

Termites of the West Indies, the Bahamas, and Bermuda

Thomas E. Snyder¹

INTRODUCTION

Based on specimens in the collection of the U. S. National Museum, and on authoritative records in literature, the following lists have been compiled of the species of termites known to be present in Bermuda, the Bahamas, the Greater Antilles and the Lesser Antilles of the West Indies, Curaçao, and Trinidad. The first list is a systematic arrangement of termites by species; the second list is by islands, giving all the records from each locality. Identifications based on nymphs being very difficult, and for some forms impossible, the concluding keys to the species from these islands are based on the soldiers and winged adults.

TERMITES OF BERMUDA, THE BAHAMAS, AND THE WEST INDIES

Listed by Species

KALOTERMITIDAE

Kalotermes approximatus Snyder: Bermuda.

K. bequaerti Snyder: Bermuda, Cuba, St. Croix, St. Thomas.

K. cubanus Snyder: Cuba.

K. incisus Silvestri: Barbados, Mona Island, St. Croix.

K. jouteli Banks: Bahamas (Andros Island), Cuba.

K. milleri Emerson: Jamaica.

K. mona Banks: Mona Island.

K. schwarzi Banks: Cuba, Jamaica, New Providence (Nassau).

K. snyderi Light: Bermuda, Bimini—Bahamas, Cuba, Mona Island, Puerto Rico, St. Croix.

Neotermes castaneus (Burmeister): Barbados, Cuba, Dominica, Haiti, Jamaica, Montserrat, Puerto Rico, Trinidad.

Neotermes n. sp.: Jamaica.

N. holmgreni Banks: Tobago, Trinidad.

Procryptotermes corniceps (Snyder): Puerto Rico, Mona Island.

Procryptotermes n. sp.: Jamaica.

Cryptotermes brevis (Walker): Barbados, Cuba, Curacao, Dominica, Dominican Republic, Grenada, Guadeloupe, Haiti, Jamaica, Puerto Rico, St. Croix, St. Kitts, St. Lucia, St. Thomas, Tobago, Trinidad.

¹ Retired. Formerly with the Division of Forest Insect Investigations, Bureau of Entomology and Plant Quarantine, Agricultural Research Administration, USDA, Washington, D. C.

C. cavifrons Banks: Bermuda, Cuba, Haiti, New Providence (Nassau), Puerto Rico, St. Croix.

C. dudleyi Banks: Trinidad.

C. havilandi (Sjostedt): Barbados.

Glyptotermes liberatus (Snyder): Jamaica.

G. posticus (Hagen): Cuba, Jamaica, St. Thomas.

G. pubescens Snyder: Puerto Rico.

Calcaritermes nigriceps (Emerson): Trinidad.

RHINOTERMITIDAE

Heterotermes cardini (Snyder): Bahamas (Andros Island) Nassau, Cuba, Dominican Republic, Haiti.

H. convexinotatus (Snyder): Barbados, Cuba, Haiti, Jamaica, Puerto Rico, St. Croix, St. Thomas.

H. tenuis (Hagen): Bahamas, Cuba, Dominica, Guadeloupe, Haiti, Jamaica, Montserrat, Puerto Rico, Tobago, Trinidad.

Coptotermes havilandi Holmgren: Barbados (introduced), Jamaica (introduced).

C. testaceus (Linnaeus): Tobago, Trinidad.

Prorhinotermes simplex (Hagen): Cuba, Jamaica, Puerto Rico.

Rhinotermes marginalis (Linnaeus): Dominican Republic, Haiti, Martinique.

Dolichorhinotermes longilabius (Emerson): Trinidad.

TERMITIDAE

Anoplotermes banksi Emerson: Trinidad.

A. brevipilis Emerson: Trinidad.

A. meridianus Emerson: Dominican Republic, Haiti, Martinique, Puerto Rico.

A. schwarzi Banks: Cuba.

A. spp.: Haiti, Puerto Rico, Trinidad.

Speculitermes silvestrii (Emerson): Trinidad.

Microcerotermes arboreus Emerson: Haiti, Puerto Rico, Tobago, Trinidad.

M. exiguum (Hagen): Trinidad.

Crepiditermes verruculosus (Emerson): Trinidad.

Termes hispaniolae (Banks): Cuba, Haiti, Isle of Pines, Jamaica, Tobago, Trinidad.

