

**A new species of the leaf-beetle genus *Demotina* Baly
(Coleoptera: Chrysomelidae: Eumolpinae) from Vietnam**

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**Новый вид листоедов рода *Demotina* Baly
(Coleoptera: Chrysomelidae: Eumolpinae) из Вьетнама**

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Abstract. A description of a new species of the genus *Demotina* Baly, *Demotina medvedeviana* sp. n., with figures of male and female genitalia is given. Lectotype of *Pseudometaxis ater* Pic is designated.

Key words. Chrysomelidae, Eumolpinae, *Demotina*, new species.

Резюме. Приводятся описание нового вида рода *Demotina* Baly, *Demotina medvedeviana* sp. n. с рисунками гениталий самцов и самок. Обозначен лектотип *Pseudometaxis ater* Pic.

Ключевые слова. Chrysomelidae, Eumolpinae, *Demotina*, новый вид.

Introduction

The genus *Demotina* Baly, 1863 is abundantly represented in the fauna of Vietnam. According to a rough estimate, it may contain about 40–50 species. Yet Kimoto and Gressitt (1982) listed only two species of this genus in the monograph of the Eumolpinae of Indochina. This gap was partly filled by Eroshkina (1992). She described eight new species of *Demotina* and listed five species described by other authors, one of which was resurrected from synonyms; two species, described from China, were for the first time recorded from Vietnam. Unfortunately, Eroshkina did not examine the types of the species described by the preceding authors and so misinterpreted some names. One of these cases was discussed earlier (Moseyko, 2005), another one, with *Demotina atra* (Pic), is discussed below.

The conspecificity of the Vietnam specimens assigned by the preceding authors to *D. inaequalis* (Pic) and *D. tuberosa* Chen with the types of these species, described from China, raises doubts too. Apparently, Chinese species of *Demotina* occur only in the border provinces of Vietnam, not reaching even Tam Dao. Moreover, North and Central Vietnam are centres of wide speciation of *Demotina*. But it is necessary to examine types of all Chinese species for a sustainable review of the *Demotina* of Vietnam. And, in spite of the presence of numerous undescribed species in collections, it is possible, until types of the Chinese species are examined, to describe only species with striking specific characters like pattern of elytra. One such species is described below.

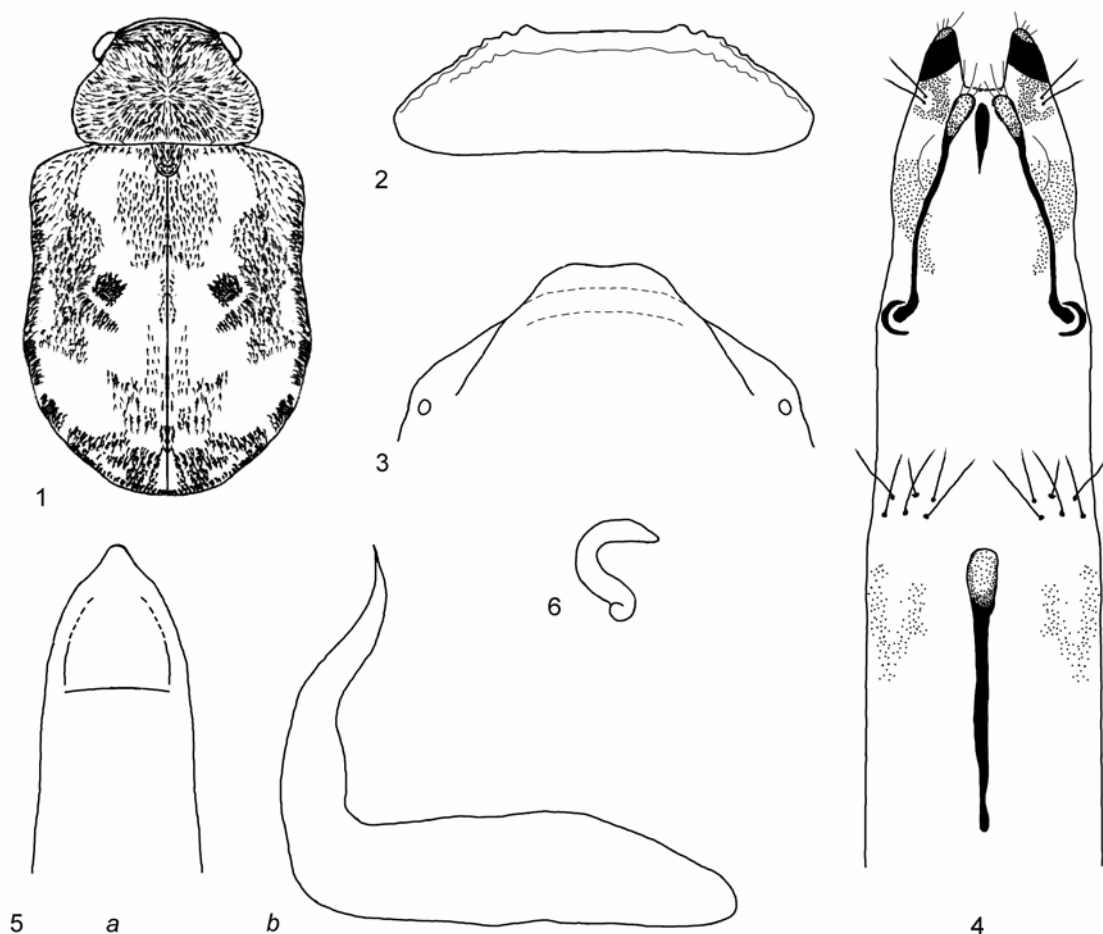
The following abbreviations for material depositories are used: ZISP – Zoological Institute of the Russian Academy of Sciences, St. Petersburg; MNHN – Muséum National d'Histoire Naturelle, Paris.

