

Mosquito Taxonomic Inventory (<https://mosquito-taxonomic-inventory.myspecies.info/node/11358>)
Updated 30 July 2023 – Ralph Harbach

(Note: Cited references are listed at the end of the classification.)

Genus *Anopheles* Meigen

Subgenus *Anopheles* Meigen

Angusticorn Section (Reid & Knight, 1961)

annulipalpis Lynch Arribálzaga (see Harbach & Kitching, 2015)

Anopheles Series (Edwards, 1932a)

algeriensis Theobald

concolor Edwards

marteri Senevet & Prunelle

Claviger Complex (Coluzzi *et al.*, 1965)

claviger (Meigen)

petragnani del Vecchio

Alongensis Group (Phan *et al.*, 1991)

alongensis Venhuis

cucphuongsensis Vu, Nguyen, Tran & Nguyen

Aitkenii Group (Reid & Knight, 1961)

aberrans Harrison & Scanlon

acaci Baisas

aitkenii James

bengalensis Puri

borneensis McArthur

fragilis (Theobald)

insulaeflorum (Swellengrebel & Swellengrebel de Graaf)

palmatus (Rodenwaldt)

peytoni Kulasekera, Harrison & Amerasinghe

pililotum Harrison & Scanlon

pinjaurensis Barraud

stricklandi Reid

tigerti Scanlon & Peyton

Atratipes Group (Lee *et al.*, 1987b)

atratispes Skuse

tasmaniensis Dobrotworsky

Culiciformis Group (Reid & Knight, 1961)

culiciformis Cogill

sintoni Puri

sintonoides Ho

Lindesayi Group (Reid & Knight, 1961)

Gigas Subgroup (Harrison *et al.*, 1991, as Gigas Complex)

Bailey Complex (Somboon *et al.*, 2020)

baileyi Edwards (species A)

baileyi (species D)

bhutanensis Somboon, Namgay & Harbach (species C)
monticola Somboon, Namgay & Harbach (species B)
simplensis James

Gigas Complex (redefined by Somboon *et al.*, 2020)
crockeri Colless
danaubento Mochtar & Walandouw
formosus Ludlow
gigas Giles
refutans Alcock
prachongae Rattanaarithikul & Harrison
sumatrana Swellengrebel & Rodenwaldt

Lindesayi Subgroup (Harrison *et al.*, 1991, as Lindesayi Complex)
menglansensis Ma
nilgircus Christophers
wellingtonianus Alcock

Lindesayi Complex (Namgay *et al.*, 2020)
benguetsensis King
cameronensis Edwards
druki Somboon, Namgay & Harbach (*lindesayi* species C)
himalayensis Somboon, Namgay & Harbach (*lindesayi* species D)
japonicus Yamada
lindesayi Giles (species A)
lindesayi (species B)
pleccau Koidzumi
thimphuensis Somboon, Namgay & Harbach (*lindesayi* species E)

Maculipennis Group (Reid & Knight, 1961)
atropos Dyar & Knab
aztecus Hoffmann
lewisi Ludlow
walkeri Theobald

Maculipennis Subgroup (Linton, 2004)
artemievi Gordeyev, Zvantsov, Goryacheva, Shaikevich & Yezhov
atroparvus van Thiel
daciae Linton, Nicolescu & Harbach
labranchiae Falleroni
maculipennis Meigen
martinius Shingarev
melanoon Hackett
messeae Falleroni
persiensis Linton, Sedaghat & Harbach
sacharovi Favre

Quadrifaculatus Subgroup (Linton, 2004)
beklemishevi Stegnii & Kabanova
diluvialis Reinert
inundatus Reinert
maverlius Reinert

quadrimaculatus Say
smaragdinus Reinert
Freeborni Subgroup (Linton, 2004)
earlei Vargas
freeborni Aitken
hermsi Barr & Guptavanij
occidentalis Dyar & Knab
Plumbeus Group (Reid & Knight, 1961)
arboricola Zavortink
barberi Coquillett
barianensis James
fausti Vargas
judithae Zavortink
omorii Sakakibara
plumbeus Stephens
powderi Zavortink
xelajuensis de Leon
Pseudopunctipennis Group (Reid & Knight, 1961)
argentinus (Brèthes)
chiriquiensis Komp
eiseni Coquillett
geometricus Corrêa
franciscanus McCracken
hectoris Giaquinto-Mira
levicastilloi Levi-Castillo
neghmei Mann
noei Mann
parapunctipennis Martini
pseudopunctipennis Theobald
rivadeneirai Levi-Castillo
tibiamaculatus (Neiva)
Punctipennis Group (Reid & Knight, 1961)
perplexens Ludlow
punctipennis (Say)
Crucians Complex (Wilkerson *et al.*, 2004)
bradleyi King
crucians Wiedemann (species A, B, C, D and E)
georgianus King
Stigmaticus Group (Reid & Knight, 1961)
colledgei Marks
corethroides Theobald
papuensis Dobrotworsky
powelli Lee
pseudostigmaticus Dobrotworsky
stigmaticus Skuse
Cyclolepteron Series (Edwards, 1932a)

grabhamii Theobald
Lophoscelomyia Series (Edwards, 1932a)
bulkleyi Causey
Asiaticus Group (Reid, 1968)
annandalei Prashad
noniae Reid
Asiaticus Subgroup (Rattanaarithikul *et al.*, 2006b)
asiaticus Leicester
Interruptus Subgroup (Rattanaarithikul *et al.*, 2006b)
interruptus Puri
Laticorn Section (Reid & Knight, 1961)
Arribalzagia Series (Root, 1922a)
anchietai Corrêa & Ramalho
apicimacula Dyar & Knab
bustamantei Galvão
calderoni Wilkerson
costai Fonseca & Ramos
evandroi da Costa Lima
fluminensis Root
forattinii Wilkerson & Sallum
gabaldoni Vargas
guarao Anduze & Capdevielle
maculipes (Theobald)
malefactor Dyar & Knab
mattogrossensis Lutz & Neiva
medialis Harbach
mediopunctatus (Lutz)
minor da Costa Lima
neomaculipalpus Curry
peryassui Dyar & Knab
pseudomaculipes (Chagas)
punctimacula Dyar & Knab
rachoui Galvão
shannoni Davis
veruslanei Vargas
vestitipennis Dyar & Knab
Myzorhynchus Series (Edwards, 1932a)
obscurus (Grünberg)
Albotaeniatus Group (Reid & Knight, 1961)
albotaeniatus (Theobald)
balerensis Mendoza
ejercitoi Mendoza
montanus Stanton & Hacker
saperoi Bohart & Ingram
Bancroftii Group (Reid & Knight, 1961)
bancroftii Giles

