
	---; ---; 219	Taylor	1934 a
	---; ---; 263	Buxton & Hopkins	1927
	---; ---; 208	Smart	1943
punctulatus novaeguineensis (Venhuis)	---; ---; 148	Knight et al.	1944

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
ANOPHELES punctulatus punctulatus Dönitz	---; ---; 32*	Geigy & Herbig	1955
	---; ---; 32, 148 (Small pools, open, sunlit rain pools, margins of streams, in houses, bites all night). ---; possible vector of malaria; 220, 283	Russell et al.	1943
	Common in pools with clear water exposed to sunlight, wheel ruts, foot prints in muddy ground, drainage ditches; ---; 50	Laird	1946
	---; ---; 50*. In pools, in wheel tracks; in hospital, May-Oct.; 148*	Roberts & O'Sullivan	1946
	---; naturally infected with *Wuchereria bancrofti*; 50, 283. ---; ---; 121*	Manson-Bahr	1959
	Coast and inland up to 3,500 feet elevation, sunlit ground, temporary pools with algal growth, puddles, streambeds, slit trenches, wheel tracks, foot prints; ---; 148	Lee & Woodhill	1944
	Foxholes dug in fields; in houses, Apr.; 148	King & Hoogstraal	1946 a
	---; experimentally infected with *Plasmodium vivax, P. falciparum, P. malariae*; 148*	Mackerras & Roberts	1947
	---; naturally infected with *W. bancrofti*; 148* (Water exposed to sunlight, hoof prints, gutters, ditches, water tanks, water barrels, bilge water in boats, tin cans, coconut shells)	Farner	1943
	---; possible vector of filariasis, common; 148	Avery	1946
	---; ---; 268, 283 (All types stagnant or slow water, prefers open country)	Knight et al.	1944
	---; naturally infected with *W. bancrofti*, suspected vector of filariasis; 283	Schlosser	1949
solomonis Belkin, Knight & Rozeboom	Small tributary streams of larger rivers, pot holes in coral stream beds, along margins of streams, shallow taro swamp, deeply shaded areas in flotage of sticks or in leaves along margins of pools; rest in daytime on buttresses and trunks of large trees in swampy jungle areas, Feb., May, July-Sept., Nov., at 1500 feet; 283	Belkin et al.	1945

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
ANOPHELES stigmaticus Skuse	Small pools with filamentous algae in small creek bed in bush; in brush near waterfall, grass and bushes, Jan. and April; 32	Mackerras	1927
	In clear rock pools; experimentally infected with *Plasmodium vivax* and *P. faloiparum*; 32	Mackerras & Roberts	1947
	Cold, clean water in shade, mountainous areas, streamfed pools, in pits and rock pools at the edge of creeks; ---; 32	Dobrotworsky	1965
	---; experimentally infected with malaria; 32, 148	Lee & Woodhill	1944
	Ditches with clear, cold water, grassy banks; at an altitude of 1860 meters; 148	Bonne-Wepster & Swellengrebel	1953
stigmaticus corethroides Theobald	---; ---; 32	Taylor	1934a
stigmaticus stigmaticus Skuse	Small pools containing filamentous algae in gullies and small creekbeds at 6,000 feet elevation; ---; 32. ---; ---; 148	Russell et al.	1943
	Small water holes or streams; ---; 32	Knight et al.	1944
	---; ---; 32*	Geigy & Herbig	1955
subpictus Grassi	---; ---; 50. ---; in houses; 148° (Fresh to salty, dirty and polluted water, excavations, hollows, borrow pits, buffalo wallows, ricefields, drains, pools, furrows, water tanks, enters houses, experimental infection of *Plasmodium falciparum* and *P. vivax*)	Bonne-Wepster & Swellengrebel	1953
	Along coast in open or partly shaded semi-tidal pools, grassy fresh-water pools, beached canoe; ---; 148	Boyd	1949
	---; naturally infected with malaria; 148°	Russell et al.	1943
	---; ---; 148 (Muddy pools, rain pools and pools contaminated with sewage, intermediary host of malaria)	Taylor	1938
	---; ---; 148 (Dirty or brackish water, large or small water collections, especially near habitations)	Knight et al.	1944
	---; ---; 148*	Kumm	1929

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY, DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
ANOPHELES subpictus indefinitus (Ludlow)	Road ruts, semi-stagnant pools or marshes along stream and rock holes, unshaded and brackish water, drain ditches, artificial containers; Mar.-Nov.; 197°	Bohart	1957
	Lowland fresh water marshes, stagnant and slowly moving streams, buffalo wallows, coral rock holes, ground pools, brackish water in coastal tide-waters; ---, 197	Yamaguti & La Casse	1950
tessellatus Theobald	---; ---; 148 (Ricefield and vegetated spring pools, stream edges, enters houses, naturally infected with malaria, bites man)	Simmons & Aitken	1942
ambrosus Theobald	---; ---; 148	Hill	1925
vagus Dönitz	---; ---; 148 (Almost anywhere but generally avoiding salt water, enter houses, rest on stream banks)	Steffan	1966
	---; ---; 148 (Small pools and puddles)	Covell	1944
vanus Walker	---; ---; 148 (Anthropophilic)	Steffan	1966
varuna Iyengar	---; ---; 32*	Geigy & Herbig	1955
ARMIGERES breinli (Taylor)	Water of high organic content in coconut husks, rotting tree stumps, artificial containers; bites by day in shady jungle, rarely in open on sunny days, active on dull days, enters houses; 50°	Laird	1946
	---; ---; 50, 148, 268, 283° (Coconut husks and shells with decaying coconut meat, strongly attracted to man, bites by day, around native villages and forest areas)	Belkin	1962
	Tree hole; bite in jungle; 148°	Hill	1925
	Coconut shell, artificial container; ---; 148	Brug	1935
	---; ---; 148, 283 (Hollow log, pool near village, coconut shell, beached canoe)	Knight et al.	1944
	Semi-mangrove scrub along the coast; vicious biter during day; 283°	Perry	1949
denbestani Brug	---; ---; 148 (Ditches)	Steffan	1966

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
ARMIGERES lacuum Edwards	Water of high organic content in coconut shells, rotting tree stumps, and artificial containers; rarely in open on sunny days, active on dull days; 50°	Laird	1946
	---; ---; 50, 148 (Bamboo, tree holes, bite by day in jungle, at night in houses)	Hill	1925
	---; ---; 50, 148 (Putrid water in tree holes and coconuts)	Steffan	1966
malayi (Theobald)	---; at 1800 meters elevation; 148	Bonne-Wepster	1948
	---; ---; 148 (Tree holes, bamboo stumps, coconut shells and axils of fallen *Areca* palm leaves)	Delfinado	1966
	Coconut husks; ---; 283	Paine & Edwards	1929
malayi var. *breinli* Taylor	---; ---; 148, 283	Taylor	1934 a
	Coconut husk, common in semi-mangrove swamp scrub; bites fiercely by day but less frequently in plantations; 283°	Paine & Edwards	1929
milnensis Lee	Putrid water in tree holes, septic tanks and drains; rest outdoors, bites man during daytime; 148°	Steffan	1966
	---; ---; 148	Penn	1947
obturbans (Walker)	---; ---; 32 (Anthropophilic, bites at sundown, sometimes in houses)	Brug	1931
	Coconut husk; ---; 148	Lee	1944
	---; July; 148	Bonne-Wepster	1948
	---; ---; 148 (Dirty water in artificial containers in sun or shade, tree holes, bamboo)	Knight et al.	1944
papuensis Peters	Foul water in sago palms, banana stumps, drains, septic tank, small collections of surface water; ---; 148	Steffan	1966
BANKSINELLA lineatopennis Ludlow	---; in bathroom at 10:00 a.m., Jan., Feb., March and May; 32°	Hill	1922
	---; ---; 32	Taylor	1917
BIRONELLA bironelli (Christophers)	---; ---; 32	Stone et al.	1959
	---; ---; 5. 148 (Well shaded jungle pools, along grassy edges slow running streams, bites man occasionally)	Steffan	1966

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
BIRONELLA	---; ---; 50	Steffan	1966
brugi Soesilo & Van Slooten	---; ---; 148	Boyd	1949
confusa Bonne-Wepster	---; ---; 148	Steffan	1966
derooki Soesilo & Van Slooten	---; ---; 148	Lee & Woodhill	1944
gracilis Theobald	Common in shady stagnant water; ---; 32	Lee & Woodhill	1944
	---; ---; 32°, 148° (Sago and other swamps, shaded ground pools containing decaying vegetation)	Boyd	1949
	Mountain stream with decaying leaves, still water with floating debris and emergent vegetation in *Pandanus* s[illegible]; ---; 50	Laird	1946
	Rain water and overflow pools in the forest; ---; 148	Russell et al.	1943
hollandi Taylor	Shady jungle streams; ---; 50	Lee & Woodhill	1944
	Well; ---; 50	Taylor	1934
	---; ---; 50, 148 (Undisturbed semi- and permanent waters, artificial containers, in deep shade, tolerates water with high organic contents, most frequently in cool clear water)	Belkin	1962
	---; ---; 50, 148 (Shady streams, swamps and pools in sago swamps, pot holes of creeks)	Steffan	1966
	Undisturbed, natural, permanent or semi-permanent bodies of water, streams, swamps, dense coastal lagoons at the mouths of rivers, bomb craters, "fox holes", road, hog wallows, artificial containers, in shade, pools in beds of dry streams, frequent in cool, clear water in vegetation or flotage; all year; 283	Belkin et al.	1945
occulta Bonne-Wepster	---; ---; 148	Bonne-Wepster & Swellengrebel	1953
papuae (Swellengrebel & Swellengrebel-de Graaf)	---; ---; 50, 148 (Slow running streams, edges of well-shaded, fast streams, exposed or shaded jungle pools, bites man)	Steffan	1966

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
BIRONELLA			
papuae (Swellengrebel & Swellengrebel de Graaf) (cont.)	Quick running forest streams, large river banks, sunny or shady pools, slowly running streams; ---; 148°	Bonne-Wepster & Swellengrebel	1953
	Swiftly flowing streams with vegetation; ---; 148	Lee & Woodhill	1944
papuae brugi Soesilo & Van Slooten	---; ---; 50, 148	Knight et al.	1944
papuae papuae Swellengrebel	---; ---; 50, 148	Knight et al.	1944
soesiloi Strickland & Choudhury	---; ---; 50. Marginal vegetation along small streams and isolated pools in streambeds; ---; 148	Boyd	1949
	Quickly running forest streams, large river banks, sunny or shaded pools, slow streams; ---; 148	Bonne-Wepster & Swellengrebel	1953
	Swampy creek; ---; 148	Lee & Woodhill	1944
travestita (Brug)	---; ---; 50, 148 (Partially shaded swamps, pools in sago swamps, shaded pot holes of creeks)	Steffan	1966
	Partially shaded swamps, sago swamps, pools; ---; 148	Lee & Woodhill	1944
walchi Soesilo	---; ---; 148	Bonne-Wepster & Swellengrebel	1953
CAENOCEPHALUS			
concolor Taylor	Salt water pools in rocks; Nov.; 32	Taylor	1913
CALOMYIA			
priestleyi Taylor	---; March; 32	Taylor	1913
CHAETOCRUIOMYIA			
sylvestris Theobald	---; scrub covered ravine on mountain side; 32	Hill	1922
CIRYSOCONOPS			
acer Walker	---; in dense scrub near fresh water, in dwellings at night; 32°	Hill	1917
aurites Theobald	---; dense tropical growth near river; 32	Hill	1917

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
CHRYSOCONOPS			
brevicellulus Theobald	---; ---; 148	Taylor	1914
littleri Taylor	---; ---; 32	Taylor	1913
COQUILLETTIDIA			
crassipes (van der Wulp)	---; ---; 32, 50, 220, 283 (Associated with *Ipomoea aquatica* and grass roots in dirty pit, enters houses, bites man)	Steffan	1966
giblini (Taylor)	---; ---; 32, 50, 148	Steffan	1966
lutea Belkin	Plant roots in swamp, fresh water lagoon; wooded areas around swamps; 283	Steffan	1966
memorans (Bonne-Wepster)	---; ---; 148	Steffan	1966
nigrochracea (Bonne-Wepster)	---; ---; 148	Steffan	1966
ochracea (Theobald)	---; ---; 148	Steffan	1966
xanthogaster (Edwards)	---; ---; 32, 148, 220 (Small, weed covered swamps)	Steffan	1966
CULEX			
abdominalis Taylor	---; ---; 32	Taylor	1917
albinervis Edwards	Mats and clumps of filamentous green algae in taro swamps, at edge of streams and ditches; ---; 107	Belkin	1962
	Ditch with stagnant water pools; ---; 107	Edwards	1929
	Ponds; ---; 107	Lever	1944
	Dalo swamp; ---; 107	Paine	1943
alis Theobald	Swamp, beached canoe; ---; 148, 179	Knight et al.	1944
annulirostris Skuse	Fresh and brackish ground pools, swamps, ditches and channels; potential vector of encephalitis, active after sunset, common in late summer and autumn; 32	Dobrotworsky	1965
	Any small collection of clear water; sandstone gullies; 32	Mackerras	1928

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
CULEX annulirostris Skuse (cont.)	Tea-tree swamp; bites by day; 32°	Bearup & Laurence	1947
	Fresh waters, weedy margins of marshes and ponds overgrown with vegetation and green algae; ---; 32	Cooling	1924 b
	---; naturally infected with *Wuchereria bancrofti*; 32*. ---; ---; 66*, 148*	Manson-Bahr	1959
	---; May; 32	Minter	1950
	---; ---; 32*	Taylor	1938
	---; ---; 32, 50, 83, 97, 107, 114, 121, 148, 183, 219, 220, 263, 268, 281, 283, 314, 315 (Permanent or temporary, standing or flowing, fresh or strongly brackish, clean or with very high organic content waters, canoes, artificial containers, in open sunlit sites, also strongly shaded pools and dense jungle swamps, rarely in coconut husks or large open treeholes, bites man readily from late afternoon through the night, indoors and in the open)	Belkin	1962
	Clear water in road rut, artificial container; enters houses in evenings; 50	Laird	1946
	Ground pools, artificial containers; Nov., persistent and annoying in the early evening; 66°. Cavity in felled log, hot springs and a brackish land-locked lagoon; ---; 220. Coconut shell; ---; 263	Bohart & Ingram	1946
	---; experimentally transmits Japanese "B" encephalitis; 66	Hammon et al.	1949
	Brackish ditches; ---; 97°. Open sheets of water; ---; 107. Clear water with filamentous green algae, water in hoofmarks, stagnant pools, slowly running ditches among taro, open concrete drain; all year; 263	Buxton & Hopkins	1927
	Brackish seepage water wells; ---; 97	Venner	1944
	Fresh water well; bites at night; 107°	Paine	1943
	Swamps, ricefields, ponds, rock pools, artificial containers; ---; 107	Lever	1944 a
	Drains, weedy streams; ---; 107	Lever	1943 a

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
CULEX annulirostris Skuse (cont.)	---; naturally and experimentally infected, natural and experimental vector of *Wuchereria bancrofti*; 148*. ---; naturally infected with non-periodic *W. bancrofti*; 281	Raghavan	1961
	Fields; ---; 197	Travis	1947
	Fresh or stagnant water in ponds, road ruts, artificial containers; ---: 219*	Perry	1950
	Sunny permanent fresh water swamps, road ruts, ditches, ponds, hog wallows, tree bases, occasionally artificial containers, coconut shells; bites man late afternoon; 220°	Perry	1946
	Among open coconut groves and thinned jungle area, natural water catchments; bites by night; 220°, 283°	Oman & Christenson	1947
	Barrel on waterfront; day and night biter; 222°	Graham	1939
	Ground pools, artificial containers, depressions, hog wallows with fresh, brackish or foul water; bite in early evening and morning; 283°	Perry	1949
	Large and shallow rain pool containing dead coconut leaves just above the beach, small salt water pools in rocks above high tide marks; ---; 283	Paine & Edwards	1929
annulirostris annulirostris Skuse	---; at light, all year; 66. Road rut; July; 236 (Common in fresh water in ground pools and artificial containers, nuisance in evening and at night, potential vector of Japanese "B" encephalitis and probable vector of filariasis)	Bohart	1957
annulirostris marianae Bohart & Ingram	Fresh or slightly brackish water of ground pools, marshy lake edges, concrete cisterns, road ruts, rock pools, stream pools, marshy pools, artificial containers; all year; 197	Bohart	1957
atracus Colless	---; ---; 50	Steffan	1966
atriceps Edwards	Tree holes, coconut husks, artificial containers; larvae of *Wuchereria bancrofti* may occasionally complete development, in houses, tree buttresses, bites man at night; 281°	Belkin	1962
	---; experimentally infected with non-periodic *W. bancrofti*; 281	Raghavan	1961

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
CULEX			
australicus Dobrotworsky & Drummond	---; ---; 32 219	Belkin	1962
basicinctus Edwards	Ground pools with *Spirogyra*; ---; 32	Lee	1944
	---; enters houses; 32	Edwards	1922 a
	---; ---; 32, 220 (Rock pools)	Knight et al.	1944
	Algae mats in fresh water streams and rivers; ---; 219	Perry	1950
	Algae along river margins; rare species; 220	Perry	1946
becki Belkin	Crabholes; ---; 283	Belkin	1962
belkini Stone & Penn	Leaf axils of *Pandanus*; ---; 283	Belkin	1962
bergi Belkin	Rock pools and pools in blocked stream beds; ---; 283	Belkin	1962
bicki Stone & Penn	Leaf axils of sago palm; ---; 148	Stone & Penn	1947
binigrolineatus Knight & Rozeboom	Leaf axils of sago palms in sago swamp, in forest, Jan.-March; 148	Knight & Rozeboom	1945
bitaeniorhynchus Giles	Shallow swamp; at lamp indoors, March, April and June; 32	Hill	1922
	Clean, stagnant and slow-flowing water with vegetation, swamps; ---; 32	Lee	1944
	---; ---; 32, 148. In clumps of *Spirogyra* in ponded ditches with clear water; ---; 219 (In mats of green algae also shaded sites, suspected vector of encephalitis and naturally infected with larvae of *Wuchereria malayi*, attack man readily, particularly at night)	Belkin	1962
	---; ---; 32 (Hill streams, pools, ditches with filamentous green algae, bite during the day, rarely at night)	Hsiao	1945
	---; ---; 32, 148 (Open weedy pools, ricefields)	Bohart	1945
	---; ---; 148*	Manson-Bahr	1959

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
CULEX *bitaeniorhynchus* Giles (cont.)	---; ---; 148, 219, 236 (Bites man at night)	Delfinado	1966
	Rice paddies, ponds, slow streams with green algae; enters houses at night, possibly carries Japanese "B" encephalitis, Dec.; 236°	Bohart	1957
brevipalpis (Giles)	---; ---; 50, 148 (Tree holes, cut bamboo, water tanks and in forest streams)	Delfinado	1966
	Tree holes, bamboos; domestic; 148	Lee	1944
buxtoni Edwards	Shaded areas in permanent swamps among tree roots, shaded grassy stream margins, occasionally in rocky pools and abandoned road ruts; ---; 220	Belkin	1962
caeruleus King & Hoogstraal	Pools in flat swampy forest; ---; 148	Steffan	1966
cairnsensis (Taylor)	---; ---; 32	Stone et al.	1959
carolinensis Bohart & Ingram	Tree holes, coconut shells and husks, taro leaf axils, polluted water in artificial containers; Nov. and Dec.; 66	Bohart & Ingram	1946
	---; July; 66	Bohart	1957
cataractarum Edwards	On rocks under waterfalls; ---; 50	Edwards	1923
	---; ---; 148	Steffan	1966
chaetoventralis (Theobald)	---; ---; 32	Edwards	1924
cheesmanae Mattingly & Marks	---; ---; 183, 219 (Rock pools in streambeds)	Belkin	1962
christiani Colless	Shallow pools with emergent vegetation; ---; 148	Steffan	1966
ciliaris (Linnaeus)	---; ---; 32*	Manson-Bahr	1959
concolor Desvoidy	Shallow dirty swamps, dirty wells, liquid manure pits, contaminated soakages, neglected drinking troughs; rarely indoors, Jan., Feb., March and June; 32	Hill	1922
crassistylus Brug	---; ---; 148	Lee	1944
crinicauda Edwards	Brackish water; ---; 32	Knight et al.	1944

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
CULEX *cylindricus* Theobald	Fresh water pools in creeks and swamps; ---; 32	Lee	1944
	---; ravines on mountain side; 32	Hill	1922
	---; ---; 32, 50 (Shallow ground pools)	Steffan	1966
	Wheel ruts, grassy ditches, swamps, wells; ---; 50	Laird	1946
digcelensis Brug	---; ---; 32	Lee	1944
	---; Jan.; 148	Steffan	1966
douglasi Dobrotworsky	Rocky valleys, in shallow, cool, clean shaded backwaters, pools with sandy bottom, abundant under overhanging stones; dark recesses in stream banks and in rocks, rarely bites man, Apr.-May; 32°	Dobrotworsky	1965
dumbletoni Belkin	Rock pools and holes; ---; 219	Belkin	1962
fatigans Wiedemann	Domestic collections of water, prefers polluted water and liquid manure; in or near houses, bites only in the dark; 32*°	Mackerras	1928
	Fouled, sheltered drains, cesspools; most troublesome species, all year; 32	Hill	1917
	Irrigation channels and street watertables; ---; 32	Taylor	1918
	Fresh waters; ---; 32	Ferguson	1926 a
	---; probable vector of filariasis; 32. ---; ---; 219	Ferguson	1926
	---; May; 32	Minter	1950
	---; ---; 32, 148, 283 (Potholes chiefly in mangrove tidal area)	Barraud	1934
	Beached canoes with rain water; Aug.-Sept.; 50	Laird	1946
	Taro swamps and pools in shade; ---; 83	McKenzie	1925
	---; ---; 97, 114, 121, 179 (Foul water, cesspits and artificial containers near human habitation, vector of filariasis)	Smart	1943
	Stagnant rock pools, ground pools, coconut husks; enter houses, bites by night, common in Mar.-June; 107°	Paine	1943
	Drains in soapstone, pools of dirty water, polluted water; January; 107	Lever	1943 a

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
CULEX fatigans Wiedemann (cont.)	Pit privies, organic matter in artificial containers; ---; 107	Lever	1944a
	---; naturally and experimentally infected with non-periodic *Wuchereria bancrofti*; 107, 281. ---; naturally and experimentally infected with non-periodic *W. bancrofti*; 263	Raghavan	1961
	---; Feb., March, common; 114. Tin cans, coconut shells and husks, barrels of rain water, tree holes, muddy pig wallow, cesspits, small hole in block of lava, in open drain very frequently; ---; 263	Buxton & Hopkins	1927
	---; naturally infected with *W. bancrofti*; 148, 220, 283	Manson-Bahr	1959
	---; ---; 148*	Wilcocks	1944
	---; in house, March; 199	Edwards	1935
	---; ---; 199*	Mumford & Adamson	1934
	Any place exposed to full sunlight and holding water charged with decaying organic matter; bite at night, all year; 222°	Graham	1939
	Near dwellings, field or bush, water troughs, tree stumps, hollow places in logs, broken coconut shells; bites man at night, naturally infected with *Wuchereria bancrofti*; 263**°	Doane	1914
	---; Jan.-Feb.; 263	Edwards	1928
	Polluted and dirty water; rest in houses, bites by night; 281°	Galliard et al.	1949
	Barrel containing dirty water; ---; 283	Paine & Edwards	1929
femineus Edwards	Rock pools along streams, sometimes ground pools, shallow brackish wells and tree root holes; ---; 220	Belkin	1962
	Root pocket with dead leaves, pool in streambed; ---; 220	Knight et al.	1944
	Road ruts, open wells, artificial containers, occasionally tree holes; ---; 220	Perry	1946
fergusoni (Taylor)	Clean water pools and swamps in hill forest, in back-water pools shaded by trees and overgrown hanging rocks in rocky valleys; ---; 32	Dobrotworsky	1965
	Fresh water ground pools and rock pools often with *Spirogyra*; ---; 32	Lee	1944

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
CULEX			
flavifrons Skuse	---; ---; 32	Cooling	1924a
fragilis Ludlow	---; ---; 50, 148. Artificial containers, coconut shells; ---; 283 (Tree holes, sago and papaya stumps and ground pools with foul water containir much organic matter)	Belkin	1962
	---; ---; 50, 148 (Artificial containers and coconut shells)	Delfinado	1966
	---; ---; 148, 283 (Semi-permanent or temporary ground pools with algae, Jan.-June)	Steffan	1966
franclemonti Belkin	Dense jungle swamps, swamp pool, stream margins; ---; 283	Steffan	1966
fraudatrix (Theobald)	---; ---; 32°	Hill	1922
	---; ---; 32, 50, 148 (Pot holes in mangrove tidal area, also away from coast, shallow wells)	Lee	1944
	---; ---; 32, 50, 148 (Shaded temporary ground pools)	Steffan	1966
	Wheel ruts, grassy swamps, tree holes; occasionally bite in day near breeding places; 50°	Laird	1946
	Shaded swamps among tree roots, grassy stream margins, occasionally rocky pools, road ruts; ---; 220	Perry	1946
	Shallow fresh water pot holes; ---; 283	Perry	1949
fraudatrix var. *annulata* Taylor	---; ---; 32	Taylor	1934a
fraudatrix fraudatrix Theobald	---; ---; 32, 50, 148, 220, 283 (Shaded leafy pools, sunlit footprint, brackish mangrove or fresh water potholes)	Knight et al.	1944
fraudatrix var. *solomonis* Edwards	Tree hole; ---; 283	Paine & Edwards	1929
fusc[illegible]us Wiedemann	---; July-Aug.; 66°. Artificial container containing taro plant; Aug., Dec.; 236° (Natural pools, shallow wells, domestic collections of water, seldom bites man)	Bohart	1957

