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Three new species of *Microtenochira* SPAETH from Brazil and Panama
(Coleoptera: Chrysomelidae: Cassidinae)

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ABSTRACT. *Microtenochira brasiliensis* (Brazil), *M. obscurata* (Brazil) and *M. panamensis* (Panama), new to the science, are described.

Key words: entomology, taxonomy, new species, Coleoptera, Chrysomelidae, Cassidinae, *Microtenochira*, Neotropics.

The genus *Microtenochira* SPAETH, 1926 was revised by SPAETH (1926). Only few species were described after the revision (SPAETH 1932, ŚWIĘTOJAŃSKA and BOROWIEC 1995). Last catalogue lists 104 species within the genus (BOROWIEC in print). In the materials studied recently we found specimens of three new species. Their descriptions are given below.

***Microtenochira brasiliensis* n. sp.**

ETYMOLOGY

Named after its terra typica.

DIAGNOSIS

It belongs to the species group with long antennae, flat or impressed clypeus, impunctate and immaculate explanate margin of elytra, elongate third antennal segment and regularly convex elytral disc. *Microtenochira flavonotata* (BOHEMAN,

1855) and *M. brasiliensis* are the only species of the group with pronotal dark spot marked with yellow spots. Pattern of both species is very similar but in *M. flavonotata* pronotal dark spot is marked by five yellow spots while in *M. brasiliensis* only by two spots. Dark pattern of elytra in *M. flavonotata* is black and extending partly to marginal row of elytra while in *M. brasiliensis* the pattern is reddish-brownish-black and extending only to submarginal row of elytra. Punctuation of elytral disc in *M. brasiliensis* is thrice coarser than in *M. flavonotata* and intervals on slope are distinctly convex (flat in *M. flavonotata*). In *M. flavonotata* only last antennal segment is infusate to black (occasionally also apex of 10th segment is infusate) while in *M. brasiliensis* three last antennal segments are infusate.

DESCRIPTION

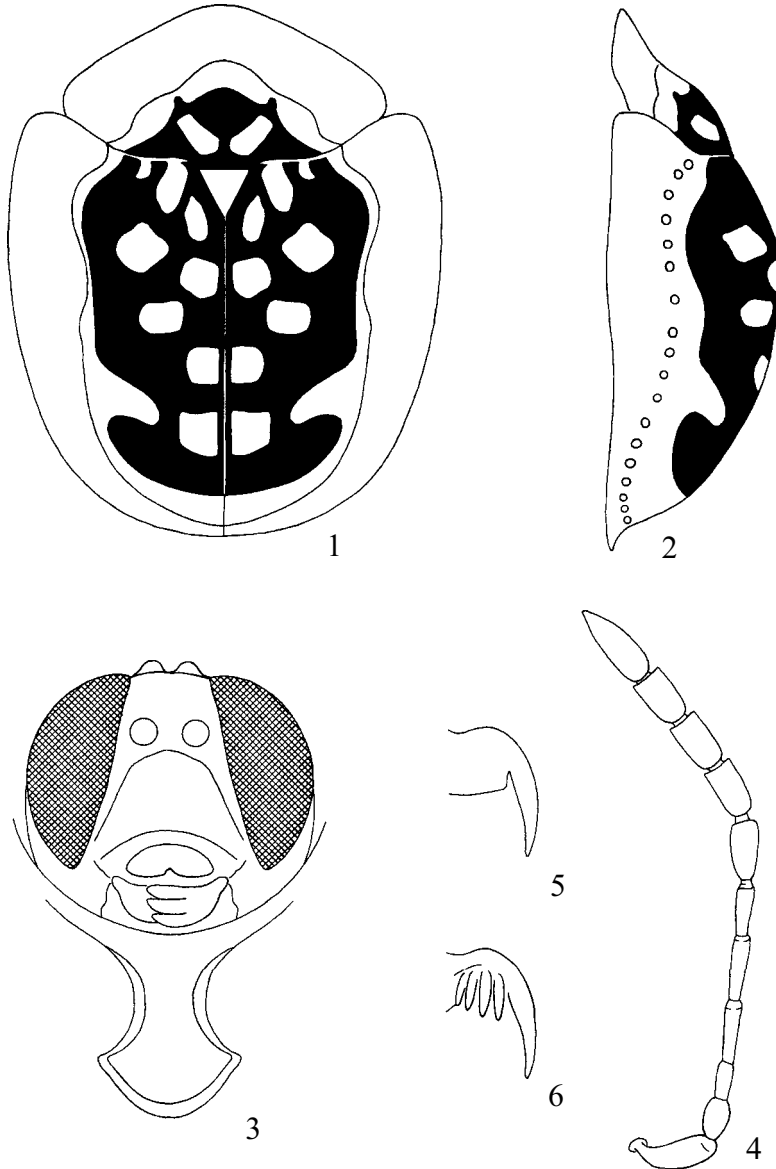
Length: 5.1 mm, width: 4.0 mm, length of pronotum: 1.7 mm, width of pronotum 3.1 mm, length/width ratio: 1.27, width/length of pronotum ratio: 1.82.

