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azm@ecologia.edu.mx

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Dellacasa, Marco; Stebnicka, Zdzislawa

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**A NEW GENUS FOR *OXYOMUS MOROSUS* HAROLD, 1869
(EUPARIINI) AND REDEFINITION OF *OXYOMUS
SETOSOPUNCTATUS* A. SCHMIDT, 1911 (APHODIINI)
(COLEOPTERA SCARABAEIDAE: APHODIINAE)**

Marco DELLACASA¹ and Zdzisława STEBNICKA²

¹ Università di Pisa. Centro interdipartimentale. Museo di Storia naturale e del Territorio. Via Roma, 79 - 56011 Calci (PI) ITALY

² Polish Academy of Sciences, Institute of Systematics and Evolution of Animals, ul. Sławkowska 17 – PL-31-016 Kraków POLAND

RESUMEN

Los lectotipos de *Oxyomus morosus* Harold, 1869 de Chile y *Oxyomus setosopunctatus* A. Schmidt, 1911 de México son designados. Mientras que la posición sistemática de *O. setosopunctatus* dentro de Aphodiini es confirmada, *Oxyomus morosus* es adscrita al nuevo género *Oxyataenius* (Eupariini).

Palabras Claves: Coleoptera, Aphodiini, Eupariini, *Oxyomus setosopunctatus*, [*Oxyomus*] *morosus*, *Oxyataenius* new genus, México, Chile.

ABSTRACT

The lectotypes of *Oxyomus morosus* Harold, 1869 from Chile and *Oxyomus setosopunctatus* A. Schmidt, 1911 from Mexico are herein designated. The systematic position of *O. setosopunctatus* within Aphodiini is ascertained, and *Oxyomus morosus* is transferred to the new genus *Oxyataenius* (Eupariini).

Key Words: Coleoptera, Aphodiini, Eupariini, *Oxyomus setosopunctatus*, [*Oxyomus*] *morosus*, *Oxyataenius* new genus, Mexico, Chile

INTRODUCTION

This paper is a systematic revision of taxa from the Mexican Transition Zone and Neotropical Region previously placed in the genus *Oxyomus* (i.e. *Oxyomus setosopunctatus* A. Schmidt, 1911 and *Oxyomus morosus* Harold, 1869). All character systems are considered including those of the aedeagus and epipharynx.

The study of type material indicates that "*Oxyomus*" *morosus* actually belongs to a new genus of Eupariini herein described while *setosopunctatus* is a true member of *Oxyomus*.

Dellacasa & Stebnicka: New genus and redefinition for *Oxyomus*

OXYATAENIUS new genus

Type species: *Oxyomus morosus* Harold, 1869

Diagnosis: small species (length 5 mm), body (Fig. 1) elongate oval, entirely pubescent. Head transverse, almost flat, epistome feebly convex medially, genal suture subcariniform; clypeus dilated to cover mouth parts, anterior margin truncate. Eye well developed. Antenna 9-segmented, club 3-segmented. Pronotum transverse, sides and base margined, surface posteriorly with shallow depressions on each side of basal margin. Scutellum small, widely triangular with two longitudinal punctate grooves. Elytra with irregular basal bead and distinct preapical umbone, margins fringed with setae; striae deep, wide, stria punctures moderate in size; intervals tectiform with two lateral rows of coarse setigerous punctures. Wings functional. Mesosternum scabrous, transversely rugose; metasternal lateral triangle distinct; abdominal sternites coalesced, sternites 3-5 coarsely fluted in anterior half, surface punctures large, bearing pale setae; pygidium (Fig. 6) with median transverse carina and wide basal groove, surface above carina setigerous, punctate, exposed apical portion with setigerous granules. Legs moderate in length; profemora grooved at anterior and posterior edge; meso- and metafemora setigerous, punctate; meso- and metatibiae slightly expanded apically, apex of metatibiae with few stout setae lacking accessory spine; spurs slender, both located close together below tarsal articulation; claws hornlike.