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
CULEX			
fuscicinctus King & Hoogstraal	---; April; 148	Steffan.	1966
gaufini Belkin	Stagnant swamp, potholes along a stream and shaded leafy, grassy pools; ---; 219	Belkin	1962
gelidus Theobald	Ground, weedy pools, marshy tracks; ---; 148	Lee	1944
	---; ---; 148 (Enter houses)	Delfinado	1966
globocoxitus Dobrotworsky	---; ---; 32	Stone et al.	1959
gossi Bohart	---; July, Aug., Oct., Dec.; 66	Bohart	1957
halifaxii Theobald	Street gulley traps, disused ships' tanks, garden water barrels, and other water-holding rubbish about habitations and rarely in fresh tea-tree swamp; ---; 32	Barraud	1934
	---; ---; 32, 50, 148, 283 (Permanent or temporary ground pools, frequently in all types of artificial containers, rock pools, stream margins and tree holes, coconut shells or husks, predaceous and strongly cannibalistic, may be of minor benefit in reducing the economically important species)	Belkin	1962
	---; ---; 32, 50, 148, 283 (Ricefields, small ponds, roadside ditches, jungle pools and other artificial containers about habitation)	Delfinado	1966
	---; ---; 32, 148, 283 (Swamps, wheel ruts, slit trenches)	Lee	1944
	---; ---; 32. 148, 283 (Contaminated wells)	Knight et al.	1944
	Clear water in grassy wheel ruts water tank, pools, predaceous; rare; 50	Laird	1946
	Bog pools; Apr.; 148	King & Hoogstraal	1946a
	Artificial containers and rock pools in coral cliffs; ---; 283	Perry	1949
hilli Edwards	---; ---; 32	Edwards	1922a
	Muddy ditch with some algal scum, hoofmarks; ---; 283	Paine & Edwards	1929

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
CULEX *hilli* var. *buxtoni* Edwards	Dark swamp under bamboos, stinking water full of leaves, footprints beside a ditch in full sunshine; ---; 220	Buxton & Hopkins	1927
	---; ---; 283	Paine & Edwards	1929
hurlbuti Belkin	Leaf axils of *Pandanus*, densely shaded nipa swamp; ---; 283	Steffan	1966
ipangari Mattingly & Rageau	---; ---; 183, 219 (Rock pool in coral, ground seepage pools, deep well, barrels and hole in coconut trunk)	Belkin	1962
jopsoni Theobald	Swamps and tidal creeks; in long grass, scrub, night and day biter; 32°	H'll	1922
	---; ---; 32, 50, 107, 148, 220, 263 (Small coastal water collections, brackish or fresh)	Knight et al.	1944
	---; ---; 97	Ferguson	1926
	---; ---; 107°	Veitch & Greenwood	1921
	---; experimental vector of Japanese "B" encephalitis; 197	Hammon et al.	1949
	Coral or sand pockets along beaches, ditches and artificial containers; ---; 220	Perry	1946
	Brackish water; ---; 220	Daggy	1945
kesseli Belkin	Leaf axils of a *Pandanus*; ---; 281	Belkin	1962
kuhnsi King & Hoogstraal	Tree holes, fallen palm bracts; Feb.-March, Dec.; 148	Steffan	1966
kusaiensis Bohart	Water collected on cave floors to depths of several feet, water with decayed matter, ground pools; Feb., Mar.; 66	Bohart	1957
laffooni Belkin	Rock crevices along jungle stream; ---; 283	Belkin	1962
lainei Belkin	Jungle swamps, along a stream, in treehole; ---; 283	Belkin	1962
latus Dobrotworsky	---; ---; 32	Stone et al.	1959
leei King & Hoogstraal	Pond, large log hole; Feb., May; 148	Steffan	1966

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
CULEX			
leonardi Belkin	Jungle swamps with dense vegetation; ---; 283	Belkin	1962
litoralis Bohart	---; ---; 148, 263, 281	Stone et al.	1959
	Fresh to saline water in coral brackish rock pools, pot holes, artificial containers along coast; common, March, June, Aug.-Oct.; 197	Bohart	1957
	Tree holes; ---; 197	Yamaguti & La Casse	1950
malayi (Leicester)	Stagnant pools with much vegetation; ---; 148	Lee	1944
	---; ---; 148 (Small rock pools along mountain streams)	Steffan	1966
maplei Knight & Hurlbut	Taro axils, cement tanks, artificial containers around habitations; Jan.-Mar., June-Sept.; 66	Bohart	1957
marksae King & Hoogstraal	---; April; 148	Steffan	1966
marquesensis Stone & Rosen	Rock holes, coconut husks, water drums and barrel tops; ---; 199	Belkin	1962
millironi Belkin	Rock pools and rock holes in a ponded creek; ---; 219	Belkin	1962
mimulus Edwards	Streams and pools with vegetation, tree holes, fallen bamboos with collections of water, stone tanks, sunny streams; ---; 32	Lee	1944
	---; ---; 32, 148 (Empty snail shells and truck rut)	Delfinado	1966
	---; ---; 148 (Ground pools)	Knight et al.	1944
miraculosus Bonne-Wepster	---; ---; 148	Lee	1944
mossmani Taylor	---; ---; 32	Taylor	1915
mutisus Edwards	---; ---; 50, 283 (Contaminated well near beach)	Hill	1925
	Forest pools, treeholes; ---; 148	Brug	1934

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
CULEX			
nailoni King & Hoogstraal	Crab hole in rain forest; ---; 148	Steffan	1966
nigropunctatus Edwards	---; July-Aug., Nov.-Dec.; 66. Artificial containers; Jan.-Apr., Aug., Dec.; 236 (Rice-fields, grassy ground pools)	Bohart	1957
	---; ---; 66 (Occasionally in artificial container)	Delfinado	1966
nocturnus Theobald	---; ---; 107°	Veitch & Greenwood	1921
normanensis Taylor	---; ---; 32	Taylor	1915
occidentalis Skuse	---; April; 32	Hill	1917
omani Belkin	Dense jungle swamps; on vegetation near jungle swamp; 283	Belkin	1962
orbostiensis Dobrotworsky	---; bites by day, Sept.; 32°	Dobrotworsky	1965
ornatus (Theobald)	---; ---; 50, 148 (Deep well shaded hole, partly shaded, muddy leaf-filled seepage pool at edge of sago swamp, hoofprints, bites man, Dec., June)	Steffan	1966
oveni Belkin	Rock holes, pools in rocky stream beds, treehole along mountain stream bed; ---; 283	Belkin	1962
pacifus Edwards	Shallow well, cavity among roots of tree, rot holes and crab holes, water with high organic content; ---; 220	Buxton & Hopkins	1927
	Coconut shells, plant axils; ---; 220	Belkin	1962
	Artificial containers; ---; 220	Knight et al.	1944
	---; common; 220	Perry	1946
pallidiceps (Theobald)	---; ---; 148, 283	Stone et al.	1959
pallidothorax Theobald	Forest pools, treeholes, during rainy season and wells in dry season; ---; 148	Lee	1944
	---; ---; 148 (Bamboo, stream, rock pools, ground pools and artificial containers)	Delfinado	1966
palpalis Taylor	---; ---; 32	Hill	1917

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
CULEX *papuensis* (Taylor)	Clear water with vegetation, in wheel rut and truck tire; ---; 50	Laird	1946
	---; ---; 50, 148, 283 (Tree holes, artificial containers and ground pools, putrid water in hollowed sago trunks, shaded or semi-shaded places where the water is clear or with leaves)	Delfinado	1966
	---; ---; 148, 283 (Coconut shells, refuse pits)	Lee	1944
	Coconut husks; ---; 283	Paine & Edwards	1929
parvis Taylor	---; ---; 32	Hill	1917
pedicellus King & Hoogstraal	---; ---; 148	Steffan	1966
perkinsi Stone & Penn	Leaf axils of various *Pandanaceae*; ---; 283	Belkin	1962
perryi Belkin	Leaf axils of *Pandanus*; April; 283	Steffan	1966
	Leaf axils of *Pandanus* in partial shade in jungle; ---; 283	Belkin	1962
pervigilans Bergroth	---; ---; 32	Edwards	1924
	---; ---; 165	Stone	1963
	In every type of water; nocturnal, in houses, all year; 222°	Graham	1929
	Polluted water, ground pools, artificial containers; ---; 222	Lee	1944
petersi Colless	Shallow pools with emergent vegetation; ---; 148	Steffan	1966
pipiens Linnaeus	Pools, water high in organic matter, hoofprints of cows, near ricefields, artificial containers; abundant; 134	van Dine	1904
pipiens fatigans Wiedemann	Foul water in pools, drains and artificial containers; readily enters houses, bites man at night; 32°	Dobrotworsky	1965
	---; naturally infected with *Wuchereria bancrofti*; 32*. ---; ---; 66*	Manson-Bahr	1959
	Ditches, ponds; ---; 134	Pemberton	1943

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
CULEX *pipiens fatigans* Wiedemann (cont.)	---; experimentally infected with *Wuchereria bancrofti*; 134	Nelson et al.	1946
pipiens molestus Forskal	Water butts, foul water in pools at rubbish tips, drainage pits and artificial containers; indoors; 32°	Dobrotworsky	1965
postspiraculosus Lee	Open swamps overgrown with reeds; ---; 32	Dobrotworsky	1965
	Brackish swamp; ---; 32	Lee	1944 b
pseudomelanoconia Theobald	Still backwaters of running mountain streams; ---; 32	Lee	1944
	Clear ground pools in forest; ---; 32	Dobrotworsky	1965
	Fresh water, shallow, rocky streams; ---; 219	Perry	1950
pseudornatus Colless	---; ---; 148	Steffan	1966
pullus Theobald	---; ---; 32, 50, 148. Ground pools of all types; ---; 283 (Artificial containers, large treeholes, coconut husks and shells)	Belkin	1962
	---; ---; 32, 50, 148, 283 (Forest and jungle pools, horse trough, canoe, well)	Knight et al.	1944
	---; ---; 32, 50, 148 (Fresh water in wheel ruts, grassy drains)	Lee	1944
	Clear, sunny water of temporary pools; occasionally enters houses by day and early evening; 50	Laird	1946
	Artificial containers; ---; 66. ---; ---; 236 (Treeholes, ground pools, artificial containers)	Bohart & Ingram	1946
	Bog pools; Apr.; 148	King & Hoogstraal	1946 a
quinquefasciatus Say	Sewage-polluted water courses, septic tank, cess-pools, liquid-manure barrels, street gully-traps, water-holding rubbish; in houses, carrier of *Wuchereria bancrofti*, bites by night, all year; 32°	Cooling	1924
	---; nocturnal and domestic, probable transmitter of filariasis; 32. Fresh foul or brackish water in artificial catchments, stagnant, polluted pools, swamps; ---; 219*. ---; ---; 220*, 263*, 283*	Perry	1950

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
CULEX quinquefasciatus Say (cont.)	---; ---; 32*	Cilento	1924
	---; ---; 32, 50, 121, 148 (Artificial containers and other small water collections near habitations, diluted sewage)	Knight et al.	1944
	Ground pools, rot hole in coconut tree, artificial containers; near human habitations, suspected vector of filariasis; 66. Street gutter, ground pools, air-raid shelters, irrigation water, brackish water wells; near human habitations, common; 134. Ground pools, polluted treehole, artificial containers; probable vector of filariasis; 197°. ---; ---; 236. Pig wallow, coconut stumps exposed to sunlight, open drains, treehole, coconut shells and husks, artificial containers; possible vector of non-periodic filariasis, partial development of *Wuchereria bancrofti*; 263 (Ground pools, water grossly polluted by food or sewage, slightly brackish well water, artificial containers, darker corners of habitations, under buildings, caves, air-raid shelters, dark damp situations near living quarters, persistent and annoying biters, mostly at night, important vector of nocturnal filariasis--*Wuchereria bancrofti*, possible vector of non-periodic filariasis, suspected vector of Japanese "B" encephalitis)	Bohart & Ingram	1946
	---; experimental vector of Japanese "B" encephalitis; 66	Hammon et al.	1949
	---; common; 66, 197, 200 (Vector of filariasis)	Farner	1944 a
	---; ---; 66°, 197, 236° (Treeholes, bamboos, shallow wells, drains, ditches, latrines, anthropophilic, nocturnal and domestic)	Farner	1944
	---; ---; 83, 95, 97, 114, 183, 199, 219, 220, 222, 263, 268, 281, 283, 314, 315. ---; suspected vector of non-periodic filariasis; 107. ---; suspected vector of periodic filariasis; 217 (Foul ground pools, ditches, large and small artificial containers, dependent on man for breeding places, bite man readily, primarily at night, in and outdoors, important vector of periodic filariasis, naturally and artificially infected with encephalitis)	Belkin	1962
	---; experimentally infected with *W. bancrofti*; 134	Nelson et al.	1946

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
CULEX quinquefasciatus Say (cont.)	Fields; ---; 197	Travis	1947
	Stagnant swamps; common and domestic, experimental transmission of dengue; 219	Perry	1948
	Artificial containers; in houses, rest among vegetation, bites readily at night; 220°	Perry	1946
	---; carrier of filariasis, experimentally infected with filariasis; 263	Byrd et al.	1945
	---; naturally infected with non-periodic *Wuchereria bancrofti*; 281	Raghavan	1961
	---; ---; 330 (Artificial containers and ground pools, polluted water, severe pests at night, possible vectors of filariasis and encephalitis)	Bohart	1957
poicilipes Belkin	Brackish pools, also fresh water swamps; in houses; 281	Belkin	1962
	---; ---; 283	Stone	1963
pallidocephalus Peters	Crab holes in partial shade on beach; ---; 148	Steffan	1966
sagax Skuse	---; ---; 32	Taylor	1917
samoaensis (Theobald)	---; ---; 148	Knight et al.	1944
	---; in a latrine; 263	Bohart & Ingram	1946
	---; March-Aug.; 263	Belkin	1962
sitiens Wiedemann	Brackish water in tidal creeks, mangroves near coast, mountain slopes; bites day and night, enters houses at night; 32°	Hill	1922
	Stagnant salt pools and marshes; Feb.-Mar.; 32	Cooling	1924
	Pools, hollow stumps, crabholes, mangrove swamps, fed by springtides or rainwater, weedy lagoons, water holes, artificial containers; ---; 32	Hill	1917
	---; ---; 32, 107, 148 (Relatively poor intermediate host of *Wuchereria bancrofti*)	Taylor	1943 a
	Fresh water pool; ---; 50	Laird	1946

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
CULEX sitiens Wiedemann (cont.)	---; ---; 50, 107, 148, 219, 263, 283. Brackish water in boat on beach; ---; 66. Brackish water of coral rockholes, in boat on beach; ---; 197. Partly brackish elevated coral rockholes containing dead leaves; ---; 220. Brackish swamp, pond in large swamp, artificial containers; ---; 236 (Small coastal collections of brackish sometimes fresh water, coral crevices, boats containing brackish or highly saline water)	Bohart & Ingram	1946
	---; Feb., July-Dec.; 66°. ---; June, Sept.; 197°	Bohart	1957
	---; ---; 97, 114, 219, 220, 263, 283. Undiluted seawater; ---; 107 (Brackish water near seacoast, brackish and fresh water ground pools, coral holes, canoes, artificial containers)	Belkin	1962
	Artificial containers, ditches, stagnant rock pools, wells, coastal seepage pools; enter houses, bite at night; 107°	Paine	1943
	Ditch with stagnant water pools; ---; 107	Edwards	1929
	Fields; ---; 197	Travis	1947
	Brackish water of a mangrove swamp; bites at night, domestic; 219°	Williams	1943
	Mangrove swamps, tidal pools; ---; 219	Perry	1950
	Dark pool under a cliff, seepage; ---; 220	Buxton & Hopkins	1927
	---; ---; 263 (Bites man)	Delfinado	1966
	---; naturally infected with non-periodic [illegible]; 281	Raghavan	1961
	Coastal coral cliff pockets, brackish and salt water; ---; 283	Perry	1949
	---; in houses; 283	Paine & Edwards	1929
[illegible] Bonne-Wepster & Brug	---; ---; 148	Lee	1944
[illegible] Edwards	All types of ground water, permanent jungle swamps, stream margins and temporary pools, treeholes, artificial containers; tree trunks or other vegetations; 283	Belkin	1962

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
CULEX			
somerseti Taylor	---; ---; 32	Taylor	1917
squamosus (Taylor)	---; ---; 32, 148. ---; on vegetation; 283 (Dense mats of filamentous green algae in fresh ground water pools and stream margins, more rarely in open swamps with dense vegetation)	Belkin	1962
	---; ---; 32, 148 (Small pools, creek backwaters, semi-permanent puddles)	Lee	1944
	---; ---; 32, 283 (Slow rivulet, brush swamp, canal)	Knight et al.	1944
	Slow moving rivulet, swamp, canal; ---; 148	Brug	1934
	Plantation drains; ---; 283	Hill	1925
starckeae Stone & Knight	---; ---; 32, 219. Along margins of streams and in stream bed pools; ---; 220 (In mats of filamentous green algae in open sunlit ground pools, attempt to bite man)	Belkin	1962
tigripes Grandpré & Charmoy	Waterbutts, stagnant pools, irrigation wells, horse troughs, predaceous and cannibalistic; in long grass, among bushes; 32	Hill	1917
townsvillensis Taylor	---; ---; 32	Taylor	1918
uniformis (Theobald)	---; ---; 148 (Bamboo stumps, treeholes and rock pools in jungle)	Delfinado	1966
	---; ---; 148 (Artificial containers, puddles)	Steffan	1966
ventralis Walker	---; ---; 148	Steffan	1966
vicinus (Taylor)	---; ---; 32, 148	Steffan	1966
vishnui Theobald	In bay, between plants on shore, heath pond; ---; 148	Brug	1931
	Ground pools, ricefields, salt marshes; ---; 148	Knight et al.	1944
	Bog pools; Apr.; 148	King & Hoogstraal	1946a
	---; ---; 148 (Lakes, river backwaters, small streams, drainage ditches, flooded grassland, irrigated ricefields, lagoons, brackish water, bites man by night)	Farner	1943

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
CULEX			
walukai Belkin	Treeholes, coconut shells or husks, rockholes, artificial containers; buttresses of trees; 283	Belkin	1962
whitmorei (Giles)	Submerged grasslands; ---; 148	Lee	1944
	Bog pools; ---; 148	King & Hoogstraal	1946 a
	---; ---; 148 (Ground water, rice paddies, pools and margins of slow moving streams, enter houses, bites man at night)	Delfinado	1966
whittingtoni Belkin	---; ---; 283	Belkin	1962
vinckei Belkin	Rock pools and rock holes; ---; 283	Belkin	1962
CULICADA			
annulata Taylor	---; April-May; 32	Taylor	1913
annulipes Taylor	---; Oct., Nov.; 32	Taylor	1913
delandi Taylor	---; Nov.; 32	Taylor	1913
harpaloni Taylor	---; Oct.; 32	Taylor	1913
hemasis Strickland	---; ---; 32	Taylor	1917
hybrida Taylor	---; ---; 32	Taylor	1917
mileoni (Taylor)	---; ---; 32	Taylor	1915
nigra Taylor	---; ---; 32	Taylor	1913
[illegible] Taylor	---; April; 32	Taylor	1913
[illegible]hemasis Strickland	---; ---; 32	Taylor	1917

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
CULICADA			
vandema Strickland	---; ---; 32	Taylor	1913
wilsoni Taylor	---; among cypress pine; 32	Taylor	1918
CULICELSA			
annulirostris Skuse	---; ---; 148	Taylor	1914 a
annulirostris var. *milli* Taylor	---; ---; 148	Taylor	1914 a
fuscus Taylor	---; in waterbutts, March; 32	Taylor	1913
paludis Taylor	---; mangrove swamps, rare; 32	Hill	1917
simplex Taylor	---; enter houses, May; 32	Taylor	1913
vigilax Skuse	Mangrove swamps, tidal creeks, rivers, scrubby ravines, springtidal seawater accumulations, fresh water, hollow of mangrove trunks; diurnal and nocturnal, most troublesome between 8:00 p.m. and 10:00 p.m., in houses, all year; 32°	Hill	1917
	---; ---; 148	Taylor	1914 a
CULISETA *antipodea* Dobrotworsky	Tea-tree swamps and semi-permanent pools in coast, densely vegetated swamp near river; ---; 32	Dobrotworsky	1965
drummondi (Dobrotworsky)	Pits concealed by undergrowth; bites by day; 32°	Dobrotworsky	1965
frenchii (Theobald)	Subterranean water in the tunnels of land crayfish; common in upland forest with high rainfall, bites by day and most troublesome in forest; 32°	Dobrotworsky	1965
frenchii atritarsalis (Dobrotworsky)	---; ---; 32	Dobrotworsky	1965
hilli (Edwards)	Subterranean waters in the tunnels of land crayfish; bites by day, Oct.; 32°	Dobrotworsky	1965
inconspicua Lee	Shaded ground and rock pools, swamps overgrown by reeds; ---; 32	Dobrotworsky	1965
littleri (Taylor)	Highland forest, shaded permanent pools, under uprooted trees; ---; 32°	Dobrotworsky	1965

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
CULISETA			
otwayensis (Dobrotworsky)	Shaded pools; ---; 32	Dobrotworsky	1965
sylvanensis (Dobrotworsky)	Pits concealed by undergrowth, fallen branches and other debris; bites by day; 32°	Dobrotworsky	1965
tonnoiri (Edwards)	Backwaters of streams with very slow-flowing or comparatively dead water sheltered by dense canopy of foliage and rich in decaying matter including leaves and debris; ---; 222	Belkin	1962
victoriensis (Dobrotworsky)	Subterranean water in tunnels of land crayfish; bite man in forest, Oct., common in early summer and autumn; 32°	Dobrotworsky	1965
weindorferi (Edwards)	---; ---; 32	Stone et al.	1959
DANIELSA			
albonulata Taylor	---; ---; 32	Hill	1917
minuta Taylor	---; ---; 32	Taylor	1917
DIXOMYIA			
elegans Taylor	---; April; 32	Taylor	1913
ETORLEPTIOMYIA			
elegans Taylor	---; ---; 32	Taylor	1917
FICALBIA			
bougainvillensis Belkin	Puddles in cleared bog, pockets in moss and mud in swamp at mouth of lake, small ground pools, among herbage surrounding pond, puddles, along margins of cane area; ---; 283	Belkin	1962
chamberlaini (Ludlow)	---; ---; 32, 148 (Irrigation ditches with algae and vegetation, along river banks, in fish ponds and water tank)	Delfinado	1966
chamberlaini metallica	---; ---; 32	Stone et al.	1959
(Leicester)	---; ---; 148 (Ground pools and ponds with vegetation)	Steffan	1966
elegans (Taylor)	---; ---; 32, 50, 148, 283 (Cattle hoofprints with decaying vegetation at edge of swamps, fresh water holes and dams)	Delfinado	1966
	Ground hole; ---; 50, 148	Taylor	1934

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
FICALBIA			
flavens King & Hoogstraal	---; April; 148	Steffan	1966
gurneyi Belkin	Fresh water lagoons, near small aquatic plants, roots of swamp fern; April; 283	Steffan	1966
hybrida (Leicester)	Ground pools with *Pistia*; ---; 148	Delfinado	1966
metallica (Leicester)	Grassy swamp, hoof holes, edge of swamp; ---; 32	Lee	1944
minima (Theobald)	---; ---; 148 (Associated with *Pistia*)	Steffan	1966
modesta King & Hoogstraal	---; Jan., March-April; 148	Steffan	1966
solomonis Belkin	Undisturbed jungle swamps with extremely dense vegetation, shaded edges of swamps; ---; 283	Belkin	1962
FINLAYA			
kochi Dönitz	Leaf axils; ---; 263°	Doane	1914
poicilia Theobald	---; May, June, Sept. and Nov.; 32°	Hill	1922
	---; ---; 32	Taylor	1918
	---; ---; 107°	Veitch & Greenwood	1921
	---; ---; 148	Taylor	1914
GRABHAMIA			
flindersi Taylor	---; Nov.; 32	Taylor	1913
theobaldi Taylor	---; ---; 32	Taylor	1918
HARPAGOMYIA			
tenurostris (Leicester)	Leaf axils; ---; 32, 148	Wharton	1947
leei Wharton	Leaf axils of *Colocasia*; ---; 148	Wharton	1947
solomonis Wharton	Leaf axils; ---; 283	Wharton	1947

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
HODGESIA	---; ---; 32, 283	Steffan	1966
cairnsensis Taylor	---; in dense, shady jungle; 50°	Laird	1946
	---; ---; 50, 148 (Dense scrub and mangroves)	Hill	1925
quasisanguinae Leicester	---; ---; 32, 50, 148 (Vicious biters)	Steffan	1966
	---; at 50 meters elevation; 148	Bonne-Wepster	1948
solomonis Belkin	Dense jungle swamps, mostly in small pockets of water at edges of swamps; bites extremely painful, bites in open in broad sunlight; 283°	Belkin	1962
	---; ---; 283	Steffan	1966
spoliata Edwards	Swamps; ---; 148	Steffan	1966
	---; dense jungles, mangroves on banks of streams, bites by day; 148°	Hill	1925
triangulata Taylor	---; ---; 32, 148	Taylor	1915
triangulatus Taylor	Permanent spring in dense tropical scrub; Nov.; 32	Hill	1917
	---; ---; 148	Taylor	1914
HULECOETEOMYIA *milsoni* Taylor	---; ---; 32	Taylor	1917
LEPIDOTOMYIA *lineatus* Taylor	---; ---; 148	Taylor	1914 a
LEUCOMYIA *annulipetris* Taylor	---; March-April; 32	Taylor	1913
annulata Taylor	---; Feb ; 32	Hill	1922
	---; March-April; 32	Taylor	1913
australiensis var. *parvensis* Taylor	---; ---; 148	Taylor	1914a
vicina Taylor	Mangrove fringed swamps, in masses of green, slimy aquatic vegetation; ---; 32	Hill	1917
LOPHOCERATOMYIA *annulata* Taylor	---; bedroom before sunrise; 32	Hill	1917