T. panamaensis (Snyder): St. Croix, Trinidad.

Cavitermes tuberosus (Emerson): Trinidad.

Neocapritermes angusticeps (Emerson): Trinidad.

Nasutitermes costalis (Holmgren): Antigua, Barbados, Cuba, Dominica,

Dominican Republic, Grenada, Guadeloupe, St. Lucia, St. Kitts, Tobago, Trinidad, Haiti, Jamaica, Martinique, Puerto Rico, St. Croix.

N. ephratae (Holmgren): Guadeloupe, Montserrat, Tobago, Trinidad.

N. guayanae (Holmgren): Trinidad.

N. hubbardi Banks: Cuba, Jamaica.

N. intermedius (Banks): Trinidad.

N. lividus (Burmeister): Cuba, Dominican Republic, Haiti.

N. nigriceps (Haldeman): Curacao, Jamaica, Puerto Rico, St. Croix, St. Thomas, San Salvador, Trinidad, Vieques Island (near Puerto Rico).

N. rippertii (Rambur): Bahamas (Andros Island, Bimini, New Providence, Nassau; Dry Key, and Mangrove Key), Cuba, Eleuthera, Jamaica.

Parvitermes brooksi (Snyder): Biminis, Bahamas; Cuba.

P. discolor (Banks): Cuba, Culebra Island, Puerto Rico.

P. flaveolus (Banks): Haiti.

P. pallidiceps (Banks): Haiti.

P. wolcotti (Snyder): Puerto Rico.

Obtusitermes aequalis (Snyder): Cuba.

Velocitermes antillarum (Holmgren): Dominican Republic, Haiti.

V. toussainti (Banks): Dominican Republic, Haiti.

Labiotermes labralis, subsp. *boreus* (Emerson): Trinidad.

Armitermes holmgreni Snyder: Trinidad.

Angularitermes nasutissimus (Emerson): Trinidad.

Subulitermes baileyi (Emerson): Trinidad.

S. parvillus (Silvestri): Trinidad.

S. snyderi (Emerson): Trinidad.

S. spp.: Trinidad.

Listed by Localities

Bermuda

KALOTERMITIDAE.—*Kalotermes approximatus* Snyder, *K. bequaerti* Snyder, *K. snyderi* Light, *Cryptotermes cavifrons* Banks.

Bahamas, Andros

KALOTERMITIDAE.—*Kalotermes jouteli* Banks.

RHINOTERMITIDAE.—*Heterotermes cardini* (Snyder), *H. tenuis* (Hagen).

TERMITIDAE.—*Nasutitermes rippertii* (Rambur).

Bimini

KALOTERMITIDAE.—*Kalotermes snyderi* Light.

TERMITIDAE.—*Nasutitermes rippertii* (Rambur), *Parvitermes brooksi* (Snyder).

*Dry Key, Eleuthera, Mangrove Key*TERMITIDAE.—*Nasutitermes rippertii* (Rambur).*New Providence (Nassau)*KALOTERMITIDAE.—*Kalotermes schwarzi* Banks, *Cryptotermes cavifrons* Banks.RHINOTERMITIDAE.—*Heterotermes cardini* (Snyder), *H. tenuis* (Hagen).TERMITIDAE.—*Nasutitermes rippertii* (Rambur).*Antigua*TERMITIDAE.—*Nasutitermes costalis* (Holmgren).*Barbados*KALOTERMITIDAE.—*Kalotermes incisus* Silvestri, *Neotermes castaneus* (Burmeister), *Cryptotermes brevis* (Walker), *C. havilandi* (Sjostedt).RHINOTERMITIDAE.—*Heterotermes convexinotatus* (Snyder), *Coptotermes havilandi* Holmgren.TERMITIDAE.—*Nasutitermes costalis* (Holmgren).*Cuba*KALOTERMITIDAE.—*Kalotermes bequaerti* Snyder, *K. cubanus* Snyder, *K. jouteli* Banks, *K. schwarzi* Banks, *K. snyderi* Light, *Neotermes castaneus* (Burmeister), *Cryptotermes brevis* (Walker), *C. cavifrons* Banks, *Glyptotermes posticus* (Hagen).RHINOTERMITIDAE.—*Heterotermes cardini* (Snyder), *H. convexinotatus* (Snyder), *H. tenuis* (Hagen), *Prorhinotermes simplex* (Hagen).TERMITIDAE.—*Anoplotermes schwarzii* Banks, *Termes hispaniolae* Banks, *Nasutitermes costalis* (Holmgren), *N. hubbardi* Banks, *N. lividus* (Burmeister), *N. rippertii* (Rambur), *Parvitermes brooksi* (Snyder), *P. discolor* (Banks), *Obtusitermes aequalis* (Snyder).*Culebra*TERMITIDAE.—*Parvitermes discolor* (Banks).*Curacao*KALOTERMITIDAE.—*Cryptotermes brevis* (Walker).TERMITIDAE.—*Nasutitermes nigriceps* (Haldeman).*Dominica*KALOTERMITIDAE.—*Neotermes castaneus* (Burmeister), *Cryptotermes brevis* (Walker).RHINOTERMITIDAE.—*Heterotermes tenuis* (Hagen).TERMITIDAE.—*Nasutitermes costalis* (Holmgren).

