Cephalocyclus majomaensis and Oscarinus cabreroi
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Cephalocyclus majomaensis and Oscarinus cabreroi new species of Mexican Aphodiinae (Coleoptera: Scarabaeidae: Aphodiinae)

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Abstract. The new species Cephalocyclus majomaensis and Oscarinus cabreroi from Mexico are described and figured.

Key words. Systematics, Cephalocyclus majomaensis, Oscarinus cabreroi, new species, Mexico, Aphodiinae.

Introduction

While studying specimens from Mexico to complete a systematic revision of the Aphodiinae (Coleoptera: Scarabaeidae) of that region, we found a couple of species new to science. They belong to the genera Cephalocyclus Dellacasa, Gordon and Dellacasa, 1998 and Oscarinus Gordon and Skelley, 2007, and are described here.

Materials and methods

Terminology used to describe morpho-anatomical features follows that of Dellacasa et al. (2001). Specimens studied are in the following collections:

CMNO – Canadian Museum of Nature, Ottawa, Canada [H. F. Howden Collection]  
CNCI – Canadian National Collection, Ottawa, Canada  
DCGI – Dellacasa Collection, Genoa, Italy  
FSCA – Florida State Collection of Arthropods, Gainesville, Florida, U.S.A.  
RHTC – R. H. Turnbow Collection, Enterprise, Alabama, U.S.A.  

Cephalocyclus majomaensis new species  
(Fig. 1-4)

Type locality. Majoma, Zacatecas, Mexico.

Type repository. Unites States National Museum, Washington, D. C., U.S.A.

Description of male. Length 6.5-7.0 mm; elongate, moderately convex, shiny, glabrous. Testaceous; head and pronotum somewhat darker than elytra. Head with epistome weakly convex on disc, slightly
depressed medially toward clypeal margin, sparsely irregularly not closely punctured, smooth at center; clypeus faintly sinuate at middle, round at sides, very thinly bordered, edge upturned and elongately ciliate laterally; genae angulate, depressed, elongately ciliate, strongly protruding from the eyes; frontal suture not tuberculate, distinctly impressed laterally, obsolete at middle; front finely irregularly, sparsely punctured. Pronotum transverse, moderately convex, dually punctured; large punctures, three to four times larger than small ones, irregularly sparse on sides, lacking on disc; small punctures, somewhat variously sized, coarser and denser on sides, superficial and sparser on disc; lateral margins moderately arcuate, rather thickly bordered, edge elongately sparsely ciliate; hind angles obtusely round; base distinctly bisinuate, not bordered. Scutellum elongate, alutaceous, sparsely moderately punctured. Elytra very elongate, weakly widened posteriorly, epipleural carina elongately ciliate in basal two thirds; striae very fine, superficially almost indistinctly punctured, not crenulate; interstriae faintly convex, minutely alutaceous, with extremely fine, irregularly sparse and barely perceptible punctures. Hind tibiae superior spur shorter than first tarsal segment; latter shorter than following three segments combined. Aedeagus Fig. 4. Female: unknown.

Type material. MEXICO: Zacatecas: Majoma; 07.III.1934; leg. Smith & Dunkley (holotype, male, USNM; 1 paratype, male, DCGI).

Distribution. Known from the type locality only.

Etymology. Named after the type locality only.

Bionomics. Almost unknown; the specimens of the type series were collected in March.

Discussion. Cephalocyclus majomaensis is most similar to C. howdenorum Dellacasa, Dellacasa and Gordon, 2007, but can be easily distinguished from that species. It falls C. howdenorum in couplet 21 of the key to Cephalocyclus in Dellacasa et al. (2011: 35) which has to be modified as follows:

22. Elytra broadly oval; interstriae near imperceptibly pubescent toward apex. Hind tibiae superior spur as long as first tarsal segment; latter as long as following three segments combined. Dark piceous, clypeal margin and pronotal sides somewhat paler; elytra dark yellowish brown. Length 7.0-8.0 mm. Mexico (Nuevo León) .... C. howdenorum Dellacasa, Dellacasa and Gordon — Elytra very elongate, feebly widened posteriorly, glabrous. Hind tibiae superior spur shorter than first tarsal segment; latter shorter than following three segments combined. Testaceous, head and pronotum somewhat darker. Length 6.5-7.0 mm. Mexico (Zacatecas) .......................... C. majomaensis new species

Oscarinus cabreroi new species
(Fig. 5-9)

Type locality. Cerro El Potosí, 24°52'28.1"N–100°13'14.9"W, m 3274, Nuevo León, Mexico.

Type repository. Dellacasa Collection, Genoa, Italy.

Description. Length 4.0-4.5 mm; shortly oval, strongly convex, shiny, almost glabrous. Blackish, clypeal margin, anterior angles of pronotum, base and preapical declivity of elytra shadowy brownish-red; legs brownish; antennal club piceous. Head with epistome moderately convex, irregularly punctured; punctuation distally dense, coarse and somewhat confuse, proximally rather fine and sparse; clypeus faintly sinuate at middle, weakly denticulate at sides, very thinly bordered, edge feebly upturned, glabrous; genae angulose, scarcely ciliate, protruding from the eyes; frontal suture finely impressed laterally, almost obsolete medially, not tuberculate; front evenly, rather coarsely, not closely punctured. Pronotum transverse, convex, dually and somewhat irregularly punctured; large, coarse, faintly umbilicate punctures, five times larger than small ones, denser on sides, very sparse on disc; small punctures evenly
scattered throughout, somewhat finer on disc; lateral margins feebly arcuate, thinly bordered, edge glabrous; hind angles obtusely round, base slightly bisinuate, distinctly bordered. Scutellum somewhat convex, finely, not closely punctured on basal half. Elytra strongly convex, rather elongate, almost subparallel-sided; striae rather deep, very superficially, not closely punctured, not crenulate; interstriae flat, finely sparsely, biseriately punctured, punctures denser and coarser on preapical declivity; lateral interstriae, toward apex, with extremely short sparse setae. Hind tibiae superior spur shorter than first tarsal segment; latter somewhat longer than following three segments combined. Male: head and pronotum relatively less densely and less coarsely punctured; fore tibiae spur somewhat stouter and more abruptly downward bent; aedeagus Fig. 8-9. Female: head and pronotum relatively more densely and more coarsely punctured; fore tibiae spur somewhat slender and regularly curved downward.


**Distribution.** Mexico (Chihuahua, Nuevo León, San Luis Potosí, Sinaloa).

**Etymology.** Named in honor of our friend and colleague Francisco J. Cabrero-Sañudo, Spanish scarabaeidologist.

**Bionomics.** Late spring and summer species feeding on cow dung, probably in sheltered areas.

**Discussion.** **Oscarinus cabreroi** is most similar to **O. spiniclypeus** (Hinton, 1934). It can be easily distinguished from that species by the following key

1. Epistome coarsely punctured distally. Elytra very shortly and sparsely pubescent on preapical declivity, with interstriae distinctly punctured. Color blackish with clypeal margin, sides of pronotum, base and apex of elytra brownish red. Mexico (Chihuahua, Nuevo León, San Luis Potosí, Sinaloa) ........................................................................................................... **O. cabreroi** new species

— Epistome granulose distally. Elytra are glabrous, with interstriae almost imperceptibly punctured. Color entirely blackish. Mexico (Distrito Federal [Gordon and Skelley, 2007: 164], Guerrero and México) ........................................................................................................... **O. spiniclypeus** (Hinton)

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