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A NEW SPECIES OF *AMITERMES* SILVESTRI FROM AMAPÁ STATE, BRAZIL (ISOPTERA, TERMITIDAE, TERMITINAE)

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RESUMO – O soldado e o operário de *Amitermes aporema*, *sp.n.*, são descritos a partir de material coletado no cerrado do leste do Estado do Amapá. São apresentados desenhos da cabeça do soldado e das mandíbulas do operário.

PALAVRAS-CHAVE: *Amitermes*; Isoptera; Termitinae; Cupins; Taxonomia.

ABSTRACT – The soldier and worker castes of *Amitermes aporema*, *sp.n.*, are described from material collected in the cerrado vegetation of eastern Amapá State, Brazil. Drawings of the soldier head and worker mandibles are presented.

KEY WORDS: *Amitermes*; Isoptera; Termitinae; Termites; Taxonomy.

The genus *Amitermes* is world-wide in distribution, with nearly 100 known species, most of them living exclusively in savannas, deserts and other arid or semi-arid open environments. An updated world list of species of this genus was presented by Scheffrahn & Su (1987). The American species of *Amitermes* were studied by Light, who attempted to define "groups" among them. These groups, however, may be artificial and more detailed studies are still necessary in order to define phylogenetic relations.

Six species are known from the Neotropical Region, and two, *A. excellens* and *A. beaumonti*, live in forest habitats. A new species collected in the cerrado vegetation of the eastern Amapá State, Brazil, is described in this paper.

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METHODS

Measurements were taken with an ocular micrometer, according to the suggestions of Roonwal (1969). The correspondence with Roonwal's measurement numbers is as follows: (1) length of head to side base of mandibles = no. 5; (2) width of head = no. 17; (3) height of head = no. 21; (4) width of pronotum = no. 68; (5) length of left mandible = no. 37; (6) length of hind tibia = no. 85. Terms used for chaetotaxy are comparative. Bristles are long and hard, with well-marked bases. Hairs are shorter and more slender than bristles. Colors are described using the scheme proposed by Sands (1965).

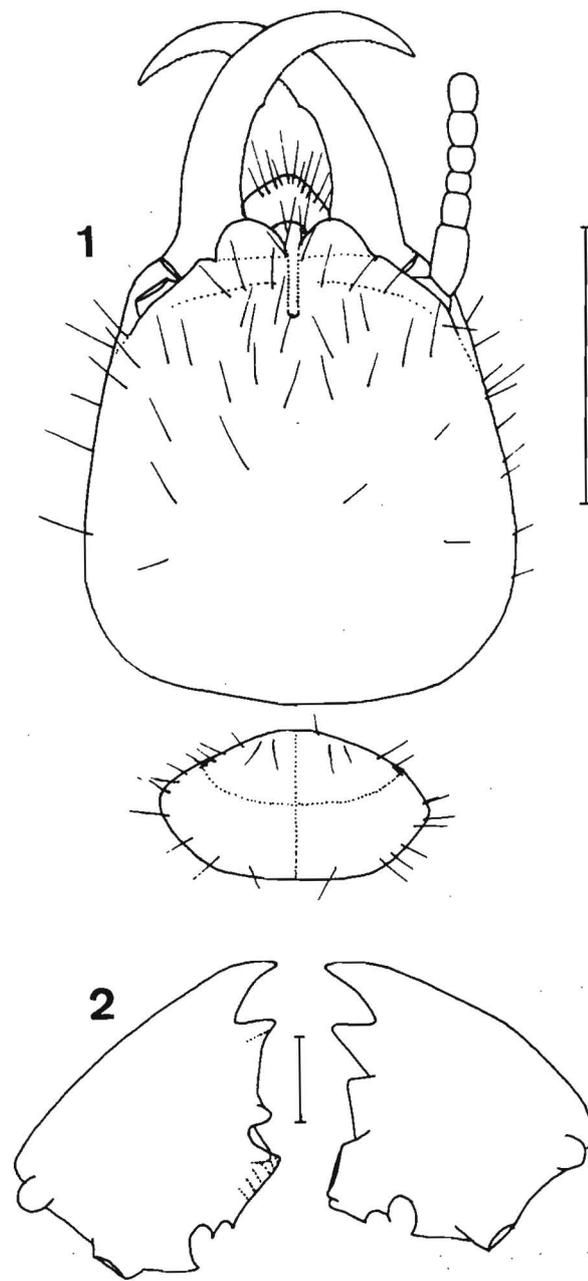
Amitermes aporema, sp.n.