Dominican Republic

KALOTERMITIDAE.—*Cryptotermes brevis* (Walker).

RHINOTERMITIDAE.—*Heterotermes cardini* (Snyder), *Rhinotermes marginalis* (Linnaeus).

TERMITIDAE.—*Anoplotermes meridianus* Emerson, *Nasutitermes costalis* (Holmgren), *N. lividus* (Burmeister), *Velocitermes antillarum* (Holmgren), *V. toussainti* (Banks).

Grenada

KALOTERMITIDAE.—*Gryptotermes brevis* (Walker).

TERMITIDAE.—*Nasutitermes costalis* (Holmgren).

Guadeloupe

KALOTERMITIDAE.—*Cryptotermes brevis* (Walker).

RHINOTERMITIDAE.—*Heterotermes tenuis* (Hagen).

TERMITIDAE.—*Nasutitermes costalis* (Holmgren), *Nasutitermes ephratae* (Holmgren).

Haiti

KALOTERMITIDAE.—*Neotermes castaneus* (Burmeister), *Cryptotermes brevis* (Walker), *C. cavifrons* Banks, *Glyptotermes posticus* (Hagen).

RHINOTERMITIDAE.—*Heterotermes cardini* (Snyder), *H. convexinotatus* (Snyder), *H. tenuis* (Hagen), *Rhinotermes marginalis* (Linnaeus).

TERMITIDAE.—*Anoplotermes meridianus* Emerson, *Anoplotermes* spp., *Microcerotermes arboreus* Emerson, *Termes hispaniolae* (Banks), *Nasutitermes costalis* (Holmgren), *N. lividus* (Burmeister), *Parvitermes flaveolus* (Banks), *P. pallidiceps* (Banks), *Velocitermes antillarum* (Holmgren), *V. toussainti* (Banks).

Isle of Pines

TERMITIDAE.—*Termes hispaniolae* (Banks).

Jamaica

KALOTERMITIDAE.—*Kalotermes milleri* Emerson, *K. schwarzi* Banks, *Neotermes castaneus* (Burmeister), *Neotermes* n. sp., *Procryptotermes* n. sp., *Cryptotermes brevis* (Walker), *Glyptotermes liberatus* (Snyder), *G. posticus* (Hagen).

RHINOTERMITIDAE.—*Heterotermes convexinotatus* (Snyder), *H. tenuis* (Hagen), *Coptotermes havilandi* Holmgren, *Prorhinotermes simplex* (Hagen).

TERMITIDAE.—*Termes hispaniolae* (Banks), *Nasutitermes costalis* (Holmgren), *N. hubbardi* Banks, *N. nigriceps* (Haldeman).

Martinique

RHINOTERMITIDAE.—*Rhinotermes marginalis* (Linnaeus).

TERMITIDAE.—*Anoplotermes meridianus* Emerson, *Nasutitermes costalis* (Holmgren).

Mona

KALOTERMITIDAE.—*Kalotermes incisus* Silvestri, *K. mona* Banks, *K. snyderi* Light, *Procryptotermes corniceps* (Snyder).

Montserrat

KALOTERMITIDAE.—*Neotermes castaneus* (Burmeister).

RHINOTERMITIDAE.—*Heterotermes tenuis* (Hagen).

