



## ***Ngauratermes arue*, new genus and species of nasute termite (Isoptera: Termitidae) from the Amazon**

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### **Abstract**

*Ngauratermes arue*, new termite genus and species from the Amazon region is described based on soldiers and workers. Soldiers are dimorphic, with constricted head and vestigial mandibles with distinct points. Workers are dimorphic, but one worker type is rare. The gut morphology of *Ngauratermes* is similar to that of *Velocitermes* and *Diversitermes*, with a large crop, P1 simple and tubular, enteric valve conical and curved. The relationships of the new genus with other neotropical Nasutitermitinae are discussed.

**Key words:** Nasutitermitinae, *Velocitermes*, *Diversitermes*, Neotropical

### **Introduction**

The nasute termites (Nasutitermitinae *sensu* Engel & Krishna 2004) comprise a large pantropical group which is particularly diverse in South America, where it includes more than 30% of the known genera and species (26 and 154 respectively) (Constantino 1998).

The New World genera *Velocitermes* Holmgren, *Diversitermes* Holmgren, and *Tenuirostritermes* Holmgren share several morphological similarities and feeding habits, and probably form a monophyletic group. Similarities include the shape of the gut *in situ*, the large crop, the short mixed segment, left worker mandible with short apical tooth and long cutting edge between M1 and M3 (Fontes 1987), and soldiers with constricted head (except major soldiers of *Diversitermes*). All known species in this group are open-air foragers and feed mostly on surface litter. Soldiers of *Diversitermes* and most species of *Velocitermes* are di- or trimorphic while soldiers of the *Tenuirostritermes* are monomorphic.

In this paper we describe a new monotypic termite genus with dimorphic nasute soldiers from the western Amazon. This genus seems to be close to *Velocitermes* and *Diversitermes*.

### **Material and methods**

Drawings were prepared with a camera lucida attached to a stereoscopic microscope. The enteric valve, gizzard, and mandibles were dissected and examined under a stereoscopic microscope, and mounted on microscope slides with Hoyer's medium or euparal. Images were captured with a digital camera attached to a light microscope.

The terminology used for worker mandibles follows Sands (1998). The left mandible has 4 marginal teeth: M1, M2 (absent or reduced in most Termitidae), M3, and M4 (marginal subsidiary or molar tooth). The right mandible has only 2 marginal teeth: M1 and M2. The left mandible index is the ratio between the