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## Chrysomelidae of southern Asia (Coleoptera)

by Lev N. Medvedev

**Abstract.** 2 genera (*Lankaphthona* gen.nov., *Platysphaera* gen.nov.) and 41 species are described as new to science. Sri Lanka: *Luperomorpha zaitzevi*, *Zipangia carinata*, *Trachyaphthona lankana*, *Manobidia lankana*, *Lankaphthona micheli*, *L. bicolor*, *L. antennata*, *Jacobyana ovata* spp.nov.; southern India: *Lema keralensis*, *Aeteomorpha bifurcata*, *Hyphaenia keralensis*, *H. nitidissima*, *Garuda bulbifera*, *Chalaenosoma schereri*, *Philopona indica*, *Phygasia minuta*, *Glaucosphaera indica* spp.nov.; Indochina: *Tricliona tristis*, *Rhyparida thailandica*, *Paleosepharia rubromarginata*, *P. marginata*, *P. haemorrhoidalis*, *P. reducta*, *P. membranaceus*, *Hyphaenia pallida*, *H. bicolor*, *H. tristis*, *H. kimotoi*, *H. rubra*, *H. clypealis*, *H. nigrilabris*, *H. mandibularis*, *Platyxantha labiata*, *P. bicornuta*, *Antiphula pallida*, *A. discalis*, *Luperomorpha minutissima*, *Sphaeroderma capitis*, *Platysphaera thaiensis*, *Javeta pubicollis*, *Agonita apicata* spp.nov. New synonymes: *Amphimela* CHAPUIS, 1876 (= *Clitea* BALY, 1887 syn.nov.), *Aetheomorpha nigromarginata* JACOBY, 1908 (= *Aetheomorpha mysorensis* TAKIZAWA, 1990 syn.nov.), *Garuda hindustanica* SCHERER, 1969 (= *Garuda schereri* DOEBERL, 1996 syn.nov.). Keys for *Chalaenosoma* JACOBY, 1893 and Indochinese *Hyphaenia* BALY, 1865 are given as well as notes on a few poorly-known species.

**Key words:** Coleoptera – Chrysomelidae – southern Asia – new taxa

I had the opportunity to study a very large and interesting body of material from the Museum of Natural History, Basel, including many new species. I also used a wide range of materials collected in Thailand by Dr. M. Mostovsky (Paleontological Institute, Moscow) and in Vietnam by myself, as well as a few species from my own collection.

Specimens are deposited as below; the abbreviations are used in text:

NHMB ..... Naturhistorisches Museum, Basel

LM ..... Author's collection

### Alticinae of Sri Lanka

#### *Luperomorpha zaitzevi* sp.nov.

Fig. 1

**Material examined.** Holotype male (LM): Sri Lanka, Belihul-Oya, 24. X. 1982, V. Zaitzev.

**Description.** Entirely black, glossy, with very feeble metallic lustre.

Head impunctate, frontal tubercles triangular. Antennae reach behind middle of elytra, segment 2 and 3 short, next segments elongate, more broad, subequal; 4th more than twice as long as 3rd. Prothorax 1.4 times as wide as long, sides feebly arcuate, surface impunctate and without microsculpture. Elytra 1.5 times as long as wide, broadened towards the rear, with dense and rather pronounced punctures, more feeble on apical slope; postbasal impression absent. Segment 1 of anterior tarsi broadened in male, but rather small; middle part of last abdominal segment deeply concave. Aedeagus – Fig. 1.

Length: 2.6 mm.

**Differential diagnosis.** Differs from practically all other Indian species that have black uppersides, although the aedeagus and antennae are almost identical with *L. nigripennis* DUVIVIER, 1892. The species in question also resembles *L. metallica* CHEN, 1935 from northern India, differing in colour and form of aedeagus.

***Zipangia carinata* sp.nov.**

Fig. 2

**Material examined.** Holotype male and 1 paratype female (LM): Sri Lanka, A. Sakharov.

**Description.** Black, elytra with very feeble blue sheen, basal segments of antennae, knees and tarsi dark brown.

Body elongate, widened towards the posterior, flattened above. Clypeus short triangular, concave and impunctate, interantennal space narrow and carinate, frontal tubercles elongate cuneiform, with anterior angles produced to interantennal space; vertex almost smooth excepting strongly punctate area beyond tubercles.

Antennae reach almost to the middle of elytra, segment 2 short, a little longer than broad, segment 3 longer than 2 and subequal to 4–10. Prothorax 1.7–1.8 times as wide as long, with lateral margins almost straight, all angles very distinct, anterior angles produced exteriorly, with a pore. Surface with deep basal groove, glossy, with moderately pronounced, dense punctures. Elytra 1.4 times as long as wide, flattened above, with lateral ridge, long and sharp in female, feeble and short in male; punctures dense and moderately pronounced, interspaces mostly as large as punctures, microsculptured. Segment 1 of anterior tarsi of male elongate triangular, moderately widened. Median lobe of last abdominal sternite of male with arcuate ridge, dividing concave apical part. Aedeagus asymmetrical (Fig. 2).

Length: 2.6–2.7 mm.

**Differential diagnosis.** Near *Z. nigrocyanea* SCHERER, 1969 and *Z. micans* SCHERER, 1969, both from northern India, but intermediate in size between these species, distinctly flattened dorsally, elytra strongly carinate in female, apex of aedeagus elongate, asymmetrical and bent downwards (subtruncate in *Z. micans*, rounded-triangular in *Z. nigrocyanea*).

***Trachyaphthona lankana* sp.nov.**

Fig. 3

**Material examined.** Holotype male and 6 paratypes (NHMB, 2 ex. – LM): Sri Lanka, Kandy, 600 m, 1–18. IV.1991, J. Kolibáč; – 5 km ESE Nuvara Elya, botanical garden Hakchala, 2200 m, tropical forest, 26. IX. 1982, V. Zaitzev, 1 paratype (LM).

**Description.** Entirely fulvous.

Body elongate, widened towards the rear. Head without punctures, with feeble microsculpture. Clypeus triangular, flat. Frontal tubercles transverse, delimited behind by a sharp furrow. Antennae reach anterior third of elytra, all segments elongate, segment 2 equal to 3, but much thicker, 4 a little longer than 3, subequal with next segments. Prothorax 1.5 times as wide as long, side margin feebly rounded, angulate in anterior third, where there is a pore with a long bristle. Surface with microsculpture and

dense and distinct, rather fine punctures. Elytra 1.5 times as long as wide, glossy, densely punctate. Anterior tarsi with segment 1 feebly widened in male. Aedeagus cuneiform with acute apex, arcuate in lateral view (Fig. 3).

Length: 2.2 mm.

**Remarks.** There are 4 winged species in Sri Lanka, all of them without depression on prothorax.

They differ as follows:

- 1(2) Body dark, black or piceous. Length: 1.7–2.2 mm. ....  
 ..... *T. proxima* JACOBY, 1887
- 2(1) Body fulvous or bicolourous.
- 3(4) Body fulvous with black or piceous elytra. Length: 2 mm. ....  
 ..... *T. lewisi* JACOBY, 1887
- 4(3) Body entirely fulvous with more or less darkened apices of antennae.
- 5(6) Prothorax without microsculpture, with sparse, feeble punctures. Body larger, 2.5–2.8 mm. ....  
 ..... *T. freyi* SCHERER, 1969
- 6(5) Prothorax with microsculpture and dense, distinct punctures. Body smaller, 1.8–2.3 mm. ....  
 ..... *T. lankana* sp.nov.

#### *Thrylaea flavipennis* MOTSCHULSKY, 1866

**Remarks.** I have in my collection a female with the label: “Ceylon, Thuvaites, 1892” which is almost identical with the type specimen, and differing only in having a round black spot in the middle of each elytron.

#### *Ogloblinia nigripennis* MOTSCHULSKY, 1866

**Material examined.** Sri Lanka, Dambulla env., 200 m, 19.IV – 9.V. 1991, J. Kolibáč, 4 ex.

**Remarks.** Known from Tenasserim and recorded from Sri Lanka by SCHERER (1969).

#### *Manobidia simplicithorax* CHEN, 1934

**Material examined.** Sri Lanka, Dambulla env., 200 m, 19.IV. – 9.V. 1991, Kolibáč, 2 ex.; – Sri Lanka, Mahasilava, 9 km SW Yaba, 22. X. 1982, V. Zaitzev, 1 ex.

**Remarks.** Species known from Vietnam.

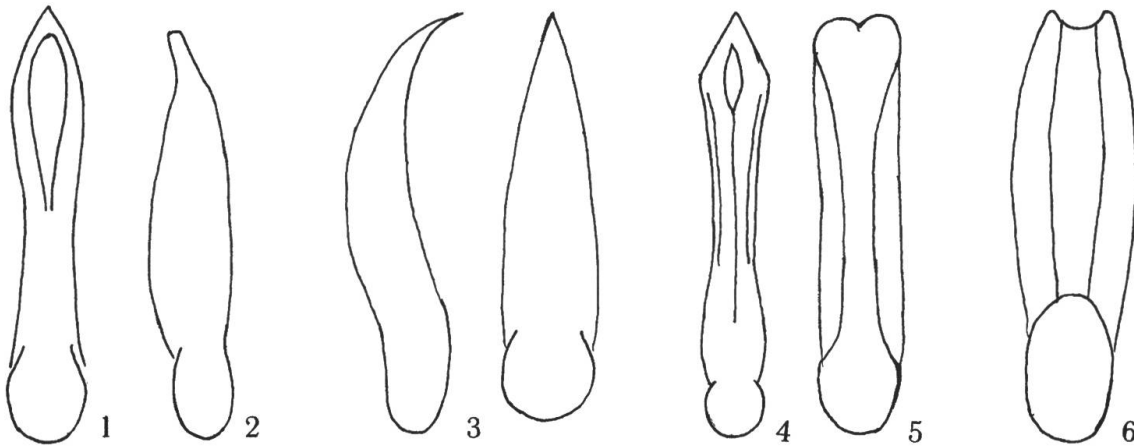
#### *Manobidia lankana* sp.nov.

Fig. 4

**Material examined.** Holotype male (NHMB) and 2 paratypes (NHMB, LM): Sri Lanka, Dambulla env., 200 m, 19.IV. – 9.V. 1991, J. Kolibáč.

**Description.** Piceous with fulvous antennae and legs, except dark hind femora.

Head impunctate, interantennal space ridged, frontal tubercles rounded, poorly delimited behind. Antennal segment 2 distinctly longer than 3, segment 4 slightly longer



**Figs 1–6:** aedeagus (d – dorsal, v – ventral, l – lateral): 1 – *Luperomorpha zaitzevi*, v; 2 – *Zipangia carinata*, v; 3 – *Trachyaphthona lankana*, v, l; 4 – *Manobidia lankana*, v; 5 – *Lankaphthona micheli*, v; 6 – *L. bicolor*, v.

than 2, subequal to next segments, except 11th, which is more elongate. Prothorax 1.4 times as wide as long, feebly rounded on sides, with distinct angles; surface convex, not flattened near base, glossy, with fine, sparse punctures. Elytra 1.4 times as long as wide, rows of punctures absent, indistinct, or very feeble in apical part, interspaces flat, glossy and impunctate. Anterior tarsi of male with segment 1 elongate and widened. Hind tibiae widened to apex, segment 1 of hind tarsus thin and long, about 1/3 of tibia length. Aedeagus thin, spear-like, ridged on underside (Fig. 4).

