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Notes on Neotropical Alticinae (Coleoptera, Chrysomelidae)

Lev N. MEDVEDEV

Severtsov Inst. Ecol. & Evolution, Russian Academy of Sciences, Moscow

Abstract: A list of Alticinae from Hispaniola is given with descriptions of one new genus and six new species, as well as one new species from Brasilia.

Key words: South America, flea beetles, taxonomy, biogeography, new taxa.

1. INTRODUCTION

The article proposed is based mostly on material collected by J. & S. Klapperich on the island of Hispaniola and deposited in the Basel Museum of Natural History; as well as one new species from Brasilia was found in the Stuttgart Natural History Museum.

The following abbreviations for depository locations are used:

NHMB – Naturhistorisches Museum, Basel

SMNS – Staatliches Museum fuer Naturkunde, Stuttgart

LM – author's collection.

2. TAXONOMY

2.1. Island of Hispaniola

***Hirtasphaera* Medvedev, gen. n.**– (Fig. 1)

Description. Body elongate, distinctly flattened above. Head impunctate, frontal tubercles subquadrate, interantennal ridge high, frons narrow, as wide as eye, clypeus elevated posteriorly, vertex with longitudinal impressed line, eyes round. Antennae filiform, reaching middle of elytra. Prothorax transverse quadrangular, much narrower than elytra at base, all angles distinct, with setiferous pore, but not produced (Fig. 1), surface without transverse basal groove. Elytra elongate, impunctate, without basal convexity, with dense erect hairs. Epipleurae broad, horizontal, in lateral view seem only in anterior third. Prosternum flat, narrowed in middle. Mesosternum with hind margin arcuately emarginate. Metasternum neither marginate nor elevate anteriorly. Last abdominal sternite of male with dark longitudinal line. Hind femora twice as long as wide, hind tibia 1.5 times as long as width of femur, with small preapical tooth

followed with shallow excavation on outer margin. Spur short and thick. Hind tarsus: segment 1 about 2.5 times shorter than tibia, last segment globular on apex.

Diagnosis. This new genus is similar to *Asphaera* Chevrolat, 1842, but it differs well in pubescent elytra, not produced anterior angles of rather narrow prothorax and globular apex of last segment on hind tarsi. In any case, I don't know any species or genus in Oedionychini with pubescence on the elytra.

Type species: *Hirtasphaera hirsuta*, sp. n.

***Hirtasphaera hirsuta* L. Medvedev, sp. n.** (Figs 2, 3)

Holotype (male): Dominican Republic, Constanza, 1250 m, 10. V. 1972, leg. J. & S. Klapperich (NHMB).

Paratypes: same locality, 1 male (LM), 1 female (NHMB).

