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Four new species of Aslamidium Borowiec, with description of Neoaslamidium new subgenus (Coleoptera: Chrysomelidae: Hispinae)

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ABSTRACT. Aslamidium ecuadoricum (Ecuador, Peru), A. coca (Ecuador), A. (Neoaslamidium) pichinchaensis (Ecuador) and A. (N.) lescheni (Peru), new to the science, are described. A new subgenus, Neoaslamidium is proposed for Imatidium formosum, Spaeth, 1907 and two of the new species.

Key words: entomology, taxonomy, new species, new subgenus, *Coleoptera*, *Chrysomelidae*, *Hispinae*, South America.

The genus Aslamidium Borowiec, 1984 (= Imatidium sensu Aslam, 1965: 689 not Fabricius, 1801: 345) comprises five species (Aslam 1965), widespread in the southern part of Central and northern part of South America. In recently studied materials I found next four species of the genus. For Aslamidium formosum (Spaeth, 1907) and two new species I have proposed a new subgenus, Neoaslamidium, distributed only in the mountains of Peru and Ecuador.

Aslamidium (s. str.) ecuadoricum n. sp.

ETYMOLOGY Named after its type locality.

DIAGNOSIS

At first glance it is very similar to A. capense (HERBST), especially in the shape of elytral spots and bands. It differs in the elongate sutural spot behind scutellum, always longer than wide (in capense square, almost as long as wide or slightly wider than long), W-shaped transverse band narrower and more zigzaglike, stronger pronotal puncturation, explanate margin of elytra in subhumeral part more impressed, forming a shallow gutter. The three examined specimens of A. ecuadoricum are slightly larger than most specimens of A. capense.

DESCRIPTION

Length: 6.8-7.7 mm, width: 5.2-6.2 mm, length/width ratio: 1.24-1.32.

Pronotum pale yellow, base with two square or rectangular black spots, partly coalescent at base. Scutellum black or with yellowish apex. Elytra pale yellow with several black spots and bands (fig. 1): small along sides of scutellum (sometimes obsolete), elongate spot in postscutellar area on intervals 1 and 2 coalescent with elongate spot on interval 3 and 4 in front of postscutellar spot, large C-shaped spot on humerus and posthumeral area which is sometimes slightly coalescent with spot on fourth interval, narrow, W-shaped, geometrical transverse band behind the middle of elytra, and zigzag band at apex of elytron. Explanate margin of elytra with three large spots, sutural apex immaculate (in A. capense it is often maculate). Postscutellar spot is never coalescent with scutellar spots (in A. capense postscutellar spot is always united with scutellar spot by black first interval). Dorsal side of head black, vertex with yellow spots, ventral part of head and mouthparts yellowish to yellowish-brown. Antennae yellow, two or three basal segments from yellow-brown to brownish-black. Ventrites uniformly yellow, or thorax partly brownish-black. Legs yellow, tarsi darker yellow to yellowish-brown.

Pronotum almost semicircular, width/length ratio: 2.11-2.17, anterior emargination large and deep, extending to half length of pronotum. Base of disc with two shallow, strongly punctate impressions, in front of the impressions several coarse punctures. Specimen from Peru has coarser and denser punctate disc than specimens from Ecuador. Margins with 14-26 coarse punctures, specimen from Peru has fewer punctures than specimens from Ecuador. Sides narrowly marginate. Surface between punctures smooth and glabrous. Emargination in front of seta tubercle of anterior margin distinct. Scutellum pentagonal, impunctate. Base of elytra as wide as base of pronotum, then elytra broadly rounded, with maximum width in 1/3 length, in the widest part elytra 1.4-1.5 times wider than pronotum. Disc slightly unevenly convex, with top of convexity in postscutellar point, with shallow scutellar impressions, without lateral impressions. Puncturation completely regular, rows slightly impressed, punctures in rows coarse and dense, distance between punctures 0.2-0.5 puncture diameter. Punctures on slope twice to thrice smaller than in anterior part of disc, the largest punctures occupy anterolateral part of elytral rows. In specimen from Peru punctures slightly larger

than in specimens from Ecuador. Intervals slightly elevated, on sides of disc twice to thrice, in sutural part of disc three to four times wider than rows, its surface smooth and glabrous. Explanate margin broad, in the widest part only slightly narrower than each disc of elytron, behind humerus impressed, forms a shallow gutter. Puncturation of explanate margin very strong, punctures three to four times larger than the largest punctures of disc, on median dark spots punctures partly coalescent, form transverse grooves.

