

Towards knowledge of the Indian Clytrinae (Coleoptera, Chrysomelidae)

Autor(en): **Medvedev, Lev N.**

Objektyp: **Article**

Zeitschrift: **Entomologica Basiliensia**

Band (Jahr): **25 (2003)**

PDF erstellt am: **05.05.2024**

Persistenter Link: <https://doi.org/10.5169/seals-980880>

Nutzungsbedingungen

Die ETH-Bibliothek ist Anbieterin der digitalisierten Zeitschriften. Sie besitzt keine Urheberrechte an den Inhalten der Zeitschriften. Die Rechte liegen in der Regel bei den Herausgebern.

Die auf der Plattform e-periodica veröffentlichten Dokumente stehen für nicht-kommerzielle Zwecke in Lehre und Forschung sowie für die private Nutzung frei zur Verfügung. Einzelne Dateien oder Ausdrucke aus diesem Angebot können zusammen mit diesen Nutzungsbedingungen und den korrekten Herkunftsbezeichnungen weitergegeben werden.

Das Veröffentlichen von Bildern in Print- und Online-Publikationen ist nur mit vorheriger Genehmigung der Rechteinhaber erlaubt. Die systematische Speicherung von Teilen des elektronischen Angebots auf anderen Servern bedarf ebenfalls des schriftlichen Einverständnisses der Rechteinhaber.

Haftungsausschluss

Alle Angaben erfolgen ohne Gewähr für Vollständigkeit oder Richtigkeit. Es wird keine Haftung übernommen für Schäden durch die Verwendung von Informationen aus diesem Online-Angebot oder durch das Fehlen von Informationen. Dies gilt auch für Inhalte Dritter, die über dieses Angebot zugänglich sind.

Towards knowledge of the Indian Clytrinae (Coleoptera, Chrysomelidae)

by Lev N. Medvedev

Abstract. A list of Clytrinae (Chrysomelidae) from southern India in the collection of the Natural History Museum Basel (Switzerland) is given, as well as a key to the genera of southern India and keys for genera *Pantocometis* Lacordaire, 1848, *Epimela* Weise, 1903 and *Aetheodactyla* Lacordaire, 1848. Seven new species are described: *Epimela minuta* (southern India), *E. tristis* (Nepal), *Aetheodactyla orientalis* (eastern India), *A. regalini*, *Aspidolopha dembickyi*, *Aetheomorpha sculpturata*, and *Smaragdina pacholatkoi* (southern India) spp.nov. *Epimela downesii* (Baly, 1865) comb.nov. is removed from the genus *Lachnaea* Chevrolat, 1837. *Aetheodactyla flavobasalis* (Jacoby, 1908) comb.nov. is removed from the genus *Smaragdina* Chevrolat, 1837. *Aetheodactyla minor* Duvivier, 1891 is confirmed as a valid species (a new status for *Pseudoclytra plagiata* var. *minor* Duvivier, 1891). Two new synonyms are established: *Epimela downesii* (Baly, 1865) (= *Epimela indica* Duvivier, 1891 syn.nov.) and *Aetheodactyla flavobasalis* (Jacoby, 1908) (= *Aetheodactyla incisipes* L. Medvedev, 1984 syn.nov.).

Key words. Coleoptera – Chrysomelidae – Clytrinae – India – taxonomy – keys – new species

Introduction

During my last visit to the Basel Museum of Natural History I had an opportunity to study a large and interesting body of Clytrinae material collected in southern India in the year 2002. This included 16 species, mostly represented with large series, among them 4 species new to science.

The Clytrinae of southern India are still very poorly studied and no keys exist. Because of this, I include a key to the genera of southern India in the article, as well as revisions of 3 genera: *Pantocometis* Lacordaire, 1848, *Epimela* Weise, 1903 and *Aetheodactyla* Lacordaire, 1848, also with descriptions of a few new species.

Material of the southern Indian Clytrinae in Natural History Museum Basel (The species collected in 2002.)

Pantocometis subfasciata Jacoby, 1908

Material examined. Tamil Nadu, Nilgiri Hills, 11 km SE Kotagiri, Kunchappanai, 1100 m, 3–15.V.2002, leg. Pacholátko, 7 exx.

Remark. The black spots on the elytra are occasionally connected along the side margin.

Aetheodactyla regalini sp.nov.

Material examined. Tamil Nadu, Nilgiri Hills, 11 km SE Kotagiri, Kunchappanai, 1100 m, 3–15.V.2002, leg. Pacholátko, 1 male.

Remark. The species described below.

***Aspidolopha distincta* Duvivier, 1891**

Material examined. Tamil Nadu, Nilgiri Hills, 11 km SE Kotagiri, Kunchappanai, 1100 m, 3–15.V.2002, leg. Pacholátko, 8 exx.

***Aspidolopha decora* Fabricius, 1801**

Material examined. Tamil Nadu, Nilgiri Hills, 11 km SE Kotagiri, Kunchappanai, 1100 m, 3–15.V.2002, leg. Pacholátko, 6 females.

***Aspidolopha dembickyi* sp.nov.**

Material examined. Tamil Nadu, Nilgiri Hills, 11 km SE Kotagiri, Kunchappanai, 1100 m, 3–15.V.2002, leg. Pacholátko, 10 females; Tamil Nadu, Nilgiri Hills, 15 km SE Kotagiri, Kunchappanai, 17–22.V.1997, leg. Dembický & Pacholátko, 1 male.

Remark. The species described below.

***Aetheomorpha cribellata* Jacoby, 1908**

Material examined. Tamil Nadu, Nilgiri Hills, 11 km SE Kotagiri, Kunchappanai, 1100 m, 3–15.V.2002, leg. Pacholátko, 19 exx.; Karnataka, W Ghats, 20 km W Talguppa, Jog Falls, 500 m, 22–28.V.2002, leg. P. Pacholátko, 1 ex. Aedeagus – Fig. 17.

Remarks. This species is very variable, and is represented by the following colour forms:

1. Prothorax fulvous:

- Elytra entirely fulvous – 2 exx.
- Elytra with black band beyond mid-point – 4 exx.
- Elytra with 2 spots in anterior half and black band beyond mid-point (typical form) – 1 exx.

2. Prothorax black:

- Elytra entirely fulvous – 2 exx.
- Elytra with black band beyond mid-point – 5 exx.
- Elytra with 2 spots in anterior half (sometimes connected) and black band beyond mid-point – 6 exx.

