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Description of two new Bolivian Cerambycidae and a Costa Rican
record for an African prionine (Coleoptera)

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Abstract. Two new species of Cerambycidae (Coleoptera) are described from Bolivia: *Compsibidion woodleyi* Wappes, Santos-Silva and Galileo (Cerambycinae: Neoibidionina); and *Drycothaea dozieri* Wappes, Santos-Silva and Galileo (Lamiinae: Calliini). Illustrations of the new species are included. *Mallodon downesii* Hope, 1843 (Prioninae: Macrotomini) is reported for the first time in Costa Rica.

Key words. Bolivia, key, Prioninae, South America, taxonomy.

Introduction

Martins (1967, 1970) characterized his Division V (currently Compsina) of Ibicionini (currently Neoibidionini) as having procoxal cavities closed behind, with his Division IV (currently Neoibidionina) defined as having procoxal cavities open behind. Oftentimes, the procoxal cavity in some specimens of Neoibidionina is only slightly open appearing closed, and hence leads to improper placement of species.

This is also true in *Compsibidion* Thomson, 1864 (Neoibidionina), a genus with some of its species having features shared with *Heterachthes* (Compsina), especially the basal antennomeres thickened and not carinate in males. According to Martins and Galileo (2007) (translated): “*Compsibidion* includes a great miscellany of species that, for now, must remain together. A division of *Compsibidion* into new genera, in addition to being based on very variable features, would be premature.” Actually, the separation of some species currently placed in *Compsibidion* from those of *Heterachthes* is problematic. Although *Compsibidion woodleyi* Wappes, Santos-Silva and Galileo has the procoxal cavities open posteriorly, they are not widely open and hence we prefer to include it in *Compsibidion*. Currently, *Compsibidion* includes 79 species distributed from Mexico to southern South America (Monné 2018a).

Drycothaea Thomson, 1868 is the second largest genus of Calliini, with 27 species distributed from Mexico to southern South America (Monné 2018b). Martins and Galileo (1990) presented a key to South American species of *Drycothaea*, which included five species. However, Galileo and Martins (1991) transferred several species to *Drycothaea*, including South American species, making the key obsolete. Later, Galileo and Martins (2010) published the most recent key to species of *Drycothaea*. The new species, *Drycothaea dozieri* Wappes, Santos-Silva and Galileo, is the fourth *Drycothaea* species formally recorded for Bolivia.

Mallodon downesii Hope, 1843, a Prioninae species known as a coffee pest in Africa (Delahaye and Tavakilian 2009) has been found in Costa Rica. Coffee is one of the main agricultural crops in Costa Rica and the introduction of this species into the country is of real concern and a potential problem for coffee growers.

Materials and Methods

Photographs were taken with a Canon EOS Rebel T3i DSLR camera, Canon MP-E 65mm f/2.8 1–5× macro lens, controlled by Zerene Stacker AutoMontage software. Measurements were taken using measuring ocular Hensoldt/Wetzlar - Mess 10 in the Leica MZ6 stereomicroscope, also used in the study of the specimens.

The collection acronyms used in this study are as follows:

FSCA – Florida State Collection of Arthropods, Gainesville, FL, USA

INBio – Instituto Nacional de Biodiversidad, Santo Domingo de Heredia, Costa Rica

MZSP – Museu de Zoologia, Universidade de São Paulo, São Paulo, São Paulo, Brazil

Taxonomy

Cerambycinae

Neoibidionini

Neoibidionina

Compsibidion woodleyi Wappes, Santos-Silva and Galileo, new species

(Fig. 1–4)

Description. Male. Dorsal side of head and pronotum black; ventral side of head dark brown, almost black, except yellowish-brown centrobasal area; scape dark brown, almost black; antennomeres dark brown, gradually lighter toward distal segments; ventral side of prothorax dark brown; ventral side of meso- and metathorax mostly reddish-brown, darkened on some areas, gradually lighter toward apex of metaventricle. Elytra black, gradually brown after middle, with small, oblique pale-yellow macula on about end of basal third; coxae mostly reddish-brown; femoral peduncle light reddish-brown, and femoral club brown; tibiae blackish basally, dark reddish-brown on remaining surface; tarsi brown on tarsomeres I–II, yellowish-brown on remaining tarsomeres; abdominal ventrites brown, gradually lighter toward ventrite V, except narrow, transverse yellowish band at apex of ventrites I–IV.

