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New records on Elateridae, and description of a new species from Westghats in India* (Insecta: Coleoptera)

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Abstract: During the Czech-Polish expedition to the Westghats of Maharashtra state in India in the year 2005, 23 species of Elateridae have been collected. A new species *Podeonius borowieci* is described from vicinity of Lonavla.

Key words: entomology, taxonomy, Coleoptera, Elateridae, new species, new records, India, Maharashtra.

INTRODUCTION

The Ceylonese subregion, which is a part of the Oriental region includes the south-western India, from Cap Comorin in the south, up to Bombay in the north which covers the Westghats, and the western parts of the provinces Karnataka, and Kerala, as well as the Islands of Lakshadweep, the Maldives, the Chagos Archipelago, and Sri Lanka (Ceylon).

In the Mesozoic India and Sri Lanka had been a part of the old south continent named Gondwanaland, prior to their separation located next to Madagascar. Therefore, there is still monophyletic linage in recent species occurring in the Ceylonese subregion and in the Madagascar subregion as well. Due to isolation mechanisms, such as extensive deposit of tuff as the result of long-term volcanic eruptions, since the time when the Indian subcontinental plate collided with the Eurasian plate and climate changed drastically, migrations of Palaearctic species to the Ceylonese subregion have just restrictedly been possible. Therefore, the Ceylonese subregion has conserved species

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from the old south continentt until today, and its fauna and flora is still conspicuously different from that of the neighbouring Indian sub-region.

Due to the reasons above, species from Westghats in India are most interesting for natural sciences. Despite that, they are poorly represented in collections.

In September and October 2005, Czech and Polish scientists executed an expedition to the Pune-, and Satara-districts in the west of India (Maharashtra state), and collected a number of Coleoptera. The results of the treatment on the Elateridae of this collection are provided in this paper. The collected material will be preserved in the DBET, some of it in CSV.

Abbreviations

CSV Coll. Schimmel, Vinningen, Germany;
IRSNB Institute Royal des Sciences Naturelles de Belquique, Bruxelles, Belgium;
DBET Department of Biodiversity and Evolutionary Taxonomy, University of Wroclaw, Poland;
MP Museum National d'Histoire Naturelle, Paris, France.

List and description of species

Subfam. Pyrophorinae Candèze, 1863

Pyrophorites Candèze, 1863: 1.

Tribus Agrypnini, Candèze, 1857

Agrypnides, Candèze, 1857: 15.
Agrypnini, Stibick, 1979: 157.

Genus *Adelocera* Latraile, 1829

Adelocera Latraile, 1829: 451.

Adelocera lupinosus (Candèze, 1857)

(fig. 9)

Agrypnus lupinosus Candèze, 1857: 130.

Locus typicus
India.

General remarks
The species has been recorded from North and South India, from Burma (Myanmar), Thailand, Cochinchine, Cambodia, and Borneo, and seems to have a wide-spread

distribution in the south-eastern Asia. The records of the recently found specimen of the species confirm the distribution in South India.

New records

India: Maharashtra, Satara district, Wai, 3.X.2005, 1 spm., leg. (at light) L. Borowiec.

Adelocera microcephalus (Motschulsky, 1858)

(Fig. 10)

Brachylacon microcephalus Motschulsky, 1858: 60

Locus typicus

Sri Lanka.

General remarks

The species has been recorded from northern territories of India, from Sri Lanka, Japan, and Borneo.

New records

India: Maharashtra, Pune district, Lonavla, Bhushi Dam, 27.IX.2005, 2 spm., leg. (at light) L. Borowiec; same locality, but 25.IX.2005, 1 spm., leg. (at light) L. Borowiec; same locality, but 26.IX.2005, 2 spm., leg. (at light) L. Borowiec; same district, but Mulshi at Mulshi Lake, 7.-8.X.2005, 2 spm., leg. (at light) L. Borowiec; same locality, but 10-X.2005, 2 spm., leg. (at light) L. Borowiec.

Adelocera sp. 1, aff. *microcephalus* (Motschulski, 1858)

Comments

The species in its general shape and colour is near the *Adelocera microcephalus*, but has a more slender and smaller body.

Records

India: Maharashtra, Satara district, Mahalabeshwar, 30.IX.2005, 1 spm., leg. (catch) L. Borowiec; Pune district, Bhushi Dam, 25.IX.2005, 3 spm, leg. (at light) L. Borowiec; same locality, but 26.IX.2005, leg. (at light) L. Borowiec; same locality, but 27.IX.2005, leg. (at light) L. Borowiec.

Adelocera sp. 2, aff. *microcephalus* (Motschulski, 1858)

Comments

The species in its general shape and colour is near the *Adelocera microcephalus*, but has a wider and longer body, and conspicuous excavations at each side of basal angles of pronotum.

Records

India: Maharashtra, Pune district, Mulshi at Mulshi Lake, 7.-8.X.2005, 1 spm., leg. (at light) L. Borowiec; same locality, but 10.X.2005, 1 spm., leg. (at light) L. Borowiec; Pune district, Bhushi Dam, 26.IX.2005, 1 spm, leg. (at light) L. Borowiec; same locality, but 27.IX.2005, 1 spm., leg. (at light) L. Borowiec; Lonavla, Bhushi Dam, 26.IX.2005, 1 spm., leg. (at light) L. Borowiec; same locality, but 28.IX.2005, 2 spm., leg. (at light) L. Borowiec.

