

SUPPLEMENTARY MATERIAL

Material suplementario: Revisión taxonómica del grupo de especies de *Dichotomius cotopaxi* (Coleoptera: Scarabaeidae: Scarabaeinae)

Supplementary material: Taxonomic revision of the *Dichotomius cotopaxi* species-group (Coleoptera: Scarabaeidae: Scarabaeinae)

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- 1 Sixth abdominal ventrite with constriction in the middle region (males)...2
- 1' Sixth abdominal ventrite without constriction in the middle region (females)...8
- 2 Triangular head with acute prolongation in the anterior region of the clypeus (Fig. 12a-b). Clypeal teeth not evident (Fig. 12a). Cephalic process in the frons, flattened and rearward and goes to the central region of the pronotum (Fig. 12b). Colombia, Santander and Norte de Santander departments...*Dichotomius ribeiroi* (Pereira, 1954)
- 2' Head not triangular and lacking clypeus prolongation. Clypeal teeth evident. Cephalic process upward and not flattened...3
- 3 Cephalic process located on clypeus region (Figs. 2a, 5a, 7a)...(males 1)...4
- 3' Cephalic process located on frons region (Figs. 2c, 5c, 7c)...(males 2)...7
- 4 Clypeal process with triangular apex and tongue-shaped (Fig. 5a-b)...*Dichotomius germanchoi* **sp. nov.**
- 4' Clypeal process with broad apex, subquadrangular shape...5
- 5 Pronotal process with invagination in the central region (Fig. 2a). Evident elytral striae with soft and separate dimples spaced three to five times their diameter (Fig. 3a)...*Dichotomius cotopaxi* (Guérin-Méneville, 1855)
- 5' Pronotal process with a prolongation on the central region. Evident elytral striae with deep and laterally elongated dimples on all extension...6

- 6 Trilobed pronotum, lacking spinelike processes near lateral fovea (Fig. 7a-b). Apex of the pronotal processes with slightly enlarged shiny surface (Fig. 7a). Gena with straight and long lateral border (more than 2 mm) (Fig. 7a). Pronotum from the anterior border to the lateral fovea with opaque surface. Ecuador (Fig. 4)...*Dichotomius luederwaldti* **sp. nov.**
- 6' Quinquelobed pronotum, with spinelike processes near to the lateral fovea (Fig. 10a-b). Apex of pronotal processes with wide and evident shiny surface (Fig. 10a). Gena with curved and short lateral border (less than 2 mm) (Fig. 10a). Pronotum from the anterior border to the lateral fovea with shiny surface. Colombia (Fig. 4)...*Dichotomius monstrosus* (Harold, 1875)
- 7 Evident elytral striae with soft and separate dimples spaced three to five times their diameter (Fig. 3a)...*Dichotomius cotopaxi* (Guérin-Ménéville, 1855)
- 7' Elytral striae evident, with strong dimples on all extension...8
- 8 Gena with very straight and long edge (more than 2 mm) (Fig. 7c-d). Elytral interstriae with soft wrinkles in some areas near its base (Fig. 8a). Ecuador (Fig. 4)...*Dichotomius luederwaldti* **sp. nov.**
- 8' Gena with curved and short edge (less than 2 mm) (Fig. 5c-d). Elytral interstriae with deep dimples in all extension (Fig. 6a). Colombia (Fig. 4)...*Dichotomius germanchoi* **sp. nov.**
- 9 Bituberculate cephalic process (Figs. 2e-f, 10c-d, 12c-d)...10
- 9' Trituberculate cephalic process (Figs. 5e-f, 7e-f)...12
- 10 Evident elytral striae with soft and separate dimples spaced three to five times their diameter (Fig. 3a)...*Dichotomius cotopaxi* (Pereira, 1954)
- 10' Elytral striae evident, with strong dimples in all extension...11
- 11 Pronotum with excavation on the anterior region, its surface with calluses. Clypeal teeth evident, non-triangular head (Fig. 10c-d)...*Dichotomius monstrosus* (Harold, 1875)
- 11' Pronotum with excavation in the anterior region, its surface lacking calluses and smooth. Clypeal teeth not evident, head subtriangular (Fig. 12c-d)...*Dichotomius ribeiroi* (Pereira, 1954)
- 12 Elytral interstriae surface with deep wrinkles on all extension (Fig. 6a). Pronotal process bilobate (Fig. 5e-f). Colombia (Fig. 4)...*Dichotomius germanchoi* **sp. nov.**
- 12' Elytral interstriae with smooth surface, with soft wrinkles in some areas near its base (Fig. 8a). Pronotal process not bilobate (Fig. 7e-f). Ecuador (Fig. 4)...*Dichotomius luederwaldti* **sp. nov.**