***Aetheomorpha nigropicta* (Lefevre, 1891)**

Material examined. Tamil Nadu, Nilgiri Hills, 11 km SE Kotagiri, Kunchappanai, 1100 m, 3–15.V.2002, leg. Pacholátko, 1 female.

***Aetheomorpha sculpturata* sp.nov.**

Material examined. Tamil Nadu, Nilgiri Hills, 11 km SE Kotagiri, Kunchappanai, 1100 m, 3–15.V.2002, leg. Pacholátko, 3 females.

Remark. The species described below.

***Aetheomorpha suturata* Jacoby, 1898**

Material examined. Tamil Nadu, Nilgiri Hills, 11 km SE Kotagiri, Kunchappanai, 1100 m, 3–15.V.2002, leg. Pacholátka, 2 exx; Karnataka, W Ghats, 20 km W Talguppa, Jog Falls, 500 m, 22–28.V.2002, leg. P. Pacholátka, 9 exx.

***Aetheomorpha tibialis* L. Medvedev, 2000**

Material examined. Tamil Nadu, Nilgiri Hills, 11 km SE Kotagiri, Kunchappanai, 1100 m, 3–15.V.2002, leg. Pacholátka, 9 exx.

Remark. One male with entirely fulvous prothorax; in other specimens there are well developed black spots.

***Aetheomorpha bifurcata* L. Medvedev, 2001**

Material examined. Tamil Nadu, Nilgiri Hills, 11 km SE Kotagiri, Kunchappanai, 1100 m, 3–15.V.2002, leg. Pacholátka, 1 male, 41 females; Karnataka, W Ghats, 20 km W Talguppa, Jog Falls, 500 m, 22–28.V.2002, leg. P. Pacholátka, 2 females.

***Miochira lefevrei* Jacoby, 1895**

Material examined. Tamil Nadu, Nilgiri Hills, 11 km SE Kotagiri, Kunchappanai, 1100 m, 3–15.V.2002, leg. Pacholátka, 15 exx; Karnataka, W Ghats, 20 km W Talguppa, Jog Falls, 500 m, 22–28.V.2002, leg. P. Pacholátka, 5 exx.

***Ceroclytra cornuta* Jacoby, 1895**

Material examined. Tamil Nadu, Nilgiri Hills, 11 km SE Kotagiri, Kunchappanai, 1100 m, 3–15.V.2002, leg. Pacholátka, 1 exx.; Karnataka, W Ghats, 20 km W Talguppa, Jog Falls, 500 m, 22–28.V.2002, leg. P. Pacholátka, 3 exx.

***Smaragdina frontalis* Jacoby, 1908**

Material examined. Tamil Nadu, Nilgiri Hills, 11 km SE Kotagiri, Kunchappanai, 1100 m, 3–15.V.2002, leg. Pacholátka, 9 exx.

***Smaragdina divisa* Jacoby, 1889**

Material examined. Tamil Nadu, Nilgiri Hills, 11 km SE Kotagiri, Kunchappanai, 1100 m, 3–15.V.2002, leg. Pacholátka, 63 exx.

***Smaragdina pacholatko* sp.nov.**

Material examined. Tamil Nadu, Nilgiri Hills, 11 km SE Kotagiri, Kunchappanai, 1100 m, 3–15.V.2002, leg. Pacholátko, 57 exx.

Remark. The species described below.

***Smaragdina nilgiriensis* Jacoby, 1903**

Material examined. Tamil Nadu, Nilgiri Hills, 15 km SE Kotagiri, Kunchappanai, 17–22.V.1997, leg. Dembický & Pacholátko, 1 male.

Abbreviations

NHMB		Naturhistorisches Museum, Basel
LM		Author's collection (L. N. Medvedev), Moscow
SMNS		Staatliches Museum für Naturkunde, Stuttgart

Taxonomy**Key to genera of Clytrinae of southern India**

- 1(4) Upperside or at least prothorax pubescent. First segment of tarsi more or less elongate. Pygidium not covered by elytra.
- 2(3) Propleurae not pubescent. Upperside, head, pygidium and legs with short, light pubescence and long, erect black hairs. Elytra confusedly punctate ...
..... *Pantocometis* Lacordaire, 1848
- 3(2) Propleurae densely pubescent. Elytra mostly with irregular rows.
..... *Epimela* Weise, 1903
- 4(1) Upperside not pubescent.
- 5(6) Epipleurae with erect pubescence. Body elongate. Pygidium covered by elytra. Underside and legs with long pubescence. Aedeagus thickened apically; covering plate of orifice of complicated structure. Males often with hind tibiae deeply excavated before apex (not very distinct because of long hairs) and with hairy brushes on abdomen. Anterior tarsi of male elongate.
..... *Aetheodactyla* Lacordaire, 1848
- 6(5) Epipleurae not pubescent.
- 7(10) Frons and vertex with dense, erect hairs. Anterior coxae divided with thin but very high lamellate prosternum. Antennal segments 6–9 distinctly transverse. Pygidium covered by elytra. Tarsi broad, 2nd segment broader than long. Body large.

- 8(9) Antennae sharply serrate, almost pectiniform, segments 6–10 about 3 times as wide as long. Epipleurae very short, reaching only middle of metasternum. Elytra of male strongly widened in the middle.
..... *Clytrasoma* Jacoby, 1908
- 9(8) Antennae moderately serrate, segments 6–10 not more than twice as wide as long. Epipleurae reach 2nd abdominal segment. Elytra of male not widened. *Clytra* Laicharting, 1781
- 10(7) Frons and vertex glabrous or with short, mostly adpressed pubescence. Anterior coxae contiguous, prosternum low and not seen between coxae. Tarsi narrow with segments 1 and 2 mostly longer than broad.
- 11(16) Pygidium not covered by elytra.
- 12(15) Prosternal triangle between coxa, pleural suture and anterior margin with dense adpressed pubescence. Elytra with well developed epipleural lobe, epipleurae almost vertical.
- 13(14) Propleurae not pubescent. Apex of pygidium not emarginate. Frons with dense adpressed pubescence, vertex bare. Hind angles of prothorax distinct, obtuse. Body cylindrical. Prothorax impunctate.
..... *Diapromorpha* Lacordaire, 1848
- 14(13) Propleurae pubescent. Apex of pygidium mostly emarginate in female. Head with pubescent stripes along eyes, sometimes connected on frons. Body narrows towards the front and the rear. Prothorax with broadly rounded hind angles, usually punctate. *Aspidolopha* Lacordaire, 1848
- 15(12) Prosternal triangle usually sparsely pubescent or not at all. Epipleural lobe of elytra feeble, epipleurae not vertical. Propleurae not pubescent. Hind angles of prothorax broadly rounded. This genus is hardly distinguishable from *Smaragdina* Chevrolat, 1837 (see below).
..... *Aetheomorpha* Lacordaire, 1848
- 16(11) Pygidium covered by elytra.
- 17(18) Anterior legs of male strongly elongate. Head of male not enlarged. Body black, elytra fulvous with 2 black bands. [Single species, *M. lunulata* (Fabricius, 1781).] *Merilia* Lacordaire, 1848
- 18(17) Anterior legs of male feebly elongate or not at all, in latter case body not black.
- 19(20) Anterior legs of male feebly elongate, head of male enlarged, almost as wide as anterior margin of prothorax. First antennal segment strongly widened. Head and prothorax fulvous with black spots.
..... *Ceratobasis* Lacordaire, 1848