TERMITIDAE.—*Nasutitermes ephratae* (Holmgren).

Puerto Rico

KALOTERMITIDAE.—*Kalotermes snyderi* Light, *Neotermes castaneus* (Burmeister), *Procryptotermes corniceps* (Snyder), *Cryptotermes brevis* (Walker), *C. cavifrons* Banks, *Glyptotermes pubescens* Snyder.

RHINOTERMITIDAE.—*Heterotermes convexinotatus* (Snyder), *H. tenuis* (Hagen), *Prorhinotermes simplex* (Hagen).

TERMITIDAE.—*Anoplotermes meridianus* Emerson, *Microcerotermes arboreus* Emerson, *Nasutitermes costalis* (Holmgren), *N. nigriceps* (Halde man), *Parvitermes discolor* (Banks), *P. wolcotti* (Snyder).

St. Kitts (St. Christopher)

KALOTERMITIDAE.—*Cryptotermes brevis* (Walker).

TERMITIDAE.—*Nasutitermes costalis* (Holmgren).

St. Lucia

KALOTERMITIDAE.—*Cryptotermes brevis* (Walker).

TERMITIDAE.—*Nasutitermes costalis* (Holmgren).

San Salvador (Watling)

TERMITIDAE.—*Nasutitermes nigriceps* (Halde man).

Tobago

KALOTERMITIDAE.—*Neotermes holmgreni* Banks, *Cryptotermes brevis* (Walker).

RHINOTERMITIDAE.—*Heterotermes tenuis* (Hagen), *Coptotermes testaceus* (Linnaeus).

TERMITIDAE.—*Microcerotermes abroreus* Emerson, *Termes hispaniolae* (Banks), *Nasutitermes costalis* (Holmgren), *N. ephratae* (Holmgren).

Trinidad

KALOTERMITIDAE.—*Neotermes castaneus* (Burmeister), *N. holmgreni* Banks, *Cryptotermes brevis* (Walker), *C. dudleyi* Banks, *Calcaritermes nigriceps* (Emerson).

RHINOTERMITIDAE.—*Heterotermes tenuis* (Hagen), *Coptotermes testaceus* (Linnaeus), *Dolichorhinotermes longilabius* (Emerson).

TERMITIDAE.—*Anoplotermes banksi* Emerson, *A. brevipilis* Emerson, *Anoplotermes* spp., *Speculitermes silvestrii* (Emerson), *Microcerotermes arboreus* Emerson, *M. exiguum* (Hagen), *Crepititermes verruculosus* Emerson, *Termes hispaniolae* (Banks), *T. panamaensis* (Snyder), *Cavitermes tuberosus* (Emerson), *Neocapritermes angusticeps* (Emerson), *Nasutitermes costalis* (Holmgren), *N. ephratae* (Holmgren), *N. guayanae* (Holmgren), *N. intermedius* Banks, *N. nigriceps* (Haldeman), *Labiotermes labralis*, subsp. *boreus* (Emerson), *Armitermes holmgreni* Snyder, *Angularitermes nasutissimus* (Emerson), *Subulitermes baileyi* (Emerson), *S. parvellus* (Silvestri), *S. snyderi* (Emerson), *Subulitermes* spp.

Virgin Islands, St. Croix

KALOTERMITIDAE.—*Kalotermes bequaerti* Snyder, *K. incisus* Silvestri, *K. snyderi* Light, *Cryptotermes brevis* (Walker), *C. cavifrons* Banks.

RHINOTERMITIDAE.—*Heterotermes convexinotatus* (Snyder).

TERMITIDAE.—*Termes panamaensis* (Snyder), *Nasutitermes costalis* (Holmgren), *N. ephratae* (Holmgren), *N. nigriceps* (Haldeman).

Virgin Islands, St. Thomas

KALOTERMITIDAE.—*Kalotermes bequaerti* Snyder, *Cryptotermes brevis* (Walker), *Glyptotermes posticus* (Hagen).

RHINOTERMITIDAE.—*Heterotermes convexinotatus* (Snyder).

TERMITIDAE.—*Nasutitermes nigriceps* (Haldeman).

Virgin Islands, Vieques

TERMITIDAE.—*Nasutitermes nigriceps* (Haldeman).

