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A new species of *Dapsa* LATREILLE from India (Coleoptera: Endomychidae)

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ABSTRACT. *Dapsa mizoramica* n. sp. from India is described and illustrated. A key to the species of *Dapsa* from India, Nepal and Burma is provided.

Key words: entomology, taxonomy, new species, key, Coleoptera, Cucujoidea, Lycoperdininae, *Dapsa*.

INTRODUCTION

Dapsa LATREILLE (1829) belongs to the subfamily Lycoperdininae (LAWRENCE and NEWTON 1995, TOMASZEWSKA 2000), sharing the following synapomorphies with other genera of this subfamily: the stridulatory membrane on the anterior margin of the pronotum, stridulatory area (occipital file) on the head and ovipositor with fused coxites (TOMASZEWSKA 2000).

In the review of *Dapsa*, AUDISIO and DE BIASE (1996) concluded that the genus constituted a likely monophyletic group within Lycoperdininae and they provided a diagnosis of the genus, based on the following characters: distance between mesocoxal cavities strongly reduced; more or less distinctly curved median connection between caudal mesocoxal marginal lines; elytral margins not visible from above; dorsal punctation more or less strongly impressed and dense, usually with long, golden pubescence. The result of their review was 30 recognized species within the genus, together with *Dapsa caucasica* MOTSCHULSKY, 1845, which was

however earlier transferred to Cryptophagidae (LYUBARSKY 1994). Nikitsky and Semenov (2001) followed the opinion of LYUBARSKY. FRANZ (1996) added *D. curta* from the Canary Is. Two more species, *D. adami* and *D. indica* were described by TOMASZEWSKA (1997) from India and Nepal. Subsequently NIKITSKY and SEMENOV (2001) while reviewing the species found within the borders of the former USSR, added another three species, *D. motschulskyi* from Mongolia, Dahuria and Far East Russia, *D. nikolajevi* from Uzbekistan and *D. ussuriensis* from Far East Russia. A species recognized as new and described here as *Dapsa mizoramica*, was collected by one of us (TKP) in the Indian province Mizoram.

At present *Dapsa* contains 36 species distributed mainly in the Mediterranean region. The range of the genus however extends from the Canary Islands towards south-east Siberia and Russian Far East as a comparatively narrow belt, occupying area between about 32 and 53° of northern latitude (except the Canary Is. - 28° N) and representing a typical Palaearctic fauna. An interesting exception is an isolated group of 7 Asian species, which are distributed on the border area of the Palaearctic and Oriental Regions, extending as a very narrow belt through the north and north-east India, Nepal and Burma, reaching about 22-23° N. The origin of this group remains still uncertain, as indicated by AUDISIO and DE BIASE (1996), although *D. birmanica* has a basal position (apart from *D. erytraea* PIC which seems to be a sister-group of all the remaining species of *Dapsa*) on their preferred cladogram, sharing many symplesiomorphies with *Ancylopus* COSTA, a postulated sister-taxon of *Dapsa*.

TAXONOMY

***Dapsa mizoramica* n. sp.**

(figs 1-7)

ETYMOLOGY

The name *mizoramica* is based upon the Indian province Mizoram, where this species has been collected.

DIAGNOSIS

This species shows much similarity to *Dapsa adami* from Nepal and Indian provinces Sikkim and West Bengal. *D. mizorami* however can be separated by having dorsal surface of the body dark reddish brown and sparsely pubescent, elytra differently decorated by contrasting markings, male fore tibia with distinct tooth near middle length (fig. 5), mid tibia simple and aedeagus of different shape.

DESCRIPTION

Length 4.60 mm, width 2.02 mm. Male: body (fig. 1) weakly convex, elongate, 2.28 times as long as wide; dorsum dark reddish-brown, venter blackish-brown;