Pronotum yellow, disc with large, brown, trapezoidal basal spot, marked with two yellow spots. Scutellum yellow. Elytral disc mostly reddish-brown, with 18 yellow spots: four at base of elytra, two close to apex of scutellum, three along sides of suture, two on each side of principal impression, and transverse in 2/3 length of disc connected with marginal interval. The brown spot extending to submarginal row, extreme apex of disc yellow. Explanate margin uniformly yellow. Head, ventrites and legs yellow. Antennae yellow, three apical segments infusate.

Pronotum elliptical, with maximum width slightly behind the middle, sides obtuse. Disc convex, in front of scutellum with two oblique impressions, on sides and along border of disc with several moderately coarse punctures, top of disc smooth, shiny. Explanate margin broad, subhorizontal, its surface smooth, shiny. Scutellum large, triangular. Base of elytra only slightly wider than pronotum. Elytral disc regularly convex, with shallow principal impressions, no postscutellar impressions. Punctuation of elytra completely regular, punctures coarse and dense, distance between punctures c. twice narrower than puncture diameter. Punctures on sides on disc and in principal impression c. 1.5 times larger than punctures in central rows, on slope only slightly smaller than in anterior half of disc. Scutellar row with 5 punctures. Marginal row with punctures c. twice larger than in central part of disc. Interval 1 and 3 as wide as rows, interval 2 c. 1.5 times wider, on slope intervals 1-3 slightly convex, lateral intervals very narrow, linear, distinctly narrower than rows. Marginal interval very narrow, narrower than submarginal row. Explanate margin moderately broad, declivous, smooth and glabrous. Apex of elytral epipleura bare. Head with very large eyes, clypeus c. 1.5 times wider than long, flat, anterior margin slightly elevated, clypeal sulci distinct only in basal half of clypeus. Labrum shallowly emarginate to 1/5 length. Antennae elongate, length ratio of antennal segments: 100:50:48:76:79:59:71:65:70:67:112. Segment 3 c. as long as 2, segment 4 c. 1.6 times longer than 3. Anterior claws with large basal tooth, mid- and hind claws with long pecten of four teeth extending to 2/5 length of claw.

TYPE

Holotype: "BRAZIL, Sao Paulo, Barueri, 15 X 1968, T. LEGOŃ" (preserved at the Department of Systematic Zoology and Zoogeography, University of Wrocław, Poland).



1-6. *Microctenochira brasiliensis*: 1 - body outline and dorsal pattern, 2 - body in profile, 3 - head and prosternum, 4 - antenna, 5 - anterior claw, 6 - mid claw

***Microtenochira obscurata* n. sp.**

ETYMOLOGY

Latin "*obscurata*" means darkened; named after dark colouration of elytra.

DIAGNOSIS

It belongs to the species group with long antennae, flat or impressed clypeus, impunctate and immaculate explanate margin of elytra, third antennal segment distinctly shorter than second and elytral pattern extending only to submarginal row of punctures. Only common and variable *Microtenochira sertata* (ERICHSON, 1847) has a similar combination of characters but differs in elytral pattern forming a more or less regular black ring with yellow centre (in *M. obscurata* elytral disc is mostly brown, gradually paler from margin to the centre of disc). Elytral colouration in *M. obscurata* is unique and no species of the genus has of the same colour as in the new species.

