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## Two new species of the tribe Stolaini (Coleoptera: Chrysomelidae: Cassidinae)

JOLANTA ŚWIĘTOJAŃSKA

Zoological Institute, University of Wrocław, Sienkiewicza 21, 50-335 Wrocław, Poland,  
e-mail: [sindiola@biol.uni.wroc.pl](mailto:sindiola@biol.uni.wroc.pl)

ABSTRACT. *Anacassis nigroscutata* from Uruguay and *Hilarocassis maculicollis* from Brazil, Bahia are described. Keys to the genera *Anacassis* and *Hilarocassis* are given.

Key words: entomology, taxonomy, new species, Coleoptera, Chrysomelidae, Cassidinae, *Anacassis*, *Hilarocassis*, Neotropical Region.

The genera *Anacassis* SPAETH, 1913 and *Hilarocassis* SPAETH, 1913 are moderately large members of the *Stolas* genus group. The genus *Anacassis* comprises 18 species associated with Asteraceae plants, while *Hilarocassis* comprises 9 species associated with Convolvulaceae (BOROWIEC 1999, 2002, BOROWIEC & SWIETOJANSKA 2002). They are widely spread in the Neotropical Region from Mexico to Argentina, one species of *Hilarocassis* extends its range to Arizona in USA. Both genera are well characterized within *Stolas* group by elongate or elongate-oval body, with elytra only slightly to moderately wider than pronotum, elytral disc regularly convex or at most angulate in profile but always without postscutellar tubercle, and narrow explanate margin of elytra. *Anacassis* differs from *Hilarocassis* in only four basal glabrous antennal segments (five in *Hilarocassis*) and simple or indistinctly doublemarginate elytral margin (distinctly double marginate in *Hilarocassis*).

In material studied recently I found a new species of *Anacassis* collected in Uruguay and a new species of *Hilarocassis* from Bahia in Brazil. Their descriptions are given below. Because *Anacassis* and *Hilarocassis* have never been keyed, keys for both genera are given.

*Anacassis nigroscutata* n. sp.

## ETYMOLOGY

Named after black scutellum.

## DIAGNOSIS

A very distinct species, well distinguished from all congeners in completely homogenous elytral puncturation, and elytral surface without elevated lines or impressed rows. Immaculate dorsum and reduced elytral sculpture nears it only to *A. candida* (BOH.). *A. nigroscutata* differs in black scutellum and black ventrites (in *A. candida* scutellum is yellow and ventrites are mostly or completely yellow). Elytral sculpture in *A. candida* is not as regular as in *A. nigroscutata*, with rudimentar elevated line in anterior half of disc, parallel to suture, while in *A. nigroscutata* puncturation of disc is disposed completely regularly or only with short, impunctate but not elevated line in antero-sutural part of disc.

## DESCRIPTION

Length: 10.2-10.3 mm, width: 6-6.9 mm, length of pronotum: 2.4-2.5 mm, width of pronotum: 5.2-5.6 mm, length/width ratio: 1.53-1.75, width/length of pronotum ratio: 2.16-2.24. Body elongate-oval (fig. 1). Pronotum rusty yellow, immaculate, basal margin narrowly black. Scutellum black. Elytra rusty yellow without spots, crenulate anterior margin narrowly black. Head, antennae, ventrites, and legs black, sides of abdominal sternites with small, rusty yellow spot.

Pronotum subtrapezoidal, the widest at basal 1/5 length, sides distinctly protruding anterad, anterior margin straight, head not visible from above. Disc moderately convex, impunctate. Explanate margin distinctly bordered from disc, impunctate. Whole surface of pronotum slightly opaque.

