Jalisco plumipes, new genus and new species of Mexican Aphodiini (Scarabaeoidea: Aphodiidae)

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Abstract: Jalisco plumipes, new genus and new species of Mexican Aphodiini, is described and figured.

Key words: Jalisco plumipes, new genus, new species, Mexico, Aphodiidae.

Introduction

A complete treatment of the Mexican Aphodiinae is our ultimate goal; however, we find it desirable to publish some of the preliminary findings to simplify future progress. Here we describe a highly distinctive genus not closely allied to any presently known generic taxon.

Jalisco Dellacasa, Gordon and Dellacasa, new genus

Diagnosis: species parvae, breviter ovales, convexae, nitidae, glabrae. Castaneae, elytris apice pallidioribus. Capite epistoma fortiter, regulariter, dense punctato; clypeo antice subtruncato, lateribus rotundatis; genis prominulis; sutura frontali mutica. Pronoto confertim punctato; angulis posticis oblique late truncatis; basi immarginata. Scutello parvo, triangulari. Elytris humeribus distincte denticulatis, valde striatis, striis impunctatis; interstitiis planis, dense fortiter subvermiculate punctatis. Metatibiis setis apicalibus, curtulis, robustis, longitudine inaequalibus. Tarsis articulo primo longiore quam sequentibus quatuor simul sumptis; secundo, tertio quartoque aciniformis, quinto subcylindrico longiore quam quarto; articulis I-IV longe denseque pubescentibus.

Type species: Jalisco plumipes Dellacasa, Gordon and Dellacasa, new species, by prersent designation.

Description: small species (length 4.0-4.5 mm); short, oval, strongly convex, shiny, glabrous. Color chestnut brown, elytral apex vaguely paler. Head with epistoma coarsely, densely, evenly punctured; clypeus subtruncate, widely rounded at sides, narrowly bordered, border feebly upturned, glabrous; genae obtusely angulate, with very short, sparse bristles, distinctly protruding beyond eyes; frontal suture not tuberculate. Pronotum transverse, convex, coarsely densely, evenly punctured; hind angles widely obtusely truncate; base not bordered. Scutellum small, regularly triangular. Elytra short, oval, convex, strongly denticulate at humeral angle; striae deep, impuncate; interstices with dense, coarse, subvermiculate punctation. Fore tibiae distally tridentate and proximally finely serrulate on outer margin; upper side coarsely, irregularly, rather sparsely punctured. Middle and hind tibiae slender, with two feeble transverse carinae on outer face, apically fimbriate with rather short, stout, irregularly elongate unequal spinules. Tarsi with the first segment longer than following four combined; the second, third and fourth aciniform, the fifth subcylindrical, longer than the fourth; segments from first to fourth with dense and very elongate pubescence. Claws slender, corneous. Pygidium strongly microreticulate, almost dull, confusedly superficially punctured, glabrous. Sexual di-

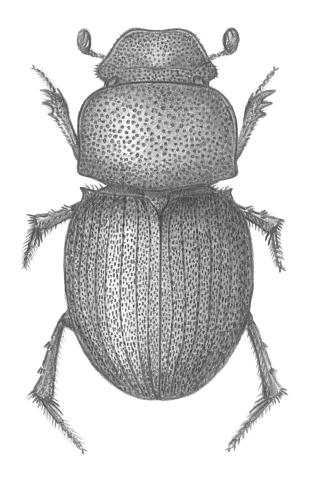


Figure 1. Jalisco plumipes n. gen. and n. sp.: habitus (male, length 4.0 mm).

morphism shown in males by the relatively shorter and more transverse shape and by the flat, smooth, metasternal plate without median longitudinal groove. Aedeagus (Fig. 3-4) with paramera short, apically narrowed and strongly acuminate. Epipharynx (Fig. 5) deeply sinuate at middle of anterior margin, widely rounded at sides; epitorma drop-shaped; corypha with two strong, moderately elongate apical spiculae; pedia densely pubescent, mostly near epitorma and with several strong chaetae intermixed; chaetoparia moderately elongate, rather densely arranged; dexio- and pternotorma very short.