Distribution: Chile

***Oxyataenius morosus* (Harold, 1869) new combination**

(Figs. 1, 5-6)

Oxyomus morosus Harold, 1869:100; 1869: 1064; A. Schmidt, 1922: 385; Blackwelder, 1944: 213

Type locality: "Chili" [Chile]

Type depository: Muséum national d'Histoire naturelle. Paris (lectotype female examined).

Description of female: length 5.0 mm. Body (Fig. 1) moderately shining, covered with setae; colour piceous, elytra dark brown, legs brownish, underside reddish brown. Head large, feebly convex; clypeus truncate anteriorly with thickened and slightly upturned margin, sides widely rounded toward right-angled, strongly prominent genae; frontal suture indicated by two lateral impressed lines; surface microreticulate, evenly densely and coarsely punctured, punctures on sides with extremely short, nearly imperceptible pale hairs. Pronotum widely transverse, moderately convex; anterior angles rounded, sides arcuate toward rounded posterior angles; sides and base strongly bordered, lateral edge fringed with moderate in length, pale setae; surface narrowly deplanate at anterior angles with shallow depressions on each side of base, punctures very dense and coarse,

reticulate and setigerous on sides of pronotum. Scutellum widely triangular with curved sides and two longitudinal punctate grooves. Elytra elongate, parallel-sided with irregular basal bead, small humeral denticles and distinctly indicated preapical umbone; epipleural margin densely ciliate, striae deep, wide, subcrenulate by moderate punctures, intervals tectiform, microreticulate with two lateral rows of coarse, setigerous punctures concentrated along slightly elevated margins, setae longer on lateral intervals. Ventral sclerites microreticulate, setigerous; mesosternum scabrous with transverse rugae; mesocoxae placed close together; metasternum smooth, midline finely impressed, disc sparsely punctate, lateral metasternal triangle scabrous inside; abdominal sternites 3-5 with short coarse fluting in anterior half, large setigerous punctures sparse, extending from side to side; pygidium (Fig. 6) distinctly microreticulate, setigerously punctate above median carina, granulate and setigerous in posterior half. All femora with punctures bearing short, pale setae; protibial terminal spur short, apically moderately acuminate and slightly bent downward; mesotibiae with trace of transverse carinae; metatibiae slender without traces of carinae, surface fimbriate, apical setae stout, accessory spine lacking, spurs located close together below tarsal insertion; basal segment of metatarsi as long as upper tibial spur and subequal to following tarsal segments combined. Epipharynx as in figure 5. Male unknown.

Distribution: the species is known only from the type locality.