Key to the Termites of the West Indies**BASED ON SOLDIERS**

Soldier absent, body worker fusiform, post clypeus strongly arched, pronotum saddle shaped, tibiae forelegs swollen.....*Anoplotermes schwarzi* Banks

Soldier present.....	1
1. Mandibles degenerated into small functionless structures, with or without points, long projection in front of head.....	2
Mandibles not degenerated.....	18

2. Projection in front of head (labrum) long and narrow, forked at tip (minor-soldier)
 Labrum wider than long (major-soldier)
- Rhinoterme marginalis* (Linneaus)
- Labrum longer than broad (major-soldier)
- Dolichorhinoterme longilabius* (Emerson)
- Projection in front of head not forked at tip, but prolonged into a nasus..... 3
3. Head usually with conspicuous constriction in middle, base mandibles with points..... 4
- Head of soldier with slight constriction in middle, base mandibles without points..... 9
- Head of soldier without constriction in middle, base mandibles with points..... 12
4. Third segment of antenna plainly longer than second..... 5
- Third segment of antenna not longer than second..... 7
5. Head plainly constricted..... 6
6. Head and antennae dark brown... *Velocitermes antillarum* (Holmgren)
 Head yellow-brown..... *Parvitermes wolcotti* (Snyder)
 Head but slightly constricted, yellow-brown, finely haired
- Parvitermes discolor* (Banks)
7. Head plainly constricted..... 8
- Head but slightly constricted..... *Parvitermes brooksi* (Snyder)
8. Head and antennae brown, femora brownish
- Velocitermes toussainti* (Banks)
- Head, antennae and legs pale yellowish.. *Parvitermes flaveolus* (Banks)
9. Nasus short and conical..... 10
- Nasus long and slender..... 11
10. Head yellow brown, second and third segments antennae of equal length..... *Obtusitermes aequalis* (Snyder)
 Head pale yellow, third segment antenna longer than second
- Parvitermes pallidiceps* (Banks)
11. Head convex, antennae with 11 segments
- Subulitermes parvellus* (Silvestri)
- Head slightly indented in middle, antennae with 12 segments
- Sublittermes snyderi* (Emerson)
12. Head covered with hairs..... 13
- Head covered with few hairs..... 15
13. Head pale yellowish..... *Nasutitermes rippertii* (Rambur)
 Head brownish..... 14
14. Head reddish or blackish-brown.... *Nasutitermes nigriceps* (Haldeman)

15. Head with 10 or more hairs, nasus short
Nasutitermes guayanae (Holmgren)
 Head with 10 hairs, nasus long.....*Nastutitermes intermedius* Banks
 Head with 6 or less hairs, one each side near vertex.....16
16. Four distinct hairs above base of nasus, nasus much shorter than head.....17
 Hairs above base nasus very small, nasus nearly as long as pale head
Nasutitermes hubbardi Banks
17. Head reddish-brown, nasus short, smaller
 Short hairs on abdominal tergites, nasus thicker and more conical
Nasutitermes costalis (Holmgren)
 Short hairs absent.....*Nasutitermes ephratae* (Holmgren)
18. Head longer than broad, castaneous.....19
 Head short, front cavate mandibles without marginal teeth prominent.....34
19. Mandibles with prominent marginal teeth.....20
 Mandibles without prominent marginal teeth.....28
 Mandibles with minute serrations
 Length head 2.67–2.73 mm.....*Microcerotermes arboreus* Emerson
 Length head shorter.....*Microcerotermes exiguum* (Hagen)
20. Head with nasus.....*Armitermes holmgreni* Snyder
 Head without nasus but with tube projecting from frontal gland
Labiotermes labralis, subsp. *boreus* (Emerson)
 Head without nasus or tubes.....21
21. Forehead deeply lobed or steeply sloping.....22
 Forehead not deeply lobed or steeply sloping.....23
22. Front almost vertical, lobed
 Head short, gula slender at middle
Glyptotermes pubescens (Snyder)
 Head elongate, gula very slender at middle
Glyptotermes liberatus (Snyder)
 Front steeply sloping, not lobed, knob on each side front head
Procryptotermes corniceps (Snyder)
23. Hind femora slender, third segment antenna not modified
Neotermes castaneus (Burm.)
 Hind femora swollen, third segment antenna modified.....24
24. Third segment antenna scarcely, if at all, longer than second.....25
 Third segment antenna plainly longer than second.....26
25. Eyespot black, mandibles not very broad.....*Kalotermes mona* Banks
 Eyespot black, mandibles very broad.....*Kalotermes cubanus* Snyder
 Eyespot hyaline.....*Kalotermes schwarzi* Banks

