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Ferrerianus, new genus for *Aphodius biimpessus* Schmidt, 1909
(Scarabaeoidea: Aphodiidae)

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Abstract. *Ferrerianus*, new genus of South American Aphodiini is created for *Aphodius biimpressus* Schmidt from Paraguay; the latter is figured and lectotype is designated.

Key words. *Ferrerianus*, new genus, *biimpressus* Schmidt, new combination, lectotype designation, Paraguay, Aphodiidae.

Introduction

In preparation for a complete treatment of Mexican Aphodiinae and other research on Aphodiini south of Mexico, we deem it necessary to update the systematics of some South American taxa based on a study of the types. This is the first of several papers in preparation.

We herein describe a highly distinctive South American genus whose main characters are: scutellum small, triangular; fore tibial upper surface impunctate; hind tibiae apically fimbriate with elongate spinules alternately unequal; base of pronotum bordered; frontal suture not tuberculate; elytra not denticulate at shoulder. This new genus is immediately distinguishable from other genera sharing some of the above mentioned characters by the peculiar shape of the epipharynx (Fig. 1) and aedeagus (Fig. 4-5) and by the fore tibiae in males lacking an apical spur (Fig. 2). This feature is shared by few genera of Aphodiinae (e.g. *Osmanius* Branco and Baraud, *Paracoptochirus* Balthasar, and *Coptochirus* Harold).

Terminology used to describe morphological features follows that of Dellacasa G. et al. (2001).

Ferrerianus Dellacasa, Dellacasa, and Gordon, new genus

Diagnosis. *Species parvae, oblongae, convexae, modice nitidae, glabrae. Obscure rufo-brunneae. Capite clypeo medio leviter sinuato, lateribus rotundato; genis parum prominulis; sutura frontali mutica. Pronoto modice transverso, subaequaliter satis sparse punctato, ante angulos posticos depresso; basi robuste marginato. Scutello parvo, triangulariter elongato. Elytra striis valde impressis, fortiter punctatis, subcrenulatis; interstitiis convexiusculis, sparse punctulatis. Mare tibiis anticis haud mucronatis. Metatibiis setis apicalibus longitudine alterne inaequalibus.*

Type species. *Aphodius biimpressus* Schmidt, 1909, by present designation.

Description. Small species (length 2.5-3.0 mm); oblong, convex, moderately shiny, glabrous. Dark brownish-red. Head with epistome evenly finely punctured; clypeus feebly sinuate at middle, rounded at sides; genae slightly protruding more than eyes; frontal suture mutic. Pronotum moderately transverse, convex, distinctly depressed before hind angles, almost evenly not closely punctured; base thickly bordered.

