**Material and methods**

The study was based on 33 dry-preserved specimens provided by the following institutions (name of curators in parenthesis):CEMT—Seção de Entomologia da Coleção Zoológica, Departamento de Biologia e Zoologia, Universidade Federal de Mato Grosso, Cuiabá, Brazil (Fernando Z. Vaz-de-Mello); MZSP—Museu de Zoologia Universidade de São Paulo, São Paulo, Brazil (Sônia Casari, Carlos Campaner and Juarez Fuhrmann); MNHN—Muséum National d'Histoire Naturelle, Paris, France (Olivier Montreuil and Antoine Mantilleri).

External morphological structures and male genitalia (genital capsule and its endophallus) were examined using a stereomicroscope Motic CMZ-168. Photos were taken using a Stereomicroscope Leica M205A with image stacking software (Leica Application Suite, version 4.2). To study male genitalia, the aedeagus was removed from the beetles' body through the pygidium opening, and the endophallus was extracted from the genital capsule. After 10-15 minutes immersed in a warm solution of KOH 10% for clearing, the endophallus was rinsed in distilled water and its sclerits were dissected. Nomenclature used to name endophallic sclerites follows Tarasov and Solodovnikov (2011).

**Taxon treatment**

***Dichotomius* (*Selenocopris*) *anningiae* sp. nov.**

Material

*Holotype*:

*Paratypes*:

Diagnosis

Description

Etymology

Named after the British fossil collector and paleontologist Mary Anning, considered by the Royal Society one of the ten most influential women in British science history.

***Dichotomius* (*Selenocopris*) *casariae* sp. nov.**

Material (planilha excel)

*Holotype*:

*Paratypes*:

Diagnosis

Description

Etymology

Named after the Brazilian coleopterist Sônia Casari in honor of her contributions to the Brazilian Coleopterology.

**Taxonomic remark**

This new species was erroneously identified by Pereira (1947) as *D. batesi* for which the author provided a redescription and illustrations. The redescription was based on several specimens from Villavicencio (Colombia) and stated the existence of a strong sexual dimorphism expressed on males head and pronotum (Pereira, 1947). According to this redescription, the males have a long cephalic horn and a high anterior declivity on pronotum. Pereira (1947) also commented that such characteristics were not described by Harold (1869) in the original description of *D. batesi*, probably because he based on a less-developed male. We examined *D. batesi* holotype (deposited in MNHN) and it is a female instead of a less developed male. This female, as well as, males of *D. batesi* identified by us did not fit Villavicencio specimens that, actually, belong to a new species described here as *D. casariae* sp. nov. Despited the similarities in body size and pronotal punctuation which positioned the two species in the *D. batesi* species-group, *D. casariae* sp. nov. can be distinguished from *D. batesi* by the following characteristics: genal margin more angulate, male with a long, plate-like cephalic horn, elytral striae chagrined, and dorsal portion of each paramere lacking a small hook. Within the group *D. batesi*, only males of *D. casariae* sp. nov. and *D. anningiae* sp. nov. have a long cephalic horn and a high anterior declivity on pronotum.

***Dichotomius* (*Selenocopris*) *franklinae* sp. nov.**

Material

*Holotype*:

*Paratypes*:

Diagnosis

Description

Etymology

Named after British chemistry Rosalind Franklin for her brilliant and inspiring scientific career.