26. Eyespot black, gula very broad..... *Kalotermes jouteli* Banks
 Eyespot hyaline, gula slender, anterior margin of pronotum finely
 serrate..... 27
27. Length 7-8 mm..... *Kalotermes synderi* Light
 Length 5-7 mm..... *Kalotermes bequaerti* Snyder
28. Head with large tube in front..... *Coptotermes testaceus* (Linn.)
 Head without tube..... 29
29. Mandibles long, slender, somewhat asymmetrical..... 30
 Mandibles shorter, stouter at base, more symmetrical..... 32
30. Head cavate in middle..... *Cavitermes tuberosus* (Emerson)
 Head not cavate in middle..... 31
31. Third segment antenna shorter than second
 Termes panamaensis (Snyder)
 Third segment antenna longer than second
 Termes hispaniolae (Banks)
32. Labrum rounded at tip, head broader behind, fontanelle distinct
 Prorhinotermes simplex (Hagen)
 Labrum pointed at tip, head hardly broader behind, fontanelle in-
 distinct..... 33
33. Head with many hairs..... *Heterotermes tenuis* (Hagen)
 Head with few hairs..... *Heterotermes cardini* (Snyder)
 Head with very few hairs..... *Heterotermes convexinotus* (Snyder)
34. Head blackish, anterior tuberculate..... *Cryptotermes brevis* (Walker)
 Head blackish, anterior not tuberculate, head 1.5 mm. long, prono-
 tum anteriorly deeply emarginate..... *Cryptotermes cavifrons* Banks
 Head longer 1.72 mm., pronotum anteriorly slightly emarginate
 Cryptotermes havilandi (Sjostedt)

BASED ON WINGED ADULTS

1. Fontanelle or head gland absent, forewing scale usually not much
 longer than pronotum, branches between costal and subcostal
 veins..... 2
 Fontanelle usually present, forewing scale longer than flat pronotum,
 no branches between costal veins..... 8
 Fontanelle usually present with plate, forewing scale shorter than
 saddle-shaped pronotum, no branches between costal veins..... 13
2. Median vein heavy, close to costal vein..... 3
 Median vein light, free from costal veins..... 6
 Median vein light, usually united with subcostal vein near middle of
 wing..... 7
3. Wing membrane stippled, small species..... 4
 Wing membrane clear, large species..... 5

4. Head dark castaneous brown, third segment antenna shorter than second..... *Glyptotermes pubescens* (Snyder)
 Head and thorax red-brown..... *Glyptotermes liberatus* Snyder
 Head yellow-brown, third segment antenna longer than second
 Procryptotermes corniceps (Snyder)
5. Length 21 mm., eye large..... *Kalotermes mona* Banks
 Length 18 mm., eye smaller..... *Neotermes castaneus* (Burm.)
6. Head and thorax yellow to castaneous, 10–16 mm. in length
 Short hairs on tergites, head yellowish, length 12 mm.
 Kalotermes jouteli Banks
 Long erect hairs on tergites
 Ocelli oblique, head yellowish, length 15–16 mm.
 Kalotermes schwarzi Banks
 Ocelli oblique, head castaneous, length 10 mm., pulvillus between
 tarsal claws prominent..... *Kalotermes bequaerti* Snyder
 Ocelli round, length 11–12 mm., pulvillus absent
 Kalotermes snyderi Light
7. Length 10 mm..... *Cryptotermes brevis* (Walker)
 Length 8.5 mm..... *Cryptotermes cavifrons* Banks
 Length 8 mm..... *Cryptotermes havilandi* (Sjostedt)
8. Median vein absent, wing margin not ciliate, fontanelle very distinct,
 yellowish-brown, length 9 mm..... *Prorhinotermes simplex* (Hagen) ✓
 Median vein present..... 9
9. Wing membrane punctate, wing margins ciliate, ocelli present or ab-
 sent, fontanelle indistinct or absent, in middle of head..... 10
 Wing membrane reticulate, ocelli present, fontanelle in front or mid-
 dle head..... 12
10. Wing surface with many hairs, posterior margin of meso- and meta-
 nota emarginate and not covered by wing scale
 Heterotermes tenuis (Hagen) ✓
 Wing surface with few hairs, posterior margin of meso- and meta-
 nota convex and covered by wing scale..... 11
11. Cubitus vein and branches spread over more than one-half of width
 of wing, median near cubitus..... *Heterotermes cardini* (Snyder)
 Cubitus and branches spread over less than half of width of wing,
 median intermediate..... *Heterotermes convexinotatus* (Snyder) ✓
12. Head with small nasus-like process over clypeus, fontanelle near
 front head, 3d. joint antenna longer than 1st
 Rhinotermes marginalis (Linnaeus)
 3d. joint antenna shorter than 1st
 Dolichorhinotermes longilabius (Emerson)