vestiture consists of rather sparse and moderately long, pale pubescence; puncturation of body dense and coarse. Elytra with light brown markings of sinuate edges extending along suture and additional black, somewhat oval spot on each elytron at apical third, separated from suture (fig. 3). Antenna (fig. 2) 11-segmented, moderately slender and long (at least as long as half body length; club 3-segmented, narrow and loose. Pronotum 1.00 mm long, 1.35 mm wide; 0.74 times as long as wide, 1.39 times as wide as head; widest at apical third; anterior angles rectangular (to weakly rounded), side margins weakly sinuate along apical third, thence simple. Elytra 3.10 mm long, 2.02 mm wide; 3.10 times as long as pronotum, 1.50 times as wide as pronotum. Metasternum provided with two pairs of subequal in size postcoxal pits; discripen extending to about middle length of metasternum. Fore tibia with small but distinct tooth on inner edge, near middle length (fig. 5); fore trochanter with small, haired tubercule produced anteriorly (fig. 4); mid and hind tibiae simple. Abdomen (fig. 7) with ventrite 1 longer than three following ventrites combined. Aedeagus comparatively long and slender but well sclerotized (fig. 6).

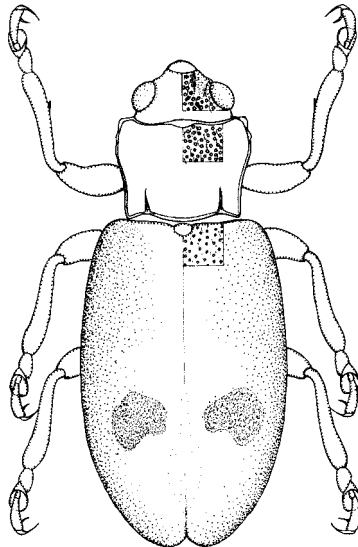
Female unknown.

TYPE MATERIAL

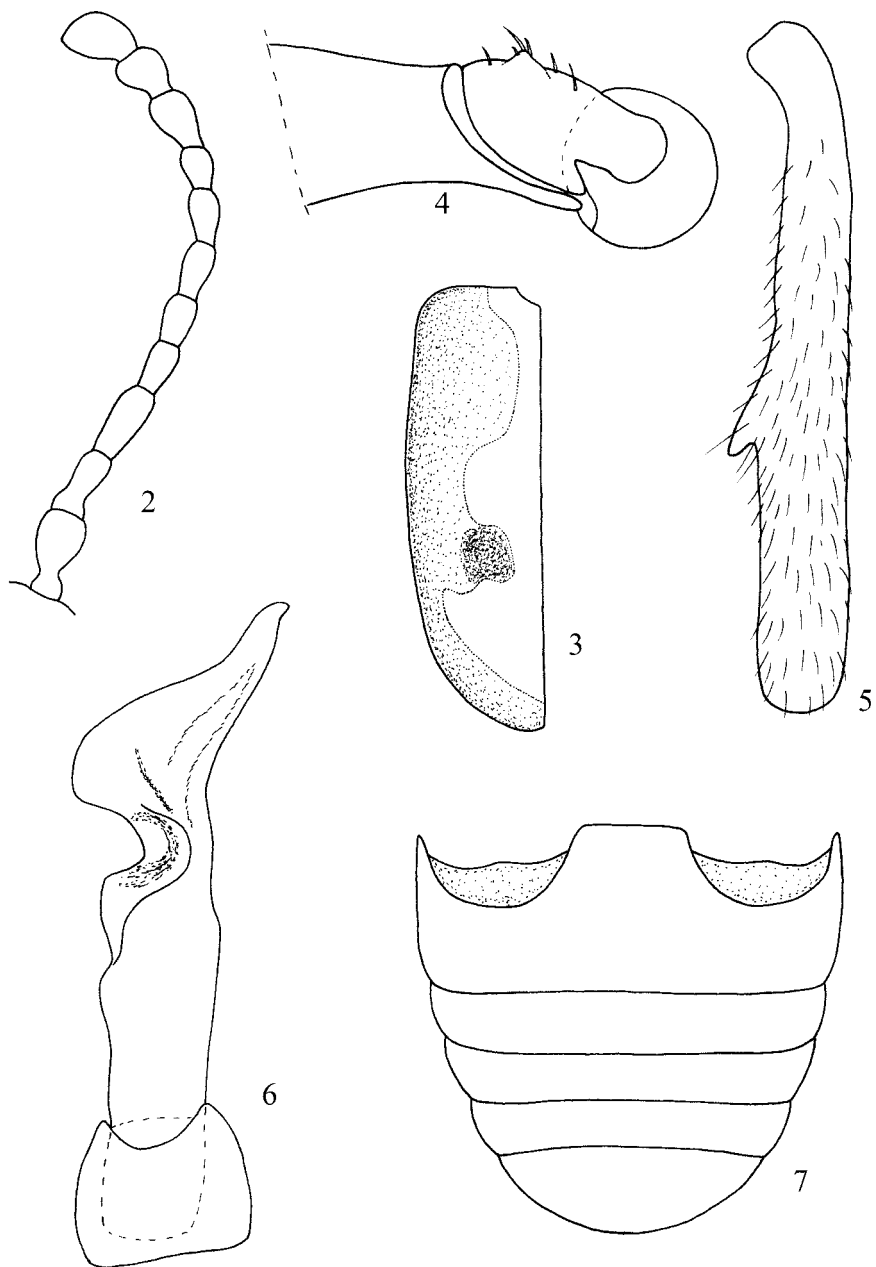
Holotype male: "Mizoram, Aizawl Distt., Seling, 900m, 29.I.1995, T.K. Pal/litter." (Zoological Survey of India, Calcutta).