Adelocera rufipes (Candèze, 1874)

Agrypnus microcephalus Candèze, 1874: 7

Locus typicus

India: Pondicherry.

General remarks

The species has been recorded from southern and northern territories of India, and from Nepal.

New records

India: Maharashtra, Satara District, Wai, 4.X.2005, 2 spm., leg. (catch), L. Borowiec.

Tribus Conoderini, Fleutiaux, 1919

Conoderinae, Fleutiaux, 1919: 58.

Genus *Aeoloderma* Fleutiaux, 1928

Aeoloderma Fleutiaux, 1928: 135.

Aeoloderma chrysites (Candèze, 1859)

(fig. 14)

Aeolus chrysites Candèze, 1859: 346.

Locus typicus

Bombay.

General remarks

The species was described as *Aeolus chrisites* by Candèze (1859) basing on specimen from Bombay. The locus typicus is geographically nearby to the Pune district, where specimen of this species have recently been collected.

New records

India: Pune District, Mulshi at Mulshi Lake, 10.X.2005, 1 spm. (at light) leg. L. Borowiec.

Aeoloderma sp.

Comments

This species is different from all other *Aeoloderma*-species by the colour of body, which is brownish with yellow legs and antenna, and red hind-angels of pronotum. Body length is 6 mm.

Records

India: Maharashtra, Pune District, Bhushi Dam, 26.IX.2005, 1 spm. (at light) leg. L. Borowiec.

Genus *Drasterius* Eschscholtz, 1829

Drasterius Eschscholtz, 1829: 33

Drasterius brahminus Candèze, 1859

(fig. 17)

Drasterius brahminus Candèze, 1859: 426

Locus typicus

Himalaya (in accordance with Platia & Gudenzi, 1997).

General remarks

The species is recorded from many localities in southern and south-eastern Asia, such as Himalaya, Bengal, Pakistan and India, and seems to have a wide-spread distribution in the Ceylonese and Indian subregions, as well as in India's neighbouring countries.

New records

India: Maharashtra, Pune district, Lonavla Bhushi Dam, 24.IX.2005, 1 spm., leg. (catch) L. Borowiec; same data, but 25.IX.2005, 3 spm., leg. (at light) L. Borowiec; same data, but 26.IX.2005, 14 spm., leg. (at light) L. Borowiec; same data, but 27.IX.2005, 1 spm., leg. (at light) L. Borowiec; same district, but Mulshi at Mulshi Lake, 7.-8.X.2005, 2 spm., leg. (at light) L. Borowiec; same data, but 10.X:2005, 1 spm., leg. (at light) L. Borowiec; Satara District, Mahalabeshwar, 1.X.2005, 55 spm., leg. (at light) L. Borowiec.

Drasterius confusus Platia & Gudenzi, 1997

(fig. 18)

Drasterius confusus Platia & Gudenzi, 1997: 407.

Locus typicus
India: Konbir.

General remarks
Platia & Gudenzi (1997) based the description of the species on material from many localities in northern India, but also from Pondicherry, Coromandel, and Sri Lanka. The distribution of the species covers the Ceylonese and the Indian subregions.

New records
India: Maharashtra, Pune district, Mulshi at Mulshi Lake, 7.-8.X.2005, 4 spm., leg. (at light) L. Borowiec; same data, but 10.X.2005, 3 spm., leg. (at light) L. Borowiec; Bushi Dam, 27.IX.2005, 1 spm., leg. (at light) L. Borowiec; Satara District, Wai, 3.X.2005, 3 spm., leg. (at light) L. Borowiec.

Genus *Heteroderes* Latraile, 1834

Heteroderes latraile, 1834: 155.

Heteroderes lenis Candèze, 1859
(fig. 11)

Heteroderes lenis Candèze, 1859: 357.

Locus typicus
Bengal.

General remarks
The species had been recorded only from Bengal in India until now. The knowledge of the distribution of the species is extended by the new records to include the Ceylonese subregion.

New records
India: India: Maharashtra, Pune District, Lonavla Bhushi Dam, 26.IX.2005, 1 spm., leg. (at ligth) L. Borowiec; same data, but 27.X.2005, 1 spm., leg. (at light) L. Borowiec; same district, but Mulshi at Mulshi Lake, 7.-8.X.2005, 2 spm., leg. (at light) L. Borowiec; same data, but 10.X.2005, 1 spm, leg. (at light) L. Borowiec.

Subfam. Dicrepidiinae Fleutiaux, 1919

Dicrepidiinae Fleutiaux, 1919: 38.

Genus *Adiaphorus* Candèze, 1859

Adiaphorus Candèze, 1859: 47.

Adiaphorus gracilicornis Candèze, 1859
(fig. 13)

Adiaphorus gracilicornis Candèze, 1859: 47.

Locus typicus
Ceylon (Sri Lanka).

General remarks
Candèze (1859) described the species from Sri Lanka. Fleutiaux (1933) recorded it from Fraserpet, which is geographically nearby to the location where the beetle has been recently found.

New records
India: Maharashtra, Pune District, Lonavla Bhushi Dam, 25.IX.2005, 2 spm., leg. (catch) L. Borowiec; same district, but Mulshi at Mulshi Lake, 9.X.2005, 1 spm., leg. (catch) L. Borowiec.