Head without process, fontanelle in middle head

Coptotermes testaceus (Linneaus)

13. Fore tibiae with two spines..... 14
 Fore tibiae with three spines..... 20
14. Left mandible with two nearly equal apical teeth, post-clypeus much shorter than half its width; pronotum weakly saddle-shaped, cubital vein ends much before tip of wing..... 15
 Left mandible with first tooth longer than second, post-clypeus about as long as half its width or if shorter strongly arched, fontanelle slender, elongate..... 17
 Left mandible with equal apical teeth, post-clypeus as long as half its width or if shorter, arched..... 19
15. Fontanelle white, conspicuous, triangular, large eyes and ocelli, ocelli close to eyes, antennae 17-segmented, first branches cubitus heavier than others *Labiotermes labralis*, subsp. *boreus* (Emerson)
 Fontanelle small, round, inconspicuous, eyes and ocelli medium sized, ocelli more distant from eyes, antennae 15-segmented; first branches cubitus heavier than others *Armitermes holmgreni* Snyder
 Fontanelle elongate, triangular, antennae 15-segmented,
 Wings and thorax blackish, eyes small not projecting, ocelli more than diameter from eye..... *Nasutitermes costalis* (Holmgren)
 Wings and thorax more yellowish
 Eyes medium-sized, medium-close to margin head, ocelli close to eyes
 Pronotum rounded on sides; much narrowed behind
 Nasutitermes ephratae (Holmgren)
 Pronotum not so much narrowed behind, ocelli larger, nearer to eyes *Nasutitermes lividus* (Burm.)
 Eyes very large, projecting, close to margin head, ocelli large, close to eyes, fontanelle elongate, slit-shaped
 Pronotum obliquely narrowed on sides..... 16
16. Pronotum somewhat emarginate posteriorly
 Length 17-18 mm..... *Nasutitermes nigriceps* (Hald.)
 Length 16-17 mm..... *Nasutitermes rippertii* (Rbr.)
 Length 13-15 mm..... *Nasutitermes intermedius* Banks
 Pronotum markedly marginate posteriorly, fontanelle not so elongate, antennae 16-segmented *Nasutitermes guayanae* (Holmg.)
17. Third segment antenna not longer than second, mandibles short and broad..... 18
 Third segment antenna very short, mandibles long, fontanelle a raised spot, meso- and meta-nota notched, head densely hairy, 2 mm. broad..... *Anoplotermes schwarzi* Banks

Head less densely hairy, less broad

Anoplotermes meridianus Emerson

18. Eye large, prominent, second segment antenna longer than third, antenna with 14 segments *Subulitermes snyderi* (Emerson)
 Eye fairly large, not prominent, second segment antenna equal to third, antenna with 16 segments *Subulitermes parvellus* (Silvestri)
19. Third segment antenna plainly longer than second, mandibles short and broad, eye small, projecting, head arched behind
 Antennae with 12–13 segments, head brownish..... *Parvitermes* spp.
 Antennae with 16 segments, head darker
Velocitermes antillarum (Holmgren)
20. Mandibles with very large first tooth, post-clypeus large, arched, about as long as half its breadth, fontanelle, eyes and ocelli small, pronotum flat, cubital vein ends near tip of wing..... 21
 Mandibles with subequal apical teeth, head oval, parallel sided; pronotum saddle-shaped, eyes and ocelli small, fontanelle indistinct.... 23
21. Fontanelle round..... *Cavitermes tuberosus* (Emerson)
 Fontanelle slit-shaped..... 22
22. Length 8 mm., wing scale as long as pronotum