barbiventris Brug
pseudobarbistrotris Ludlow
Barbistrotris Group (Reid & Knight, 1961)
freyi Meng
koreicus Yamada & Watanabe
Barbistrotris Subgroup (Reid, 1968)
donaldi Reid
franciscoi Reid
hodgkini Reid
pollicaris Reid
Barbistrotris Complex (Satoto, 2001)
barbistrotris van der Wulp
campestris Reid
dissidens Taai & Harbach (species III of Paredes-Esquivel *et al.*, 2009)
saeungae Taai & Harbach (species IV of Paredes-Esquivel *et al.*, 2009)
vanderwulpi Townson & Harbach
wejchoochotei Taai & Harbach
Vanus Subgroup (Reid, 1968)
ahomi Chowdhury
barbumbrosus Strickland & Chowdhury
manalangi Mendoza
reidi Harrison
vanus Walker
Coustani Group (Reid & Knight, 1961)
caliginosus de Meillon
coustani Laveran
crypticus Coetzee
fuscicolor van Someren
namibiensis Coetzee
paludis Theobald
symesi Edwards
tenebrosus Dönitz
ziemanni Grünberg
Hyrceanus Group (Reid, 1953)
argyropus (Swellengrebel)
belenrae Rueda
chодукini Martini
engarensis Kanda & Oguma
hailarensis Xu & Luo
heiheensis Ma
hyrcanus (Pallas)
hyrcanus ^{sp1R} (Djadid *et al.*, 2009)
kleini Rueda
kweiyangensis Yao & Wu
liangshanensis Kang, Tan, Cao, Cheng Yang & Huang
nimpe Nguyen, Tran & Harbach

pseudopictus Grassi
pullus Yamada
sinensis Wiedemann
sineroides Yamada
xui Dong, Zhou, Dong & Mao
Lesteri Subgroup (Harrison, 1972)
crawfordi Reid
lesteri Baisas & Hu
peditaeniatus (Leicester)
vietnamensis Nguyen, Tran & Nguyen
Nigerrimus Subgroup (Harrison, 1972)
nigerrimus Giles
nitidus Harrison, Scanlon & Reid
pseudosinensis Baisas
pursati Laveran
Umbrosus Group (Reid, 1950)
brevipalpis Roper
brevirostris Reid
hunteri (Strickland)
samarensis Rozeboom
similissimus Strickland & Chowdhury
Baezai Subgroup (Rattanaarithikul *et al.*, 2006b)
baezai Gater
Letifer Subgroup (Reid, 1968)
collessi Reid
letifer Sandosham
roperi Reid
whartoni Reid
Separatus Subgroup (Rattanaarithikul *et al.*, 2006b)
separatus (Leicester)
Umbrosus Subgroup (Rattanaarithikul *et al.*, 2006b)
umbrosus (Theobald)

Subgenus *Baimaia* Harbach, Rattanaarithikul & Harrison

kyondawensis Abraham

Subgenus *Cellia* Theobald

Cellia Series (Christophers, 1924a)
argenteolobatus (Gough)
brumpti Hamon & Rickenbach
crisipalpis Service
murphyi Gillies & de Meillon
pharoensis Theobald
swahilicus Gillies
Squamosus Group (Grjebine, 1966)

cydippis de Meillon
squamosus Theobald
Myzomyia Series (Christophers, 1924a)
apoci Marsh
azaniae Bailly-Choumara
barberellus Evans
bervoetsi D'Haenans
brunnipes (Theobald)
domicolus Edwards
dthali Patton
erythraeus Corradetti
ethiopicus Gillies & Coetzee
flavicosta Edwards
fontinalis Gillies & de Meillon
gabonensis Rahola, Makanga & Paupy, 2014
majidi Young & Majid
moucheti Evans
nigeriensis Evans
schwetzi Evans
tchekedii de Meillon & Leeson
walravensi Edwards
Demeilloni Group (Gillies & de Meillon, 1968)
basilewskyi Leleup, 1957
carteri Evans & de Meillon
demeilloni Evans
freetownensis Evans
garnhami Edwards
keniensis Evans
lloreti Gil Collado
macmahoni Evans
sergentii (Theobald)
Funestus Group (Garros *et al.*, 2005b)
jeyporiensis James
Aconitus Subgroup (Chen *et al.*, 2003)
aconitus Dönitz
filipinae Manalang
mangyanus (Banks)
pampanai Büttiker & Beales
varuna Iyengar
Culicifacies Subgroup (Garros *et al.*, 2005b)
culicifacies Giles (species A, B, C, D and E) (Kar *et al.*, 1999)
Funestus Subgroup (Garros *et al.*, 2005b)
aruni Sobti
confusus Evans & Leeson
funestus Giles
funestus-like species (Spillings *et al.*, 2009)

longipalpis (Theobald) (Type C) (Koekemoer *et al.*, 2009)
parensis Gillies
vaneedeni Gillies & Coetzee
 Minimus Subgroup (Chen *et al.*, 2003)
flavirostris (Ludlow)
leesoni Evans
longipalpis (Theobald) (Type A) (Koekemoer *et al.*, 2009)
 Fluviatilis Complex (Sarala *et al.*, 1994)
fluviatilis James (species S, T and U)
 Minimus Complex (Green *et al.*, 1990)
harrisoni Harbach & Manguin (species C)
minimus Theobald (species A)
yaeyamaensis Somboon & Harbach
 Rivulorum Subgroup (Garros *et al.*, 2005b)
brucei Service
fuscivenosus Leeson
rivulorum Leeson
rivulorum-like species (Cohuet *et al.*, 2003)
 Marshallii Group (Gillies & de Meillon, 1968)
austenii (Theobald)
berghei Vincke & Leleup
brohieri Edwards
gibbinsi Evans
hancocki Edwards
hargreavesi Evans
harperi Evans
mortiauxi Edwards
mousinhoi de Meillon & Pereira
njombiensis Peters
seydeli Edwards
 Marshallii Complex (Gillies & Coetzee, 1987)
hughi Lambert & Coetzee
kosiensis Coetzee, Segerman & Hunt
letabensis Lambert & Coetzee
marshallii (Theobald))
 Wellcomei Group (Gillies & de Meillon, 1968)
distinctus (Newstead & Carter)
erepens Gillies
theileri Edwards
ugandae Evans
ungujae White
wellcomei Theobald
 Neocellia Series (Christophers, 1924a)
ainshamsi Gad, Harbach & Harrison
broussesi Edwards
dancalicus Corradetti

hervyi Brunhes, le Goff & Geoffroy
karwari (James)
maculipalpis Giles
moghulensis Christophers
paltrinierii Shidrawi & Gillies
pattoni Christophers
pretoriensis (Theobald)
pulcherrimus Theobald
rufipes (Gough)
salbairi Maffi & Coluzzi
stephensi Liston (potentially a species complex; see Firooziyan *et al.*, 2018)
superpictus Grassi (species A and B) (Oshaghi *et al.*, 2007; Oshaghi *et al.*, 2008)
theobaldi Giles

Annularis Group (Reid, 1968)

Annularis Complex (Atrie *et al.*, 1999)
annularis van der Wulp (species A and B)
pallidus Theobald
philippinensis Ludlow
schueffneri Stanton

Nivipes Complex (Green *et al.*, 1985b; Harrison *et al.*, 1991)
nivipes (Theobald) (2 cytogenetic species in Thailand)

Jamesii Group (Rattanaarithikul *et al.*, 2006b)

jamesii Theobald
pseudojamesi Strickland & Chowdhury
splendidus Koidzumi

Maculatus Group (Rattanaarithikul & Green, 1987)

dispar Rattanaarithikul & Harbach
greeni Rattanaarithikul & Harbach
pseudowillmori (Theobald)
willmori (James)