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
LOPHOCERATOMYIA			
cairnsensis Taylor	---; ---; 32	Taylor	1918
cylindrica Theobald	---; ---; 32	Taylor	1918
LUTZIA			
halifaxi Theobald	Street gully-traps, disused ships, tanks and other water-holding rubbish about habitation, rarely in tea swamp; ---; 32°	Cooling	1924 b
	Predaceous; in a house; 32	Mackerras	1928
	Pools; ---; 32	Taylor	1927
	---; ---; 148	Cooling	1924 a
	Large and shallow rainwater pools containing dead coconut leaves just above the beach, small salt water pools in rocks above high tide marks; ---; 283	Paine & Edwards	1929
MACLEAYA			
tremula Theobald	In fire buckets, rot hole in fork of tree; in and about huts, bite all day, Feb. and May; 32°	Hill	1922
MALAYA			
genurostris Leicester	---; ---; 32, 148 (Leaf axils of large *Arum* and *Colocasia*)	Steffan	1966
loei (Wharton)	Leaf axils of *Colocasia*; Jan.; 148	Steffan	1966
solomonis (Wharton)	Axils of swamp plants; ---; 283	Belkin	1962
MANSONIA			
africana (Theobald)	---; ---; 148 (Attracted to roots of *Pistia stratiotes*, bites chiefly at night)	Steffan	1966
annulifera (Theobald)	---; ---; 148 (Fresh water ponds, pools, backwaters, marshes with *Pistia* and *Eichhornia*, bites man)	Farner et al.	1946
	---; ---; 148 (Ponds, swamps overgrown with vegetation)	Knight et al.	1944
	---; ---; 148°	Delfinado	1966
indica Dobrotworsky	---; bites by day, Dec.-Feb.; 32°	Dobrotworsky	1965
papuaellalas Theobald	Swamps; ---; 107	Lever	1944 a

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
MANSONIA bonneweptserae Assem	Roots of *Pistia stratiotes* and *Hydrocharis asiatica* in heavily polluted water; bites man after sunset and in daytime in wet, shady areas; 148°	Steffan	1966
crassipes (van der Wulp)	---; ---; 32, 50, 107, 148, 219 (Drain in grassy swamp)	Knight et al.	1944
	---; July-Aug.,Oct.-Nov.; 66°. ---; ---; 107°, 219°. ---; bites in woods, Jan., Oct.-Dec.; 236° (Grassy pools, swamps or lakes attached to submerged plants, resting in dense vegetation)	Bohart	1957
	Small lakes in association with *Ipomoea*; ---: 107, 148, 219	Lee	1944
	Swamps with vegetation; May, Aug.; 107	Lever	1944
	At 1700 meters elevation; ---; 148	Bonne-Wepster	1948
	Aquatic plants in fresh water swamps; ---; 219	Perry	1950
	---; ---; 283	Stone et al.	1959
dives (Schiner)	---; ---; 32, 50, 148 (Forest swamps, among rootlets of trees, rattans and palms, indoors and outdoor biters)	Delfinado	1966
fijiensis Belkin	Swamp, pit, attached to *Eleocharis articulata*; in the bush; 107	Belkin	1962
giblini (Taylor)	---; ---; 32, 50, 148	Stone et al.	1959
indiana Edwards	On *Pistia* plants; ---; 148° (Vector of *Wuchereria bancrofti*)	Farner	1943
	---; ---; 148 (Associated with *Pistia*, common in lakes, fouled by coconut husks, enters houses, bites man)	Steffan	1966
	---; ---; 148 (Swamps and pools overgrown with vegetation)	Knight et al.	1944
irrorata (Walker)	---; ---; 222	Lee	1944
luzonia (Skuse)	---; bites by day, common, Dec.-Mar.; 32°	Dobrotworsky	1965
	---; ---; 32	Lee	1944

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
MANSONIA			
longipalpis van der Wulp	*Pistia* plants; ---; 50, 148	Farner et al.	1946
lutea Belkin	Edge of swamp in wooded area in very shallow water at the base of a *Pandanus*, attached to roots in a swamp, fresh water lagoon; wooded areas around swamps, in tents; 283	Belkin	1962
melanesiensis Belkin	---; vicious day and night biter, in villages, with partially developed *Wuchereria bancrofti* larvae; 283°	Belkin	1962
memorans Bonne-Wepster	---; ---; 148	Bonne-Wepster	1930 a
nigrochracea (Bonne-Wepster)	---; ---; 148	Bonne-Wepster	1930 a
ochracea (Theobald)	---; ---; 148	Bonne-Wepster	1930 a
papuensis (Taylor)	---; bites in the early evening; 148°	Steffan	1966
	---; ---; 148	Bonne-Wepster	1930
septempunctata Theobald	---; ---; 32, 50, 148	Knight et al.	1944
tenuipalpis (Edwards)	---; ---; 222	Lee	1944
uniformis (Theobald)	---; ---; 32, 50, 148, 283 (Anthropophilic and persistent biters, active day and night, enters houses). Mangrove swamp; ---; 148	Farner et al.	1946
	---; ---; 32, 50, 148, 283 (Swamps and pools overgrown with vegetation)	Knight et al.	1944
	---; ---, 32 (Eager biter, host of *Wuchereria bancrofti*)	Martini	1930
	Attached to roots of giant grasses in soft-bottom marshes; nocturnal; 148°	Steffan	1966
	At 50 - 2,250 meters elevation; July-Sept., Dec.; 148	Bonne-Wepster	1948
	On *Pistia* and *Eichhornia*; ---; 148	Farner	1943
	---; ---; 148*	Raghavan	1961

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
MANSONIA			
variegata Dobrotworsky	---; bites man after sunset; 32°	Dobrotworsky	1965
xanthogaster (Edwards)	---; ---; 32, 183. Grassy swamps; ---; 219. Dwarf *Pandanus* in water 1-3 feet deep in heavily shaded overgrown fresh-water swamps; persistent and vicious biters; 220°	Belkin	1962
	---; ---; 107	Lever	1945
	---; ---; 148	Lee	1944
	Pandanus, *Lemna* and *Nymphaea*, in large fresh water swamp; bite during day; 220°	Perry	1946
	Attached to submerged fleshy roots, stems and leaves of aquatic vegetation; all year; 220	Perry	1949 a
	---; ---; 222	Knight et al.	1944
MANSONIOIDES			
africanus Theobald	Swamps; ---; 32°	Hill	1922
indiana Edwards	---; naturally infected with *Wuchereria bancrofti*; 148	Manson-Bahr	1959
longipalpis (van der Wulp)	---; ---; 148*	Manson-Bahr	1959
paupensis (Taylor)	---; naturally infected with *Wuchereria bancrofti*; 148*	Manson-Bahr	1959
	---; experimentally infected with *W. bancrofti*; 148	Raghavan	1961
septemguttata Theobald	---; ---; 32	Hill	1922
uniformis Theobald	Swamps; ---; 32°	Hill	1922
	---; ---; 32,	Taylor	1918
	---; naturally and experimentally infected with *Wuchereria bancrofti*; 148. ---; naturally infected with *W. bancrofti*; 283	Raghavan	1961
	---; ---; 148*	Manson-Bahr	1959
MAORIGOEDIA *argyropus* (Walker)	Artificial containers in or near native bush; ---; 222	Belkin	1962

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
MEGARHINUS *inornatus* Walker	Clear and murky water in coconut husks and tin cans in jungle; inside buildings during day; 50	Laird	1946
	Old stump of sago palm; ---; 50	Taylor	1934
	---; ---; 50, 97 (Treeholes, artificial containers)	Knight et al.	1944
	Coconut husks; ---; 107	Paine	1934
	Predaceous; ---; 134	Bohart & Ingram	1946
	Tree holes, artificial containers in secluded places; ---; 148	Hill	1925
speciosus Skuse	Treeholes; ---; 32	Mackerras	1928
	Artificial containers; ---; 32	Cooling	1924 b
	Cannibalistic; ---; 32	Ferguson	1926 a
	---; ---; 107, 148 (Treeholes, artificial containers)	Knight et al.	1944
splendens Wiedemann	Treeholes, coconut husks, leaf axils of *Colocasia* and *Alocasia*, artificial containers, predaceous; ---; 107	Paine	1943
	Bamboo stumps; tree trunks by night in swamp land along the coast; 107	Paine	1934
	---; June; 107 (Treeholes, leaf axils of *Colocasia*, artificial containers)	Lever	1941
	---; at 50 meters elevation; 148	Bonne-Wepster	1948
splendens *splendens* Wiedemann	---; ---; 107, 148	Knight et al.	1944
splendens *subulifer* Doleschall	---; ---; 148	Knight et al.	1944
MELANOCONION *ornatus* Theobald	---; ---; 148	Edwards	1924
pallidiceps Theobald	---; ---; 148	Edwards	1924
MIMETOMYIA *atripes* Skuse	Dense scrub in rain-forest; May; 32	Hill	1922

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
MIMETEOMYIA *hilli* Taylor	Predaceous; ---; 32	Taylor	1917
ornata Taylor	---; ---; 32	Taylor	1917
pulcherrima Taylor	Rothole in tree; May; 32	Hill	1922
quasiornata Taylor	---; ---; 32	Taylor	1917
MIMOMYIA *metallica* Leicester	---; ---; 32	Taylor	1929
MUCIDUS *alternans* (Westwood)	Salt waters, predaceous; bites in the evening, annoying near mud flats; 32°	Mackerras	1928
	Shallow swamp; in bushes, grass and scrub, attracted into house by lights, Jan.-March and May-July; 32	Hill	1922
	Fresh or slightly brackish swamps; ---; 32	Hill	1925
	---; ---; 148, 222 (Shallow swamps)	Edwards	1924
kermorganti (Laveran)	---; ---; 219	Edwards	1922a
	---; ---; 222	Edwards	1924
MYZORHYNCHUS *barbirostris* var. *bancrofti* Giles	Springs and streams; ---; 32°	Hill	1917
	---; ---; 32	Taylor	1915
NEOMACLEAYA *australis* Taylor	---; ---; 32	Taylor	1915
NEOSQUAMOMYIA *breinli* Taylor	Pools, hollow logs; July; 148	Taylor	1914a
NYSORHYNCHUS *annulipes* Walker	Stagnant pools along creek beds and water holes, backwater of sluggish streams, fresh water swamps, drying mangrove swamps, crabholes, hollow tree trunks, artificial containers, near dwellings; nocturnal, diurnal, enter houses, bites in the open before sunset; 32°	Hill	1917
	---; ---; 32*	Siler et al.	1926
	---; ---; 148	Hill	1925

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
NYSORHYNCHUS annulipes var. *moluccensis* Swellengrebel	---; ---; 148	Hill	1925
OCHLEROTATUS notoscriptus (Skuse)	Rotholes and pools on fallen tree trunks, cut-off palm trunks, fire buckets, fresh and brackish water in rockholes near beach; ravines on mountain side, all year; 32°	Hill	1922
	---; ---; 32	Taylor	1918
quasirubrithorax Theobald	On bark of tree near margin of water in rothole; May; 32	Hill	1922
vigilax Skuse	Mangrove swamps, tidal creeks, fresh water swamps, open well in garden, rockhole near beach, tidal swamps marshes and creeks; in scrub, bite day and night, indoors and out, Sept.-June; 32°	Hill	1922
vittiger Skuse	Small shallow, fresh-water swamp at foot of slopes; in dwellings, bite rather painful, Feb., March, May, July, Sept. and Oct.; 32°	Hill	1922
OPIFEX fuscus Hutton	---; ---; 165, 222 (Rock pools above high-water mark and on sides below water surface, with brackish water containing *Enteromorpha*, bites man at night and produce a most painful bite)	Belkin	1962
	Semi-saline pools just above high water and frequently splashed by spray; night biter; 222°	Graham	1939
	---; rocky coasts; 222	Edwards	1924
ORTHOPODOMYIA andamanensis Barraud	---; ---; 148 (Treeholes, bamboo stumps, artificial containers, bites by day)	Steffan	1966
PARDOMYIA aurantia Theobald	Muddy ditch with some algal scum and water in hoof marks; ---; 283	Paine & Edwards	1929
PSEUDOSKUSEA basalis Taylor	Crabholes containing salt water, putrifying mangrove leaves; mangroves, Feb.-March, day and night biter; 32°	Hill	1917
	---; ---; 32	Taylor	1915
cairnsensis Taylor	---; ---; 32	Taylor	1918
PSEUDOTAENIORHYNCHUS conopas var. *giblini* Taylor	---; ---; 148	Taylor	1914 a

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
PSEUDOTAENIORHYNCHUS			
samoaensis Theobald	---; ---; 263	Theobald	1914
RACHIONOTOMYIA			
argenteiventris (Theobald)	---; ---; 148	Edwards	1924
argyropus (Walker)	Shaded tanks surrounded by bush, shallow dishes; in bush on tree trunks, under dead nikau, tree fern leaves, under eaves of huts, indoors, Oct.-May; 222	Graham	1929
	Artificial containers around cottages; night biter; 222°	Graham	1939
atra (Taylor)	---; ---; 148	Edwards	1924
atripes (Skuse)	Treeholes; in heavily timbered areas; 32°	Mackerras	1928
	Water butts and tanks; ---; 32	Edwards	1924
bimaculipes (Theobald)	---; ---; 148	Edwards	1924
caledonica Edwards	Pitcher plants; ---; 219	Edwards	1924
	---; common; 219. Narrow, deep cavity between the main branches of a *Poinciana* tree, crabholes; ---; 220	Buxton & Hopkins	1927
cephasi Edwards	---; Feb.; 32	Edwards	1923
filipes (Walker)	---; ---; 32, 148	Edwards	1924
	Leaf axils of a large wild Aroid and in leaves on the ground in forest, predaceous and cannabilistic; ---; 283	Paine & Edwards	1929
littlechildi Edwards	---; ---; 148	Edwards	1930
magnesiana Edwards	---; ---; 32	Edwards	1924
ornata (Taylor)	---; ---; 148	Edwards	1924
purpurata Edwards	Artificial container; ---; 107	Edwards	1924
	---; ---; 107°	Veitch & Greenwood	1924

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
RACHIONOTOMYIA *quasiornata* (Taylor)	Dense tropical scrub; May, June and Nov.. scrub-covered ravine on mountain side; 32	Hill	1922
	---; ---; 50	Edwards	1924
	Treeholes; diurnal; 148	Hill	1925
rotumana Edwards	---; April; 107	Edwards	1929
solomonis Edwards	Coconut husks; ---; 283	Paine & Edwards	1929
	---; in houses; 283	Edwards	1924
tasmaniensis Strickland	---; ---; 32	Edwards	1924
RACHISOURA *aira* (Taylor)	---; ---; 148	Cooling	1924a
atripes (Skuse)	Treeholes, rainwater tanks and other artificial containers; ---; 32	Cooling	1924b
caledonica Edwards	---; ---; 219	Cooling	1924
cephasi Edwards	---; ---; 32	Cooling	1924
filipes (Walker)	---; ---; 32, 148	Cooling	1924
ornata (Taylor)	---; ---; 148	Cooling	1924
pulcherrima (Taylor)	---; ---; 32	Cooling	1924
purpurata Edwards	---; ---; 107	Cooling	1924
quasiornata (Taylor)	---; ---; 32, 50	Cooling	1924
REEDOMYIA *pampangensis* (Ludlow)	Hoof-holes in boggy ground, rock crevices; day and night biter; 32°	Hill	1917
	---; ---; 32	Taylor	1915
SCUTOMYIA *notoscripta* Skuse	---; day and night biter; 32°	Hill	1917
	---; ---; 32	Taylor	1913

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
SKUSEA *funerea* Theobald	Algea and grass covered seepage, fresh water pools, salt puddles in mangrove swamps; in and around huts, Feb., March and April; 32°	Hill	1922
	---; ---; 148	Taylor	1914
pseudomediofasciata Theobald	---; ---; 32	Taylor	1918
uniformis Theobald	---; ---; 32	Taylor	1915
STEGOMYIA *atra* Taylor	---; June; 148	Taylor	1914 a
atripes (Skuse)	---; ---; 32	Taylor	1915
daliensis Taylor	---; ---; 32	Taylor	1917
fasciata Fabricius	Clean water; domestic, day biter, suspected vector of dengue; 32°	Hill	1917
	Rothole in tree; in houses, all year; 32	Hill	1922
	---; experimentally infected with *Wuchereria bancrofti*, common; 83	McKenzie	1925
	---; ---; 107°	Veitch & Greenwood	1921
	Small collections of clear water, artificial containers; near dwellings; 134	van Dine	1904
	---; July; 148	Taylor	1914 a
	Standing water; bites in evening, in fields and in bushes; 263°	Doane	1914
	---; Feb.; 263	Theobald	1914
hilli Taylor	Spring; March and April; 32°	Hill	1917
notoscripta Skuse	---; July; 148	Taylor	1914 a
ornata Taylor	---; ---; 148	Taylor	1914 a

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
STEGOMYIA *pseudoscutellaris* Theobald	Treeholes, coconut husks, rotting vegetation, artificial containers in shade; in houses and bushes, naturally and experimentally infected with *Wuchereria bancrofti*, diurnal; 83°	McKenzie	1925
	---; ---; 107°	Veitch & Greenwood	1921
	Standing water; common about houses, bites man day and evening, host of filaria, possible vector of dengue; 263°	Doane	1914
pulcherrima Taylor	---; ---; 32	Taylor	1918
punctolateralis Theobald	---; ---; 32	Taylor	1918
quasiornata (Taylor)	---; ---; 32	Taylor	1915
scutellaris Walker	---; day biter, indoors; 32°	Hill	1917
	Small natural collections of water in the forest, leaves of plants and the hollow decayed stumps of trees and branches; shady places; 134	van Dine	1904
	---; ---; 148	Taylor	1914 a
tasmaniensis Strickland	---; ---; 32	Taylor	1917
TAENIORHYNCHUS *africanus* (Theobald)	---; ---; 32	Edwards	1924
annuliferus (Theobald)	---; ---; 32, 148	Cooling	1924
annulipes (Walker)	---; ---; 32, 148	Edwards	1924
brevicellulus Theobald	On masses of algae on surface of rockhole; April, rare; 32	Hill	1922
	---; ---; 50. ---; cane-grass flats, in dense jungle and in open scrub country; 148	Hill	1925
	---, ---; 107, 219	Edwards	1924
	---; ---; 107°	Veitch & Greenwood	1921
crassipes van der Wulp	---; ---; 32	Taylor	1944

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
TAENIORHYNCHUS giblini (Taylor)	---; ---; 32	Taylor	1944
	---; ---; 148	Edwards	1924
iracundus (Walker)	Pools in sunny, sheltered creek beds with strong smelling decaying vegetation; bite day and night; 222°	Graham	1939
	---; ---; 222	Edwards	1924
linealis (Skuse)	---; rare; 32°	Mackerras	1928
	---; ---; 32	Edwards	1924
littleri Taylor	---; ---; 32	Cooling	1924
papuensis Taylor	---; common in cane-grass swamps and adjacent jungle; 148	Hill	1925
	---; ---; 148	Edwards	1924
septempunctata Theobald	---; ---; 148	Taylor	1914 a
tenuipalpis Edwards	---; bites at night, Jan. and May; 222°	Graham	1939
	---; ---; 222	Edwards	1924
uniformis Theobald	Adapted to sub-aquatic aerial respiration through roots or stems of water plants, *Pistia*; enters houses to bite; 32°	Cilento	1924
	Artificial containers; in long grass near water courses and fresh water swamps, in dwellings by day and night, day and night biter; 32°	Hill	1917
	---; ---; 32, 148	Edwards	1924
	---; ---; 50. Weedy fresh-water swamps and back-waters, mangroves; persistent biter, active throughout the day and night; 148°	Hill	1925
	---; ---; 283	Edwards	1941
uniformis var. *australiensis* Giles	---; bite day and night, in bush and in houses, suspected vector of *Wuchereria malayi*, June-July; 32°	Taylor	1943
xanthogaster (Edwards)	---; ---; 32	Edwards	1924

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
THEOBALDIA			
atra Lee	---; ---; 32	Lee	1944 b
frenchi (Theobald)	---; ---; 32	Edwards	1924
hilli Edwards	---; ---; 32	Lee	1944
inconspicua Lee	Fresh water rock and ground pools; ---; 32	Lee	1944
littleri (Taylor)	---; ---; 32	Edwards	1924
tonnoiri Edwards	---; ---; 222	Lee	1944
weindorferi Edwards	---; ---; 32	Lee	1944
THEOBALDINELLA			
tonnoiri Edwards	---; ---; 222	Miller	1950
TOPOMYIA			
papuensis Marks	Axils of a crinum-like plant growing in deep shade; April; 148	Steffan	1966
TOXORHYNCHITES			
amboinensis (Doleschall)	---; ---; 148	Steffan	1966
brevipalpis Theobald	---; ---; 134, 263 (Treeholes, artificial containers; cannibalistic)	Belkin	1962
inornatus (Walker)	Treeholes, artificial containers; ---; 32	Lee	1944
	---; ---; 32, 50, 107, 148 (Treeholes, coconut husks, artificial containers)	Belkin	1962
	---; ---; 97	Stone et al.	1959
speciosus (Skuse)	Treeholes, artificial containers, predaceous; ---; 32	Lee	1944
	Rockhole in fork of tree; ---; 32	Hill	1922
	---; ---; 32, 107, 148 (Treeholes, tanks, small wells, artificial and natural containers, predaceous)	Steffan	1966

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
TOXORHYNCHITES *splendens* (Wiedemann)	---; ---; 107, 148, 263 (Treeholes, bamboo stumps, invades artificial containers)	Belkin	1962
	---; ---; 107, 134, 148, 263 (Natural and artificial containers, predaceous)	Steffan	1966
	Treeholes, bamboo, occasionally in artificial containers, water butts; ---; 148	Lee	1944
splendens *subulifer* (Doleschall)	---; ---; 148	Steffan	1966
TRIPTEROIDES *adentata* Assem	In climbing *Nepenthes*; virgin rainforest at 457 meters altitude; 148	Steffan	1966
alboscutellatus Lee	Treeholes in sago swamp and in rain forest; ---; 148	Lee	1945
altivallis Bonne-Wepster	---; ---; 148	Steffan	1966
argenteiventris (Theobald)	---; in shady jungle, seldom bites, rest on tree buttress; 50°	Laird	1946
	---; ---; 50, 148 (Artificial containers, coconuts, tree holes, bites man, March-April, Sept., Oct.)	Steffan	1966
	Treeholes, coconut shells and artificial containers; ---; 148	Lee	1945
	Axils of floral bracts of *Circuma* sp.; ---; 148	Lee	1944
	---; at 1200-1800 meters elevation, Feb.; 148	Bonne-Wepster	1948
argyropus (Walker)	Artificial containers around houses; nocturnal; 222°	Lee	1945
	---; domestic; 222	Lee	1944
ater (Taylor)	---; bites by day in creeks, in rain and mossy forest; 148°	Lee	1945
	---; ---; 148	Penn	1947
atripes (Skuse)	Treeholes, artificial containers; bites by day; 32°	Dobrotworsky	1965
atripes *atripes* (Skuse)	Treeholes, rainwater, tanks, water barrels; ---; 32	Knight et al.	1944

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
TRIPTEROIDES			
atripes occidentalis Brug	---; ---; 148	Knight et al.	1944
atripes punctolateralis (Theobald)	Treeholes, artificial containers; ---; 32	Knight et al.	1944
bimaculipes (Theobald)	---; bites by day; 32° (Treeholes, sago swamp, coconut shells, artificial container). Coconut shells and artificial containers; bites in scrub and around jungle margins; 148°	Lee	1945
	Coconut husks, tree holes, bamboo stumps, pitcher; ---; 50, 148	Lee	1944
	---; ---; 50, 148 (Hollow logs, tree holes, coconut shells, artificial containers, sago swamps and rain forests, bites man all day)	Steffan	1966
	Nepenthes; ---; 148	Brug	1934
binotatus Belkin	Tree holes, leaf axils of taro, artificial containers; ---; 283	Belkin	1950
bisquamatus Lee	Pitcher plants, climbing *Nepenthes*; ---; 148	Steffan	1966
	Nepenthes in swampy grassland; ---; 148	Lee	1945
	---; at 1200-1600 meters elevation; 148	Bonne-Wepster	1948
bonneti Belkin	Airplane wing tank used to catch rain water; ---; 268	Belkin	1962
brevipalpis Brug	---; ---; 148 (Bamboo stumps, cut bamboo)	Steffan	1966
brevirhynchus Brug	*Nepenthicolous* sp.; ---; 32	Lee	1945
brugi (Edwards)	---; ---; 148	Lee	1944
caledonicus (Edwards)	Tree holes, coconut husk, pitcher plants and artificial containers; ---; 219	Perry	1950
	Tree holes, plant axils, coconut halves and husks, bamboo stumps, artificial containers; rest on tree trunks; 220	Perry	1946

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
TRIPTEROIDES			
coheni Belkin	Tree holes, hollow stump, with clear or turbid water; ---; 283	Belkin	1950
collessi Lee	Tree holes; ---; 32	Lee	1945
concinnus Lee	---; at 1,400 meters elevation; 148	Lee	1945
	---; March; 148°	Steffan	1966
confusus Lee	Artificial containers, coconut shells; ---; 148	Steffan	1966
	---; at 50-1800 meters elevation; 148	Bonne-Wepster	1948
cuttsi Assem	In *Nepenthes*; moss forest at 1,829 meters elevation, bites by day; 148°	Steffan	1966
digoelensis Brug	*Nepenthes*; ---; 148	Brug	1934
distigma (Edwards)	Tree hole; in house; 283	Belkin	1962
elegans Brug	Pitcher plants; ---; 148	Knight et al.	1944
	---; at light; 148	Lee	1945
exnebulis Bonne-Wepster	---; at 1800 meters elevation, Dec., Jan.; 148	Bonne-Wepster	1948
felicitatis Bonne-Wepster	---; at 1800 meters elevation; 148	Bonne-Wepster	1948
filipes (Walker)	Leaf axils of *Aroid* and leaves on ground; ---; 32, 148, 283	Lee	1944
	Pitcher plants; ---; 32°. *Pandanus* and coconut centers; ---; 148°. Wild *Aroid* and fallen leaves; ---; 283	Lee	1945
	---; ---; 32, 50, 148, 283 (Leaf axils, tree holes, predaceous)	Knight et al.	1944
	---; ---; 32, 50, 148 (Pitcher plants, *Nepenthes*, grassy swamps, bites man)	Steffan	1966
	Leaf axil of *Colocasia*; ---; 50	Laird	1946
	Rot holes in trees; ---; 50	Taylor	1934

