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Scientific Note

New record of *Schievitermes globicornis* Roisin, 2022 (Blattodea, Isoptera, Termitidae) for the Brazilian Amazon forest

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Abstract. *Schievitermes* Roisin, 2022 is a monotypic termite genus previously described only from French Guiana. In this study, we report for the first time the occurrence of this species in the Brazilian Amazon, in the Ducke Reserve, Manaus, Amazonas, Brazil. Species identification was confirmed through detailed morphological analyses of soldiers and workers, following established protocols, and comparison with previously published descriptions and illustrations. This record significantly expands the known geographic distribution of the species and highlights the importance of Amazonian forests in conserving poorly known termite lineages.

Keywords: Soldier, Termite, Taxonomy, Neotropical Region.

Neocapritermitinae is a subfamily of the Termitidae Latreille, 1802, recently proposed based on genomic analyses conducted by Hellemans et al. (2024). This subfamily comprises three genera *Neocapritermes* Holmgren, 1912, *Planicapritermes* Emerson, 1949 and *Schievitermes* Roisin, 2022 for the Neotropical Region. Representatives of these genera share a set of distinctive morphological traits, most notably soldiers with strongly asymmetric snapping mandibles and sub-rectangular heads lacking a frontal projection. These morphological features, together with recent molecular evidence, support the taxonomic cohesion of the subfamily and distinguish it from other groups within Termitidae.

Schievitermes Roisin, 2022, is a monotypic genus originally described from three colonies collected in distinct localities in French Guiana, predominantly within "white-sand" forest environments (Roisin 2022). Its only known species, *Schievitermes globicornis* Roisin, 2022, exhibits a unique set of morphological traits that do not fit within any of the previously established genera, thus supporting its independent taxonomic placement. In this study, we report the expansion of the geographical distribution of *Schievitermes globicornis* Roisin, 2022 to the Brazilian Amazon, thus increasing current knowledge.

A colony of this species was sampled in the Ducke Reserve, located near Manaus, Amazonas State, Brazil. The identification of the species followed the dissection protocol proposed by Almeida-Azevedo et al. (2023). After dissection, the specimens were compared with the morphological descriptions and illustrations provided by Roisin (2022). The analysis included both external morphological characters, such as the cephalic capsule and soldier mandibles, and internal characters, particularly the worker gut morphology. The collected material will be deposited in the Invertebrate Collection of the Instituto Nacional de Pesquisas da Amazônia (INPA), in Manaus, ensuring its preservation and availability for future scientific studies. In addition, high-resolution digital images were obtained using a Leica DMC4500 digital camera mounted on a Leica M205A stereomicroscope, allowing detailed documentation of diagnostic characters.

The new record of *S. globicornis* (Figs. 1, 2) in the Brazilian Amazon forest (Fig. 3) confirms the broad distribution of this species. The Ducke

Figure 1. *Schievitermes globicornis* Roisin, 2022 (Blattodea, Isoptera, Termitidae). (A) Worker; (B) Soldier. Scale bars = 1 mm.

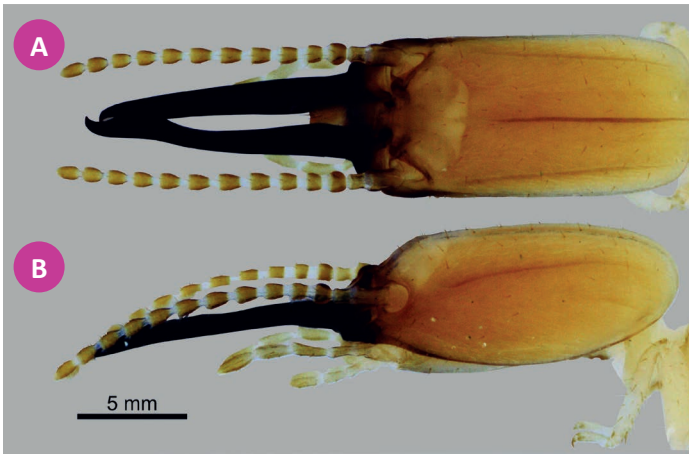

Figure 2. *Schievitermes globicornis* Roisin, 2022 (Blattodea, Isoptera, Termitidae). Soldier; (A) Head in dorsal view. (B) Head in lateral view. Scale bars = 5 mm.