DISTRIBUTION

India (Mizoram).



1. Habitus of *Dapsa mizoramica* n. sp. (without antennae), by T.K. PAL



2-7. *Dapsa mizoramica* n. sp.: 2 - antenna, right, dorsal, 3 - left elytron, dorsal, 4 - procoxa, trochanter and base of femur, 5 - left protibia, 6 - aedeagus, dorsal, 7 - abdomen, ventral

KEY TO THE SPECIES OF *DAPSA* FROM INDIA, NEPAL AND BURMA

1. Elytra pale ochreous, yellow to reddish-brown with or without black trilobate, discal spot 2.
- Elytra black or dark reddish-brown, with lighter (brownish or red) spots of a different shape, sometimes also with additional black spots 6.
2. Metasternum with three pairs of postcoxal pits; pronotum with anterior angles weakly obtuse, somewhat rounded; [dorsum yellowish-brown, elytra with trilobate, discal spot; ventral surface brown; pronotal sides almost parallel-sided, slightly arcuate at anterior third]; N.E. Burma
..... *birmanica* AUDISIO and DE BIASE
- Metasternum with two pairs of postcoxal pits; pronotum with anterior angles distinctly produced forwards and rounded or weakly acute and moderately produced outwards 3.
3. Pronotum with anterior angles produced forwards, blunt; lateral margins simple or almost so; elytra uniformly coloured 4.
- Pronotum with anterior angles weakly acute and somewhat produced outwards, lateral margins at least weakly sinuate, at least at apical third; elytra almost always with black spots 5.
4. Pronotum trapezoidal with anterior angles strongly produced forwards; body exceptionally elongate with elytra about 1.7 times as long as wide; male fore trochanter with small haired tubercule produced anteriorly, male fore tibia with very small tooth on inner edge at apical three fifths; Northern Burma, India (Mizoram) – **first record** *trogositoides* GORHAM
- Pronotum not trapezoidal, anterior angles moderately produced forwards; body not as strongly elongate with elytra about 1.5 times as long as wide; male fore trochanter with long and sharp, thorn-like projection, male fore tibia thickened on inner edge, at apical third; India (Sikkim, West Bengal: Darjeeling)
..... *indica* TOMASZEWSKA
5. Pronotum small, subquadrate, coarsely and densely punctate; male fore trochanter with long, sharp, thorn-like projection; Northern Burma
..... *sculpturata* GORHAM
- Pronotum larger, not subquadrate (transverse), finely punctate; male fore trochanter with small, haired tubercule; Nepal, India (West Bengal: Darjeeling)
..... *celata* ARROW
6. Dorsum black, each elytron with two large, brownish spots (anterior long oval and posterior somewhat heart-shaped); pronotal sides subparallel; male fore tibia simple; Nepal, India (Sikkim, West Bengal: Darjeeling)
..... *adami* TOMASZEWSKA
- Dorsum dark reddish-brown, elytra with light brown markings of sinuate edges extending along suture and additional black, somewhat oval spot on each elytron at apical third, separated from suture; pronotum widest at apical third thence weakly narrowing towards base; male fore tibia with small tooth near middle length; India (Mizoram) *mizoramica* n. sp.

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