- 20(19) In male, anterior legs not elongate and head not enlarged. First antennal segment feebly widened or not at all.
- 21(22) Tarsi relatively short, tarsal segments 1 and 2 transverse. Body narrow and elongate. *Miochira* Lacordaire, 1848
- 22(21) Tarsi longer, at least tarsal segment 1 narrow and elongate.
- 23(24) Hind angles of prothorax distinct, obtuse. Tibiae often comparatively thick. *Physosmaragdina* L. Medvedev, 1971
- 24(23) Hind angles of prothorax broadly rounded. Tibiae thin.
- 25(26) Head of male with horn on frons. Upperside fulvous with variable dark spots. *Ceroclytra* L. Medvedev, 1962
- 26(25) Head simple. Features of some species transitional to *Aetheomorpha* Lacordaire, 1848. *Smaragdina* Chevrolat, 1837

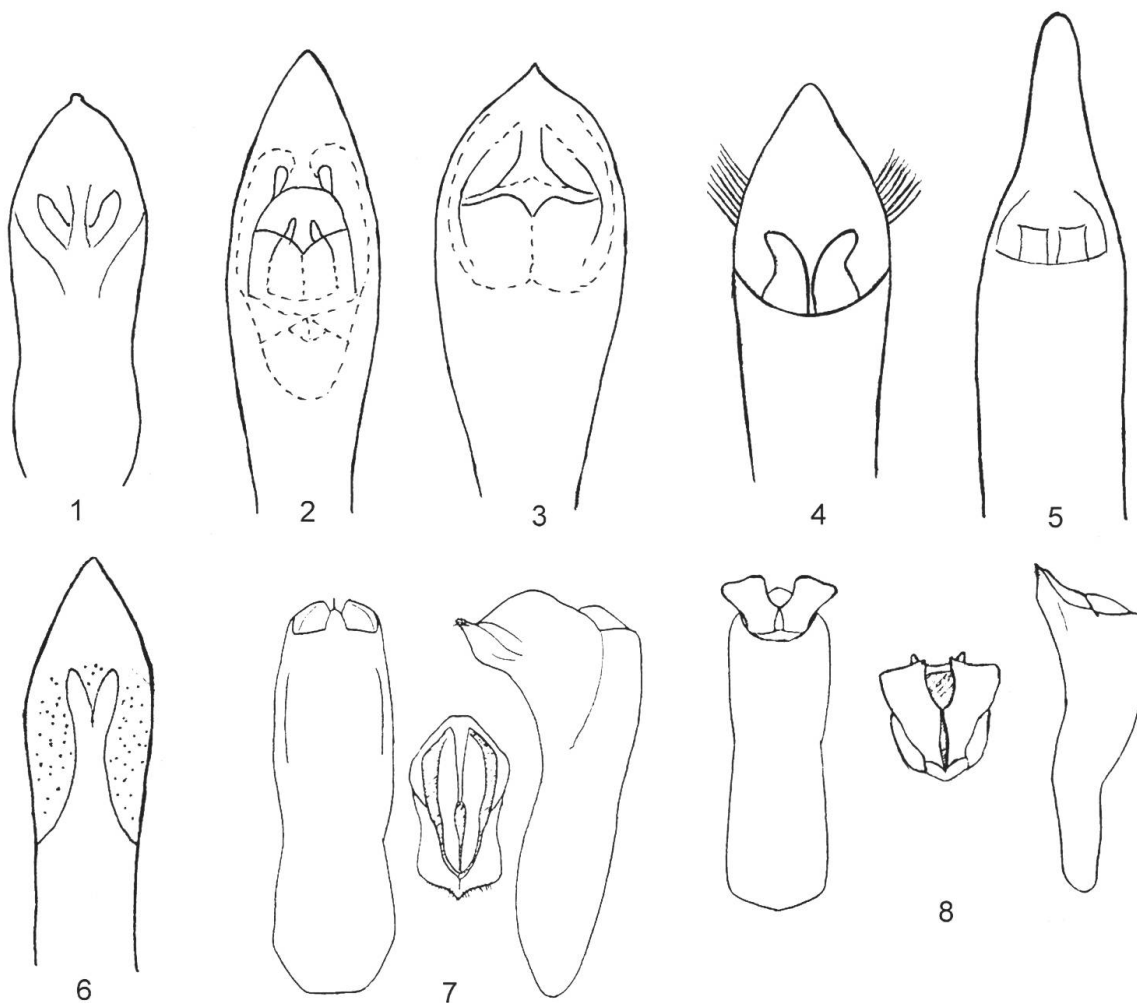
Key to southern Indian species of the genus *Pantocometis* Lacordaire, 1848

- 1(4) Elytra with large subtriangular spot at humeri and with black transverse band in front of apex.
- 2(3) Elytral spots not connected along side margin. Pygidium entirely fulvous. Aedeagus, Fig. 1. Length 4.2–5.3 mm. *P. subfasciata* Jacoby, 1908
- 3(2) Elytral spots connected along side margin. Pygidium partly black. Length 5 mm.
[It is probably a colour variation of the previous species *P. subfasciata*. The type specimen was not found in the Musée National d'Histoire Naturelle, Paris; it has probably been destroyed.] *P. juncta* Pic, 1943
- 4(1) Elytra with broad black band beyond centre, widened externally. Length 5 mm. Poorly known species. *P. hirsuta* Lacordaire, 1848

Key to southern Indian species of the genus *Epimela* Weise, 1903

- 1(14) Elytra not pubescent, fulvous with humeral spot, spot before mid-point near suture and band beyond centre; sometimes spots united or partly reduced. (subgenus *Epimela* s.str.)
- 2(3) Elytra with common apical spot. Legs fulvous with darkened femora. Length 5 mm.
Kashmir. [Male unknown, species unknown to me.]
..... *E. signaticollis* (Redtenbacher, 1846)
- 3(2) Elytra without apical spot.