Length: 1.7–2 mm.

**Differential diagnosis.** This species differs from other black continental species in that the prothorax is not impressed at the base, and the antennae and legs (except hind femora) are fulvous.

### Genus *Lankaphthona* gen.nov.

**Type species:** *Lankaphthona micheli* sp.nov.

**Description.** Body ovate, rather strongly convex, upperside not pubescent. Head with frontal tubercles. Prothorax transverse, lateral margins angulate in anterior third, surface without any depressions. Elytra irregularly punctate. Anterior coxal cavities open behind, prosternal process between coxae rather narrow, elongate, not widened posteriorly. Metasternum more or less bituberculate on hind margin, with longitudinal groove. Abdominal process between hind coxae with two more or less parallel ridges. 3rd tarsal segment split. Hind tibiae thick, flattened above, with short, acute spur. Segment 1 of hind tarsus long, cylindrical, about 2/5–1/2 as long as tibia.

**Differential diagnosis.** This genus has all the main characters and habitus of *Aphthona* DEJEAN, 1835, except a long tarsal segment on the hind legs, resembling *Longitarsus*

BERTHOLD, 1827. It differs from both these genera in having a ridged abdominal process, as in a few other genera, notably from the Philippines: *Philaphthona* MEDVEDEV, 1994, *Dentisterna* MEDVEDEV, 1994, *Tribolia* CHEN, 1933, *Horaia* CHUJO, 1935, and *Ogloblinia* CSIKI, 1939. The new genus differs from *Philaphthona* in that the prothorax is evenly convex and from other genera in that the elytral punctures are irregular.

***Lankaphthona micheli* sp.nov.**

Fig. 5

**Material examined.** Holotype male and 7 paratypes (NHMB, 2 ex. – LM): Sri Lanka, Kandy, 600 m, 1–18. IV. 19991, J. Kolibáč.

**Description.** Entirely fulvous or reddish fulvous.

Head smooth, glossy, impunctate. Clypeus with longitudinal obtuse ridge from anterior margin to frontal tubercles; latter triangular, obliquely placed, feeble. Antennae filiform, reaching middle of elytra, proportions of segments: 9–6–4–8–9–9–9–9–9–8–12. Prothorax 2 times as wide as long, glossy, finely punctate, lateral margins feebly rounded, hind margin with median lobe. Elytra 1.25 times as long as wide, with feeble humeral tubercle, without basal convexity, punctation fine, but distinctly larger than on prothorax, interspaces very finely microsculptured. Abdominal process between hind coxes with ridges slightly curved and rather short. Segment 1 of hind tarsus thin. Aedeagus (Fig. 5) bilobed on apex.

Length: 1.6–2 mm.

**Etymology.** This species is dedicated to Dr. M. Brancucci.

***Lankaphthona bicolor* sp.nov.**

Fig. 6

**Material examined.** Holotype male and 1 paratype: Sri Lanka, Beluhil Oya, 24. X. 1982, V. Zaitzev (LM).

**Description.** Black or piceous, antennae and legs (except dark hind femora) fulvous, elytra dark fulvous.

Head impunctate, glossy. Clypeus triangular, flat, with grooves to accommodate antennae on each side, interantennal space narrow, with low and feeble ridge. Frontal tubercles transverse, obliquely placed and sharply delimited behind. Antennae filiform, with segment 3 a little longer than 2 and subequal to next segments, only 11th a little longer. Prothorax 1.4 times as wide as long, side margins angulate in anterior quarter, with large pore and long bristle, widest at this point, practically straight from angulation to obtuse basal angles. Surface glossy and very finely, almost indistinctly punctate. Elytra 1.5 times as long as wide, very glossy, with fine punctures partly arranged in irregular rows; apical slope virtually impunctate. Ridges of abdominal process parallel and long, almost reaching hind margin of sternite. Segment 1 of hind tarsus moderately wide, channelled on upperside. Apex of aedeagus bituberculate (Fig. 6).

Length: 2.1–2.2 mm.

**Differential diagnosis.** Differs well from *L. micheli* sp.nov. in colour, different proportions of antennal segments 2–4, structure of clypeus, long ridges on the 1st abdominal sternite, different punctation of upperside and form of aedeagus.

***Lankaphthona antennata* sp.nov.**

**Material examined.** Holotype female: Sri Lanka, Beluhil Oya, 24. X. 1982, V. Zaitzev (LM).

**Description.** Red; head, antennae except basal segments and apex of 11th, prothorax and legs black.

Head impunctate, glossy. Clypeus triangular, flat, with groove for reception of antennae on each side, interantennal space narrow, with short ridge. Antennae with distinctly thickened apical segments (especially 8th–10th), proportions of segments: 7–4–2–2–5–5–5–5–5–7; preapical segments about 1.2 times as long as wide. Prothorax identical with preceding species, surface impunctate. Elytra 1.2 times as long as wide, smooth and glossy, finely and sparsely punctate, mostly in basal half, punctures partly arranged in irregular rows. Ridges of abdominal process parallel and rather long, reach a little behind middle of sternite. Segment 1 of hind tarsus thin and long (half of tibia length).

Length: 2.3 mm.

**Differential diagnosis.** Resembles *L. bicolor* sp.nov. in coloration, but differs markedly from both species described above in widened preapical segments of antennae.

***Jacobyana ovata* sp.nov.**

**Material examined.** Holotype female (LM): Sri Lanka, vicinity of Belihul Oya, 24. X. 1982, V. Zaitzev.

**Description.** Pitch black, antennal segments 1–7, tibiae and tarsi fulvous, femora more dark, especially hind ones.

Body ovate, moderately convex. Head coarsely punctate, without frontal tubercle, interantennal space as broad as antennal segment 1. Antennae short, segments 1–6 cylindrical, 7–11 widened, especially three apical ones; segments 1–2 thick, 3–6 very thin, 3 very long, twice as long as 4; 5 equal to 4, 6 very short, 10 subquadrate. Prothorax twice as wide as long, broadest at base, sides rounded, with a pore just before middle. Surface moderately strong, rather sparsely punctate. Elytra glossy, with small humeral tubercle, rows of punctures distinct to apex, interspaces broad, flat or slightly convex, punctate. Prosternum subquadrate.

Length: 3.4 mm.

**Differential diagnosis.** Near *J. piceicollis* JACOBY, 1889, but body smaller, less convex and more elongate, interantennal space much broader (in *J. piceicollis* it is less than segment 1), prosternum subquadrate (in *J. piceicollis* it is longer than broad). Antennal segment 3 long. From *J. naini* SCHERER, 1969 it differs in body form, broad interantennal space and clearly punctate interspaces of elytral rows.

**Genus *Ivalia* JACOBY, 1887**

**Remarks.** I have studied two species (*I. metallica* JACOBY, *I. ruficollis* MOTSCHULSKY) and found that the metasternum is saddle-like, like, as in *Taizonia* CHUJO, 1934. In *Ivalia* segment 1 of the hind tarsi is as long as total of the total of the following segments; in

the same same proportion as *Taizonia uenoi* KIM. from Taiwan; in Indian species of *Taizonia* this segment is shorter, but of the same type. The upperside of the hind tibia is rather variable, from distinctly sulcate to flattened and more or less ridged on its inner side.

### Genus *Amphimela* CHAPUIS, 1876

**Type species:** *Amphimela mouhoti* CHAPUIS, 1876

*Clitea* BALY, 1887 **syn.nov.** (Type species: *Clitea picta* BALY, 1887)

**Remarks.** Two genera, *Amphimela* CHAPUIS, 1876 and *Clitea* BALY, 1887 differ only in body form: rounded in *Amphimela* and elongate ovate in *Clitea* (MAULIK 1926, SCHERER 1969). *Amphimela* includes a single oriental species (type species *A. mouhoti*) and a few species from the Afrotropical region. *Clitea* includes 4 oriental species.

It is now very clear that *Amphimela mouhoti* is very variable in size and body form, from elongate ovate to rounded ovate, and males of this species have practically the same form as the females of *Clitea fulva* and *C. metallica*. Measurements of all oriental species are given in Tab. 1.

Species	RB	RE
<i>Clitea metallica</i> CHEN	1.52	1.21
<i>Amphimela mouhoti</i> CHAP. (type species)	1.32–1.78	1.07–1.3
<i>Amphimela</i> sp. (Arabia)	1.6	1.25
<i>Clitea picta</i> BALY (type species)	1.84	1.36
<i>Clitea indica</i> JAC., male	2.28	1.58
<i>Clitea indica</i> JAC., female	1.92	1.5
<i>Clitea fulva</i> CHEN	1.66	1.33
<i>Clitea metallica</i> CHEN	1.52	1.21

**Tab. 1.** RB = Ratio of length to width of body; RE = Ratio of length to width of elytra.

It is clear from the table that there is no distinct difference between *Amphimela* and *Clitea*, and the Arabian species of *Amphimela* is less rounded than *Clitea metallica*. Because all other characters of these two genera are identical I regard the genus *Clitea* BALY, 1887 as the new synonym of *Amphimela* CHAPUIS, 1876.

## Chrysomelidae of southern India

### Criocerinae

#### *Lema (Petauristes) keralensis* sp.nov.

**Material examined.** Holotype: (NHMB) India, Kerala, Thekkady, Periyar lake (9.34N, 77.10E), 900–1000 m, 19–27.05.1997, Dembický & Pacholátko; – 1 paratype (LM): India, Kerala, 15 km SW Munnar (10.02N, 76.5E), 1250 m, 1–9.05.1997, Dembický & Pacholátko.

**Description.** Entirely fulvous or with black middle of thorax and ventral surface.

Head impunctate, vertex moderately convex, poorly delimited behind, without distinct longitudinal groove. Maxillary palpi thin, with conical last segment. Antennae very long, reaching 3rd abdominal segment, proportions of segments: 5–4–6–9–14–12–12–11–11–11–11, preapical segments about 4 times as long as wide. Prothorax virtually as long as wide, deeply constricted just behind middle (1.5 times more narrow than in the widest place at the level of anterior angles), surface glossy, impunctate, with deep groove in basal quarter. Scutellum quadrangular, incised on apex. Elytra 1.8 times as long as wide, without distinct postbasal impression, rows of punctures feeble behind middle and almost imperceptible on apical slope. All interspaces flat.

Length: 6–6.3 mm.

**Differential diagnosis.** Near *L. jansoni* BALY, 1861 but in the latter species the antennae reach only 1st abdominal segment and preapical segments 2.5–3 times as long as wide, prothorax less deeply constricted, interspaces of elytral rows costate on sides and behind middle.

### Clytrinae

#### *Aetheomorpha nigromarginata* JACOBY, 1908

Fig. 7

*Aetheomorpha mysorensis* TAKIZAWA, 1990 **syn.nov.**

**Material examined.** India, Tamil Nadu, 6 km S Kotagin (11.25N, 76.52E), Elk fall, 1650 m, 12–16.05.1997, Dembický & Pacholátko, 5 males; India, Kerala, Thekkady, Periyar lake (9.34N, 77.10E), 900–1000 m, 19–27.05.1997, Dembický & Pacholátko, 1 female (NHMB).

