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A new species of *Deleaster* Erichson, 1839 from the Himalaya, with treatment of an unrecorded name in the genus (Coleoptera: Staphylinidae: Oxytelinae: Deleasterini)

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Abstract. *Deleaster tarsalis* sp. nov. is described based on specimens from Nepal. A key to the Palaearctic species of *Deleaster* Erichson, 1839 is presented. *Deleaster obscuricollis* Coiffait, 1979, an until now unrecorded name, is added as an unavailable name (nomen nudum) to the synonymy of *D. bactrianus* A. P. Semenov, 1900.

INTRODUCTION

Deleaster Erichson, 1839 is a small genus of the tribe Deleasterini Reitter, 1909, containing at present ten extant species distributed in the Nearctic (*D. concolor* LeConte, 1866; *D. trimaculatus* Fall, 1910 + introduced Palaearctic *D. dichrous* (Gravenhorst,1802), Palaearctic (*D. bactrianus* A. P. Semenov,1900; *D. dichrous* (Gravenhorst,1802); *D. pekinensis* Fairmaire, 1893; *D. taiwanensis* Hayashi, 1984; *D. yokoyamai* Adachi, 1935) and Ethiopian (*D. pectinatus* Fauvel, 1882; *D. gibbosus* Cuccodoro & Makranczy, 2013 and *D. negus* Cuccodoro & Makranczy, 2013) Regions. One fossil (Miocene) species, *D. grandiceps* Wickham, 1912, is known from the deposits in Florissant, Colorado, USA.

Except for *D. dichrous* not much was published about the Palaearctic species of the genus. Kashcheev (1999) described a new species *Deleaster bergi* (subsequently synonymized with *D. bactrianus* by Grebenikov (2002)) and provided a key that included *D. dichrous, D. bactrianus* and *D. bergi.* Grebennikov (2002) treated the western Palaearctic species of the genus, pointed out great variability of *D. dichrous* in many characters and provided a key that included *D. dichrous* and *D. bactrianus.* There is no key available for the Palaearctic species at present. Frank (1982) provided a list of parasites of *D. dichrous*.

MATERIAL AND METHODS

The acronyms used in text when referring to the deposition of the specimens are as follows:

ASC collection of Aleš Smetana, deposited at The National Museum of Nature and Science, Toshiba, Japan;

CNC Canadian National Collection of Insects, Arachnids and Nematodes, Ottawa, Canada.

The measurement ratios given in the description are average values. The label data for the type specimens are quoted exactly as they appear on the label.

The photographs were taken using a Canon EOS 7D with a EF-100 mm lens, mounted on a Stackshot automated Macro rail. Photomontage was accomplished using Zerene Stacker.

TAXONOMIC PART

Deleaster tarsalis sp. nov.

(Figs. 1-4, 6, 8, 10)

Type locality. Nepal, Khandbari district, Induwa Khola Valley, 2000 m.

Type material. Holotype (♂): "NEPAL, Khandbari Distr., Induwa Khola Valley, 2000 m, 15.IV.84, Smetana & Löbl", (CNC). Allotype (♀): same data as holotype, (CNC). Paratype (1 ♂): same data s holotype, (ASC). (See Comments).

Diagnosis. In all characters similar to *D. yokoyamai,* but different as follows: head narrower; eyes slightly smaller (length 23 units x 26 units in *yokoyamai*); impressions delimiting vertex of head laterally almost parallel to each other and each ending in a pit (markedly convergent posteriad and missing the pits in *D. yokoyamai*); pit at middle of posterior margin present (absent in *D. yokoyamai,* Figs 10,11); pronotum narrowed from widest point at about anterior fifth toward anterior margin sinuately to subangulately (arcuately in *D. yokoyamai,* Figs. 10,11)); anterior middle portion of pronotum more densely punctate on surface with rudimentary microsculpture (very sparsely punctate on surface without microsculpture in *D. yokoyamai*); deep and very large depressions delimiting elevated middle portion of pronotum appearing duller than those in *D. yokoyamai* due to denser coriaceous surface and the tubercles delimiting laterally the posterior depression missing in *D. yokoyamai*; elytra wider, more dilated posteriad; abdomen wider (Figs. 4, 5), microsculpture on each tergite denser, more apparent; aedeagus considerably smaller. The species differs from all Palaearctic and Nearctic species by the fourth segment of all tarsi modified to form an oblong to oval palette bearing very long, thin hair-like setae at apical margin (Figs. 6, 8).

Description. Black, abdomen rather piceous-black, becoming paler at apex; mandibles, first three antennal segments and legs rufotestaceous, both maxillary and labial palpi testaceous, remaining antennal segments piceous. Head and pronotum with scattered pale hairs, elytra and abdomen with rather dense, fine, pale pubescence.