Base of elytra wider than base of pronotum but explanate margin strongly declivous in humeral part and humeri are protruding down. Disc regularly convex (fig. 2), moderately coarse, completely irregularly punctate. Punctures spread almost evenly on whole disc, only in anterior fourth of disc, in position of second interval runs impunctate line (in paratype the line is rudimentary). Distance between punctures 1-3 times wider than puncture diameter (in holotype punctures slightly finer and sparser than in paratype). Interspaces smooth and slightly shiny. No marginal row, but in anterior third of disc runs more or less visible impunctate marginal interval. Explanate margin very narrow, in posterior fourth almost linear, punctate as coarse as on disc.

Ventrites with no specific characters.

Antennae stout, length ratio of antennal segments: 100:40:60:60:60:53:53:53:53:60:93 (fig. 3). Claws with large basal tooth (fig. 4).

## TYPE MATERIAL

Holotype: "URUGUAY, Minas I 1980" (preserved at the Department of Biodiversity and Evolutionary Taxonomy, University of Wrocław, Poland);

paratype: “Montevideo, coll. Sivori” “nigroscutata Spaeth” “*Anacassis nigroscutata* Spaeth det. typus!” “Museo Civico di Genova” (preserved at the Museo Civico di Storia Naturale, Genova, Italy).

## NOTE

Franz SPAETH in the forties intended to describe this species under name *Anacassis nigroscutata* in his monograph of world Cassidinae (manuscript preserved in Manchester Museum, England). He selected a specimen from Genova Museum as “Typus!”. Because of premature death of F. SPAETH his monograph has never been published. I selected as holotype the specimen preserved at the Department of Biodiversity and Evolutionary Taxonomy, University of Wrocław because the specimen from Genova Museum is strongly damaged, with deformed right elytron.

KEY TO THE GENUS *ANACASSIS*

(*Anacassis ingrata* BOH. is not included in the key; it is probably only pale form of *A. fuscata*)

1. Elytra strongly convex to angulate in profile ..... 2.
- Elytra regularly convex ..... 8.
2. Elytra strongly convex but not gibbous or angulate in profile ..... 3.
- Elytra gibbous to angulate in profile ..... 5.
3. Dorsal colouration tends to form paler and darker stripes ..... 4.
- Dorsal colouration without paler and darker stripes ..... *bruchi* SP.
4. Dorsal colouration rusty-yellow. Pronotum very broad, approximately twice wider than long, appears not regularly circular. Elytral puncturation moderately coarse, puncturation of explanate margin distinctly finer than puncturation of disc ..... *languida* (BOH.)\*
- Dorsal colouration pale yellow. Pronotum moderately broad, less than twice wider than long, appears regularly circular. Elytral puncturation coarse, puncturation in the middle of explanate margin only slightly finer than puncturation of disc ..... *fiebrigi* SP.
5. Humeri strongly protruding laterally, elytra widest in humeral part. Base of elytra strongly wider than base of pronotum ..... 6.
- Humeri moderately protruding laterally, elytra widest in the mid length. Base of elytra slightly to moderately wider than base of pronotum ..... 7.
6. Pronotum with black median stripe, elytra with numerous black spots ..... *dubia* (BOH.)\*
- Pronotum without black median stripe but with three reddish-brown to brown irregular spots of indistinct borders. Elytra immaculate ..... *xerampelina* (BOH.)\*
7. Scutellum black. Puncturation of elytra fine to moderately coarse, surface of elytra never appears irregular or rugose ..... *testudinaria* (BOH.)\*