**Remarks.** I have a series that corresponds well to Jacoby's description of this poorly known species. At least 2 specimens have typical coloration (hind part of head, scutellum and underside black, elytra with marginal black stripe from base to apex). Sometimes the scutellum is black at the base or entirely fulvous, underside often with ventral surface mostly or entirely fulvous, elytral stripe partly or entirely reduced. However, the form of the aedeagus is identical in all these colour forms (Fig. 7) and is the same as in *A. mysorensis* TAKIZAWA, 1990, which I consider to be the new synonym of this species.

#### *Aetheomorpha bifurcata* sp.nov.

Fig. 8

**Material examined.** Holotype male (NHMB) and 5 paratypes (NHMB, 2 ex. – LM): southern India, Tamil Nadu, 6 km S Kotagin (11.25N, 76.52E) < Elk falls, 1650 m, 12–16. V. 1997. Dembický & Pacholátko. One female with a label: "Kerala, 15 km SW Munnaar, 1–9. V. 1997, 125 m", may also belong to this species.

**Description.** Fulvous; antennae apart from 3 basal segments, 4 spots on elytra, underside, apices of tibiae and tarsi black. Elytra with humeral spot, lateral elongate spot (often connected with humeral) and two spots along suture; posterior spot often connected with lateral one. Middle of breast and abdomen mostly fulvous, legs sometimes strongly darkened.

Body cylindrical (male) or widened posteriorly (female). Frons of male 2.5 times more narrow than width of head, with 3 grooves punctured near eyes. Antennae serrate

from the 4th segment. Prothorax twice as wide as long, impunctate, glossy. Scutellum triangular with truncate apex, impunctate. Elytra 1.3–1.4 times as long as wide, distinctly punctate. Apex of pygidium rounded in male, truncate in female.

Aedeagus (Fig. 8) with very characteristic bifurcate apex.

Length of male: 3.7–4.4 mm, of female 4.4–4.9 mm.

**Differential diagnosis.** The species in question is practically identical morphologically and in colour with *A. nigropicta* LEFEVRE, 1891, but differs obviously in the specific form of the aedeagus.

## Eumolpinae

### *Tricliona bifasciata* JACOBY, 1895

**Remarks.** JACOBY (1908) indicated, that “this is a most variable species in regard to colouration, varying from flavous to black, with or without black markings”. I have studied 177 specimens from Kerala (Thekkady, Periyar Lake, 900–1000 m, 19–27. IV. 1997) and found that the situation is not so simple. Males (about 35 specimens) are small, with narrow frons and always entirely fulvous. Females are distinctly larger, with frons broader and colouration, however variable, includes only a few quite distinct forms. They are:

1. Upperside entirely fulvous (8% of females).
2. Upperside fulvous, elytra with black spot before middle (21%).
3. Upperside fulvous, elytra with interrupted dark stripe in middle (1.5%).
4. Same as 3, but stripe entire (3.5%).
5. Upperside fulvous, elytra with basal and apical dark bands (8%).
6. Prothorax fulvous, elytra black with extreme apex fulvous (13%).
7. Prothorax fulvous with dark central spot, elytra with dark stripe (2%).
8. Prothorax black with sides more or less fulvous, elytra with dark stripe (18%).
9. Upperside black with apex of elytra fulvous (20%).
10. Upperside entirely black (5%).

## Galerucinae

### Genus *Hyphaenia* BALY, 1865

**Type species:** *Hyphaenia pilicornis* MOTSCHULSKY, 1866

**Remarks.** Species of the genus *Pseudoscelida* JACOBY, 1894 known to me have all the characters typical for the studied species of *Hyphaenia*: antennae of male with erect hairs, antennal segment 2 very small, 3 a few times longer than 2, genae short, anterior border of prothorax lacking margins, tibiae without spur. Jacoby never compared it with *Hyphaenia*, poorly known at that time. Thus, synonymization of *Pseudoscelida* is probable.

***Hyphaenia pilicornis* MOTSCHULSKY, 1866**

Fig. 9

**Remarks.** This species is the type for the genus *Hyphaenia* BALY, 1865 described one year previously (this situation has already been discussed by MAULIK 1936). A figure of the aedeagus of Motschulsky's syntype is included at Fig. 9.

***Hyphaenia indica* (JACOBY, 1903)**

Fig. 12

**Remarks.** Jacoby described this species as "obscure fulvous, the head and the legs paler", but according MAULIK (1936) the body is practically black, sometimes with black vertex. I have studied a series from Kerala, which fully corresponds to Maulik's description. The aedeagus (Fig. 12) is almost the same as in *H. pilicornis*.

***Hyphaenia keralensis* sp.nov**

Fig. 10

**Material examined.** Holotype male (NHMB) and 1 male 2 female paratypes (NHMB, LM): southern India, Kerala, 15 km SW Munnaar, Kallar valley (10.02N, 76.58E), 1250 m, 1–9. V. 1997, Dembický & Pacholátko.

**Description.** Black; elytra dark green or blue, head except vertex, anterior angles of prothorax, pro- and mesosternum, femora and tibiae except apex pale flavous.

Male. Head impunctate, not excavated, interantennal space ridged and rather narrow, frontal tubercles transverse, sharply delimited behind, frons 2.5 times as wide as transverse diameter of eye. Antennae longer than body, proportions of segments:10–2–9–13–13–12–12–11–9–8–10, segments 3–6 with rather short, erect hairs. Prothorax 1.5 times as wide as long, surface glossy and virtually impunctate, transverse impression not interrupted in the middle. Elytra glossy, 1.4–1.5 times as long as wide, with feeble basal elevation, densely and strongly punctate, with narrow interspaces. Tarsal segment 1 not widened. Aedeagus (Fig. 10) bifurcate at apex. Length: 4.5–4.7 mm.

Female. Antennae reach apex of elytra, without erect hairs. Transverse impression of prothorax interrupted or feeble in middle.

Length: 4.8–5.4 mm.

**Differential diagnosis.** Resembles *H. indica* JACOBY, 1889 in having black prothorax and metallic elytra, but differs sharply with quite another type of aedeagus, broad frons and short erect hairs on antennae.

***Hyphaenia nitidissima* sp.nov.**

Fig. 11

**Material examined.** Holotype male (NHMB) and 31 paratypes (NHMB, 2 ex. –LM): southern India, Nilgiri Hills, Naduvatam, 6000 ft., 1958, Nathan.

**Description.** Bright metallic green; labrum, antennae, underside and legs black or dark brown, femora more or less metallic.

Male. Body narrow, elongate. Head with eyes 1.2 times as wide as prothorax, impunctate, eyes large, frons as wide as eye, interantennal space very narrow, frontal

tubercles distinct, transverse. Antennae distinctly longer than body, segment 2 very short, globular; 3rd a little longer than 1st and 4–5 times as long as 2; 4th about 1.3–1.4 times as long as 3, next segments subequal with 4th; segments 3–11 with very long, erect hairs, more short on apical segments. Prothorax 1.2 times as wide as long, with deep impression on each side, surface glossy, virtually impunctate. Elytra 4 times as long as wide, finely punctate and wrinkled, with microsculpture. Tarsal segment 1 not widened. Aedeagus very thin, moderately curved in lateral view (Fig. 11).

Female. Body more stout, widened towards the rear. Antennae about 2/3 of body length, without erect hairs.

Length: 4.8–5.5 mm.

**Differential diagnosis.** Near *H. pilicornis* MOTSCHULSKY, 1866, but upperside green, frons more narrow, antennae longer with very elongate segments and long erect hairs, aedeagus evenly curved in lateral view.

### Alticinae

#### Genus *Garuda* SCHERER, 1969 Fig. 13

**Type species:** *Garuda hindustanica* SCHERER, 1969

*Garuda schereri* DOEBERL, 1996 **syn.nov.**

**Remarks.** This genus, with unusual horn-like structure on the head, was based on a single female (SCHERER 1969). Later DOEBERL (1996) described another species, in which the female has a simple frons and the male the same horn as in Scherer's species.

I have studied a series of 4 males from southern India (Kerala) which fully correspond to *G. schereri* DOEBERL and a description of *G. hindustanica* SCHERER (which was, however, declared as a female).

It should be mentioned that the specific structure of the head in *Garuda* (horn, excavations, bristles) is practically of the same type as in many *Galerucidae* and a few *Alticinae* (*Chalaenus* etc.). Such structures are in all cases typical only in males, associated with glands and given the name of odorators (MEDVEDEV & PAVLOV 1987). I think that such a structure is impossible in a female and therefore Scherer's species must have been a male. After preparing a holotype of *G. hindustanica* SCHERER that is in Frey collection I found that it is indeed a male. But in this case *G. schereri* DOEBERL, 1996 is the new synonym of *G. hindustanica* SCHERER, 1969, because in both species a horn is distinctly narrowed to an apex (Fig. 13). But I have one male from southern India with another form of horn, which I accept for a new species.

#### *Garuda bulbifera* sp.nov.

Fig. 14

**Material examined.** Holotype male (LM): southern India, Travancore.

**Differential diagnosis.** Fully identical with *G. hindustanica* in colour and morphologically, including aedeagus, differing only in the form of the horn, distinctly widened apically (Fig. 14) and deeper impressions on the frons.

***Chalaenosoma schereri* sp.nov.**

Fig. 15

**Material examined.** Holotype male (LM): southern India, Travancore.

**Differential diagnosis.** Morphologically nearly identical with *C. travancorensis* SCHERER, 1969, differs only in the following few points:

Antennae with segment 4 about 2.1 times as long as two preceding segments together, segments 1–3 fulvous, 4–11 darkened, dark fulvous or piceous. Elytra blue with dark violaceous bands. Aedeagus (Fig. 15) thin and long, with very acute apex, in lateral view practically straight except basal third.

Length: 5.4 mm.

**Remarks.** Species of this genus were revised by SCHERER (1969).

Here I propose a key for species without impressions on prothorax:

- 1(2) First segment of antennae dark metallic, remainder of segments piceous or dark brown. Aedeagus asymmetrical, apex rounded with extreme tip not placed in the middle. Length: 5.3–6 mm. .... *C. metallica* JACOBY, 1893
- 2(1) First segment of antennae fulvous.
- 3(8) Antennae entirely fulvous.
- 4(5) Elytra green without transverse blue or violaceous bands. Apex of aedeagus triangular with acute tip. Length: 4.3–4.6 mm. ....  
..... *C. anaimalaiensis* SCHERER, 1969
- 5(4) Elytra green with 3 blue or violaceous bands.
- 6(7) Apex of aedeagus triangular and anchor-like, with small tooth on each side. Length: 5.3 mm. .... *C. travancorensis* SCHERER 1969
- 7(6) Apex of lanceolate aedeagus very narrowly rounded, without acute apical tip and lateral teeth. Length: 4.9–6.1 mm. ....  
..... *C. mimica* MEDVEDEV, 1999
- 8(3) Antennal segments 4–11 distinctly darkened. Elytra blue with 3 violaceous bands. Aedeagus with narrow, long and very acute apex. Length: 5.4 mm. .... *C. schereri* sp.nov.