Adiaphorus ponticerianus Candèze, 1859

Adiaphorus ponticerianus Candèze, 1859: 48.
Elius rufus Schwarz, 1902: 223.

Locus typicus
India: Ponticherry.

General remarks
Species of *Adiaphorus* are known from India, Sri Lanka, from Hindustan, and from Himalaya. *A. ponticerianus* Candèze, 1859 had been known exclusively from Pondicherry so far. The new records of this species are the first for the Ceylonese subregion.

New records
India: Maharashtra, Pune District, Lonavla Bhushi Dam, 26.IX.2005, 1 spm., leg. (at light) L. Borowiec; same data, but 27.IX.2005, 1 spm., leg. (at light) L. Borowiec.

Subfam. Elaterinae Leach, 1815

Elaterides Leach, 1815: 85.

Genus *Podeonius* Kiesenwetter, 1858

Podeonius Kiesenwetter, 1858: 229.

Podeonius borowieci sp. n.
(figs. 1-4)

Locus typicus
India: Pune District, Lonavla.

Type material
Holotypus ♂ (DBET): India: Maharashtra, Pune district, Lonavla Bhushi Dam, 12.X.2005, leg. (catch) L. Borowiec, India Expedition, Dep. of Biodiversity and Evol. Taxonomy, Wrocław University. Paratypus ♂ (CSV): Same data as holotype.

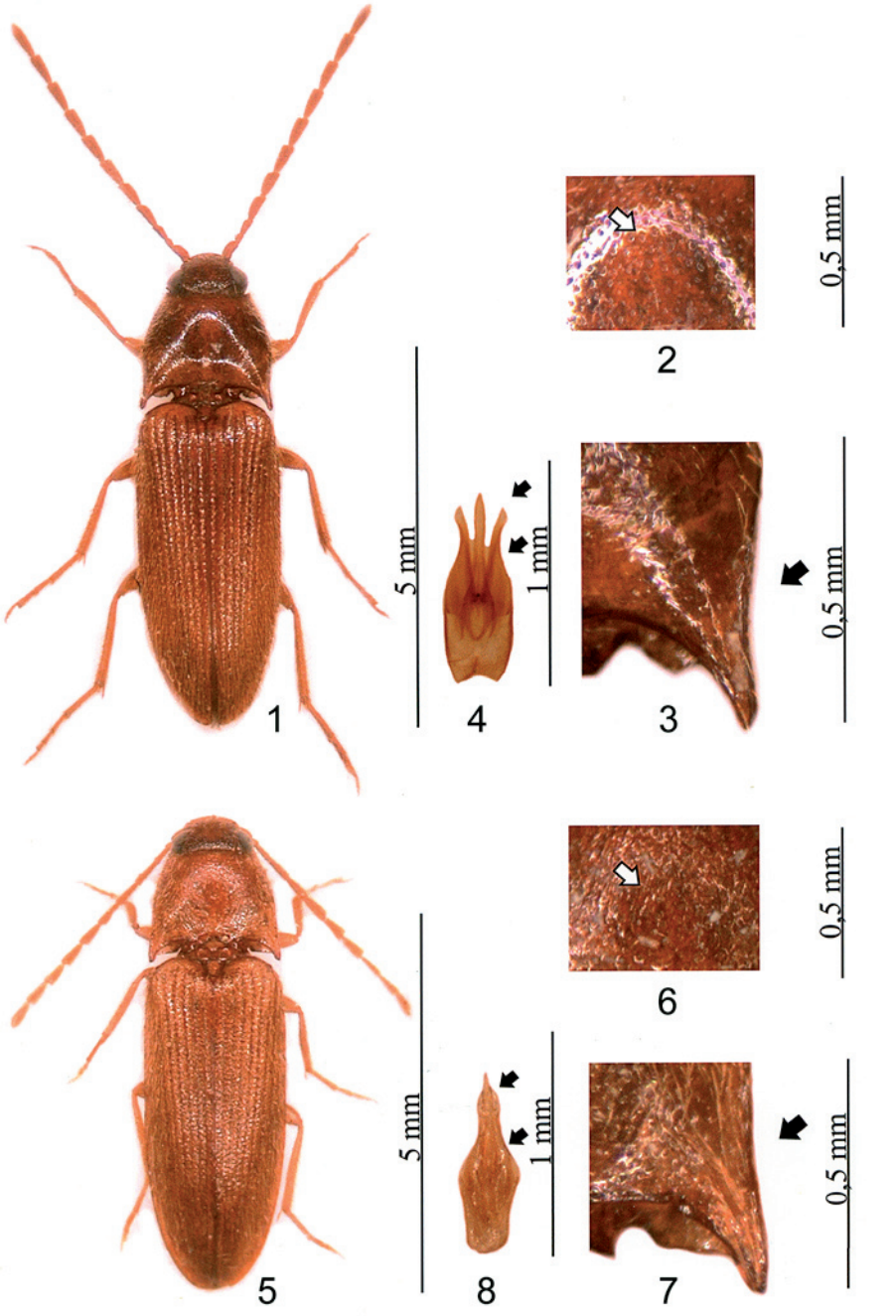
Diagnosis
Oval, subparallel, feebly raised species. Length: 6.2 mm (from apical margin of frons up to apex of elytra), width: 1.8 mm (across base of elytra). Reddish-brown, frons and lateral sides of pronotum slightly darker. Pronotum and elytra semi-matt, just little shiny. Pubescence golden-yellowish, long, dense and protruding, on head inclined to various directions, on pronotum and elytra inclined to apex and lateral margin (fig. 1).