- . Scutellum yellow. Punctuation of elytra very coarse, surface of elytra appears slightly irregular to rugose ..... *punctulata* (BOH.)\*
- 8. Pronotum with black, sometimes metallic spots ..... 9.
- . Pronotum without black spots or occasionally in central part of disc with single spot of vanished borders ..... 10.
- 9. Elytra strongly converging posterad, cuneiform. Pronotum with three black, often with indistinct metallic tint spots ..... *maculatissima* (BOH.)
- . Elytra moderately converging posterad, apex rounded. Pronotum with 5 to 11 black, always without metallic tint spots ..... *cribrum* (KLUG)\*
- 10. Elytra with distinct reddish to brown elongate bands ..... 11.
- . Elytra immaculate, or with reddish spots, occasionally with indistinct, irregular reddish stripes ..... 12.
- 11. Dark elytral bands reddish, narrow. Reddish band along suture twice narrower than yellow median band ..... *phaeopoda* BUZZI\*
- . Dark elytral bands brown, broad. Brown band along suture wider than yellow median band ..... *fuscata* (KLUG) – typical form\*
- 12. Elytra yellow, immaculate, or with reddish spots or irregular stripes ..... 13.
- . Elytra uniformly brown ..... *fuscata* (KLUG) – dark form\*
- 13. Punctuation of elytra fine to moderately coarse, uniformly disposed or tends to form indistinct punctate row or bands separated by impunctate elevations but never forms rugose fields ..... 14.
- . Punctuation of elytra very coarse, punctures almost touching each other, partly forms rugose fields or lines ..... *punctatissima* Sp.
- 14. Punctuation of elytra tends to form more or less distinct elongate bands separated by impunctate or finely punctate longitudinal elevations, at least parallel to suture runs impunctate elevation extending at least to half length of disc ..... 15.
- . Punctuation of elytra disposed completely regularly or in anterior third of disc, parallel to suture runs impunctate but not or only slightly elevated stripe extending at most to 1/3 length of disc ..... 19.
- 15. Elytra without red spots arranged in rows ..... 16.
- . Elytra with small red spots arranged in more or less regular rows, in sutural part of disc spots often coalescent, forms irregular reddish stripes ..... *rubronotata* (BOH.)\*
- 16. Interspaces of elytra more or less shiny. Elytra except two longitudinal elevations in sutural half of disc usually with at least rudimentary elevation on sides of disc. Sides of elytra less converging posterad ..... 17.
- . Interspaces of elytra opaque. Elytra only with two longitudinal elevations in sutural half of disc. Sides of elytra more converging posterad ..... *infuscata* KLUG – immaculate form\*
- 17. Pronotum subtrapezoidal with distinctly converging sides ..... 18.
- . Pronotum almost semicircular ..... *prolixa* (Boh.)\*

18. Pronotum more strongly punctate, punctures distinct on both sides and top of disc. Ventrites mostly yellow, pronotum never with black ..... *sulcipennis* (BOH.)  
 .....  
 -. Pronotum finely punctate, punctures on top of disc often indistinct, sometimes disc appears completely impunctate. Ventrites usually mostly or completely black, only occasionally mostly yellow, pronotum sometimes with large dark spot of vanished borders ..... *exarata* (BOH.)\*
19. Scutellum yellow, ventrites mostly or completely yellow ..... *candida* (BOH.)\*  
 .....  
 -. Scutellum black, ventrites black, except yellow spots on sides of abdominal sternites ..... *nigroscutata* n. sp.\*

(\*with an asterisk are marked species with colour photos available on web page [www.biol.uni.wroc.pl/cassidae/katalog%20internetowy/index.htm](http://www.biol.uni.wroc.pl/cassidae/katalog%20internetowy/index.htm)).

***Hilarocassis maculicollis* n. sp.**

ETYMOLOGY

Named after black spot in the middle of pronotal disc.