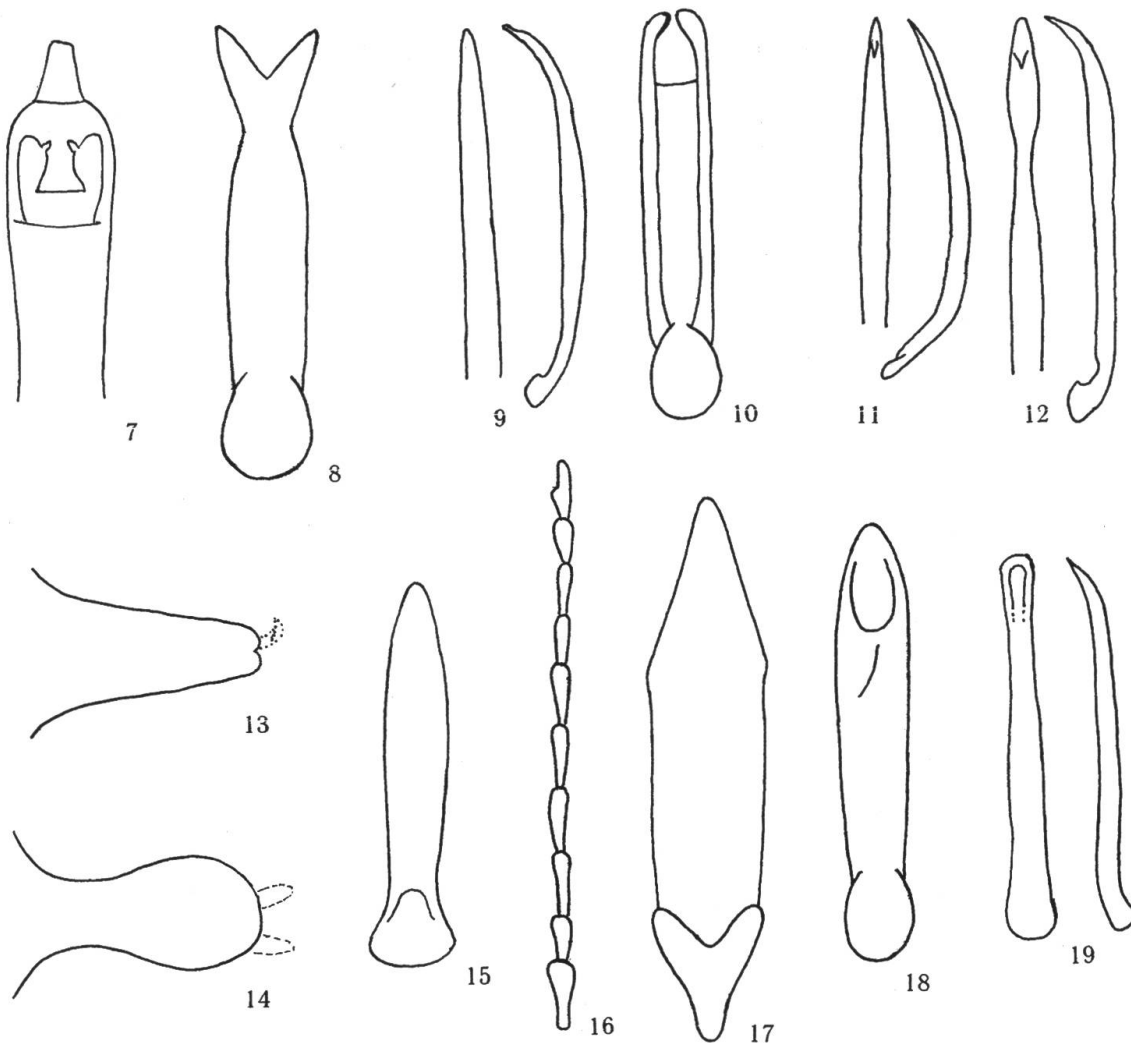
***Philopona indica* sp.nov.**

Figs 16, 17

**Material examined.** Holotype male (LM): southern India, Shembaganure.

**Description.** Entirely fulvous, antennal segments 5–11 darkened, elytra more pale than prothorax, humerus and suture very narrowly darkened.

Body elongate, flattened above. Frons as wide as diameter of eye, frontal tubercles distinct, feebly convex, not punctate except for one puncture on each side near the eye. Antennae reach almost middle of elytra, segment 3 distinctly longer than 2, next five segments subequal to 3rd, 9 and 10 shorter, 11th elongate, incised before apex (Fig. 16). Prothorax 2.3 times as wide as long, with side margins widely explanate and moderately rounded, basal transverse groove shallow, not sharply delimited; another transverse impression follows anterior margin. Surface with a few microscopic punctures, practically impunctate. Scutellum triangular, impunctate. Elytra 1.3 times as long as



**Figs 7-19:** 7-12 – aedeagus (d – dorsal, v – ventral, l – lateral): 7 – *Aetheomorpha nigromarginata*; 8 – *A. bifurcata*, v; 9 – *Hyphaenia pilicornis*, d, l; 10 – *H. keralensis*, v; 11 – *H. nitidissima*, d, l; 12 – *H. indica*, d, l; 13, 14 – horn of *Garuda*: 13 – *G. hindustanica*; 14 – *G. bulbifera*; 15, 17-19 – aedeagus, 16 – antenna; 15 – *Chalaenosoma schereri*, v; 16 – *Philopona indica*; 17 – *Philopona indica*, v; 18 – *Phygasia minuta*, d; 19 – *Glaucosphaera indica*, d, l.

wide, densely punctate, basal convexity very feeble and not delimited on the outer side with large punctures. Segment 1 of anterior tarsi triangularly widened in male.

Aedeagus – Fig. 17.

Length: 4.5 mm.

**Differential diagnosis.** Near *P. vibex* ERICHSON, 1834 and *P. shima* MAULIK, 1926, differs from both in virtually impunctate frons and unicolour elytra. *P. vibex* has frons very strongly punctate; frons of *P. shima* has a few strong punctures on each side near the eye.

***Phygasia minuta* sp.nov.**

Fig. 18

**Material examined.** Holotype male (NHMB) and 6 paratypes (NHMB, 2 ex. – LM): India, Tamil Nadu, 6 km S Kotagiri (11.25N, 76.52E), Elk fall, 1650 m, 12–16.05.1997, Dembický & Pacholátko

**Description.** Black, head and prothorax red fulvous, elytra with very feeble blue sheen, tibiae more or less dark fulvous.

Body elongate ovate. Head with narrow interantennal ridge and elongate frontal tubercles, sharply delimited behind and from each other. Vertex finely rugose anteriorly, with a groove on each side near the eye. Antennae hardly reach middle of elytra, with segment 2 the shortest and 3–10 practically subequal, but not flattened. Prothorax 1.8 times as wide as long, with sides rounded and angulate before anterior angles, maximal width just before middle. Surface finely and sparsely punctate, basal groove rather shallow, more strongly punctate. Elytra 1.5 times as long as wide, with feeble basal convexity and depression along suture behind scutellum, finely and densely punctate, with flat interspaces. Males with segment 1 of anterior and mid-tarsi slightly enlarged, elongate triangular.

Aedeagus – Fig. 18.

Length: 3.2–3.4 mm.

**Differential diagnosis.** Near *P. nigripennis* JACOBY, 1904 and *P. ceylonensis* SCHERER, 1969, but much smaller and aedeagus not narrowed in apical part.

***Glaucosphaera indica* sp.nov.**

Fig. 19

**Material examined.** Holotype male (NHMB) and 150 paratypes (NHMB, LM): India, Kerala, 15 km SW Munnar (10.02N, 76.5E), 1250 m, 1–9.05.1997, Dembický & Pacholátko.

**Description.** Metallic blue, green-blue or violaceous, underside practically black, antennae fulvous with darkened 5 or 6 apical segments, legs entirely fulvous.

Body elongate ovate, moderately convex. Head glossy, very sparsely and finely punctate, interantennal space broad, feebly convex; frontal tubercles absent. Antennae comparatively long, reaching middle of elytra, all segments more or less elongate, very feebly widened starting from 6th segment, 2nd segment the shortest, 3–10 subequal in length. Prothorax convex, twice as wide as long, anterior margin almost straight, hind margin arcuate, lateral margins feebly rounded, all angles obtuse, but distinct, with a pore bearing a bristle. Surface glossy, extremely finely and sparsely punctate. Scutellum triangular, impunctate. Elytra about 1.25 times as long as wide, moderately convex, rounded apically, with feeble humeral tubercle, without any impressions, distinctly punctate. Tarsi of male without widened segments. Hind tibia thin and long, slightly curved, channelled in apical half of upper side.

Aedeagus (Fig. 19) thin and long, narrowly rounded apically, slightly curved in lateral view, underside longitudinally elevated.

Length: 3–3.7 mm.

**Differential diagnosis.** Only one species was known in this genus – *G. cyanea* DUVIVIER, 1892, very common and widespread in the Himalayas and Indochina. The

new species differs markedly in elongate body, much less convex and not truncate posteriorly, antennae at least twice as long, with elongate segments. These characters partly change generic description, but in general this species belongs without any doubt among typical *Glaucosphaera* MAULIK, 1926.

## Hispinae

### *Dactylispa pitapada* MAULIK, 1919

**Material examined.** India, Kerala, 15 km SW Munnar (10.02N, 76.5E), 1250 m, 1–9.05.1997, Dembický & Pacholátko, 15 ex.; – India, Kerala, Thekkady, Periyar lake (9.34N, 77.10E), 900–1000 m, 19–27.05.1997, Dembický & Pacholátko, 1 ex. (NHMB).

**Remarks.** This species was described as black with fulvous legs. In the series I have studied about half the specimens have dark fulvous spots on the elytra, scattered among the black bases of the spines. One specimen (young?) also has fulvous antennae. Black specimens have sometimes feebly reflect bronze.

## Chrysomelidae of Indochina

### Eumolpinae

#### *Tricliona tristis* sp.nov.

**Material examined.** Holotype female (LM): Thailand, Khao Sok (8.55N, 98.45W), 12. XI. 1995, M. Mostovsky.

**Description.** Dark piceous to black, upperside with feeble metallic lustre, head, 4 basal segments of antennae, anterior angles of prothorax, sides and apex of elytra and legs (with knees partly darkened) red fulvous.

Body elongate, flattened above. Head coarsely punctate, without sulcus on frons, which is rather narrow, about 0.7 of transverse diameter of eye. Prothorax 1.5 times as wide as long, with arcuate side margins, surface with moderately large and rather sparse punctures; interspaces larger than punctures, microscopically punctate. Elytra 1.45 times as long as wide, rows of punctures distinct to apex, irregular on sides; interspaces flat or feebly convex, impunctate. Femora with small acute tooth, larger on anterior ones.

Length: 5.9 mm.