Head with dense and umbilicate, regularly rounded puncturation, and pubescence inclined to various directions. Frons rounded in middle, its margin separated from clypeus. Eyes small, spherical, and little prominent. Antennae long and slender, outreaching basal angles of pronotum by length of last four antennomeres. Second antennomere short, just a little longer than width, apical little extended, third antennomere conspicuously longer than second, and both together a little longer than fourth antennomere, and each of the following, those are extended at apex, last antennomere oval, sub-apically bevelled. Surface with dense puncturation and covered with fine, short, and protruding pubescence.

Pronotum campaniform, along median area a little longer than wide at basal angles (length/width ratio 1.7:1.5), slightly raised at centre, and bent laterally, in front of basal angles conspicuously convex, basal angles sharp at apex (fig. 3). Puncturation of pronotum sparser than on head, punctures small, fine and simple, not umbilicate, interstices of points one to two times their diameter (fig. 2). Pronotum basal angles with a prominent and sharp carina, which is near the lateral margin and reaching half of pronotum. Pronotum without a furrow or mould, but has a relatively flat dropping.

Scutellum lingulate, rounded at basis, lateral sub-parallel, sharp at apex, and wedge-shaped. Surface nearly flat, puncture less dense and simple. Pubescence dense and long, pointed from basis to apex.

Elytra sub-parallel, slender and wedge-shaped, after centre narrowed to apex. Apex curved, and simple, without tooth. Basis distinctly wider than those of pronotum, in the scutellum area slightly depressed, margin raised, and shoulder prominent (winged



1-4. *Podeonius borowieci* n. sp.: 1 - habitus, 2 - centre of pronotum, 3 - basal edge of pronotum, 4 - aedeagus; 5-8. *P. brastagiensis* Schimmel, 2007: 5 - habitus, 6 - centre of pronotum, 7 - basal edges of pronotum, 8 - aedeagus

species). Striae of elytra covered with dense, simple puncturation, interstices of points fine, little rugged, and semi-matt. Pubescence long and pointed to apex.

Pro-, meso- and metathorax with dense and rugged punctuation, interstices small and semi-matt. Pubescence short and inclined.

Legs slender, moderately long and thin, tarsomeres up to claws of decreasing length, ventral with just visible, fine pubescence, and fine upholstery, third tarsomere with a dorsal lobe, fourth tarsomere very small, and hardly visible due to the covering by the lobe of the third tarsomere. Tibia covered with short and sharp thorns, apex with two long spine-like thorns.

Aedeagus with a convex basal plate, and with small, subparallel, apically bevelled and sharp median lobe extending slightly behind the top of parameres. Apical lobe of paramere small, subapically slightly convex, and with a spoon-like lateral edge (fig. 4).

Females are unknown.

Differential diagnosis

P. borowieci sp. n. is closely allied to *P. brastagiensis* Schimmel, 2006, but may be easily distinguished from this species by the the following characteristics: antennae slightly shorter; puncturation of pronotum sparser; basal angles of pronotum with a single carina; paramere of aedeagus sub-apically slightly convex (figs 5-8).

Derivatio nominis

Named in honour of the discoverer of the new species, Prof. Dr. L. Borowiec, Zoological Institute, University of Wrocław.

Distribution

Pune district, India.

Ecological remarks

The two specimen of *Podeonius borowieci* had been catching from vegetation.

Subfam. Negastriinae Nakane & Kishii, 1956

Negastriinae Nakane & Kishii, 1956: 202.

Genus *Quasimus* Des Gozis, 1886

Quasimus Des Gozis, 1886: 22.

Quasimus ohirai Dolin, 2001

(fig. 20)

Quasimus ohirai Dolin, 2001: 136-137.

Locus typicus
India: Maharashtra, Matheran.

General remarks
The small Elaterid-beetle *Quasimus ohirai* may be easily distinguished from all other species of *Quasimus* by the short carina of basal angles of pronotum, which reaches just a half of pronotum lateral margin, by the yellow colour of legs, and the form of the first three antennomere. Only seven specimens have been recorded so far, on which Dolin (2001) based his description of the species. The new records from Maharashtra in India vindicate the recent distribution of the species in the Westghats in India.

New records
India: Maharashtra, Pune district, Lonavla Bhushi Dam, 25.IX.2005, 11 spm., leg. (catch) L. Borowiec; Same data, but 12.X.2005, 1 spm., leg. (at light) L. Borowiec; Same data, but 13.X.2005, 2 spm., leg. (at light) L. Borowiec; Same district, but Amba Vall., 16 km south of Lonavla, 27.IX.2005, 2 spm., leg. L. Borowiec.

Subfam. Melanotinae Candèze, 1859

Melanotites Candèze, 1859: 4.
Melanotinae Jakobson, 1913: 734.

Genus *Melanotus* Eschscholtz, 1829

Melanotus eschscholtz, 1829: 32.