Head. Frontal plate longitudinally depressed centrally; finely punctate centrally, slightly transversely striate laterally; remaining surface of frons finely vermiculate centrally, rugose-punctate laterally; with short, sparse, decumbent pale-yellow setae. Area between antennal tubercles and upper eye lobes rugose-punctate; area between apex of upper eye lobes and prothorax finely, moderately sparsely punctate; with short, sparse, decumbent pale-yellow setae, and a few long, erect pale-yellow setae between upper eye lobes. Area behind upper eye lobes finely, moderately sparsely punctate (less so toward lower eye lobe); with a few long, erect pale-yellow setae close to eyes, glabrous on remaining surface. Area behind lower eye lobes very finely, sparsely punctate; with long, erect pale-yellow setae close to eye, glabrous on remaining surface. Genae minutely punctate close to lower eye lobe, smooth toward apex; with short, decumbent pale-yellow setae except on glabrous distal area. Antennal tubercles rugose-punctate frontally, finely, sparsely punctate on remaining surface, except nearly smooth apex; with short, decumbent, sparse pale-yellow setae. Median groove distinct from frontal plate to area between upper eye lobes. Gula smooth and glabrous between prothorax and eyes, coarsely, moderately abundantly punctate on remaining surface (less so centrally); with short, sparse, decumbent pale-yellow setae interspersed with long, erect pale-yellow setae. Distance between upper eye lobes 0.51 times length of scape; in frontal view, distance between lower eye lobes 0.79 times length of scape; upper eye lobes with four rows of ommatidia. Antennae 2.0 times elytral length, reaching elytral apex at basal third of antennomere IX. Scape basally curved in lateral view, gradually widened toward apex; with short, sparse, decumbent pale-yellow setae interspersed with long, erect pale-yellow setae. Antennomere III tumid, not carinate dorsally, with decumbent, sparse pale-yellow setae interspersed with long, erect pale-yellow setae; antennomere IV tumid, slightly narrower than III, not carinate, with setae as on III; remaining



Figures 1–10. Illustrations of Bolivian Cerambycidae. 1–4) *Compsibidion woodleyi* new species, holotype male. 1) Dorsal habitus. 2) Ventral habitus. 3) Lateral habitus. 4) Head, frontal view. 5–9) *Drycothaea dozieri* new species, holotype female. 5) Head, frontal view. 6) Mesosternal process. 7) Dorsal habitus. 8) Ventral habitus. 9) Lateral habitus. 10) *Drycothaea viridescens*, male, mesosternal process.

antennomeres slender, especially from VI, with pale-yellow pubescence not obscuring integument, and long, erect pale-yellow setae at apex. Antennal formula (ratio) based on antennomere III: scape = 0.67; pedicel = 0.14; IV = 0.63; V = 0.79; VI = 0.86; VII = 0.81; VIII = 0.77; IX = 0.75; X = 0.71; XI = 0.88.

Thorax. Prothorax subcylindrical, slightly rounded laterally, with basal constriction distinct, 1.2 times longer than wide. Pronotum with slightly elevated central gibbosity, between basal constriction and middle; coarsely, partially confluent punctate on each side of central gibbosity, finely, sparsely punctate on area of basal constriction, smooth on central gibbosity, and nearly smooth on remaining surface; with pale-yellow pubescence in area of basal constriction, sides of basal half, nearly all area close to central gibbosity (slightly sparser than basally), and wide transverse band on each side of distal half; remaining surface with very sparse, decumbent pale-yellow setae except glabrous central gibbosity; with long, erect, sparse pale-yellow setae. Sides of prothorax nearly smooth except a few coarse punctures centrally near pronotum, and finely striate distal area; with pale-yellow pubescence near pronotum, gradually shorter, less conspicuous toward ventral side, except striate area with sparse pubescence; with long, erect, sparse pale-yellow setae near pronotum. Prosternum with pale-yellow pubescence in basal half, with long, decumbent pale-yellow setae interspersed; remaining surface nearly glabrous except sparse, erect, long pale-yellow setae. Prosternal process centrally about 1/4 width of procoxal cavity. Procoxal cavities slightly open posteriorly. Metaventrite with sparse pale-yellow pubescence centrally, slightly denser laterally. Mesoventral process somewhat tab-shaped at sides of distal area, distinctly emarginate centrally at apex. Mesanepisternum, mesepimeron, and metanepisternum with moderately dense pale-yellow pubescence not obscuring integument. Metaventrite with coarse, sparse, shallow punctures on sides of basal third; with pale-yellow pubescence not obscuring integument, distinctly sparser centrally; with long, erect, sparse pale-yellow setae. Scutellum with pale-yellow pubescence in distal half, interspersed with a few long, nearly decumbent golden setae. *Elytra.* Surface very slightly rugose; minutely, sparsely punctate; with coarse, sparse punctures from which emerges a long, erect golden seta (sub-aligned in basal half); with minute, sparse, decumbent pale-yellow setae; apex rounded at outer side, somewhat rounded projection at sutural angle. *Legs.* Femora clavate; with pale-yellow pubescence not obscuring integument, with long, erect, sparse pale-yellow setae interspersed. Tibiae slightly, gradually widened toward apex; with pale-yellow pubescence not obscuring integument, with long, erect pale-yellow setae interspersed. Metatarsomere I about as long as II–III together.