- 4(13) Prothorax dark metallic, very narrowly fulvous margined, especially on sides.
- 5(12) Pubescence of head and prothorax adpressed.
- 6(7) Legs entirely fulvous. Aedeagus with elongate apical triangle, more or less separated from central part (Fig. 2). Length 5.3–6 mm.
Northern India: Jammu, Assam. *E. viridicollis* (Jacoby, 1899)
- 7(6) Legs dark metallic with fulvous tibiae and sometimes tarsi.
- 8(9) Elytra unspotted or with small spot near suture beyond centre. Length 5.1–6 mm. Aedeagus as in *E. trimaculata* (Fabricius, 1798), apical triangle somewhat more elongate.
Nepal. [Perhaps a subspecies of *E. trimaculata*. Type series studied.]
..... *E. nepalica* Takizawa, 1987
- 9(8) Spots on elytra more developed.
- 10(11) Apex of aedeagus in form of short triangle (Fig. 3). Postmedian band on elytra reduced to small spot or absent. Labrum fulvous. Length 5.5 mm.
Distribution unclear, type from "India", other specimens from "India orientalis". [syn. *Diapromorpha ccticollis* var. *obliterata* Pic, 1941] *E. obliterata* (Pic, 1941)
- 11(10) Apex of aedeagus in form of elongate triangle (Fig. 4). Full complement of spots on elytra or humeral spot absent. Labrum dark. Length 5–6.7 mm.
Southern India, Sri Lanka; Nepal records need confirmation and perhaps belong to *E. nepalica*. [syn. *E. insularis* Weise, 1903, *E. dilutipes* Jacoby, 1908, *E. viridescens* Pic, 1941, *E. viridescens* ab. *interrupta* Pic, 1941, *Diapromorpha ccticollis* Pic, 1941]
..... *E. trimaculata* Fabricius, 1798
- 12(5) Pubescence of head and prothorax longer and partly erect (especially in lateral view). Antennae and labrum fulvous. Aedeagus with very elongate apical part (Fig. 5). Body small, 4.3 mm.
Southern India. *E. minuta* **sp.nov.**
- 13(4) Prothorax entirely dark metallic blue, without fulvous emargination. Legs entirely blackish-blue. Length 6.4 mm.
Nepal. [Male unknown.] *E. tristis* **sp.nov.**
- 14(1) Elytra with sparse erect pubescence, especially in humeral area, more or less regularly punctate, fulvous, usually with dark spot or band beyond centre. Prothorax with erect hairs, dark metallic, sometimes with very narrow fulvous emargination.
..... (subgenus *Paraepimela* L. Medvedev, 1984)
- 15(16) First abdominal sternite without smooth spot on the sides. Elytra parallel-sided, about 1.7 times as long as wide. Labrum fulvous. Aedeagus, Fig. 6. Length 6.5–9 mm.
India: Bengal, Bombay. [*E. indica* Duvivier, 1891 **syn.nov.**] ... *E. downesi* Baly, 1865



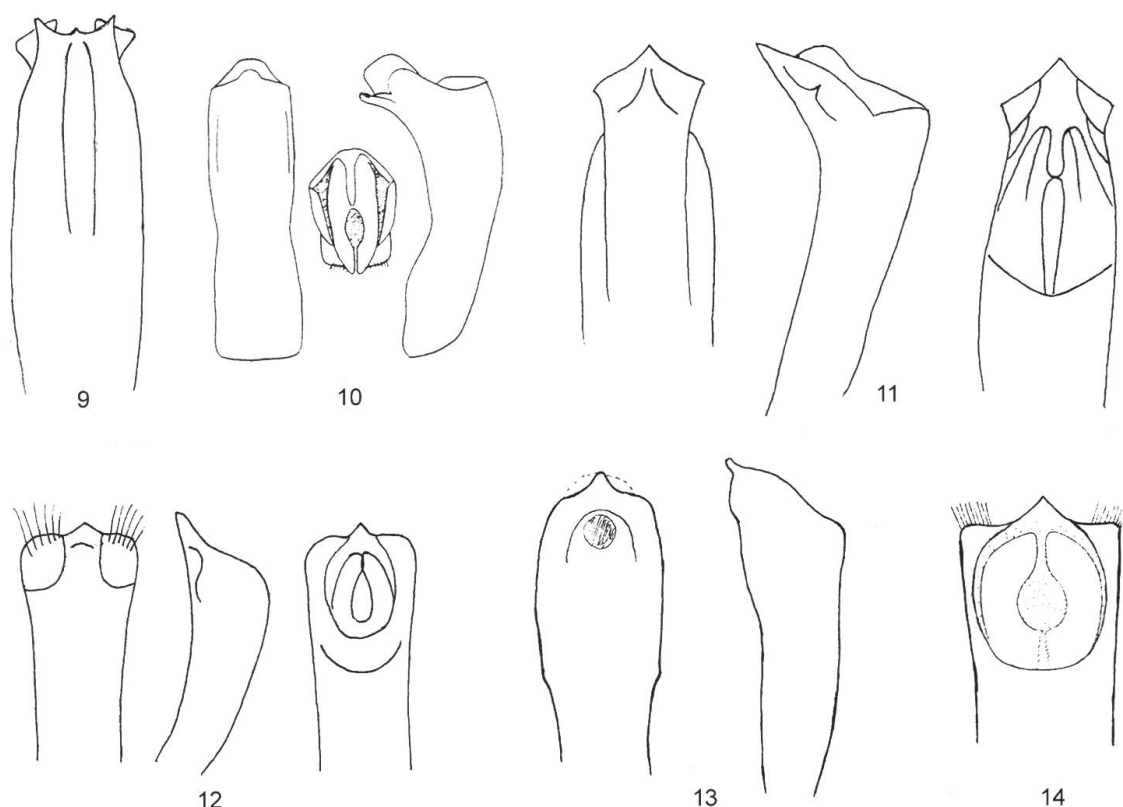
Figs 1–8. Aedeagus (d – dorsal, v – ventral, l – lateral, a – apical): 1, *Pantocometis subfasciata* Jacoby (d); 2, *Epimela viridicollis* Jacoby (d); 3, *Epimela obliterata* Pic (d); 4, *Epimela trimaculata* Fabricius (d); 5, *Epimela minuta* sp.nov. (d); 6, *Epimela downesii* Baly (d); 7, *Aetheodactyla andrewesi* Jacoby (v, l, a) (after TAKIZAWA 1990); 8, *Aetheodactyla wallardiensis* Jacoby (d, l, a) (after TAKIZAWA 1990).

