**Stolas sanramonensis**, a new species from Bolivia
(Coleoptera: Chrysomelidae: Cassidinae: Stolaini)

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**ABSTRACT.** *Stolas sanramonensis*, a species new to science, is described from Bolivia, Cochabamba. It is close to *Stolas lineaticollis* (Bohemian, 1850) and its relatives but differs in unique elytral pattern forming a thin black line along humeral calli.

**Key words:** entomology, taxonomy, new species, Coleoptera, Chrysomelidae, Cassidinae, Stolaini, *Stolas*, Bolivia.

The genus *Stolas* Billberg, 1820 is one of the largest in the subfamily Cassidinae. It was usually treated as a polytypic genus with numerous subgenera (Hincks 1952; Seno and Wilcox 1982), but in recent classification (Borowiec 1999; Borowiec & Świętojańska 2005) the genus comprises only species classified previously within *Stolas* sensu stricto with *Pseudomesomphalia* Spaeth, 1901, *Championaspis* Spaeth, 1913, and *Hadraspis* Spaeth, 1915 as synonyms. In this sense it comprises 176 species, mostly well characterized and distinct, only a few are doubtful species because of the loss of their type specimens. The genus is extremely diverse in size, shape, and coloration. It comprises some of the largest cassidine species and the most beautiful in body coloration, vestiture, and elytral sculpture (see colour photos of most species in Borowiec & Świętojańska 2005). On the one hand several common species probably represent groups of closely related biological species (E.G. Riley, D. Windsor personal comm.), on the other hand many distinct species remain undescribed. Below, a new species from
Bolivia of unique dorsal pattern belonging to the well separated group of small species close to *S. lineaticollis* (*Boheman, 1850*) is described.

**Stolas sanramonensis** n. sp.

**Etymology**

Named after its locus typicus, San Ramon in Bolivia.

**Diagnosis**

It belongs to the group of species close to *Stolas lineaticollis* (*Boheman, 1850*). The group comprises some of the smallest members of the genus *Stolas* *Billb.* characterized by elytra mostly yellow or occasionally brown, without metallic colour, pronotum yellow, reddish or brown often marked with black pattern, elytral puncturation homogenous, fine to moderate, without groups of large punctures, elytral disc without impressions, regularly convex in profile, and humeral angles in male without lateral emargination. The group comprises hitherto *Stolas augur* (*Boheman, 1856*), *S. bilineata* (*Boheman, 1850*), *S. deleia* (*Boheman, 1850*), *S. kraatzi* (*Boheman, 1862*), *S. lineaticollis* (*Boheman, 1850*), *S. plagicollis* (*Boheman, 1850*), and *S. schaumi* (*Boheman, 1850*) - for colour photos of all species see *Borowiec & Siwejkońska 2005*. *S. sanramonensis* n. sp., *S. kraatzi* (*Boh*.), *S. lineaticollis* (*Boh*.), and *S. schaumi* (*Boh*.) are well characterized by the presence of a black line or band along the middle of pronotal disc, while remaining species have pronotal disc uniformly yellow, reddish, or reddish-brown, or with brownish or reddish spots of indistinct borders but never with a black line. *S. sanramonensis* differs from its three relatives, as well as from all species of the group in the presence of a thin black line along humeral callus extending from base of elytra to 1/4 length of disc. Only *S. bilineata* (*Boh*.) has elytral disc with black lines but they are broad and long, run from base of elytra below humeral callus and extend to slope of disc. In *S. bilineata* (*Boh*.) the suture is broadly black while in *S. sanramonensis* n. sp. only sutural margin is narrowly browned to black. *S. lineaticollis* (*Boh*.) differs in finer elytral punctuation, elytral disc with no black markings except narrowly blackened sutural margin. *S. kraatzi* (*Boh*.) differs in suture and lateral margin of elytra broadly blackened, and elytral disc close to marginal row in 1/3 length with a small black spot (no lateral spots in *S. sanramonensis*). *S. schaumi* (*Boh*.) differs in the presence of a broad black band along pronotal disc, black basal half of lateral margin of pronotum, black suture, and broadly blackened lateral margin of elytra, usually with completely black anterior angles. Both *S. schaumi* and *S. kraatzi* form a rare aberration with thin median line of pronotum and narrowly blackened suture and lateral margin of elytra but in *S. sanramonensis* lateral margin of elytra is never black. Elytral punctuation in *S. sanramonensis* is distinctly coarser than in *S. schaumi* and *S. kraatzi*. *Stolas plagicollis* (*Boh*.) differs in pronotal disc with two round, reddish-brown spots, basal angles of pronotum black, and suture and
lateral margin of elytra narrowly blackened (in *S. sanramonensis* pronotal disc without spots, pronotal angles of the same colour as explanate margin, suture and lateral margin of elytra not marked with black). *Stolas augur* (Boh.) differs in reddish band along suture and pronotum mostly reddish with yellowish anterior corners. *Stolas deletea* (Boh.) differs in pronotum and elytra immaculate, but in this species along ventral side of elytra run two broad dark bands. The bands in fresh specimens are visible through transparent integument of elytra but in dried specimens integument is usually not transparent then bands are invisible from above, at most only slightly darker punctures mark process of bands.