Head with markedly prominent, wide clypeus and large, highly convex eyes (length of eys 23 units), length from frontoclypeal suture to neck markedly shorter than maximum width across eyes (ratio 0.47), temples considerably shorter than length of eyes seen from above (ratio 0.42); elevated vertex of head delimited laterally by impressions that are almost parallel to each other, each ending in a pit, separated from another pit at middle of posterior margin of elevated vertex by narrow anterior extension of coriaceous posterior

part of head (Fig. 10). Antennae very long and slender, segment three longer than segment two (ratio 1.28), remaining segments distinctly longer than wide, last segment shorter than two preceding segments combined. Neck narrow, with a few punctures on finely coriaceous surface. Pronotum about as long as at point of maximum width at about anterior fifth wide and from there narrowed toward anterior margin sinuately to subangulately (Fig.10); anterior elevated middle portion of pronotum moderately finely and densely punctate on surface with rudimentary microsculpture; deep and very large depressions delimiting elevated middle portion of pronotum appear dull due to denser coriaceous surface, posterior one delimited at each side by an elevated tubercle (Fig. 10). Scutellum finely punctate on finely coriaceous surface. Elytra large and wide, dilated posteriad (Fig. 4), finely and densely punctate. Legs very long and slender, middle and hind tibia with ctenidium of fine short spines on lateral edge. Fourth segment of all tarsi modified to form an oblong to oval palette bearing very long, thin hair-like setae at apical margin (Figs. 6, 8 , compare Figs. 7, 9). Abdomen wide with wide laterosternites, each tergite very finely punctate on microsculptured, dull surface, both punctation and microsculpture disappearing toward middle of tergite which appears more or less shiny; tergite 7 with very fine whitish apical seam of palisade fringe; apical margin of tergite 8 with fine denticulation.

Length 6.5-7.0 mm

Male. First four segments of front tarsus moderately dilated. Tergite 10 and sternite 9 of genital segment as in Figs. 1-2. Aedeagus as in Fig. 3; median lobe variably split anteriorly; parameres not appreciably dilated apically, considerably exceeding apex of median lobe, each with two apical setae, long medial and short lateral one.

Female. First four segments of front tarsus simple, not dilated. Denticulation on tergite quite fine. Genital segment not available.

Geographical distribution. The species is at present known only from the type locality in the Khandbari District, Nepal.

Bionomics. Specimens were taken from the gravel banks of the Induwa Khola river, together with a *Dianous* species.

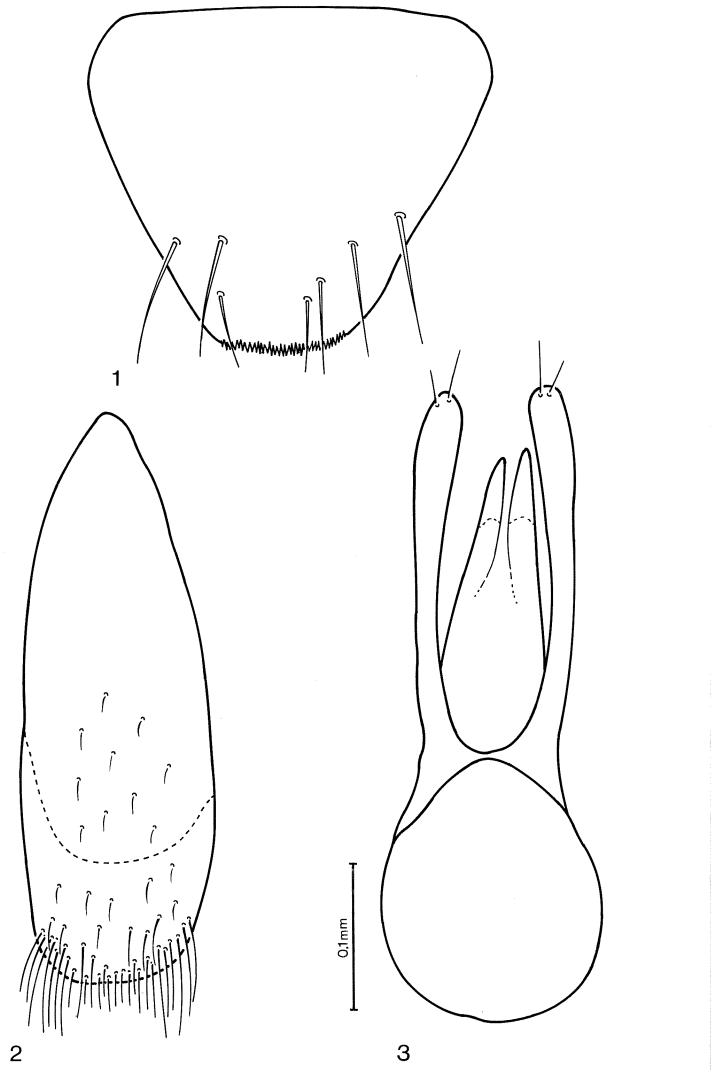
Comments. The paratype is missing three outer segments of left antenna, and tibia and tarsus of left hind leg.

