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A new species of *Cyrtonota* CHEVROLAT from Colombia (Coleoptera: Chrysomelidae: Cassidinae: Mesomphaliini)

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ABSTRACT. *Cyrtonota santanderensis*, species new to science, is described from province Santander in Colombia. It belongs to the group of species with elytra not metallic, mostly yellowish brown.

Key words: entomology, taxonomy, new species, Coleoptera, Chrysomelidae, Cassidinae, Mesomphaliini, *Cyrtonota*, Colombia.

The genus *Cyrtonota* CHEVROLAT, 1837 comprises 62 species distributed in the whole Neotropical region from Mexico to Argentina with centre of diversity in mountains of South America (BOROWIEC 1999, BOROWIEC and ŚWIĘTOJAŃSKA 2002). In recent times several new species were described, mostly from mountains of Colombia to Peru (BOROWIEC 1989, 2000, 2007; BUZZI 1998; BOROWIEC and SASSI 1999; SEKERKA 2007; SASSI 2008).

In material studied recently I have found a new species of the genus *Cyrtonota* CHEVROLAT from Santander province in Colombia. It belongs to group of species without metallic elytra. Its description is given below. A modified key (see BOROWIEC 2007) to species without metallic elytra and gibbous or tuberculate elytral disc is also given.

Photos were prepared using Helicon Focus software. Colour photos of similar species are available in BOROWIEC and ŚWIĘTOJAŃSKA (2002).

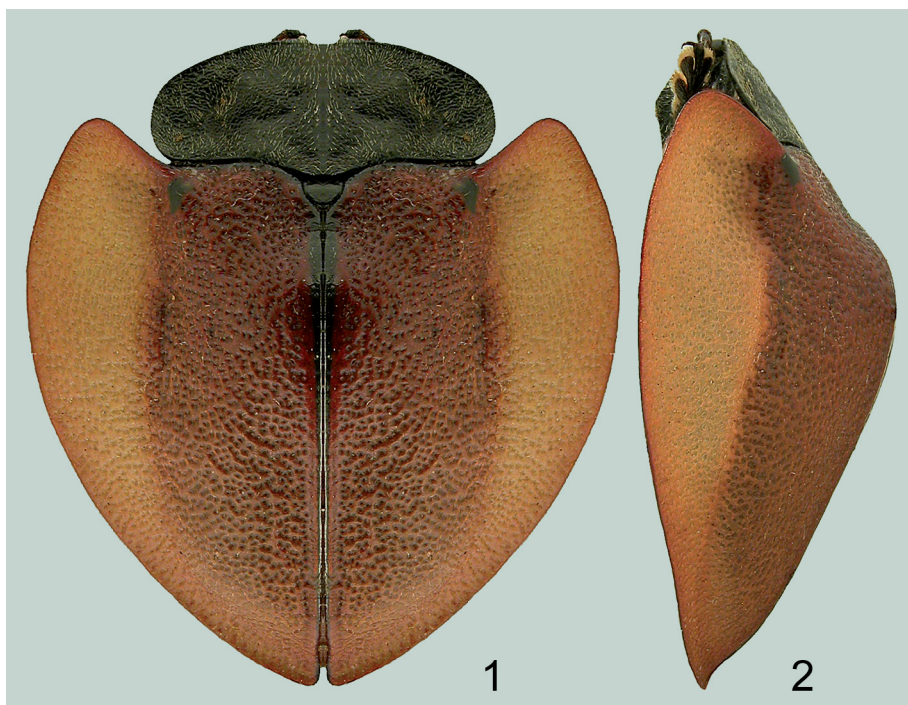
Cyrtonota santanderensis n. sp.

ETYMOLOGY

Named after Santander province of Colombia where type locality is placed.

DIAGNOSIS

It belongs to the group of species with elytra not metallic, elytral sculpture without reticulation, and ground colour of elytra mostly yellowish-brown without distinct black markings. The group comprises eight species: *C. aurovestita* (SPAETH), *C. caprishensis* SEKERKA, *C. lurida* SPAETH, *C. marginata* (KIRSCH), *C. banghaasi* (SPAETH), *C. kolbei* (SPAETH), *C. huallagensis* (SPAETH) and *C. santanderensis* n. sp. First three species are distinct by presence of two spots of velvet hair on pronotum while other species have pronota bare or with short adherent pubescence. *C. marginata* distinctly differs in pronotum yellowish or reddish while other species have pronotum uniformly black or with two reddish spots. *C. banghaasi* differs in elytra uniformly brown, without black markings and surface of pronotum shiny while other species have at least part of suture narrowly black, often black spot on humerus and black lateral margin of elytra, and surface of pronotum dull. *C. santanderensis* differs from *C. banghaasi* also in distinctly broader pronotum, more than twice as wide as long while in *C. banghaasi* it is distinctly less than twice as wide as long. *C. kolbei* differs from the new species in elytral margin narrowly black (not black in *santanderensis*) and less acuminate elytra. *C. huallagensis* differs in pronotum less than twice as wide as long and pronotal disc with two reddish spots (uniformly black in *santanderensis*).