16(15) First abdominal segment with smooth bare spot on the sides. Elytra elongate ovate, about 1.5 times as long as wide. Labrum dark. Length 6.3–6.8 m.

Sri Lanka. [Male unknown.] *E. zaitzevi* L. Medvedev, 1984

***Epimela* (s.str.) *minuta* sp.nov.**

Material examined. Holotype (male): southern India, Nilgiri Hills, Moyar-Camp, 3000 ft., V. 1954, leg. Nathan (LM).



Figs 9–14. Aedeagus (d – dorsal, v – ventral, l – lateral, a – apical): 9, *Aetheodactyla orientalis* sp.nov. (v); 10, *Aetheodactyla lateralis* Lacordaire (v, l, a) (after TAKIZAWA 1990); 11, *Aetheodactyla plagiata* Duvivier (v, l, d); 12, *Aetheodactyla minor* Duvivier (v, l, d); 13, *Aetheodactyla regalini* sp.nov. (v, l); 14, *Aetheodactyla flavobasalis* Jacoby (v).

Description. Dark metallic green, labrum, antennae, narrow emargination of prothorax, elytra, tibiae and tarsi fulvous; on elytra humeral spot, another spot before midpoint near suture and transverse band beyond centre violaceous blue; extreme apex of suture with small, dark-brown mark (Fig. 19).

Morphologically identical with *E. trimaculata*, only head and pronotum with longer and more or less erect hairs. Aedeagus (Fig. 5) with very elongate apical triangle.

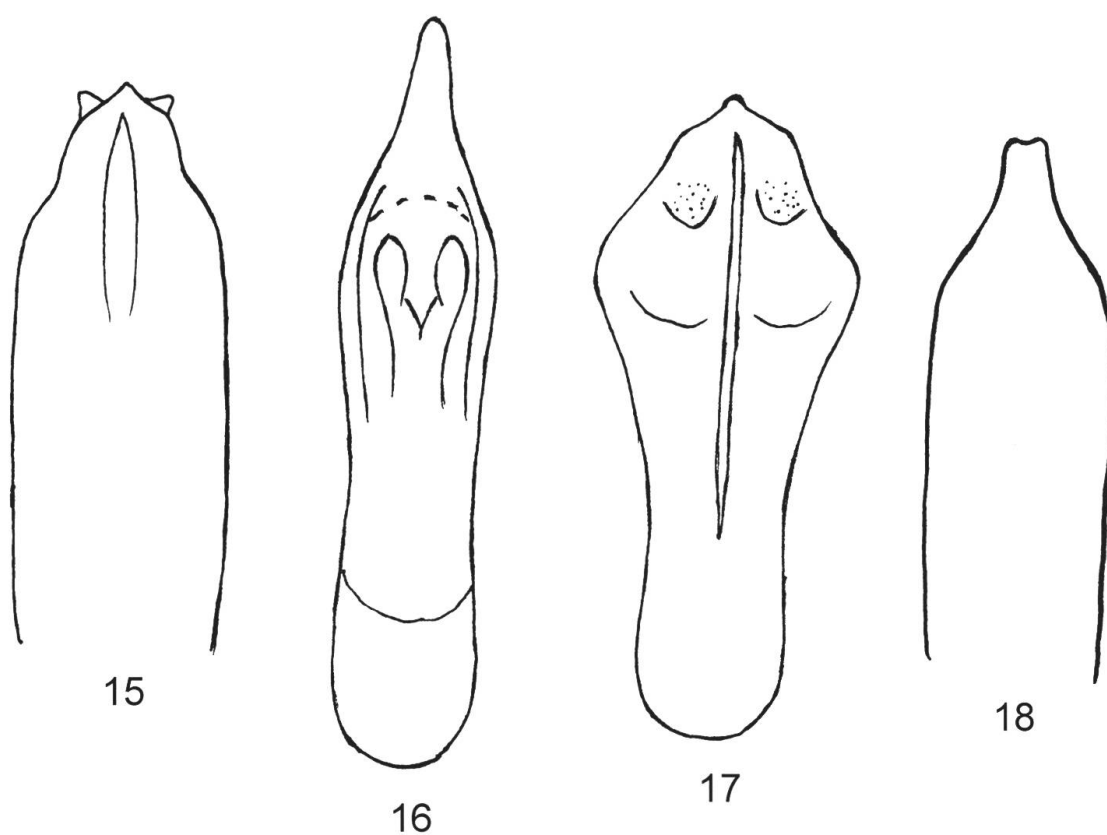
Length: 4.3 mm.

Distribution. Southern India.

Diagnosis. Being very near to *E. trimaculata*, differs sharply in fulvous antennae and labrum, erect hairs of head and prothorax, trace of additional spot on apex of elytra, smaller size and different form of aedeagus.

Epimela (s.str.) *tristis* sp.nov.

Material examined. Holotype (female). Nepal 471, Myagdi Distr., lower Marang Khola, Bim, 1150 m, 29. V. 1995, leg. Martens & Schawaller (SMNS).



Figs 15–18. Aedeagus (d – dorsal, v – ventral, l – lateral, a – apical): 15, *Aetheodactyla dimidiatipennis* Baly (v); 16, *Aspidolopha dembickyi* sp.nov. (d); 17, *Aetheomorpha cribellata* Jacoby (v); 18, *Smaragdina pacholatkoii* sp.nov. (v).

Description. Dark metallic green, 3 basal antennal segments and elytra fulvous, on elytra humeral and subhumeral spots and large patch in middle (connected sutural spot and postmedian band) violaceous.

Clypeus glossy, finely punctate, frons and vertex densely punctate, with adpressed pubescence. Antennae distinctly serrate from the 4th segment. Prothorax broadest before base, with adpressed pubescence, very densely punctate on sides, finely and sparsely in the middle. Elytra strongly and irregularly punctate, partly rugose, not pubescent.

Length: 6.4 mm.

Distribution. Nepal.

Diagnosis. Differs clearly from all species of the subgenus in its naked and smooth clypeus, the sculpture of the prothorax and entirely metallic legs.

***Epimela (Paraepimela) downesii* (Baly, 1865) comb.nov.**

Pantocometis downesii Baly, 1865

Lachnaea downesii: BRYANT (1923).