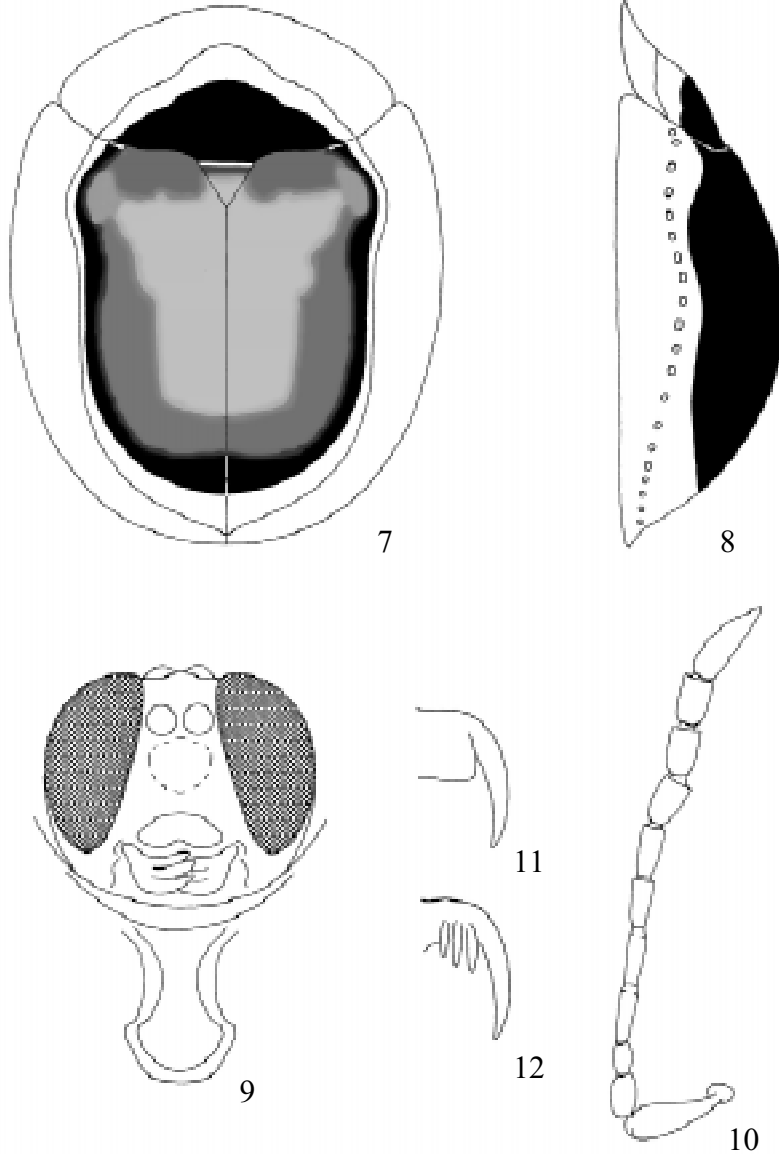
DESCRIPTION

Length: 4.70 mm, width: 3.70 mm, length of pronotum: 1.55 mm, width of pronotum 2.8 mm, length/width ratio: 1.27, width/length of pronotum ratio: 1.81.

Pronotum yellow, disc with large, brown, immaculate basal spot. Scutellum brown. Elytral disc with large brown spot occupying almost whole disc except marginal interval and extreme apex. The spot on sides dark brown, to the middle of disc gradually paler, top of disc yellowish-brown. Explanate margin uniformly yellow. Head, ventrites and legs yellow. Antennae yellow, only dorsal side of apex of last segment slightly infusate.

Pronotum ellyptical, with maximum width in the middle, sides angulate. Disc convex, in front of scutellum with two short, narrow, oblique impressions, on sides with several moderately coarse punctures, top of disc smooth, shiny. Explanate margin broad, subhorizontal, its surface smooth, shiny. Scutellum large, triangular. Base of elytra only slightly wider than pronotum. Elytral disc regularly convex, with distinct but shallow principal impressions, no postscutellar impressions. Puncturation of elytra completely regular, punctures coarse and dense, distance between punctures as wide as to twice narrower than puncture diameter. Punctures on sides of disc only slightly larger than punctures in central rows, on slope only slightly smaller than in anterior half of disc. Scutellar row with 4-5 punctures. Marginal row with punctures c. twice larger than in central part of disc. First three intervals c. as wide as rows, on slope slightly convex, lateral intervals very narrow, linear, distinctly narrower than rows. Marginal interval very narrow, narrower than submarginal row. Explanate margin moderately broad, declivous, smooth and glabrous. Apex of elytra epipleura bare. Head with very large eyes, clypeus c. 1.5 times wider than long, flat, apex with large, circular impression. Labrum shallowly emarginate to 1/5 length. Antennae elongate, length ratio of antennal segments: 100:42:32:62:57:50:52:48:48:100.