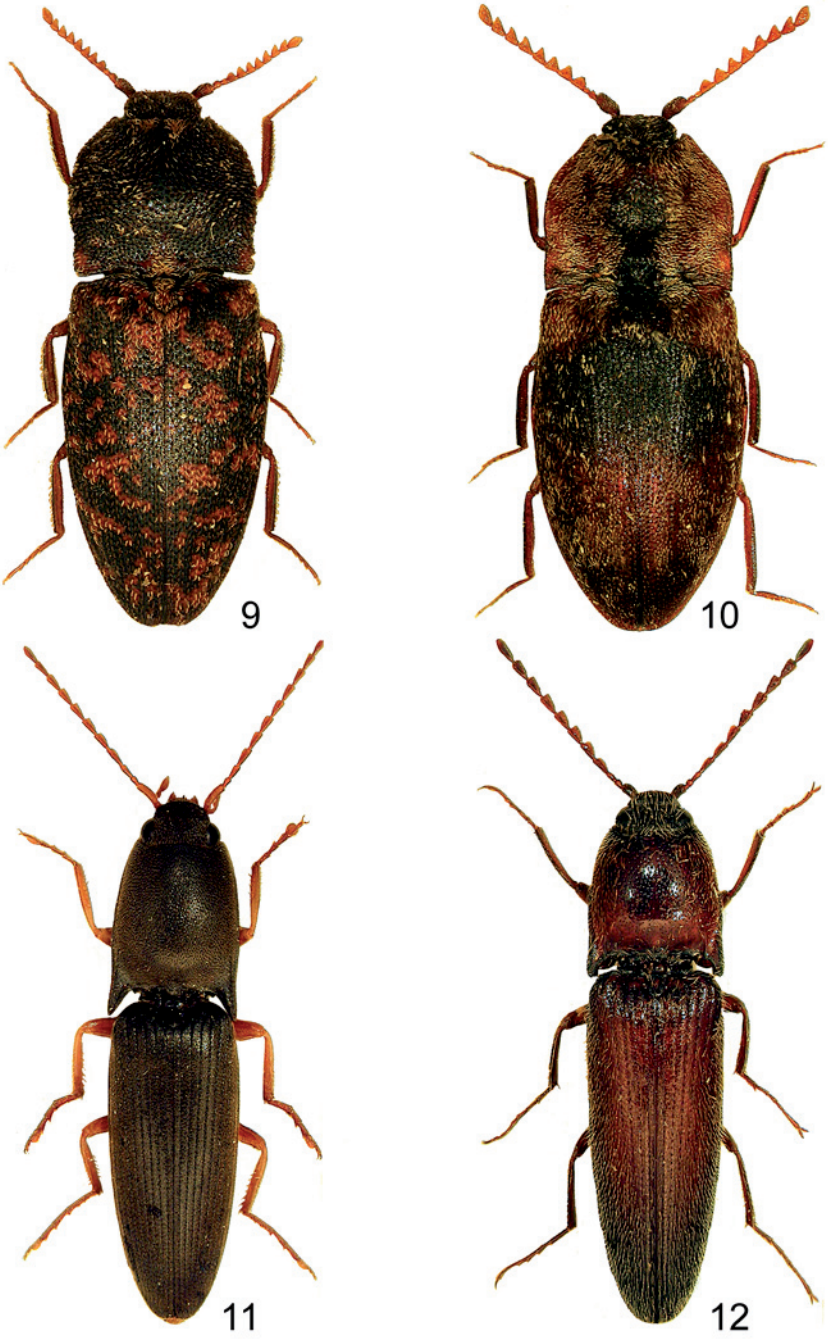
Melanotus rufinus Candèze, 1893
(fig. 12)

Melanotus rufinus Candèze, 1893: 177.