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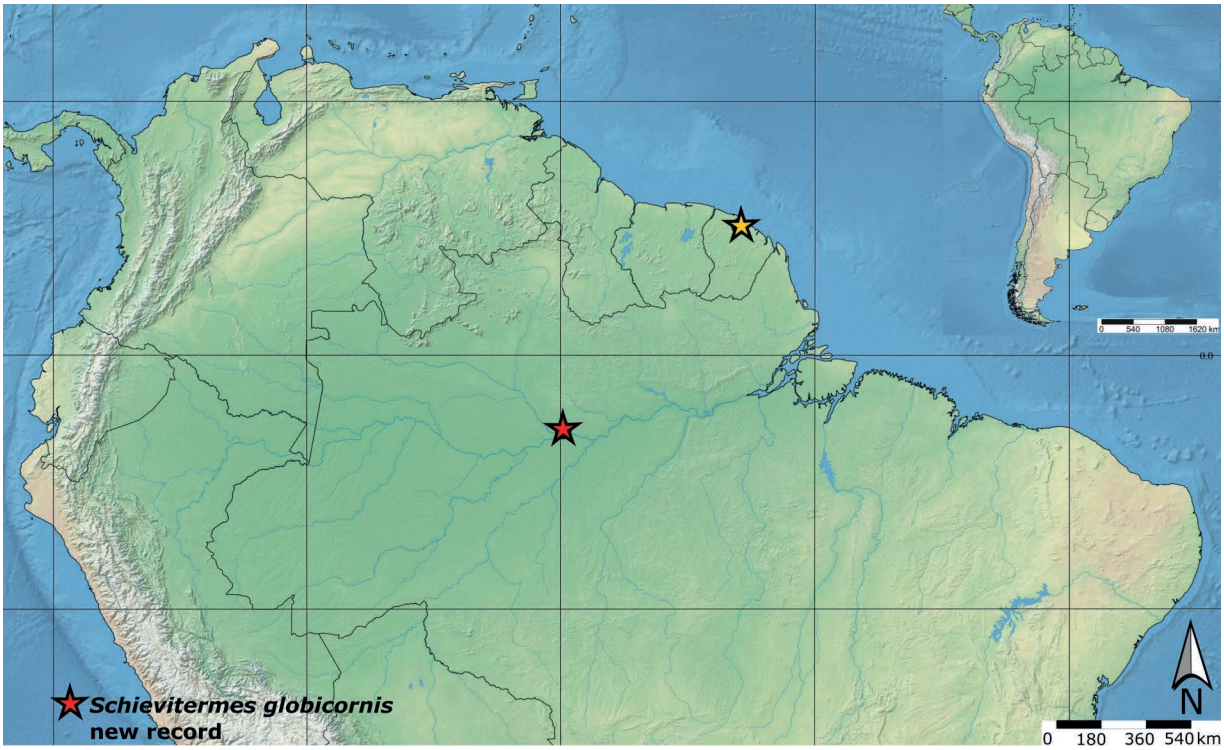

Figure 3. Geographic distribution of *Schievitermes globicornis* Roisin, 2022 (Blattodea, Isoptera, Termitidae). Yellow star indicates the type locality in French Guiana; red star indicates the new record in the Brazilian Amazon Forest.

Forest Reserve is predominantly composed of dense ombrophilous forest, whereas the species' original area of occurrence in French Guiana is characterized as a "white-sand" forest. This contrast demonstrates that *S. globicornis* can inhabit different types of environments, suggesting considerable ecological plasticity. Furthermore, the species is recognized as a humus feeder, highlighting its functional role in soil ecosystems.

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Authors' Contributions

WVPF: Conceptualization, Investigation, Methodology, Writing - original draft; RAA: Conceptualization, Formal analysis, Writing - original draft, Writing - review & editing: JWM: Supervision, Validation, Writing-review & editing; RAA: Methodology, Validation, Writing - review & editing.

Conflict of Interest Statement

The authors declare that there is no conflict of interest.

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