# Omaspides boliviana n. sp., with a key to Omaspides s. str. (Coleoptera: Chrysomelidae: Cassidinae)

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ABSTRACT. *Omaspides boliviana* is described from Bolivia (Caranavi Prov.). It is close to *Omaspides conjugens* Spaeth, 1937 from Peru. A key to species of *Omaspides* s. str. is given.

Key words: entomology, taxonomy, new species, Coleoptera, Chrysomelidae, Cassidinae, *Omaspides* s. str., Neotropical Region.

The genus *Omaspides* Chevrolat, 1837 comprises 36 species, divided into three subgenera (Borowiec 1999, Borowiec and Świętojańska 2002), 30 of them belong to the nominotypical subgenus. Most species are distributed in mountain regions of South America, especially in Ecuador, Peru, and Bolivia. The genus was partly keyed by Spaeth (1937), only one species was described recently (Borowiec 1998).

In the material studied recently I found specimens of a new species of the nominotypical subgenus. Its description is given below. A new key to the nomintypoical subgenus is also proposed.

## Omaspides boliviana n. sp.

ETYMOLOGY Named after its terra typica.

#### DIAGNOSIS

Omaspides boliviana belongs to the group of species with metallic pronotum and elytral disc and partly yellow or red explanate margin of elytra. In most species of the group, the pale pattern forms a round or elongate spot on explanate margin, at a distance from lateral margin of elytra, only in Omaspides conjugens Spaeth, 1937 and O. boliviana n. sp. the spot occupies whole width of explanate margin up to lateral margin of elytra. Omaspides conjugens differs in impunctate surface of pronotal disc with only extremely fine pricks, while in O. boliviana disc is distinctly punctate. O. conjungens is slightly larger, with body length 12.9-14.5 mm (11.2-12.1 in O. boliviana). Yellow spot on explanate margin in O. conjungens is larger than in O. boliviana, extending to 3/4 length of the margin, while in O. boliviana it extends only to 2/3 length of the margin. Extreme external margin of the yellow spot in O. conjungens is darker than the spot, brown, while in O. boliviana it is yellow, the same colour like the spot.

## DESCRIPTION

Length: 11.2-12.1 mm, width: 10.8-11.0 mm, length of pronotum: 3.2-3.3 mm, width of pronotum: 6.1-6.5 mm, length/width ratio: 1.04-1.10, width/length of pronotum ratio: 1.85-1.97. Body almost circular (figs 1, 2).

Pronotum black, with blue, green or cupreous metallic tint. Anterior corners or whole anterior margin narrowly reddish. Elytra black, with blue, green or cupreous metallic tint, explanate margin in middle with large yellow spot occupying whole width of the margin, at a large distance from anterior margin of the explanate margin, extending posteriorly to 2/3 length of the margin. Ventrites black, sides of abdominal sternites with small reddish spot.

Pronotum regularly trapezoidal, sides straight or slightly concave, narrowly marginate. Disc moderately convex, on whole surface finely to moderately coarsely



1-3. Omaspides boliviana: 1 - female dorsal, 2 - male dorsal, 3 - male lateral

punctate, distance between punctures from as wide as to thrice wider than puncture diameter. Surface between punctures microreticulate, dull.

Elytra broad, humeri regularly rounded. Anterior margin of elytra in male in humeral part only slightly arcuate, humeri only slightly protruding anterad. Disc unevenly convex, bluntly angulate in profile (fig. 3). Whole surface of disc extremely finely, irregularly punctate, distance between punctures mostly wider than puncture diameter. Surface between punctures dull. Explanate margin of elytra in the widest part approximately twice narrower than disc, its surface as finely punctate as disc, only along border of disc punctures are slightly coarser than in central part of the explanate margin.

Antennae slim, length ratio of antennal segments: 100:46:89:100:89:75:79:79:79:161(male):129(female).

Ventrites without diagnostic characters.

## MATERIAL EXAMINED

Holotype: "Bolivia, Caranavi prov., La Paz dp., IX-2000, C. Tello"; paratype: the same data; paratype: the same data but "X-2000"; paratype: the same data but "I-2001" (holotype at P.I.M.E. Entomological Museum, Monza, Italy, paratypes at P.I.M.E. Entomological Museum, Monza, Italy, in the Department of Biodiversity and Evolutionary Taxonomy, Wrocław University, Wrocław, Poland, and in D. Sassi collection).

#### KEY TO OMASPIDES S. STR.

1.	Elytral disc mostly red. Explanate margin of elytra partly red with transverse
	black bands2.
	Elytral disc yellow, black, or metallic, or with red or yellow reticulation, or
	with pale pattern but never mostly red
2.	Red spot on explanate margin of elytra with three black transverse bands.
	French Guyana trifasciata (F.)
	Red spot on explanate margin of elytra with single black transverse band.
	French Guyana, Guyana, Suriname, Brazil: Para clathrata (L.)
3.	Elytra mostly yellow, sometimes with black margins or black bands along
	border of disc but never with black spots or transverse bands
	Elytra mostly dark, black or metallic, sometimes with pale spots, band, or
	reticulation
4.	Pronotum yellow or reddish, sometimes with dark explanate margin 5.
	Pronotum black or metallic, at most anterior margin yellowish
5.	Explanate margin of pronotum the same colour as disc
	Explanate margin of pronotum partly black or metallic, disc reddish. Brazil:
	Bahia, Minas Gerais nigrolineata (Вон.)
6.	Ventrites partly black
	Ventrites yellow or reddish

