February 21, 1924

24.061

# PROCEEDINGS

#### OF THE

BIOLOGICAL SOCIETY OF WASHINGTON

# AN EXTRAORDINARY NEW RHINOTERMES FROM PANAMA.

## BY T. E. SNYDER.

The major soldier caste in the genus *Rhinotermes* Hagen possesses excellent specific characters; the soldier has powerful mandibles with marginal teeth and a relatively short and broad labrum. The minor soldier, on the other hand, has an elongate, slender labrium, forked at the apex ("gabel nasutus") and fairly long, slender, pointed or vestigial mandibles. Recently, however, several new species have been collected, the major soldiers of which have elongate labrums, as well as well-developed mandibles. The following is a description of one of the most striking of these new species.

#### Rhinotermes longidens, new species.

Soldier (Large). (Plate X, fig. 1).—Head straw yellow, labrum yellowbrown, mandibles yellow at base but castaneous-brown towards the apex and marginal teeth; head narrows anteriorly, rounded posteriorly, scattered long hairs on head. Labrum elongate as in small soldier, broadest at base, with long hairs at apex. Mandibles elongate, slender, sharply pointed and incurved at apex; prominent marginal teeth—as in figure.

Antennae white with tinge of yellow, 15 segments, with long hairs; third segment slender, subclavate, shorter than second but longer than fourth segment; segments bead-like, become longer and broader towards apex; last segment narrower, subelliptical.

Pronotum straw yellow, margins darker, saddle-shaped, posterior margin nearly a straight line, anteriorly sharply raised up, narrowed and rounded; few scattered long hairs on posterior margin, few fairly long and more numerous short hairs on anterior margin.

Legs white with tinge of yellow, fairly elongate, slender, pubescent (hairs fairly long).

Abdomen pale straw yellow, with dense long hairs at base of tergites, cerci prominent.

11-PROC. BIOL. SOC. WASH., VOL. 37, 1924.

## 84 Proceedings of the Biological Society of Washington.

Measurements (Large Soldier):

Length of entire soldier: 3.60 mm. Length of head with mandibles: 1.65 mm. Length of head without mandibles: (to anterior) 1.00 mm. Length of left mandible: 0.80 mm. Length of labrum: 0.60 mm. Length of pronotum: 0.27 mm. Length of hind tibia: 0.76 mm. Width of head (at widest point): 1.00 mm. Width of labrum at apex: 0.15 mm. Width of labrum at base: 0.22 mm. Width (average) of labrum at center: 0.15 mm. Width of pronotum: 0.55 mm.

R. longidens Snyder is smaller than R. longilabius Emerson<sup>1</sup> from British Guiana, but has a longer mandible with larger marginal teeth, narrower labrum and smaller pronotum; on the right mandible the upper marginal tooth is larger and is parallel to the margin of the mandible; the antennae have 15 segments, whereas there are 16 in longilabius. Only three species of *Rhinotermes* are known from America where the major soldier has an elongate labrum; in addition to the two species mentioned, *R. intermedius* Snyder occurs in Bolivia.

Soldier (Small). (Plate X, fig. 2).—Head pale straw yellow, paler posteriorly, labrum yellow-brown; broadest at posterior of antennal socket, sides slope roundedly to posterior, where rounded, conical at apex; head and labrum convex in profile; head with three rows of long hairs. Labrum elongate, slender, slightly constricted at base, with a long hair and short hairs on each fork at the apex. Mandibular points vestigial—hardly visible.

Antennae yellow, 14 segments, with long hairs; third segment subclavate, longer than second or fourth segments; fourth segment short, bead-like; segments bead-like, become broader and longer towards apex; last segment pointed at apex.

Pronotum pale yellow, darker on margins, saddle-shaped, anterior margin sharply turned up, narrowed and rounded, sides rounded, posterior margin slightly roundedly emarginate, with few long hairs on margins.

Legs white with tinge of yellow, elongate, slender, with long hairs.

Abdomen pale yellow with rows of long hairs at base each tergite, cerci prominent.

Measurements (Small Soldier):

Length of entire soldier: 2.20-2.40 mm.

Length of head with labrum: 1.05 mm.

Length of head without labrum (to anterior): 0.57 mm.

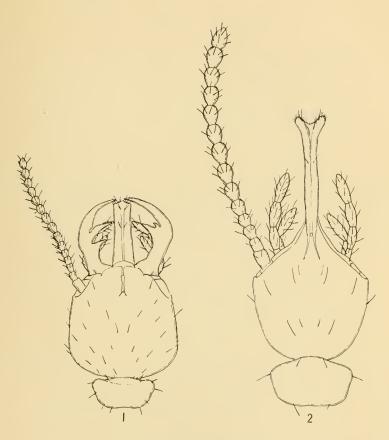
Length of labrum: 0.50 mm.

Length of pronotum: 0.22 mm.

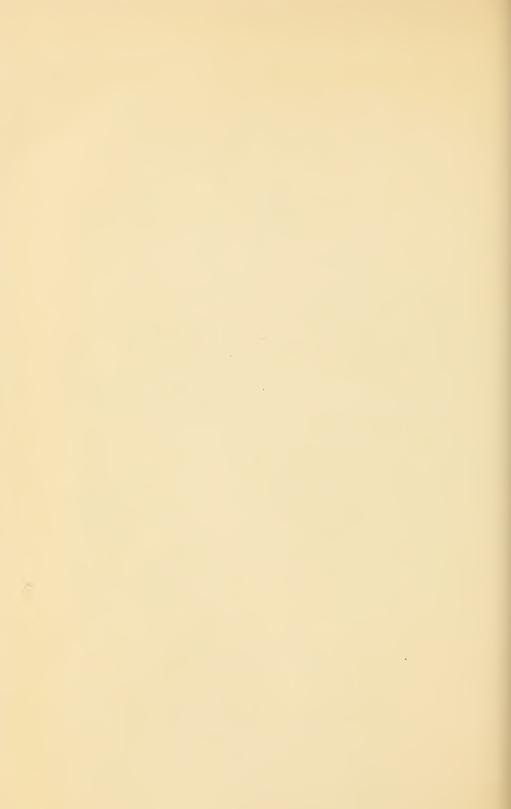
Length of hind tibia: 0.57-0.60 mm.

<sup>1</sup>The characterization of *R. longilabius* is by A. Emerson of the University of Pittsburgh.

PLATE X.



Rhinotermes longidens Snyder.



Width of head (at widest point): 0.50 mm. Width of labrum (at forks at apex): 0.12 mm. Width of labrum (at base and center): 0.05 mm. Width of pronotum: 0.35 mm.

R. longidens Snyder is lighter colored, smaller and has a narrower labrum than R. longilabius Emerson; it has fewer hairs on the head and has not the long slender sharp pointed mandibles of longilabius.

Type locality.—Rio Chinilla, C. Z., Panama.

Described from one large soldier and a series of small soldiers collected with workers at the type locality on June 8, 1923, by I. Molino and J. Zetek in a dry branch off an old tree trunk on the ground.

Type, large soldier.-Cat. No. 26533, U.S. N. M.

#### EXPLANATION OF PLATE.

Plate X.

Fig. 1. Rhinotermes longidens Snyder, Major Soldier.

Dorsal view of head and pronotum; note long labrum. Greatly enlarged.

Fig. 2. Rhinotermes longidens Snyder, Minor Soldier (Gabel-Nasutus). Dorsal view of head and pronotum. Greatly enlarged.

Drawings by Miss E. T. Armstrong.