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
TRIPTEROIDES			
flabelligera Bonne-Wepster	---; at 2100 meters elevation; 148	Bonne-Wepster	1948
floridensis Belkin	Leaf axils of banana; ---; 283	Belkin	1950
folicola Belkin	Leaf axils; ---; 220	Belkin	1962
fuliginosus Lee	---; buttress of rain-forest tree; 148	Lee	1945
fuscipleura Lee	Leaf axils of taro, small stump hole; ---; 148	Steffan	1966
kingi Lee	Pitcher plants; bites by day; 148°	Lee	1945
	Leaf axils of taro, small stump hole; ---; 148	Steffan	1966
latisquama (Edwards)	---; at 1,400 meters elevation; 148°	Lee	1945
	---; ---; 148	Lee	1944
leei Peters	Axils of *Curcuma*, tree holes; ---: 148	Steffan	1966
lipovskyi Belkin	Tree holes, coconut shells, leaf axils of sago, bamboo stubble, artificial containers; occasionally bite man by day in jungle swamp areas, rest on tree buttresses; 283°	Belkin	1950
littlechildi (Edwards)	---; ---; 148	Steffan	1966
longipalpatus Lee	Cut bamboo in rain forest, pitcher plant at 1,600 meters elevation; ---; 148	Lee	1945
lovengaui Peters	Tree holes along shaded riverside; ---; 50	Steffan	1966
magnesianus (Edwards)	---; in rain forest; 32°	Lee	1945
	---; ---; 32	Lee	1944
marksae Dobrotworsky	Hollow tree stump, artificial containers; ---; 32	Dobrotworsky	1965
mathesoni Belkin	Leaf axils of taro, predaceous and cannibalistic; taro plants by day, all year; 283	Belkin	1950

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
TRIPTEROIDES melanesiensis Belkin	---; ---; 183, 219, 220, 268 (Tree holes, bamboo, coconut husks and shells, palm bracts, rock pool, artificial containers)	Belkin	1962
microlepis (Edwards)	---; bites by day in high mountains; 148°	Lee	1945
	---; March, April; 148	Steffan	1966
nissanensis Lee	Tree holes; ---; 50	Steffan	1966
novohanoverae Peters	Tree holes, bamboo stumps; ---; 50	Steffan	1966
obscurus Brug	*Nepenthes*; ---; 148	Brug	1934
ornata (Taylor)	---; ---; 148	Lee	1944
pallidus Lee	Pitcher plants; bites in sago swamps and in rain forest; 148°	Lee	1945
papua Brug	*Nepenthicolous* sp.; ---; 148	Lee	1945
perplexus Peters	Tree holes; March; 148	Steffan	1966
pilosus Lee	Pitcher plants; ---; 148	Steffan	1966
plumiger Bonne-Wepster	---; at 1200 meters elevation; 148	Bonne-Wepster	1948
punctolateralis (Theobald)	Water butts and tanks, rot holes in fallen logs; ---; 32°	Lee	1945
	---; ---; 32, 148 (Water butts and tanks, rot holes in fallen logs, bites man, Nov.)	Steffan	1966
purpuratus (Edwards)	Tree fern stump, tree holes, coconut husks; ---; 107	Paine	1943
	Cut bamboo; ---; 107	Belkin	1962
	Artificial containers; ---; 107	Lee	1945
	---; ---; 148 (Tree holes, artificial containers)	Knight et al.	1944
quasiornatus (Taylor)	Tree holes; ---; 32, 283	Lee	1944
	---; ---; 32, 148, 283 (Tree holes, leaf axils of banana and taro)	Knight et al.	1944

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
TRIPTEROIDES quasiornatus (Taylor) (cont.)	Shady, fresh, clear, murky water with organic content, coconut husks, tree holes, artificial containers; vicious biters, in houses and jungle by day; 50°	Laird	1946
	Leaf axils of banana and *Colocasia*, rot holes in trees; ---; 50	Taylor	1934
rotumanus (Edwards)	---; ---; 97	Stone et al.	1959
	Artificial containers in deep shade in the bush area on edge of village; ---; 107	Belkin	1962
simplex Brug	Pitcher plant; ---; 148	Knight et al.	1944
solomonis (Edwards)	---; ---; 219 (Tree holes, bamboo stubbles, papaya stumps, artificial containers)	Steffan	1966
	Semi-domestic, small natural and artificial containers, tree holes, papaya stumps, bamboo stubble, water collection in canvas, water is extremely foul with large amount of decaying organic matter; a pest around human dwellings, attracted to artificial light; 283	Belkin	1962
	Common along the coast, tree holes, papaya stump, bamboo stubble, artificial container with foul water and decaying organic matter; attracted to lights, enters houses; 283°	Belkin	1950
	Coconut shells, coral pockets with high concentrations of dissolved organic tannins; ---; 283	Perry	1949
splendens Lee	---; inside tents; 148°	Lee	1945
standfasti Peters	Axils of *Curcuma*, coconut shells; Ja.., Feb.; 148	Steffan	1966
stonei Belkin	Commonly found in tree holes, bamboo stubble, artificial containers; in field resting in coconut shells and on buttresses of trees in swampy areas, abundant during rainy season, all year, bites by day; 283°	Belkin	1950
subnudipennis (Edwards)	---; at 2,400 meters elevation; 148	Steffan	1966
subobscurus Lee	*Nepenthes*; ---; 32	Lee	1945
	---; ---; 148 (*Nepenthes*)	Steffan	1966

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
TRIPTEROIDES			
sylvestris (Theobald)	---; ---; 32	Lee	1944
tasmaniensis (Strickland)	Common in elevated woodlands, artificial containers; bites by day; 32°	Dobrotworsky	1965
	Rock pools, tree holes; ---; 32	Lee	1944
tityae Slooff	---; ---; 148	Steffan	1966
torokinae Belkin	Tree holes; Nov.; 283	Belkin	1950
vanleeuweni (Edwards)	---; ---; 148	Steffan	1966
URANOTAENIA *albescens* Taylor	Clear, shallow, grassy pools of water, in kerosene tins and water butts; March, July; 32	Taylor	1913
	Wheel ruts; ---; 32, 148, 283	Lee	1944
	Stream with marginal vegetation, *Pandanus* swamp; ---; 50	Laird	1946
	---; ---; 50 (Artificial containers, shallow grassy pools, wheel ruts, March, Aug.)	Steffan	1966
	---; ---; 283 (Clear, shallow grassy pools, artificial containers)	Knight et al.	1944
albosternopleura Peters	Small rock pool; May, Aug.; 148	Steffan	1966
amiensis Peters	River edges; March-April, Nov.; 148	Steffan	1966
antennalis Taylor	---; ---; 32, 148	Steffan	1966
argyrotarsis Leicester	Limestone pot holes, tree holes; in shady forest near streams, rest on cliffs; 50	Laird	1946
	Small collections of casual ground waters, not fully exposed to sunlight; ---; 50	Taylor	1934
	---; ---; 50, 148, 283 (Forest streams, tree holes, shaded temporary ground pools and leafy forest swamps)	Delfinado	1966
	---; ---; 50, 148, 283 (Sago swamp pools, artificial containers)	Steffan	1966
	Rot-hole at the base of large tree in forest behind plantation, foul water and contaminated with decayed leaves; ---; 283	Paine & Edwards	1929

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
URANOTAENIA atra Theobald	---; ---; 32, 50, 148 (Fallen leaves, fallen coconut bracts, coconut shells, tree holes, sago swamp ground pools, crab holes, artificial containers)	Steffan	1966
	---; ---; 148 (Crab holes, stagnant pools, swamps, brackish water on coral islet)	Barraud	1934
	Slightly brackish water pools in open sunlit areas, crab holes, stagnant pools or swamps with nipa palms, and forest streams; ---; 283	Belkin	1953
barnesi Belkin	---; ---; 220, 283 (Dense fresh water jungle swamps, small pools, rock and side pools of densely shaded jungle streams, prefer shade, tree buttresses)	Belkin	1962
	Dense, fresh-water jungle swamps with high organic content, in shade, occasionally in sun, small pools, road ruts, occasionally in rock pools and stream side pools; rest on tree buttresses i.. jungle, act[illegible] 283	Belkin	1953
cairnsensis Taylor	---; ---; 32	Taylor	1918
civinskii Belkin	In shade, fresh clear water, in jungle streams, side pools, rock pools and stream beds, swamps, spring-fed pools, seepage areas, occasionally in sun; fly by day, rest in sh de; 283	Belkin	1953
colocasiae Edwards	Fallen seeds, pods, small rock pools in stream pools in stream bed, palm and banana leaves, bamboo stumps, tree holes with decaying organic matter, artificial containers, coconut husks, *Alocasia* leaf axils; predaceous; 107	Paine	1943
	Taro axils, small water collections in living plants and dead plant material, artificial containers, common in *Colocasia* and *Alocasia* leaf axils, coconut shells and spathes and large fallen leaves or fronds on ground, in cut bamboo and tree stumps, prefer fairly fresh water; ---; 283	Belkin	1962
diagonalis Brug	---; ---; 50 (Leaf axils of *Curcuma*)	Steffan	1966
	Axils and floral bracts of *Curcuma* sp.; ---; 148	Lee	1944
fimbriata King & Hoogstraal	---; March; 148	Steffan	1966

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
URANOTAENIA			
gerdae Slooff	Large clear, cool rock pools; Jan.; 148	Steffan	1966
hilli Taylor	Crab holes in mangrove swamps; ---; 32	Taylor	1918
hirsutifemora Peters	---; Feb., Nov.; 148	Steffan	1966
lateralis Ludlow	---; ---; 32, 50, 148, 283 (Forest streams, grassy puddles and brackish nipa palm swamps, crab holes and stagnant pools)	Delfinado	1966
	Slightly brackish sunlit water pools; ---; 283	Belkin	1962
moresbyensis Peters	---; Feb.; 148	Steffan	1966
neotibialis King & Hoogstraal	Swamp ground pools; March-April; 148	Steffan	1966
nigerrima Taylor	Coconut flower-bracts, coconut shells; ---; 50, 148	Lee	1944
	Jungle covered ravine; ---; 50	Hill	1925
	Clear water in artificial container; ---; 50	Laird	1946
	Water held by a large leaf of a forest tree; ---; 148	Taylor	1934
	---; ---; 283 (Water in large leaf)	Knight et al.	1944
nivipes (Theobald)	---; ---; 32	Edwards	1924
novaguinensis Peters	Edge of slow running stream in partial shade; rest in shaded hole of river bank, Jan , April, Oct.; 148	Steffan	1966
novaguinensis altiola Peters	---; May; 148	Steffan	1966
painei Edwards	Rock pools in stream beds, shallow ground puddles at edge of small flood stream, may contain algae and the cast skins of crabs; along river banks; 107	Belkin	1962
papua Brug	Cup fungus, artificial containers, spathes, leaves, inflorescences of *Curcuma*, sago swamp, ground pools; ---; 148	Steffan	1966

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
URANOTAENIA			
paralateralis Peters	---; May-June: 50	Steffan	1966
paranovaguinensis Peters	Edge of slow running stream in partial shade; rest in shaded holes in river bank, Apr., Sept.-Oct.; 148	Steffan	1966
propia Taylor	---; enters houses; 32	Taylor	1913
pygmaea Theobald	Fresh water surface pools and swamps; ---; 32	Lee	1944
quadrimaculata Edwards	Seepage swamp, clear, occasionally cloudy water, coconut husks, wheel ruts in sun or shade; active by day; 50	Laird	1946
	Colocasia leaf axils, coconut husk; ---; 50, 148	Lee	1944
	Fallen banana leaves; ---; 50, 148	Taylor	1934
	Leaf axils of taro, tree holes, coconut shells, fallen leaves, artificial containers, occasionally in fallen bamboo and tree stumps, prefers fresh water, usually with organic matter; rests in breeding places; 283	Belkin	1953
setosa King & Hoogstraal	Ground pools at edge of sago swamps, grassy ditches; Jan.-Feb., April-May; 148	Steffan	1966
sexaurei Belkin	Dense jungle swamps; rare species; 283	Belkin	1953
solomonis Belkin	Ground pools, in open, occasionally in shade, temporary pools, ruts, spring, streams, stagnant pool water, artificial containers; rest in vegetation and on tree buttresses, fly by night; 283	Belkin	1953
subtibiolada King & Hoogstraal	---; April; 148	Steffan	1966
tasmaniensis (Taylor)	---; ---; 32	Cooling	1924
tibialis Taylor	---; ---; 32	Edwards	1924
	Grassy swamps, densely shaded jungle, over-flow of streams, shallow stream pools; rest on trees and overhanging stream banks in jungle; 220	Perry	1946

TABLE 1 -- MOSQUITOES (conclusion)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
URANOTAENIA *tibioclada* King & Hoogstraal	Swamp ground pools; Feb., Aug., Dec.; 148	Steffan	1966
wyeockii Belkin	Leaf axils of *Pandanus*, in densely shaded nipa-palm swamp, occasionally in open; ---; 283	Belkin	1953

TABLE 2 - SUMMARY OF DISEASES OR DISEASE ORGANISMS TRANSMITTED BY MOSQUITOES

SPECIES	DISEASE ORGANISM: VIRUS & RICKETTSIA	PROTOZOA	HELMINTHS	OTHER	DISTRIBUTION
AEDES *aegypti* (Linnaeus)	Dengue				32, 107, 134, 219, 220, 283
			Filariasis		97
albopictus (Skuse)	Dengue				134
argenteus Poiret	Dengue and Yellow fever				32
	Dengue and Yellow fever				107
kochi Dönitz			*Wuchereria bancrofti*		32, 148
polynesiensis Marks			Filariasis		107
pseudoscutellaris (Theobald)			Non-periodic filariasis		97, 107
			Filariasis		245
			Filaria-sis		263
scutellaris Walker			*Wuchereria bancrofti*		107
	Dengue				148
scutellaris pseudoscutellaris (Theobald)			Filariasis		97, 107, 199, 263
			Non-periodic *Wuchereria bancrofti*		107
			Non-periodic filariasis		205
scutellaris tongae Edwards			Non-periodic filariasis		114
scutellaris var. *variegatus* Doleschall			Filariasis		283

TABLE 2 - MOSQUITOES (continued)

SPECIES	DISEASE ORGANISM: VIRUS & RICKETTSIA	PROTOZOA	HELMINTHS	OTHER	DISTRIBUTION
AEDES			*Filaria*		
variegatus Doleschall			*bancrofti*		107
			Filariasis		148, 263
variegatus torgae Edwards			Non-periodic filariasis		114
vigilax (Skuse)			Non-periodic filariasis		219
ANOPHELES			*Wuchereria*		
aconitus Dönitz			*bancrofti*		148
amictus Edwards			*Wuchereria bancrofti*		32
annulipes Walker		Malaria			32
			Nocturnal filariasis		50
annulipes annulipes Walker		Malaria			32, 148
bancrofti Giles		Malaria			32, 148
			Nocturnal filariasis		148
			Wuchereria bancrofti		148 (Farner, 1943)
barbirostris var. *bancrofti* Giles		Malaria	*Wuchereria bancrofti*		148
farauti Laveran		*Plasmodium falciparum*			32
		Malaria			50, 148, 220, 268, 283, 289
			Wuchereria bancrofti		148 (Raghavan, 1961)
			Filariasis		220, 283 (Oman & Christenson, 1947)

TABLE 2 - MOSQUITOES (continued)

SPECIES	DISEASE ORGANISM: VIRUS & RICKETTSIA	PROTOZOA	HELMINTHS	OTHER	DISTRIBUTION
ANOPHELES karwari (James)		Malaria			148
			Nocturnal filariasis		148
			Wuchereria bancrofti		148
koliensis (Owen)			Filariasis		283
lungae Belkin & Schlosser		Malaria			32
punctulatus Donitz			Nocturnal filariasis		50
		Malaria			148, 283
punctulatus farauti Laveran		Malaria			32, 50, 148
			Nocturnal filariasis		50, 121, 283 (Manson-Bahr, 1959)
punctulatus moluccensis Swellengrebel & Swellengrebel de Graaf		Malaria			32, 50, 220, 283
			Wuchereria bancrofti		283 (Raghavan, 1961)
		Malaria	*Wuchereria bancrofti*		148 (Wilcocks, 1944)
punctulatus punctulatus Donitz		Malaria			32, 50, 148
			Nocturnal filariasis		121
			Wuchereria bancrofti		148 (Farner, 1943)
stigmaticus stigmaticus Skuse		Malaria			32
subpictus Grassi		Malaria			148
varuna Iyengar		Malaria			32

TABLE 2 - MOSQUITOES (conclusion)

SPECIES	DISEASE ORGANISM: VIRUS & RICKETTSIA	PROTOZOA	HELMINTHS	OTHER	DISTRIBUTION
CULEX					
annulirostris Skuse			Nocturnal filariasis		32, 66, 148 (Manson-Bahr, 1959)
			Wuchereria bancrofti		32, 148
			Filariasis		219
bitaeniorhynchus Giles			Nocturnal filariasis		148
cilaris (Linnaeus)			Nocturnal filariasis		32
fatigans Wiedemann			Filariasis		32, 199
			Wuchereria bancrofti		148
	Dengue		Elephantiasis		263
pipiens fatigans Wiedemann			Nocturnal filariasis		32, 66
quinquefasciatus Say			Filariasis		32, 220, 263, 283
			Wuchereria bancrofti		219
MANSONIA *uniformis* Theobald			*Wuchereria bancrofti*		148
MANSONIOIDES *longipalpis* (van der Wulp)			Nocturnal filariasis		148
paupensis (Taylor)			Nocturnal filariasis		148
uniformis Theobald			Nocturnal filariasis		148
NYSORHYNCHUS *annulipes* Walker		Malaria			32

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B. BLACK FLIES

The black fly entries include little on biology and disease--most of the recorded information is on distribution. In the tables are listed 58 species or subspecies.

TABLE 1 - BLACK FLIES

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
AUSTROSIMULIUM australense (Schiner)	On aquatic vegetation of small rivulets, grass blades, leaves dipping into the water; ---; 222°	Tonnoir	1925
	---; ---; 222	Miller	1950
bancrofti (Taylor)	Fast-moving, clear to muddy water; ---; 32°	Mackerras & Mackerras	1949
	---; March-June; 32	Mackerras & Mackerras	1948
cornutum Tonnoir	Swift water; ---; 32	Mackerras & Mackerras	1949
crassipes Tonnoir	Mountain streams; ---; 32	Mackerras & Mackerras	1949
fulvicorne Mackerras & Mackerras	Shaded fairly swift, evenly flowing water in a small creek; ---; 32	Mackerras & Mackerras	1950
furiosum (Skuse)	Moderately, fast, clear, shallow water attached to vegetation; ---; 32°	Mackerras & Mackerras	1949
laticorne Tonnoir	On plants in a swift flowing rivulet; ---; 32	Tonnoir	1925
	---; ---; 222	Mackerras & Mackerras	1949
longicorne Tonnoir	On grasses, water cress leaves or grass blades dipping into the water, small rivulets; ---; 32	Tonnoir	1925
	---; ---; 222	Mackerras & Mackerras	1949
magnum Mackerras & Mackerras	Attached to rocks in rapids, in clear, cool, fast-moving water; ---; 32	Mackerras & Mackerras	1955
mirabile Mackerras & Mackerras	Dead leaves in moderately fast, clear water; ---; 32	Mackerras & Mackerras	1949
	Small creek; Sept., Nov.-Dec.; 32	Mackerras & Mackerras	1950
montanum Mackerras & Mackerras	Swift, cold streams; Feb.-March, Sept.-Nov.; 32	Mackerras & Mackerras	1952
multicorne Tonnoir	On grass in small rivulet. Dec.-March; 32	Tonnoir	1925
	---; ---; 222	Mackerras & Mackerras	1949
pestilens Mackerras & Mackerras	Attached to sticks, logs, stumps and dead leaves in torrential, turbulent and muddy streams; ---; 32°	Mackerras & Mackerras	1948

TABLE 1 - BLACK FLIES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
AUSTROSIMULIUM *simile* Tonnoir	Small creeks, rivers, on leaves, grass blades or bits of reeds dipping into the water; Nov.-Jan.; 32	Tonnoir	1925
tasmaniense Tonnoir	On stones of small and medium-sized creeks, grass blades dipping in small rivulets with moderately swift current; ---; 32	Tonnoir	1925
tillyardi Tonnoir	On shingles; all year; 32	Tonnoir	1925
	---; ---; 222	Mackerras & Mackerras	1949
torrentium Tonnoir	On stones, cataract gorge, river shingles and creek; Oct., Nov., Jan.-Feb.; 32	Tonnoir	1925
torrentium hilli Mackerras & Mackerras	Swift clear water; ---; 32	Mackerras & Mackerras	1949
torrentium torrentium Tonnoir	Swift flowing large streams; ---; 32	Mackerras & Mackerras	1949
ungulatum Tonnoir	---; all year; 32°	Tonnoir	1925
	---; ---; 222	Mackerras & Mackerras	1949
vexans Mik.	---; ---; 32	Tonnoir	1925
	---; ---; 222	Mackerras & Mackerras	1949
victoriae Roubaud	On stones, occasionally on grass blades, in small to medium-sized creeks with moderate flow; ---; 32	Mackerras & Mackerras	1949
weindorferi Tonnoir	In a creek; ---; 32	Tonnoir	1925
CNEPHIA *auricaciacum* (Tonnoir)	Fast, clear mountain streams on vegetation; ---; 32	Mackerras & Mackerras	1949
fergusoni (Tonnoir)	---; ---; 32°	Mackerras & Mackerras	1949
strenua Mackerras & Mackerras	Rocks sheltered below brink in fast water; ---; 32	Mackerras & Mackerras	1950
terebrans (Tonnoir)	---; ---; 32°	Mackerras & Mackerras	1949

TABLE 1 - BLACK FLIES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
CNEPHIA			
tonnoiri *fuscoflava* (Mackerras & Mackerras)	Small, fast clear water; ---; 32	Mackerras & Mackerras	1949
tonnoiri *orientalis* Mackerras & Mackerras	Moderate to fast, clear water, turbulent streams; ---; 32	Mackerras & Mackerras	1950
umbratorum (Tonnoir)	On reeds of gently flowing water, small sluggish channel; ---; 32	Mackerras & Mackerras	1952
SIMULIUM			
adamsoni Edwards	---; ---; 199	Edwards	1932
aurantiacum Tonnoir	On stones of a fall or cascade, swift running creek; Oct.-Dec.; 32	Tonnoir	1925
aureonigrum Mackerras & Mackerras	Attached to rock and dead leaves, small shaded stream; ---; 32	Mackerras & Mackerras	1950
	---; ---; 32	Mackerras & Mackerras	1955
bancrofti Taylor	---; ---; 32	Taylor	1927
buissoni Roubaud	---; ---; 199	Buxton & Hopkins	1927
	---; ---; 199°	Mumford & Adamson	1934
buissoni var. *gallinum* Edwards	---; ---; 199	Edwards	1932
cheesmanae Edwards	---; ---; 281	Edwards	1935
clathrinum Mackerras & Mackerras	On stone, grass blades in swiftly flowing, clear water; ---; 32	Mackerras Mackerras	1949
	Coastal streams, jungle creek; Jan., April, May and Sept.; 32	Mackerras & Mackerras	1950
faheyi Taylor	Attached to reeds and grass, in moderately fast, smooth flowing water; ---; 32	Mackerras & Mackerras	1950
	---; ---; 32°	Mackerras & Mackerras	1949
fergusoni Tonnoir	---; ---; 32°	Tonnoir	1925

TABLE 1 - BLACK FLIES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
SIMULIUM			
guamense Stone	---; ---; 197	Stone	1964
inornatum Mackerras & Mackerras	On rock, dead leaves and roots of semi-aquatic plants, in small, shady creek with moderately fast, running, clear water; ---; 32	Mackerras & Mackerras	1950
laciniatum Edwards	---; ---; 107	Buxton & Hopkins	1927
melatum Wharton	Edge of fast clear stream, tributary of fresh water creek; ---; 32	Mackerras & Mackerras	1950
mumfordi Edwards	---; ---; 199	Edwards	1932
nicholsoni Mackerras & Mackerras	Attached to submerged vegetation, dead sticks and leaves or logs in moderately fast, clear to muddy water; -; 32	Mackerras & Mackerras	1949
	---; March-June; 32°	Mackerras & Mackerras	1948
oculata (Enderlein)	---; ---; 148	Lee	1948
ornatipes Skuse	On stones and vegetation, in moderate or sluggish clear water; ---; 32	Mackerras & Mackerras	1949
	---; Feb.-June; 32	Mackerras & Mackerras	1948
	Attached to the under surface of stones in a small fairly rapidly moving stream; ---; 148	Lee	1948
oviceps Edwards	---; ---; 281	Edwards	1935
palauense Stone	---; ---; 236	Stone	1964
papuensis Lee	---; ---; 148	Lee	1948
peregrinum Mackerras & Mackerras	On reeds, sticks and dead leaves in swifter parts of small, clear, shaded creeks; ---; 32	Mackerras & Mackerras	1950
tahitiensis Edwards	---; ---; 281	Edwards	1935
terebrans Tonnoir	---; ---; 32°	Tonnoir	1925
torresianum Mackerras & Mackerras	Dead twigs in a small, clear rather sluggish creek with sandy bottom; ---; 32	Mackerras & Mackerras	1955

TABLE 1 - BLACK FLIES (conclusion)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
SIMULIUM			
trukense Stone	---; ---; 66, 197	Stone	1964
umbratorum Tonnoir	---; ---; 32	Tonnoir	1925
wilhelmlandae Smart	---; ---; 148	Lee	1948

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C. SAND FLIES

The sand fly entries include a few species of Psychodinae which do not bite but may be pests of man, often causing allergic reactions. Little is to be found in the literature on the biologies and disease transmission of these species. Most of the data are distributional records.

The tables include 6 species or subspecies most of which are in the large genus *Phlebotomus*.

TABLE 1 - SAND FLIES

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
PERICOMA			
townsvillensis Taylor	---; indoors, severe biter; 32°	Taylor	1915
PHLEBOTOMUS			
brevitilis Tonnoir	---; in houses, Nov.-March; 32	Tonnoir	1935
englishi Tonnoir	---; Dec.-April; 32	Tonnoir	1935
queenslandi Hill	---; in houses, rare, Jan.; 32	Tonnoir	1935
queenslandi meridionalis Tonnoir	---; rare, Dec.-April; 32	Tonnoir	1935
squamipleuris Newstead	---; ---; 32 (May bite man)	Dicke & Hsiao	1946

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D. MIDGES

The midges include representatives from the family Ceratopogonidae. In some areas, the biting species, especially *Culicoides*, are called "sand flies". Little is known of the biology of individual species; however, the larvae are known to occur either in water or in most terrestrial environments. In addition to being quite important as pests, these biting midges are vectors for several disease organisms.