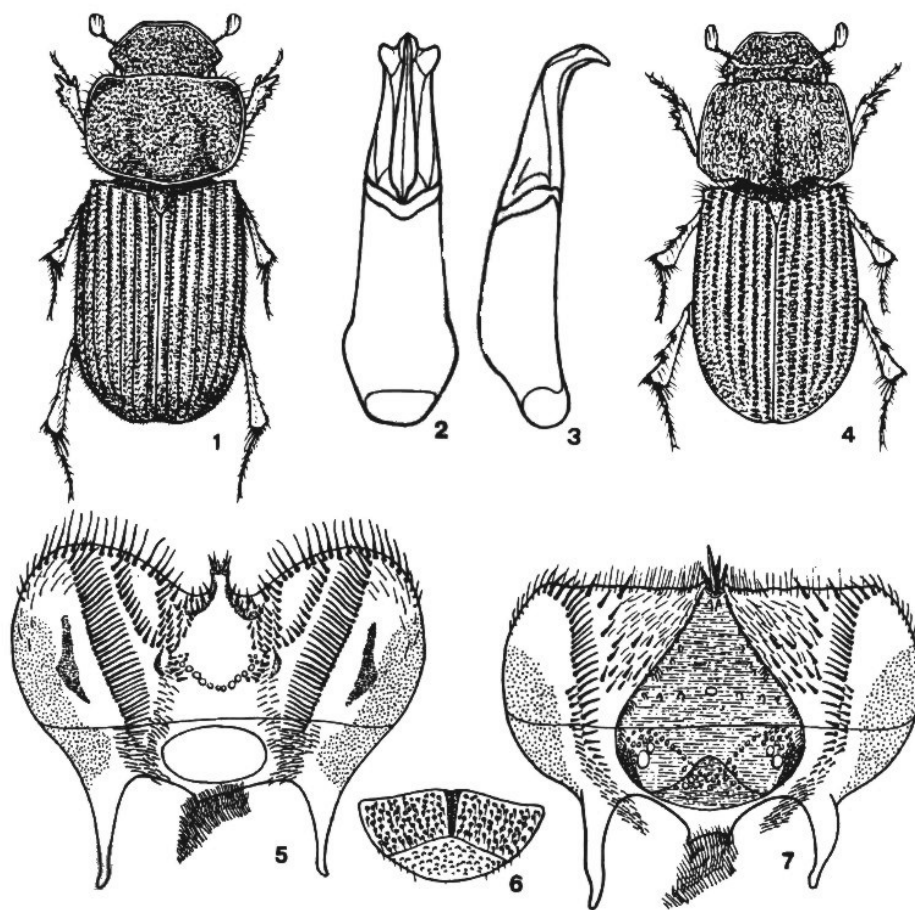
Material examined

The female specimen, **herein designate lectotype**, bears the following labels:

- 1) white, handwritten: Chili;
- 2) white, printed: Ex Musaeo E. Harold;
- 3) white, handwritten: *morosus* typ. Harold;
- 4) white, handwritten: Aphodiini/ Genus?/ *morosus* (Har.); printed: det. F. Chalumeau 1983;
- 5) red, printed: *Oxyomus morosus* Harold, 1869, lectotype, M. Dellacasa & Stebnicka des., 2000.

Remarks: this *Oxyomus*-appearing species does not fit easily into any of the genera outlined in either the Aphodine and Euparine complex. The new genus described above is unfortunately based on a unique female specimen and the very important features of the male genitalia remain unknown. However, *Oxyataenius morosus* can be definitely placed in the Eupariini on the basis of the combination of characters. Most of the latter are shared with *Ataenius* (see Stebnicka & Howden 1997) with special reference to the Neotropical species of that genus, e.g. to *Ataenius montanus* Schmidt from Ecuador with similar sculpture of the pronotum and elytra. The characters distinguishing *Oxyataenius* from *Ataenius* include the shape of head with flattened epistome, the sculpture of scutellum with longitudinal grooves, the elytra with preapical umbone, the piliferous abdominal sternites and sculpture of pygidium. The epipharyngeal structures are intermediate in form, showing a combination of character states found among some species of *Aphodius* and *Ataenius*. The new genus seems to be one of the transitional links between the above groups of taxa.

Dellacasa & Stebnicka: New genus and redefinition for *Oxyomus*



Figures 1-7

Oxytaenius morosus (Harold, 1869) (Chili): 1. habitus (female, length mm 5); 5. epipharynx; 6. pygidium. *Oxyomus setosopunctatus* A. Schmidt, 1911 (Mexico): 2-3. aedeagus (dorsal and lateral view); 4. habitus (male, length mm 3); 7. epipharynx.

***Oxyomus setosopunctatus* A. Schmidt, 1911**
(Figs. 2-4, 7)

Oxyomus setosopunctatus A. Schmidt, 1911: 15; A. Schmidt, 1922: 381; Blackwelder, 1944: 213

Type locality: Mexico

Type depository: Naturhistoriska Riksmuseet, Stockholm (lectotype examined)

