

A CHECKLIST OF THE TERMITES FROM VENEZUELA
(ISOPTERA: KALOTERMITIDAE,
RHINOTERMITIDAE, TERMITIDAE)

SOLANGE ISSA

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Termites are a diverse and important group of insects in the New World, and the Neotropical Region has the second highest species diversity worldwide (Constantino 1998). Constantino (1998) reports about 543 species from Mexico and Florida (USA) to Argentina. However, little has been recorded about the Venezuelan termite species since the list of Snyder (1959). The list below is an update of Snyder's 1959 work, including some species added after Snyder (1959) by Araujo (1977) and Constantino (1998). Some species, such as *Comatermes perfectus* were recorded for the country but

without any location. Recent collections throughout the country and revisions have produced new records for Venezuelan termites and expanded geographic distribution for the known species reported. All new records and expanded geographic distributions are derived from the collection at Simon Bolivar University Museum, and herein referenced as "Issa." The list is presented by family, subfamily, species and the geographical distribution (locality and State) followed by the authority references responsible for each entry. This list is preliminary to a more comprehensive work on the termites of Venezuela, their geographical distribution, and biology.

KALOTERMITIDAE

- Calcaritermes temnocephalus* (Silvestri): Las Trincheras, Carabobo (Silvestri 1901).
Calcaritermes? n.sp.: Las Melenas, Península de Paria, Sucre (Scheffrahn & Krecek, pers. comm.).
Comatermes perfectus (Hagen): No locality given (Araujo 1977).
Cryptotermes brevis (Walker): Caracas, Distrito Federal; Margarita Island, Nueva Esparta (Snyder 1959).
Glyptotermes pellucidus (Emerson): No locality given (Snyder 1959).
Incisitermes (Kalotermes) incisus (Silvestri): Caracas, Distrito Federal (Snyder 1959); St. Jean, Guarico (Silvestri 1901); La Blanquilla Island (Scheffrahn & Krecek, pers. comm.).
Neotermes araguaensis Snyder: Rancho Grande, Maracay and Choroni, Aragua; El Pilar, Mt. Auyantepui, Bolívar (Snyder 1959).
N. castaneus (Burmeister): No locality given (Araujo 1977).
Neotermes sp.: La Blanquilla island (Issa).
Pronotermes (Glyptotermes) latifrons (Silvestri): Las Trincheras, Carabobo (Silvestri 1901).

RHINOTERMITIDAE

Coptotermitinae

- Coptotermes testaceus* (L.): Suromoni, Amazonas (Scheffrahn & Krecek, pers. comm.); El Limón, Aragua; Puerto Cabello, Carabobo (Snyder 1959); Uverito and El Merey, Monagas (Issa).
Coptotermes sp.: Canaima, Bolívar (Issa).

Heterotermitinae

- Heterotermes convexinotatus* (Snyder): El Limón, Aragua; Caracas, Distrito Federal; Margarita Island, Nueva Esparta (Snyder 1959).
H. crinitus (Emerson): El Limón, Aragua; Central Tacarigua, Miranda (Snyder 1959).
Heterotermes sp.: Chaguaramas, Monagas (Issa).

Rhinotermitinae

- Dolichorhinotermes longilabius* (Emerson): Raudal El Danto, Cua River, Suromoni, Amazonas (Scheffrahn & Krecek, pers. comm.).
Rhinotermes hispidus Emerson. Suromoni, Amazonas (Scheffrahn & Krecek, pers. comm.).

TERMITIDAE

Apicotermittinae

- Anoplotermes franciscoi* Snyder: El Limón, Aragua; El Pilar, Bolívar (Snyder 1959).

- A. meridianus* Emerson: El Limón and Rancho Grande, Aragua (Snyder 1959).
A. subterraneus Emerson: El Limón, Aragua; Uruyen, Gran Sabana, Bolívar (Snyder 1959).
A. tenebrosus (Kollar): El Limón, Aragua (Snyder 1959).

Termitinae

- Amitermes foreli* Wasmann: Coro, Falcón (Scheffrahn & Krecek, pers. comm.), Maracaibo, Zulia (Snyder 1959).
Cavitermes tuberosus (Emerson): Suromoni, Amazonas (Issa).
Microcerotermes arboreus Emerson: Cuyagua, Aragua (Issa); El Valle, Distrito Federal (Snyder 1959).
Microcerotermes near *arboreus* Emerson. Calabozo, Guarico (Scheffrahn & Krecek, pers. comm.).
M. exiguus (Hagen): El Limón, Aragua; El Valle, Distrito Federal (Snyder 1959); Sartenejas, Miranda (Issa).
Microcerotermes near *exiguus* (Hagen): Calabozo, Guarico (Scheffrahn & Krecek, pers. comm.).
Neocapritermes brasiliensis (Emerson): El Porvenir, Suromoni, Amazonas (Scheffrahn & Krecek, pers. comm.).
Neocapritermes angusticeps (Emerson): Las Melenas, Península de Paria, Sucre (Scheffrahn & Krecek, pers. comm.).
Spinitermes trispinosus (Bates): Hato El Frio, Apure (Scheffrahn & Krecek, pers. comm.).
Termes hispaniolae (Banks): Calabozo, Guarico (Issa).
Termes near *fatalis* (Harris): Calabozo, Guarico; Uverito, Monagas (Scheffrahn & Krecek, pers. comm.).
Termes sp.: Canaima, Bolívar (Issa).