Abdomen. Ventrites with yellowish-white pubescence not obscuring integument, slightly denser laterally, interspersed with long erect, sparse pale-yellow setae, except in glabrous yellowish area of ventrites I–IV. Apex of ventrite V, widely, slightly emarginate centrally.

Dimensions in mm (holotype male). Total length 7.00; prothoracic length 1.60; basal prothoracic width 1.20; distal prothoracic width 1.20; max. prothoracic width 1.30; humeral width 1.65; elytral length 4.65.

Type material. Holotype male from BOLIVIA, *Santa Cruz*: Refugio Los Volcanes (4 km N Bermejo; 18°10'S / 63°60'W; 1,045–1,350 m), 31.X.2013, J. Wappes & K. Kuckartz col. (FSCA).

Etymology. Named for Norm Woodley, Hereford, AZ, who has so kindly assisted the authors with numerous reviews, consultation on difficult taxonomic problems and for his valued friendship.

Remarks. *Compsibidion woodleyi* sp. n. shares the characters of thick antennomere III, which is not carinate, with a number of other species of *Compsibidion*. However, it differs from them as follows: 1. *C. angulare* (Thomson, 1867) – outer angle of elytral apex unarmed, and pronotum lacking pubescent bands (*C. angulare* has elytral apex with outer angle spined and pubescent pronotal bands); 2. *C. balium* Napp and Martins, 1985 – general color dark brown, almost black, outer elytral apex unarmed (*C. balium* is generally colored orangish-yellow and the outer elytral apex has a long spine); 3. *C. clivum* Martins, 1971 – thicker body, antennomere III widened from near the base, then parallel-sided, and elytral apex distinctly wider (*C. clivum* has body slender, antennomere III gradually widened toward apex, and elytral apex distinctly narrower); 4. *C. concisum* Napp and Martins, 1985 – base and apex of the elytra similarly colored, and elytral apex unarmed (*C. concisum* has base and apex of the elytra with distinctly different color, and elytral apex with outer spine); 5. *C. decemmaculatum* (Martins, 1960) – antennomere IV thick, elytral setae not distinctly thick, elytral apex unarmed at outer angle (*C.*