Distribution: known from Mexico (state of Jalisco) only.

Etymology: the genus name refers to the Mexican state. The gender is neuter.

Remarks: *Jalisco* is distinguished from all presently known genera of Aphodiini by the unique tarsal shape and pubescence (Fig. 6) that are remotely similar to those of *Sugrames* Reitter and *Sitiphus* Fairmaire. *Jalisco* keys to couplet 31 in the key to genera of Aphodiini (Dellacasa G. *et al.* 2001), but is immediately distinguished from any genera included there by the tarsal shape and pubescence.

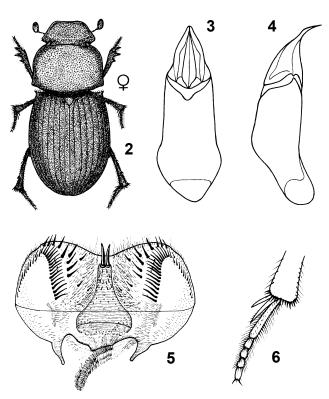
Jalisco plumipes Dellacasa, Gordon and Dellacasa, new species

(Figs. 1-6)

Type locality: "Las Joyas", Sierra Manantlán, Jalisco, Mexico

Type depository: United States National Museum of Natural History, Smithsonian Institution, Washington, D.C.

Description: length 4.0-4.5 mm; short, oval, strongly convex, shiny, glabrous. Color chestnut brown, elytral apex widely paler; legs brownish; antennal club piceous. Head with epistome finely microreticu-



Figures 2-6. *Jalisco plumipes* n. gen. and n. sp.: 2) habitus (female, length 4.5 mm); 3 - 4) aedeagus (dorsal and lateral view); 5) epipharynx; 6) right metatarsus (dorsal view).

late, feebly convex, coarsely, densely and evenly punctured; clypeus anteriorly subtruncate, narrowly bordered, widely rounded at sides; genae obtusely angulate, strongly protruding beyond eyes; frontal suture not tuberculate, very finely impressed; front coarsely, densely and evenly punctured. Pronotum widely transverse, moderately convex, finely microreticulate, coarsely, densely and evenly punctured, sides narrowly bordered, slightly sinuate inwardly before hind angles; latter obtusely truncate; base not bordered; basal margin crenulate by a belt of contiguous coarse punctures. Scutellum widely triangular, somewhat convex, irregularly punctured on basal half. Elytra convex, short, oval, strongly denticulate at shoulder; striae deep, rather wide, impunctate; interstices flat, distinctly microreticulate, with dense, coarse and subvermiculate punctation. Hind tibiae with superior apical spur shorter than first tarsal segment; latter somewhat longer than following four combined. Male (Fig. 1): head and pronotum relatively more transverse and less convex; elytra somewhat shorter; metasternal plate flat, smooth, without trace of median longitudinal groove. Female (Fig. 2): head and pronotum relatively less transverse and more convex; elytra somewhat longer; metasternal plate feebly incavate, sparsely and finely punctured, with trace of median longitudinal groove.

Type material: holotype (male): Mexico, Jalisco, Sierra Manantlán, "Las Joyas", m 1850, 15/20.07.1970, leg Torres D.; bosque mesófilo "*Carpinus*"; coprotrampa. Allotype (female): same data as holotype (Dellacasa Collection, Genoa, Italy)

Distribution: known from the type locality only.

Etymology: the name refers to the peculiar tarsal pubescence that resembles a feather.

Literature cited

Dellacasa, G., P. Bordat and M. Dellacasa. 2001. A revisional essay of world genus-group taxa of Aphodiini. Memorie della Società Entomologica Italiano, Genova, 79 (2000): 1-482.