

Additions to hister beetles (Coleoptera: Histeridae) fauna of Cuba, with description of new species of genus *Iliotona* Carnochan, 1917

Дополнения к фауне жуков-карапузиков (Coleoptera: Histeridae) Кубы, с описанием нового вида *Iliotona* Carnochan, 1917

A.V. Sokolov
А.В. Соколов

Институт проблем экологии и эволюции РАН, Ленинский проспект 33, 119071 Москва, Россия
Institute of Ecology and Evolution, Russian Academy of Sciences, Leninsky Prospect 33, 119071 Moscow, Russia

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КЛЮЧЕВЫЕ СЛОВА: Histeridae, фауна, новые находки, новый вид, *Iliotona markushevae*.

ABSTRACT. Four species of hister beetles (Coleoptera, Histeridae) are recorded in fauna of Cuba for the first time, and 1 species — *Iliotona markushevae* sp.n. is described as a new.

РЕЗЮМЕ. Впервые для фауны Кубы приводятся четыре вида жуков карапузиков (Coleoptera, Histeridae), и 1 вид *Iliotona markushevae* sp.n. описывается как новый.

Fauna of Cuban Histeridae is poorly investigated. At present time it includes 35 species and it's possible can supplement 14 more, widely distributed in Central and South America [Decou & Therond, 1977; Mazur, 1984; Peck et al., 1998]. However this figures hardly reflect actual diversity of this family in the island with extension more 1000 km, with well presented natural zones (tropics, subtropics and deserts) as well as altitude belts (several types of mountainous forests). It's necessary to note, that fauna of neighboring continental areas totals hundreds species. Low species diversity of hister beetles in Cuba is partly consequence of shadow forming effect, and their low frequency of occurrence by normal collecting methods too.

The mentioned below short list of Histeridae was created on the base of materials collected by author during expedition to Cuba in October–November, 2003. The collection was carried out in 5 geographical areas:

Western Cuba:

VAR — 23°12'N 81°08'E, Matanzas province, E end of Varadero peninsula;

VIN — 22°37'N 83°43'E, Pinar-del-Rio province, near Vinyales village;

Eastern Cuba:

GUA — 21°05'N 76°05'E, Olgin province, 7 km S Guardelavaca village;

SDC — 19°53'N 75°33'E, Santiago-de-Cuba province, 50 km E Santiago-de-Cuba town;

BAC — 20°02'N 75°10'E, Guantanamo province, 70 km E Santiago-de-Cuba town, near Bacanao village.

As the result four species of Histeridae are found in Cuban fauna for the first time (*), and 1 species is described here as a new. The type materials are deposited in following collections:

NHMB — British Museum of Natural History (UK, London);

ZISP — Zoological Institute of Russian Academy of Sciences (Russia, St. Petersburg);

cAS — author's collection.

Genus *Aeletes* Horn, 1873

Aeletes gulliver (Marseul, 1856)*

MATERIAL. 1 ♀, VAR, 05.11.2003, inside of decaying stems of cactus *Dendrocereus nudiflorus*.

REMARK. Earlier this species was known from Haiti, Guatemala and Guadeloupe.

Genus *Acritus* LeConte, 1853

Acritus atomus LeConte, 1853

MATERIAL. 4 ♂ 8 ♀, BAC, 24–25.10.2003, under a bark of a foliage tree.

Genus *Xerosaprinus* Wenzel in Arnett, 1962

Xerosaprinus viator (Marseul, 1855)

MATERIAL. 1 ♀, SDC, 24.10.2003, in cow dung.

Genus *Hypocaccus* Thomson, 1867

Hypocaccus lustrans (Casey, 1916)*

MATERIAL. 2 ♂, VAR, 08.11.2003, on shore of Atlantic ocean in decaying algae.