decemmaculatum has antennomere IV slender, elytral apex slightly concave, with outer angle slightly projected, and elytral setae distinctly thick); 6. *C. fairmairei* (Thomson, 1865) – body robust, and elytral apex wide, with outer angle rounded (*C. fairmairei* with body slender, and elytral apex narrower, with outer angle not rounded); 7. *C. guanabarinum* (Martins, 1962) – elytra mostly dark brown, with outer angle unarmed (*C. guanabarinum* has large light areas on elytra, and outer angle of apices spiniform); 8. *C. inflatum* Martins and Galileo, 2014 – antennomere III parallel-sided almost from the base, elytral setae about as long as diameter of antennomere III, and prothorax slightly wider than length of antennomere III (*C. inflatum* has antennomere III gradually widened from base, with elytral setae distinctly longer than diameter of antennomere III, and prothorax distinctly wider than length of antennomere III); 9. *C. inornatum* (Martins, 1962) – elytra with light macula in basal half, and elytral apex unarmed (*C. inornatum* without macula, and with long spine at outer elytral apex); 10. *C. megarthron* (Martins, 1962) – elytra nearly entirely dark, and elytral apex unarmed (*C. megarthron* nearly entirely light, and elytral apex with long spine at outer angle); 11. *C. monnei* Martins, 1969 – general color dark brown, almost black, and elytra with a single, oblique light macula directed toward scutellum (*C. monnei* with general color light reddish-brown, and elytra with two light maculae, the anterior one elliptical and not directed toward scutellum); 12. *C. paradoxum* Martins, 1971 – elytra nearly entirely dark, and antennomere IV short and thick (*C. paradoxum* with elytra entirely lighter, and antennomere IV long and slender); 13. *C. psydrum* Martins, 1969 – elytra nearly entirely dark, with apex wide and unarmed (*C. psydrum* has elytra mostly light, and elytral apex narrow, and projected at outer angle); 14. *C. punga* Martins and Galileo, 2007 – antennomere IV thick, and elytral apex unarmed (*C. punga* has antennomere IV slender, and elytral apex spiniform at outer angle); 15. *C. reichardti* (Martins, 1962) – elytra mostly dark brown (*C. reichardti* has basal half of the elytra reddish and distal half black); 16. *C. singulare* (Gounelle, 1909) – antennomere IV thick, and outer elytral apex unarmed (*C. singulare* has antennomere IV not thick, and outer elytral apex spiniform); 17. *C. sphaeriinum* (Bates, 1870) – antennomere IV thick, and outer elytral apex unarmed (*C. sphaeriinum* has antennomere IV not thick, and outer elytral apex spiniform); 18. *C. taperu* Martins and Galileo, 2007 – pronotum without dense white pubescent macula, and elytra nearly entirely dark, with outer angle rounded (*C. taperu* with dense pubescent macula, and elytra with large light areas); 19. *C. trichocerum* (Martins, 1962) – elytra nearly entirely dark, elytral apex with rounded outer angle (*C. trichocerum* nearly entirely reddish, and outer elytral apex with long spine); 20. *C. trinidadense* (Gilmour, 1963) – antennomere III about as wide as IV, and elytral apex rounded at outer angle (*C. trinidadense* has antennomere III distinctly wider than IV, and elytral apex spiniform); 21. *C. unifasciatum* (Gounelle, 1909) – antennomere IV thick, and elytral apex unarmed (*C. unifasciatum* has antennomere IV slender, and elytral apex with spine at outer angle); 22. *C. varipenne* Martins, 1969 – antennomere IV thick, and outer elytral apex rounded (*C. varipenne* has antennomere IV slender, and elytral apex spiniform).

Currently, 17 species of *Compsibidion* are only known from females. Of these, five lack spines on the outer elytral apex as in the holotype male of *C. woodleyi* sp. n. Typically, this kind of sexual dimorphism (elytral apex armed in female and unarmed in male) does not occur in *Compsibidion*. Of the five species with unarmed outer elytral apex, only *C. achiraensis* Santos-Silva, Galileo and Wappes, 2017 and *C. amboroensis* Santos-Silva, Galileo and Wappes, 2017 could even remotely be confused with the new species (the general appearance of the other three are dramatically different). *Compsibidion woodleyi* sp. n. differs from both these species by the light elytral macula placed at basal third, smaller, and ending away from the suture (placed at about middle, larger, and ending nearer the suture in *C. achiraensis* and *C. amboroensis*), and elytral apex almost truncate (uniformly rounded in *C. achiraensis* and *C. amboroensis*).

Compsibidion woodleyi sp. n. can be included in the alternative of couplet “4” from Santos-Silva et al. (2017):

- 4'(2). Elytral apex wide, nearly truncate; with light-colored elytral macula placed at basal third;
 Bolivia ***C. woodleyi* Wappes, Santos-Silva and Galileo, new species**
 — Elytral apex uniformly rounded, with light-colored elytral macula placed at about middle. . 4

- 4(4'). Upper eye lobes with 5 rows of ommatidia; elytra at least partially with moderately abundant, decumbent pubescence; Bolivia
 *C. amboroensis* Santos-Silva, Galileo and Wappes, 2017
 — Upper eye lobes with 3 rows of ommatidia; elytra with very sparse, decumbent pubescence; Bolivia
 *C. achiraensis* Santos-Silva, Galileo and Wappes, 2017

Lamiinae

Calliini

Drycothaea dozieri Wappes, Santos-Silva and Galileo, new species

(Fig. 5–9)

Description. Female. Integument mostly dark brown; anteclypeus reddish-brown; distal half of labrum yellowish-brown; most of mouthparts reddish-brown, with palpi almost black except yellowish apex of each segment; antennomere III dark reddish-brown basally, gradually darkening to darker brown apex; antennomere IV reddish-brown basally, brownish on wide central area, dark brown on apex; antennomeres V–X light reddish-brown, gradually slightly darkened on wide central area, dark brown on apex (this latter area gradually smaller and less conspicuous toward X); antennomere XI light reddish-brown; apex of abdominal ventrites I–IV narrowly yellowish-brown. Pubescence pale-yellow (more whitish or golden depending on angle of light source).