Maculatus Subgroup (Rattanaarithikul *et al.*, 2006b)

dravidicus Christophers
Maculatus Complex (Ali *et al.*, 2019b)
maculatus Theobald
maculatus Javanese form (Ali *et al.*, 2019a)

Sawadwongporni Subgroup (Rattanaarithikul *et al.*, 2006b)

notanandai Rattanaarithikul & Green
rampae Harbach & Somboon, 2011
sawadwongporni Rattanaarithikul & Green

Neomyzomyia Series (Christophers, 1924a)

amictus Edwards
annulatus de Rook
aurirostris (Watson)
dualaensis Brunhes, le Goff & Geoffroy
hilli Woodhill & Lee
incognitus Brug

kokhani Vythilingam, Jeffery & Harbach
kolambuganensis Baisas
longirostris Brug
meraukensis Venhuis
novaguinensis Venhuis
saungi Colless
stookesi Colless
watsonii (Leicester)

Annulipes Complex (Green, 1972)
annulipes Walker (species A–Q) (Foley *et al.*, 2007b)

Lungae Complex (Belkin, 1962)
lungae Belkin & Schlosser
nataliae Belkin
solomonis Belkin, Knight & Rozeboom

Ardensis Group (Gillies & de Meillon, 1968)
ardensis (Theobald)
buxtoni Service
cinctus (Newstead & Carter)
deemingi Service
dureni Edwards
eouzani Brunhes, le Goff & Bousses
kingi Christophers
machardy Edwards
maliensis Bailly-Choumara & Adam
millecampsi Lips
multicinctus Edwards
natalensis (Hill & Haydon)
vernus Gillies & de Meillon
vincke de Meillon

Nili Complex (Gillies & de Meillon, 1968)
carnevalei Brunhes, le Goff & Geoffroy
nili (Theobald)
ovengensis Awono-Ambene, Kengne, Simard, Antonio-Nkondjio & Fontenille
somalicus Rivola & Holstein

Kochi Group (Rattanarithikul *et al.*, 2006b)
kochi Dönitz

Leucosphyrus Group (Reid, 1949)
Hackeri Subgroup (Sallum *et al.*, 2005a)
hackeri Edwards
mirans Sallum & Peyton
pujutensis Colless
recens Sallum & Peyton
sulawesi Waktoedi Koesoemawinangoen

Leucosphyrus Subgroup (Peyton, 1990; Sallum *et al.*, 2005b)
baisasi Colless

Dirus Complex (Sallum *et al.*, 2005b)

aff. takasagoensis (Takano *et al.*, 2010)
baimaii Sallum & Peyton
cracens Sallum & Peyton
dirus Peyton & Harrison
elegans (James)
nemophilous Peyton & Ramalingam
scanloni Sallum & Peyton
takasagoensis Morishita
Leucosphyrus Complex (Sallum *et al.*, 2005a)
balabacensis Baisas
introlatus Colless
latens Sallum & Peyton
leucosphyrus Dönitz
Riparis Subgroup (Peyton, 1990)
cristatus King & Baisas
macarthuri Colless
riparis King & Baisas
Mascarensis Group (Harbach, 1994a)
mascarensis de Meillon
Pauliani Group (Grjebine, 1966)
grassei Grjebine
grenieri Grjebine
milloti Grjebine & Lacan
pauliani Grjebine
radama de Meillon
Punctulatus Group (Schmidt *et al.*, 2001)
clowi Rozeboom & Knight
koliensis Owen
punctulatus Dönitz
rennellensis Taylor & Maffi
sp. near *punctulatus* (Foley *et al.*, 1995)
Farauti Complex (Schmidt *et al.*, 2003)
farauti Laveran
farauti 4 and 5 (Foley *et al.*, 1993)
farauti 8 (Bower *et al.*, 2008)
hinesorum Schmidt
irenicus Schmidt
oreios Bangs & Harbach, 2014
torresiensis Schmidt
Ranci Group (Grjebine, 1966)
griveaudi Grjebine
Ranci Subgroup (Grjebine, 1966)
ranci Grjebine
Roubaudi Subgroup (Grjebine, 1966)
lacani Grjebine
notleyi van Someren

roubaudi Grjebine
Rhodesiensis Group (Gillies & de Meillon, 1968)
cameroni de Meillon & Evans
lounibosi Gillies & Coetzee
rhodesiensis Theobald
rodhaini Leleup & Lips
ruarinus Edwards
rupicolus Lewis
Smithii Group (Gillies & de Meillon, 1968)
caroni Adam
faini Leleup
hamoni Adam
jebudensis Froud
lovettae Evans
rageaui Mattingly & Adam
smithii Theobald
vanhoofi Manson & Lebied
wilsoni Evans
Tessellatus Group (Rattanaarithikul *et al.*, 2006b)
orientalis (Swellengrebel & Swellengrebel de Graaf
tessellatus Theobald
Tessellatus Complex (Bourke *et al.*, 2021)
tessellatus Theobald (species A, B, C, D, E and F)
Paramyzomyia Series (Christophers & Barraud, 1931)
Cinereus Group (Gillies & de Meillon, 1968)
azevedoi Ribeiro
cinereus Theobald
hispaniola (Theobald)
turkhudi Liston
Listeri Group (Gillies & de Meillon, 1968)
listeri de Meillon
multicolor Cambouliu
seretsei Abdulla-Khan, Coetzee & Hunt
Pyretophorus Series (Edwards, 1932a)
christyi (Newstead & Carter)
comorensis Brunhes, le Goff & Geoffroy
daudi Coluzzi
indefinitus (Ludlow)
limosus King
litoralis King
ludlowae (Theobald)
parangensis (Ludlow)
pseudosundaicus Tyagi, Hiriyan, Tewari, Ayanar, Samuel, Arunachalam,
Paramasivan, Krishnamoorthy, Dhananjeyan, Leo & Rajendran
torakala Stoker & Waktoedi Koesoemawinangoen
vagus Dönitz

Gambiae Complex (White, 1985)
amharicus Hunt, Wilkerson & Coetzee
arabiensis Patton
bwambae White
coluzzii Coetzee & Wilkerson
gambiae Giles
melas Theobald
merus Dönitz
quadriannulatus (Theobald)
Subpictus Complex (Suguna *et al.*, 1994)
subpictus Grassi (species A, B, C and D)
Sundaicus Complex (Sukowati *et al.*, 1999)
epiroticus Linton & Harbach
sundaicus (Rodenwaldt)
sundaicus (species B, C, D and E) (Dusfour *et al.*, 2007)