Nasutitermitinae

- Araujotermes* sp.: Santa Rosa Castle, Margarita Island, Nueva Esparta (Scheffrahn & Krecek, pers. comm.).
Armitermes holmgreni Snyder: Suromoni, Amazonas (Scheffrahn & Krecek, pers. comm.).
Constrictotermes cavifrons (Holmgren): No locality given (Snyder 1959); Suromoni, Amazonas (Scheffrahn & Krecek, pers. comm.).
Cornitermes pugnax Emerson: Suromoni, Amazonas (Scheffrahn & Krecek, pers. comm.).
Embiratermes (Armitermes) neotenicus (Holmgren): Guayaraca, Aunyantepui, Bolívar (Snyder 1959).
Embiratermes benjamini (Snyder): Rio Negro, Amazonas (Issa).
Labiotermes labralis (Holmgren): Suromoni, Amazonas (Scheffrahn & Krecek, pers. comm.); Moitaco, Gran Sabana, Bolívar (Emerson & Banks 1965).
Nasutitermes near *acajuilae* (Holmgren): Caracas, Distrito Federal; Calabozo, Guarico (Scheffrahn & Krecek, pers. comm.).
Nasutitermes (Velocitermes) bolivari (Snyder): Suromoni, Amazonas (Issa); Mt. Auyantepuy, Guayaraca, Bolívar (Snyder 1959).
N. corniger (Motschulsky): Tucacas, Falcón (Issa); Higuerote and Tacarigua, Miranda (Issa); Aroa, Yaracuy (Issa); Maracaibo, Zulia (Snyder 1959).
N. costalis (Holmgren): Raudal El Danto (Cauo River), Amazonas (Scheffrahn & Krecek, pers. comm.).
N. ephratae (Holmgren): Auyantepui, Bolívar (Snyder 1959); Las Trincheras, Carabobo (Snyder 1959); Tucacas, Falcón (Issa); Higuerote y Tacarigua, Miranda (Issa); Aroa, Yaracuy (Issa).
N. guayanae (Holmgren): Uruyen, Bolívar (Snyder 1959); Valencia, Carabobo (Snyder 1959); Calabozo, Guarico (Issa).

- N. meinerti* (Wasmann): Moitaco, Hoya del Rio Negro, Bolívar (Snyder 1959); Las Trincheras, Carabobo (Silvestri 1901); Kunana, Perijá, Zulia (Snyder 1959).
- N. nigriceps* (Haldeman): Cauo River, (Scheffrahn & Kreck, pers. comm.); Calabozo, Guarico (Issa); Margarita Island, Nueva Esparta (Scheffrahn & Kreck, pers. comm.); Acarigua, Portuguesa (Snyder 1959).
- N. surinamensis* (Holmgren): No locality given (Snyder 1959).
- Nasutitermes* spp.: Villa de Cura, Aragua; Hato El Frio, Apure; Coro, Falcón; Rio Chico, Miranda; La Bananera, Yaracuy (Issa).
- Obtusitermes* n.sp.: Canaima, Bolívar (Issa); Uverito, Monagas (Scheffrahn & Kreck, pers. comm.).
- Syntermes aculeosus* Emerson: Maraca, Movaca, Puerto Ayacucho and San Carlos de Rio Negro, Amazonas (Constantino 1995).
- S. grandis* (Rambur): Akuriman and Santa Elena de Guairen, Bolívar (Snyder 1959, Constantino 1995).
- S. molestus* (Burmeister): Akuriman, Canaima, Ciudad Bolívar; Santa Blanca de Uaren, Uruyen, Bolívar (Snyder 1959, Issa).
- S. parallelus* Silvestri: El Rincón, Sucre (Constantino 1995).
- S. spinosus* (Latreille). Sarare, Lara (Constantino 1995).
- Velocitermes* near *beibei* (Emerson): Uverito, Monagas; Calabozo, Guarico (Scheffrahn & Kreck, pers. comm.).
- Velocitermes* sp.: Suromoni, Amazonas (Scheffrahn & Kreck, pers. comm.).

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SUMMARY

Species and geographical locations are provided for termites recorded from Venezuela. Fifty eight species from 3 families are included from the continental area and islands of Venezuela. There are 30 new records for Venezuela.

REFERENCES CITED

- ARAUJO, R. 1977. Catálogo dos Isoptera do Novo Mundo. Rio de Janeiro. Academia Brasileira de Ciencias. 92 pp.
- CONSTANTINO, R. 1998. Catalog of living termites of the New World (Insecta: Isoptera). Arq. Zoo. (Sao Paulo) 35: 135-231.
- CONSTANTINO, R. 1995. Revision of the Neotropical termite genus *Syntermes* Holmgren (Isoptera: Termitidae). Bull. Sci. Univ. Kansas 55: 455-518.
- EMERSON, A. 1925. The termites of Kartabo, Bartica District, British Guiana. Zoologica. 6: 291-459.
- EMERSON, A. 1945. The neotropical genus *Syntermes* (Isoptera: Termitidae). Bull. American Mus. Nat. Hist. 8: 427-472.
- EMERSON, A., AND F. BANKS. 1965. The neotropical genus *Labiotermites* (Holmgren): its phylogeny, distribution and ecology (Isoptera, Termitidae, Nasutitermitinae). American Museum Novitates 2570: 1-31.
- FONTES, L. 1985. New genera and species of Nasutitermitinae from the Neotropical region (Isoptera: Termitidae). Revista Brasileira de Entomologia 29: 135-138.
- SILVESTRI, F. 1901. Nota preliminari sui termitidi sud-americani. Bolletino dei Musei di Zoologia e Anatomia Comparata della Universiti di Torino. XVI: 1-8.
- SNYDER, T. 1949. Catalog of the termites (Isoptera) of the world. Smithsonian Misc. Coll. 112: 1-490.
- SNYDER, T. 1959. New termites from Venezuela, with keys and a list of described Venezuelan species. American Midland Naturalist 61: 313-321.