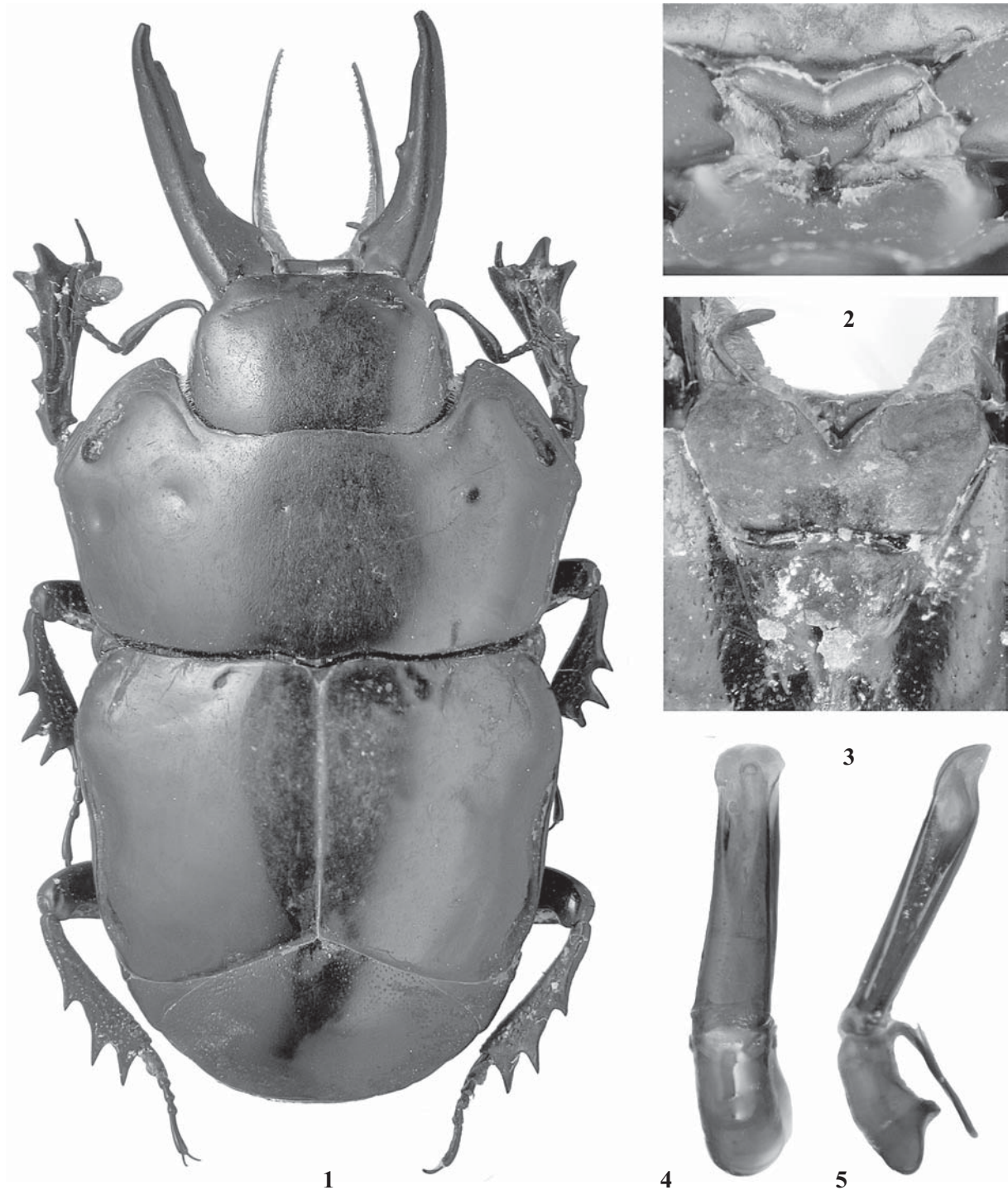
REMARK. Sooner this species was found in Florida peninsula only.

Genus *Carcinops* Marseul, 1855

Carcinops dominicanus Marseul, 1855*

MATERIAL. 15 ♂ 6 ♀, BAC, 24–25.10.2003, under a bark of a foliage tree.

REMARK. Earlier this species was marked from Haiti only.



Figs 1–5. *Iliotona markushevae* sp.n.: 1 — habitus, dorsal view; 2 — labrum, anterior view; 3 — submentum, ventral view; 4 — aedeagus, ventral view; 5 — the same, lateral view.

Рис. 1–5. *Iliotona markushevae* sp.n.: 1 — габитус, сверху; 2 — верхняя губа, спереди; 3 — подбородок, снизу; 4 — эдеагус, снизу; 5 — то же, сбоку.

Carcinops sp.

MATERIAL. 18 ♂ 14 ♀, VAR, 05–08.11.2003, inside of decaying stems of cactus *D. nudiflorus* (VAR).

REMARK: This species more closed to *C. cribripuga* Wenzel but differs by metallic-green color of body and abbreviated 5th and 6th dorsal striae.

Genus *Epierus* Erichson, 1834*Epierus antillarum* Marseul, 1854

MATERIAL. 13 ♂ 8 ♀, BAC, 24–25.10.2003, under a bark of a foliage tree.

Genus *Hister* Linnaeus, 1758*Hister coenosus* Erichson, 1834

MATERIAL. 5 ♂ 2 ♀, GUA, 20.10.2003, in cow dung.

Genus *Omalodes* Erichson, 1834*Omalodes ruficlavis* Marseul, 1853

MATERIAL. 3 ♂ 2 ♀, VAR, 05–08.11.2003, inside of decaying stems of cactus *D. nudiflorus*.