Subgenus *Christya* Theobald

implexus (Theobald)
okuensis Brunhes, Le Goff & Geoffroy

Subgenus *Kerteszia* Theobald

auyantepuiensis Harbach & Navarro
bambusicolus Komp
lepidotus Zavortink
Bellator Complex (Bourke *et al.*, 2023)
bellator Dyar & Knab (*bellator* 1)
bellator 2
Boliviensis Complex (Bourke *et al.*, 2023)
(identity of *boliviensis* (Theobald) *s.s.* not determined)
boliviensis 1
boliviensis 2
boliviensis 3
Cruzii Complex (Ramirez & Dessen, 2000a)
cruzii Dyar & Knab (species A, B and C) (Ramirez & Dessen, 2000b). [More recent studies by de Carvalho-Pinto & Lourenço-de-Oliveira \(2004\) and Rona *et al.* \(2009, 2010a, 2010b, 2013\) suggest the complex consists of 4 or 5 species, but how these relate to the three chromosomal species of Ramirez & Dessen \(2000b\) is not clear. Also see Bourke *et al.* \(2023\).](#)
Homunculus Complex (Bourke *et al.*, 2023)
homunculus Komp (*homunculus* 1?)
homunculus 2
Laneanus Complex (Bourke *et al.*, 2023)
laneanus 1
laneanus Corrêa & Cerqueira (*laneanus* 2)

- Neivai Complex (Bourke *et al.*, 2023)
neivai Howard, Dyar & Knab (*neivai* 1)
neivai 2
neivai 3
neivai 4
neivai 5
neivai 6
neivai 7
neivai 8 (*neivai* nr *neivai* 4 of Ahumada *et al.*, 2016)
- Pholidotus Complex (Bourke *et al.*, 2023)
(identity of *pholidotus* Zavortink *s.s.* not determined)
pholidotus 1
pholidotus 2
pholidotus 3
pholidotus 4
- Rollai Complex (Bourke *et al.*, 2023)
(identity of *rollai* Cova García *et al.* *s.s.* not determined)
rollai 1
rollai 2
rollai 3
rollai 4
rollai 5

Subgenus *Lophodomyia* Antunes

- gilesi* (Peryassú)
gomezdelatorrei Leví-Castillo
oiketorakras Osorno-Mesa
pseudotibiamaculatus Galvão & Barretto
squamifemur Antunes
vargasi Gabaldon, Cova-García & Lopez

Subgenus *Nyssorhynchus* Blanchard

- Albimanus Section (Levi Castillo, 1949)
Albimanus Series (Faran, 1980)
albimanus Wiedemann
- Oswaldoi Series (Faran, 1980)
Oswaldoi Group (Faran, 1980)
Oswaldoi Subgroup (Faran, 1980)
anomalophyllus Komp
aquasalis Curry
evansae (Brèthes)
galvaoi Causey
ininii Senevet & Abonnenc
- Konderi Complex (Ruiz-Lopez *et al.*, 2013)

konderi Galvão & Damasceno
tadei Saraiva & Scarpassa (formerly *sp. nr. konderi* of Ruiz-Lopez *et al.*, 2013)
 Nuneztovari Complex (Mirabello & Conn, 2008; Foster *et al.*, 2013; Scarpassa *et al.*, 2016)
 dunhami Causey
 goeldii Rozeboom & Gabaldón
 jamariensis (Sant'Ana & Sallum)
 nuneztovari Gabaldón
 nuneztovari B and C
 Oswaldoi Complex (Ruiz-Lopez *et al.*, 2013)
 oswaldoi (Peryassú)
 oswaldoi A (Ruiz-Lopez *et al.*, 2013)
 oswaldoi B (Ruiz *et al.*, 2005; Ruiz *et al.*, 2010)
 rangeli Gabaldon, Cova-Garcia & Lopez
 sanctielii Senevet & Abonnenc
 trinkae Faran
 Strodei Subgroup (Faran, 1980)
 albertoi Unti
 CP Form (Sallum *et al.*, 2010)
 rondoni (Neiva & Pinto)
 striatus Sant'Ana & Sallum
 strodei Root
 Arthuri Complex (Bourke *et al.*, 2013)
 arthuri (species A)
 arthuri B
 arthuri D
 rondoniensis (Sant'Ana & Sallum, 2022) (species C)
 Benarrochi Complex (Ruiz *et al.*, 2005)
 benarrochi Gabaldon, Cova-Garcia & Lopez
 benarrochi B (Ruiz *et al.*, 2005)
 Triannulatus Group (Faran, 1980)
 halophylus Silva do Nascimento & Lourenço-de-Oliveira
 triannulatus (Neiva & Pinto)
 triannulatus (species C) (Silva-do-Nascimento & Lourenço-de-Oliveira, 2007)
 Argyratarsis Section (Levi Castillo, 1949)
 Albitarsis Series (Linthicum, 1988)
 Albitarsis Group (Linthicum, 1988)
 Albitarsis Complex (Wilkerson *et al.*, 1995)
 albitarsis Lynch Arribálzaga
 albitarsis (species F, G, H and I) (Brochero *et al.*, 2007; Ruiz-Lopez *et al.*, 2012)
 deaneorum Rosa-Freitas
 janconnae Wilkerson & Sallum
 lineage nr *janconnae* (Gutiérrez *et al.*, 2010)
 marajoara Galvão & Damasceno (lineages 1 and 2) (McKeon *et al.*, 2010)
 oryzalimnetes Wilkerson & Motoki
 Braziensis Group (Linthicum, 1988)

braziliensis (Chagas)
Argyritarsis Series (Linthicum, 1988)
Argyritarsis Group (Linthicum, 1988)
argyritarsis Robineau-Desvoidy
sawyeri Causey, Deane, Deane & Sampaio
Darlingi Group (Linthicum, 1988)
darlingi Root
Lanei Group (Linthicum, 1988)
lanei Galvão & Franco do Amaral
Pictipennis Group (Linthicum, 1988)
atacamensis González & Sallum
pictipennis (Philippi)
Myzorhynchella Section (Peyton *et al.*, 1992)
antunesi Galvão & Franco do Amaral
guarani Shannon, 1928
lutzii Cruz
nigritarsis (Chagas)
parvus (Chagas)
pristinus Nagaki & Sallum

Subgenus *Stethomyia* Theobald

acanthotorynus Komp
canorii Flock & Abonnenc
kompi Edwards
nimbus (Theobald)
thomasi Shannon

Nomina dubia

africanus Roque
allopha (Peryassú)
arnoulti Grjebine
brachypus Dönitz
costalis Loew
courdurieri Grjebine
jacobi (Hill & Haydon)
minutus Macquart
nero (Doleschall)
soalalaensis Grjebine
upemba Lips
vulgaris Hatori

