

Rediscovery of primary type specimens and lectotype designation for *Bolboceras excavatum* R. A. Philippi, 1859 (Coleoptera: Geotrupidae)

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Abstract. A primary type of *Bolboceras excavatum* R. A. Philippi, 1859 in F. PHILIPPI (1859) (Coleoptera: Geotrupidae: Bolboceratinae) was rediscovered and is designated as a lectotype. The previous neotype designation is set aside. *Bolboceras excavatum* is confirmed as junior synonym of *Bolborhinum laesicolle* (Fairmaire, 1856), which occurs in Chile and Argentina. Photographs of the lectotype and its labels are provided.

Key words. Coleoptera, Geotrupidae, Bolboceratinae, *Bolborhinum*, neotype, lectotype, Argentina, Chile, Neotropical Region

Introduction

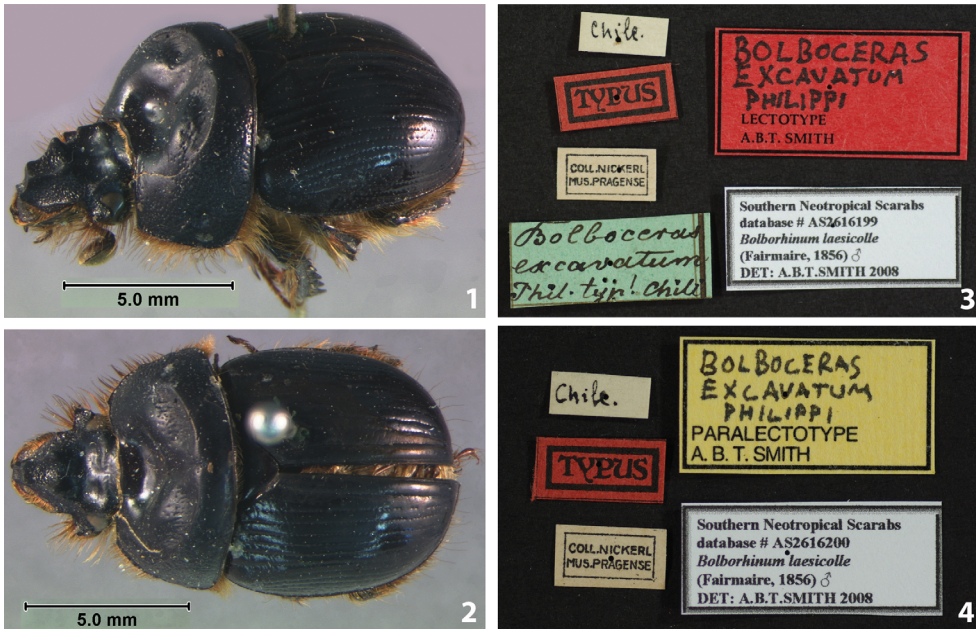
The genus *Bolborhinum* Boucomont, 1911 (Coleoptera: Geotrupidae: Bolboceratinae) was recently revised by MONDACA & SMITH (2008) and several lectotypes and neotypes were designated for both valid species and junior subjective synonyms within the genus. One of the neotypes designated was for the name *Bolboceras excavatum* R. A. Philippi, 1859, a junior synonym of *Bolborhinum laesicolle* (Fairmaire, 1856). Subsequently, BEZDĚK & HÁJEK (2009) discovered that three syntypes of *Bolboceras excavatum* were housed in the National Museum in Prague, Czech Republic (= NMPC). The purpose of this paper is to confirm that the previous neotype designation for *Bolboceras excavatum* must be set aside and to designate a lectotype from the syntype series from NMPC.

Taxonomy

***Bolboceras excavatum* R. A. Philippi, 1859**

Bolboceras excavatus R. A. Philippi, 1859 in F. PHILIPPI (1859: 660).

Bolboceras excavatum: BOUCOMONT (1912: 11) (catalogue; correction of gender agreement).



Figs 1–4. *Bolboceras excavatum* R. A. Philippi, 1859. 1 – lectotype, oblique view; 2 – lectotype, dorsal view; 3 – lectotype, labels; 4 – paralectotype, labels.

Type locality. Chile, Región de Los Ríos (XIV), ‘cerca de Corral [= environs of Corral]’.

Type material examined. LECTOTYPE (here designated) (Figs 1–3): ♂, ‘Chile [handwritten] // TYPUS [typeset, red label, black margin] // COLL. NICKERL / MUS. PRAGENSE [typeset] // Bolboceras / excavatum / Phil. Typ! Chile [handwritten, green label, black margin on right side] // BOLBOCERAS / EXCAVATUM / PHILIPPI [handwritten] / LECTOTYPE / A.B.T. SMITH [typeset, red label, black margin] // Southern Neotropical Scarabs / database # AS2616199 / *Bolborhinum laesicolle* / (Fairmaire, 1856) ♂ / DET: A.B.T. SMITH 2008 [typeset]’ (NMPC).

PARALECTOTYPE: 1 ♂ (Fig. 4), ‘Chile [handwritten] // Typus [typeset, red label, black margin] // COLL. NICKERL, MUS. PRAGENSE [typeset] // BOLBOCERAS / EXCAVATUM / PHILIPPI [handwritten] // PARALECTOTYPE / A.B.T. SMITH [typeset, yellow label, black margin] // Southern Neotropical Scarabs / database # AS2616200 / *Bolborhinum laesicolle* / (Fairmaire, 1856) ♂ / DET: A.B.T. SMITH 2008 [typeset]’ (NMPC).

Other type material. PARALECTOTYPE: 1 specimen, ‘Chile [handwritten] // Typus [typeset, red label, black margin] // COLL. NICKERL, MUS. PRAGENSE [typeset]’ (NMPC). Not examined, see BEZDĚK & HÁJEK (2009).

Discussion

BEZDĚK & HÁJEK (2009) rediscovered and catalogued the original type series of *Bolboceras excavatum*, which in effect set aside the neotype designation by MONDACA & SMITH (2008) (see Article 75.8 of the ICZN 1999). I accept the assessment of BEZDĚK & HÁJEK (2009) that these specimens are genuine original type specimens, as R. A. Philippi was known to send specimens to European collectors such as the Nickerl family. I examined two of the three

specimens from the original type series and there is no doubt that they are conspecific with the MONDACA & SMITH (2008) concept of *Bolborhinum laesicolle*. I am designating one of these two specimens as the lectotype so there is a single, name-bearing specimen for the species name *Bolboceras excavatum*. None of these actions change the MONDACA & SMITH (2008) species concepts for *Bolborhinum* or alter any of the valid names in this genus.

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