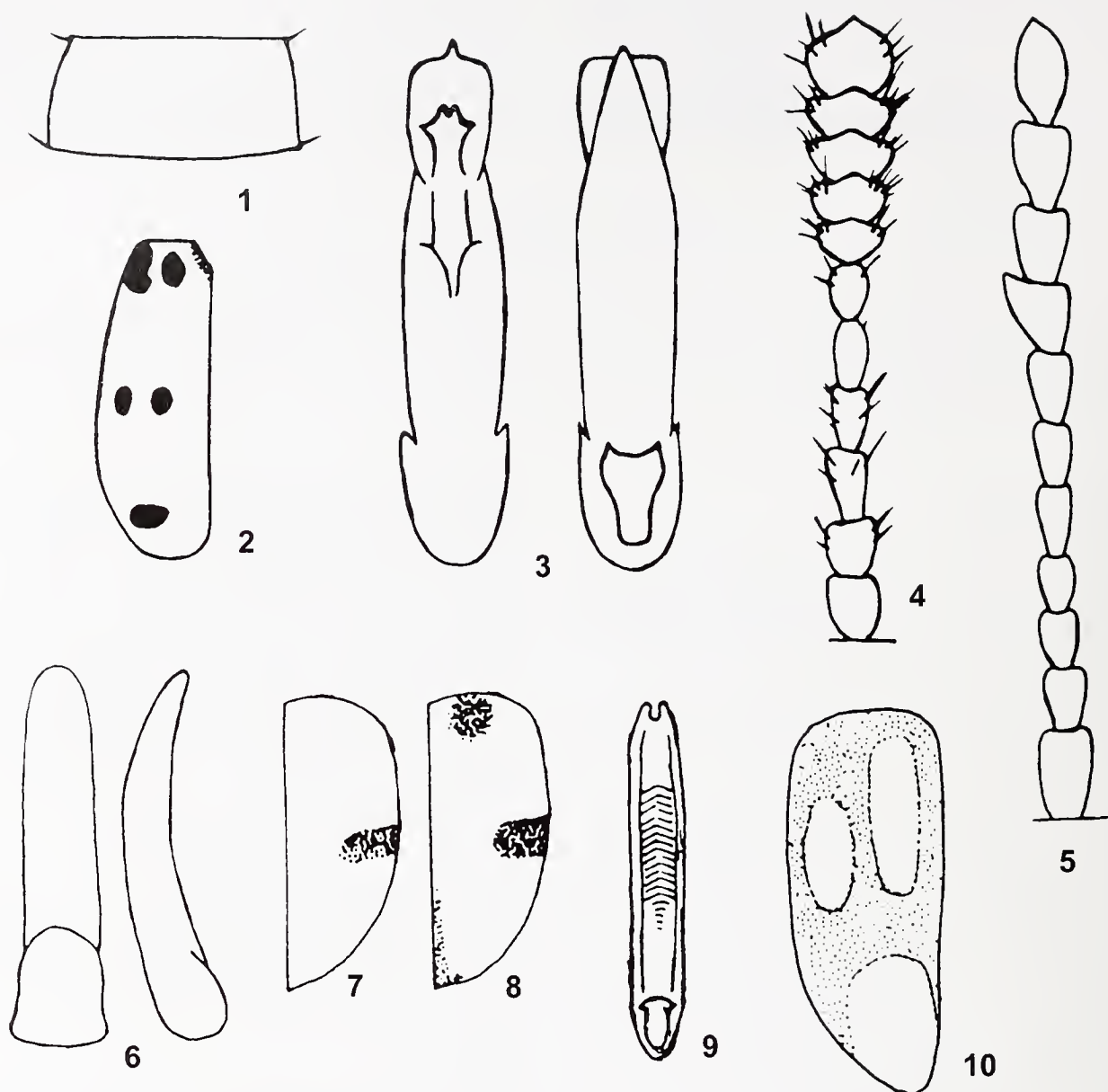
Description: Pale flavous; antennal segments 7-9, apical part of segment 6 and scutellum black, elytra with 5 dark metallic spots (2, 2, 1; Fig. 2) and narrow dark emargination around scutellum.

Head feebly shining, frontal tubercles with dense microsculpture. Proportions of antennal segments: 11-4-7-8-10-10-10-8-8-8-11. Prothorax 2.1 times as wide as long, anterior margin practically straight, lateral margins straight, subparallel, broadly explanate; surface impunctate, shining. Elytra 1.5 times as long as wide. Aedeagus – fig. 3. Length 6.4 mm, width 3.3 mm.

***Homophaeta albicollis* (Fabricius, 1787)**

Material: Dominican Republic, Colonia, 1000 m, 18. III. 1972; leg. J. & S. Klapperich, 1 ex.; – Constanza, 7.VII. 1972, leg. J. & S. Klapperich, 1 ex. (NHMB).

General distribution: South America and West Indies, including Haiti and Dominican Republic (BLAKE 1931).



Figs. 1-3 *Hirtasphaera hirsuta*: 1 prothorax, 2 elytral pattern, 3 aedeagus dorsal and ventral.

Fig. 4 *Distigmoptera antennata*, antenna

Fig. 5 *Centralaphthona dominicana*, antenna

Fig. 6 *Apraea oculata*, aedeagus ventral and lateral

Figs. 7-9 *Leptophysa ornata*: 7 & 8 elytral pattern, 9 aedeagus ventral

Fig. 10 *Megistops sexmaculata*, elytral pattern

***Kuschelina cincta* (Olivier, 1789)**

Material: Dominican Republic, Colonia, 1000 m, 10.III.-21.IV.1972, leg. J. & S. Klapperich, 10 ex. (NHMB).

Remarks: This series includes both colour forms: with fulvous stripe in middle of elytra and fulvous type with blue apex of elytra.

General distribution: West Indies.

***Kuschelina purpurella* (Blake, 1940)**

Material: Dominican Republic, Colonia, 1000 m, 10-18.III.1972, leg. J. & S. Klapperich, 1 ex. (NHMB).

General distribution – Endemic to Hispaniola.