Etymology. The specific epithet is the Latinized adjective *tarsalis* (relating to the tarsus). It refers to the characteristic tarsus of the species.

***Deleaster obscuricollis* Coiffait, 1979**

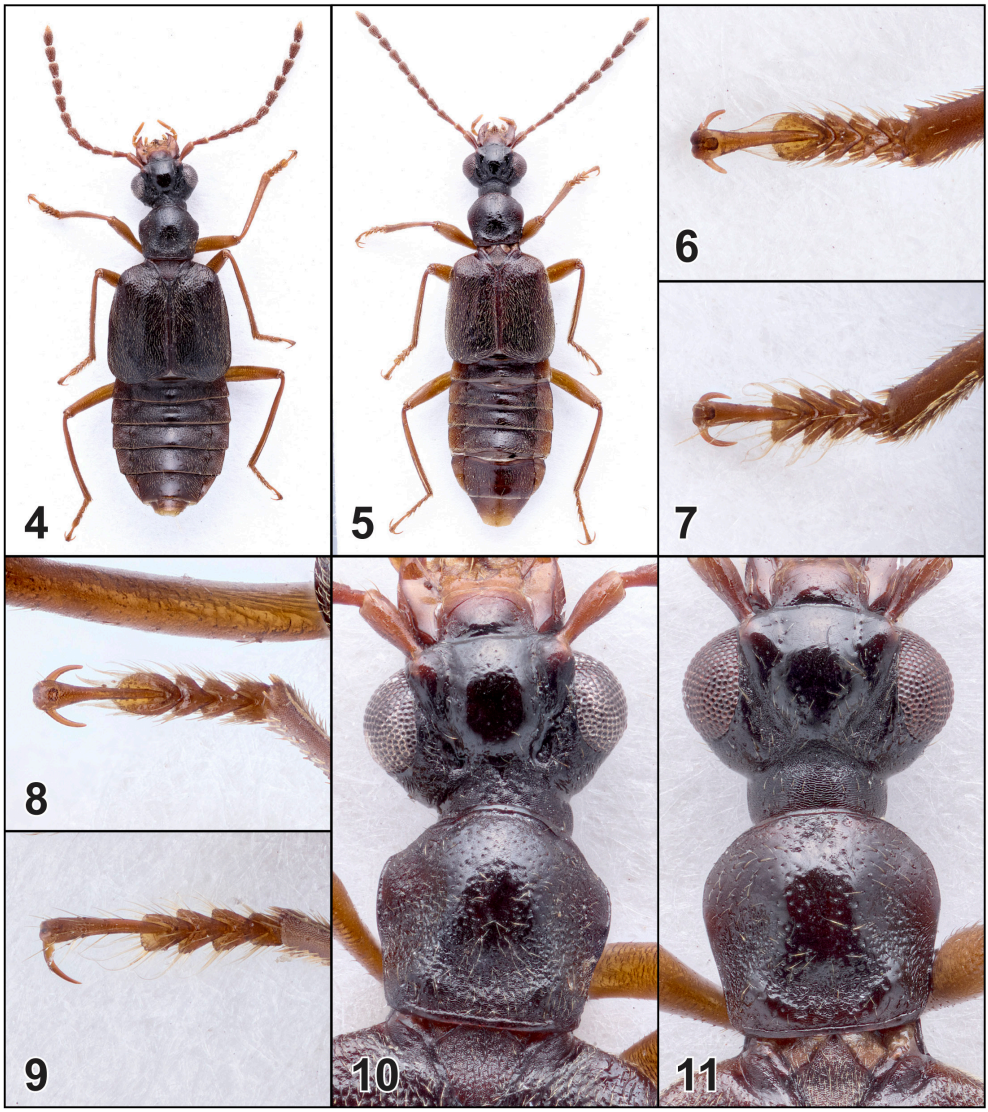
Deleaster obscuricollis Coiffait, 1979: 560 (illustration of aedoeagus).