References

- Ahumada, M.L., Orjuela, L.I., Pareja, P.X., Conde, M., Cabarcas, D.M., Cubillos, E.F.G., Lopez, J.A., Beier, J.C., Herrera, S. & Quiñones, M.L. 2016. Spatial distributions of *Anopheles* species in relation to malaria incidence at 70 localities in the highly endemic Northwest and South Pacific coast regions of Colombia. *Malaria Journal* 15: 407.
- Ali, R.S.M., Wahid, I., Saeung, A., Wannasan, A., Harbach, R.E. & Somboon, P. 2019a. Genetic and morphological evidence for a new species of the Maculatus Group of *Anopheles* subgenus *Cellia* (Diptera: Culicidae) from Java, Indonesia. *Parasites & Vectors* 12: 107.
- Ali, R.S.M., Wahid, I., Saingamsook, J., Saeung, A., Wannasan, A., Walton, C., Harbach, R.E. & Somboon, P. 2019b. Molecular identification of mosquitoes of the *Anopheles maculatus* group of subgenus *Cellia* (Diptera: Culicidae) in the Indonesian Archipelago. *Acta Tropica* 199: 105124.
- Antunes, P.C.A. 1937a. A new *Anopheles* and a new *Goeldia* from Colombia (Dipt. Culic.). *Bulletin of Entomological Research* 28: 69–73.
- Atrie, B., Subbarao, S.K., Pillai, M.K.K., Rao, S.R.V. & Sharma, V.P. 1999. Population cytogenetic evidence for sibling species in *Anopheles annularis* (Diptera: Culicidae). *Annals of the Entomological Society of America* 92: 243–249.
- Belkin, J.N. 1962. *The mosquitoes of the South Pacific (Diptera, Culicidae)*. Volumes 1 and 2. University of California Press, Berkeley and Los Angeles.
- Booth, D.R. & Bryan, J.H. 1986. Cytogenetic and crossbreeding evidence for additional species in the *Anopheles annulipes* Walker complex (Diptera: Culicidae). *Journal of the Australian Entomological Society* 25: 315–325.
- Bourke, B.P., Oliveira, T.P., Suesdek, L., Bergo, E.S. & Sallum, M.A.M. 2013. A multi-locus approach to barcoding in the *Anopheles strodei* subgroup (Diptera: Culicidae). *Parasites & Vectors* 6: 111.
- Bourke, B.P., Wilkerson, R.C., Ruiz-Lopez, F., Justi, S.A., Pecor, D.B., Quinones, M.L., Navarro, J.-C., Ormaza, J.A., Ormaza, J.A., Jr, González R., Flores-Mendoza, C., Castro, F., Escovar, J. & Linton, Y.-M. 2023. High levels of diversity in *Anopheles* subgenus *Kerteszia* revealed by species delimitation analyses. *Genes* 14: 344.
- Bourke, B.P., Wilkerson, R.C. & Linton, Y.-M. 2021. Molecular species delimitation reveals high diversity in the mosquito *Anopheles tessellatus* Theobald, 1901 (Diptera, Culicidae) across its range. *Acta Tropica* 215: 105799.
- Bower, J.E., Downton, M., Cooper, R.D. & Beebe, N.W. 2008. Intraspecific concerted evolution of the rDNA ITS1 in *Anopheles farauti* sensu stricto (Diptera: Culicidae) reveal recent patterns of population structure. *Journal of Molecular Evolution* 67: 397–411.
- Brochero, H.H.L., Li, C. & Wilkerson, R.C. 2007. A newly recognized species in the *Anopheles (Nyssorhynchus) albitarsis* complex (Diptera: Culicidae) from Puerto Carreño, Colombia. *American Journal of Tropical Medicine and Hygiene* 76: 1113–1117.
- Chen, B., Butlin, R.K. & Harbach, R.E. 2003. Molecular phylogenetics of the Oriental members of the Myzomyia Series of *Anopheles* subgenus *Cellia* (Diptera: Culicidae) inferred from nuclear and mitochondrial DNA sequences. *Systematic Entomology* 28: 57–69.
- Christophers, S.R. 1915. The male genitalia of *Anopheles*. *Indian Journal of Medical Research* 3: 371–394.
- Christophers, S.R. 1924a. Provisional list and reference catalogue of the Anophelini. *Indian Medical Research Memoirs* 3: 1–105.

- Christophers, S.R. & Barraud, P.J. 1931. The eggs of Indian *Anopheles*, with descriptions of the hitherto undescribed eggs of a number of species. *Records of the Malaria Survey of India* 2: 161–192, 5 pls.
- Cohuet, A., Simard, F., Toto, J.C., Kengne, P., Coetzee, M. & Fontenille, D. 2003. Species identification within the *Anopheles funestus* group of malaria vectors in Cameroon and evidence for a new species. *American Journal of Tropical Medicine and Hygiene* 69: 200–205.
- Coluzzi, M., Sacca, G. & Feliciangeli, D. 1965. Il complesso *A. claviger* nella sottoregione mediterranea. *Cahiers ORSTROM, série Entomologie médicale et Parasitologie* 1965: 97–102.
- da Costa Lima, A. 1928. Sobre algumas anophelinas encontradas no Brasil. *Suplemento das Memórias do Instituto Oswaldo Cruz* 3: 91–113.
- de Carvalho-Pinto, C.J. & Lourenço-de-Oliveira, R. 2004. Isoenzimatic [sic] analysis of four *Anopheles (Kerteszia) cruzii* (Diptera: Culicidae) populations of Brazil. *Memórias do Instituto Oswaldo Cruz* 99(5): 471–475.
- Djadid, N.D., Jazayeri, H., Gholizadeh, S., Pashaeirad, S. & Zakeri, S. 2009. First record of a new member of *Anopheles* Hyrcanus Group from Iran: molecular identification, diagnosis, phylogeny, status of kdr resistance and *Plasmodium* infection. *Journal of Medical Entomology* 46: 1084–1093.
- Dusfour, I., Michaux, J.R., Harbach, R.E. & Manguin, S. 2007. Speciation and phylogeography of the Southeast Asian *Anopheles sunaicus* complex. *Infection, Genetics and Evolution* 7: 484–493.
- Dyar, H.G. 1928. *The mosquitoes of the Americas*. Publication no. 387. Carnegie Institution of Washington, Washington, D.C.
- Edwards, F.W. 1921d. A revision of the mosquitos [sic] of the Palaearctic Region. *Bulletin of Entomological Research* 12: 263–351.
- Edwards, F.W. 1932a. *Genera Insectorum. Diptera, Fam. Culicidae*. Fascicle 194. Desmet-Verteneuil, Brussels.
- Faran, M.E. 1980. Mosquito studies (Diptera, Culicidae) XXXIV. A revision of the Albimanus Section of the subgenus *Nyssorhynchus* of *Anopheles*. *Contributions of the American Entomological Institute* 15(7): 1–215.
- Faran, M.E. & Linthicum, K.J. 1981. A handbook of the Amazonian species of *Anopheles (Nyssorhynchus)* (Diptera: Culicidae). *Mosquito Systematics* 13: 1–81.
- Firoozian, S., Djadid, N.D. & Gholizadeh, S. 2018. Speculation on the possibility for introducing *Anopheles stephensi* as a species complex: preliminary evidence based on odorant binding protein 1 intron I sequence. *Malaria Journal* 17: 366.
- Foley, D.H., Cooper, R.D. & Bryan, J.H. 1995. A new species within the *Anopheles punctulatus* complex in Western Province, Papua New Guinea. *Journal of the American Mosquito Control Association* 11: 122–127.
- Foley, D.H., Paru, R., Dagher, H. & Bryan, J.H. 1993. Allozyme analysis reveals six species within the *An. punctulatus* complex of mosquitoes in Papua New Guinea. *Medical and Veterinary Entomology* 7: 37–48.
- Foley, D.H., Wilkerson, R.C., Cooper, R.D., Volovsek, M.E. & Bryan, J.H. 2007. A molecular phylogeny of *Anopheles annulipes* (Diptera: Culicidae) sensu lato: The most species-rich anopheline complex. *Molecular Phylogenetics and Evolution* 43: 283–297.