Type Material - BRAZIL. Amapá State. Aporema, lots MPEG 3229 (holotype soldier, paratypes soldiers and workers), MPEG 3230 (paratypes soldiers and workers), and MPEG 3232 (paratypes soldiers and workers), 26.X.1989, R. Constantino, col., in the entomological collection of the Museu Paraense Emílio Goeldi. Paratypes deposited in the collection of the Museu de Zoologia, Universidade de São Paulo.

Imago - Unknown.

Soldier (Figure 1) - Head short and wide, with sides straight converging towards front. Top of head strongly convex in profile. Labrum short. Postclypeus bilobed. Mandibles strongly curved inwards, with one very reduced marginal tooth in the middle. Cutting edge between apical tooth and marginal tooth finely serrated. Antennae with 13 segments, 1st longer than 2nd, 2nd, 4th and 5th about the same length, 3rd the shortest. Postmentum strongly inflated and convex in profile. Anterior and posterior margins of pronotum rounded. Head capsule with many long bristles on top and sides, more numerous on anterior part. Labrum with approximately 10 bristles. Pronotum with long bristles on margins. Meso and metanotum with long bristles on posterior margin. Legs with scattered hairs and short bristles. Tibia with a few long bristles on outer margin. Middle tibia with a spine on outer margin, a little thicker than a long bristle. Tibial spurs 3:3:2, but 3rd spur of middle tibia small. Tergites and sternites with numerous hairs on surface and a row of long bristles on posterior margin. Head and pronotum yellow. Mandibles yellow brown. Legs yellowish white. Abdomen whitish, transparent.

Measurements (in millimeters) of 6 soldiers from the 3 samples: lateral length of head without mandibles: 0.83-0.89; height of head excluding postmentum: 0.49-0.53; width of head: 0.71-0.76; width of pronotum: 0.47-0.50; length of left mandible: 0.49-0.53; length of hind tibia: 0.58-0.61.



Amitermes aporema, sp.n. Figure 1. Soldier head, dorsal view; Figure 2. Worker mandibles, dorsal.

Worker - Head capsule rounded. Postclypeus moderately inflated. Labrum short. Mandibles as in Figure 2. Antennae with 13 segments, 1st longer than 2nd, 2nd longer than 4th, 4th equal 5th, 3rd very short. Head with many hairs and short bristles. Labrum with many short bristles. Chaetotaxy of thorax, abdomen and legs similar to that of soldier.

Comparisons - The soldier of *A. aporema*, sp.n., is easily distinguished from the other known Neotropical and Nearctic species by the very small size and the very reduced marginal teeth of soldier mandibles. All the other known species of these regions have a well-developed marginal tooth on each mandible.

Biology - The three samples were collected from cattle dung pads in an open cerrado used as pasture. No termite construction was found in or under the pads, and the nests were certainly subterranean.

Distribution - Known only from the type locality, and probably restricted to the cerrado vegetation. It is possible that *A. aporema* may be endemic to Amapá State, given the isolation of the cerrado vegetation of this region.

DISCUSSION

The phylogenetic relations of this new species are not clear, but it seems to be in a separate group among the Neotropical and Nearctic species, characterized by the very reduced marginal teeth on the soldier mandibles.

The presence of spines on the outer margin of the tibiae is considered a primitive character, but descriptions of other American species of this genus do not mention anything about tibial spurs and spines. I have examined *A. amifer*, *A. excellens* and an unidentified species from Ceará State, and all of these have tibial spurs 3:2:2 and no spine on the outer margin of the tibiae. The absence of alates makes difficult the definition of other relationships.

Mathews (1977:113, Fig. 47) presents a drawing of a soldier of an unknown species of *Amitermes* which seems to be very similar to *A. aporema* in size and in the shape of mandibles.

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