Epimela indica (Duvivier, 1891) **syn.nov.**

Remarks. This species is identical with *E. indica* (Duvivier, 1891) syn.nov. It is really surprising that BRYANT (1923) includes it in the Mediterranean genus *Lachnaea* Chevrolat, 1837.

A key to Indian species of the genus *Aetheodactyla* Lacordaire, 1848

- 1(6) Upperside entirely fulvous. Hind tibiae of male notched before apex.
- 2(5) Body entirely fulvous, including antennae and legs. Pubescence of abdomen simple.
- 3(4) Epipleurae with short and sparse pubescence. Male: tarsi elongate, segment 1 of fore-tarsi about 2.5 times as long as wide; hind tibiae almost straight, narrowly notched just before apex, with triangular plate on extreme apex (Fig. 24). Aedeagus (Fig. 7) not bifurcate at apex. Length 6–8 mm.
Southern India. *A. andrewesi* (Jacoby, 1895)
- 4(3) Epipleurae with long and dense pubescence. Male: tarsi feebly elongate, segment 1 of fore-tarsi a little longer than wide; hind tibiae angulate in apical third, distinctly notched before apex. Aedeagus (Fig. 9) bifurcate at apex. Length 7.2 mm.
Eastern India. *A. orientalis* **sp.nov.**
- 5(2) Antennae apart from basal segments, underside and legs, at least tibiae black. Male: hind tibiae, Fig. 25; aedeagus, Fig. 8. Length 6.5–7.3 mm.
Southern India. *A. wallardiensis* (Jacoby, 1908)
- 6(1) Elytra bicolorous.
- 7(8) Underside, legs, antennae apart from basal segments black, sometimes partly fulvous. Pubescence of underside dark. Upperside fulvous with rear half of elytra black, or with black postmedian band, sometimes broadly interrupted on suture. Male: segment 1 of mid-tarsi strongly widened (Fig. 26), segment 1 of fore-tarsi about 3 times as long as wide. Hind tibiae straight, widened to apex, without preapical notch. Aedeagus (Fig. 10) with rounded apex, underside with deep and broad preapical groove (broader than lateral margins). Length 6.3–9 mm.
Southern India. [syn. *A. externesignata* Pic, 1943] ... *A. lateralis* Lacordaire, 1848
- 8(7) Underside, legs and antennae fulvous or partly black. Pubescence of underside light. Male: segment 1 of mid-tarsi slightly widened or not at all, apex of aedeagus not rounded.
- 9(12) Elytra with broad black band beyond centre, sometimes widened to the rear, but apex of elytra fulvous. Hind tibiae of male feebly notched before apex. Antennae, legs and underside fulvous. Abdomen of male without hairy brushes.

- 10(11) Epipleurae with long pubescence. Male: segment 1 of fore-tarsi approximately twice as long as wide. Aedeagus (Fig. 11) on underside deeply concave in middle part and with rounded impression before apex. Length 7.2–10.3 mm.
Bengal (Konbir, Mandar, Barway). Record for southern India (Madras, after JACOBY 1908) needs confirmation. *A. plagiata* (Duvivier, 1891)
- 11(10) Epipleurae with short pubescence. Male: segment 1 of fore-tarsi about 1.5 times as long as wide. Aedeagus (Fig. 12) on underside not concave in middle part, with 2 grooves divided by narrow longitudinal impression before apex. Length 4.9–6.4 mm.
Bengal (Konbir, Mandar). *A. minor* (Duvivier, 1891)
- 12(9) Apical half of elytra entirely black. Antennae, legs and underside fulvous or partly black.
- 13(16) Hind tibiae of male with very deep triangular incisure on underside before apex; base of abdomen with very dense and long pubescence. (Species from southern India, Sri Lanka.)
- 14(15) Epipleurae with long and distinct pubescence, especially in male. Male: base of abdomen with denser pubescence in middle, but without hairy brushes. Segment 1 of fore-tarsi about 1.6–1.7 times as long as wide, hind tibiae moderately widened apically, feebly curved. Aedeagus (Fig. 13) with triangular apex, its latero-apical angles indistinct, underside with very deep rounded groove before apex. Length of male 5.2–6.7 mm, of female 6.5–7.6 mm. *A. regalini* **sp.nov.**
- 15(14) Epipleurae with short, somewhat indistinct pubescence. Male: abdominal sternites 1–3 with a pair of hairy brushes directed obliquely backwards. Segment 1 of fore-tarsi about 1.2–1.3 times as long as wide, hind tibiae strongly curved and widened to apex. Aedeagus (Fig. 14) with truncate apex and triangular apical tip, its latero-apical angles distinct, more or less produced, underside with narrow median groove before apex. Length of male 4.3–5.7 mm; of female 5–7 mm.
Southern India, Sri Lanka. [*A. incisipes* L. Medvedev, 1984 **syn.nov.**]
..... *A. flavobasalis* (Jacoby, 1908) **comb.nov.**
- 16(13) Male: hind tibiae not emarginate, but with transverse ridge on underside before apex, moderately widened apically and slightly curved. Anterior tarsi elongate, segment 1 about 2–2.2 times as long as wide, 2nd broadly triangular, as long as wide, 3rd broad, with basal part as long as apical lobes. Abdomen with simple pubescence. Aedeagus with elongate triangular apex and narrow median groove on underside (Fig. 15). Length of male 6.3–7 mm; of female 7.3–8.2 mm.
North India, Nepal, Assam. *A. dimidiatipennis* Baly, 1878

***Aetheodactyla orientalis* sp.nov.**

Material examined. Holotype (male): East India, Ramanborog (LM).

Description. Male: Anterior tarsus not elongate, 1st segment widened, 1.1 times as long as wide, 2nd triangular, as long as wide, 3rd 1.1 times as long as wide, with its basal part about 4 times shorter than apical lobes. Mid-tarsi practically the same. Hind-tibia curved, angulate in apical third, with shallow emargination on underside before apex. Epipleurae with long and dense pubescence. Aedeagus (Fig. 9) with unusual bidentate apex, with feeble and narrow median groove on underside, deeper before apex; lamellae of orifice triangularly widened laterally; viewed laterally, practically in line with the underside.

Length: 7.2 mm.

Distribution. East India.

Differential diagnosis. Very near to *A. andrewesi* Jacoby, 1895 morphologically and fully identical in coloration, differs only in secondary sexual characters of male.

***Aetheodactyla minor* (Duvivier, 1891) stat.nov.**

Pseudoclytra plagiata var. *minor* Duvivier, 1891

Remarks. Types of both taxa were studied. *A. minor* differs clearly from *A. plagiata* in the quite different form of the aedeagus and is therefore a distinct species.