**Differential diagnosis.** Near *T. punctipennis* DUVIVIER, 1892, but much larger and broader, with prothorax sparsely punctate overall. Its large size separates it from 4 species from Indochina that have strongly punctured heads. *T. megalops* CHEN, 1935 and *T. paksensis* KIMOTO & GRESSITT, 1982, having same structure of head, do not exceed 4 mm and differ in colour. *T. melanura* LEFEVRE, 1890 and *T. consobrina* CHEN, 1935, being more similar to the new species in colour, have a deep sulcus on the frons and do not exceed 5 mm.

***Rhyparida thailandica* sp.nov.**

Fig. 20

**Material examined.** Holotype male (NHMB) and 2 paratypes (NHMB, LM): Thailand, Chiang Dao (19.25N, 98.52E), 1000 m, 17–24. V. 1991, V. Kubáň.

**Description.** Body entirely fulvous, ovate.

Clypeus elongate, divided from frons with impression, finely and sparsely punctate, feebly microsculptured. Frons and vertex impunctate, finely microsculptured. Antennae almost reach apex of elytra, segments 3–11 thin and long, segment 3 about 3 times as long as 2 and subequal to the next segments. Prothorax 1.9 times as wide as long, slightly narrowed anteriorly, with rounded side margins, surface glossy, finely and sparsely punctate. Elytra with regular rows of densely crowded punctures, more dispersed on apical slope, interspaces feebly convex, glossy, impunctate. Propleurae impunctate, microsculptured. Metasternum glossy, impunctate, with dull pleurae. Abdominal sternites with rows of long, erect hairs. All femora with acute tooth, less developed on mid-femora. Aedeagus cylindrical with tridentate apex (Fig. 20).

Length: 5.5–6 mm.

**Differential diagnosis.** Very near to *R. khasiensis* JACOBY, 1899, but body larger, antennae and tarsi fulvous, elytral rows deeper with interspaces more convex; median process on apex of aedeagus longer (Figs 20, 21).

***Colaspoides laosensis* KIMOTO & GRESSITT, 1982**

Fig. 22

**Remarks.** Males. Body entirely fulvous, including legs. Aedeagus – Fig. 22 (16 ex.). Females. Typical form: body fulvous with apices of femora, tibiae and tarsi black (7 ex.).

There are a few very exact colour forms:

- ab. *piceus* . . . . . same colour, but elytra black (7 ex.).
- ab. *oculata* . . . . . elytra black with large dark fulvous spot in middle (5 ex.).
- ab. *erythrocephala* . . . . . body black with red head (3 ex.).
- ab. *melanura* . . . . . body entirely black, scutellum often red (10 ex.).

**Galerucinae*****Pseudadimonia vietnamica* SAMODERZHENKOV, 1988**

Fig. 23

**Material examined.** Thailand, Chiang Dao.

**Remarks.** Very possibly, all indications of *P. variolosa* HOPE, 1831, cited by KIMOTO (1989) for Indochina and China, belong to this species. It differs markedly from *P. variolosa* in the structure of the aedeagus (SAMODERZHENKOV 1988), as well as in an altogether different form of prothorax (Figs 23, 24). I have typical *P. variolosa* only from Nepal and North India.

***Paleosepharia rubromarginata* sp.nov.**

Figs 25, 26

**Material examined.** Holotype male and 3 paratypes (LM): Vietnam, prov. Vinh-Phu, Tamdao, 900 m, 27. X. 1979, L. Medvedev; paratypes: N. Vietnam, river Con near Phu-khui, Kabakov, 1 male (LM).

**Description.** Body red, labrum, antennae except 1st segment, tibiae, tarsi, pygidium and last abdominal sternite piceous, elytra pale fulvous with red emargination, rather broad at the suture, but nowhere sharply delimited. Abdomen more pale than breast.

Male. Head glossy, sparsely punctate on vertex, clypeus convex. Antennae almost reach apex of elytra, proportions of segments: 22–7–12–20–20–20–20–20–18–20. Prothorax 1.5 times as wide as long, glossy, densely punctate, without distinct lateral impressions, but with shallow groove in centre, covered with short hairs. Elytra 1.5 times as long as wide, finely and densely punctate, without secondary characters, only flattened on suture behind scutellum. Pygidium partly covered with elytra, truncate at apex. Anterior tarsi with segment 1 not widened. Hind tibiae incised on innerside before apex (Fig. 25). Segment 1 of hind tarsus 1.5 times as long as next segments together. Median lobe of last abdominal sternite with two oblique and angulate ridges and concavity between them. Aedeagus – Fig. 26.

Length: 4.8–5.3 mm.

Female. Prothorax without central groove, hind tibiae straight.

Length: 5.7 mm.

**Differential diagnosis.** Near *P. tenasserimensis* MAULIK, 1936, differs in different colour of upperside and incised hind tibiae of male.

***Paleosepharia marginata* sp.nov.**

Fig. 27

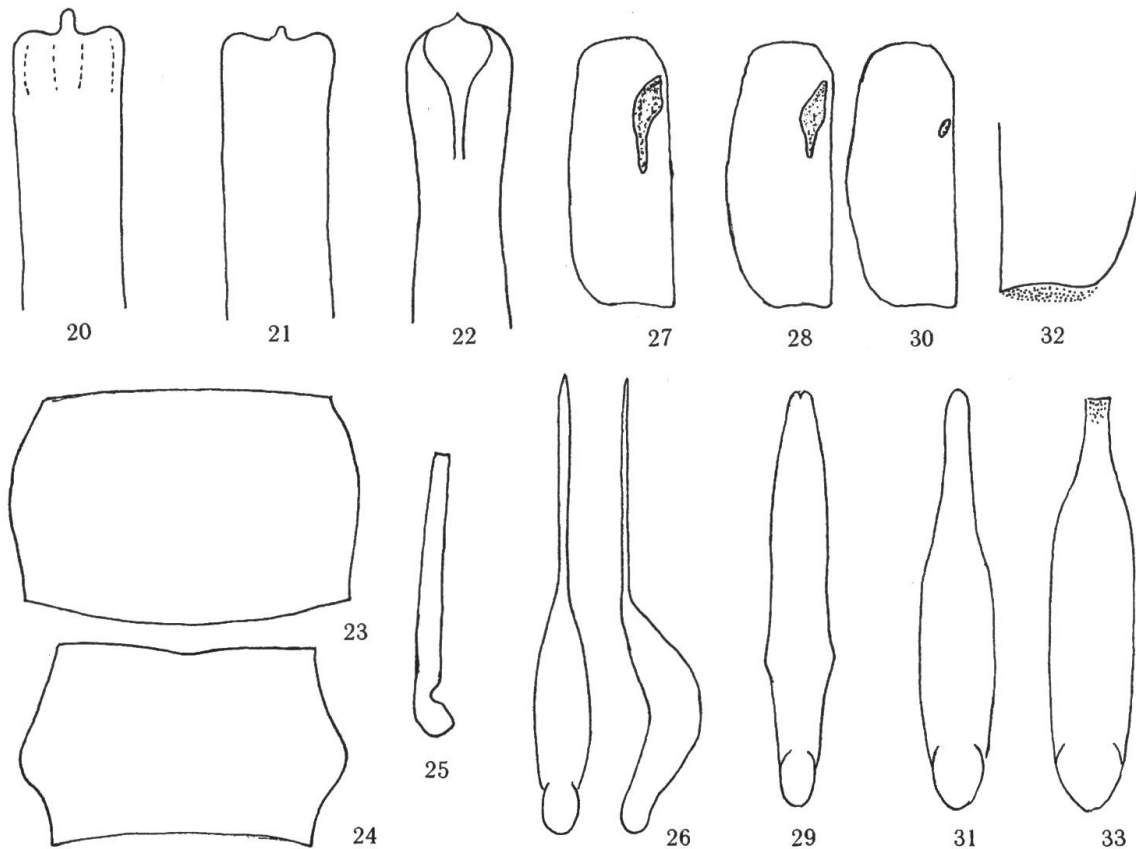
**Material examined.** Holotype male (LM): Thailand, Khao Soc (8 55' N, 98 45' E), 1995, M. Mostovsky.

**Description.** Body flavous, labrum, vertex, antennae except two basal segments, scutellum, narrow sutural and lateral stripes and extreme apex of elytra, epipleurae, tibiae, tarsi, pygidium and last abdominal sternite black.

Male. Head finely punctate. Antennae almost reach apex of elytra, pubescent (more sparse on 2 basal segments, proportions of segments: 25–7–10–22–27–25–25–25–23–21–(last segment absent). Prothorax 1.5 times as wide as long, glossy, finely and densely punctate. Elytra 1.5 times as long as wide, very densely and finely punctate, with deep cuneiform groove on each side near scutellum (Fig. 27). Pygidium partly exposed, distinctly truncate at apex. Segment 1 of anterior tarsus widened, elongate. Segment 1 of hind tarsus 1.4 times as long as the sum of the following segments together.

Length: 5 mm.

**Differential diagnosis.** Near *P. tenasserimensis* MAULIK, 1936, but labrum, vertex, antennae and apical segment of abdomen black, prothorax entirely fulvous, elytra without black spots and band, with very large impression behind scutellum.



**Figs 20–33:** 20 – *Rhyparida thailandica*, aedeagus; 21 – *R. khasiensis*, aedeagus; 22 – *Colaspoides laosensis*, aedeagus; 23 – *Pseudadimonia vietnamica*, prothorax; 24 – *P. variolosa*, prothorax; 25, 26 – *Paleosepharia rubromarginata*: 25 – hind tibia; 26 – aedeagus; 27 – *P. marginata*, elytra; 28, 29 – *P. haemorrhoidalis*: 28 – elytra, 29 – aedeagus; 30, 31 – *P. reducta*: 30 – elytra, 31 – aedeagus; 32, 33 – *P. membranaceus*: 32 – apex of elytra, 33 – aedeagus.

***Paleosepharia haemorrhoidalis* sp.nov.**

Figs 28, 29

**Material examined.** Holotype male (NHMB) and 7 paratypes (NHMB, 2 ex. – LM): NW Thailand, Mae Hong Son, Ban Huai Po, 1600 m, 8–17. V. 1992, S. Bílý.

**Description.** Body flavous with elytra more pale; humeral area of elytron, epipleurae, at base, breast, pygidium except base and last abdominal sternite except sides red. Basal half of elytra usually with white transparent spots.

**Male.** Head practically impunctate, with traces of microsculpture. Antennae reach apical slope of elytra, with all segments distinctly pubescent, proportions of segments: 21–7–12–20–21–21–20–20–20–19–18–19. Prothorax 1.6 times as wide as long, with very feeble impression on each side, glossy, finely punctate. Elytra 1.6 times as long as wide, dull, very finely and densely punctate, with deep longitudinal groove near suture widened anteriorly; an area outwards from this groove is distinctly elevated (Fig. 28). Preapical tergite not covered with elytra, hard and glossy. Pygidium with rounded truncate apex. Segment 1 of hind legs 1.6 times as long as the sum of the following segments together. Segment 1 of fore tarsi slightly enlarged. Aedeagus – Fig. 29.

Length: 4.5–5.2 mm.

Female. Last abdominal sternite triangular. Elytra slightly flattened near suture.

Length: 4.7–5.4 mm.