Head concave anteriorly, clypeus very short, triangular, frons dull, with sharp median carina. Antennae elongate, telescoped. Length ratio of antennal segments: 100:62:125:110:125:100:115:106:106:156, segment 3 almost twice longer than 2 and 1.1-1.2 times longer than segment 4 (fig. 6).

Prosternal process distinctly expanded apically, between procoxae not or distinctly impressed, apex coarsely punctate with few short longitudinal grooves. Other ventrites with no diagnostic characters.

TYPES

Holotype: "Ecuador, Napo, Misahualli, 450 m, MAY 28 1994, C BOADA"; paratypes: "Ecuador", 1, "Pérou", 1, (holotype in Departamento de Ciencias Biológicas Pontifica Universidad Católica del Ecuador, Quito, Ecuador, paratypes in author's collection).

Aslamidium (s. str.) coca n. sp.

ETYMOLOGY

Named after the coca shrub and Coca village in Napo Distr.

DIAGNOSIS

Its body colouration is unique. It differs from both relatives of nominotypical subgenus (*capensis* and *ecuadoricum*) in lacking transverse bands and in immaculate pronotum..

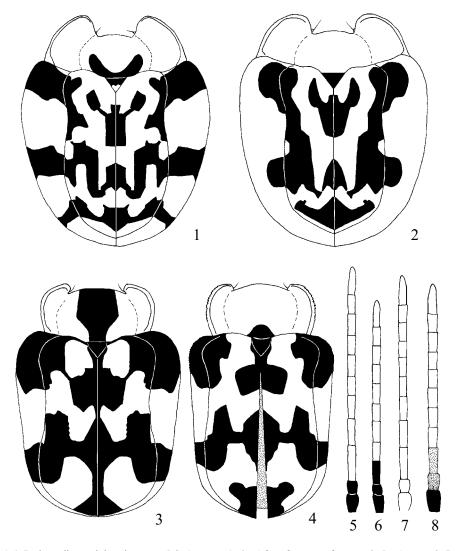
DESCRIPTION

Length: 6.8 mm, width: 5.3 mm, length/width ratio: 1.28.

Pronotum pale yellow. Scutellum black. Elytra pale yellow with black pattern (fig. 2): small spots along sides of scutellum, Y-shaped spot in postscutellar point, triangular spot at humerus behind the middle of elytra, transverse spot at slope and large longitudinal band along side from base of elytron to 2/3 its length. Explanate margin of elytra with only two spots, first close to humerus, second in 2/3 its length. Humeral spot not extending to anterior margin of elytron, both humeral and posterolateral spots not extending to lateral margin of elytron and both are coalescent with lateral band of disc. Dorsal side of head black, vertex with yellow spots, ventral part of head and mouthparts yellowish to yellowish-

brown. Antennae yellow, first segment black, second brownish-black. Ventrites mostly yellow, margins of prosternum and anterior margin of metasternum brown. Legs yellow, coxae, trochanters and tarsi yellowish-brown.

Pronotum almost semicircular, width/length ratio: 2.09, anterior emargination large and deep, but slightly shallower than in both relatives. Base of disc with indistinct impressions, coarsely and densely punctate, also anterior part of disc punctate but finer and sparser than base. Margins with 28-29 coarse punctures, they are distributed more regularly than in both relatives. Sides narrowly marginate.



1-4. Body outline and dorsal pattern, 5-8. Antenna: 1, 6 - *Aslamidium ecuadoricum*, 2, 5 - *A. coca*, 3, 7 - *A. pichinchaensis*, 4, 8 - *A. lescheni*

Surface between punctures smooth and glabrous. Emargination in front of seta tubercle of anterior margin distinct. Scutellum pentagonal, impunctate. Base of elytra as wide as base of pronotum, then elytra broadly rounded, with maximum width in 1/3 length, in the widest part elytra 1.4-1.5 times wider than pronotum. Disc slightly unevenly convex, with top of convexity in postscutellar point, with shallow scutellar impressions, and shallow impression on each side of postscutellar area. Puncturation completely regular, rows impressed, punctures in rows coarse and dense, larger than in both relatives, distance between punctures 0.1-0.3 width of puncture diameter. Punctures on slope only slightly smaller than punctures in anterior part of disc, the largest punctures occupy impressions at sides of postscutellar area. Intervals slightly elevated, on sides of disc 1.5-2.0, in sutural part of 2.0-2.5 times wider than rows, its surface smooth and glabrous.