***Demotina medvedeviana* Moseyko, sp. n. (Figs 1–6)**

Diagnosis. The new species belongs to the group of *Demotina* with well-developed transverse anterior impression on the pronotum and thickened fore and hind femora. The most similar species is *D. weisei* Eroshkina, 1992, from which the new species is distinguished by the presence of elytral pattern and the shape of aedeagus.

Description. Reddish brown with blackish pattern, covered with pale, whitish and blackish scales, forming pattern too (Fig. 1). Body elongate, 1.75–1.85 times as long as wide, with humeral calli, basal prominence and basal impression on elytra and anterior impression on pronotum very well developed.

Head densely punctured and covered with scales, leaving feeble bald median line on frons. Clypeus trapeziform, with three shallow indentations similar in size at anterior margin, microsculptured, sparsely punctured and with short thin scales in basal part. Eyes of medium size, not emarginated, prominent. Antennae brown, with first three segments yellow, nearly $\frac{2}{3}$ as long as body. First segment robust, somewhat club-shaped. Ratio of segments length 1.8 : 1.1 : 2 : 2.6 : 2.4 : 2.2 : 2.6 : 2.2 : 2.1 : 2 : 2.2. 7–11th segments thickened. 4th segment about 6 times, 11th segment 2.5 times as long as wide.



Figs 1–6. *Demotina medvedeviana* sp. n. 1 – body, dorsal view; 2 – 5th sternite of abdomen; 3 – pygidium; 4 – ovipositor; 5 – aedeagus (*a* – dorsal view; *b* – lateral view); 6 – spermatheca.

Pronotum about 1.4 times as wide as long, widest slightly behind middle, narrowing anteriorly, with transverse depression in anterior part. Surface densely punctured and closely covered with scales, distributed evenly and directed outwards from one point in the center of disc. Lateral margin underdeveloped, interrupted, but present throughout entire length of sides of prothorax. Prosternum longer than wide, evident in central part, shallowly punctured. Propleura microsculptured, punctured, and covered with scales not so closely placed as those on pronotum. Mesepisternum, mesepimeron, metepisternum and lateral parts of metathorax covered with scales quite densely.

Scutellum subpentagonal, narrowed posteriorly, rounded at apex. Dorsum covered with scales similar to those on elytra.

Elytra 1.35–1.42 times as wide as pronotum, slightly narrowed behind humeri and rounded at apex. Dorsum strongly convex, with well-developed humeral calli, basal prominence and basal impression, and underdeveloped, almost imperceptible lateral ridge, covered with scales and not standing out against pattern. Coloration of elytron looking approximately like smooth letter X or H on lighter background. Surface strongly and mostly irregularly punctured, covered with scales of different types, arranged in correspondence with elytral pattern and partly forming it. Scales yellowish on light parts of elytra, about 5 times as long as wide, blackish on dark parts, approximately 4 times as long as wide. Several small areas of whitish scales present in centre of each elytron.

Legs robust, all of subequal length; ratio of width of fore, middle, and hind femora 2 : 1.7 : 2.2. Fore and hind femora dark brownish with basal 1/4 yellowish, middle femur yellowish with apical 1/3 brownish. Fore and middle femora with very small, hind femur with larger tooth.

Abdomen ventrally covered with scales smaller than those on dorsum. Lateral margin of 5th visible sternite with small denticles, posterior one or two of these bigger (Fig. 2). Pygidium with punctures and 2 transverse ridges in apical half and without areas of velvety (only with some small punctures in basal half) (Fig. 3).