**Differential diagnosis.** Near *P. persimilis* KIMOTO, 1989, but elytral depression of male large and broad anteriorly, all tibiae infuscate and apex of abdomen distinctly red. *P. humeralis* CHEN & JIANG, 1984 is also a very near species (possibly identical with *P. persimilis*).

***Paleosepharia reducta* sp.nov.**

Figs 30, 31

**Material examined.** Holotype male (NHMB) and 6 paratypes (NHMB, 2 ex. – LM): NW Thailand, Mae Hong Son, Ban Huai Po, 1600 m, 8–17. V. 1992, S. Bílý.

**Description.** Body fulvous, antennae with darkened apical segments; scutellum, sutural stripe, narrow lateral emargination, apical 3/7 of elytra, epipleurae, tibiae, tarsi, pygidium and last ventral sternite black; metasternum red.

Male. Clypeus and frons impunctate, with microsculpture, vertex glossy, finely punctate. Antennae a little longer than body, all segments pubescent, proportions of segments: 22–6–10–22–25–23–23–23–22–21–21. Prothorax 1.8 times as wide as long, glossy, finely punctate, with feeble impression on each side. Elytra 1.5 times as long as wide, dull, finely and densely punctate, flattened behind scutellum, with small elongate groove near suture in anterior quarter (Fig. 30). Preapical tergite partly not covered by elytra, hard. Apex of pygidium rounded-truncate. Segment 1 of anterior tarsi distinctly widened, twice as broad as segment 2. Segment 1 of hind tarsus 1.7 times as long as next segments together. Aedeagus – Fig. 31.

Length 4.5–5.2 mm.

**Differential diagnosis.** Near *P. tenasserimensis* MAULIK, 1936, but upperside marked differently, apical abdominal segment black, elytra with very small punctiform groove near suture (not wedge-like, as in *P. tenasserimensis*).

***Paleosepharia membranaceus* sp.nov.**

Figs 32, 33

**Material examined.** Holotype male and 2 paratypes (LM): Vietnam, prov. Vihn Phu, Tamdao, 800–1200 m, in forest, 12–22. IV. 1986, L. Medvedev et al.

**Description.** Body red, head, prothorax and last abdominal sternite black, elytra with broad pale flavous band (only basal third and extreme apex red).

Male. Head virtually impunctate, only vertex with a few fine punctures. Antennae reach behind middle of elytra, pubescent from the 4th segment; proportions of segments: 20–5–6–19–20–20–20–18–18–15–14. Prothorax 1.75 times as wide as long, with two deep impressions, finely microsculptured, finely and densely punctate except middle, where punctures are almost imperceptible. Elytra 1.3 times as long as wide, partly covering pygidium, apex of elytron with membranaceous stripe (Fig. 32), surface moderately glossy, densely punctate, without any distinct impressions, but slightly flattened near suture just behind scutellum. Apex of pygidium subtruncate. Segment 1 of

hind legs almost twice as long as the sum of the following segments. Aedeagus – Fig. 33. Median lobe of last sternite elongate, concave.

Length: 4.7–5 mm.

Female. Last sternite with protruding middle of hind margin.

Length: 5.5 mm.

**Differential diagnosis.** Differs from all other species in the unusual structure of elytral apices. Resembles colour *P. gongshana* CHEN & JIANG, 1986 in colour, but male without grooves on elytra, prothorax dark.

### Genus *Hyphaenia* BALY, 1865

**Type species:** *Hyphaenia pilicornis* MOTSCHULSKY, 1866

This genus seems to be very rich in species. KIMOTO (1989) recorded 9 species for Indochina, among them 8 new to science. I add below eight more new species for this region. But it should be noted that the genus in question is clearly heterogeneous and includes 3 different groups. A typical group from southern India (*H. pilicornis* MOTSCHULSKY, 1866 and allied species) has very thin, needle-like aedeagus, distinctly curved in lateral view (Figs 9, 11, 12). Another large group includes species with a very specific bifurcate aedeagus (Figs 41–47) and is widespread from southern India to southern China. The third group is small and from the Himalayas (*H. yasudai* TAKIZAWA, 1985, *H. apicalis* TAKIZAWA, 1988, *H. convexicollis* MEDVEDEV & SPRECHER, 1997); it has an aedeagus of same type as in the preceding group, but the apex is not bifurcate and the interantennal space not ridged but longitudinally channelled.

*Hyphaenia* differs from the nearest genera (*Palpoxena* BALY, 1861 *Aenidea* BALY, 1874, *Platyxantha* BALY, 1864) only in having additional erect hairs on antennae of male. Nevertheless a few species without this character also have a bifurcate aedeagus. I describe two such species, giving them preliminary allocation to the genus *Platyxantha*. However, all these genera need full revision, partly because the females of these genera are practically indistinguishable.

#### *Hyphaenia pallida* sp.nov.

Figs 34, 41

**Material examined.** Holotype male (LM): Thailand, Khao Sok (8.55N, 98.45E), 12. XI. 1995, M. Mostovsky.

**Description.** Male. Fulvous; antennae except two basal segments, meso- and metasternum and base of anterior abdominal sternite black.

Head glossy, not excavated. Clypeus triangular, with central ridge. Frontal tubercles transverse with acute anterior processes, very glossy and smooth. Vertex with a few punctures and traces of microsculpture. Antennae longer than body (segment 9 reaches apex of elytra), proportions of segments: 9–2–9–12–10–10–9–8–8–9, segments 3 and 4 with long hairs, directed mostly parallel to segment; segments 3–6 slightly thickened, 4–6 slightly curved (Fig. 34). Prothorax 1.4 times as wide as long, divergent from base to apex, lateral margins almost straight behind middle, rounded near anterior angles. Surface gloss, with feeble lateral grooves and sparse punctures, without microsculpture.

Scutellum smooth, triangular. Elytra with sparse punctures and fine microsculpture. Aedeagus – Fig. 41.

Length: 3.7 mm.

**Differential diagnosis.** Near *H. nigricornis* KIMOTO, 1989, but head without excavation, upperside glossy, antennae different in form of segments and pubescence. In *H. fulva* KIMOTO, 1989 the head of the male is simple, the antennae are black and segments 8 and 9 slightly curved.

***Hyphaenia bicolor* sp.nov.**

Figs 35, 42

**Material examined.** Holotype male (NHMB) and 2 paratypes (NHMB, LM): NW Thailand, Soppong-Pai, 1800 m, 1–6. V. 1991, Pacholátko.

**Description.** Male. Fulvous, antennae except two basal segments, elytra and underside black.

Head glossy and impunctate, vertex with microsculpture, excavation large but shallow, with triangular tooth on anterior margin directed backwards and rounded tubercle below near hind margin. Interantennal ridge broad, concave. Frontal tubercles triangular, poorly delimited behind. Antennae a little longer than body, proportions of segments: 11–2–11–15–13–12–11–10–10–9–10, segments 2–4 with erect and longer hairs, segment 1 almost straight, thickened to apex, 3 and 4 with acute apical angle, 5 obliquely cut at apex, remainder of segments thin, cylindrical (Fig. 35). Prothorax 1.5 times as wide as long, widest in anterior third, lateral margins straight in posterior 2/3 and rounded anteriorly, all angles with a long bristle. Surface densely microsculptured, finely and sparsely punctate, with shallow impression on each side. Scutellum glossy, impunctate, with feeble microsculpture. Elytra with dense punctures and microsculpture, transversely impressed in middle, with another feeble impression along suture near base. Segment 1 of anterior and mid tarsi not widened. Aedeagus – Fig. 42.

Length: 4.7–5.2 mm.

Female. Head and antennae simple, antennae reach apical slope of elytra, without erect hairs, with 4 basal segments fulvous. Elytra without transverse impression in middle.

Length: 5.7 mm.

**Differential diagnosis.** Near *H. nigricornis* KIMOTO, 1989, but antennae fulvous basally, elytra without geminate rows and longitudinal costae.

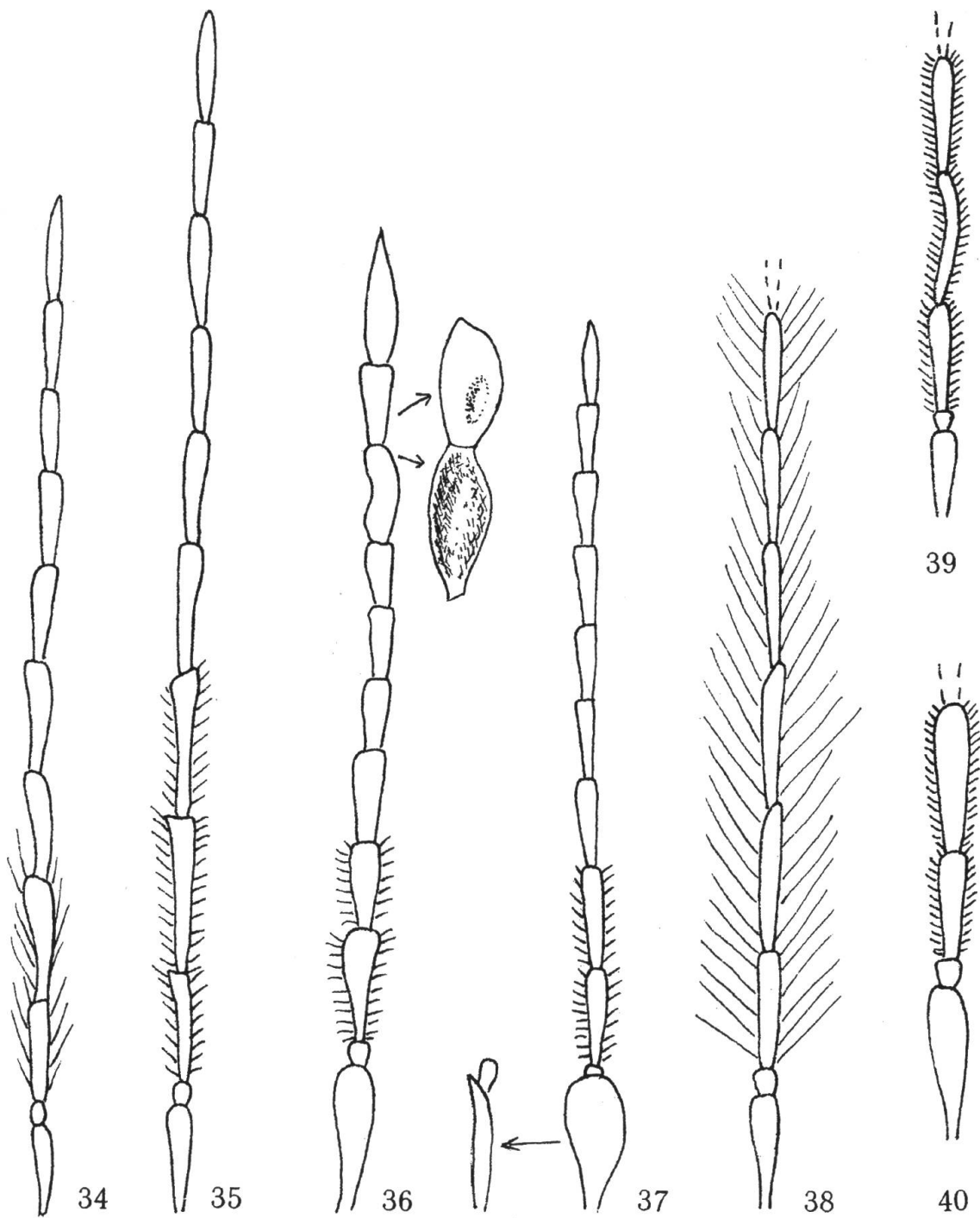
***Hyphaenia tristis* sp.nov.**

Fig. 36

**Material examined.** Holotype male (LM): Thailand, Khao Sok (8.55N, 98.45E), 12. XI. 1995, M. Mostovsky.

**Description.** Male. Black, elytra dark blue, head and prothorax with very feeble metallic sheen, antennal segment 2 and base of segments 3–7 fulvous, legs piceous with femora and base of tibiae dark fulvous.

