Papéis Avulsos de Zoologia

MUSEU DE ZOOLOGIA DA UNIVERSIDADE DE SÃO PAULO

ISSN 0031-1049

PAPÉIS AVULSOS ZOOL., S. PAULO, 36(21):251-255 20. II. 1987

OBSERVATION ON *CYRANOTERMES* ARAUJO, WITH A DESCRIPTION OF *C. CAETE*, NEW SPECIES. (ISOPTERA, TERMITIDAE, NASUTITERMITINAE)

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ABSTRACT

Cyranotermes caete, *sp.n. was collected in rain forest habitat in Serra dos Carajás, Brazil. Drawings are presented of the soldier's head and of the worker's mandibles, as well as data on* C. timuassu *Araujo, with drawings of the nest.*

INTRODUCTION

The genus *Cyranotermes* was described by Araujo (1970) with only one species, *C. timuassu*. According to Araujo "the type colony settled in wall of hard, dirt termitarium, with a distinct endoecie... apparently built by *Procornitermes araujoi*..." I have collected *P. araujoi* in a non-distinct endoecie nest and, according to Egler (1985), *P. araujoi* does not build nests with differenciated centers.

After Araujo's paper many other samples of *C. timuassu* have been collected from the state of Minas Gerais and one from Chapada dos Guimarães, Mato Grosso. These samples were found along with species of *Paracornitermes, Cornitermes,Labiotermes, Rhynchotermes, Syntermes, Armitermes, Diversitermes, Velocitermes, Subulitermes, Nasutitermes, Heterotermes, Orthognathotermes, Termes, Cavitermes, Anoplotermes, Ruptitermes and Serritermes.*

There are two samples in the collection of the Museu de Zoologia da Universidade de São Paulo (MZUSP), n.º 5092 and n.º 6081, with notes on the peculiar nest: "unknown construction for neotropical termites". One of these nests is deposited in the MZUSP without a catalog number. Drawings of this nest (believed to have been made by R. L. Araujo) are presented in fig. 1 (A, B, C, D).

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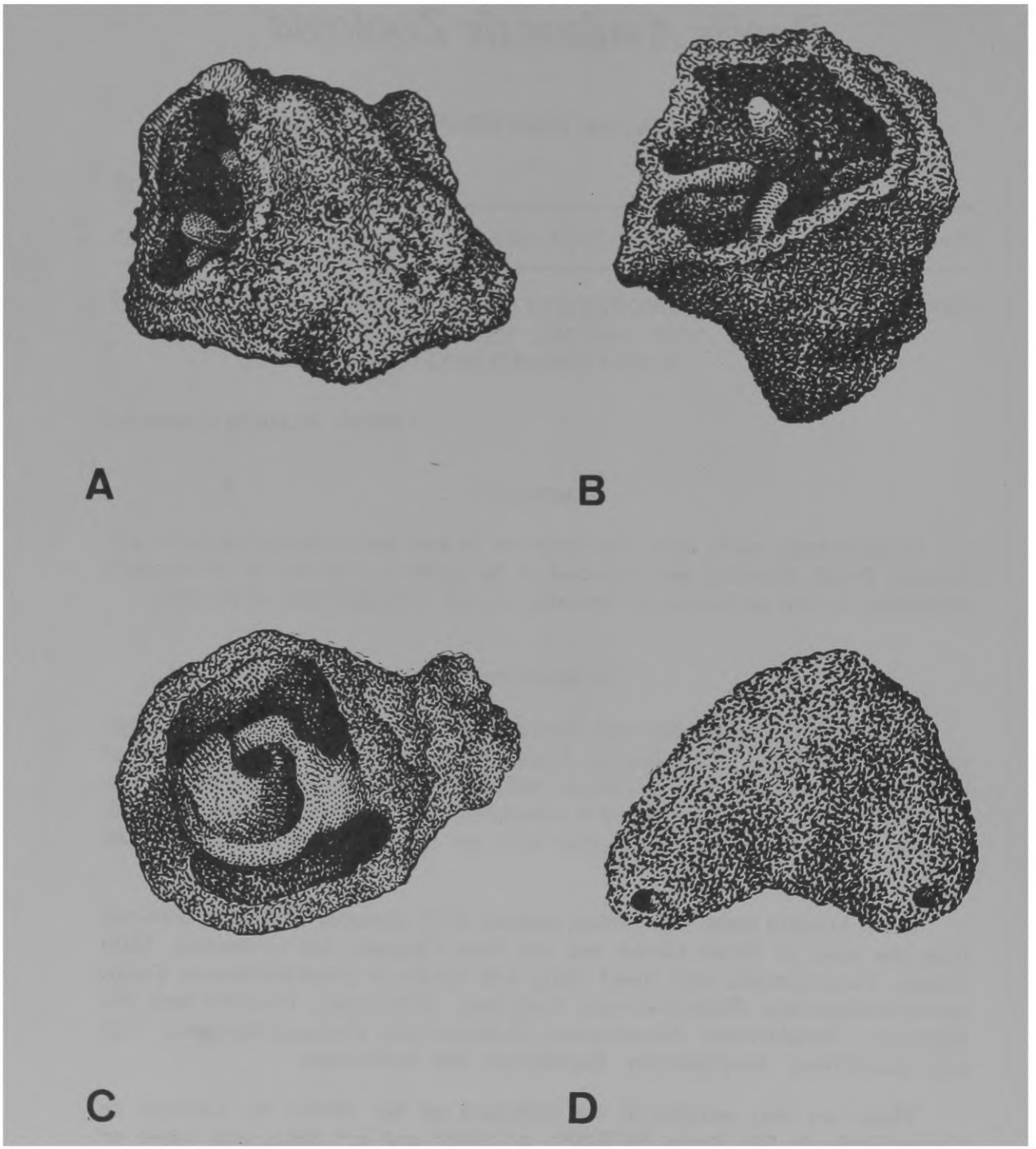
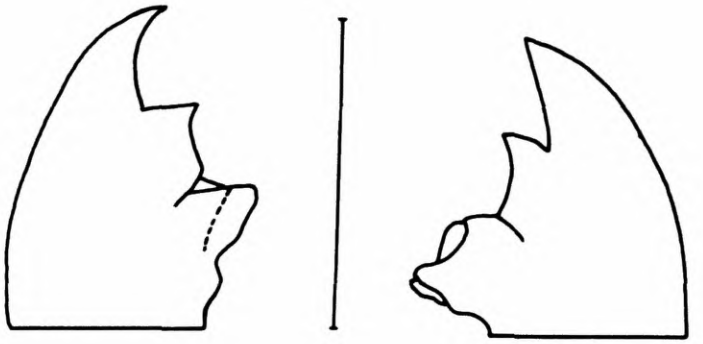