Male genitalia. Aedeagus as in Fig. 5, with angle between basal and apical parts approximately 90°.

Female genitalia. Spermatheca as in Fig. 6. Segments 8 and 9 forming elongate telescopic ovipositor (Fig. 4), approximately 3.5 times as long as wide. Styli absent.

Length of male 3.9–4.4, length of female 4.0–4.2 mm.

Material. Vietnam. **Holotype:** ♂, Hoa Binh Prov., Mai Chau Distr., Pa Co, 20° 45' N, 104° 54' E, 1200 m, 27–28 IV 2002, S. Belokobylskij (ZISP). **Paratypes.** Vietnam, Hoa Binh Prov., Mai Chau Distr.: as holotype, 3 ♂, 3 ♀ (ZISP); Pa Co, 1200 m, 21 IV 2002, S. Belokobylskij, 1 ex. (ZISP); Hang Kia, 1200 m, 25 IV 2002, S. Belokobylskij, 2 ex. (ZISP).

Etymology. The species is named for Prof. Gleb S. Medvedev, St. Petersburg, a prominent specialist on the Tenebrionidae, on occasion of his 75th birthday.

***Demotina atra* (Pic, 1923)**

Pseudometaxis ater Pic, 1923: 17; – Pic, 1929: 140.

Demotina atra (Pic, 1923): Chen, 1935: 353; – Gressitt, Kimoto, 1961: 250.

Material. Lectotype (designated here): ♀, “Yunnan Sin”, ex coll. M. Pic (MNHN); Vietnam, Lao Cai Prov., Sa Pa Distr., Fan Si Pan Mt., 22° 20' 58'' N, 103° 46' 15'' E, 1900–2500 m, 20 IV–9 V 1999, N.L. Orlov, 3 ♂ (ZISP).

The type series is represented by 1 specimen, designated here as the lectotype.

Note. This species was described from Yunnan and transferred to *Demotina* by Chen (1935). The subsequent record from China by Gressitt and Kimoto (1961) gives no new material. Eroshkina (1992: 96) erroneously recorded *D. atra* from Tam Dao (Vinh Phu Prov., Vietnam) based on misidentified specimens of ? *Hyperaxis scutellatus* (Baly) and included it in the key to Vietnam species. The main distinguishing characters of *D. atra* are size, presence of distinct denticles at lateral margin of prothorax, shape of eyes, etc. Examination of the ZISP collection has shown the occurrence of *D. atra* (Pic) in Vietnam too, where it lives in Lao Cai Province bordering with China.

Identification key to the *Demotina* species of Vietnam (partially)

- 1(6). Surface of pronotum evenly prominent, without transverse impression. Body length 4 mm or more.
- 2(3). Dorsum with dense uniform white scaling and excretion. Lateral margins of pronotum with distinct denticles. Dorsum piceous to black. Length 4.4–4.9 mm *D. atra* (Pic, 1923)

- 3(2). Elytral pattern formed by lines and spots composed of whitish to pale brown scales.
- 4(5). Elytral pattern consisting of regular longitudinal rows. Body pale brown. Length of male 4.1 mm *D. regularis* Eroshkina, 1992
- 5(4). Elytral scales arranged into irregular pattern of lines and spots. Body pale brown to blackish with obscure dark spots. Body length 4–5.8 mm *D. medvedevi* Moseyko, 2005
- 6(1). Surface of pronotum with transverse impression of varying structure.
- 7(8). Surface of elytra with distinct ridges or tubers *tuberosa* group
- 8(7). Surface of elytra without distinct ridges or tubers.
- 9(16). Fore and hind femora wider than middle femur. All femora with tooth.
- 10(11). Elytra blackish with white pattern of scales and very short erect hairs. Scales very short and wide. Length 2.9–3.1 mm *D. nigrita* Eroshkina, 1992
- 11(10). Elytra brownish, without erect hairs; scales much longer.
- 12(15). Pronotum 1.4–1.5 times as wide as long. Length over 3.3 mm.
- 13(14). Elytra with X-shaped blackish pattern. Aedeagus apically stretched tongue-like. Length 3.9–4.4 mm *D. medvedeviana* sp. n.
- 14(13). Elytra without X-shaped pattern, with white spots. Pronotum darker than elytra. Top of aedeagus curved. Length 3.3–4.5 mm *D. weisei* Eroshkina, 1992
- 15(12). Pronotum 1.6–1.8 times as wide as long. Elytra with obscure spots near suture and behind middle. Length 2.6–3.4 mm *D. vietnamica* Eroshkina, 1992
- 16(9). Fore and hind femora approximately as wide as middle femur. Femora without distinct teeth other species of *Demotina*

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