***Distigmoptera antennata* Medvedev, sp. n. (Fig. 4)**

Holotype: Dominican Republic, Cazabita, 1250 m, 17. X. 1971, leg. J. & S. Klapperich (NHMB).

Description: Dark brown to pitch brown with lighter coloured legs, antennal segment 5 white, prothorax almost black with dark brown hind margin. Pubescence dark on head and prothorax, white or fulvous on elytra.

Body robust. Head coarsely and rugosely punctate, frontal tubercles indistinct. Antennae short, reaching only humeral tubercles, covered with rather long erect hairs,

segments 1 and 2 thick, 3 as long as 2, but much thicker, 4 and 5 equal, shorter than 3, 6 the shortest and globular, 7-11 strongly widened, 7-10 transverse, 11 as long as wide (Fig. 4). Prothorax 1.3 times as wide as long, lateral margins almost straight, anterior angles acute and produced, hind margin arcuate, surface uneven, with two blunt tubercles in middle, divided with longitudinal impression; a few impressions also near hind angles and along base; disc very densely and coarsely punctate. Elytra 1.3 times as long as wide, slightly broadened to behind, with high basal convexity delimited behind with oblique impression, humerus strong, elytral rows of punctures deep, strong and regular, interspaces smooth, rather shining, flat or feebly convex. Length 2.3 mm.

Diagnosis. As in the genus, but with unusual colour of the antennae.

***Disonycha glabrata* (Fabricius, 1775)**

Material: Dominican Republic, Santo Domingo, 30 m, 6. XII. 1970, leg. J. & S. Klapperich, 1 ex. (NHMB).

General distribution: Widespread in North and South America, including West Indies.

***Disonycha texana* Schaeffer, 1919**

Material: Dominican Republic, Boca Chica, 10 m, 3. VI. 1972, leg. J. & S. Klapperich, 2 ex. (NHMB).

General distribution: Widespread in south-east USA and Mexico; according to BLAKE (1933) it might be a variation of *D. leptolineata* Blatchley, 1917. First record for Hispaniola.

***Systema basalis* Jackelin du Val, 1856**

Material: Dominican Republic, Santo Domingo, 30 m, 6. XII. 1970, leg. J. & S. Klapperich, 7 ex. (NHMB).

General distribution: Widespread in West Indies, Central America.

***Centralaphthona elachia* (Blake, 1948)**

Material: Dominican Republic, Colonia, 1000 m, 18. III. 1972, leg. J. & S. Klapperich, 3 ex. (NHMB).

General distribution: Haiti (only 2 females were known); first record for Dominican Republic.

***Centralaphthona dominicana* Medvedev, sp. n.
(Fig. 5)**

Holotype (male): Dominican Republic, Boca Chica, 10 m, 21. X. 1971, leg. J. & S. Klapperich (NHMB).

Paratypes: same locality, 6-21. X. 1971, leg. J. & S. Klapperich, 20 ex. (NHMB, 3 ex. – LM).

Description: Dark fulvous with antennal segments 5-11 pitch black.

Head impunctate, clypeus convex, interantennal ridge rather broad, flattened. Frontal tubercles sharply delimited, rounded-triangular, feebly convex. Antennae short, reaching a little behind humerus, segments 2-10 more or less subequal in length, 2-6 about 1.5 times as long as wide, next segments thickened and almost subquadrate; in male segment 8 triangularly widened (Fig. 5). Prothorax 1.5 times as wide as long, lateral margins almost straight; divergent to front and angulate in anterior fifth; surface shining, finely and sparsely punctate. Elytra 1.3 times as long as wide, slightly rounded on sides and broadly rounded on apex, with regular rows of fine punctures, very feeble in apical part and on sides; interspaces flat. Length 1.2-1.3 mm.

Diagnosis: This species belongs to the *C. insolita* group (*C. insolita* Melshemer 1847, *C. fulvipennis* Jacoby 1892 from continental North America and seven species from West Indies, described by BLAKE). They might be divided as follows:

Key

- 1(2) Upperside fulvous with dark pattern. Puerto Rico.
C. crucifera (Blake, 1964)
- 2(1) Upperside entirely fulvous.
- 3(4) Antennae fulvous with a few intermediate segments (6-9, 8-9 or 8-10) black.
C. fraterna (Blake, 1948), Haiti
C. elachia (Blake, 1948), Haiti
C. schwarzi (Blake, 1949) Cuba
- 4(3) Antennae without black intermediate segments.
- 5(6) Antennae pitch black with 4 basal segments fulvous; segment 8 triangularly widened in male. Length 1.2-1.3 mm. Dominican Republic.
C. dominicana, sp. n.
- 6(5) Antennae fulvous with slightly darkened apical segments;
segment 8 simple.
- 7(8) Body larger, about 1.8 mm. Puerto Rico.
C. inornata (Blake, 1949)
C. lepta (Blake, 1964)
- 8(7) Body small, about 0.3 mm. Cuba.
C. nana (Blake, 1949)

All these species were originally assigned to *Aphthona* Chevrolat, 1837 and later transferred to the genus *Centralaphthona* Bechyne, 1960. This Neotropical genus, being rather distinct, is very alike the Oriental genus *Manobidia* Chen, 1934.

***Homoschema bnscki* Blake, 1950**

Material: Dominican Republic, Colonia, 1000 m, 18.III. – 21.IV.1972, leg. J. & S. Klapperich, 2 ex.; – Boca Chica, 10 m, 15.V.1971, leg. J. & S. Klapperich, 1 ex. (NHMB).

General distribution: This species was described from the Dominican Republic (Mt. St. Francisco) and was known only from the type series.

***Homoschema lencurum* Blake, 1950**

Material: Haiti, Kenscoff Pass, 800-2000 m, 13. XII. 1972, leg. J. & S. Klapperich, 3 ex. (NHMB).

General distribution: This species was described from Haiti (La Vanneau) and was known only from the type series.

***Leptophysa hispaniolae* (Blake, 1941)**

Material: Dominican Republic, Cazabita, 1250 m, 17. X. 1971, leg. J. & S. Klapperich, 15 ex. (NHMB).

General distribution – Endemic to Hispaniola.

***Apraea oculata* Medvedev, sp. n. (Fig. 6)**

Holotype (male): Dominican Republic, Bani, 65 m, 10. IX. 1972, leg. J. & S. Klapperich (NHMB).

Paratype: same locality, 30.IX.1972, leg. J. & S. Klapperich, 1 female (NHMB).

Description: Head behind antennae and upperside bronze, anterior part of head, antennae, underside and legs fulvous.

Body elongate ovate with elytra almost parallel-sided. Clypeus triangular, convex, impunctate. Eyes very large, frons narrow, about half of transverse diameter of eye, frontal tubercles indistinct, vertex finely and sparsely punctate. Antennae reaching anterior third of elytra, proportions of segments: 10-4-6-5-5-6-6-6-6-9. Prothorax twice as broad as long, narrowed anteriorly, with lateral margins feebly rounded, surface rather densely rounded-triangular, impunctate. Elytra 1.5 times as long as wide, with very feeble humeral tubercle, basal convexity absent, elytra rows quite regular, interstices moderately broad, finely punctate, flat on dorsum and feebly convex on sides. Segment 1 of anterior tarsi slightly widened in male. Aedeagus (Fig. 6) parallel-sided, rounded at apex, uniformly convex on underside. Length 2.9 mm.

Diagnosis: Resembles *A. fulgens* Blake 1963, but has very large eyes and extremely narrow frons.

***Apraea metallica* Medvedev, sp. n.**

Holotype (female): Dominican Republic, Bani, 65 m, 10. IX. 1972, leg. J. & S. Klapperich (NHMB).

Description: Head and upperside greenish blue, mouth parts, antennae (except darkened apical segments), underside and legs fulvous.

Body elongate ovate, moderately convex. Head shining, with large punctures, frontal tubercles poorly delimited, frons as broad as transverse diameter of eye. Antennae reaching middle of elytra, proportions of segments: 9-3-3-5-5-6-5-7-10-10-12. Prothorax twice as broad as long, narrowed anteriorly, with lateral margins feebly rounded, surface with large, but rather sparse punctures. Scutellum rounded-triangular, impunctate. Elytra 1.3 times as long as wide, feebly arcuate at sides, with feeble humeral tubercle and basal convexity; rows of punctures not quite regular, especially near suture, interstices broad and flat, inner interstices with more or less distinct fine punctures. Abdominal sternites punctate, microsculptured and pubescent. Length 2.7 mm.

Diagnosis: This species belongs to the group with metallic upperside and is near *A. fulgens* Blake 1963 from Haiti, but differs in not quite regular elytral rows of punctures and blue coloration of upperside.