Description: length 2,5-3,5 mm; oval-elongate, convex, strongly dull, pubescent. Blackish, sometimes elytra dirty brownish. Head with epistome anteriorly feebly convex, densely and coarsely punctured, punctures distinctly cariose and especially on sides with short backwardly recumbent pale hairs; clypeus subsinuate at middle, obtusely rounded at sides, very thinly bordered, border glabrous; genae obtuse, elongately ciliate, more protruding than eyes; latter normal-sized; frontal suture feebly raised, more distinct laterally. Pronotum transverse, moderately convex, toward base with a median feeble longitudinal groove and only with vestigia of lateral impressions on disc; very densely and coarsely punctured, punctures finely umbilicate and setigerous, pale hairs backwardly recumbent; sides slightly rounded, thickly bordered, border glabrous; hind angles obliquely truncate, truncation faintly inwardly sinuate; base distinctly bisinuate, not bordered. Scutellum very small, triangularly elongate, superficially microreticulate so almost shiny and with few large and setigerous punctures irregularly scattered. Elytra feebly oval, strongly convex, with a small humeral denticle; groove-shaped pseudostriae deeply transversely foveolate; pseudointerstices rather sharply cariniform, with a row of coarse, irregular and shortly setigerous punctures; pale hairs backwardly recumbent. Fore tibiae distally tridentate and proximally serrulate at outer margin; upperside minutely reticulate, smooth. Middle and hind tibiae with distinct transverse carinae on outer face; apically fimbriate with short, stout but somewhat irregularly elongate spinules. Hind tibiae superior apical spur shorter than first tarsal segment; latter longer than following two combined. Male: metasternal plate deeply incavate; densely, coarsely and almost irregularly punctured; anteriorly distinctly microreticulate and with shiny longitudinal groove at middle. Female: metasternal plate nearly flat, relatively less densely and coarsely punctured; longitudinal groove nearly faint.

Distribution: Mexico

Material examined

The **lectotype** specimen, **herein designated**, bears the following labels:

- 1) white, handwritten: Truqui/Mexico;
- 2) white, handwritten: *O. setoso-/punctatus*/m. Type
- 3) red, printed: TYPUS
- 4) red, printed: *Oxyomus setosopunctatus* A. Schmidt, 1911; Lectotype, M. Dellacasa des. 2000.

The **paralectotype** specimen, **herein designated**, bears the following labels:

- 1) white handwritten: Truqui/Mexico
- 2) red, printed: *Oxyomus setosopunctatus* A. Schmidt, 1911; Paralectotype, M. Dellacasa des. 2000.

México, Edo. Veracruz; Cuiyachapan, 2700 m; Mpio Coscomatepec; VI-VII, 1998; J.S. Sosa, M. Alvarado & M. Cruz leg. (29 exx., ♂♂♀♀) (Instituto de Ecología, Xalapa (Veracruz, México) and Dellacasa Collection, Genoa, Italy).

Dellacasa & Stebnicka: *New genus and redefinition for Oxyomus*

Remarks: the type locality [Truqui (Mexico)] recorded by A. Schmidt in the original description is incorrect. As a matter of fact Truqui is the name of the collector [Eugenio Truqui (or Truqui), † Rio de Janeiro, IV-1860; cfr. Conci & Poggi, 1996: 358] and not that of a Mexican country.

The taxon is easily distinguishable from *Oxyomus sylvestris* (Scopoli, 1763) by the deeper and denser setigerous punctation of head and pronotum; by the smaller humeral denticle of the elytra; and by cariniform elytral pseudointerstices with a row of setigerous punctures.

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LITERATURE CITED

- Blackwelder R. E.** 1944. Checklist of the Coleopterous insects of Mexico, Central America, the West Indies and South America. Part II. *Bull. U. S. nat. Mus.*, 185: 189-341.
- Cartwright O. L.** 1974. *Ataenius*, *Aphotaenius*, and *Pseudataenius* of the United States and Canada. *Smiths. Contr. Zool.*, 154: 1- 106.
- Conci C. & Poggi R.** 1996. Iconography of Italian entomologists, with essential biographical data. *Mem. Soc. ent. Ital.*, 75: 159-382.
- Dellacasa G., Bordat P. & Dellacasa M.** (in press). A revisional essay of world genus-group taxa of Aphodiinae. *Mem. Soc. ent. Ital.*, 79
- Harold E.** 1869. Diagnosen neuer Coprophagen. *Col. Hefte*, 5: 95-104.
- Schmidt A.** 1911. Funf neue Aphodiinen aus dem Museum zu London. *Societas ent.*, 26: 14-16.
- _____. 1922. Coleoptera Aphodiinae. (*Das Tierreich*), 45: 1-614.
- Stebnicka Z. & Howden H. F.** 1997. Revision of the Australian species of *Ataenius* Harold. *Invertebr. Taxon.*, 11: 735-821.

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