7.	Anterior margin of pronotum rounded. Apex of tibia and tarsi infuscate to black. Colombia
	Anterior margin of pronotum truncate. Tibiae and tarsi yellow. Brazil: Sao
	Paulotricolorata (Вон.)
8.	Elytral disc without dark spots. Pronotum yellow or pale red
	Elytral disc in 1/3 length, close to border of disc, with small brown or black
	spot. Pronotum deep red. Brazil: Rio de Janeiro, Sao Paulo iheringi (Sp.)
9.	Pronotum pale red, broad, with slightly concave sides, appears triangular.
	Lateral margin of elytra narrowly black. Widespread in tropical South America
	trichroa (Вон.)
	Pronotum usually yellow or only slightly reddish, with straight sides, appears
	trapezoidal. Lateral margin of elytra never black. SE Brazil
	pallidipennis (Вон.)
10.	Body very broad, wider than long
-, 11	Body moderately broad, slightly longer than wide
11.	Pronotal disc strongly convex, shiny. Colombia
	Pronotal disc moderately convex, slightly dull. Panama, Colombia, Venezuela bistriata Вон.
12	Pronotum with strongly converging sides, appears trapezoidal, its anterior
12.	margin narrowly yellow. Ecuador, Peru abbreviata BALY
	Pronotum with moderately converging sides, appears almost semicircular, its
•	anterior margin black. Ecuador
13.	Elytra completely black or metallic
	Elytra at least on explanate margin with yellow or red spots or reticulation
14.	Elytral disc with reticulate sculpture. Ecuador tenuicula Вон.
	Elytral disc without reticulate sculpture. Ecuador unicolor Bor.
15.	Pronotum black or metallic
	Pronotum red. Colombia, Peru, NW Brazilpulchella BALY
16.	Elytral disc with pale spots or reticulation
	Elytral disc completely black or metallic
17.	Elytral disc with yellow spots or yellow to reddish reticulation, without
	transverse yellow band
<del>-</del> .	Elytra with yellow band across middle. Peru
18.	Explanate margin of elytra with oval or elongate spot, sometimes divided by
	black transverse bands into two or three separate spots or with yellow to red
	reticulation
	Explanate margin of crytra with yellow sinuate lines. Peru
19	Elytral disc with yellow to red reticulation, sometimes reduced to several folds
1).	in apical part of disc
	Elytral disc with yellow spots 21.

20.	Whole elytral disc with reticulate sculpture. Ecuador bivittata BALY
	Elytral disc without reticulate sculpture, or it is limited to sides and apex of
	disc, its presence is correlated with presence of reddish reticulation. Ecuador,
	Peru, Bolivia augusta Вон.
21.	Elytral disc with yellow spots only in its posterior half
	Elytral disc with yellow spots in both anterior and posterior half. Brazil:
	Amazonas, Paralunulata Вон.
22.	Spot on explanate margin without black transverse bands. Peru
	quadrifenestrata Sp.
	Spot on explanate margin with two black transverse bands. Ecuador
	collecta Sp.
23.	Yellow or red pattern on explanate margin of elytra forms more or less developed reticulation
	Yellow or red pattern on explanate margin of elytra forms round to oval spots only occasionally marked with dark spots
24.	Whole elytral disc with reticulate sculpture. Ecuador bivittata BALY
	(form with immaculate elytral disc)
	Elytral disc without reticulate sculpture. Ecuador, Peru, Bolivia
	augusta Boh
	(form with immaculate elytral disc)
25.	Pale spot on explanate margin marked with small dark spots
	Pale spot on explanate margin without small dark spots
26.	Spot on explanate margin round with irregular border not or only slightly
	extending behind half length of elytra, marked with a few irregularly arranged
	dark spots. Brazil: Amazonas
	Spot on explanate margin elongate, with regular border, distinctly extending
	behind half length of elytra, sometimes up to apex of the margin, marked with
	three dark spots arranged in line. Brazil: Amazonas basilica Вон.
27.	Pale spot on explanate margin extending to lateral margin of elytra 28
	Pale spot on explanate margin separated from lateral margin of elytra by black
	Pronotum impunctate, at most with fine pricks. Peru conjugens Sp.
	Pronotum distinctly punctate. Bolivia
29.	Pronotum stout, almost semicircular in outline
	Pronotum broad, distinctly trapezoidal to subtriangular in outline 31
30.	Spot on explanate margin of elytra short, only slightly longer than wide
	Brazil: Amazonas
	Spot on explanate margin of elytra elongate, approximately twice longer than
	wide. Brazil: Amazonas
31.	Spot on explanate margin of elytra short, at most 1.5 times as long as wide
	Spot on explanate margin of elytra elongate, approximately twice longer than
	wide. Colombia, Ecuador, Peru, W Brazilspecularis Era

32.	Pronotal disc strongly convex, slightly shiny. Costa Rica
	Pronotal disc only slightly convex, dull. Bolivia, Peru erichsoni Sp.

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## REFERENECS

- Borowiec, L., 1998. Review of the Cassidinae of Ecuador, with a description of thirteen new species (Coleoptera: Chrysomelidae). Genus, 9: 155-246.
- —, 1999. A world catalogue of the Cassidinae (Coleoptera: Chrysomelidae). Biologica Silesiae, Wrocław, 476 pp.
- Borowiec, L., Świętojańska, J., 2002. Cassidinae of the world an interactive manual (Coleoptera: Chrysomelidae). Permanent electronic publication: www.biol.uni.wroc.pl/cassidae/katalog%20internetowy/index.htm
- Spaeth, F., 1937. Mitteilungen über Cassidinen mit besonderer Berücksichtigung der Sammlung des Naturkundemuseums der Stadt Stettin (Col.). Stettin. Entomol. Ztg., 98: 79-95.