The tables include 44 species or subspecies, most of which are in the large genus *Culicoides*.

TABLE 1 - MIDGES

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
ACANTHOCONOPS			
myersi Tonnoir	---; ---; 222°	Tonnoir	1924
CULICOIDES			
asraripennis Skuse	---; ---; 32	Kieffer	1917
ardentissimus Tokunaga	---; ---; 66	Tokunaga	1940 a
australiensis Kieffer	---; ---; 148	Vargas	1949
brevitarsis Kieffer	---; ---; 32	Vargas	1949
canarisocius Macfie	---; ---; 107	Vargas	1949
decempunctatus Skuse	---; ---; 32	Kieffer	1917
esaki Tokunaga	Mountain streams; common; 66	Farner	1944
	---; ---; 66°	Tokunaga	1940 a
flavimaculinotalis Tokunaga	---; ---; 66	Tokunaga	1940
gutifer var. *histrio* Johannsen	---; ---; 197	Vargas	1949
multipennis de Meijere	---; ---; 32	Kieffer	1917
insulanus Macfie	---; ---; 281	Vargas	1949
kuscicnsis Tokunaga	---; ---; 66	Tokunaga	1940
lineatus Kieffer	---; ---; 148	Vargas	1949
marmoratus (Skuse)	---; ---; 32	Vargas	1949
melanesicus Macfie	---; ---; 148	Vargas	1949
minusculus Skuse	---; ---; 32	Kieffer	1917

TABLE 1 - MIDGES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
CULICOIDES			
molestus (Skuse)	---; ---; 32	Vargas	1949
mollis Edwards	---; ---; 107	Lever	1944
	---; ---; 263	Vargas	1949
multimaculatus (Skuse)	---; ---, 32	Vargas	1949
nigellus Skuse	---; ---; 32	Kieffer	1917
nubeculosus Meigen	---; ---; 1	Gutzevich	1960
ornatus	---; common in mangrove areas; 32	Seddon	1951
oxystoma Kieffer	---; ---; 32	Edwards	1929
pelliiouensis Tokunaga	Mangrove swamps; bites man; 236°	Tokunaga & Esaki	1936
peregrinus Kieffer	---; ---; 205	Barnett & Toshioka	1951
peregrinus assamensis Smith & Swaminath	---; ---; 66	Tokunaga	1940
rabauli Macfie	---; ---; 148	Vargas	1949
salinarius Kieffer	---; alkaline reservoirs; 83	Gutzevich	1960
shortii Smith & Swaminath	---; ---; 32	Vargas	1949
subnitidus Skuse	---; ---; 32	Kieffer	1917
sydneyensis Skuse	---; ---; 32	Kieffer	1917
townsvillensis Taylor	---; ---; 32	Vargas	1949
victoriae Macfie	---; ---; 32	Vargas	1949
xanthoceras Kieffer	---; ---; 148	Vargas	1949

TABLE 1 - MIDGES (conclusion)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
LEPTOCONOPS			
albiventris de Meijere	---; very common, May; 148°	de Meijere	1915
groundis Skuse	---; ---; 32	Lee	1948
longicornis Carter	---; bite by day; 32°	Carter	1921
spinosipes	---; ---; 148	Kieffer	1917
stygius Skuse	---; ---; 32	Carter	1921
woodhilli Lee	---; ---; 32	Lee	1948
STYLOCONOPS			
albiventris (de Meijere)	---; ---; 50, 148°, 199	Lee	1948
australiensis Lee	---; ---; 32°	Lee	1948
myersi (Tonnoir)	---; ---; 222°	Lee	1948

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E. HORSE FLIES

The entries for horse flies (Tabanidae) include very little biology. Most of the literature on this large and important group is concerned with taxonomy, a lesser amount on distribution and little on disease transmissions.

The synonymy, both at the genus and the species level, is very complex. Several specialists are currently striving to straighten out some of these problems.

In the tables are listed 750 species or subspecies, but it is certain that many of these are not valid names.

TABLE 1 - HORSE FLIES

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
APHOPEAS			
nigripes Kröber	---; ---; 222	Kröber	1931
truncatus Walker	---; ---; 222	Kröber	1931
APOCAMPTA			
subcana Walker	---; ---; 32°	Ferguson & Hill	1922
ARCHEORYIA			
fulvus Ricardo	---; ---; 32	Philip	1941
AUSTROPLEX			
brevipalpis (Macquart)	---; ---; 32	Mackerras	1956
chrysophilus (Walker)	---; ---; 32	Mackerras	1956
goldfinchi Mackerras	---; ---; 32	Mackerras	1956
CAENOPROSOPON			
australis (Ricardo)	---; ---; 32	Mackerras	1956
[illegible] Mackerras	---; ---; 32	Mackerras	1960
[illegible] Taylor	---; ---; 32	Taylor	1917
[illegible] (Taylor)	---; ---; 32	Mackerras	1956
nigroviltatus (Ferguson & Hill)	---; ---; 32	Mackerras	1956
[illegible] (Bigot)	---; ---; 32	Mackerras	1956
[illegible] Ricardo	---; ---; 32	Ferguson & Henry	1919
CHALYBIONIA			
[illegible] (Wiedemann)	---; ---; 32	Mackerras	1959
[illegible] (Schuurmans Stekhoven)	---; ---; 148	Oldroyd	1948

TABLE 1 - HORSE FLIES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
CHALYBOSOMA *malkini* Oldroyd	---; ---; 148	Oldroyd	1948
metallicum (Ricardo)	---; ---; 148	Oldroyd	1948
CHASMIA *basifasciata* (de Meijere)	---; ---; 148	Oldroyd	1948
bincta Enderlein	---; ---; 148	Oldroyd	1948
CHASMIELLA *breviuselus* (Walker)	---; ---; 148	Oldroyd	1948
fasciata Oldroyd	---; ---; 148	Oldroyd	1948
fulgidus (Ricardo)	---; ---; 148	Oldroyd	1948
ochrothorax Schuurmans Stekhoven	---; ---; 148	Oldroyd	1948
papouinus (Walker)	---; April; 148	Oldroyd	1948
parva Oldroyd	---; ---; 148	Oldroyd	1948
parvicallosa Oldroyd	---; ---; 148	Oldroyd	1948
raffrayi (Bigot)	---; ---; 148	Oldroyd	1948
subhastata Oldroyd	---; ---; 148	Oldroyd	1948
CHRYSOPS *albicincta* van der Wulp	---; ---; 148	Oldroyd	1948
australis Ricardo	---; ---; 32	Taylor	1926
australis papuensis Mackerras	---; ---; 148	Mackerras	1964
signifer Walker	---; ---; 148	Taylor	1945

TABLE 1 - HORSE FLIES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
CHRYSOPS			
testaceus Macquart	---; ---; 32	White	1915
COENOPROSOPON			
hamlyni Taylor	---; ---; 32	Ferguson & Hill	1922
CORIZONEURA			
anthracina Macquart	---; ---; 32	White	1915
chrysophilia Walker	---; ---; 32	Ferguson & Hill	1922
fulva Macquart	---; ---; 32	Taylor	1917
kurandae Taylor	---; ---; 32	Taylor	1917 a
montana Hutton	---; ---; 222	Kröber	1931
rufovittata Macquart	---; ---; 32	White	1915
CYDISTOMYIA			
albidosegmentata (Schuurmans Stekhoven)	---; ---; 148	Mackerras	1964
albithorax Ricardo	---; ---; 148	Oldroyd	1948
alternata (Ferguson & Hill)	---; ---; 32	Mackerras	1959
aluensis Oldroyd	---; ---; 148	Oldroyd	1948
atripes (Schuurmans Stekhoven)	---; ---; 148	Mackerras	1964
atriventer (Schuurmans Stekhoven)	---; ---; 148	Mackerras	1964
curvibarba Mackerras	---; ---; 148	Mackerras	1964
avida (Bigot)	---; ---; 32	Mackerras	1959
barretti Mackerras	---; ---; 148	Mackerras	1964

TABLE 1 - HORSE FLIES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
CYDISTOMYIA			
basifasciata (de Meijere)	---; ---; 148	Mackerras	1964
bezzi Mackerras & Rageau	---; ---; 107	Mackerras & Rageau	1958
bisecta Oldroyd	---; ---; 148	Oldroyd	1948
breviuscula (Walker)	---; ---; 148	Mackerras	1964
caesius Walker	---; ---; 148	Oldroyd	1948
caledonica (Ricardo)	---; ---; 219	Mackerras & Rageau	1958
cohici Mackerras & Rageau	---; ---; 219	Mackerras & Rageau	1958
colasbelcouri Mackerras & Rageau	---; ---; 219	Mackerras & Rageau	1958
crepuscularis Oldroyd	---; ---; 148	Oldroyd	1948
diasi Mackerras & Rageau	---; ---; 219	Mackerras & Rageau	1958
dimorpha Oldroyd	---; ---; 148	Oldroyd	1948
doddi Taylor	---; ---; 32	Taylor	1919
duplonotata (Ricardo)	---; ---; 32	Mackerras	1959
fasciata (Oldroyd)	---; ---; 148	Mackerras	1964
festiva Oldroyd	---; ---; 148	Oldroyd	1948
fulgida (Ricardo)	---; ---; 148	Mackerras	1964
grenieri Mackerras & Rageau	---; ---; 219	Mackerras & Rageau	1958

TABLE 1 - HORSE FLIES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
CYDISTOMYIA			
griseiventor (Schuurmans Stekhoven)	---; ---; 148	Mackerras	1964
heydoni Oldroyd	---; ---; 148	Oldroyd	1948
hollandiensis Mackerras	---; ---; 148	Mackerras	1964
hyperythrea (Bigot)	---; ---; 32	Mackerras	1959
imitans Oldroyd	---; ---; 148	Oldroyd	1948
immatura Oldroyd	---; ---; 148	Oldroyd	1948
immigrans Oldroyd	---; ---; 148	Oldroyd	1948
inopinata Oldroyd	---; ---; 148	Oldroyd	1948
insularis Mackerras	---; ---; 148	Mackerras	1964
kuniae Mackerras & Rageau	---; ---; 219	Mackerras & Rageau	1958
laetus (de Meijere)	---; ---; 148	Oldroyd	1948
lamellata Oldroyd	---; ---; 148	Oldroyd	1948
laticallosa (Ricardo)	---; ---; 32	Mackerras	1959
laticallosa heroni (Ferguson)	---; ---; 32	Mackerras	1959
latisegmentata (Schuurmans Stekhoven)	---; ---; 148	Mackerras	1964
latistriata (Schuurmans Stekhoven)	---; ---; 148	Mackerras	1964
lifuensis (Bigot)	---; ---; 183	Mackerras & Rageau	1958
	---; ---; 219	Mackerras	1962

TABLE 1 - HORSE FLIES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
CYDISTOMYIA			
limbatella (Bezzi)	---; ---; 107	Mackerras & Rageau	1958
lorentzi Ricardo	---; ---; 148	Oldroyd	1948
	---; ---; 283	Mackerras & Rageau	1958
macmillani Mackerras	---; ---; 148	Mackerras	1964
magnetica (Ferguson & Hill)	---; ---; 32	Mackerras	1959
masali Mackerras & Rageau	---; ---; 219	Mackerras & Rageau	1958
misimensis Oldroyd	---; ---; 148	Oldroyd	1948
nana Mackerras & Rageau	---; ---; 148	Mackerras	1964
	---; ---; 283	Mackerras & Rageau	1958
nigerrima Oldroyd	---; ---; 148	Oldroyd	1948
nigropicta (Macquart)	---; ---; 32	Mackerras	1959
nokensis Oldroyd	---; ---; 148	Oldroyd	1948
ochrothorax (Schuurmans Stekhoven)	---; ---; 148	Mackerras	1964
oldroydi Mackerras	---; ---; 148	Mackerras	1964
oudella Oldroyd	---; ---; 148	Oldroyd	1948
pacifica (Ricardo)	---; ---; 107	Mackerras & Rageau	1958
palmensis (Ferguson & Hill)	---; ---; 32	Mackerras	1959
papouina (Walker)	---; ---; 148	Mackerras	1964
parva (Oldroyd)	---; ---; 148	Mackerras	1964

TABLE 1 - HORSE FLIES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
CYDISTOMYIA			
parvicallosa (Oldroyd)	---; ---; 148	Mackerras	1964
perdita Mackerras	---; ---; 148	Mackerras	1964
pseudimmatura Oldroyd	---; ---; 148	Oldroyd	1948
quasimmatura Mackerras	---; ---; 148	Mackerras	1964
raffrayi (Bigot)	---; ---; 148	Mackerras	1964
ratcliffei Mackerras & Rageau	---; ---; 283	Mackerras & Rageau	1958
risbeci Mackerras & Rageau	---; ---; 219	Mackerras & Rageau	1958
roubaudi Mackerras & Rageau	---; ---; 219	Mackerras & Rageau	1958
similis Mackerras	---; ---; 148	Mackerras	1964
sol (Schuurmans Stekhoven)	---; ---; 148	Oldroyd	1948
solomensis (Ricardo)	---; ---; 148	Mackerras	1964
	---; ---; 283	Mackerras & Rageau	1958
subhastata (Oldroyd)	---; ---; 148	Mackerras	1964
sylviodes (Walker)	---; ---; 148	Mackerras	1964
torresi (Ferguson & Hill)	---; ---; 148	Mackerras	1964
toumanoffi Mackerras & Rageau	---; ---; 219	Mackerras & Rageau	1958
variegata (Schuurmans Stekhoven)	---; ---; 148	Mackerras	1964
veitchi (Bezzi	---; ---; 107	Mackerras & Rageau	1958
	---; ---; 220	Mackerras	1962

TABLE 1 - HORSE FLIES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
DASYBASIS			
acutipalpis (Macquart)	---; ---; 32	Mackerras	1959
albohirtipes (Ferguson)	---; ---; 32	Mackerras	1959
angusticallus (Ricardo)	---; ---; 32	Mackerras	1959
anomala Mackerras & Rageau	---; ---; 148	Mackerras	1964
	---; ---; 283	Mackerras & Rageau	1958
appendiculata Macquart	---; ---; 32	Mackerras	1959
bratrankii (Nowicki)	---; ---; 222	Mackerras	1957
caesia (Walker)	---; ---; 32, 148	Mackerras	1959
circumdata (Walker)	---; ---; 32	Mackerras	1959
cirrus (Ricardo)	---; ---; 32	Mackerras	1959
clavicallosa (Ricardo)	---; ---; 32	Mackerras	1959
clavicallosa banksiensis (Ferguson & Hill)	---; ---; 32	Mackerras	1959
constans (Walker)	---; ---; 32	Mackerras	1959
difficis (Kröber)	---; ---; 222	Mackerras	1957
dixoni (Ferguson)	---; ---; 32	Mackerras	1959
dubiosa (Ricardo)	---; ---; 32	Mackerras	1959
dubiosa indefinita (Taylor)	---; ---; 32	Mackerras	1959
edentula (Macquart)	---; ---; 32	Mackerras	1959

TABLE 1 - HORSE FLIES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
DASYBASIS			
eidsvoldensis (Taylor)	---; ---; 32	Mackerras	1959
exultans (Erichson)	---; ---; 32	Mackerras	1959
froggatti (Ricardo)	---; ---; 32	Mackerras	1959
gentilis (Erichson)	---; ---; 32	Mackerras	1959
germanica (Ricardo)	---; ---; 32, 148	Mackerras	1959
gregaria (Erichson)	---; ---; 32	Mackerras	1959
grenieri (Mackerras & Rageau)	---; ---; 219	Mackerras	1962
griseoannulata (Taylor)	---; ---; 32	Mackerras	1959
hebes (Walker)	---; ---; 32	Mackerras	1959
hobartiensis (White)	---; ---; 32	Mackerras	1959
imperfecta (Walker)	---; ---; 32	Mackerras	1959
innotata (Ferguson & Hill)	---; ---; 32	Mackerras	1959
irrorata Macquart	---; ---; 148	Mackerras	1964
kewensis (Ferguson & Hill)	---; ---; 32	Mackerras	1959
loewi Enderlein	---; ---; 222	Mackerras	1957
macrophthalma (Schiner)	---; ---; 32	Mackerras	1959
mellicallosa Mackerras & Rageau	---; ---; 148 ---; ---; 268, 283	Mackerras Mackerras & Rageau	1964 1958

TABLE 1 - HORSE FLIES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
LASYBASIS			
milsoniensis (Ferguson & Hill)	---; ---; 32	Mackerras	1959
milsonis (Ricardo)	---; ---; 32	Mackerras	1959
moretonensis (Ferguson & Hill)	---; ---; 32	Mackerras	1959
nemopunctata (Ricardo)	---; ---; 32	Mackerras	1959
nemotuberculata (Ricardo)	---; ---; 32	Mackerras	1959
neobasalis (Taylor)	---; ---; 32	Mackerras	1959
neocirrus (Ricardo)	---; ---; 32	Mackerras	1959
neogermanica (Ricardo)	---; ---; 32	Mackerras	1959
neolatifrons (Ferguson & Hill)	---; ---; 32	Mackerras	1959
neopalpis (Ferguson & Hill)	---; ---; 32	Mackerras	1959
nigripes Kröber	---; ---; 222	Mackerras	1957
ochreoflava (Ferguson & Henry)	---; ---; 32	Mackerras	1959
ocula (Ricardo)	---; ---; 32	Mackerras	1959
opla (Walker)	---; ---; 222	Mackerras	1957
postica (Wiedemann)	---; ---; 32	Mackerras	1959
postponens (Walker)	---; ---; 32	Mackerras	1959
pseudoardens (Taylor)	---; ---; 32	Mackerras	1959
pseudocallosa (Ferguson & Hill)	---; ---; 32	Mackerras	1959

TABLE 1 - HORSE FLIES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
DASYBASIS			
rageaui Mackerras	---; ---; 219	Mackerras	1962
rainbowi (Taylor)	---; ---; 32	Mackerras	1959
regis-georgii (Macquart)	---; ---; 32	Mackerras	1959
rubricallosa (Ricardo)	---; ---; 183°, 219	Mackerras & Rageau	1958
rufifrons (Macquart)	---; ---; 32	Mackerras	1959
sarpa (Walker)	---; ---; 222	Mackerras	1957
spadix (Taylor)	---; ---; 32	Mackerras	1959
spatiosa (Ricardo)	---; ---; 32	Mackerras	1959
standfasti Mackerras	---; ---; 148	Mackerras	1964
tasmaniensis (White)	---; ---; 32	Mackerras	1959
thereviformis Mackerras	---; ---; 222	Mackerras	1957
transversa (Walker)	---; ---; 222	Mackerras	1957
trilineatis (Ferguson & Henry)	---; ---; 32	Mackerras	1959
truncata (Walker)	---, ---; 222	Mackerras	1957
trypherа (Taylor)	---; ---; 32	Mackerras	1959
vespiformis (Ferguson & Henry)	---; ---; 32	Mackerras	1959
vetusta (Walker)	---; ---; 32	Mackerras	1959
viridis (Hudson)	---; ---, 222	Mackerras	1957

TABLE 1 - HORSE FLIES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
DEMOPLATUS			
australis Ricardo	---; ---; 32	Taylor	1917
nigrovittatus Ferguson & Hill	---; ---; 32	Ferguson & Hill	1920
trichocerus Macquart	---; ---; 32	Ferguson	1921 a
DIATOMINEURA			
abdominalis Ricardo	---; Nov.-Feb.; 32	Ferguson & Henry	1919
aurata (Macquart)	---; ---; 32	Ferguson	1922
auriflua Donovar	---; Nov.-March; 32	Ferguson & Henry	1919
auripleura Taylor	---; ---; 32	Taylor	1917
bicolorata Taylor	---; ---; 32	Taylor	1918
brevirostris Macquart	---; Nov.-Dec.; 32	Ferguson & Henry	1919
clavata Macquart	---; Dec.-March; 32	Ferguson & Henry	1919
constans Walker	---; ---; 32	White	1915
crocea Taylor	---; ---; 32	Taylor	1917 a
cydister Taylor	---; ---; 32	Taylor	1918
dorsomaculata Macquart	---; ---; 32	White	1915
fulgida Ferguson & Henry	---; Nov.-March; 32	Ferguson & Henry	1919
gagatina Bigot	---; ---; 32	Taylor	1918
ianthina White	---; ---; 32	Taylor	1919
inflata Ricardo	---; Jan.-March; 32	Ferguson & Henry	1919

TABLE 1 - HORSE FLIES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
DIATOMINEURA			
jacksonensis Guerin	---; ---; 32	Taylor	1918
montana Ricardo	---; ---; 32	Taylor	1917
plana Walker	---; ---; 32	Taylor	1918
pulchra Ricardo	---; ---; 32	Taylor	1917
regis-georgii Taylor	---; ---; 32	Taylor	1918
ruficornis Macquart	---; ---; 32	Ferguson	1921a
subappendiculata Macquart	---; ---; 32	Ferguson & Hill	1922
testacea Macquart	---; ---; 32	Taylor	1917
violacea Macquart	---; enters houses; 32	Ferguson & Hill	1922
ECTENOPSIS			
angusta (Macquart)	---; ---; 32	Mackerras	1956
australis Ricardo	---; ---; 32	Ferguson	1921
erratica (Walker)	---; ---; 32	Mackerras	1960
fulva Ferguson	---; ---; 32	Mackerras	1956
hamlyni (Taylor)	---; ---; 32	Mackerras	1956
norrisi Mackerras	---; ---; 32	Mackerras	1956
victoriensis Ferguson	---; ---; 32	Mackerras	1956
vittata Mackerras	---; ---; 32	Mackerras	1956
vulpecula (Wiedemann)	---; ---; 32	Ferguson	1921
vulpecula nigripennis Taylor	---; ---; 32	Taylor	1918

TABLE 1 - HORSE FLIES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
ELAPHROMYIA			
carteri Taylor	---; ---; 32	Taylor	1917a
EREPHOPSIS			
albibarbus Schuurmans Stekhoven	---; ---; 148	Schuurmans Stekhoven	1926
aureohirta Ricardo	---; ---; 32	Ferguson	1921a
aureovestita Ferguson & Henry	---; ---; 32	Ferguson & Henry	1919
bancrofti Austen	---; ---; 32	Taylor	1917a
binotata Latreille	---; ---; 32	Ferguson	1921a
caliginosa Walker	---; ---; 148	Schuurmans Stekhoven	1926
cinerea Ricardo	---; ---; 32	Taylor	1918
clelandi Ferguson	---; ---; 32	Ferguson	1921
concolor Walker	---; Nov.-March; 32	Ferguson & Henry	1919
contigua Walker	---; ---; 32	Ferguson & Henry	1919
divisa Walker	---; ---; 32	Ferguson	1921a
gemina Walker	---; ---; 32	Ferguson	1921a
gibbula Walker	---; ---; 32	Taylor	1917
guttata Donovan	---; Nov.-March; 32	Ferguson & Henry	1919
jacksoni Macquart	---; ---; 32	Taylor	1918
lasiophthalma Boisduval	---; ---; 32	Ferguson	1921a

TABLE 1 - HORSE FLIES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
EREPHOPSIS			
maculipennis Macquart	---; ---; 32	Ferguson	1921a
media Walker	---; ---; 32	Ferguson & Henry	1919
neotricolor Taylor	---; ---; 32	Taylor	1918
niveovittata Ferguson & Henry	---; ---; 32	Ferguson & Henry	1919
novaeguineensis Ricardo	---; ---; 148	Schuurmans Stekhoven	1926
quadrimacula Walker	---; ---; 32	Ferguson	1921a
rufoniger Ferguson	---; ---; 32	Ferguson	1921
subcontigua Ferguson	---; ---; 32	Ferguson	1921
submacula Walker	---; ---; 32	Taylor	1919
submedia Walker	---; ---; 32	Ferguson	1921a
vicina Taylor	---; ---; 32	Taylor	1918
vicina georgii Taylor	---; ---; 32	Taylor	1918
xanthopilis Ferguson	---; ---; 32	Ferguson	1921a
HAEMATOPATA			
javana Wiedemann	---; ---; 148	Schuurmans Stekhoven	1932
JAPENOIDES			
cheesmanae Oldroyd	---; ---; 148	Mackerras	1964
festiva (Oldroyd)	---; ---; 148	Mackerras	1964
ratcliffei (Mackerras & Rageau)	---; ---; 148	Mackerras	1964

TABLE 1 - HORSE FLIES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
LEPTOTABANUS *transversus* Walker	---; ---; 222	Kröber	1931
LILAEA *atriventer* Schuurmans Stekhoven	---; ---; 148	Oldroyd	1948
de meijerei Ricardo	---; ---; 148	Oldroyd	1947
flavicincta Schuurmans Stekhoven	---; ---; 148	Oldroyd	1948
vittata Ricardo	---; ---; 148	Oldroyd	1947
LISSIMAS *moluccensis* Mackerras	---; ---; 148	Mackerras	1964
philipi Mackerras	---; ---; 148	Mackerras	1964
MESOMYIA *alcocki* (Summers)	---; ---; 32	Mackerras	1961
ater (Taylor)	---; ---; 32	Mackerras	1961
atrata (Schuurmans Stekhoven)	---; ---; 148	Mackerras	1964
burnsi Mackerras	---; ---; 32	Mackerras	1961
cydister (Taylor)	---; ---; 32	Mackerras	1961
de meijerei (Ricardo)	---; ---; 32	Mackerras	1961
	---; ---; 148	Mackerras	1964
dimidiata (Wulp)	---; ---; 148	Mackerras	1964
distincta Ricardo	---; ---; 32	Mackerras	1961
doddi (Ricardo)	---; ---; 32	Mackerras	1961
equina (Ferguson & Hill)	---; ---; 32	Mackerras	1961