***Aetheodactyla flavobasalis* (Jacoby, 1908) comb.nov.**

Gynandrophthalma flavobasalis Jacoby, 1908

Smaragdina flavobasalis: TAKIZAWA (1990)

Aetheomorpha incisipes L. Medvedev, 1984 **syn.nov.**

Remarks. I have studied a male specimen of *A. flavobasalis* determined and illustrated by TAKIZAWA (1990) and found it identical with *A. incisipes* I described from Sri Lanka. Moreover, the species has to be removed from *Smaragdina* Chevrolat, 1837 to *Aetheomorpha*.

***Aetheodactyla regalini* sp.nov.**

Material examined. Holotype (male): southern India, Nilgiri Hills, Moyar Camp, 900 m, V. 1954, leg. Nathan (LM). Paratypes: same locality, 3 males, 4 females (LM); Tamil Nadu, Nilgiri Hills, 11 km SE Kotagiri, Kunchappanai, 1100 m, 3–15.V.2002, leg. Pacholátko, 1 male (NHMB).

Description. Red fulvous, rear half of elytra black. Sometimes antennae, legs and abdomen more or less darkened. Epipleurae with long, dense, light yellow pubescence.

Male: anterior abdominal sternites with longer and denser pubescence than on other parts of underside but not arranged in two brushes as in *A. flavobasalis*, and all hairs directed backwards, not occurring obliquely. Fore-tarsi not elongate, 1st segment 1.5 times, 2nd as long as wide, 3rd with basal part about 4 times shorter than apical lobes.

Mid-tarsi with 1st segment feebly enlarged. Hind tibiae feebly curved, moderately widened apically; preapical incisure of the same form and as deep as in *A. incisipes*. Aedeagus (Fig. 13) with rounded triangular apex, ending in a short tip, without distinct lateroapical angles; underside with deep rounded ovate fovea before apex; lamellae of orifice longer, almost straight, forming longitudinal split between them (in *A. incisipes* these are distinctly arcuate and forming a more or less round hole between them).

Length of male: 5.2–6.7 mm. Female more widened towards the rear, length 6.8–7.6 mm.

Distribution. Southern India.

Differential diagnosis. Very near to *A. flavobasalis*, differs mostly in secondary sexual characters.

Derivatio nominis. I dedicate this species to Mr. Renato Regalin, a specialist in the Clytrinae.

Aspidolopha dembickyi sp.nov.

Material examined. Holotype (male): Tamil Nadu, Nilgiri Hills, 15 km SE Kotagiri, Kunchappanai, 17–22.V.1997, leg. Dembický & Pacholátko (NHMB). Paratypes: Tamil Nadu, Nilgiri Hills, 11 km SE Kotagiri, Kunchappanai, 1100 m, 3–15.V.2002, leg. Pacholátko, 10 females (NHMB, 2 exx. – LM).

Description. Metallic blue, including abdominal tergites, labrum, basal segments of antennae, elytra and basal half of all tibiae fulvous; elytra often with humeral spot, sometimes also with median spot and traces of preapical spot dark blue (Figs 20–22).

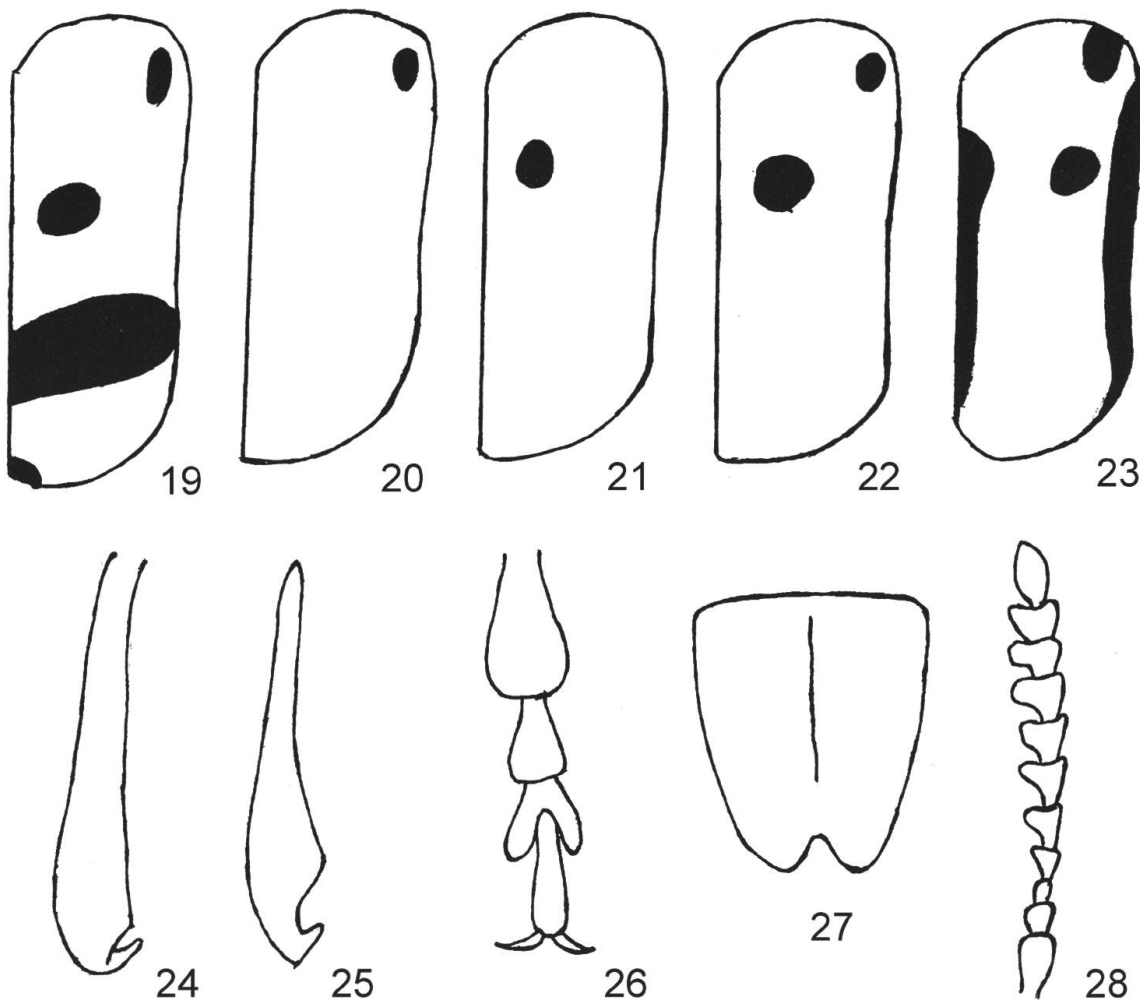
Head glossy, densely punctate. Antennae distinctly serrate from the 5th segment, 4th segment triangular, but much smaller than 5th. Prothorax narrowed towards the front, strongly punctate throughout, but more sparsely in the middle, glossy. Elytra 1.4 times as long as wide, narrowed towards the rear, strongly punctate; punctures in posterior half arranged in irregular rows. 1st abdominal sternite with impunctate glabrous spot on each side. Male pygidium without longitudinal ridge, with apex narrowly margined. Aedeagus with elongate apex (Fig. 16). Female pygidium with longitudinal ridge and triangularly emarginate apex (Fig. 27).