Fig. 1. The three nest cells of *C. timuassu:* A and B the same, partially opened, in different views. C. Opened cell, showing the internal structure. D. Closed cell, showing the two openings.

Mathews (1977) redescribed the soldier of *C. timuassu* and presented some data on its biology, including a short description of the nest, which would suit the nest in our collection: "The nest of this species, made in the mineral soil of termite mounds of other species, consist of a series of curious flask like



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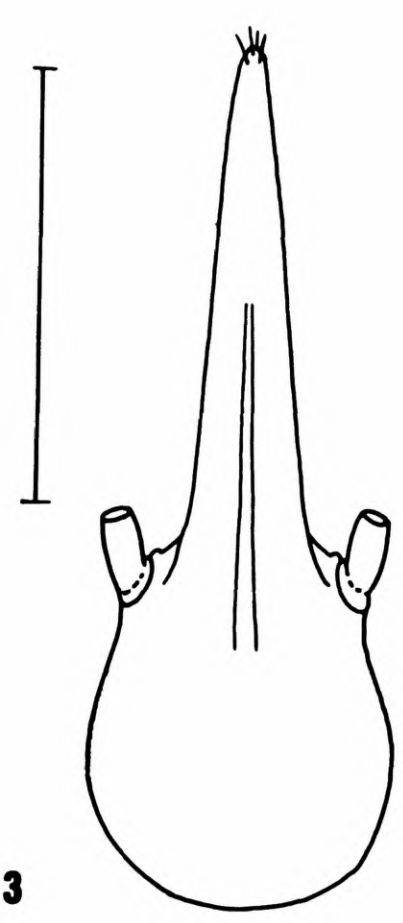

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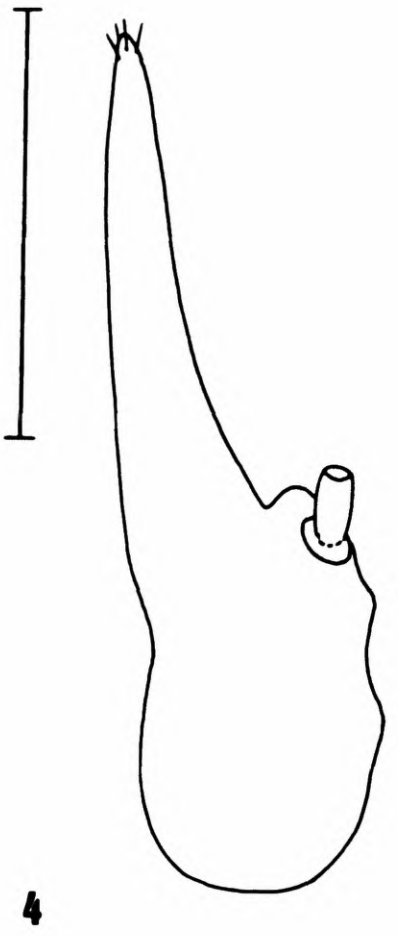