TABLE 1 - HORSE FLIES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
MESOMYIA			
femoralis (Ricardo)	---; ---; 148	Mackerras	1964
fergusoni (Ricardo)	---; ---; 32	Mackerras	1961
fuliginosa (Taylor)	---; ---; 32	Mackerras	1961
fulvissima Mackerras	---; ---; 32	Mackerras	1961
fuscipennis (Ricardo)	---; ---; 32	Mackerras	1961
frontalis (Ricardo)	---; ---; 32	Mackerras	1961
grandis (Ricardo)	---; ---; 32	Mackerras	1961
imitator (Ferguson)	---; ---; 32	Mackerras	1961
latifrons Mackerras	---; ---; 32	Mackerras	1961
lunulata (Bigot)	---; ---; 32	Mackerras	1961
lurida (Walker)	---; ---; 32	Mackerras	1961
lyreana Mackerras	---; ---; 32	Mackerras	1961
mansoni (Summers)	---; ---; 32	Mackerras	1961
montana (Ricardo)	---; ---; 32	Mackerras	1961
nigerrima Mackerras	---; ---; 32	Mackerras	1961
nigripennis (Ricardo)	---; ---; 32	Mackerras	1961
norrisi Mackerras	---; ---; 32	Mackerras	1961
obscura Mackerras	---; ---; 32	Mackerras	1961
paralurida (Ferguson & Henry)	---; ---; 32	Mackerras	1961

TABLE 1 - HORSE FLIES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
MESOMYIA			
peregrina Mackerras	---; ---; 148	Mackerras	1964
pulla Mackerras	---; ---; 32	Mackerras	1961
queenslandi Ricardo	---; ---; 32	Mackerras	1961
silvester (Bergroth)	---; ---; 32	Mackerras	1961
sulcifrons (Ferguson)	---; ---; 32	Mackerras	1961
stradbrokei (Taylor)	---; ---; 32	Mackerras	1961
taylori Mackerras	---; ---; 32	Mackerras	1961
tepperi (Ferguson)	---; ---; 32	Mackerras	1961
typhera (Taylor)	---; ---; 32	Mackerras	1961
vittata (Ricardo)	---; ---; 148	Mackerras	1964
NEOBOLBODIMYIA			
nigra Ricardo	---; ---; 148	Oldroyd	1948
NEOLEPTABANUS			
transversus Walker	---; ---; 222	Miller	1950
OSCA			
aurata Macquart	---; ---; 32	Ferguson	1924
bicolor Macquart	---; ---; 32	Ferguson	1924
dorsomaculata Macquart	---; ---; 32	Ferguson	1924
guttipennis Ferguson	---; ---; 32	Ferguson	1924
lasiopthalma Macquart	---; ---; 32	Ferguson	1924
limbithorax Macquart	---; ---; 32	Ferguson	1924

TABLE 1 - HORSE FLIES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
OSCA			
maculiventris Westwood	---; ---; 32	Ferguson	1924
PALIMMECOMYIA			
celaenospila Taylor	---; ---; 32	Taylor	1917
walkeri Newman	---; ---; 32	Ferguson & Hill	1922
PANGONIA			
clavata Macquart	---; ---; 32	Ferguson	1916
neocaledonica Megnin	---; ---; 219	Williams	1943
PARACANTHOCERA			
australis Ricardo	---; ---; 32	Oldroyd	1948
PARASILVIUS			
fulvis Ferguson	---; ---; 32	Ferguson	1921
PAREOCOMPSA			
dimidiata van der Wulp	---; ---; 148	Oldroyd	1948
femoralis Ricardo	---; ---; 148	Oldroyd	1948
PAREUCOMPSA			
dimidiata Wulp	---; ---; 148	Oldroyd	1947
femoralis Ricardo	---; ---; 148	Oldroyd	1947
PELECORHYNCHUS			
albolineatus Hardy	---; ---; 32	Ferguson	1921 a
claripennis Ricardo	---; ---; 32	Ferguson	1921
dauque Hardy	---; ---; 32	Mackerras & Fuller	1942
distincta Taylor	---; ---; 32	Taylor	1918
eristaloides (Walker)	---; ---; 32	Ferguson	1921 a
eristaloides montanus Hardy	---; ---; 32	Hardy	1916

TABLE 1 - HORSE FLIES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
PELECORHYNCHUS			
fascipennis Mackerras & Fuller	---; ---; 32	Mackerras & Fuller	1942
flavipennis Ferguson	---; ---; 32	Ferguson	1921
fulvus Ricardo	Mud bank of swamp; ---; 32	Mackerras & Fuller	1942
fusconiger (Walker)	Under short grass tussocks, in mud or merely moist soil, near or far from water; ---; 32	Mackerras & Fuller	1942
fusconiger alpinensis Mackerras & Fuller	---; ---; 32	Mackerras & Fuller	1942
fusconiger fergusoni Hardy	---; ---; 32	Mackerras & Fuller	1942
fusconiger rufibasis Mackerras & Fuller	---; ---; 32	Mackerras & Fuller	1942
igniculus Hardy	---; swamps; 32	Mackerras & Fuller	1942
interruptus Mackerras & Fuller	---; ---; 32	Mackerras & Fuller	1942
kippsi Mackerras & Fuller	---; ---; 32	Mackerras & Fuller	1942
lineatus Mackerras & Fuller	---; ---; 32	Mackerras & Fuller	1942
lunulatus Mackerras & Mackerras	---; ---; 32	Mackerras & Mackerras	1953
maculipennis Macquart	---; ---; 32	Taylor	1917
mirabilis Taylor	---; ---; 32	Mackerras & Fuller	1942
montanus Hardy	---; ---; 32	Mackerras & Fuller	1942
nebulosis Mackerras & Fuller	---; ---; 32	Mackerras & Fuller	1942

TABLE 1 - HORSE FLIES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
PELECORHYNCHUS			
nero Mackerras & Fuller	---; ---; 32	Mackerras & Fuller	1942
niger Mackerras & Fuller	---; ---; 32	Mackerras & Fuller	1942
nigripennis Ricardo	Mud in the center of swamps and weedy-algae covered pools; ---; 32	Mackerras & Fuller	1942
occidens Hardy	---; ---; 32	Mackerras & Fuller	1942
olivei Hardy	---; swamps; 32	Mackerras & Fuller	1942
personatus (Walker)	---; ---; 32	Mackerras & Fuller	1942
rubidus Mackerras & Fuller	In fairly dry mud under short turf; ---; 32	Mackerras & Fuller	1942
rubidus avittatus Mackerras & Fuller	---; ---; 32	Mackerras & Fuller	1942
simplex Mackerras & Fuller	On low shrubs and herbage in small swamps; ---; 32	Mackerras & Fuller	1942
simplissimus Mackerras & Fuller	---; ---; 32	Mackerras & Fuller	1942
taeniatus Mackerras & Fuller	---; ---; 32	Mackerras & Fuller	1942
tillyardi Taylor	---; ---; 32	Taylor	1918
PHIBALOMYIA			
carteri (Taylor)	---; ---; 32	Mackerras	1961
PHILOLICHE			
buxtoni Mackerras & Rageau	---; ---; 219	Mackerras & Rageau	1958
neocaledonica (Macquin)	---; ---; 219	Mackerras & Rageau	1958

TABLE 1 - HORSE FLIES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
PHILOLICHE *verventi* Mackerras & Rageau	---; ---; 219	Mackerras & Rageau	1958
PROTODASYOMMIA *loewi* Enderlein	---; ---; 222	Kröber	1931
PSEUDOPANGONIA *australis* Ricardo	---; ---; 32	Mackerras	1961
PSEUDOTABANUS *lutulentus* Hutton	---; ---; 222	Kröber	1931
queenslandi Ricardo	---; ---; 32	Taylor	1920
SCAPTIA *abdominalis* (Ricardo)	---; ---; 32	Mackerras	1960
adrel (Walker)	---; ---; 222	Kröber	1931
albibarba Schuurmans Stekhoven	---; ---; 148	Oldroyd	1948
alpina *alpina* Mackerras	---; ---; 32	Mackerras	1960
alpina *hardyi* Mackerras	---; ---; 32	Mackerras	1960
anomala Mackerras	---; ---; 32	Mackerras	1960
auranticula Mackerras	---; ---; 32	Mackerras	1960
aurata (Macquart)	---; ---; 32	Mackerras	1960
aureohirta (Ricardo)	---; ---; 32	Mackerras	1960
aureovestita (Ferguson & Henry)	---; ---; 32	Mackerras	1960
auriflua (Donovan)	---; ---; 32	Mackerras	1960

TABLE 1 - HORSE FLIES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
SCAPTIA			
auriflua dives (Macquart)	---; ---; 32	Mackerras	1960
aurinotum Mackerras	---; ---; 32	Mackerras	1960
auripilosa Oldroyd	---; ---; 148	Oldroyd	1947
auripleura (Taylor)	---; ---; 32	Mackerras	1960
bancrofti (Austen)	---; ---; 32	Mackerras	1960
barbara Mackerras	---; ---; 32	Mackerras	1960
bernhardi Oldroyd	---; ---; 148	Oldroyd	1948
berylensis (Ricardo)	---; ---; 32	Mackerras	1960
bicolor Hudson	---; ---; 222	Kröber	1931
bicolorata (Taylor)	---; ---; 32	Mackerras	1960
binotata (Latreille)	---; ---; 32	Mackerras	1960
brevipalpis Kröber	---; ---; 222	Kröber	1931
brevipalpis palpis Kröber	---; ---; 222	Kröber	1931
brevirostris (Macquart)	---; ---; 32	Mackerras	1960
calabyi Mackerras	---; ---; 32	Mackerras	1960
caliginosa (Walker)	---; ---; 148	Oldroyd	1948
calliphora Mackerras	---; ---; 32	Mackerras	1960
cinerea (Ricardo)	---; ---; 32	Mackerras	1960

TABLE 1 - HORSE FLIES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
CAPTIA			
clavata (Macquart)	---; ---; 32	Mackerras	1960
clelandi (Ferguson)	---; ---; 32	Mackerras	1960
concolor (Walker)	---; ---; 32	Mackerras	1960
divisa (Walker)	---; ---; 32	Mackerras	1960
flavibarbis Oldroyd	---; ---; 148	Oldroyd	1948
floccosa Oldroyd	---; ---; 148	Oldroyd	1948
fulgida (Ferguson & Henry)	---; ---; 32	Mackerras	1960
gemina (Walker)	---; ---; 32	Mackerras	1960
georgii (Taylor)	---; ---; 32	Mackerras	1960
gibbula (Walker)	---; ---; 32	Mackerras	1960
guttata (Donovan)	---; ---; 32	Mackerras	1960
guttipennis guttipennis (Ferguson)	---; ---; 32	Mackerras	1960
guttipennis occidentalis Mackerras	---; ---; 32	Mackerras	1960
hirticeps (Nowicki)	---; ---; 222	Kröber	1931
ianthina (White)	---; ---; 32	Mackerras	1960
insularis Oldroyd	---; ---; 148	Oldroyd	1948
jacksoniensis (Guerin)	---; ---; 32	Mackerras	1960
jacksonii (Macquart)	---; ---; 32	Mackerras	1960

TABLE 1 - HORSE FLIES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
SCAPTIA			
lasiophthalma (Macquart)	---; ---; 32	Mackerras	1960
leonina Oldroyd	---; ---; 148	Oldroyd	1948
lerda (Walker)	---; ---; 222	Kröber	1931
limbithorax (Macquart)	---; ---; 32	Mackerras	1960
maculiventris (Westwood)	---; ---; 32	Mackerras	1960
mafulensis Oldroyd	---; ---; 148	Oldroyd	1948
media (Walker)	---; ---; 32	Mackerras	1960
milleri Mackerras	---; ---; 222	Mackerras	1957
minuscula Mackerras	---; ---; 32	Mackerras	1960
montana (Hutton)	---; ---; 222	Mackerras	1957
monticola Mackerras	---; ---; 32	Mackerras	1960
muscula English	---; ---; 32	Mackerras	1960
neoconcolor Mackerras	---; ---; 32	Mackerras	1960
neotricolor (Taylor)	---; ---; 32	Mackerras	1960
nigerrima Mackerras	---; ---; 32	Mackerras	1960
nigroapicalis Mackerras	---; ---; 32	Mackerras	1960
nigrocincta Mackerras	---; ---; 32	Mackerras	1960
norrisi Mackerras	---; ---; 32	Mackerras	1960
novaeguineensis (Ricardo)	---; ---; 148	Oldroyd	1948

TABLE 1 - HORSE FLIES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
SCAPTIA			
orba Mackerras	---; ---; 32	Mackerras	1960
orientalis Mackerras	---; ---; 32	Mackerras	1960
palpalis Kröber	---; ---; 222	Miller	1950
patula (Walker)	---; ---; 32	Mackerras	1960
pictipennis Mackerras	---; ---; 32	Mackerras	1960
plana (Walker)	---; ---; 32	Mackerras	1960
pulchra (Ricardo)	---; ---; 32	Mackerras	1960
quadrimaculata (Walker)	---; ---; 32	Mackerras	1960
regis-georgii (Taylor)	---; ---; 32	Mackerras	1960
ricardoae (Hutton)	---; ---; 222	Mackerras	1957
roei (Macleay)	---; ---; 32	Mackerras	1960
rufonigra (Ferguson)	---; ---; 32	Mackerras	1960
similis Mackerras	---; ---; 32	Mackerras	1960
singularis (Macquart)	---; ---; 32	Mackerras	1960
subappendiculata (Macquart)	---; ---; 32	Mackerras	1960
subcana (Walker)	---; ---; 32	Mackerras	1960
subcinerea Mackerras	---; ---; 32	Mackerras	1960
subcontigua (Ferguson)	---; ---; 32	Mackerras	1960
taylori Oldroyd	---; ---; 148	Oldroyd	1948
testacea (Macquart)	---; ---; 32	Mackerras	1960

TABLE 1 - HORSE FLIES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
SCAPTIA			
testaceomaculata (Macquart)	---; ---; 32	Mackerras	1960
tricolor (Walker)	---; ---; 32	Mackerras	1960
unilineata Oldroyd	---; ---; 148	Oldroyd	1948
vertebrata (Bigot)	---; ---; 32	Mackerras	1960
vicina (Taylor)	---; ---; 32	Mackerras	1960
violacea (Macquart)	---; ---; 32	Mackerras	1960
walkeri (Newman)	---; ---; 32	Mackerras	1960
xanthopilis (Ferguson)	---; ---; 32	Mackerras	1960
SILVIUS			
alcocki Summers	---; ---; 32	Taylor	1915
angusticallosus Taylor	---; ---; 32	Taylor	1919
ater Taylor	---; ---; 32	Taylor	1917 a
atripes Schuurmans Stekhoven	---; ---; 148	Schuurmans Stekhoven	1926
atriventer Schuurmans Stekhoven	---; ---; 148	Schuurmans Stekhoven	1926
australis Ricardo	---; ---; 32	Ferguson	1921 a
borealis Taylor	---; ---; 32	Taylor	1915
de Meyeri Ricardo	---; ---; 148	Schuurmans Stekhoven	1926
dimidiatus van der Wulp	---; ---; 148	Schuurmans Stekhoven	1926
dimidiatus femoralis Ricardo	---; ---; 148	Schuurmans Stekhoven	1926

TABLE 1 - HORSE FLIES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
SILVIUS			
distinctus Taylor	---; ---; 32	Taylor	1926
doddi Ricardo	---; ---; 32	Taylor	1917 a
elongatus Taylor	---; ---; 32	Taylor	1915
elongatus persimilis Taylor	---; ---; 32	Taylor	1919
equinus Ferguson & Hill	---; ---; 32	Ferguson & Hill	1922
fergusoni Ricardo	---; Nov.-March; 32	Ferguson & Henry	1919
flavicinctus Schuurmans Stekhoven	---; in forest; 148	Schuurmans Stekhoven	1932
frontalis Ricardo	---; ---; 32	Ferguson	1921 a
fuliginosus Taylor	---; ---; 32	Taylor	1915
fulvohirtus Taylor	---; ---; 32	Taylor	1915
grandis Ricardo	---; ---; 32	Ferguson	1921 a
hackeri Taylor	---; ---; 32	Taylor	1919
hilli Taylor	---; ---; 32	Taylor	1915
imitator Ferguson	---; ---; 32	Ferguson	1921 a
indistinctus Ricardo	---; ---; 32	Ferguson & Hill	1920
insularis Ricardo	---; ---; 32	Ferguson	1921 a
latistriatus Schuurmans Stekhoven	---; ---; 148	Schuurmans Stekhoven	1926
luridus Walker	---; ---; 32	Ferguson & Hill	1922

TABLE 1 - HORSE FLIES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
SILVIUS			
mansoni Summers	---; ---; 32	Taylor	1915
minor Taylor	---; ---; 32	Taylor	1918
montanus Ricardo	---; ---; 32	Ferguson	1921 a
niger Ricardo	---; ---; 32	Ferguson	1922
nigripennis Ricardo	---; ---; 32	Taylor	1918
nigroapicalis Ferguson	---; ---; 32	Ferguson	1921
nitescens Walker	---; ---; 32	Taylor	1915
notatus Ricardo	---; ---; 32	Ferguson & Hill	1920
paraluridus Ferguson & Henry	---; Nov.-Dec.; 32	Ferguson & Henry	1919
psarophanes Taylor	---; ---; 32	Taylor	1917
silvester Bergroth	---; ---; 32	Taylor	1915
sordidus Taylor	---; ---; 32	Ferguson & Hill	1920
stradbrokei Taylor	---; ---; 32	Taylor	1917
strongmani Summers	---; ---; 32	Taylor	1915
subluridus Taylor	---; ---; 32	Taylor	1917 a
sulcifrons Ferguson	---; ---; 32	Ferguson	1921
tabaniformis Taylor	---; ---; 32	Taylor	1915
tepperi Ferguson	---; ---; 32	Ferguson	1921 a

TABLE 1 - HORSE FLIES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
SILVIUS			
trypherus Taylor	---; ---; 32	Taylor	1915
variegatus Schuurmans Stekhoven	---; ---; 148	Schuurmans Stekhoven	1926
vicinus Taylor	---; ---; 32	Taylor	1919
vittatus Ricardo	---; ---; 148	Schuurmans Stekhoven	1926
TABANUS			
absterus Walker	---; ---; 32	Austen	1914
acutipalpis Macquart	---; ---; 32	Hardy	1934
adelaidae Ferguson & Hill	---; ---; 32	Ferguson & Hill	1922
albidosegmentatus Schuurmans Stekhoven	---; ---; 148	Schuurmans Stekhoven	1926
albithorax Ricardo	---; ---; 148	Schuurmans Stekhoven	1926
albithorax brunnifemur Ricardo	---; ---; 148	Schuurmans Stekhoven	1926
albithorax citribarbus Ricardo	---; ---; 148	Schuurmans Stekhoven	1926
albithorax flavifemur Ricardo	---; ---; 148	Schuurmans Stekhoven	1926
albohirtipes Ferguson	---; ---; 32	Ferguson	1921a
alternatus Ferguson & Hill	---; ---; 32	Hardy	1944
alternatus magneticus Ferguson & Hill	---; ---; 32	Hardy	1944

TABLE 1 - HORSE FLIES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
TABANUS			
anellosus Summers	---; ---; 32	Austen	1914
angusticallosus Schuurmans Stekhoven	---; ---; 148	Schuurmans Stekhoven	1926
angusticallus Ricardo	---; ---; 32	Ferguson	1921 a
angustilineatus Oldroyd	---; ---; 148	Oldroyd	1948
antecedens Walker	---; ---; 32	Hardy	1934
appendiculatus Macquart	---; ---; 32	Hardy	1947
approximatus Oldroyd	---; ---; 148	Oldroyd	1948
aprepes Taylor	Swamps of aquatic plants; Oct.-April; 32	Hill	1921
	Sandy bed of creek; ---; 32	Ferguson & Hill	1922
aroeensis Schuurmans Stekhoven	---; ---; 148	Schuurmans Stekhoven	1926
atmosphorus Taylor	---; ---; 32	Taylor	1926
aurivittatus Ricardo	---; ---; 148	Oldroyd	1948
australis Taylor	---; ---; 32	Taylor	1917 a
avidus Bigot	---; ---; 32	Ferguson	1921 a
basifasciatus de Meijere	---; June; 148	de Meijere	1915
basii Ferguson	---; ---; 32	Hardy	1934
batchelori Taylor	---; ---; 32	Taylor	1926
bewanensis Oldroyd	---; ---; 148	Mackerras	1964

TABLE 1 - HORSE FLIES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
TABANUS			
bipunctatus Schuurmans Stekhoven	---; ---; 148	Schuurmans Stekhoven	1926
breinli Ferguson & Hill	---; ---; 32	Ferguson & Hill	1922
brevidentatus Macquart	---; ---; 32	Taylor	1913 +
brevior Walker	---; ---; 32	Ferguson & Hill	1920
breviusculus Walker	---; June; 148	de Meijere	1915
brevivitta Walker	---; ---; 32	McEachran & Hill	1915
brisbanensis Taylor	---; ---; 32	Taylor	1917
caesius Walker	---; ---; 148	Schuurmans Stekhoven	1932
caledonicus Ricardo	---; ---; 183	Ricardo	1914
ceylonicus Schiner	---; ---; 32	Mackerras & Rageau	1958
	---; ---; 148. ---; very common; 283	Schuurmans Stekhoven	1926
cinerescens Macleay	---; ---; 32	Ferguson	1921 a
cinnamoneus Doleschall	---; ---; 148	Oldroyd	1948
circumdatus Walker	---; Nov.-April, on window of houses, 32	Ferguson & Henry	1919
cirrus Ricardo	---; ---; 32	Ferguson & Hill	1922
clavicallosus Ricardo	---; ---; 32	Ferguson	1921 a
clavicallosus banksiensis Ferguson & Hill	---; ---; 32	Ferguson & Hill	1922

TABLE 1 - HORSE FLIES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
TABANUS			
cohaerens Walker	---; May, August; 148	de Meijere	1915
concolor Walker	---; ---; 32	Mackerras	1959
confusus Taylor	---; ---; 32	Taylor	1917
crypserytherus Taylor	---; ---; 32	Taylor	1919
cyaneus Wiedemann	---; Dec.-March; 32	Ferguson & Henry	1919
daphoenus Taylor	---; ---; 32	Taylor	1919
daruensis Oldroyd	---; ---; 148	Oldroyd	1948
darwinensis Taylor	---; ---; 32	Taylor	1917a
davidsoni Taylor	---; Nov.-March; 32	Ferguson & Henry	1919
denticulatus Ricardo	---; ---; 148	Oldroyd	1948
diemanensis Ferguson	---; ---; 32	Ferguson	1921
diminutus Walker	---; ---; 32	Taylor	1918
divisus Ricardo	---; ---; 32	Ferguson & Hill	1922
	---; ---; 148	Oldroyd	1948
dixoni Ferguson	---; ---; 32	Ferguson	1921a
doddi Taylor	---; ---; 32	Hardy	1944
dorsicus Walker	---; ---; 148	Oldroyd	1948
dorsobimaculatus Macquart	---; ---; 32	Mackerras	1959
	---; ---; 148	Mackerras	1964
dubiosus Ricardo	---; ---; 32	Taylor	1917

TABLE 1 - HORSE FLIES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
TABANUS			
duplonotatus Ricardo	---; ---; 32	Ferguson & Hill	1920
edentulus Macquart	---; ---; 32	Taylor	1917
eidsvoldensis Taylor	---; ---; 32	Taylor	1926
exagens Walker	---; ---; 148	Schuurmans Stekhoven	1926
expulsus Walker	---; ---; 220	Ricardo	1914
expulsus expulsus Walker	---; ---; 220	Mackerras & Rageau	1958
expulsus filianus Ricardo	---; ---; 107	Mackerras & Rageau	1958
exulans Erichson	---; ---; 32	Hardy	1934
fijianus Ricardo	---; ---; 107°, 220	Ricardo	1914
flammeus Schuurmans Stekhoven	---; ---; 148	Oldroyd	1948
flavipennis Ricardo	---; hill and mountainous region, moist places; 148	Schuurmans Stekhoven	1924
flindersi Ferguson	---; ---; 32	Ferguson	1921a
froggatti Ricardo	Soil on banks of permanent swamp, under grass; feed on small flowers in pasture and on low growing *Leptospermum* on hill slopes; 32°	Fuller	1937
fugitivus Taylor	---; ---; 32	Taylor	1919
fulgidus Ricardo	---; ---; 148	Schuurmans Stekhoven	1926
furunculigenus Doleschall	---; ---; 148	Oldroyd	1948
fuscipes Taylor	---; ---; 32	Austen	1914

TABLE 1 - HORSE FLIES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
TABANUS *gentiles* Erichson	Dry soil and on side of swamp, close to surface under grass; common January, active in sunlight in swampy area; 32°	Fuller	1937
gentiles imminutus Hardy	---; ---; 32	Hardy	1947
geraldi Taylor	---; ---; 32	Taylor	1920
geraldtonensis Taylor	---; ---; 32	Taylor	1926
germanicus Ricardo	---; ---; 32	Ferguson & Hill	1922
gilingilensis Mackerras	---; ---; 148	Mackerras	1964
gregarius Erichson	---; ---; 32	Austen	1914
griseicolor Ferguson & Hill	---; ---; 32	Ferguson & Hill	1922
griseiventer Schuurmans Stekhoven	---; ---; 148	Schuurmans Stekhoven	1926
griseoannulatus Taylor	---; ---; 32	Taylor	1917 a
griseohirtus Taylor	---; ---; 32	Taylor	1917 a
griseus Taylor	---; ---; 32	Taylor	1919
hackeri Taylor	---; ---; 32	Taylor	1917
herbertensis Mackerras	---; ---; 148	Mackerras	1964
heroni Ferguson	---; ---; 32	Hardy	1944
hilli Taylor	---; ---; 32	Taylor	1926
hobartiensis White	---; ---; 32	Ferguson	1921
illustris Ricardo	---; ---; 148	Oldroyd	1948

TABLE 1 - HORSE FLIES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
TABANUS			
imperfectus Walker	---; ---; 32	Ferguson	1921a
indefinitus Taylor	---; ---; 32	Ferguson	1921a
indistinctus Bigot	---; ---; 148	Oldroyd	1948
infuscatus Oldroyd	---; ---; 148	Oldroyd	1948
innotabilis Walker	---; ---; 32, 268, 283	Mackerras & Rageau	1958
innotatus Ferguson & Henry	---; Dec.-March, in partially cleared area; 32	Ferguson & Henry	1919
insularis Walker	---; ---; 134	Ricardo	1914
insurgens Walker	---; ---; 148	de Meijere	1915
intempestivus Schuurmans Stekhoven	---; ---; 148	Schuurmans Stekhoven	1926
ixion Oste- Sacken	---; ---; 148	Kröber	1924
kendallensis Taylor	---; Nov.-March; 32	Ferguson & Henry	1919
kewensis Ferguson &	---; ---; 32	Ferguson & Henry	1919
kurandae Taylor	---; ---; 32	Taylor	1926
lastus de Meijere	---; ---; 148	Schuurmans Stekhoven	1[illegible]
laticallosus Ricardo	---; ---; 32	Taylor	1917
latifrons Ferguson	---; ---, 32	Ferguson	1921a
latisegmentatus Schuurmans Stekhoven	---; ---; 148	Schuurmans Stekhoven	1926
lenticulatus Oldroyd	---; ---; 148	Oldroyd	1948