DIAGNOSIS

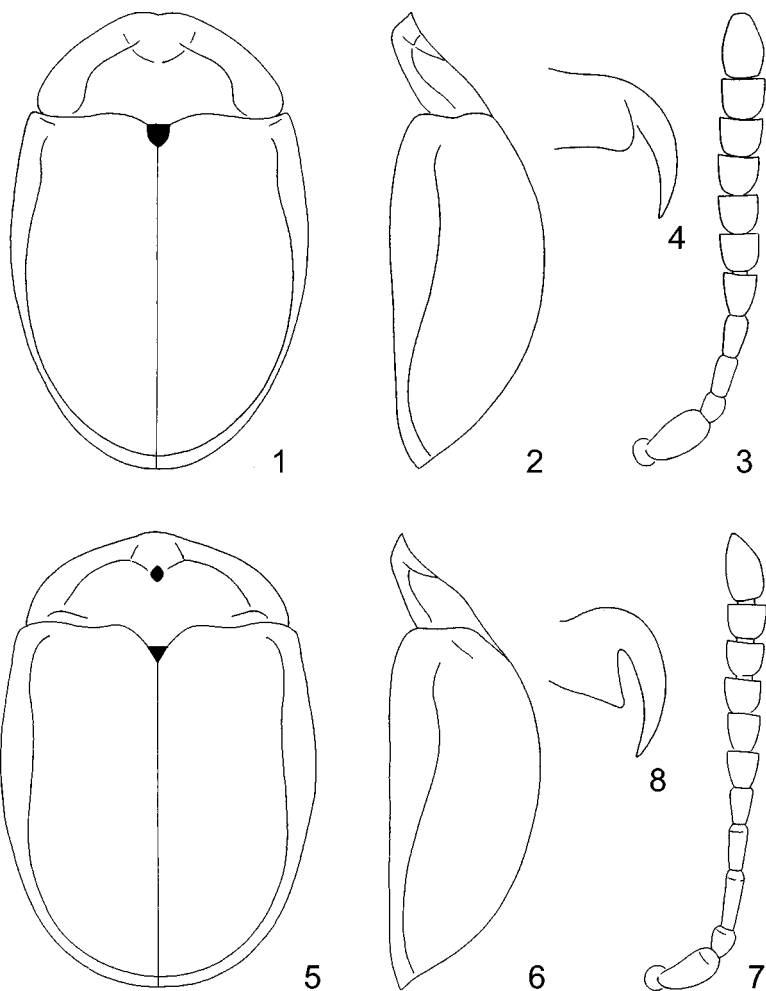
It belongs to the group of species without antennal grooves and with median spot of pronotum. The group comprises also *H. albida* (GERM.), *H. bordoni* BOR., and *H. exclamationis* (L.). *H. exclamationis* differs in presence of black line running from humerus to 1/2-2/3 elytral side. In most specimens of *H. exclamationis* behind end of the line occurs small round black spot; black, usually interrupted line sometimes runs parallel to suture (in *H. maculicollis* elytra uniformly yellow). *H. albida* differs in elytral disc with two small, round, black spots: one on humeral callus and one in posterolateral part of disc, posterior spot sometimes obsolete (in *H. maculicollis* elytra immaculate). *H. bordoni* is the most similar. Differs in well visible dark bands on ventral surface of elytral disc shown by semitransparent elytral integument and presence of irregular dark spot on humeral callus (in *H. maculicollis* humeri are immaculate, bands around ventral surface of disc are present but elytral integument is not transparent and they are invisible from above). Pronotum in *H. bordoni* is not as regularly semicircular as in *H. maculicollis*.

DESCRIPTION

Length: 8.5 mm, width: 5.6 mm, length of pronotum: 2.2-2.3 mm, width of pronotum: 4.0 mm, length/width ratio: 1.5, width/length of pronotum ratio: 1.7-1.8. Body elongate-oval (fig. 5). Pronotum yellow, in the middle with small, round, black spot. Scutellum black. Elytra uniformly yellow, basal crenulation

brown. Head, ventrites, and legs yellow. Antennal segments 1-6 yellow, segment brownish-black, segments 8-11 black.

Pronotum almost regularly semicircular, transverse, widest at base, head not visible from above. Disc moderately convex. Explanate margin narrow, distinctly bordered from disc. Disc and explanate margin with very shallow, fine and sparse punctures. Distance between punctures 1.2-3.0 times wider than puncture diameter. Interspaces slightly opaque.



