An extraordinary new termite (Isoptera: Termitidae: Syntermitinae: Rhynchotermes) from the pasturelands of northern Colombia

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Abstract

A new species of mandibulate nasute termite, Rhynchotermes bulbinasus Scheffrahn sp. nov., is described from dimorphic soldiers and monomorphic workers discovered in the Caribbean plains of northern Colombia. The new species differs from all other New World Syntermitinae and Nasutitermitinae, in having a nasus with its distal diameter greater than its median diameter. Literature on the genus Rhynchotermes Holmgren is reviewed and field observations of R. bulbinasus are given.

Key words: Isoptera: Termitidae: Syntermitinae, Neotropical, Colombia, Caribbean Basin, cattle pastures, new species, taxonomy

Introduction

The termite subfamily Syntermitinae Engel and Krishna 2004 consists of thirteen Neotropical genera all with mandibulate nasute soldiers. The most striking of these genera is Rhynchotermes Holmgren 1912. Rhynchotermes soldiers are most easily recognized by the following character combinations: sharp and strongly curved mandibles, a rather long and cylindrical or conical nasus, and a pointed projection on each fore coxa. Holmgren (1912) first established the genus Rhynchotermes from Armitermes nasutissimus Silvestri 1901 collected in Brazil and Paraguay. Snyder (1949) raised his Central American species, Armitermes (Rhynchotermes) perarmatus Snyder 1925a to Rhynchotermes and synonymized Armitermes (Rhynchotermes) major Snyder 1925b with R. perarmatus. Mathews (1977) redescribed both the genus Rhynchotermes and Silvestri’s R. nasutissimus and added two new species from Brazil, R. nyctobius and R. diphyes. Fontes (1985) included a key for the former four species noting that the minor soldiers of R. nyctobius and R. diphyes were difficult to distinguish without the major soldiers. Finally, Cancello (1997) described two additional species from Brazil, R. guarany and R. piauy, thus raising the number of Rhynchotermes species to six. Herein, I describe the most distinguishable of all Rhynchotermes species, possibly the most distinguishable of all nasute taxa, R. bulbinasus sp. nov.

Material and methods

Specimens of Rhynchotermes bulbinasus sp. nov. were collected along roadsides in the northern Colombian districts of Sucre, Bolívar, and Atlantico during 2–4 June 2009 (Fig. 1). Laboratory images (Figs. 2–6) of preserved specimens in 85% ethanol were made using an Olympus SZX9 stereomicroscope fitted by a LM Scope camera tube to an Olympus E-410 digital camera. A field photograph of live termites (Fig. 7) was taken with a Nikon Coolpix S7c digital camera set to macro and flash mode. Morphological terminology follows that of Sands (1965) and Roonwal (1969).