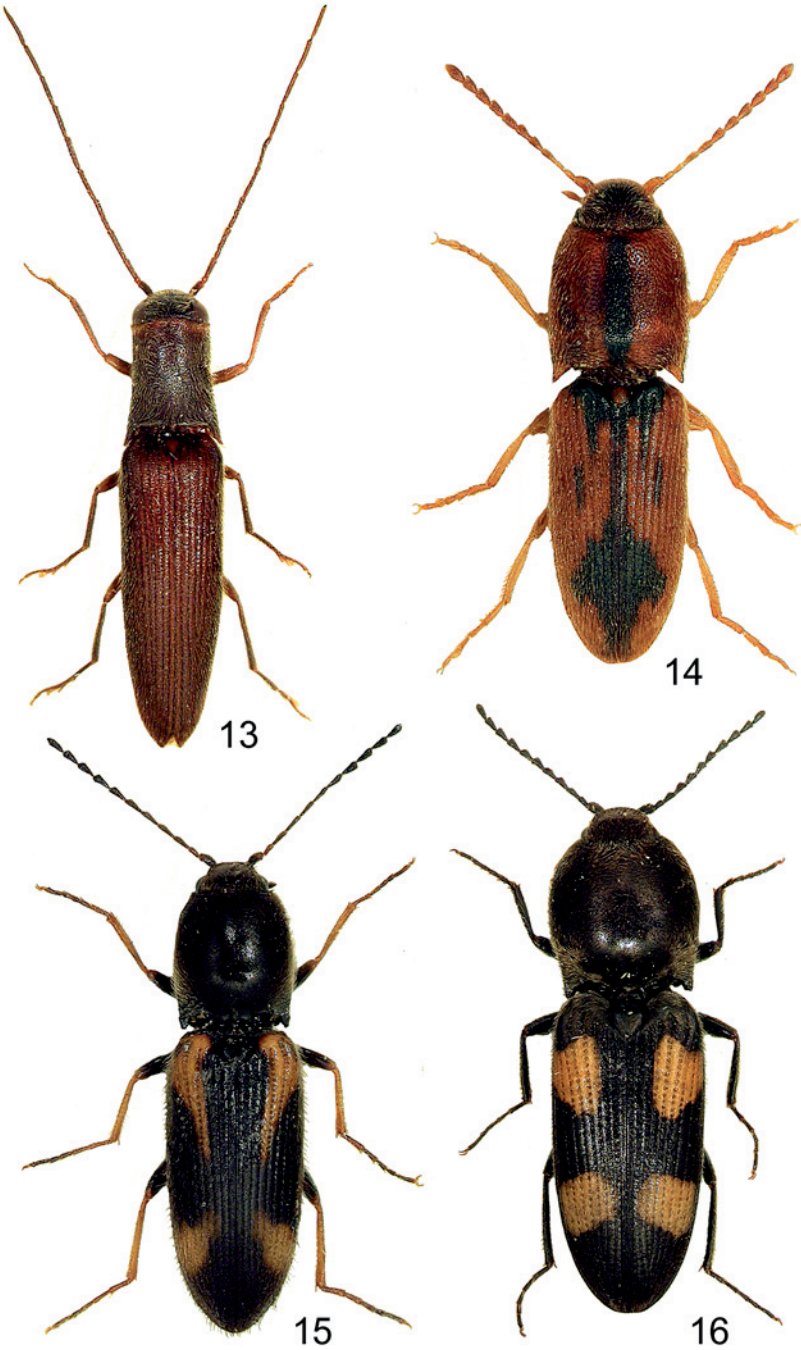
Locus typicus
India: Belgaum.

General remarks
The species has been recorded from various localities in India, mainly from the northern part of the subcontinent. Platia & Schimmel (2001) recorded the species also from Maharashtra, which is in geographical vicinity to the locus typicus, and also of the location from which the specimen of *M. rufinus* has been recently collected.

New records
India: Maharashtra, Pune district, Mulshi at Mulshi Lake, 7.-8.X.2005, 4 spm., leg. (at light) L. Borowiec.



9-12. Habitus: 9 - *Adelocera lupinosus*, 10 - *Adelocera microcephalus*, 11 - *Heteroderes lenis*, 12 - *Melanotus rufinus*



13-16. Habitus: 13 - *Adiaphorus gracilicornis*, 14 - *Aeloderma chrysites*, 15 - *Dicronychus densepunctatus*, 16 - *Dicronychus* aff. *quadrillum*

Subfam. Cardiophorinae, Candèze, 1860

Cardiophorites Candèze, 1860: 100.

Genus *Cardiophorus* Eschscholtz, 1829

Cardiophorus Eschscholtz, 1829: 34.

Cardiophorus sp. aff. *multus* (*Dicronychus*) Fleutiaux, 1933

Comments

The species is near or identical to the description of *Dicronychus multus* Fleutiaux, 1933. The type of *D. multus* has not been studied. It is presumed that the type of this species is preserved in the MP.

Records

India: Maharashtra, Satara district, Mahalabeshwar, 5.X.2005, 9 spm., leg. (at light) L. Borowiec; Pune district, Mulshi at Mulshi Lake, 10.X.2005, 1 spm., leg. (at light) L. Borowiec; Satara District, Wai, 3.X.2005, 1 spm., leg. (catch) L. Borowiec.

Genus *Dicronychus* Brullé, 1832

Dicronychus Brullé, 1832: 138.

Dicronychus sp. aff. *albomaculatus* (*Cardiophorus*) Fleutiaux, 1933

Comments

The species is near or identical with the description of *Cardiophorus albomaculatus* Fleutiaux, 1933. The type of *C. albomaculatus* has not been studied. It is presumed that the type of this species is preserved in the MP.

Records

India: Maharashtra, Satara District, Mahalabeshwar, 30.IX.2005, 83 spm., leg. (catch) L. Borowiec; Satara District, Wai, 3.X.2005, leg. (catch) L. Borowiec.