TABLE 1 - HORSE FLIES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
TABANUS			
leucopterus van der Wulp	---; on or near sea coast; 32°	Ferguson & Hill	1922
leveri Mackerras & Rageau	---; ---; 148	Mackerras	1964
	---; ---; 268, 283	Mackerras & Rageau	1958
lifuensis Bigot	---; ---; 183	Ricardo	1914
limbatinervis Macquart	---; ---; 32	White	1915
lineatus Austen	---; ---; 32	Austen	1914
lorentzi Ricardo	---; ---; 148	Schuurmans Stekhoven	1926
luciliaformis Schuurmans Stekhoven	---; ---; 148	Schuurmans Stekhoven	1926
macquarti Ricardo	---; Nov.-March; 32	Ferguson & Henry	1919
mastersi Taylor	---; ---; 32	Taylor	1917 a
meraukensis Mackerras	---; ---; 148	Mackerras	1964
merionalis Ferguson	---; ---; 32	Ferguson	1921 a
metallicus Ricardo	---; ---; 148	Schuurmans Stekhoven	1926
microdontus Macquart	---; ---; 32	Hardy	1947
milsoniensis Ferguson & Hill	---; ---; 32	Ferguson & Hill	1922
milsoni Taylor	---; ---; 32	Taylor	1917 a
minor Taylor	---; ---; 32	Taylor	1926

TABLE 1 - HORSE FLIES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
TABANUS			
minusculus Ferguson & Hill	---; ---; 32	Ferguson & Hill	1920
moretonensis Ferguson & Hill	---; ---; 32	Ferguson & Hill	1922
muruensis Mackerras	---; ---; 148	Mackerras	1964
musgravii Taylor	---; ---; 32	Taylor	1918
nemopunctatus Ricardo	---; ---; 32	Ferguson & Hill	1922
nemotuberculatus Ricardo	---; ---; 32	Ricardo	1914 a
neobasalis Taylor	Edge of swamp, in soil never in mud; ---; 32	Fuller	1937
neocirrus Ricardo	---; ---; 32	Hardy	1934
neogermanicus Ricardo	---; ---; 32	Ferguson & Hill	1920
neolatifrons Ferguson & Hill	---; ---; 32	Ferguson & Hill	1922
neopalpalis Ferguson & Hill	---; ---; 32	Ferguson & Hill	1920
nigrimanus Walker	---; ---; 32	Ferguson & Hill	1920
nigritarsis Taylor	Submerged stems or leaves of plant at margin of swamp; ---; 32	Hill	1921
nigriventris Macquart	---; ---; 243	Ricardo	1914
notatus Ricardo	---; ---; 32	Hill	1921
obscurilineatus Taylor	---; ---; 32	Taylor	1926
obscurimaculatus Taylor	---; ---; 32	Taylor	1919
obtusipalpis Schuurmans Stekhoven	---; ---; 148	Mackerras	1964

TABLE 1 - HORSE FLIES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
TABANUS			
ochreoflavus Ferguson & Henry	---; Nov.-March; 32	Ferguson & Henry	1919
ochrothorax Schuurmans Stekhoven	---; ---; 148, 283	Schuurmans Stekhoven	1926
oculatus Ricardo	---; ---; 32	Ferguson & Hill	1922
olivaceus Schuurmans Stekhoven	---; ---; 148	Schuurmans Stekhoven	1926
opalescens Schuurmans Stekhoven	---; ---; 148	Oldroyd	1948
orarius English	---; ---; 32	English	1949
pallipennis Macquart	Mud; ---; 32	Ferguson & Hill	1920
palmensis Ferguson & Hill	---; ---; 32	Hardy	1944
palmerstoni Ferguson & Hill	---; ---; 32	Ferguson & Hill	1922
palpalis Taylor	---; ---; 32	Taylor	1919
papouinus Walker	---; ---; 148	Schuurmans Stekhoven	1926
papuensis Oldroyd	---; ---; 148	Mackerras	1964
particaecus Hardy	---; ---; 32	Mackerras & Rageau	1958
parvicallosus Ricardo	---; ---; 32	Ferguson & Hill	1919
parvus Strangman	---; ---; 32	Austen	1914
patriarchus Oldroyd	---; ---; 148	Oldroyd	1948
pollinosus Ricardo	---; ---; 148	Oldroyd	1948

TABLE 1 - HORSE FLIES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
TABANUS			
posticus Wiedemann	---; ---; 32	Hardy	1944
postponens Walker	---; Nov.-Feb.; 32	Ferguson & Henry	1919
praepositus Walker	---; ---; 32	Ferguson & Hill	1922
productus Oldroyd	---; ---; 148	Oldroyd	1948
propinguus Macquart	---; ---; 32	Ferguson	1922
pseudoardens Taylor	---; ---; 32	Austen	1914
pseudobasalis Taylor	---; ---; 32	Ferguson	1921a
pseudocallosus Ferguson & Hill	---; ---; 32	Ferguson & Hill	1922
pseudopalpalis Ferguson & Hill	---; ---; 32	Ferguson & Hill	1922
quadratus Taylor	---; ---; 32	Ferguson	1921a
queenslandi Ricardo	---; ---; 32	Ricardo	1914a
raffrayi Bigot	---; ---; 148	Schuurmans Stekhoven	1926
rainbowi Taylor	---; ---; 32	Taylor	1918
recusans Walker	---; ---; 148	Oldroyd	1948
regis-georgii Macquart	---; Nov.-March; 32	Ferguson & Henry	1919
	---; ---; 32*	Ferguson	1916
regis-georgii diemeniensis Ferguson	Mud of brackish water; ---; 32	Hardy	1947
rivularis Ferguson & Henry	---; ---; 32	Ferguson & Hill	1922

TABLE 1 - HORSE FLIES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
TABANUS			
robustus Taylor	---; ---; 32	Taylor	1919
rosselensis Mackerras	---; ---; 148	Mackerras	1964
rubricallosus Ricardo	---; ---; 32	Hardy	1947
	---; ---; 183	Ricardo	1914
	---; ---; 219	Williams	1943
rubriventris Macquart	---; ---; 148	Oldroyd	1948
rufinotatus (Bigot)	---; January, Feb., April, June, Sept. and Dec.; 32	Hill	1921
	---; ---; 148	Schuurmans Stekhoven	1926
rufoabdominalis Taylor	---; ---; 32	Taylor	1917
samoensis Ferguson	---; taken at 2000 feet, April, May and Nov.; 263	Buxton & Hopkins	1927
sanguinarius Bigot	---; Nov.-March; 32	Ferguson & Henry	1919
selene Schuurmans Stekhoven	---; ---; 148	Schuurmans Stekhoven	1926
semicircularis Ricardo	---; at 2000-3000 feet; 148	Schuurmans Stekhoven	1926
sepikensis Oldroyd	---; ---; 148	Mackerras	1964
sequens Walker	---; ---; 32	Ferguson & Hill	1922
serus Walker	---; ---; 148	Oldroyd	1948
siassensis Mackerras	---; ---; 148	Mackerras	1964
sidneyensis Macquart	---; ---; 243	Ricardo	1914
silviformis Taylor	---; ---; 32	Taylor	1919
similis Macquart	---; ---; 32	Ricardo	1914 a

TABLE 1 - HORSE FLIES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
TABANUS			
sol Schuurmans Stekhoven	---; ---; 148	Schuurmans Stekhoven	1926
spadix Taylor	---; ---; 32	Taylor	1917a
spatiosus Ricardo	---; ---; 32	Taylor	1919
spoliatus Walker	---; ---; 32	Taylor	1918
strangmanni Ricardo	---; ---; 32	Ferguson	1921a
stuberi Oldroyd	---; ---; 148	Oldroyd	1948
subcohaerens Mackerras	---; ---; 148	Mackerras	1964
subrecusans Mackerras	---; ---; 148	Mackerras	1964
tasmaniensis White	---; ---; 32	Ferguson	1921
taylori Austen	---; ---; 32	Ferguson	1916
tenuis Schuurmans Stekhoven	---; ---; 148	Mackerras	1964
tetralineatus Austen	---; ---; 32	Austen	1914
torresi Ferguson & Hill	---; ---; 32, 148	Ricardo	1929
townsvilli Ricardo	---; ---; 32	Taylor	1919
transversus Walker	---; ---; 33	Ricardo	1914 a
trilinealis Ferguson & Henry	---; Nov.-Feb.; 32	Ferguson & Henry	1919
truncatus Oldroyd	---; ---; 148	Oldroyd	1948
trypherus Taylor	---; ---; 32	Taylor	1917 a

TABLE 1 - HORSE FLIES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
TABANUS			
umbripennis Ricardo	---; ---; 32	Mackerras	1959
vanleeuweni Oldroyd	---; ---; 148	Oldroyd	1948
vespiformis Ferguson & Henry	---; ---; 32	Ferguson & Henry	1919
vetustus Walker	---; coastal sand hills, February; 32	White	1915
	---; coastal sand dunes, inland in open country; 32	Hardy	1934
victoriensis Ricardo	---; ---; 32	Hardy	1944
wallaroni Ricardo	---; ---; 148	Oldroyd	1948
walteri Taylor	---; ---; 32	Taylor	1926
wentworthi Ferguson & Hill	---; ---; 32	Hardy	1944
whitei Hardy	---; ---; 32	Hardy	1947
wynyardensis Hardy	---; ---; 32	Hardy	1916
yulensis von Roder	---; ---; 148	Oldroyd	1948
THEREVIOTABANUS			
viridis Kröber	---; ---; 222	Kröber	1931
THEREVOPANGONIA			
insolita Mackerras	---; ---; 32	Mackerras	1956
THERIOPLECTES			
bratrankii Nowicki	---; ---; 222	Kröber	1931
difficilis Kröber	---; ---; 222	Kröber	1931
gravis Hutton	---; ---; 222	Kröber	1931

TABLE 1 - HORSE FLIES (conclusion)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
THERIOPLECTES			
oplus Walker	---; ---; 222	Kröber	1931
pseudobratrankii Krober	---; ---; 222	Kröber	1931
sarpa Walker	---; ---; 222	Kröber	1931
sordidus Walker	---; ---; 222	Kröber	1931
viridis Hudson	---; ---; 222	Kröber	1931
UDENOCERA			
australis Ricardo	---; ---; 32	Taylor	1926

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F. BITING FLIES

Biting flies belong to several families. The tables include only seven species or subspecies.

TABLE 1 - BITING FLIES

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
LYPEROSIA			
exigua de Meijere	---; seldom bites man; 32°	Handschin	1933
SPANIOPSIS			
clelandi Ferguson	---; ---; 32°	Ferguson	1915
longicornis Ferguson	---; ---; 32°	Ferguson	1915
marginipennis Ferguson	---; ---; 32°	Ferguson	1915
tabaniformis White	---; occasionally bites man; 32°	White	1915
vexans Ferguson	---; ---; 32°	Ferguson	1915
STOMOXYS	---; ---; 32°	Cleland	1944
calcitrans (Linnaeus)	---; bites in the open, suspected vector of anthrax, infantile paralysis and certain trypanosome diseases; 107°	Simmonds	1928
	---; ---; 134°	Pemberton	1947
	---; ---; 222°	Miller	1950

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G. NON-BITING FLIES

The entries for non-biting flies include representatives of several groups. Of course, the most important species in this category are those that feed as larvae on the flesh or blood of living animals.

The tables include only nine species or subspecies.

TABLE 1 - NON-BITING FLIES

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
CEPHALOMYIA *ovis* (Linnaeus)	---; ---; 134*	Herms	1925
CHRYSOMYA *megacephala* (Fabricius)	---; occasionally invade diseased tissues, considered to spread amoebiasis, hookworm and other intestinal infections; 205*	James	1962
MUSCA *domestica* Linnaeus	---; in houses, common; 263° (Possible vector of conjunctivitis and yaws)	Doane	1914
retustissima Walker	---; bites man, making persistent attempts to reach the eyes, nose and mouth; 32°	Johnston & Bancroft	1920
sorbens Wiedemann	---; feeds on open sores or wounds; 220°	Oman & Christenson	1947
	---; common on ulcers and sores, frequently seen feeding on the surface of secondary eruption of yaws of children; 263°	Buxton & Hopkins	1927
terrae-reginae Johnston & Bancroft	---; feed on mucous membranes and sores; 32°	Johnston	1920
ventrosa Wiedemann	---; feed on mucous membrane sores; 32°	Johnston	1920
OESTRUS *ovis* Linnaeus	---; ---; 222°	Miller	1950
PHAENICIA *cuprina* (Wiedemann)	---; has been incriminated in human myasis, potential vector of enteric pathogens; 205	James	1962

TABLE 2 - SUMMARY OF DISEASES OR DISEASE ORGANISMS TRANSMITTED BY NON-BITING FLIES

SPECIES	DISEASE ORGANISM: VIRUS & RICKETTSIA	PROTOZOA	HELMINTHS	OTHER	DISTRIBUTION
CEPHALOMYIA ovis (Linnaeus)				Myiasis	
CHRYSOMYA megacephala (Fabricius)				Myiasis	205

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H. FLEAS

The entries for fleas include almost no biology. Very few authors deal with flea biology. A few comment on fleas as vectors, but most of the literature deals with taxonomy and hosts. Only when the flea is said to bite man is a host recorded.

The tables include 88 species or subspecies.

TABLE 1 - FLEAS

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
ACANTHOPSYLLA endarleini (Wagner)	---; ---; 148	da Costa Lima & Hathaway	1946
franklinensis Rothschild	---; ---; 32	da Costa Lima & Hathaway	1946
pavida (Rothschild)	---; ---; 32	Jordan & Rothschild	1922
praxilla Rothschild	---; at 2400 meters; 148	Rothschild	1934
rothschildi (Rainbow)	---; ---; 32	Jordan & Rothschild	1922
rothschildi nereis Jordan & Rothschild	---; ---, 32	Jordan & Rothschild	1922
rothschildi rothschildi Rainbow	---; ---; 32	Jordan & Rothschild	1922
rothschildi victoriana Jordan & Rothschild	---; ---; 32	Jordan & Rothschild	1922
saphes Jordan & Rothschild	---; ---; 32	Jordan & Rothschild	1922
woodwardi (Rothschild)	---; ---; 32	Jordan & Rothschild	1922
ACEDESTIA chera Jordan	---; ---; 32	da Costa Lima & Hathaway	1946
ALAOPSYLLA papuensis Jordan	---; ---; 148	da Costa Lima & Hathaway	1946
BRADIOPSYLLA echidnae (Denry)	---; ---; 32	da Costa Lima & Hathaway	1946
CERATOPHYLLUS fasciatus (Bosc.)	---; rare; 32 (On man, in houses)	Bennetts	1923
gallinae (Schrank)	---; ---; 32°	Seddon	1951

TABLE 1 - FLEAS (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
CERATOPHYLLUS *londiniensis* Rothschild	---; ---; 32	Jordan & Rothschild	1921
CHORISTOPSYLLA *ochi* (Rothschild)	---; ---; 32	Jordan & Rothschild	1922
thomasi (Rothschild)	---; ---; 32	Jordan & Rothschild	1922
tristis (Rothschild)	---; ---; 32	Jordan & Rothschild	1922
CTENOPCEPHALIDES *canis* (Curtis)	---; rare; 32 (On man, in houses)	Bennetts	1923
	---; ---; 32°	Nicholls	1934
	---; domestic, rare; 197, 203, 205, 245	Hopkins	1961
felis Bouche	---; common in [illegible] rts, Nov.; 32 (On man, in houses)	Bennetts	1923
	---; ---; 107	Lever	1944
	---; ---; 114, 220, 263 (On man)	Buxton	1928
	---; common; 134	Pemberton	1943
	---; Feb., July, Sept.-Oct.; 199	Stewart	1935 a
	---; ---; 245 , 263 (Bites man)	Hopkins	1961
	---; Sept.-Nov.; 281	Stewart	1935
felis *felis* (Bouche)	---; ---; 32, 148, 199	da Costa Lima & Hathaway	1946
	---; ---; 66 , 114 , 134 , 197 , 200 , 205 , 220 , 236 , 263 , 281 (Domestic, readily bites man)	Hopkins	1961
felis *orientis* Jordan	---; ---; 50	Sharif	1930
	---; domestic; 66, 148, 197, 205	Hopkins	1961
	---; ---; 148	da Costa Lima & Hathaway	1946
CTENOPSYLLUS *signis* (Schonherr)	---; ---; 134	Pemberton	1943
ECHIDNOPHAGA *ambulans* *ambulans* Oliff	---; ---; 32	da Costa Lima & Hathaway	1946

TABLE 1 - FLEAS (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
ECHIDNOPHAGA	---; ---; 32	da Costa Lima &	
ambulans			
inepta		Hathaway	1946
Rothschild			
aranka	---; ---; 32	da Costa Lima &	
Rothschild		Hathaway	1946
cornuta	---; ---; 32	da Costa Lima &	
Wagner		Hathaway	1946
gallinacea	---; ---; 32°	Swan	1937
(Westwood)			
	---; ---; 32, 107	Sharif	1930
	---; ---; 134	Pemberton	1943
gallinacea	---; ---; 107	da Costa Lima &	
gallinacea			
(Westwood)		Hathaway	1946
liopus	---; ---; 32	da Costa Lima &	
Jordan &			
Rothschild		Hathaway	1946
macronychia	---; ---; 32	da Costa Lima &	
Jordan &			
Rothschild		Hathaway	1946
myrmecobii	---; ---; 32	da Costa Lima &	
Rothschild		Hathaway	1946
perilis	---; ---; 32	da Costa Lima &	
Jordan		Hathaway	1946
GLAUERTIDOS	---; ---; 32	da Costa Lima &	
scintilla			
(Rothschild)		Hathaway	1946
IDIOCHAETIS	---; ---; 148	da Costa Lima &	
illustris			
Jordan		Hathaway	1946
ISCHNOPSYLLUS	---; ---; 32	da Costa Lima &	
bathyllus			
Rothschild		Hathaway	1946
caninus	---, ---; 32	da Costa Lima &	
(Rothschild)		Hathaway	1946

TABLE 1 - FLEAS (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
ISCHNOPSYLLUS *earinus* Rothschild	---; ---; 32	da Costa Lima & Hathaway	1946
indicus Jordan	---; ---; 197	Hopkins	1961
reductus (Rothschild)	---; ---; 32	da Costa Lima & Hathaway	1946
LEPTOPSYLLA *musculi* (Schonh)	---; rare; 32 (On man, in houses)	Bennetts	1923
segnis (Schönherr)	---; ---; 32, 222	Cumpston & McCallum	1926 +
LYCOPSYLLA *nova* Rothschild	---; ---; 32	da Costa Lima & Hathaway	1946
MACROPSYLLA *hercules* Rothschild	---; ---; 32	da Costa Lima & Hathaway	1946
NOSOPSYLLUS *fasciatus* (Bosc-d'Antic)	---; ---; 32	Seddon	1951
	---; ---; 134	Pemberton	1943
	---; ---; 222	Cumpston & McCallum	1926 +
londoniensis (Rothschild)	---; ---; 32	da Costa Lima & Hathaway	1946
PARAPSYLLUS *australiacus* Rothschild	---; ---; 32	Jordan & Rothschild	1923
longicornis *australiacus* Rothschild	---; ---; 32	da Costa Lima & Hathaway	1946
taylori Jordan	---; ---; 32	da Costa Lima & Hathaway	1946
PULEX *irritans* Linnaeus	---; in houses; 32°	Nicholls	1934
	---; domestic; 114, 148, 220, 281	Hopkins	1961
	---; Feb.-July, peak May; 134	Haas & Wilson	1967
	---; ---; 134°	Pemberton	1943
	---; March, July, October; 199°	Stewart	1935 a

TABLE 1 - FLEAS (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
PULEX	---; Sept.; 220. ---; in house; 263 (On man)	Buxton	1928
irritans Linnaeus (cont.)	---; Nov.; 281*	Stewart	1935
simulans Baker	---; Feb.-July, peak May; 134	Haas & Wilson	1967
PYGIOPSYLLA			
colossus Rothschild	---; ---; 32	Jordan & Rothschild	1922
congrua Jordan & Rothschild	---; Feb., June, July, Aug.; 32	Jordan & Rothschild	1922
gravis Rothschild	---; ---; 32	Jordan & Rothschild	1922
hilli (Rothschild)	---; ---; 32	Jordan & Rothschild	1922
hoplia Jordan & Rothschild	---; June, Aug., Oct.; 32	Jordan & Rothschild	1922
laciniosa Rothschild	---; ---; 148	Jordan & Rothschild	1922
novaeguinae (Rothschild)	---; ---; 50, 148	da Costa Lima & Hathaway	1946
rainbowi Rothschild	---; ---; 32	Jordan & Rothschild	1922
solida Rothschild	---; ---; 32	Jordan & Rothschild	1922
sethi (Rothschild)	---, ---; 32	Jordan & Rothschild	1922
STEPHANOCIRCUS	---; ---; 32	da Costa	
concinus Rothschild		Lima & Hathaway	1946
dasyuri Skuse	---; ---; 32	da Costa Lima & Hathaway	1946
jarvisi Rothschild	---; ---; 32	da Costa Lima & Hathaway	1946
pectinipes Rothschild	---; ---; 32	da Costa Lima & Hathaway	1946
sinsoni Rothschild	---; ---; 32	da Costa Lima & Hathaway	1946

TABLE 1 - FLEAS (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
STEPHANOPSYLLA thomasii (Rothschild)	---; ---; 32	da Costa Lima & Hathaway	1946
STIVALIUS abacetus Jordan & Rothschild	---; ---; 148	Jordan & Rothschild	1922
alticola Jordan	---; ---; 148	da Costa Lima & Hathaway	1946
anaxilas Rothschild	---; at 1500 meters; 148	Rothschild	1934
ancisus Jordan	---; ---; 148	da Costa Lima & Hathaway	1946
corrugis Jordan	---; ---; 148	Jordan	1937
gracilentus Jordan	---; ---; 148	da Costa Lima & Hathaway	1946
lasiurus Jordan & Rothschild	---; ---; 148	Jordan & Rothschild	1922
molestus Jordan	---; ---; 32	da Costa Lima & Hathaway	1946
mordax (Rothschild)	---; ---; 148	Jordan & Rothschild	1922
novaeguineae Rothschild	---; ---; 50, 148	Jordan & Rothschild	1922
papuanus Jordan & Rothschild	---; ---; 148	da Costa Lima & Hathaway	1948
rectus Jordan & Rothschild	---; ---; 32, 148	Jordan & Rothschild	1922
rugatus Jordan	---; ---; 148	da Costa Lima & Hathaway	1946
shawyeri Jordan	---; ---; 148	da Costa Lima & Hathaway	1946

TABLE 1 - FLEAS (conclusion)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
STIVALIUS spooneri Rothschild	---; at 2000 meters; 148	Rothschild	1934
UROPSYLLA tasmanica Rothschild	---; ---; 32	da Costa Lima & Hathaway	1946
XENOPSYLLA cheopis Rothschild	---; common along the coastal parts, July-Sept., Dec.; 32	Bennetts	1923
	---; ---; 32°	Cilento	1940 +
	---; ---; 107 , 134 , 197 , 263 (Bites man, of great importance in plague areas)	Hopkins	1961
	---; Feb., March; 199	Stewart	1935 a
hawaiiensis (Jordan)	---; ---; 134	Pemberton	1943
vexabilis hawaiiensis Jordan	---; vector capacity for plague; 134	Macchiavello	1954
vexabilis meseris Jordan	---; ---; 32	da Costa Lima & Hathaway	1946
vexabilis vexabilis Jordan	---; ---; 32	da Costa Lima & Hathaway	1946

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I. BUGS

The bugs or Hemiptera seem to be uncommon as pests of man in Australia and the Pacific Islands. Two species are listed for this group.

TABLE 1 - BUGS

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
LINOCORIS indicus Stal	---; ---; 32°	Cleland	1944
TRIATOMA *rubrofasciata* (De Geer)	---; experimentally infected with *Trypanosoma cruzi*; 66, 148	Neiva & Lent	1941
	---; bite caused severe pain, swelling and pronounced reddish blotches on the skin of a woman; 134°	Anonymous	1944

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J. URTICATING & VESICATING ARTHROPODS

The entries for urticating and vesicating arthropods are surprisingly few. Only 13 species or subspecies are listed.

TABLE 1 - URTICATING AND VESICATING ARTHROPODS

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
ALLOXACIS flavipes Kono	---; ---; 197*	Farner	1944
ANACA palmarus Zacher	---; ---; 200*	Farner	1944
ANTHELA nicothoe Boisduval	---; cause irritation; 32°	Musgrave	1941
DORATIFERA vulnerans Lewin	Gum tree leaves; ---; 32*	Taylor	1938
EOBIA gigantea Kono	---; ---; 66*	Farner	1944
truckana Kono	---; ---; 66*	Farner	1944
uchiyamai Kono	---; ---; 23o*	Farner	1944
EUPROCTIS edwardsi Newman	---; cause urticating rash; 32°	Musgrave	1941
	---; skin irritation and edema of the face and eyelids; 32°	Cleland	1920
LEWINIBOMBYX lewini (Lewin-Bombyx)	---; ---; 32°	Musgrave	1941
OCHROGASTER contraria	---; ---; 32*	Berkowitz	1945
Walker	---; ---; 32°	Musgrave	1941
SEMINANIA [illegible] Fairmaire	---; ---; 200*	Farner	1944
[illegible]thorax Pic.	---; ---; 200*	Farner	1944
[illegible] Fabricius	---; ---; 200*	Farner	1944

TABLE 2 - SUMMARY OF DISEASES OR DISEASE ORGANISMS TRANSMITTED BY URTICATING AND VESICATING ARTHROPODS

SPECIES	DISEASE ORGANISM: VIRUS & RICKETTSIA	PROTOZOA	HELMINTHS	OTHER	DISTRIBUTION
ALLOXACIS flavipes Kono				Dermatitis	197
ANACA palmarus Zacher				Dermatitis	200
DORATIFERA vulnerans Lewin				Dermatitis	32
EOBIA gigantea Kono				Dermatitis	66
truckana Kono				Dermatitis	66
uchiyamai Kono				Dermatitis	236
OCHROGASTER contraria Walker				Dermatitis	32
SESSINANIA decolor Fairmaire				Dermatitis	200
impressithorax Pic.				Dermatitis	200
livida Fabricius				Dermatitis	200

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K. TICKS

The tick entries seldom include information on the immature forms separately from the adults. In fact, most of the entries contain only distributional data.