Head. Frons coarsely, sparsely punctate; pubescence moderately abundant, not obscuring integument; with long, erect dark seta emerging from nearly all punctures, and close to eyes. Area between antennal tubercles with sculpturing, pubescence, and erect setae as on frons. Area between upper eye lobes with row of punctures, slightly coarser than on frons, on each side of central groove; pubescence as on frons; with a long, erect dark seta emerging from some punctures. Remaining surface of vertex minutely punctate; pubescence sparser than on frons; without erect setae. Area behind eyes minutely punctate (less so behind lower eye lobes); pubescent close to eye, nearly glabrous close to prothorax; with a few long, erect dark setae close to lower eye lobe. Genae very finely, transversely striate; with sparse pubescence close to eye, glabrous toward apex. Antennal tubercles impunctate; pubescence as on frons; with a few long, erect dark setae. Median groove distinct from clypeus to area between antennal tubercles, just indicated from this point to prothorax. Postclypeus coarsely, sparsely punctate in center, slightly rugose in remaining wide central area, smooth laterally; pubescence as on frons in wide central area, gradually sparser toward anteclypeus, glabrous in smooth area; with long, erect, sparse dark setae in pubescent area (one very long on each side). Labrum coplanar with anteclypeus in basal 2/3, inclined at distal third; minutely, abundantly punctate, with interspersed slightly coarser punctures at apex of basal 2/3; with sparse pubescence interspersed with long, erect dark setae directed forward; with fringe of golden setae at apex. Gula smooth, glabrous toward prothorax, finely punctate, sparsely pubescent, with a few long, erect setae toward mouthparts. Distance between upper eye lobes 0.39 times length of scape; in frontal view, distance between lower eye lobes 0.78 times length of scape. Antennae 1.4 times elytral length, reaching elytral apex at base of antennomere XI; scape slightly widened toward apex; moderately coarsely, sparsely punctate; pubescence not obscuring integument, interspersed with long, erect dark setae; antennomeres III–X with long, erect dark setae ventrally (gradually shorter, sparser toward X), and long, erect dark setae at dorsal apex (shorter toward X); Antennal formula (ratio) based on antennomere III: scape = 0.93; pedicel = 0.22; IV = 0.95; V = 0.82; VI = 0.73; VII = 0.67; VIII = 0.58; IX = 0.53; X = 0.42; XI = 0.47.

Thorax. Prothorax 1.5 times wider than long (including lateral tubercles); lateral tubercles moderately large, conical, nearly acute at apex, placed at about middle. Pronotum with large, subcircular, slightly distinct gibbosity on each side of distal half, and elongate, slightly elevated gibbosity at center of basal half; coarsely, sparsely punctate except on smooth central gibbosity; pubescence moderately abundant, not obscuring integument; with long, erect dark setae emerging from some punctures. Sides of prothorax

smooth between base and lateral tubercle, coarsely punctate close to pronotum between lateral tubercle and narrow, smooth distal area; pubescence moderately abundant, not obscuring integument; with long, erect dark setae emerging from some punctures. Prosternum very finely rugose, with interspersed fine punctures; pubescence not obscuring integument; with long, erect dark setae toward prosternal process; prosternal process noticeably narrowed centrally. Ventral side of meso- and metathorax with pubescence not obscuring integument, slightly sparser centrally. Mesoventral process slightly longitudinally elevated centrally; apex emarginate. Scutellum with yellow pubescence, denser toward margins. *Elytra*. Coarsely, abundantly punctate (slightly finer, sparser toward apex); pubescence abundant, not obscuring integument; with long, erect, dark setae emerging from punctures; apex rounded. *Legs*. Femora moderately finely, sparsely punctate; pubescence abundant, not obscuring integument; with a few long, erect dark setae. Tibiae slightly, gradually widened toward apex; with abundant, long erect, dark and yellowish setae, especially dorsally on meso- and metatibiae. Metatarsomere I slightly shorter than II–III together.