1, 2. *Cyrtanota santanderensis* n. sp.: 1 – habitus dorsal, 2 – habitus lateral

DESCRIPTION

Length 15.2 mm, width 13.3 mm, length of pronotum 3.50 mm, width of pronotum 7.75 mm, length/width ratio 1.14, width/length ratio of pronotum 2.21. Body subtriangular, elytra widest in 1/3 length then strongly converging posterad, apex subacuminate (fig. 1).

Pronotum completely black. Scutellum black. Elytra yellowish-brown, explanate margin slightly paler than disc. Suture narrowly black, from scutellum to the top of disc the black stripe as wide as 2/3 width of scutellum then gradually narrowed posterad and in apical 1/3 length only sutural edge of elytron is infuscate. Humeral calli with small black spot. Basal margin of disc infuscate but the dark markings not extended to basal margin of explanate margin of elytra thus whole lateral edges of elytra the same colour as disc. Ventrites black, two last abdominal sternites on both sides with small reddish spot. Legs black, antennae mostly black only segments 2 and 3 on underside reddish-brown.

Pronotum extremely broad, 2.21 times as wide as long, widest in 2/5 length from base. Anterior margin shallowly emarginate, sides regularly rounded without lateral angles thus pronotum appears transversely ellipsoidal. Disc moderately convex, indistinctly bordered from explanate margin, on sides with transverse impression, explanate margin on each sides with moderately deep impression impression. Whole surface of pronotum dull, microreticulate, with dense, moderately coarse punctation. On disc punctures sparser than on explanate margin with interspaces at top of disc wider than puncture diameter, on sides gradually narrower and on explanate margin mostly narrower than puncture diameter. In impressed parts of pronotum punctures tend to form shallow grooves and surface appears slightly irregular. Along middle of disc runs impunctate line. Whole pronotum covered with sparse, moderately long, adherent hairs.

Scutellum almost semicircular, without sulcus. Base of elytra much wider than base of pronotum, humeral angles strongly protruding anterad, reaching to mid length of pronotum but humeral angle rounded. Elytral disc strongly convex, in profile appears gibbous but not tuberculate (fig. 2). Postscutellar impressions hardly marked. Whole disc with moderately coarse and with dense punctation, punctures in most parts of disc with interspaces narrower than puncture diameter only on sides of hump partly wider but never wider than two punctures together. Interspaces partly tend to form indistinct reticulation, especially on sides and slope. Surface of disc in basal and humeral part with sparse, short and moderately long, adherent to erect pubescence, to apex of disc the pubescence is gradually sparser and shorter and on slope hardly visible. Disc is distinctly bordered from explanate margin by narrow but slightly elevated marginal interval. Explanate margin in the widest part slightly less wide than half width of disc. Its surface with punctation as coarse or slightly coarser than disc, interspaces distinctly narrower than puncture diameter. Apex of elytral epipleura with dense pubescence.

Clypeus typical for the genus *Cyrtonota* CHEVR., strongly elevated, clypeal plate flat, dull, with several small punctures. Labrum deeply emarginate to 2/5 length. Antennae long, length ratio of antennal segments: 100:47:103:103:90:63:67:80:77:87:127. Segment 3 approximately 2.2 times as long as segment 2, segment 4 as long as segment 3, segments 9 and 10 approximately 1.5-1.6 times as long as wide. Prosternal collar

long, sides subangulate. Prosternal process narrow, along middle deeply canaliculate, apex moderately expanded laterally, whole surface covered with sparse but long hairs. All claws with large basal tooth typical for the genus *Cyrtonota* CHEVR.

Genitalia not dissected, as comparative study on genitalia in some genera of Mesomphaliini performed in my Department of Biodiversity and Evolutionary Taxonomy showed that in the genus *Cyrtonota* they are not diagnostic (unpublished data).

TYPE MATERIAL

Holotype: "COLOMBIA: Sant.[ander], 12 km E Bucaramanga, 10 Jul 1982, Clark & Cave" (preserved at the Monte L. Bean Life Science Museum, Provo, USA). The locality is placed approximately at 7°7'46" N and 73°7'33" W, 1000 m a.s.l.