Ticks are especially important to livestock in Australia; also, some serious human disease organisms are transmitted by ticks. In Table 1 are listed 108 species or subspecies.

TABLE 1 - TICKS

SPECIES	SPECIFIC NOTES; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
AMBLYOMMA			
acutangulatum Neumann	---; 107	Robinson	1926
albolimbatum Neumann	---; 32	Robinson	1926
auruginans Schulze	---; 32	Taylor & Murray	1946
australiense Neumann	---; 32	Robinson	1926
cordiferum Neumann	---; 263	Buxton & Hompkins	1927
cyprium Koch & Neumann	At 3000 feet; 107°	Lever	1943
	---; 148, 197	Robinson	1926
	---; 220	Buxton & Hopkins	1927
cyprium	---; 107°, 148°, 197, 220	Anastos	1950
cyprium cyprium Neumann	---; 205°	Kohls	1957
helvolum Koch	---; 32, 148	Robinson	1926
limbatum Neumann	---; 32	Robinson	1926
moreliae (Koch)	---; 32	Robinson	1926
nitidum Hirst & Hirst	---; 283	Robinson	1926
papuana Hirst	---; 32	Robinson	1926
postoculatum Neumann	---; 32	Ferguson	1925
	---; 222	Fielding	1926
quasicyprium Nuttal, Warburton & Robinson	July; 107	Lever	1943
scaevola Oudemans	---; 148	Fielding	1926
triguttatum Koch	---; 32	Robinson	1926

TABLE 1 - TICKS (continued)

SPECIES	SPECIFIC NOTES; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
APONOMMA			
concolor Neumann	Common; 32	Ferguson	1925
decorosum Koch	---; 32	Fielding	1926
	---; 107	Ferguson	1925
ecinctum Neumann	---; 32	Fielding	1926
gervaisi (Lucas)	---; 32	Seddon	1951
hydrosauri Denny	---; 32	Fielding	1926
oudemansi Neumann	---; 148	Taylor & Murray	1946
sphenodonti Dumbleton	Endemic; 222	Dumbleton	1963
trabeatum Schulze	---; 148	Taylor & Murray	1948
trachysauri Lucas	---; 32	Seddon	1951
trimaculatum (Lucas)	---; 32	Anastos	1950
	---; 148	Fielding	1926
ARGAS			
lagenoplastis Froggatt	---; 32	Fielding	1926
persicus (Oken)	Cracks and crevices in the walls; 32	Ferguson	1925
	---; 32	Fielding	1926
	---; 222	Hoogstraal	1956
vespertilionis (Latreille)	---; 32	Hoogstraal	1956
victoriensis Sweet	---; 32	Fielding	1926
BOOPHILUS			
annulatus (Say)	---; 205	Kohls	1957
annulatus australis (Fuller)	Grass stems, vegetation and fences; 32	Ferguson	1925

TABLE 1 - TICKS (continued)

SPECIES	SPECIFIC NOTES; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
BOOPHILUS annulatus var. *australis* Fuller	---; 148	Farner	1943
annulatus microplus Canestrini	Experimental transmission of "Q" fever; 32	Derrick	1944
	Infected with "Q" fever; 32	Kohls	1947
	---; 32°	Andrew et al.	1946
australis (Fuller)	Common during the wet season; 32	Legg	1930
krijgsmani Minning	---; 148	Farner	1943
longiscutatus Minning	---; 148	Farner	1943
microplus (Canestrini)	---; 32	Hoogstraal	1956
	---; 148	Anastos	1950
	---; 205	Kohls	1957
DERMACENTOR atrosignatus Neumann	---; 32 (Host: man)	Farner	1943
auratus Neumann	---; 148	Schulze	1933
HAEMAPHYSALIS australis Neumann	---; 32	Taylor	1913
bancrofti Nuttall & Warburton	---; 32°	Andrews et al.	1946
	---; 32	Fielding	1926
bispinosa Neumann	Experimental transmission and potential vector of "Q" fever; 32°	Derrick	1944
	Experimentally infected with "Q" fever; 32	Smith	1942
	Probable vector of tropical typhus; 32*	Toumanoff	1944
	Bases of rushes and clumps of rough grass during winter; 32	Ferguson	1925
	---; 219, 222	Anastos	1950
bremneri Roberts	---; 32	Roberts	1963

TABLE 1 - TICKS (continued)

SPECIES	SPECIFIC NOTES; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
HAEMAPHYSALIS humerosa Warburton & Nuttall	Naturally infected with "Q" fever; 32*°	Derrick	1944
	Experimental transmission of *Bacillus tropicus*; 32	Heaslip	1940
	All year, bites man experimentally; 32 (Known vector of "Q" fever)	Smith	1941
krijgsmani Kohls	---; 148	Kohls	1948
lagostrophi Roberts	---; 32	Roberts	1963
leachi Audouin	---; 32, 33	Fielding	1926
	---; 222, 263	Miller	1922
longicornis Neumann	---; 32	Fielding	1926
meraukensis Taylor	---; 148	Taylor & Murray	1946
novae-guineae Krijgsman & Ponto	---; 32	Roberts	1963
	---; 148	Farner	1943
papuana Thorell	---; 32	Anastos	1950
	---; 148	Fielding	1926
ratti Kohls	---; 32	Roberts	1963
	---; 148	Kohls	1948
wellingtoni Nuttall & Warburton	---; 148	Schulze	1939
HYALOMMA aegyptium (Linnaeus)	---; 32°	Fielding	1926
	---; 222	Miller	1922
INDOCENTOR atrosignatus Neumann	---; 148	Schulze	1933
steini Schulze	---; 148	Taylor & Murray	1946
steini steini Schulze	---; 148	Schulze	1933
IXODES acanthoglossi Lucas	---; 148	Farner	1943

TABLE 1 - TICKS (continued)

SPECIES	SPECIFIC NOTES; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
IXODES	---; 33	Fielding	1926
anatis Chilton	---; 222	Nuttall	1916
antechini Roberts	---; 32	Roberts	1960
aptericola Maskell	---; 222	Miller	1922
apteridis Maskell	---; 222	Miller	1922
auritulus Neumann	---; 32	Ferguson	1925
	---; 222	Nuttall	1916
auritulus sealandicus Dumbleton	---; 222	Dumbleton	1961
australiensis Neumann	---; 32	Fielding	1926
confusus Roberts	---; 32°	Roberts	1960
cordifer Neumann	---; 148	Toumanoff	1944
cornuatus Roberts	---; 32	Roberts	1960
eichhorni Nuttall	---; 50°	Taylor & Murray	1946
	---; 148°	Fielding	1926
eudyptides Maskell	---; 32, 222	Nuttall	1916
fecialis Warburton & Nuttall	---; 32	Taylor & Murray	1946
fecialis aegrifossus	---; 32	Toumanoff	1944
hirsti Hassall	---; 32	Roberts	1960

TABLE 1 - TICKS (continued)

SPECIES	SPECIFIC NOTES; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
IXODES *holocyclus* Neumann	Capable of transmitting *Coxiella burneti* and possible vector of "Q" fever; 32. ---; 148	Seddon	1951
	Naturally infected with "Q" fever, experimentally infected with and experimental transmission of "Q" fever; 32*°	Smith	1942
	Causes fatal paralysis of children; 32	Sharif	1938
	Common during spring and early summer; 32	Ross	1924
hydromyidis Swar.	---; 32	Taylor & Murray	1946
intermedius Neumann	---; 222	Miller	1922
jacksoni Hoogstraal	---; 222	Hoogstraal	1967
kohlsi Arthur	---; 32°	Roberts	1960
luxuriosus Schulze	---; 148	Farner	1943
maskelli Kirk	---; 222	Nuttall	1916
mindanensis Kohls	---; 66, 205	Kohls	1957
neumanni	---; 32, 222	Toumanoff	1944
ornithorhynchi Lucas	---; 32	Toumanoff	1944
	---; 197	Taylor & Murray	1946
percavatus Neumann	---; 32	Taylor & Murray	1946
pricei collaris Schulze	---; 148	Farner	1943
pteroidromai Arthur	---; 32	Roberts	1964
putus (Pickard & Cambridge)	Occasionally bites man; 32°	Ferguson	1925
	---; 222	Nuttall	1916
ricinus Linnaeus	---; 33*	Toumanoff	1944
	---; 222	Miller	1922
simplex simplex Neumann	---; 32	Roberts	1960

TABLE 1 - TICKS (continued)

SPECIES	SPECIFIC NOTES; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
IXODES			
steini Schulze	---; 148	Farner	1943
tasmani Neumann	---; 32	Seddon	1931
	---; 32°	Roberts	1960
trichosuri Roberts	---; 32	Roberts	1960
trimaculatus Lucas	---; 148	Farner	1943
unicavatus Neumann	---; 32, 222	Ferguson	1925
uriae White	---; 32	Cooley & Kohls	1945
	---; 222	Dumbleton	1961
vespertilionis Koch	---; 32	Nuttall	1916
vestitus Neumann	---; 32	Taylor & Murray	1946
victoriensis Nuttall	---; 32	Taylor & Murray	1946
MARGAROPUS annulatus var. *australis* (Fuller)	---; 32	Howard	1908
ORNITHODOROS capensis Neumann	---; 32, 197	Hoogstraal	1956
	---; 134. ---; 205°	Kohls	1957
	---; 222	Dumbleton	1961
gurneyi Warburton	Bite cause severe local and systemic symptons; 32°	Seddon	1951
	Experimentally infected with "Q" fever; 32	Smith	1942
	Experimental transmission of "Q" fever; 32°	Derrick	1944
megnini (Duges)	---; 134	Zimmerman	1944
talaje (Guerin-Meneville)	In houses; 32	Ferguson	1925
	---; 32°	Fielding	1926

TABLE 1 - TICKS (conclusion)

SPECIES	SPECIFIC NOTES; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
ORNITHODOROS			
talaje			
capensis Neumann	---; 32	Kohls	1957
OTOBIUS			
megnini Duges	---; 134	Beaumont	1943
RHIPICEPHALUS			
sanguineus (Latreille)	Experimental transmission and possible vector of "Q" fever; 32°	Derrick	1944
	---; 134°	Pemberton	1943
	---; 263	Doane	1914
sanguineus	---; 32°	Hoogstraal	1956
sanguineus (Latreille)	---; 205	Kohls	1957

TABLE 2 - SUMMARY OF DISEASES OR DISEASE ORGANISMS TRANSMITTED BY TICKS

SPECIES	DISEASE ORGANISM: VIRUS & RICKETTSIA	PROTOZOA	HELMINTHS	OTHER	DISTRIBUTION
ARGAS persicus Oken				Relapsing fever	32
HAEMAPHYSALIS bispinosa Neumann	Tropical typhus				32
humeirosa Warburton & Nuttall	"Q" fever				32
IXODES holocyclus Neumann				Tick paralysis	32
ricinus Linnaeus				Tick paralysis	32

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L. MITES

The entries for mites include a wide variety of species, most of which seldom bite man. For the most part, there are no biological entries. The trombiculid entries are, of course, for larval stages. Most of the others will be for various stages, but mostly for adults.

There are only 69 species or subspecies recorded in the tables.

TABLE 1 - MITES

SPECIES	SPECIFIC NOTES; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
ACOMATACARUS australiensis (Hirst)	Jan.-Apr., Sept.-Dec., causes irritating and inflamed swelling; 32*°	Anonymous	1946
	---; 32	Seddon	1951
	---; 148 (Host: man, causes dermatitis)	Wharton & Fuller	1952
barrinensis Womersley	---; 32°	Womersley	1945
DEMODEX folliculorum Simon	Common; 32°	Taylor & Murray	1946
DERMANYSSUS gallinae (De Geer)	In houses, occasionally bites man, nocturnal; 32*°	Taylor & Murray	1946
	---; 134°	Pemberton	1943
GLYCYPHAGUS domesticus De Geer	---; 222*°	Robertson	1946
LAELAPS agilis Koch	---; 32°	Strickland	1929
australiensis	---; 32*	Williams	1944
LEEUWENHOEKIA australiensis Hirst	Common; 32°	Gunther	1941
	---; 148°	Womersley & Heaslip	1943
LEIOGNATHUS bacoti Hirst	Bite at night, wharves, in houses; 32*°	Hirst	1914
LIPONYSSUS bacoti (Hirst)	---; 32°	Hirst	1926
	---; 32*	Taylor & Murray	1946
bursa Berlese	---; 32°	Seddon	1951
	In houses, bites cause irritation; 134°	Zimmerman	1944
ORNITHONYSSUS bacoti Hirst	---; 32° (Causes dermatitis)	Williams & Kershaw	1961
PARASCHONGASTIA rubra Womersley	---; 32*°, 148*°	Taylor & Murray	1946

TABLE 1 - MITES (continued)

SPECIES	SPECIFIC NOTES; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
PEDICULOIDES ventricosus (Newport)	Common in straw, cotton seed and grain; 32*	Taylor & Murray	1946
	Causes "hay itch" in man; 32°	Swan	1937
	Causes skin erruption; 32°	Seddon	1951
	---; 134*	Pemberton	1943
SARCOPTES scabei (Linnaeus)	---; 50*	Backhouse	1929
	---; 263°	Marples	1950
scabiei var. *hominis* (Hering)	---; 32*, 148*	Taylor & Murray	1946
SCHÖNGASTIA blestowei Gunther	---; 32*°, 148*	Taylor & Murray	1946
	---; 50°	Gunther	1941
	---; 148°	Womersley & Heaslip	1943
katonis Womersley & Heaslip	---; 236*°	Wharton & Fuller	1952
pusilla Womersley	---; 32*°, 148*°	Taylor & Murray	1946
schüffneri (Walch)	---; 148 (Host: man, cause dermatitis)	Wharton & Fuller	1952
vandersandei Oudemans)	In grass and on low branches or shrubs, causes shrub-itch; 148*°	Ewing & Hartzell	1918
	March, July-Aug., Nov.; 148	Womersley	1952
	---; 148, 283 (Causes dermatitis)	Wharton & Fuller	1952
	Cause scrub-itch; 283°	Dumbleton	1947
TROMBICULA ablephara Womersley	---; 32, 148	Womersley	1952
deliensis Walch	---; 197 (Host: man)	Wharton & Fuller	1952
akamushi (Brumpt)	---; 32, 148 (Bites man, vector of *Rickettsia orientalis*)	Gelgy & Herbig	1955
	---; 148	Roy & Brown	1954

TABLE 1 - MITES (continued)

SPECIES	SPECIFIC NOTES; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
TROMBICULA			
alicola Dowr:w	---; 32	Nadchatram & Mitchell	1965
anous (Wharton)	---; 197	Wharton & Fuller	1952
australiensis Hirst	---; 32°	Hirst	1929
buloloensis Gunther	---; 32*°, 148*°	Taylor & Murray	1946
chiroptera Womersley & Heaslip	---; 32	Womersley & Heaslip	1943
deliensis Walch	Common; 32, 148, 283 (Vector of scrub typhus)	Womersley	1952
	Probable vector of K-typhus and apparent vector of "tsutsugamushi" fever; 32	Womersley & Heaslip	1943
	---; 32*°, 148*°	Taylor & Murray	1946
	---; 32*, 148*	Williams	1944
	---; 32, 148 (Bites man, vector of *Rickettsia orientalis*)	Geigy & Herbig	1955
	Naturally infected with scrub typhus; 50	Philip & Kohls	1945
	May transmit typhus; 148	Wilcocks	1944
	---; 283 (Host: man)	Wharton & Fuller	1952
	Suspected vector of Tsutsugamushi fever; 289	Ahlm & Lipshutz	1944
densipiliata Walch	---; 50	Womersley	1952
	---; 148	Wharton & Fuller	1952
elegans Womersley	---; 32	Wharton & Fuller	1952
fletcheri Womersley & Heaslip	---; 32*°, 148*°	Taylor & Murray	1946
	Possible vector of scrub typhus; 148	Kohls	1947
	Tall grass or vegetation, suspected vector of Tsutsugamushi fever; 289	Ahlm & Lipshutz	1944
frittsi Wharton	---; 283	Wharton & Fuller	1952

TABLE 1 - MITES (continued)

SPECIES	SPECIFIC NOTES; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
TROMBICULA			
gymnodactyla (Womersley & Kohls)	---; 148	Wharton & Fuller	1952
hirsti Sambon	Rotting logs and damp situations in rain forest; 32*°. ---; 148*°	Taylor & Murray	1946
	Abundant during warm months especially in January in undergrowth beneath tea-trees, bite cause severe irritation; 32°	Hirst	1929
	---; 50°	Dumbleton	1947
	---; 283 (Host: man, cause dermatitis)	Wharton & Fuller	1952
hirsti var. *buldoensis* Gunther	---; 148°	Gunther	1939
incurva Womersley	---; 32	Womersley	1952
keechongi Nadchatram & Mitchell	---; 283	Nadchatram & Mitchell	1965
kohlsi Womersley	---; 148	Womersley	1952
leveri Womersley	---; 107	Womersley	1952
lundbladi Womersley	---; 148	Womersley	1952
lygosomoides Womersley	---; 148	Womersley	1952
minor Berlese	Soil on edges of scrubs; 32*°	Seddon	1951
	Common "itch mite" of the scrub, at high altitude of 1,500 feet; 32	Womersley & Heaslip	1943
	---; 32*, 148*	Williams	1944
	---; 148*°	Taylor & Murray	1946
	Tall grass or vegetation, suspected vector of Tsutsugamushi fever; 289	Ahlm & Lipshutz	1944
minor var. *deliensis* Walch	---; 148	Womersley & Heaslip	1943

TABLE 1 - MITES (continued)

SPECIES	SPECIFIC NOTES; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
TROMBICULA			
mysantha Womersley	---: 32, 148	Womersley	1952
naultini Dumbleton	---; 222	Womersley	1952
nissani Dumbleton	---; 50	Womersley	1952
	---; 148	Wharton & Fuller	1952
novae-hollandiae Hirst	---; 32	Womersley	1952
obscura Womersley	---; 148	Womersley	1952
philipi Womersley	---; 148	Womersley	1952
pluvina (Wharton)	---; 32, 197, 283	Womersley	1952
quadriense Womersley & Heaslip	---; 32	Womersley	1952
rara (Walch)	Sept.; 32. Aug., Dec.; 148	Womersley	1952
	---; 148°	Audy	1950
rioi Gunther	---; 148	Womersley	1952
robusta Gunther	---; 148	Womersley	1952
samboni Womersley	In black soil, chiefly in the top inch, common on warm days, bites are very irritating, bites mostly on the legs, waistline where clothing fits tightly, all year especially from Sept.-Jan.; 32°	Womersley & Heaslip	1943
	Common; 32*, 148*°	Taylor & Murray	1946
sarcina Womersley	---; 32*	Wharton & Fuller	1952
	---; 32*	Seddon	1951
scincoides Womersley	---; 93. Dec.-Jan., March, May; 148. July; 283	Womersley	1952

TABLE 1 - MITES (conclusion)

SPECIES	SPECIFIC NOTES; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
TROMBICULA			
signata Womersley	---; 32	Wharton & Fuller	1952
sobrina Womersley	---; 148	Womersley	1952
thori Womersley	---; 32	Womersley	1952
tovelli Womersley	---; 32	Womersley	1952
translucens Womersley	---; 32	Womersley	1944
vandersandei Oudemans	---; 32*°, 148*°	Taylor & Murray	1946
walchi Womersley & Heaslip	---; 32*°, 148*°	Taylor & Murray	1946
wichmanni (Oudemans)	---; 32*°, 148*°	Taylor & Murray	1946
	---; 32, 148, 283 (Host: man, cause dermatitis)	Wharton & Fuller	1952
	---; 50, 93	Womersley	1952
TYROGLYPHUS			
longior var. *castellanei* Hirst	Infesting copra, cause "copra itch" in man; 148*	Taylor & Murray	1946
TYROPHAGUS			
longior Gervais	---; 222*°	Robertson	1946

TABLE 2 - SUMMARY OF DISEASES OR DISEASE ORGANISMS TRANSMITTED BY MITES

SPECIES	DISEASE ORGANISM: VIRUS & RICKETTSIA	PROTOZOA	HELMINTHS	OTHER	DISTRIBUTION
ACOMATACARUS australiense (Hirst)				Dermatitis	32
DERMANYSSUS gallinae (De Geer)				Dermatitis	32
GLYCYPHAGUS domesticus De Geer				Dermatitis	222
LAELAPS australiensis	Tsutsugamushi			Dermatitis	32
LEIOGNATHUS bacoti Flint				Dermatitis	32
LIPONYSSUS bacoti Hirst				Dermatitis	32
PAPASCHÖNGASTIA dubia Womersley				Dermatitis	32, 148
PEDICULOIDES ventricosus				Dermatitis	32
(Newport)				Dermatitis	134
SARCOPTES scabei Linnaeus				Dermatitis	50
scabei var. *hominis* Raspail				Dermatitis	32, 148
SCHÖNGASTIA blestowei Gunther				Dermatitis	32, 148
katonis Womersley & Heaslip				Dermatitis	236
pusilla Womersley				Dermatitis	32, 148
vanderhaidei (Oudemans)				Bush-itch	148

TABLE 2 - MITES (conclusion)

SPECIES	DISEASE ORGANISM: VIRUS & RICKETTSIA	PROTOZOA	HELMINTHS	OTHER	DISTRIBUTION	
TROMBICULA						
buloloensis Gunther				Dermatitis	32, 148	
deliensis Walch	Tsutsugamushi				32, 148	(Williams-1944)
				Dermatitis	32, 148	
fletcheri Womersley & Heaslip				Dermatitis	32, 148	
hirsti Sambon				Dermatitis	32, 148	
minor Berlese				Dermatitis	32	(Seddon, 1951)
	Tsutsugamushi				32, 148	
				Dermatitis	148	
samboni Womersley				Dermatitis	32, 148	
sarcina Womersley				Dermatitis	32	
vandersandei Oudemans				Dermatitis	32, 148	
walchi Womersley & Heaslip				Dermatitis	32, 148	
wichmani (Oudemans)				Dermatitis	32, 148	
TYROGLYPHUS *longior* var. *castellanei* Hirst				Dermatitis	148	
TYROPHAGUS *longior* Gervais				Dermatitis	222	

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M. MISCELLANEOUS ARTHROPODS

The entries listed as miscellaneous arthropods are mostly for scorpions and spiders. There are 18 species or subspecies listed.

TABLE 1 - MISCELLANEOUS ARTHROPODS

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
ANISOLABIS *colossea* (Dohrn)	---; ---; 32°	Cleland	1920
ATRAX *formidabilis* Rainbow	---; bite causes severe systemic disturbances; 32°	McKeown	1952
robustus Cambridge	---; funnel web spun in natural crevices, nocturnal, bite may be fatal; 32°	McKeown	1952
DECOPHYLLA *smaragdina* (Fehr)	---; ---; 32°	Cleland	1920
ENTOMOBRYA *multifasciata* Tull.	---; ---; 32°	Pescott	1942
tenuicauda Schött.	---; ---; 32°	Pescott	1942
HORMURUS *australasiae* Fabricius	---; ---; 66, 197, 236 (Sting is not poisonous)	Farner	1944
	---; effect of sting is slight; 263°	Buxton & Hopkins	1927
ISOMETRUS *europaeus*	---; enters house, sting is very painful; 66°, 197°, 200°, 236°	Farner	1944
maculatus (De Geer)	---; ---; 134°	Pemberton	1943
	---; effect of sting is slight; 263°	Buxton & Hopkins	1927
LATRODECTUS *hasseltii* Thorell	---; common in man-made structures, bite causes severe systemic disturbances, occasionally fatal; 32°. ---; ---; 222	McKeown	1952
mactans Fabricius	---; ---; 134°	Pemberton	1943
MYRMECIA *nigriventris* Mayr	---; ---; 32°	Cleland	1920
nigrocincta F. Smith	---; painful sting; 32°	Cleland	1920
OCINARA *lewinae* (Lewin)	---; skin irritation; 32°	Cleland	1920
OECOPHYLLA *smaragdina* (Fabricius)	---; ---; 32°	Cleland	1920

TABLE 1 - MISCELLANEOUS ARTHROPODS (conclusion)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
PEDICULUS			
capitis (De Geer)	---; ---; 107°	Veitch & Greenwood	1921
humanus Linnaeus	---; ---; 107°	Veitch & Greenwood	1921
PHTHIRUS			
inguinalis Leach	---; ---; 107°	Veitch & Greenwood	1921
pubis Linnaeus	---; on eyelashes of children; 263°	Buxton & Hopkins	1927
SCOLOPENDRA			
morsitans Linnaeus	---; enters houses, bite is extremely painful; 197°	Farner	1944
subspinipes Leach	---; ---; 134°	Pemberton	1943
	---; enters houses, bite is extremely painful; 197°	Farner	1944
	---; readily bites man, bite caused oedema of hand and forearm; 263°	Buxton & Hopkins	1927

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13. ABSTRACT

The occurrence of insects and other arthropods of medical importance in Australia, New Zealand, New Guinea, and the islands of Oceania is summarized on the basis of a review of most of the available references in the scientific literature. The report includes, for each major group of arthropods, a listing of species and subspecies with biological and distributional data, tabulations of diseases or disease organisms transmitted, and literature citations.

The groups of arthropods included, with the number of species or subspecies in parentheses, are:

Mosquitoes (828), Black flies (58), Sand flies (6), Midges (44), Horse flies (750) Biting flies (7), Non-biting flies (9), Fleas (88), Bugs (2), Urticating and vesicating arthropods (13), Ticks (108), Mites (69), and Miscellaneous arthropods (18).

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Midges	9		6			
Mites	9		6			
Ticks	9		6			
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Pacific Islands	9		9			
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