Head concave anteriorly, clypeus very short, triangular, frons dull, with sharp median carina. Antennae elongate, telescoped. Length ratio of antennal segments: 100:75:206:150:125:106:115:106:115:105:156, segment 3 longer than in the preceding species, 2.7 times longer than 2 and 1.4 times longer than 4 (fig. 5).

Prosternal process distinctly expanded apically, between procoxae slightly impressed, apex with few large punctures and few short longitudinal grooves. Other ventrites with no diagnostic characters.

Types

Holotype: "Ecuador, Napo, Coca, III 1983" (preserved at the Department of Systematic Zoology and Zoogeography, Wrocław).

Neoaslamidium new subgenus

It differs from nominotypical subgenus in the following characters (respective characters for *Imatidium* s. str. given in parentheses): body elongate, parallelsided (broad, sides rounded), pronotum rectangular (almost semicircular), elytra slightly to moderately wider than pronotum (strongly wider), prosternal process along sides with deep groove (apex of prosternal process with several shallow and short grooves). Margins of elytra impunctate (punctate), narrow, in the widest part narrower than half width of elytral disc.

Type species: Imatidium formosum Spaeth, 1907. Gender: neuter.

Aslamidium (Neoaslamidium) pichinchaensis n. sp.

ETYMOLOGY

Named after its type locality, Pichincha in Ecuador.

DIAGNOSIS

It differs from both relatives (*formosum* and *lescheni*) in uniformly yellow antennae (in *formosum* two basal segments reddish, in *lescheni* three basal segments brownish to black), and completely black suture (partly yellow in both relatives).

DESCRIPTION

Length: 5.0 mm, width: 3.3 mm, length/width ratio: 1.52.

Pronotum pale yellow, along middle with black, cup-shaped spot. Scutellum black. Elytra pale yellow with black pattern similar to that of *A. capense* (fig. 3): small spots along side of scutellum, large spot at humerus and square spot in postscutellar point united with humeral spot by a fine oblique line, zigzag transverse band behind the middle and triangular spot at apex. Postscutellar spot coalescent by black suture with scutellar spot and posterior band, and the band coalescent with apical spot, thus whole suture black. Explanate margin of elytra with two large spots, both extending to lateral margin of elytron, sutural apex immaculate. Head black, only mouthparts and posterior half of gena yellowish. Antennae uniformly yellow, basal segments as pale yellow as distal one. Prosternum partly yellowish-brown to brown, meso- and metasternum brown, abdomen rusty-yellow. Legs yellow, trochanters and tarsi brown.

Pronotum almost square, width/length ratio: 1.88, its sides slightly narrowed posterad, anterior corners broadly rounded, anterior emargination broad but shallower than in species of nominotypical subgenus, extending to 1/4 length of pronotum. Disc without impressions, mostly impunctate, only sides of its base with few medium-sized punctures. Margins with several coarse but shallow punctures. Sides broadly marginate. Surface between punctures smooth and glabrous. Emargination in front of seta tubercle of anterior margin distinct. Scutellum pentagonal, impunctate. Base of elytra distinctly wider than base of pronotum, elytra with almost straight sides, widest in anterior part then slightly narrowed posterad. Disc depressed, without impressions. Puncturation completely regular, rows not impressed, punctures in rows medium-sized and dense, distance between punctures as wide as to slightly narrower than puncture diameter. Punctures on slope distinctly smaller than in anterior part of disc, the largest punctures occupy anterolateral part of elytral rows. Intervals flat, on sides of disc as wide as to twice wider, in sutural part of disc c. three times wider than rows, their surface smooth and glabrous. Explanate margin narrow, in the widest part thrice narrower than elytral disc, behind humerus impressed, forms a shallow gutter, its surface smooth and glabrous.