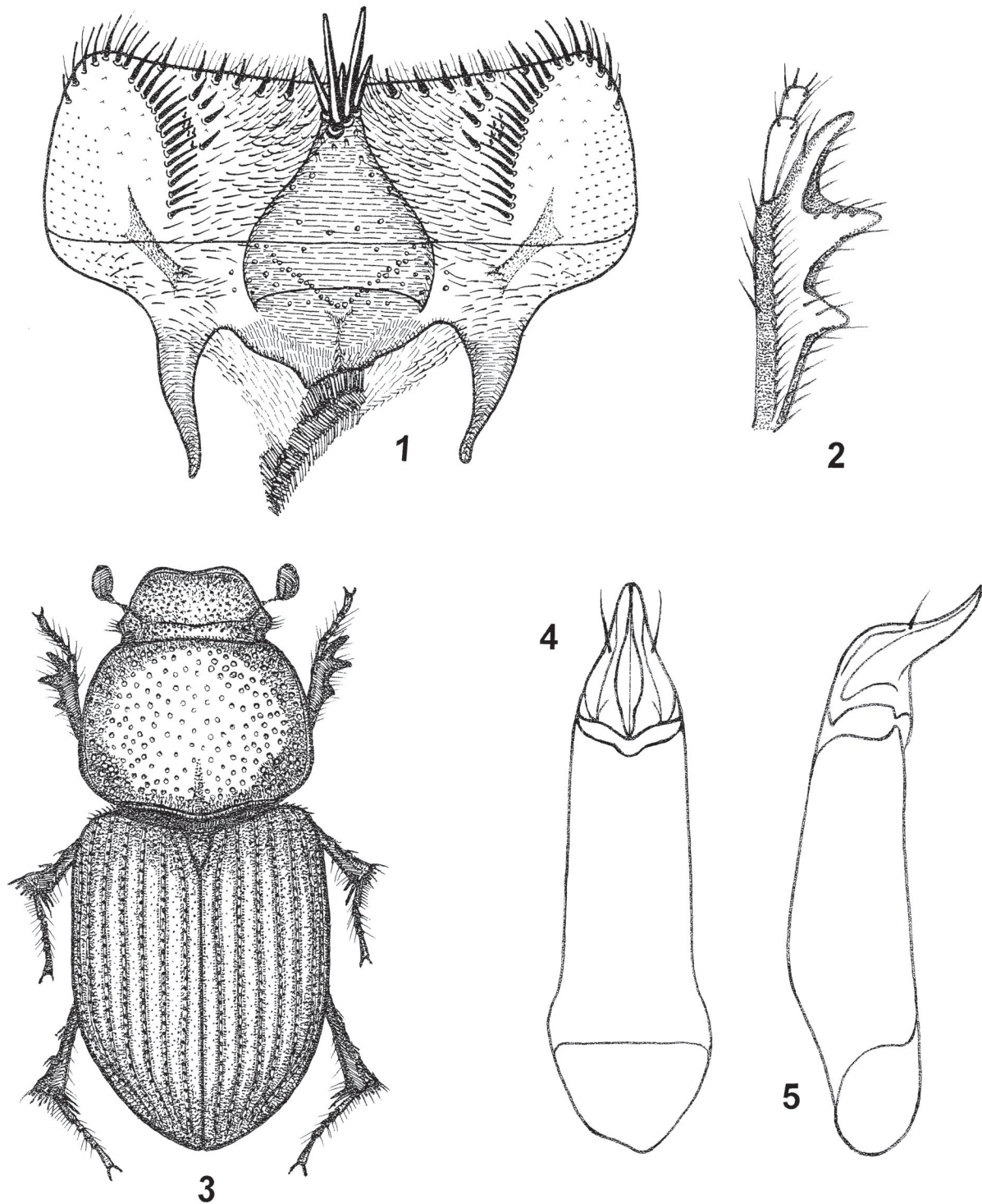


Figure. 1-5. *Ferrerianus biimpressus* (Schmidt, 1909) (male, length 3.0 mm, Paraguay). **1)** Epipharynx. **2)** Left fore tibia of male (ventral view). **3)** Morphological details of male habitus. **4-5)** Aedeagus (dorsal and lateral view).

Scutellum small, triangularly elongate. Elytra rather deeply striate, striae coarsely punctured, feebly crenulate; intervals slightly convex, sparsely finely punctured. Fore tibiae distally tridentate, proximally not serrulate at outer margin; upperside impunctate. Hind tibiae with rather feeble transverse carinae on outer face, apically fimbriate with stout spinules alternately unequal. Pygidium finely alutaceous, sparsely superficially punctured; each puncture elongately setigerous; apical margin with few sparse very elongate setae. Male fore tibiae without apical spur; female unknown. Aedeagus with paramera very short, nearly as long as one fourth of tegmen, in lateral view abruptly curved and acuminate; each one with a long curved anteroprotruding seta at half of length; tegmen slender, subcylindrical. Epipharynx with anterior margin slightly curved inwardly, feebly rounded at sides; epitorma conical; corypha with a clump of strong apical chaetae, central ones protruding more than front margin; pedia densely pubescent, with a transverse anterior row and few lateral short chaetae; chaetopariae moderately elongate, rather densely arranged.

Distribution. Known from Paraguay only.

Etymology. Named in honour of Julius Ferrer (Stockholm), an eminent specialist of the Tenebrionidae.

***Ferrerianus biimpessus* (Schmidt, 1909), new combination**

(Fig. 1-5)

Aphodius biimpessus Schmidt, 1909: 177; Blackwelder, 1944: 212.

Aphodius (*Orodalus*) *biimpessus*; Schmidt, 1913: 158; Schmidt, 1922: 260.

Aphodius (*Euorodalus*) *biimpessus*; Dellacasa M., 1988: 98.

Type locality. Paraguay.

Type repository. Naturhistoriska Riksmuseet, Stockholm.

Description. Length 2.5-3.0 mm; oblong, convex, moderately shiny, glabrous. Dark brownish-red; clypeal margin, pronotal sides and elytral apex somewhat paler; legs yellowish-brown; antennal club brownish-black. Head with epistome moderately convex, finely alutaceous, evenly finely not closely punctured; clypeus feebly sinuate at middle, broadly rounded at sides, rather thickly bordered, edge feebly upturned, glabrous; genae obtusely rounded, sparsely ciliate, slightly protruding more than eyes; frontal suture not tuberculate, distinctly impressed medially; front somewhat more irregularly coarsely punctured than epistome. Pronotum convex, moderately transverse, rather deeply depressed before hind angles, more superficially near front angles, medially with short superficial groove near the basal margin, almost evenly, rather sparsely punctured; punctures somewhat larger and coarser on sides; lateral margins feebly arcuate, rather thickly bordered, edge glabrous; hind angles obtusely rounded; base bisinuate, thickly bordered. Scutellum flat, with few sparse punctures near base. Elytra moderately convex, deeply striate; striae coarsely, not very closely punctured, feebly crenulate; intervals finely alutaceous, slightly convex, finely sparsely punctured; punctation denser and coarser preapically. Metasternal plate excavate and shortly shallowly longitudinally grooved at middle, sparsely distinctly punctured on sides; each puncture elongately setigerous. Hind tibiae superior apical spur as long as first tarsal segment; latter somewhat longer than following two combined. Male: fore tibiae without apical spur; first segment of anterior tarsi almost as long as first outer teeth of tibia; aedeagus Fig. 4-5. Female: unknown.

Type material. Lectotype (male, **herein designated**) bearing the following labels: 1) white, printed: Paraguay; 2) white, handwritten: *biimpessus* m.; 3) red, printed: TYPUS; 4) red, printed: *Aphodius biimpessus* Sch., Dt. Stebnicka '00, HOLOTYPE; 5) red, printed: *Aphodius biimpessus* Schmidt A., 1909, LECTOTYPE, Dellacasa des. 2007. Paralectotype (male) bearing the following labels: 1) white, printed: Paraguay; 2) red, printed: *Aphodius biimpessus* Sch., Dt. Stebnicka '00; 3) red, printed: *Aphodius biimpessus* Schmidt A., 1909, PARALECTOTYPE, Dellacasa des. 2007.

Distribution. Known from the type locality only.

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