- Foster, P.G., Bergo, E.S., Bourke, B.P., Oliveira, T.M.P., Nagaki, S.S. Sant'Ana, D.C. & Sallum, M.A.M. 2013. Phylogenetic analysis and DNA-based species confirmation in *Anopheles* (*Nyssorhynchus*). *PLoS ONE* 8: e54063.
- Gabaldon, A. 1940. Estudios sobre anofelinos. Serie I. 1. Descripción de *Anopheles* (*Nyssorhynchus*) *nuñez-tovari* [sic] n. sp. y consideraciones sobre una sub-division del grupo *Nyssorhynchus* (Diptera, Culicidae). *Publicación del División de Malariología (Caracas)* 5: 3–7.
- Gabaldon, A. & Cova-Garcia, P. 1952. Zoogeografía de los anofelinos en Venezuela IV Su posición en la región Neotrópica y observaciones sobre las especies de esta región. *Revista Venezolana Sanidad y Asistencia Social* 17: 171–209, 12 pls.
- Galvão, A.L.A. 1941b Contribuição ao conhecimento das espécies de *Myzorhynchella* (Diptera, Culicidae) [sic]. *Arquivos de Zoologia (São Paulo)* 2: 505–576, 13 pls.
- Galvão, A.L.A. 1943. Chaves para a determinação das espécies do subgênero *Nyssorhynchus* do Brasil. *Arquivos de Higiene Saúde Pública* 8(19): 141–162.
- Garros, C., Harbach, R.E. & Manguin, S. 2005b. Morphological assessment and molecular phylogenetics of the *Funestus* and *Minimus* Groups of *Anopheles* (*Cellia*). *Journal of Medical Entomology* 42: 522–536.
- Gillies, M.T. & Coetsee, M. 1987. A supplement to the Anophelinae of Africa south of the Sahara (Afrotropical Region). *Publications of the South African Institute for Medical Research* 55: 1–143.
- Gillies, M.T. & de Meillon, B. 1968. The Anophelinae of Africa south of the Sahara (Ethiopian Zoogeographical Region). *Publications of the South African Institute for Medical Research* 54: 1–343.
- Green, C.A., Cass, R.F., Munstermann, L.E. & Baimai, V. 1990. Population-genetic evidence for two species in *Anopheles minimus* in Thailand. *Medical and Veterinary Entomology* 4: 25–34.
- Green, C.A., Harrison, B.A., Klein, T.A. & Baimai, V. 1985b. Cladistic analysis of polytene chromosome rearrangements in anopheline mosquitoes, subgenus *Cellia*, series *Neocellia*. *Canadian Journal of Genetics and Cytology* 27: 123–133.
- Grjebine, A. 1966. *Faune de Madagascar. XXII. Insecies Diptères Culicidae Anophelinae*. Centre National de la Recherche Scientifique, Office de la Recherche Scientifique et Technique Outre-Mer, Paris.
- Gutiérrez, L.A., Orrego, L.M., Gómez, G.F., López, A., Luckhart, S., Conn, J.E. & Correa, M.M. 2010. A new mtDNA COI gene lineage closely related to *Anopheles janconnae* of the *Albitarsis* complex in the Caribbean region of Colombia. *Memorias do Instituto Oswaldo Cruz* 105: 1019–1025.
- Harbach, R.E. 1994a. Review of the internal classification of the genus *Anopheles* (Diptera: Culicidae): the foundation for comparative systematics and phylogenetic research. *Bulletin of Entomological Research* 84: 331–342.
- Harbach, R.E. 2004. The classification of genus *Anopheles* (Diptera: Culicidae): a working hypothesis of phylogenetic relationships. *Bulletin of Entomological Research* 95: 537–553.
- Harbach, R.E. & Kitching, I.J. 2015. The phylogeny of Anophelinae revisited: inferences about the origin and classification of *Anopheles* (Diptera: Culicidae). *Zoologica Scripta* 00(0): 000–000. doi:10.1111/zsc.12137

- Harbach, R.E., Rattanarithikul, R. & Harrison, B.A. 2005. *Baimaia*, a new subgenus for *Anopheles kyondawensis* Abraham, a unique crabhole-breeding anopheline in southeastern Asia. *Proceedings of the Entomological Society of Washington* 107: 750–761.
- Harrison, B.A. 1972. A new interpretation of affinities within the *Anopheles hyrcanus* complex of Southeast Asia. *Mosquito Systematics* 4: 73–83.
- Harrison, B. A. 1980. Medical entomology studies – XIII. The Myzomyia Series of *Anopheles* (*Cellia*) in Thailand, with emphasis on intra-interspecific variations (Diptera: Culicidae). *Contributions of the American Entomological Institute* 17(4): iv + 1-195.
- Harrison, B.A., Rattanarithikul, R., Peyton, E.L. & Mongkolpanya, K. 1991. Taxonomic changes, revised occurrence records and notes on the Culicidae of Thailand and neighboring countries. *Mosquito Systematics* (1990) 22: 196–227.
- Hunt, R.H., Coetzee, M. & Fittene, M. 1998. The *Anopheles gambiae* complex: a new species from Ethiopia. *Transactions of the Royal Society of Tropical Medicine and Hygiene* 92: 231– 235.
- International Commission on Zoological Nomenclature. 1999. *International code of zoological nomenclature*. Fourth Edition. International Trust for Zoological Nomenclature, London.
- Kar, I., Subbarao, S.K., Eapen, A., Ravendaran, J., Satyanarayana, T.S., Raghavendra, K., Nanda, N. & Sharma, V.P. 1999. Evidence for a new malaria vector species, species E, within the *Anopheles culicifacies* complex (Diptera: Culicidae). *Journal of Medical Entomology* 36: 595–600.
- Knab, F. 1913b. The species of *Anopheles* that transmit human malaria. *American Journal of Tropical Diseases and Preventive Medicine* 1: 33–43.
- Koekemoer, L.L., Misiani, E.A., Hunt, R.H., Kent, R.J., Norris, D.E. & Coetzee, M. 2009. Cryptic species within *Anopheles longipalpis* from southern Africa and phylogenetic comparison with members of the *An. funestus* group. *Bulletin of Entomological Research* 99: 41–49.
- Komp, W.H.W. 1937b. The species of the subgenus *Kerteszia* of *Anopheles* (Diptera, Culicidae). *Annals of the Entomological Society of America* 30: 492–529.
- Komp, W.H.W. 1942. The anopheline mosquitoes of the Caribbean Region. *National Institute of Health Bulletin* 179: 1–195.
- Lee, D.J., Hicks, M.M., Griffiths, M., Debenham, M.L., Bryan, J.H., Russell, R.C., Geary, M. & Marks, E.N. 1987b. *The Culicidae of the Australasian Region*. Volume 5. Nomenclature, synonymy, literature, distribution, biology and relation to disease. Genus *Anopheles*. Subgenera *Anopheles*, *Cellia*. Monograph Series, Entomology Monograph No. 2. Australian Government Publishing Service, Canberra.
- Levi Castillo, R. 1949. *Atlas de los anofelinos Sudamericanos*. Sociedad Filantrópica de Guayas, Guayaquil, Ecuador.
- Linthicum, K.J. 1988. A revision of the Argyritarsis Section of the subgenus *Nyssorhynchus* of *Anopheles* (Diptera: Culicidae). *Mosquito Systematics* 20: 98–27 1.
- Linton, Y. 2004. Systematics of the holarctic *maculipennis* complex. The 70th Annual Meeting of the American Mosquito Control Association, Savannah, Georgia, U.S.A., February 22-26, 2004.
- Mirabello, L. & Conn, J.E. 2008. Population analysis using the nuclear *white* gene detects Pliocene/Pleistocene lineage divergence within *Anopheles nuneztovari* in South America. *Medical and Veterinary Entomology* 22: 109–119.