Length: male 5 mm, female 6–6.3 mm.

Distribution. Southern India.

Differential diagnosis. The new species differs clearly from all known species in the form of the aedeagus, but in any case it is near *A. decora* Fabricius, 1801, from which it differs in fulvous labrum and basal parts of tibiae, females also in ridged pygidium. JACOBY (1908) indicated that the pygidium of *A. decora* is “carinate in the middle”, but this is definitely a mistake, because the typical form of *A. decora* (with fulvous scutellum) has a pygidium that is not carinate. Specimens of this new species with spotted elytra are very similar to *A. distincta* Duvivier, 1891, which however has bicolourous prothorax and fulvous abdominal tergites.

Derivatio nominis. The species is dedicated to its collector, Mr. M. Dembický.



Figs 19–28. 19–23, elytron pattern: 19, *Epimela minuta* sp.nov.; 20–22, *Aspidolopha dembickyi* sp.nov.; 23, *Aetheomorpha sculpturata* sp.nov. 24–25, hind-tibia of male: 24, *Aetheodactyla andrewesi* Jacoby; 25, *A. wallardiensis* Jacoby. 26, *A. lateralis* Lacordaire: mid tarsus of male. 27, *Aspidolopha dembickyi* sp.nov.: pygidium of female. 28, *Smaragdina pacholatko* sp.nov.: antenna.

***Aetheomorpha sculpturata* sp.nov.**

Material examined. Holotype (female): Tamil Nadu, Nilgiri Hills, 11 km SE Kotagiri, Kunchappanai, 1100 m, 3–15.V.2002, leg. Pacholátko (NHMB). Paratypes. Same locality, 2 females (NHMB, LM).

Description. Head black with fulvous clypeus, antennae black with fulvous basal segments, prothorax reddish-fulvous with 4 black spots in a transverse row, scutellum black, elytra flavous with black pattern: humeral spot, lateral stripe narrowing towards the rear, ovate spot before centre and near side margin, common sutural spot in anterior third, prolonged towards the rear in sutural stripe black, extreme apex very narrowly margined in black (Fig. 23). Propleurae fulvous with black spot, meso- and metasternum black, abdomen fulvous with more or less black centre, pygidium black with fulvous base or fulvous with black apex, legs fulvous with tarsi slightly darkened.

Body cylindrical, rather robust. Head without distinct impressions, clypeus bare and almost impunctate, frons and vertex pubescent, densely punctate, frons 2.5 times as wide as eye. Antennae feebly serrate from the 5th segment, segment 3 very small, 4 elongate triangular, next segments approximately as long as wide, subtriangular or subquadrate. Prothorax 1.8 times as wide as long, broadest beyond centre, very densely and coarsely punctate. Scutellum triangular with rounded apex, distinctly punctate and pubescent in basal half. Elytra 1.4 times as long as wide, strongly and densely punctate, more feebly on apical slope, punctures in lateral half form irregular rows. Pygidium pubescent, densely punctate, with triangular emargination on apex, not covered with elytra. Propleurae not pubescent.

Length: 3.5–3.9 mm.

Distribution. Southern India.

Differential diagnosis. Propleurae not pubescent. Differs from all species of *Aetheomorpha* in the very strong sculpture of upperside, especially prothorax, and specific pattern of upperside.

***Smaragdina pacholatko* sp.nov.**

Material examined. Holotype (male): Tamil Nadu, Nilgiri Hills, 11 km SE Kotagiri, Kunchappanai, 1100 m, 3–15.V.2002, leg. Pacholátko (NHMB). Paratypes. Same locality, 56 exx. of both sexes (NHMB, 4 exx. – LM).

Description. Entirely fulvous, only antennal segments 4–11 darkened to black.

Body cylindrical (male) or slightly widened towards the rear (female). Head glossy, impunctate, with 3 grooves on frons, which is 1.6–1.8 times as wide as eye in male, 2.0–2.2 times in female. Antennae serrate from the 4th segment, segment 5–10 feebly transverse, with more or less rounded innerside and apical angle not acute (Fig. 28). Prothorax twice as wide as long, broadest beyond centre, glossy and impunctate. Scutellum triangular with rounded apex, impunctate. Elytra 1.4–1.5 times as long as wide, very distinctly and confusedly punctate except for apical slope which is almost smooth. Segment 1 of fore-tarsi slightly widened in male, subcylindrical. Aedeagus (Fig. 18) with long finger-like apical process.

Length: male 3.7–4.0 mm, female 4.3–4.7 mm.

Distribution. Southern India.

Differential diagnosis. *S. divisa* Jacoby, 1889, is very similar, but is distinctly larger, with black tarsi, pale apical part of elytra, antennal segments 5–10 sharply triangular, with straight innerside and acute apical angle; aedeagus is also quite different, without finger-like apical process.

Derivatio nominis. The species is dedicated to its collector, Mr. Petr Pacholátko.

Acknowledgements

I am grateful to Dr. M. Brancucci for opportunity to study the interesting material in the Naturhistorisches Museum Basel.

References

- BRYANT G. E. (1923): *Synonymy in the Clytrinae*. Annals and Magazine of Natural History **12(9)**: 134.
JACOBY M. (1908): *Fauna of British India*. London, 534 pp.
TAKIZAWA H. (1990): *Notes on Chrysomelid beetles (Coleoptera, Chrysomelidae) of India and its neighbouring areas. Part 9*. Japan Journal of Entomology **58(4)**: 746–760.

Address of author:

Prof. Lev. N. Medvedev
Institute for Problems in Ecology and Evolution
Russian Academy of Sciences
Leninsky prospect 33
Moscow 119071
RUSSIA