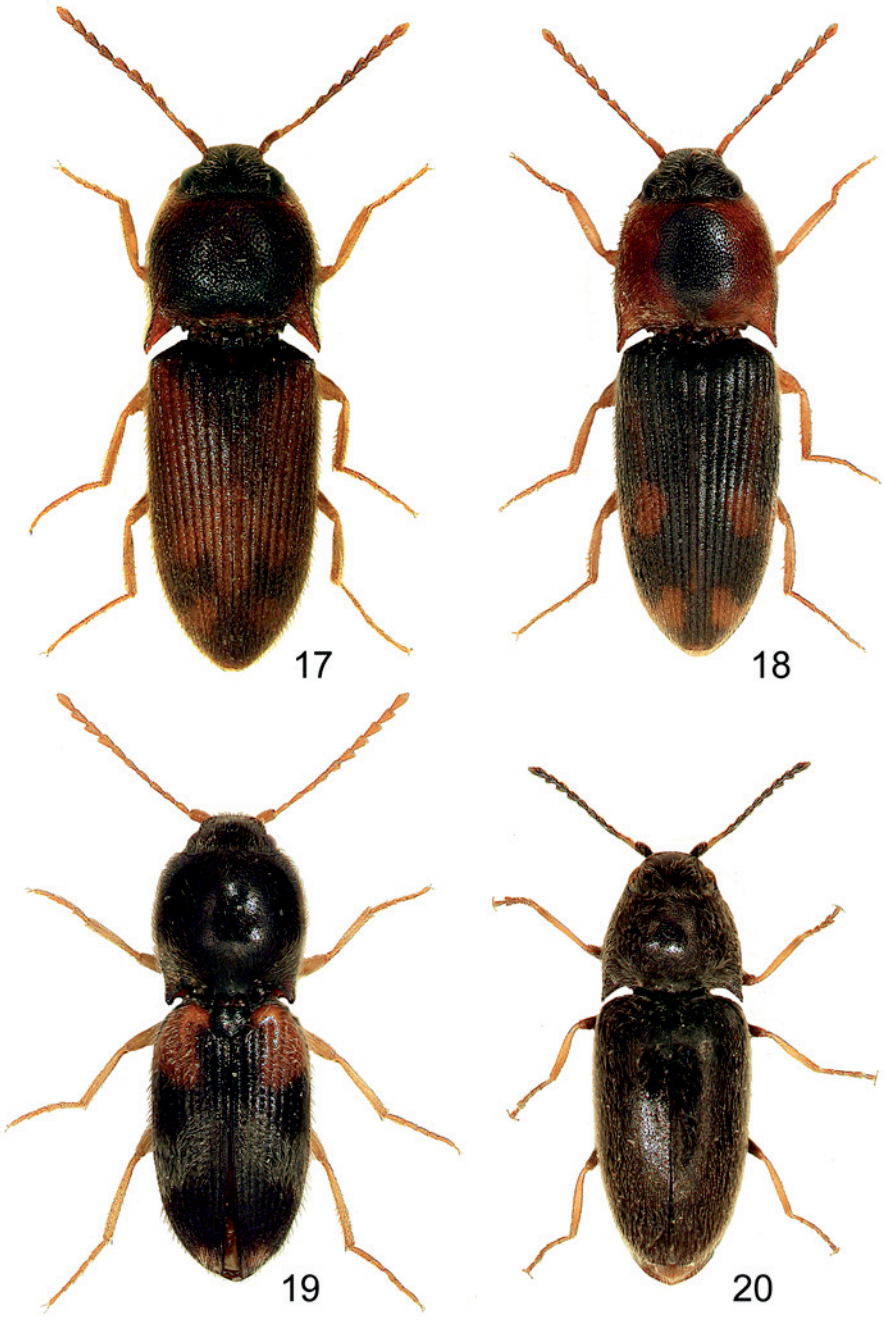
Dicronychus sp. aff. *bigeminatus* (*Cardiophorus*) Candèze, 1893

Comments

The species is near or identical with the description of *Cardiophorus bigeminatus* Candèze, 1893, which has been published by Fleutiaux (1933) as *Dicronychus lacertosus* var. *bigeminatus*. The type of *Cardiophorus bigeminatus* is very probably preserved in IRSNB.

Records

India: Maharashtra, Pune District, Laovla Bhushi Dam, 26.IX.2005, 1 spm., leg. (at light) L. Borowiec.



17-20. Habitus: 17 - *Drasterius brahminus*, 18 - *Drasterius confusus*, 19 - *Paracardiophorus minutus*, 20 - *Quasimus ohirai*

Dicronychus densepunctatus Fleutiaux, 1933
(fig. 15)

Dicronychus densepunctatus Fleutiaux, 1933: 13.

Locus typicus
India.

General remarks
Fleutiaux (1933) described this species basing on three specimens from Coorg (Karnataka district) and from Madras. The Karnataka district is geographically nearby to the location where the specimen of *D. densepunctatus* has been collected recently.

New records
India: Maharashtra, Satara District, Mahalabeshwar, 30.IX.2005, 33 spm., leg. (catch) L. Borowiec.

Dicronychus sp. aff. *lacertosus* Erichson, 1840

Comments
The species is near or identical with the description of *Dicronychus lacertosus* Erichson, 1840. The type of the species has not been studied.

Records
India: Maharashtra, Satara District, Mahalabeshwar, 5.X.2005, 1 spm., leg. (at light) L. Borowiec; Pune District, Lonavla Bhushi Dam, 27.IX.2005, 1 spm., leg. (at light) L. Borowiec; same locality but 26.IX.2005, 3 spm., leg. (at light) L. Borowiec; Pune District Mulshi at Mulshi Lake, 7.-8.X.2005, 1 spm., leg. (at light) L. Borowiec; same locality but 10.X.2005, 1 spm., leg. (at light) L. Borowiec.

Dicronychus sp. aff. *quadrillum* (*Cardiophorus*) Candèze, 1860
(fig. 16)

Comments
The species is near or identical with the description of *Cardiophorus quadrillum* Candèze, 1860. The typus of *C. quadrillum* has not been studied. The typus of this species is very probably preserved in the IRSNB.

Records
India: Maharashtra, Pune District, Mulshi at Mulshi Lake, 8.IX.2005, 1 spm., leg. (catch) L. Borowiec; same locality but 10.X.2005, 3 spm. (catch), L. Borowiec; same locality but 11.X.2005, 1 spm., leg. (catch) L. Borowiec.