- McKeon, S.N., Lehr, M.A., Wilkerson, R.C., Ruiz, J.F., Sallum, M.A., Povoas, M.M., Conn, J.E. & Lima, J.B.P. 2010. Lineage divergence detected in the malaria vector *Anopheles marajoara* (Diptera: Culicidae) in Amazonian Brazil. *Malaria Journal* 9: 271.
- Namgay, R., Pemo, D., Wangdi, T., Phanitchakun, T., Harbach, R.E. & Somboon, P. 2020. Molecular and morphological evidence for sibling species within *Anopheles* (*Anopheles lindesayi* Giles) (Diptera: Culicidae) in Bhutan. *Acta Tropica* 207: 105455.
- Oshaghi, M.A., Shemshad, Kh., Yaghobi-Ershadi, M.R., Pedram, M., Vatandoost, H., Abaie, M.R., Akbarzadeh, K. & Mohtarami, F. 2007. Genetic structure of the malaria vector *Anopheles superpictus* in Iran using mitochondrial cytochrome oxidase (COI and COII) and morphologic markers: A new species complex? *Acta Tropica* 101: 241–248.
- Oshaghi, M.A., Yaghobi-Ershadi, M.R., Shemshad, Kh., Pedram, M. & Amani, H. 2008. The *Anopheles superpictus* complex: introduction of a new malaria vector complex in Iran. *Bulletin de la Société de Pathologie exotique* 101: 429–434.
- Paredes-Esquivel, C., Donnelly, M.J., Harbach, R.E., Townson, H. 2009. A molecular phylogeny of mosquitoes in the *Anopheles barbirostris* subgroup reveals cryptic species: implications for identification of disease vectors. *Molecular Phylogenetics and Evolution* 50: 141–151.
- Peyton, E.L. 1990. A new classification for the Leucosphyrus Group of *Anopheles* (*Cellia*). *Mosquito Systematics* (1989) 21: 197–205.
- Peyton, E.L., Wilkerson, R.C. & Harbach, R.E. 1992. Comparative analysis of the subgenera *Kerteszia* and *Nyssorhynchus* of *Anopheles* (Diptera: Culicidae). *Mosquito Systematics* 24: 51–69.
- Ramirez, C.C. & Dessen, E.M. 2000a. Chromosomal evidence for sibling species of the malaria vector *Anopheles cruzii*. *Genome* 43: 143–151.
- Ramirez, C.C. & Dessen, E.M. 2000b. Chromosome differentiated populations of *Anopheles cruzii*: evidence for a third sibling species. *Genetica* 108: 73–80.
- Rattanarithikul, R. & Green, C.A. 1987. Formal recognition of the species of the *Anopheles maculatus* group (Diptera: Culicidae) occurring in Thailand, including the descriptions of two new species and a preliminary key to females. *Mosquito Systematics* (1986) 18: 246–278.
- Rattanarithikul, R., Harrison, B.A., Harbach, R.E., Panthusiri, P. & Coleman, R.E. 2006b. Illustrated Keys to the mosquitoes of Thailand. IV. *Anopheles*. *Southeast Asian Journal of Tropical Medicine and Public Health* 37 (suppl. 2): 1–128.
- Reid, J.A. 1949. A preliminary account of the forms of *Anopheles leucosphyrus* Dönitz (Diptera: Culicidae). *Proceedings of the Royal Entomological Society of London Series B Taxonomy* 18: 42–53.
- Reid, J.A. 1950. The *Anopheles umbrosus* group (Diptera: Culicidae). Part 1: systematics, with descriptions of two new species. *Transactions of the Royal Entomological Society of London* 101: 281–318.
- Reid, J.A. 1953. The *Anopheles hyrcanus* group in south-east Asia (Diptera: Culicidae). *Bulletin of Entomological Research* 44: 5–76.
- Reid, J.A. 1968. Anopheline mosquitoes of Malaya and Borneo. *Studies from the Institute for Medical Research Malaya* 31: 1–520.
- Reid, J.A. & Knight, K.L. 1961. Classification within the subgenus *Anopheles* (Diptera, Culicidae). *Annals of Tropical Medicine and Parasitology* 55: 474–488.

- Rona, L.D.P., Carvalho-Pinto, C.J., Gentile, C., Grisard, E.C. & Peixoto, A.A. 2009. Assessing the molecular divergence between *Anopheles (Kerteszia) cruzii* populations from Brazil using the *timeless* gene: further evidence of a species complex. *Malaria Journal* 8: 60.
- Rona, L.D.P., Carvalho-Pinto, C.J. & Peixoto, A.A. 2010a. Molecular evidence for the occurrence of a new sibling species within the *Anopheles (Kerteszia) cruzii* complex in south-east Brazil. *Malaria Journal* 9: 33.
- Rona, L.D.P., Carvalho-Pinto, C.J., Mazzoni, C.J. & Peixoto, A.A. 2010b. Estimation of divergence time between two sibling species of the *Anopheles (Kerteszia) cruzii* complex using a multilocus approach. *BMC Evolutionary Biology* 10: 91.
- Rona, L.D.P., Carvalho-Pinto, D.J. & Peixoto, A.A. 2013. Evidence for the occurrence of two sympatric sibling species within the *Anopheles (Kerteszia) cruzii* complex in southeast Brazil and the detection of asymmetric introgression between them using a multilocus analysis. *BMC Evolutionary Biology* 13: 207.
- Root, F.M. 1922a. The classification of American *Anopheles* mosquitoes. *American Journal of Hygiene* 2: 321–322.
- Root, F.M. 1923. The male genitalia of some American *Anopheles* mosquitoes. *American Journal of Hygiene* 3: 264–279.
- Ruiz, F., Quiñones, M.L., Erazo, H.F., Calle, D.A., J Alzate, J.F. & Linton, Y.-M. 2005. Molecular differentiation of *Anopheles (Nyssorhynchus) benarrochi* and *An. (N.) oswaldoi* from Southern Colombia. *Memorias do Instituto Oswaldo Cruz* 100: 155–160.
- Ruiz, F., Linton, Y.-M., Ponsonby, D.J., Conn, J.E., Herrera, M., Quiñones, M.L., Vélez, I.D., Wilkerson, R.C. 2010. Molecular comparison of topotypic specimens confirms *Anopheles (Nyssorhynchus) dunhami* Causey (Diptera: Culicidae) in the Colombian Amazon. *Memorias do Instituto Oswaldo Cruz* 105(7): 899–903.
- Ruiz-Lopez, F., Wilkerson, R.C., Conn, J.E., McKeon, S.N., Levin, D.M., Quiñones, M.L., Póvoa, M.M., Linton, Y.-M. 2012. DNA barcoding reveals both known and novel taxa in the Albitarsis Group (*Anopheles: Nyssorhynchus*) of Neotropical malaria vectors. *Parasites & Vectors* 5: 44.
- Ruiz-Lopez, F., Wilkerson, R.C., Ponsonby, D., Herrera, M., Sallum, M.A.M., Velez, I.D., Quiñones, M.L., Flores-Mendoza, C. Chadee, D.D., Alarcon, J., Alarcon-Ormasa, J. & Linton, Y.-M. 2013. Systematics of the Oswaldoi Complex (*Anopheles, Nyssorhynchus*) in South America. *Parasites & Vectors* 6: 324.
- Sallum, M.A.M., Foster, P.G., dos Santos, C.L.S., Flores, D.C., Motoki, M.T. & Bergo, E.S. 2010. Resurrection of two species from synonymy of *Anopheles (Nyssorhynchus) strodei* Root, and characterization of a distinct morphological form from the Strodei Complex (Diptera: Culicidae). *Journal of Medical Entomology* 47: 504–526.
- Sallum, M.A.M., Peyton, E.L., Harrison, B.A. & Wilkerson, R.C. 2005b. Revision of the Leucosphyrus group of *Anopheles (Cellia)* (Diptera, Culicidae). *Revista Brasileira de Entomologia* 49 (Supl. 1): 1–152.
- Sallum, M.A.M., Peyton, E.L. & Wilkerson, R.C. 2005a. Six new species of the *Anopheles leucosphyrus* group, reinterpretation of *An. elegans* and vector implications. *Medical and Veterinary Entomology* 19: 158–199.
- Sant'Ana, D.C. & Sallum, M.A.M. 2022. A new species of the Arthuri Complex of the Strodei Subgroup of *Nyssorhynchus* (Diptera: Culicidae). *Zootaxa* 5175(5): 559–569.