REMARKS

In my key to the species of *Cyrtonota* without metallic elytra (BOROWIEC 2007) characters of *C. santanderensis* lead to the couplet 13 (*C. caprishensis* SEKERKA and *C. timida* SASSI, both described recently are also included, and after study of types position in key of *C. huallagensis* (SPAETH) and *C. marginata* (KIRSCH) is replaced):

- | | |
|---|-----------------------------------|
| 13. Pronotum with two spots of extremely dense vestiture | 14. |
| – Pronotum without spots of extremely dense vestiture | 16. |
| 14. Suture and humeral calli partly or completely black | 15. |
| – Suture and humeral calli the same colour as rest of elytra, fulvous to brown. Peru | <i>C. caprishensis</i> SEKERKA |
| 15. Pronotum almost semicircular. Elytra less gibbous. Ground colour of elytra paler, yellowish-brown. Suture completely black. Basal antennal segments yellowish ventrally. Colombia | <i>C. lurida</i> (SPAETH) |
| – Pronotum subtrapezoidal. Elytra more gibbous. Ground colour of elytra darker, brown. Suture only in anterior part black. Antennae uniformly black. Ecuador | <i>C. aurovestita</i> (SPAETH) |
| 16. Elytra completely with red reticulation or with red reticulate spots | 17. |
| – Elytra without red reticulation or red reticulate spots | 20. |
| 17. Elytra on whole surface with red reticulation | 18. |
| – Elytra with six red reticulate spots: two in postscutellar impression, one in the middle of margin of disc and two on slope. Brazil: Bahia | <i>C. bondari</i> (SPAETH) |
| 18. Length above 12 mm. Pronotal sides rounded posterad, basal corners obsolete | 19. |
| – Length below 11 mm. Pronotum in basal 1/3 length almost parallelsided, basal corners distinct. Peru | <i>C. ruforeticulata</i> BOROWIEC |
| 19. Elytra strongly gibbous, postscutellar impressions well marked. Large, length c. 14 mm. Pronotum more transverse, width/length ratio 2.25-2.40. Colombia | <i>C. compulsa</i> (SPAETH) |
| – Elytra less gibbous, postscutellar impressions hardly marked. Smaller, length c. 12.5 mm. Pronotum less transverse, width/length ratio approximately 1.97. Colombia | <i>C. gibbera</i> BOROWIEC |

- 20. Elytra strongly gibbous in profile 21.
- Elytra regularly convex or only slightly gibbous in postscutellar part 31.
- 21. At least elytra partly red or brown 21.
- Pronotum and elytra completely black. Venezuela *C. punctatissima* (SPAETH)
- 22. Elytra uniformly brown or brown with at most suture, humerus and extreme margin of elytra narrowly black 23.
- Elytra with more expanded black or brown markings, at least suture and margin of elytra broadly black 27.
- 23. Pronotum uniformly black or with two reddish spots 24.
- Pronotum yellowish, reddish or brownish. Ecuador *C. marginata* (KIRSCH)
- 24. At least elytral suture partly narrowly black, usually also humeral calli black. Surface of pronotal disc dull 25.
- Elytra uniformly brown. Surface of pronotal disc shiny. Peru ... *C. banghaasi* (SPAETH)
- 25. Elytral margin not black 26.
- Elytral margin narrowly black. Colombia and Ecuador *C. kolbei* (SPAETH)
- 26. Pronotum less than twice wider than long, disc with two reddish spots. Ground colour of elytra reddish. Peru *C. huallagensis* (SPAETH)
- Pronotum more than twice wider than long, uniformly black. Ground colour of elytra yellowish-brown. Colombia *C. santanderensis* n. sp.
- 27. Pronotum black. Explanate margin of elytra at least in posterior half with broad black margination. Elytral disc along sides without spots, or with black band or stripe, or with two black spots 28.
- Pronotum reddish-brown. Explanate margin of elytra with narrow black margination. Elytral disc along sides with three black spots. Ecuador *C. montana* BOROWIEC
- 28. Explanate margin of elytra before middle without transverse black spot. Elytra bare or with sparse, short, erect hairs 29.
- Explanate margin of elytra before middle with transverse black spot. Elytra with moderately dense, partly adherent hairs. Peru *C. machupicchu* BOROWIEC
- 29. Black markings of elytra forms broad band along elytral margin and broad band along suture, no black markings along sides and centre of disc 30.
- Disc of elytra black with two red spots (typical form) or black markings of elytra forms band along elytral margin, band along suture and black stripe or two elongate spots along sides of disc (ab. *christophori* BOROWIEC) *C. balyi* (KIRSCH)
- 30. Pronotum less than twice as wide as long. Black margination of elytra broad, in the middle of elytra almost as wide as half width of the explanate margin, apically occupies the whole surface of the explanate margin. Black stripe along suture as broad as black marginalia of elytral sides. Ground colour of elytra yellowish-brown. Colombia *C. bugaensis* BOROWIEC et SASSI
- Pronotum more than twice as wide as long. Black margination of elytra narrow, in the middle of elytra occupies less than 1/3 width of the explanate margin, apically not extended to border of disc. Black stripe along suture as narrow as black marginalia of elytral sides. Ground colour of elytra red. Colombia *C. timida* SASSI

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