1-4. *Anacassis nigroscutata*: 1 – body dorsal, 2 – body – lateral, 3 – antenna, 4 – tarsal claw; 5-8. *Hilarocassis maculicollis*: 5 – body dorsal, 6 – body – lateral, 7 – antenna, 8 – tarsal claw

Base of elytra moderately wider than base of pronotum. Disc regularly convex (fig. 6), moderately coarse, completely irregularly punctate. Distance between punctures 2-5 times wider than puncture diameter. Interspaces smooth and slightly shiny. No marginal row, but slightly behind humeral callus runs short impunctate field. Explanate margin very narrow, slightly less coarsely punctate than on disc.

Ventrites with no specific characters.

Antennae stout, length ratio of antennal segments: 100:43:93:71:57:57:57:50:50:50:100 (fig. 7). Claws with large basal tooth (fig. 8).

#### TYPE MATERIAL

Holotype: "BRAZIL, Bahia"; paratype: the same data (both preserved at the Department of Biodiversity and Evolutionary Taxonomy, University of Wrocław, Poland).

#### KEY TO THE GENUS *HILAROCASSIS*

1. Venter of pronotum with deep antennal grooves bordered externally by a sharp carina ..... 2.
- Venter of pronotum without or with very shallow antennal grooves bordered externally by obtuse fold ..... 4.
2. Pronotum uniformly yellowish brown, elytra uniformly yellowish brown or at most with four round black spots ..... 3.
- Pronotum mostly black, or yellowish to red with black spots, elytra with black variegate pattern sometimes reduced to 6 small spots ..... *venusta* (BOH.)\*
3. Elytra unicolours ..... *nigritarsis* (BOH.)
- Elytra with four black spots ..... *rubripennis* Sp.
4. Pronotum without black spots or lines ..... 5.
- Pronotum with black spots or lines ..... 6.
5. Ventral side of elytral disc with black band along suture and margin of disc, bands are visible from above by slightly transparent elytra integument. Elytral disc pale yellow, often distinctly paler than ochraceous-yellow pronotum. Anterior and sutural margin of elytra never marked with black ..... *evanida* (BOH.)\*
- Ventral side of elytral disc without black bands. Elytral disc ochraceous-yellow, only slightly paler than pronotum. Anterior margin and anterior part of sutural margin of elytra marked with black line ..... *suturella* (BOH.)\*
6. Pronotum with black spot in the middle ..... 7.
- Pronotum with narrow black line along middle. Each elytron with two black lines along disc ..... *quinquelineata* Sp.\*
7. Elytral disc on dorsal surface without black lines behind humerus ..... 8.
- Elytral disc on dorsal surface with black line runs from black humeral spot to 1/2-2/3 length of disc. On slope behind the end of black line small black spot sometimes joined with the line ..... *exclamationis* (L.)\*

8. Pronotum not regularly semicircular, base of elytra distinctly wider than pronotal base. Elytral disc at least on humerus with black spot. Dark bands on ventral surface of elytral disc usually more or less visible by semitransparent elytral integument ..... 9.
- Pronotum regularly semicircular, base of elytra only slightly wider than pronotal base. Elytra without dark spots. Dark bands on ventral surface of elytral disc present but invisible from above because of opaque elytral integument ..... *maculicollis* n. sp.\*
9. Elytral disc except round black humeral spot with small black spot on slope, sometimes posterior spot obsolete. Dark bands surrounding ventral surface of elytral disc indistinct or sometimes invisible. Large, length of male above 8.5 mm, female above 9.7 mm ..... *albida* (GERM.)\*
- Elytral disc except irregular black humeral spot always without spots on slope. Dark bands surrounding ventral surface of elytral disc well marked. Small, length of male below 7.8 mm, female below 9.6 mm ..... *bordoni* BOR.\*

(\*with an asterisk are marked species with colour photos available on web page [www.biol.uni.wroc.pl/cassidae/katalog%20internetowy/index.htm](http://www.biol.uni.wroc.pl/cassidae/katalog%20internetowy/index.htm)).

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