

Article



A new termite (Isoptera: Termitidae: Termitinae: Proboscitermes) from Tanzania

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Abstract

A new species of termite, *Proboscitermes mcgrewi* Scheffrahn, is described from soldiers, workers, and a physogastric queen collected along the northeastern shore of Lake Tanganyika. The new species differs from all other mandibulate termite soldiers in having a relatively large proportion of head capsule volume anterior to the mandibular articulations.

Key words: Isoptera, Termitidae, Termitinae, *Proboscitermes mcgrewi*, Ethiopian Region, Tanzania, Lake Tanganyika, new species, taxonomy

Introduction

Within the higher termites, the subfamily Termitinae is composed of species with soldiers that possess piercing, slashing, or snapping mandibles. Within the Termitinae, the *Cubitermes* group (Noirot 2001) is a large (Kambhampati & Eggleton 2000) and apparently monophyletic clade (Noirot 2001, Inward *et al.* 2007) of African termites. All *Cubitermes* group soldiers have rather long and narrow mandibles. Some genera within this group (Sjöstedt 1925) have a variably bifurcate labrum such as *Cubitermes*, *Noditermes*, and *Unicornitermes*, while fewer have a quadrate labrum such as *Orthotermes* and *Proboscitermes*. The most diagnostic character of the *Cubitermes* group was shown by Sands 1998 and Noirot 2001 to be the position and arrangement of the enteric valve armature in workers. Noirot (2001) elegantly described its morphology as follows: "P2. Funnel-shaped and not separated from P1, it is always well developed, ventrolaterally positioned on the left, with an axis at an angle near 0°. Its armature is characteristic (Noirot's figure refers to his *Procubitermes niapuensis* photograph). The six usual cushions are elongated and armed with numerous spines, and six intermediate cushions, smaller and with a weaker armature, lie between the principal ones". Some of the *Cubitermes* group soldiers have a similar enteric valve armature, however, that of the workers is generally used for taxonomic purposes.

Most genera in the *Cubitermes* group build epigeal earthen mounds or inhabit epigeal mounds of other termites (Emerson 1928). Often referred to as "soil feeders" (Eggleton *et al.* 2002) their gut contents reveal that they selectively ingest organic matter in soil although some mineral particles are also consumed. The *Cubitermes* group includes 25 genera when *Forfurculitermes novem nudum* (Kambhampati & Eggleton 2000) is removed. Soldiers of *Proboscitermes* Sjöstedt and the monotypic *Unicornitermes* Coaton are among the most distinctive of the *Cubitermes* group genera in that their frons forms a bulbous horizontal overhang, or nasus, that extends well anterior to the mandibular articulations.