Head dull, impunctate, densely microsculptured, deeply excavated, hind margin of clypeus triangular and elevated, interantennal space triangular and rather broad



**Figs 34–40:** 34–40 – antennae of *Hyphaenia* spp.nov.; 34 – *H. pallida*; 35 – *H. bicolor*; 36 – *H. tristis*; 37 – *H. kimotoi*; 38 – *H. rubra*; 39 – *H. clypealis*; 40 – *H. nigrilabris*.

moderately convex; frontal tubercles transverse, with acute anterior processes. Vertex more densely microsculptured than other parts of head. Antennae as long as body, proportions of segments: 13–2–10–9–8–7–7–6–9–8–12; all segments pubescent, but segments 3 and 4 with longer, erect hairs, which are mostly as long as the width of the corresponding segment; segment 1 moderately thickened and curved, 3 distinctly claviform, 9 widened, curved and deeply excavated, 10 with ovate impressed area in basal half (Fig. 36). Prothorax 1.4 times as wide as long, broadest in anterior third, with long seta on anterior and hind angles; lateral margins feebly rounded. Surface impunctate, densely microsculptured, with deep transverse impression, more shallow in middle. Scutellum smooth and glossy. Elytra with dense microsculpture and punctures. Segment 1 of anterior and mid tarsi enlarged, cylindrical; on mid tarsi it is 2.3 times as long as wide.

Length: 4.6 mm.

***Hyphaenia kimotoi* sp.nov.**

Figs 37, 43

**Material examined.** Holotype male (NHMB): NW Thailand, Mae Hong Son, Ban Si Lang, 1–7.V. 1992, 1000 m, S. Bílý; – Paratype male (LM): NW Thailand, Mae Hong Son, Ban Huai Po, 1600–2000 m, 9–16. V. 1991, J. Horák.

**Description.** Male. Metallic blue, antennae and tarsi black, femora and tibiae fulvous.

Head dull, impunctate except for a few punctures behind transverse frontal tubercles, densely microsculptured, with deep frontal excavation, having very long seta on each postero-lateral angle and rather long process becoming more erect from bottom upwards. Antennae reach apex of elytra, proportions of segments: 12–2–8–9–8–7–7–7–6–8, segments 3 and 4 with erect hairs, which are as long as the width of the corresponding segment; segment 2 strongly widened and flattened, spiral curved; next segments thin and long, without any special features (Fig. 37). Prothorax 1.3–1.4 times as wide as long, widest just behind anterior margin, sides nearly straight and divergent anteriorly, anterior angles with a long bristle. Surface finely punctate, with dense microsculpture and transverse impression, interrupted or very feeble in middle. Scutellum smooth and glossy. Elytra with dense punctures and microsculpture. Segment 1 of anterior tarsi enlarged. Aedeagus – Fig. 43.

Length: 4.4–4.5 mm.

**Differential diagnosis.** Differs from other metallic species in the form of the first antennal segment and colour of legs.

***Hyphaenia rubra* sp.nov.**

Figs 38, 44

**Material examined.** Holotype male and 1 paratype female (LM): Vietnam, prov. Gialai-Contum, Buon Loi, 50 km N Ankhe, 700 m, 16. VI. 1983, L. Medvedev.

**Description.** Male. Red, antennae, tibiae, tarsi and ventral surface black.

Body narrow, head and upperside glossy, without microsculpture. Head without cavity, impunctate; clypeus triangular, frons 1.7 times as wide as eye, frontal tubercles triangular, sharply delimited behind, genae very short, about 1/8 of eye length. Antennae

longer than body, all segments cylindrical and simple, segments 3–8 (apical segments absent) with very long, erect hairs, comparable in length with segments; proportions of segments: 8–2–8–13–12–12–11–11 (Fig. 38). Prothorax 1.35 times as wide as long, broadest just behind anterior margin, lateral margin very feebly rounded, with a few short, erect hairs. Surface almost impunctate except for sparse punctures anteriorly, with transverse impression more feeble in centre. Scutellum triangular, smooth. Elytra 1.7 times as long as wide, indistinctly punctate, with short hairs along lateral and apical margin. Aedeagus – Fig. 44.

Length: 3.8–4 mm.

***Hyphaenia clypealis* sp.nov.**

Figs 39, 45

**Material examined.** Holotype male and 2 paratypes female (LM): Vietnam, proc. Dongnai, Nam Cat Tien, 9–11. IV. 1989, L. Medvedev.

**Description.** Red fulvous, antennae, tibiae and tarsi black or piceous.

Male. Head without cavity, impunctate, with dense microsculpture. Anterior margin of labrum with triangular tubercle. Clypeus rectangular, flat, with very feeble central ridge and long hairs on anterior margin. Frons 2.6 times as wide as eye, frontal tubercles transversely triangular. Genae about 1/3 of eye length. Antennae (only 4 segments present) have segments 3 and 4 covered with short, dense, erect hairs, which are twice as short as the width of segment (Fig. 39). Prothorax 1.6 times as wide as long, densely microsculptured, finely and sparsely punctate; transverse impression deep on sides, shallow in middle. Elytra 1.7 times as long as wide, densely microsculptured, with rather feeble punctures. Segment 1 of anterior tarsi distinctly widened, a little longer than broad. Aedeagus – Fig. 45.

Length: 5.5 mm.

Female. Labrum without tubercle, clypeus without long hairs. Antennae reach apical slope of elytra, proportions of segments: 14–2–10–14–14–12–12–12–10–12. Elytra with dense, shallow punctures, with feeble longitudinal costae.

Length: 6.5–6.6 mm.

***Hyphaenia nigrilabris* sp.nov.**

Figs 40, 47

**Material examined.** Holotype male (LM): Vietnam, prov. Vinh Phu. Tam Dao, 900 m, V. 1981, L. Medvedev; – paratype female (LM): Vietnam, prov. Shon La, Shon La, 15. V. 1986, Goročov.

**Description.** Head fulvous with black labrum, frontal tubercles and vertex, antennae black or piceous with segment 1 more or less fulvous, prothorax, femora and base of tibiae pale fulvous, scutellum, elytra and underside reddish, apices of tibiae and tarsi fuscous.

Male. Head without cavity, impunctate. Clypeus triangular, convex, frons 1.35 times as wide as eye, frontal tubercles triangular, sharply delimited behind. Genae very short. Antennae longer than body (segment 9 reaches apex of elytra), segment 4 curved, segments 3–5 with short, erect hairs that are not longer than width of segment;

proportions of segments: 8–2–10–12–11–12–12–12–11–10 (Fig. 40). Prothorax 1.3 times as wide as long, glossy, very finely and sparsely punctate, with feeble transverse impression. Elytra 1.6 times as long as wide, glossy, finely punctate, with feeble basal convexity. Segment 1 of anterior and mid tarsi elongate, not widened. Aedeagus – Fig. 47.

Length: 3.8 mm.

Female. Antennae with usual pubescence, segment 3 not curved.

Length: 4.5 mm.

***Hyphaenia mandibularis* sp.nov.**

Fig. 48

**Material examined.** Holotype male (LM): Vietnam, prov. Lam Dong, Bao Loc, 2. VII. 1980, L. Medvedev.

**Description.** Male. Metallic blue; mandibles, coxae, femora and base of femora fulvous, labrum, antennae, apices of tibiae and tarsi pitch black.

Head without cavity, impunctate, microsculptured. Clypeus triangular, convex. Frons twice as wide as eye, frontal tubercles transverse, very narrow, sharply delimited behind. Genae very short. Antennae longer than body, segments 3–8 with erect hairs, which are comparable with width of segment, proportions of segments: 8–2–9–12–12–11–11–12–11–10–11, segments 3, 4 and 8 slightly curved, with obliquely cut apex. Prothorax 1.5 times as wide as long, microsculptured and distinctly punctate, transverse impression deep, more feeble in middle. Elytra 1.9 times as long as wide, microsculptured and distinctly punctate, with basal convexity. Segment 1 of anterior tarsi enlarged, slightly longer than wide. Aedeagus – Fig. 48.

Length: 4 mm.

**A key to the *Hyphaenia* of Indochina**

- 1(18) Upperside at least partly fulvous.
- 2(3) Prothorax subquadrate, slightly longer than wide. Frons broad. Fulvous, elytra usually with all margins broadly bluish black; antennae, tarsi and apex of tibiae blackish. Head not excavated in male. Length: 6.8–7.8 mm. Laos..... *H. maculata* KIMOTO, 1989
- 3(2) Prothorax transverse, at least 1.3 times as wide as long. Elytra unicolored.
- 4(7) Antennae entirely or largely fulvous.
- 5(6) Head without cavity in male. Length: 5–7 mm. Southern Vietnam, Thailand ..... *H. fulva* KIMOTO, 1989
- 6(5) In male, head with transverse cavity on frons and with distinct projection on posterior margin of clypeus. Length: 4.5–5.7 mm. Laos. .... *H. frontalis* KIMOTO, 1989
- 7(4) Antennae entirely or largely black.
- 8(9) Elytra and underside black. In male, head with cavity and triangular tooth on its anterior margin, antennae with segments 3–5 slightly deformed. Length: 4.7–5.7 mm. Thailand. .... *H. bicolor* sp.nov.