Head concave anteriorly, clypeus very short, triangular, frons glabrous, with sharp median carina, vertex punctate. Antennae elongate, telescoped. Length ratio of antennal segments: 100:67:156:133:122:100:95:83:89:85:156, segment 3 shorter than in *A. coca*, 2.3 times longer than 2 and 1.17 times longer than 4.

Prosternal process distinctly expanded apically, between procoxae not impressed, on sides with deep groove. Other ventrites with no diagnostic characters.

Types

Holotype: "Ecuador, Pichincha, Quito-La Armenia road, III 1983" (preserved at the Department of Systematic Zoology and Zoogeography, Wrocław).

Aslamidium (Neoaslamidium) lescheni n. sp.

ETYMOLOGY

Dedicated to R. Leschen, who collected this species in Peru.

DIAGNOSIS

It differs from both relatives (formosum and pichinchaensis) in a slimmer body, with length/width ratio 1.80-1.86 (in formosum 1.27, in pichinchaensis 1.52).

DESCRIPTION

Length: 4.5-5.2 mm, width: 2.5-2.8 mm, length/width ratio: 1.80-1.86.

Pronotum pale yellow, only in front of the scutellum with small, black spot. Scutellum black. Elytra pale yellow with black pattern: large humeral spots and large, shaped like upturned T spot behind scutellum, zigzag transverse band behind the middle and cup- or Y-shaped spot at apex. Band never coalescent with postscutellar spot, but sometimes united with apical spot by black sutural margin, thus suture partly yellow. Explanate margin of elytra with two large spots, both extending to lateral margin of elytron, also sutural apex maculate. Head black, vertex with yellow spot, mouthparts and posterior half of gena yellowish. Antennae yellow, three basal segments brownish to black. Prosternal process and procoxae brownish-black to black, meso- and metasternum mostly brown, abdomen yellow, two to four basal segments in the middle with brownish spot of diffuse borders. Legs yellow, coxae, trochanters and tarsi brown to brownish-black.

Pronotum almost square, width/length ratio: 1.71-1.76, its sides slightly narrowed posterad, anterior corners broadly rounded, anterior emargination broad but shallower than in species of nominotypical subgenus, extending to 1/5 length of pronotum, sides slightly crenulate. Disc without impressions, base with several medium-sized punctures, anterior part of disc mostly impunctate with only a few larger punctures. Margins with 17-22 coarse and dense punctures, almost touching each other. Sides broadly marginate. Surface between punctures smooth and glabrous. Emargination in front of seta tubercle of anterior margin obsolete. Scutellum pentagonal, impunctate. Base of elytra distinctly wider than base of pronotum, elytra with almost straight sides, the widest in anterior part then slightly narrowed posterad. Disc depressed, without impressions. Puncturation completely regular, rows not impressed, punctures in rows small but each puncture with transparent, slightly impressed areola. Distance between punctures

several times wider than puncture diameter, distance between areolae 0.2-0.4 times wider then areola diameter. Punctures on slope c. twice smaller than punctures in anterior part of disc, the largest punctures occupy anterolateral part of elytral rows. Intervals flat, on sides of disc as wide as, in sutural part of disc c. twice wider than rows, its surface smooth and glabrous. Explanate margin very narrow, in the widest part four times narrower than elytral disc, behind humerus only slightly impressed, its surface smooth and glabrous.

Head concave anteriorly, clypeus very short, triangular, frons glabrous, with sharp median carina, vertex punctate. Antennae elongate, telescoped. Length ratio of antennal segments: 100:85:115:100:92:85:85:77:81:77:120, segment 3 shorter than in the preceding species, 1.35 times longer than 2 and 1.15 times longer than 4.

Prosternal process distinctly expanded apically, between procoxae not impressed, on sides with deep groove. Other ventrites with no diagnostic characters.

TYPES

Holotype: "PERU: Dept. Loreto, Campamento San Jacinto, 2°18.75'S 75°51.77'W, 5 July 1993, 175-215 m, Richard Leschen, #30 ex: flight intercept trap" "*Imatidium* sp. 1994, Det. C.L. Staines"; two paratypes: the same data, without det. label (holotype and one paratype in Snow Entomological Museum, Kansas University, USA, one paratype in author's collection).

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