

**A taxonomic revision of the Neotropical termite genera
Labiotermes Holmgren and *Paracornitermes* Emerson
(Isoptera: Termitidae: Nasutitermitinae)**

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Abstract

The taxonomy of the South American termite genus *Labiotermes* Holmgren (*sensu novo*) is revised, including identification keys to soldiers and workers, and distribution maps for all 10 species. *Paracornitermes* Emerson is treated as a new synonym of *Labiotermes*. Two new species are described: *L. guasu*, from the Amazon rain forest and *L. oreadicus*, from the Cerrado of central Brazil. *Paracornitermes caapora* Bandeira & Canello and *P. hirsutus* Araujo are placed under the synonymy of *L. orthocephalus*. The imagos of *L. emersoni* and *L. orthocephalus* are described for the first time. The workers of all species are described and illustrated, including the enteric valve armature and the mixed segment. The soldiers of the species previously included in *Paracornitermes* are redescribed.

Key words: Isoptera, Termitidae, *Labiotermes*, *Paracornitermes*, revision, new species, new synonymy

Introduction

Labiotermes and *Paracornitermes* are large soil-feeding termites endemic to South America. Most species are subterranean, live in savannas and forests and are relatively difficult to find and collect. The only exception is *Labiotermes labralis*, which builds a conspicuous arboreal nest and can reach high densities in some parts of the Amazon rain forest.

The first species of this group were described by Silvestri (1901; 1903) and placed in the genus *Cornitermes* Wasmann: *C. laticephalus*, *C. longilabius* and *C. orthocephalus*, all from the Cerrado of Mato Grosso, Brazil. Holmgren (1906) described *Cornitermes labralis* from the Amazon forest of Peru. Later, Holmgren (1912) placed these four species in his new subgenus *Labiotermes*. Emerson (in Snyder 1949) transferred *C. laticephalus* and *C. orthocephalus* from *Labiotermes* to the new genus *Paracornitermes*. Araujo (1954) redescribed the genus *Paracornitermes* and described two new species from Brazil, *P. emersoni* and *P. hirsutus*. Emerson & Banks (1965) revised the taxonomy of *Labiotermes*, describing two additional species: *L. brevilabius*, from Brazil, and *L. pelliceus*, from Guyana.

Mathews (1977), in a faunistic study on the termites of Mato Grosso, Brazil, redescribed the genera *Labiotermes* and *Paracornitermes* and described a new species, *L. leptothrix*. He also noted the strong similarities between these genera and argued that they should be merged into a single genus. They form a very distinct and homogeneous group of species, with similar morphology and habits.

In this paper we revise the taxonomy of *Labiotermes* and *Paracornitermes*, including the description of two new species, one from the Cerrado of central Brazil and the other from the Amazon rain forest. *Paracornitermes* is treated as a synonym of *Labiotermes*. We describe the workers of all species and the previously unknown imagos of *L. emersoni* and