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Cyranotermes caete, s.p. n; fig. 2, worker's mandibles, in dorsal view (scale = 0,5mm) fig. 3, soldier's head, in dorsal view; fig. 4, soldier's head, in profile (scale = 1.0mm).

cells (1-2 cm. diameter) which the termites enter through a termite sized hole down the middle of an inwards turned neck with a widened flange at its opening inside the flask".

C. timuassu has always been collected in open formations: pastures, "cerrado", "campo" or in transition zones between the latter two. Only one sample, collected by Mathews, was found in a *Cornitermes bequaerti* nest, in gallery forest.

Fontes (1981) studied and figured the worker and imago mandibles and worker's digestive tube of *C. timuassu*.

Cyranotermes caete, new species

Type material:
Holotype: soldier, part of lot n.º 8711 (MZUSP), separately kept and labelled: "Brasil, Pará, Serra Norte, Carajás. VII-VIII/1985. R. Constantino col."
Type locality: "Brasil: Pará, Serra Norte, Carajás. N-3, mata trilha", See note.
Paratypes: 15 workers and 7 soldiers of lot n.º 8711 (MZUSP), with the same data as the holotype. Five soldiers and 4 workers of lot n.º 8712 (MZUSP), separately kept and labelled, same data as the holotype.
Ecology: all specimens collected in primary forest between "road N1-N5" and "Nucleo 3". No information about nests.
Note: "N1-N9" is the local name given by the mining company to the NE-SW oriented series of iron outcrops at Serra Norte, Carajás.
The village Serra Norte is located at N-5 (06°00'S, 51°20'W).

Imago: unknown
Soldier: Monomorphic. Head capsule in plain view slightly elongated, rear wider than at antenna level; in profile hind margin of head circular, with a depression just before a hump (more or less marked) leading to the straight side of nose. Nose conical, the tip very slightly downward bent. Labrum short and wide, not three-lobed. Vestigial mandibles. Antenna with 13 articles: I larger than II, III the largest of all, IV equal or larger than II, V equal or larger than IV, VI larger than V and the following segments subequal, either the last or the three last are the shortest of all. Anterior lobe of pronotum rounded, very slightly or not emarginated in the middle of upper margin. Head without hairs or bristles and rugose surface. Nose with four bristles and few very short hairs on tip and with a rugose surface. Postmentum with two bristles in the anterior region. Labrum with two bristles. Pronotum with short hairs on the the upper margin. Legs with scattered short hairs and long bristles. Tibiae with short hairs, short and long bristles, spines (7-10) and spurs. Tibial spur formula: 2: 2: 2. Abdomen with scattered short hairs and bristles in a downward direction and long bristles perpendicular to the body on sternites, and few bristles and short hairs growing denser towards apical segments on tergites. Head capsule whitish yellow to yellow, paler in the rear. Nose paler in the proximal portion and progressively darker to the tip: palish frown to dark brown. Antenna darker than head and paler than nose. Pronotum paler than head or the same colour as the rear portion of head. Abdomen very pale, translucent, showing the digestive tube through the wall. Legs, tergites and sternites the same colour as rear portion of head.

Measurements (in mm) of 14 soldiers from the two samples examined (min.-max.):

1.	length of head to tip of nose (profile)	1.84-2.03
2.	length of head to the lower base of nose (profile)	0.81-0.90
3.	legth of hind tibia	1.19-1.31
4.	width of head	0.65-0.75
5.	width of head at antenna level	0.56-0.62
6.	width of nose base	0.25-0.31
7.	width of pronotum	0.44-0.52

Worker: Monomorphic. Head rounded. Antenna with 13 or 14 articles: I the largest of all, II-IV subequal; V and the following segments subequal and larger than II-IV. Pronotum slightly emarginated. Head with some scattered long bristles and very short hairs. Postclypeus and labrum with a few short hairs and long bristles. Pronotum with short hairs on the surface and bristles on the upper margin. Abdomen with short hairs and short bristles downward directed and long bristles perpendicular to the body on tergites and sternites. Worker paler than soldiers: head, antenna, pronotum and legs yellowish white and abdomen very pale, translucent, showing the digestive tube through the wall.

Acknowledgments

Dr. Carlos Roberto F. Brandão for helping me in all phases of this work; Reginaldo Constantino who collected the type material and my father, Ilmar Catunda Marques for helping me with the drawings.

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