- Saraiva, J.F. & Scarpassa, V.M. 2021. *Anopheles (Nyssorhynchus) tadei*: A new species of the Oswaldoi-konderi Complex (Diptera, Anophelinae) and its morphological and molecular distinctions from *An. konderi* sensu stricto. *Acta Tropica* 221: 106004.
- Sarala, K.S., Nutan, N., Vasantha, K., Dua, V.K., Malhotra, M.S., Yadav, R.S. & Sharma, V.P. 1994. Cytogenetic evidence for three sibling species in *Anopheles fluviatilis* (Diptera: Culicidae). *Annals of the Entomological Society of America* 87:116–121.
- Satoto, T.B.T. 2001. Cryptic species within *Anopheles barbirostris* van der Wulp, 1884, inferred from nuclear and mitochondrial gene sequence variation. PhD Thesis. University of Liverpool, England.
- Scarpassa, V.M., Cunha-Machado, A.S. & Saraiva, J.F. 2016. Evidence of new species for malaria vector *Anopheles nuneztovari* sensu lato in the Brazilian Amazon region. *Malaria Journal* 15: 205.
- Schmidt, E.R., Foley, D.H., Bugoro, H. & Bryan, J.H. 2003. A morphological study of the *Anopheles punctulatus* group (Diptera: Culicidae) in the Solomon Islands, with a description of *Anopheles (Cellia) irenicus* Schmidt, sp.n. *Bulletin of Entomological Research* 93: 515– 526.
- Schmidt, E.R., Foley, D.H., Hartel, G.F., Williams, G.M. & Bryan, J.H. 2001. Descriptions of the *Anopheles (Cellia) farauti* complex of sibling species (Diptera: Culicidae) in Australia. *Bulletin of Entomological Research* 91: 389–410.
- Silva-do-Nascimento, T.R. & Lourenço-de-Oliveira, R. 2007. Diverse population dynamics of three *Anopheles* species belonging to the Triannulatus Complex (Diptera: Culicidae). *Memorias do Instituto Oswaldo Cruz* 102: 975–982.
- Somboon, P., Phanitchakun, T., Namgay, R., Wangdi, T., Pemo, D. & Harbach, R.E. 2020. Molecular and morphological evidence of sibling species in *Anopheles baileyi* Edwards (Diptera: Culicidae) in Bhutan and Thailand. *Acta Tropica* 209: 105549.
- Spillings, B.L., Brooke, B.D., Koekemoer, L.L, Chiphwanya, J., Coetzee, M. & Hunt, R.H. 2009. A new species concealed by *Anopheles funestus* Giles, a major malaria vector in Africa. *American Journal of Tropical Medicine and Hygiene* 81: 510–515.
- Suguna, S.G., Rathinam, K.G., Rajavel, A.R. & Dhanda, V. 1994. Morphological and chromosomal descriptions of new species in the *Anopheles subpictus* complex. *Medical and Veterinary Entomology* 9: 88–94.
- Sukowati, S., Baimai, V., Harun, S., Dasuki, Y., Andris, H. & Efriwati, M. 1999. Isozyme evidence for three sibling species in the *Anopheles sundaicus* complex from Indonesia. *Medical and Veterinary Entomology* 13: 408–414.
- Takano, K.T., Nguyen, N.T.H., Nguyen, B.T.H., Sunahara, T., Yasunami, M., Nguyen, M.D. & Takagi, M. 2010. Partial mitochondrial DNA sequences suggest the existence of a cryptic species within the Leucosphyrus group [sic] of the genus *Anopheles* (Diptera: Culicidae), forest malaria vectors, in northern Vietnam. *Parasites and Vectors* 3: 41.
- Theobald, F.V. 1907. *A monograph of the Culicidae or mosquitoes*. Volume 4. British Museum (Natural History), London.
- Vu, T.P., Nguyen, D.M., Tran, D.H. & Nguyen, N.V. 1991. *Anopheles (Anopheles) cucphuongensis*: a new species from Vietnam (Diptera: Culicidae). *Mosquito Systematics* (1990) 22: 145–148.
- White, G.B. 1985. *Anopheles bwambae* sp.n., a malaria vector in the Semliki Valley, Uganda, and its relationships with other sibling species of the *An. gambiae* complex (Diptera: Culicidae). *Systematic Entomology* 10: 501–522.

- Wilkerson, R.C., Parsons, T.J., Klein, T.A., Gaffigan, T.V., Bergo, E. & Consolim, J. 1995. Diagnosis by random amplified polymorphic DNA polymerase chain reaction for four cryptic species related to *Anopheles (Nyssorhynchus) albitarsis* (Diptera: Culicidae) from Paraguay, Argentina, and Brazil. *Journal of Medical Entomology* 32: 697–704.
- Wilkerson, R.C., Reinert, J.F. & Li, C. 2004. Ribosomal DNA ITS2 sequences differentiate six species in the *Anopheles crucians* complex (Diptera: Culicidae). *Journal of Medical Entomology* 41: 392–401.
- Zavortink, T.J. 1973. Mosquito studies (Diptera, Culicidae) XXIX. A review of the subgenus *Kerteszia* of *Anopheles*. *Contributions of the American Entomological Institute* 9(3): 1–54.