Genus *Phelister* Marseul, 1853*Phelister haemorrhous* Marseul, 1853

MATERIAL. 3 ♂ 7 ♀, GUA, 20.10.2003, in cow dung; 3 ♂, BAC, 24–25.10.2003, in cow dung; 1 ♂, VAR, 07.11.2003, in human excrements; 2 ♂ 1 ♀, VIN, 29–30.10.2003, in cow dung.

Phelister omissus Schmidt, 1893*

MATERIAL. 2 ♂ 1 ♀, VIN, 20.10.2003, in cow dung; 2 ♂, 29–GUA, 30.10.2003, in cow dung.

REMARK: Sooner this species was known only from Paraguay, Argentina and Costa-Rica. It's probably widespread in Central and South America.

Genus *Iliotona* Carnochan, 1917*Iliotona markushevae* Sokolov sp.n.

MATERIAL. Holotype, ♂, W Cuba, Matanzas province, E end of Varadero peninsula, 05.11.2003, inside of decaying stems of cactus *Dendrocereus nudiflorus*, A. Sokolov. Paratypes, 2 ♂♂ and 1 ♀, collected together with holotype. Holotype and one of paratype (♀) are deposited in cAS, 1 paratype — in collection of NHMB, 1 paratype — in collection of ZISP.

ADDITIONAL MATERIAL. 4 ♀♀ (syntypes) of *I. dorcoides* Lewis, Mexico (NHMB); 3 specimens of *I. cacti* LeConte: 1 ♂ 1 ♀, California, San Diego, 1 ♀, California, Orange count, Laguna Beach (ZISP).

DESCRIPTION. Habitus as in Fig. 1. Body length, male 8.9–10.9 mm (full length up to 22.2 mm), female 8.1 mm. Oblong-oval, moderately convex, black, shining. Legs black, club of antennae grey. Head very massive. Frons slightly more convex than in *I. dorcoides*, clothed by very fine and sparse punctures, with two deep striae. Superorbital striae well developed, reaching the anterior edge of eyes, clypeus concave. Labrum as in Fig. 2. Mandibles elongate, 1.5–1.7 times (mean 1.55) longer than head, straights, feebly curved at apex; it's basal part dilated, narrows fluently to the middle, with distinct tooth medially. Submentum not concave, with slightly shagreened surface (Fig. 3).

Pronotum sixangular (Fig. 1), with strongly projected lateral sides, creating obtuse angles (in one specimen right angular projection rounded), anterior angles feebly arcuate inward. Marginal striae rather wide and deep, complete laterally, reaching to anterior margin and interrupted behind eyes level. Pronotal disk extremely sparsely and finely punctured,

with 2 pairs of round shallow depressions, one of which situated closer to lateral side slightly above angular projection while the other placed more closer to center of disk and apically. Male with deep oblong groove prolonged from angular projection to anterior pronotal angle.

Elytra smooth, with strongly convex humeral area, narrow to apex, 1st and 2nd dorsal striae present by basal rudiments, sometimes with short fragment of 2nd dorsal stria near the middle of disk. Subhumeral stria long, moving from apex to shoulders. Outer angles of apical elytral part punctured and rugous. Visible parts of 5th tergite dull, sparsely and irregularly punctured. Sides of propygidium dull, with rather coarse and sparse (2–4) punctures. Apical punctures finer and slightly sparser. Propygidium disk looks as smooth but in fact with very fine and sparse punctures. Pygidium dull, similarly but more densely punctured than propygidium sides (1–1.5).

Sides of meso- and metasternum rugous, the middle smooth. Lateral metasternal suture obsolete, rarely present by short fragment. Femurs thinner and longer in comparison with other *Iliotona* species.

Aedeagus as in Figs 4–5.

ETYMOLOGY. A new species is named in honour of my wife K.V. Markusheva, who very helped in collecting material for this article.

BIOLOGY. All exemplars of new species were collected near seashore in thorn forest on karst limestones, similar with Brasilian caatinga. The beetles were founded only inside decaying stems of endemic cactus *Dendrocereus nudiflorus*, habitually like as thick-trunk tree. Breaking and decaying stems are unique humid microhabitat in such dry locality, with which many groups of arthropods are connected.

COMPARATIVE REMARKS. At present time genus *Iliotona* included two species only, which are distributed in Mexico and California. From both *I. markushevae* sp.n. easily distinguished by form of pronotum, developed frontal striae, reduced dorsal striae, convex shoulders, as well as longer femurs.

KEY FOR IDENTIFICATION OF *ILIOTONA* SPECIES

- 1 Pygidium unmarginated. Mandibles with teeth in the middle part 2
- Pygidium marginated. Mandibles without teeth in the middle part *I. cacti* (LeConte)
- 2 Lateral side of pronotum without angular projection, with deep transversal groove in apical one third; first dorsal stria not abbreviate *I. dorcoides* Lewis.
- Lateral side of pronotum with angular projection, without deep transversal groove; first dorsal stria present by rudiment *I. markushevae* sp.n.

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