Segment 3 distinctly shorter than 2, almost twice shorter than segment 4. Anterior claws with large basal tooth, mid- and hind claws with long pecten of three teeth extending to $2/5$ length of claw.



7-12. *Microctenochira obscurata*: 7 - body outline and dorsal pattern, 8 - body in profile, 9 - head and prosternum, 10 - antenna, 11 - anterior claw, 12 - mid claw

TYPE

Holotype: "BRAZIL, Mato Grosso, Chapada Plateau, XI 1965, native collector" (preserved at the Department of Systematic Zoology and Zoogeography, University of Wrocław, Poland).

***Microctenochira panamensis* n. sp.**

ETYMOLOGY

Named after its terra typica.

DIAGNOSIS

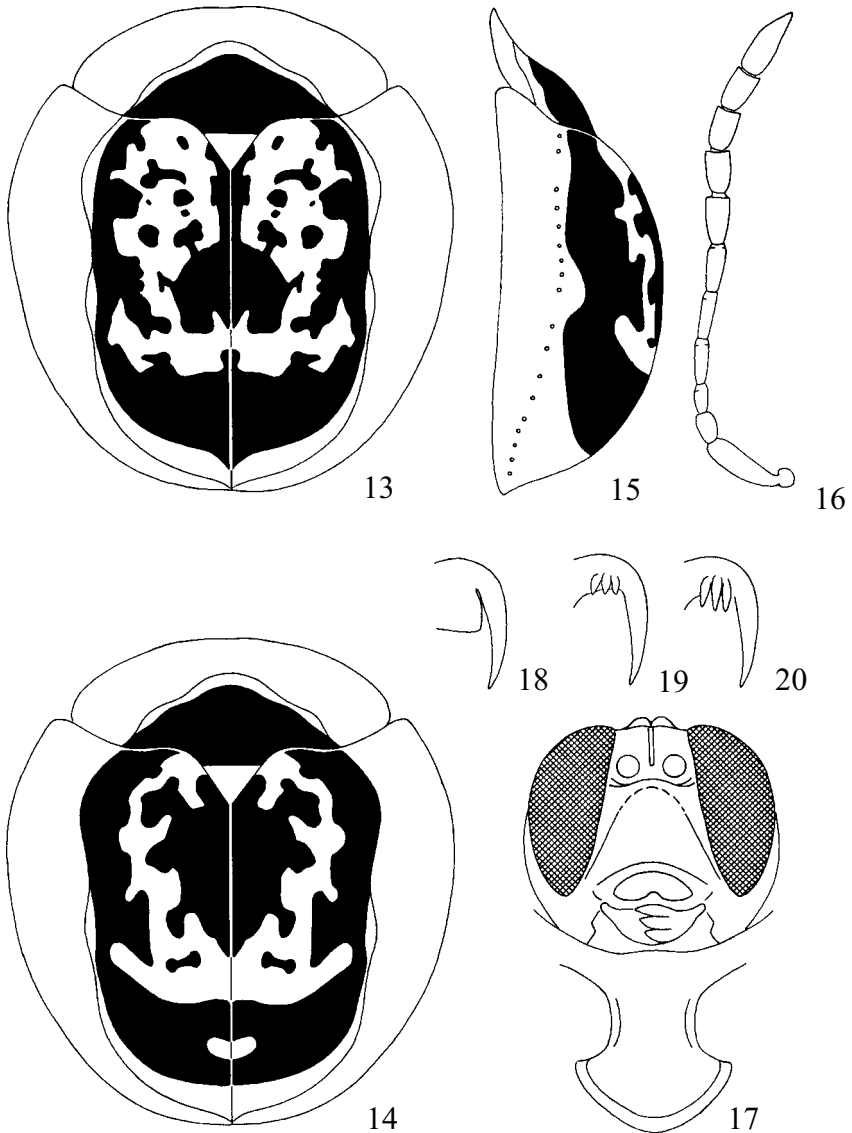
It belongs to the species group with elongate antennae, flat or impressed clypeus, impunctate and immaculate explanate margin of elytra, third antennal segment shorter than the second, regularly convex elytral disc, immaculate pronotal spot and partly black marginal interval of elytra. *Microctenochira arcana* (SPAETH, 1926), *M. cruxflava* (CHAMPION, 1894) and *M. panamensis* are the only species of the group with elytral yellow pattern with tendency to form a transverse band behind the middle of elytron. *M. arcana* differs in black antennal segments 8 and 9 (in *M. panamensis* only apex of last segment is black) and *M. cruxflava* differs in complete yellow transverse band extending to the margin of elytral disc (in *M. panamensis* the band is incomplete, extending to seventh row of punctures). Third antennal segment in *M. panamensis* is only slightly shorter than in species of the group with elongate second segment. *M. championi* (SPAETH, 1926) is the only species of the group with elongate second antennal segment which has elytral pattern with transverse band but differs in the pattern reddish yellow (pale yellow in *M. panamensis*), regular, more similar to the pattern of *M. fairmairei* (BOHEMAN, 1855) than to the irregular pattern of *M. panamensis*.

