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## Morphological and biological observations on the stick insect *Tithonophasma tithonus* (Gray, 1835) (Phasmida: Pseudophasmatidae: Pseudophasmatinae)

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American Pseudophasmatinae stick insects are often colorful, winged or apterous, with or without scale-shaped tegmina, with an area apicalis on all tibiae, and either with a ventromedian carina on the meso and metafemora, or with broad profemora, as long as head, pro- and mesonotum combined (Zompro, 2004). In the egg, micropylar plate is externally located in the middle of the dorsal surface, and internally appears of the open type. Among Pseudophasmatinae, the genus *Tithonophasma* Zompro, 2004 has a single species, *Tithonophasma tithonus* (Gray, 1835). Although this species is frequent in museum collections (Zompro, 2004), accurate morphological and biological information potentially useful in phylogenetic approaches are still missing.

Here we provide a detailed description of both adult sexes and egg capsule morphology, following terminologies of Bragg (1997) and Sellick (1997), respectively. Pictures and measurements were taken with a camera attached to Leica M205C and M125 stereomicroscopes, and with a digital caliper for the adult body length. We also present the *T. tithonus* biology studied in laboratory, which elucidate embryo and post-embryonic developments and aspects of its behavior. Ultimately, we make some considerations about *T. tithonus* distribution. All the material used is deposited in Coleções Taxonômicas da Universidade Federal de Minas Gerais (UFMG), Belo Horizonte, Brazil (curator F. A. Silveira).

## Tithonophasma tithonus (Gray, 1835)

**Diagnosis.** (Fig. 1) Colorful species; body and wings yellow, with a black dorsal median stripe on entire body; legs bluish green, black marked in ventral surface of tibia and tarsus and as a ring in apex of femora, tibia and each tarsomere. Head as wide as long; ocelli present; antennae not projecting beyond abdomen. Profemora curved and compressed basally. Both sexes with well-developed hind wing. Females' sternum VII swollen and hirsute near apex, black marked (Fig. 2B–C). Males' anal segment posterior margin distinctly truncate in dorsal view, bent down, forming a bilobed margin, each lobe with a conspicuous toothed region (Fig. 2D–E).

Redescription. Female. Head smooth, as long as wide (Fig. 2A), oval in cross-section and slightly flattened dorsally. Ocelli present, with a subcircular depression right in front of the median ocellus. Compound eyes circular, prominent, almost touching torulus; in dorsal view, 0.4x as long as head. Antennae slender and long, nearly reaching the anal segment; scape almost 1.5x as long as wide in dorsal view, slightly compressed dorsoventrally; pedicel longer than wide, about 0.7x as long as scapus; in lateral view, clearly inflate; wider than flagellomeres; first flagellomere about 2x as long as pedicel; second one slightly shorter, as long as pedicel; remaining flagellomeres increasing in length towards apex. Males head as in females. Thorax subcircular in cross-section. Pronotum slightly longer but narrower than head, 1.5x longer than wide, laterally wrinkled in its anterior third, longitudinally aciculate in the 0.1 distal portion, which is less evident in males; anterolateral angles with rounded notches, for the prothorax defensive glands opening (Fig. 2A); median line slightly impressed; transverse median depression displaced towards anterior third of segment, weakly impressed. Mesonotum as wide as and about 1.5x longer than pronotum; 2.5x longer than wide and slightly broadened towards the posterior end; bearing several, although sometimes almost indistinct, tubercles randomly arranged in the anterior half. Metanotum and median segment combined about 1.6x as long as and wider than mesonotum; 2.1x as long as wide, parallel-sided; metanotum 1.7x as long as wide and about 3x as long as median segment. Median segment separated from metanotum by a transverse depression (Fig. 1). Metaepisternum slightly striate diagonally. Mesoespisternum, pro-, meso- and metasternum simple and smooth. Tegmina small, convex, in dorsal view with an