The history of this species name is obscure and quite unique. Coiffait (1979), in his paper on Nouristan staphylinids, listed on page 554 three specimens of *Deleaster bactrianus* Sem. from two localities and referred to fig. 3 D, E , supposedly showing the aedoeagus of the species. However, fig. 3 D, E on page 560 is showing the aedoeagus of " *Lobrathium*



Figs. 1-3. *Deleaster tarsalis* sp. nov.: 1- tergite 10 of male genital segment; 2- sternite 9 of male genital segment; 3- aedoeagus, ventral view.

afghanicum, n.sp., holotype". But, on the same page, Fig. 3 F, G is showing the aedoeagus of "*Deleaster obscuricollis*, n. sp., holotype". The possible logical explanation for this mishap is, that Coiffait originally considered the three specimens of *Deleaster* listed (p. 554) as *Deleaster obscuricollis* n. sp., but subsequently assigned them to *D. bactrianus* Sem. He changed the name in the text but failed to do so in the caption to the two illustrations of the aedoeagus of the species. Illustrations that actually do show the aedeagus of *D. bactrianus*.



Figs. 4-11. *Deleaster tarsalis* sp. nov.: 4- dorsal habitus; 6- front tarsus; 8- middle tarsus; 10- head and pronotum, details. *Deleaster yokoyamai*: 5- dorsal habitus; 7- front tarsus; 9- middle tarsus; 11- head and pronotum, details.

Every name published after 1930, to be available," must be accompanied by a description or definition that states in words characters that are purported to differentiate the taxon" (Article 13.1.1 of the Code). The name *D. obscuricollis* is to be added, as an unavailable name (nomen nudum) to the synonymy of *D. bactrianus*.

KEY TO PALAEARCTIC SPECIES OF *DELEASTER*

1 Pronotum and entire elytra testaceous to rufotestaceous. Length 6.5-8.0 mm. Western Palaearctic Region, eastward to Turkmenistan and western Siberia. Introduced into Nearctic Region .... *Deleaster dichrous* Gravenhorst, 1802

- Pronotum dark, piceous-black to black. Elytra never entirely testaceous to rufotestaceous 2

2 Elytra testaceous to rufotestaceous, markedly blackened on apico-lateral portions and along apical margin. Central Asia: Kazakhstan, Kyrgyzstan, Uzbekistan, Tajikistan, Afghanistan. Length 7.0-8.5 mm .... *D. bactrianus* A. P. Semenov, 1900

- Elytra dark, rarely indefinitely lightened mediobasally. Eastern Palaearctic region: from Nepal through China and Taiwan to Japan 3

3 Fourth segment of all tarsi modified to form an oblong to oval palette bearing very long, hair-like setae at apical margin (Figs. 6, 8). Habitus Fig. 4. Himalaya. Length 6.5-7.0 mm ..... *D. tarsalis* sp. nov.

- Fourth segment of all tarsi not modified as above (Figs. 7, 9) 4

4. Pronotum wide, wider than long (ratio 1.14); elevated portions of disc of head and pronotum with sparse microsculpture; parameres of aedoeagus not appreciably dilated at apex (Fig. 3a in Hayashi, 1984:92). On average larger and darker species. Length 8.0-9.0 mm. Taiwan..... *D . taiwanensis* Hayashi, 1984

- Pronotum narrow, about as long as wide, elevated portions of disc of head and pronotum without any microsculpture; parameres of aedoeagus distinctly club-like dilated at apex (Fig. 4a in Hayashi, 1984: 93). On average smaller and somewhat paler species (aedoeagus of *D. pekinensis* not known..... 5

5. Specimen from Japan. Habitus Fig. 5. Length 6.0-7.5 mm ..... *D. yokoyamai* Adachi, 1935

- Specimen from mainland China. Length 7.0-8.5 mm ..... c.f. *D. pekinensis* Fairmaire, 1893

(The concept of *D. pekinensis* is based on the two specimens mentioned in Schülke (2003:433) that may or may not represent the species Fairmaire described. I am not quite convinced that the specimens from mainland China and Japan belong to two distinct species but I keep the status until more specimens from mainland China are available and Fairmaire's type specimen is studied.)

CORRECTION

An inadvertent mistake happened in my paper "The identity of *Staphylinus* (*Tasgius*) *antennalis* Cameron, 1932 (Coleoptera: Staphylinidae: Staphylinini: Staphylinina) - *Studies and Reports Taxonomical Series* 14(2) 2018: 487-490. The caption for Fig. 1 reads *Aulacocypus kansuensis* (Bernhauer, 1933) rather than *Aulacocypus antennalis* (Cameron, 1932), as it is obvious from labels pictured in Fig. 1 C.

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