DESCRIPTION

Length: 6.00 mm, width: 5.25-5.30 mm, length of pronotum: 2.00 mm, width of pronotum 3.55-3.75 mm, length/width ratio: 1-13-1.14, width/length of pronotum ratio: 1-78-1.88.

Pronotum yellow, disc with large, black, immaculate, trapezoidal basal spot. Scutellum yellow. Elytral disc with black and yellow variable pattern. In the middle of disc large yellow spot with irregular borders, marked by numerous black spots, sometimes black spots coalescent and form at top of disc splash. Posterior part of yellow spot narrowly extended to 7th row of punctures, forms incomplete transverse, irregular band. Sometimes also apex of black spot with central, small, yellow spot. Black spot at least in posthumeral part extending to marginal row of punctures. Head, ventrites and legs yellow. Antennae yellow, only apex of dorsal side of last segment infuscate.

Pronotum ellyptical, with maximum width in the middle, sides obtuse. Disc convex, in front of scutellum with two oblique impressions, on sides and along border of disc with several moderately coarse punctures, top of disc smooth, shiny. Explanate margin broad, subhorizontal, its surface smooth, shiny. Scutel-



13-20. *Microctenochira panamensis*: 13-14 - body outline and variation of dorsal pattern, 15 - body in profile, 16 - antenna, 17 - head and prosternum, 18 - anterior claw, 19 - mid claw, 20 - hind claw

lum large, triangular. Base of elytra slightly wider than pronotum. Elytral disc regularly convex, with shallow principal impressions, and very shallow posts-cutellar impressions. Puncturation of elytra mostly regular, but rows broken by yellow pattern. Punctures on sides coarse and dense, distance between punctures c. twice narrower than puncture diameter, in central parts of disc punctures small, group on black spots. Punctures on sides of disc and in principal impression c. twice larger than punctures in central rows, on slope twice to thrice smaller than in anterolateral half of disc. Scutellar row with 5 punctures. Marginal row with punctures only slightly larger than in anterolateral part of disc. Interval 1-3 c. thrice wider than rows, flat, lateral intervals very narrow, linear, distinctly narrower than rows. Marginal interval as wide as submarginal. Explanate margin moderately broad, declivous, smooth and glabrous. Apex of elytral epipleura bare. Head with very large eyes, clypeus c. 1.6 times wider than long, flat, anterior margin slightly elevated, clypeal sulci distinct only in basal half of clypeus. Labrum shallowly emarginate to 1/4 length. Antennae elongate, length ratio of antennal segments: 100:35:35:58:60:60:58:53:50:50:94. Segment 3 as long as 2, segment 4 c. 1.7 times longer than 3. Anterior claws with large basal tooth, mid claws with short pecten, extending to 1/6 length of claw, hind claws with moderately long pecten of three teeth extending to 1/3 length of claw.

TYPES

Holotype: "PANAMA, Cerro Campana, 4 I 1991, native collector" (preserved at the Department of Systematic Zoology and Zoogeography, University of Wrocław, Poland); paratype (not fully sclerotized specimen): "PANAMA: Chiriqui, 5.6 km N Boquete, La Culebra Trail, 1450 m, 8°49'23''N, 82°25'18''W, 15 Jun 1996; J. ASHE, R. BROOKS; PAN 1AB96 161 ex: fungusy log" (preserved in Snow Entomological Museum, Lawrence, USA).

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