Dicronychus sp. aff. *merkli* Pic, 1910

Comments

The species as of its body form and colour reminds *D. merkli* Pic, 1910 from Turkey, but has slender pronotum and a black, longitudinal strip along inner interstice of point-line of its yellow elytra. In further characteristics the species is nearly identical with the *D. merkli.*

Records

India: Maharashtra, Pune District, Mulshi at Mulshi Lake, 10.X.2005, 2 spm., leg. (at light) L. Borowiec; Pune District, Lonavla Bhushi Dam, 25.IX.2005, 1 spm., leg. (catch) L. Borowiec.

Genus *Paracardiophorus* Schwarz, 1895

Paracardiophorus Schwarz, 1895: 40.

Paracardiophorus minutus Fleutiaux, 1933

(fig. 19)

Paracardiophorus minutus Fleutiaux, 1933: 12.

Locus typicus

India: Madras, North Salem.

General remarks

The species has been described by Fleutiaux (1933), basing on a single specimen from Madras. The new records are the first from the Ceylonese subregion, and the second from Indian subcontinent.

New records

India: Maharashtra, Pune District, Mulshi at Mulshi Lake, 10.V.2005, 4 spm., leg. (catch) L. Borowiec; Pune District, Lonavla, Bhush Dam, 12.X.2005, 2 spm., leg. (catch) L. Borowiec; Satara District, Mahalabeshwar, 30.IX.2005, 5 spm., (catch) L. Borowiec.

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REFERENCES

Candèze, E., 1857. Monographie des Elatérides 1. Mém. Soc. roy. Sci. Liège, **12**: 1-400.

—, 1859. Monographie des Elatérides 2. Mém. Soc. roy. Sci. Liège, **14**: 1-543.

—, 1860. Monographie des Elatérides 3. Mém. Soc. roy. Sci. Liège, **15**: 1-512.

—, 1863. Monographie des Elatérides 4. Mém. Soc. roy. Sci. Liège, **17**: 1-534.

—, 1874. Revision de la Monographie des Elatérides. Mém. Soc. roy. Sci. Liège, **4** (1): 1-218.

—, 1893. Additions aux Elatérides des Indes Orientales. Ann. Soc. Entomol. Belg., **37**: 168-179.

Dolin, W. G., 2001. Zur Kenntnis der *Quasimus*-Arten Indiens. Koleopt. Rdsch, **71**: 121-142.

Eschscholtz, J. F., 1829. Elateriden, Eintheilung derselben in Gattungen. In: Thon. Entomol. Arch., **2** (1): 31-35.

Fleutiaux, E., 1918. Nouvelles Contributions à la Faune l'Indo-chine Francaise. Ann. Soc. Ent. France, **87**: 250.

—, 1919. Voyage de Ch. Allaud et R. Jeannel en Afrique Orientale (1911-1912). Insectes Coléoptères: 13, Elateridae, Trixagidae, et Melasidae. Paris: 1-119.

—, 1928. Les Elatérides de l'Indo-Chine française (Catalogue raisonne) 1. Coleoptera. Encycl. ent., Ser. B., **3**: 103-177.

Gozis, M. P. des, 1886. Recherche de l´espèce typique de quelques anciens genres. Rectification synonymiques et notes diverses. Montluçon: 1-36.

Jakobson, G. G., 1913. Beetles of Russia and Western Europe. St. Petersburg: 1-1024.

Kiesenwetter, H. von, 1858. In: Erichson: Naturgeschichte der Insecten Deutschlands. Erste Abtheilung Coleoptera. 745 S., Berlin.

Latraille, P. A., 1834. Distribution de la famille des Serricornes. Ann. Soc. Ent. France, **3**: 113-170.

Leach, W. E., 1815. Entomology. Brewster's Edinburgh Encycl., **9** (1): 1-384.

Motschulsky, V., 1858. Insectes des Indes orientales. 1. Série. Etud. Entomol., **1**: 20-122.

Nakane, T. & T. Kishii, 1956. On the subfamilies of Elateridae from Japan (Coleoptera). Kntyŭ, **24** (4): 201-206.

Platia, G. & I. Gudenzi, 1997. Revisione delle specie del Genere *Drasterius* Eschscholtz della Regione Orientale (Coleoptera, Elateridae, Conoderini). Lambillionea, **117**: 402-416.

Platia, G. & R. Schimmel, 2001. Revisione delle specie orientali (Giappone e Taiwan esclusi) del genere *Melanotus* Eschscholtz, 1829 (Coleoptera, Elateridae, Melanotinae). Mon. Nr. 27, Mus. Reg. di Sci. Nat., Torino. 638 pp.

Schimmel, R., 2006. Neue Ampedini-, Physorhinini-, Denticollini- und Diminae-Arten sowie eine neue Gattung, *Poggiellus* n. gen. aus Südostasien. Mitt. POLLICHIA, **92**: 131-158.

Schwarz, O., 1902. Neue Elateriden. Stettiner Entomol. Z., **63**: 194-316.

Stibick, J. N. L., 1979. Classification of the Elyteridae (Coleoptera), Relationships and Classification of the Subfamilies and Tribes. Pac. Ins., **20** (2-3): 145-186.