**DESCRIPTION**

Length: male 5.4-5.9 mm, female 7.0-7.3 mm, width: male 4.4-5.3 mm, female 5.3-5.5 mm, length of pronotum: male 1.8-1.9 mm, female 2.1 mm, width of pronotum: male 3.20-3.55 mm, female 3.8-3.9 mm, length/width ratio: male 1.11-1.23, female 1.32-1.33, pronotum width/length ratio: male 1.83-1.87, female 1.81-1.86. Sexual dimorphism distinct, male distinctly smaller and stouter than female (Figs 1, 2).

Holotype male: pronotum reddish-orange, basal margin narrowly blackened. Along the middle of disc runs a thin black line, beginning at anterior margin and ending before praescutellar lobe. Scutellum black. Elytra lemon-yellow, sutural margin narrowly blackened, basal margin of elytron between base of humeral stripe and disc/explanate margin border also narrowly black, lateral margin of elytra the same colour as disc. Humerus with black longitudinal stripe running

from basal margin of elytra to 1/4 length of disc. Disc of each elytron in anterior half with two small spots in line placed in 2/3 distance between suture and black humeral stripe. Head and ventrites orange-reddish. Legs orange-reddish, mid and hind femora in 2/3 distance from base with brownish spot, external carinae of tibia brownish to black. Four basal antennal segments orange-reddish, fifth segment orange-reddish ventrally and black dorsally, segments 6-11 black.

Paratype male: coloured as holotype but without two small black spots on elytral disc.

First paratype female: coloured as paratype male.

Second paratype female: coloured as first paratype female but with two very small black spots on each elytron. First spot placed as anterior spot in the holotype, in anterior half of disc in 2/3 distance between suture and humeral stripe, second spot placed in posterolateral part of disc in 3/5 distance between suture and lateral margin of disc.

Pronotum transversely pentagonal, anterior margin deeply, semicircular emarginate, sides regularly rounded in basal 1/3 length slightly converging posterad. Disc of pronotum moderately convex, moderately and shallowly punctate, distance between punctures mostly as wide as puncture diameter. Explanate margin indistinctly bordered from disc, as coarsely and shallowly punctate as on disc. Surface between punctures mostly dull, only in male top of disc partly shiny.

Scutellum triangular, shiny. Base of elytra distinctly wider than pronotum. In male humeral part of explanate margin obliquely cut but without emargination before angle, in female humeri regularly rounded. Sides of elytra regularly rounded, moderately converging posterad, in male maximum width of elytra in 1/5, in female in 1/4 length of elytra. Disc in profile regularly convex, with top of convexity in 1/3 length of its length (Fig. 3). Puncturation of disc completely irregular, moderate, uniform, punctures arranged regularly on whole surface of disc. Distance between punctures from as wide as to twice wider than puncture diameter. Surface between punctures slightly shiny. Border between disc and explanate margin distinctly marked, in anterior 2/3 length forms impunctate interval, in posterior 1/3 length impunctate line. Explanate margin in widest part as wide as 1/5 width of disc, its puncturation as coarse as but slightly denser than on disc. Apex of elytral epipleura bare.

Ventrices with no diagnostic characters. Antennae typical for the genus *Stolas* B illb., second segment twice shorter than third, segments third and fourth of approximately equal length, segments 9 and 10 slightly transverse.

MATERIAL EXAMINED

University, Oxford, England, one paratype at the Department of Biodiversity and Evolutionary Taxonomy, Wrocław University, Wrocław, Poland).

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