Termes hispaniolae (Banks)

Length shorter, wing scale shorter than pronotum

Termes panamaensis (Synder)

23. Length 9 mm.,..... *Microcerotermes arboreus* Emerson
 Length shorter..... *Microcerotermes exiguum* (Hagen)

SUMMARY

Many of the termites of the West Indies are endemic, and so far as known, have a very limited distribution, often recorded from only a few islands. *Kalotermes mona* Banks is endemic to Mona Island and is found nowhere else. By contrast, many of the termites occurring in Cuba are also found in the United States, those of Jamaica in Panamá and Central America, and those of Trinidad in South America. The truly tropicosmopolitan *Cryptotermes brevis* (Walker) and *Nasutitermes costalis* (Holmgren) readily become established in new localities, islands or countries in which the environmental conditions are at all suitable.

The comparatively large island of Trinidad, close to the mainland of South America and mostly with a continental fauna, has the largest number of species of termites of any of the West Indies: 31. The island of Curaçao, also near the coast of South America, but small and arid has but 2, and none is recorded from Aruba, Margarita or the other smaller islands off the north coast of Venezuela. The comparatively small island of Tobago, northeast from Trinidad, has 8 species of termites recorded, and Barbados

7, but none is listed from St. Vincent, and most of the other Lesser Antilles have at most but 3 or 4. None is reported from Nevis, Saba, or St. John, but St. Croix of the U. S. Virgin Islands has 10, St. Thomas 5, and Culebra and Vieques 1 each. Fifteen species of termites are recorded from Puerto Rico, and 4 from Mona. In the large island of Hispaniola, only 8 species of termites are recorded from the eastern portion: the Dominican Republic, while 18 are known from Haiti. Sixteen species of termites are known in Jamaica, and 9 from the widely dispersed islands of the Bahamas. The large island of Cuba, closest of any to continental North America, has 22; the comparatively minute, and most distant Bermuda has 4.

All recorded species may be identified by means of keys based on the characters of the soldiers, or of the winged adults.

RESUMEN

Muchos de los comejenes de las Antillas son endémicos. Hasta donde se sabe, tienen una distribución muy limitada por lo que sólo existen récords de su presencia en muy pocas islas. A modo de contraste, muchos de los comejenes de Cuba también se pueden encontrar en los Estados Unidos; los de Jamaica en Panamá y los de Trinidad en Sur América. Los verdaderos cosmopolitas del Trópico, el *Cryptotermes brevis* (Walker) y el *Nasutitermes costalis* (Holmgren) se establecen fácilmente en nuevas localidades, islas o países donde las condiciones del medio ambiente les son favorables.

La comparativamente extensa isla de Trinidad, cerca del continente de Sur América cuya fauna es casi la misma que la continental, tiene el mayor número de comejenes entre todas las Antillas, el cual asciende a 31. La isla de Curazao, también cerca de la costa suramericana, y con un área pequeña y árida sólo tiene 2 especies. Aruba no tiene, tampoco Margarita ni las otras islas más pequeñas cerca de la costa norte de Venezuela. La relativamente pequeña isla de Tobago, al noroeste de Trinidad tiene 8 especies de comején, Barbada tiene 7, pero según la lista St. Vincent no cuenta con especie alguna. La mayoría de las Antillas Menores sólo tiene 3 ó 4. Nevis, Saba y St. John no tienen, pero St. Croix en las Islas Vírgenes Americanas informa tener 10 y St. Thomas 5. Culebras y Vieques informan 1 especie cada una.

Hay en récord 15 especies de comején en Puerto Rico. La Mona tiene 4. La Española, isla de gran extensión territorial, tiene 8 especies en su región oriental ocupada por la República Dominicana, mientras que en Haití hay 18. Los récords señalan que en Jamaica hay 16 especies de comején y 9 especies están dispersas entre las islas Bahamas. La gran isla de Cuba, la más cercana al continente de Norte America tiene 22 especies, la comparativamente diminuta Bermuda tiene 4.

Todos las especies en récord se pueden identificar por medio de claves, las cuales se basan en los caracteres de los soldados, o en los adultos alados.