Abdomen. Pubescence abundant, not obscuring integument; apex of ventrite V truncate.

Dimensions in mm (holotype female). Total length 7.55; prothoracic length 1.45; basal prothoracic width 1.70; distal prothoracic width 1.50; max. prothoracic width 2.15; humeral width 2.70; elytral length 5.45.

Type material. Holotype female from BOLIVIA, *Santa Cruz*: Potrerillo del Guendá (350–400 m; 17°40'S / 63°27'W), 7-9.IX.2012, J. Wappes, P. Skelley and T. Bonaso col. (FSCA).

Etymology. Named to honor B. K. “Byrd” Dozier, an avid lifetime collector of beetles (especially the Buprestidae and Cerambycidae), whose most favorite collection locality in Bolivia is Potrerillo del Guenda, the type locality of this species (Note: in February of this year Byrd celebrated his 91st Birthday!)

Remarks. *Drycothaea dozieri* sp. n. differs from *D. angustifrons* (Breuning, 1943) by the distance between upper eye lobes wider than width of one upper lobe (at most equal to width of an upper lobe in *D. angustifrons*), and tubercle of mesoventral process not forming elevated keel (forming elevated keel in *D. angustifrons*). The new species differs from *D. viridescens* (Buquet, 1857) by the mesoventral process without an elevated central tubercle (Fig. 6) (tubercle present in *D. viridescens* (Fig. 10)).

Drycothaea dozieri sp. n. can be included in the alternative of couplet “22” from Galileo and Martins (2010):

- 22'(21). Mesoventral process without distinct elevated tubercle; Bolivia
 ***D. dozieri* Wappes, Santos-Silva and Galileo, new species**
 — Mesoventral process with distinct elevated tubercle **22**
- 22(22'). Elytral punctures separated, those of row close to suture, at central area, separated by distance equal to twice the diameter of a puncture; punctures of distal area of the elytra sparse; Venezuela ***D. estola* (Lameere, 1893)**
 — Elytral punctures of the row close to suture, at central area, separated by distance equal to diameter of a puncture; punctures of distal area of the elytra not distinctly sparse; Brazil (Bahia, Espírito Santo, Rio de Janeiro, São Paulo, Santa Catarina), Paraguay, Argentina (Misiones) ***D. viridescens* (Buquet, 1857)**

***Mallodon downesii* Hope, 1843**

(Fig. 11)

Mallodon downesii Hope 1843: 366; Tavakilian and Chevillotte 2018: website (cat.).

In 2009, a male specimen of *Mallodon downesii* was collected in a light trap in Costa Rica: “La Ceiba Manzanillo”. The place is a private reserve near “Refugio de vida silvestre Gandoca-Manzanillo” and Puerto Viejo, in the southern Caribbean Zone of Costa Rica, province of Limón. As INBio has a very large collection of insects from Costa Rica, we sent photographs of the specimen to Angel Solís asking if he was aware of other specimens of this species from the country. He made an extensive search of the INBio collection but was not able to locate additional specimens. Since it is impossible to know how the



Figure 11. *Mallodon downesii*, male, dorsal habitus of the specimen collected in Costa Rica.

specimen was introduced into Costa Rica, it is considered an incidental introduction.

According to Delahaye and Tavakilian (2009), *Mallodon downesii* occurs in: “Afrique du Sud, Angola, Bénin, Botswana, Burundi, Cameroun, République Centrafricaine, Comores, Côte d’Ivoire, Ethiopie, Gabon, Gambie, Guinée, Guinée-Bissau, Kenya, Liberia, Madagascar, Mali, Mayotte, Mozambique, Namibie, Nigeria, Ouganda, République Populaire du Congo, République Démocratique du Congo, Rwanda, São Tomé, Sénégal, Sierra Leone, Tanzanie, Togo, Zambie, Zimbabwe.” We were not able to find a work citing this species as occurring outside of Africa.

Full bibliographic references for *Mallodon downesii* are available in Tavakilian and Chevillotte (2018).

Material examined. COSTA RICA, *Limón*: La Ceiba Manzanillo (“cebo luminoso”), 1 male, 17.IV.2009, José Esteban Durán col. (MZSP).

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