***Leptophysa ornata* Medvedev, sp. n. (Figs 7-9)**

Holotype (male) and 6 paratypes (females): Dominican Republic, Cazabita, 1250 m, 17. X. 1971, leg. J. & S. Klapperich, (NHMB, 1 ex. – LM).

Description: Red fulvous, elytra with piceous pattern: transverse spot in middle of lateral margin and often with rounded spot at base near scutellum, hind part of suture and extreme apex (Figs. 7, 8); prothorax more or less darkened in middle.

Head long and narrow, clypeus long, triangular, flat, not punctate; frontal tubercles subquadrate, flat, and poorly delimited, vertex with a few fine punctures. Antennae reaching almost middle of elytra, proportions of segments: 15-9-10-13-14-14-13-12-12-11-13. Prothorax 1.35 times as wide as long, lateral margins straight, restricted before base, basal groove distinct, but not sharp, surface shining, rather densely punctate, interspaces very finely microsculptured. Elytra 1.4-1.45 times as long as wide, widened posteriorly, with distinct basal convexity and shallow impression behind base, rows of punctures quite regular, feeble on apical slope, interspaces smooth, feebly convex anteriorly, flat behind middle. Aedeagus (Fig. 9) thin and long, split at apex, underside with longitudinal impressed stripe covered with transverse wrinkles in middle part. Anterior coxal cavities open. Length of male 2.4 mm, of female 2.5-2.8 mm.

Diagnosis: This is the fourth species of the genus from Hispaniola, which differs well in maculate elytra, entirely fulvous antennae and unusual structure of the aedeagus. Other species from this island have entirely fulvous (*L. hispaniolae* Blake, 1941, *L. hottensis* Blake, 1948) or piceous (*L. punctatissima* Blake, 1964) upperside. A new species resembles *L. rugosa* Blake from Jamaica, which however has irregular rows of punctures and larger size.

***Strabala ferruginea* (Olivier, 1808)**

Material: Dominican Republic, Colonia, 1000 m, 18.III. 1972, leg. J. & S. Klapperich, 2 ex.; – Constanza, 1250 m, 10.V.1972, leg. J. & S. Klapperich, 1 ex. (NHMB).

General distribution: Endemic to Hispaniola.

***Macrohaltica jamaicensis* (Fabricius, 1792)**

Material: Constanza, 1250 m, 16.VI.1972, leg. J. & S. Klapperich, 1 ex. (NHMB).

General distribution: Widespread in West Indies and Central America.

***Chaetocnema obesula* Leconte, 1878**

Material: Dominican Republic, Colonia, 1000 m, 18.III. 1972, leg. J. & S. Klapperich, 3 ex. (NHMB).

General distribution: Widespread in West Indies, Central America and south-eastern USA.

2.2. Brasilia

***Megistops sexmaculata* Medvedev, sp. n. (Fig. 10)**

Holotype: Brasilia, Corumba, Matt. Grosso (SMNS).

Description: Body fulvous, elytra dark brown with 3 large fulvous spots (2, 1): anterior internal spot elongate ovate and reaching middle of elytra, anterior external spot is placed between humeral tubercle and middle, posterior spot occupies practically all apical third (Fig. 10).

Body elongate ovate, 1.7 times as long as wide; upperside dull. Eyes only slightly separated on vertex, frons

in form of equidistant triangle, finely and densely punctate behind frontal tubercles, feebly convex, well separated from each other and behind, impunctate, microsculptured. Antennae reaching a little behind humeral tubercles, proportions of segments: 15-6-8-11-12-10-10-10-10-10-10. Prothorax 2.5 times as wide at base as long, narrowed anteriorly, slightly rounded on sides, with thickened and more or less oblique anterior angles, surface alutaceous, thickly and finely, partly rugosely punctate. Scutellum triangular, microsculptured, impunctate. Elytra 1.4 times as long as wide, dull, finely punctate, with very dense microsculpture. Hind tibia curved, widened to apex, spur broad, with feebly developed teeth, almost truncate. Length 4 mm.

Diagnosis: This species belongs to a group with dark elytra with pale spots, but all known species have 10 or 4 spots. This species is mostly near to *M. quadrinotata* Boheman, 1859, but differs, except number of spots, with short and broad spur on hind tibia.

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Author's address: Lev N. MEDVEDEV: Severtsov Inst.Ecol.& Evolution, Russian Academy of Sciences, 33 Leninskiy Prospekt, RUS-117071 Moskwa, Russia, e-mail: vladmed@online.ru

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