- 9(8) Elytra fulvous.
- 10(11) Clypeus rectangular, flat, with very feeble longitudinal ridge. In male labrum with triangular tubercle on anterior margin. Aedeagus – Fig. 45. Length: 5.5–6.6 mm. Southern Vietnam. .... *H. clypealis* sp.nov.
- 11(10) Clypeus triangular, convex. Labrum not modified.
- 12(13) Head with cavity in male. Legs fulvous with black tibiae and tarsi. Frons broad. Upperside with microsculpture. Elytra with distinct punctures arranged in irregular geminate rows and a few feeble longitudinal costae. Length: 6.8–7.5 mm. Vietnam, Laos, Thailand. ....  
..... *H. nigricornis* KIMOTO, 1989
- 13(12) Head without cavity in male. Upperside glossy, without microsculpture. Elytra smooth or feebly irregular punctate. Genae very short.
- 14(15) Antennae of male with very long erect hairs comparable with length of corresponding segment. Body red, antennae, tibiae, tarsi and ventral surface black. Aedeagus (Fig. 44) very thin and deeply bifurcate. Length: 3.8–4 mm. Southern Vietnam. .... *H. rubra* sp.nov.
- 15(14) Antennae of male with hairs much shorter than length of corresponding segment.
- 16(17) Head behind antennal bases and labrum black; tibiae and tarsi darkened, underside fulvous. Erect hairs in male not longer than width of corresponding segment. Aedeagus – Fig. 47. Length: 3.8–4.5 mm. Northern Vietnam. .... *H. nigrilabris* sp.nov.
- 17(16) Head and legs fulvous, underside black. Frons narrow. Antennae of male with hairs much longer than width of segment and subparallel to axis of segment. Aedeagus – Fig. 41. Length: 3.7 mm. Thailand. ....  
..... *H. pallida* sp.nov.
- 18(1) Upperside or at least elytra metallic.
- 19(22) Ventral surface fulvous. Head not excavated in male. Upperside blue, bluish black, violaceous or green. Antennae reach apical slope of elytra.
- 20(21) Frons almost twice as wide as eye. Prothorax about 1.5 times as wide as long. Aedeagus – Fig. 46. Length: 5–6.3 mm. Southern China, Vietnam, Thailand. .... *H. cyanescens* LABOISSIERE, 1936
- 21(20) Frons distinctly narrower than eye. Prothorax slightly wider than long. Length: 4.2–4.8 mm. Thailand. .... *H. abdominalis* KIMOTO, 1989
- 22(19) Ventral surface black or metallic.
- 23(24) Head and prothorax piceous to black with feeble metallic lustre, elytra dark metallic. In male head with deep cavity, antennal segments 9–10 deformed. Length: 4–6 mm. Thailand. .... *H. tristis* sp.nov.
- 24(23) Upperside entirely metallic.
- 25(26) Head with deep cavity in male, antennal segment 1 strongly flattened and spirally curved (Fig. 37). Length: 4.4–4.5 mm. Thailand. ....  
..... *H. kimotoi* sp.nov.
- 26(25) In male, head without cavity, antennal segments not deformed or only slightly so.

- 27(28) Head fulvous with metallic vertex. Legs dark brown, pro- and mesosternum brownish. Length: 3.3–3.8 mm. Southern Vietnam. ....  
..... *H. minor* KIMOTO, 1989
- 28(27) Head metallic blue or green.
- 29(30) Body metallic blue; mandibles, coxae, femora and base of tibiae fulvous; labrum, antennae, apices of tibiae and tarsi piceous to black. Aedeagus – Fig. 48. Length: 4 mm. Southern Vietnam. .... *H. mandibularis* sp.nov.
- 30(29) Body entirely bluish-black.
- 31(32) Prothorax 1.5 times as wide as long. In male, antennae with segments 3–5 thickly covered with long hairs and 7 distinctly curved. Length: 3.6–3.9 mm. Laos, Thailand. .... *H. antennalis* KIMOTO, 1989
- 32(31) Prothorax 1.25 times as wide as long. Antennae slender, not modified in male. Length: 3.9–4.5 mm. Southern Vietnam. ....  
..... *H. elongata* KIMOTO, 1989

***Platyxantha costata* sp.nov.**

Figs 49, 51, 52

**Material examined.** Holotype male (LM): Vietnam, prov. Gialai-Contum, Buon Loi, 40 km N Ankhe, 700 m, 8. VI. 1980, L. Medvedev.

**Description.** Male. Dark piceous to black; labrum, clypeus, coxae, femora and tibiae except apices fulvous, elytra dark blue.

Labrum with curved ridge near anterior margin (Fig. 51), clypeus rectangular, feebly concave, with central ridge. Frontal tubercles strongly transverse, frons twice as wide as eye; genae very short anteriorly, but distinctly widened behind. Head without punctures, densely microsculptured. Antennae reach apex of elytra, proportions of segments: 16–2–14–15–15–14–14–14–13–13–13. Prothorax 1.4 times as wide as long, densely microsculptured, indistinctly punctate; transverse impression deep on sides, feeble in middle. Elytra microsculptured with 8 sharp costae, interspaces with 1–2 rows of punctures. Segment 1 of anterior tarsi widened (Fig. 52). Aedeagus – Fig. 49.

Length: 5.9 mm.

**Remarks.** This species resembles *Theopea* BALY, 1864 because of its strongly costate elytra, but the hind tibiae have no spurs. Rather large eyes and short genae, as well as bifurcate aedeagus, correspond to *Hyphaenia* but the male antennae male lack erect hairs. I give this species preliminary allocation to *Platyxantha*; it differs distinctly from other species of *Platyxantha* in having strongly costate elytra.

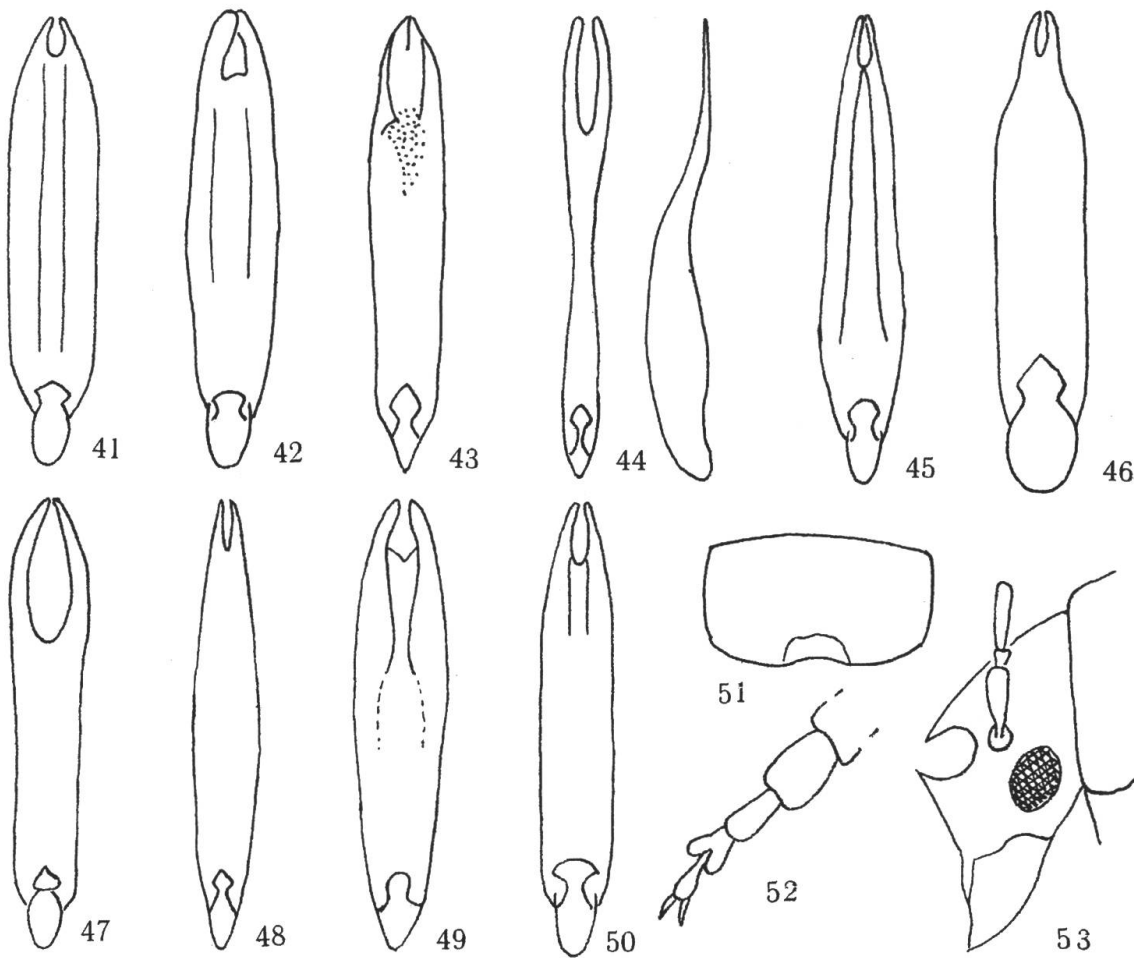
***Platyxantha bicornuta* sp.nov.**

Figs 50, 53

**Material examined.** Holotype male (LM): Vietnam, prov. Vinh Phu, Tam Dao, 800–1200 m, forest, 12–22. IV. 1986, L. Medvedev.

**Description.** Male. Fulvous; apical segment of antennae black, elytra bluish green with elongate-triangular fulvous spot near middle of side margin.

Body elongate, widened posteriorly. Head impunctate, microsculptured, clypeus with conical horn; another horn strongly flattened laterally and placed just before



**Figs 41–53:** 41–47 – aedeagus of *Hyphaenia* spp., ventral ( 44 also lateral); 41 – *H. pallida*; 42 – *H. bicolor*; 43 – *H. kimotoi*; 44 – *H. rubra*; 45 – *H. clypealis*; 46 – *H. cyanescens*; 47 – *H. nigrilabris*; 48 – *H. mandibularis*; 49, 51, 52 – *Platyxantha costata*: 49 – aedeagus, 51 – labrum, 52 – anterior tarsus of male; 50, 53 – *P. bicornuta*: 50 – aedeagus, 53 – head.

antennal base (Fig. 53). Frons deeply excavated on each side between horns and eye, the bottom of this excavation very glossy, without microsculpture. Antennae a little longer than body, proportions of segments: 15–3–13–15–15–14–13–13–13–11, segment 3 slightly curved. Prothorax 1.5 times as wide as long, slightly rounded on sides, surface impunctate, densely microsculptured, with deep, uninterrupted impression behind middle. Elytra microsculptured, finely punctate, partly in irregular rows, with feeble longitudinal ridges and oblique impression on fulvous spot, delimited behind with a blunt tubercle. Segment 1 of all tarsi elongate, but wider on anterior ones. Aedeagus – Fig. 50.

Length: 6.2 mm.

**Differential diagnosis.** This species is a typical *Paraenidea* LABOISSIERE, 1933, which has been unified with the genus *Platyxantha* (KIMOTO 1989). It differs immediately from its congeners in the two horns on the head, impressions on the elytra and the colour of the upperside.

*Antiphula pallida* sp.nov.

Fig. 54

**Material examined.** Holotype male (NHMB) and 6 paratypes (NHMB, 2 ex. – LM): Thailand, Umphang river (16.07N, 99.00E), 1000 m, 28.IV–6.V.1991, V. Kubáň.

**Description.** Fulvous, antennae sometimes more or less darkened.

Body parallel-sided. Head finely punctate, clypeus triangular, interantennal space narrow, frontal tubercles triangular, sharply delimited behind. Segment 3 of maxillar palpus widened to apex, last segment very small, conical. Antennae reach apical slope of elytra, segment 2 the shortest, feebly elongate; 3 about 1.5 times as long as 2, 4 a little longer than 3 and subequal with the next segments. Prothorax 1.5 times as wide as long, widest in anterior third, distinctly narrowed to base, all angles acute, with a pore and bristle, anterior border unmarginated, surface convex, finely punctate. Elytra 1.5 times as long as wide, without any impressions, densely microsculptured and finely irregular punctate. Anterior coxal cavities very narrowly open, almost closed. Hind tibiae without spur. Aedeagus (Fig. 54) with underside convex, slightly flattened apically.

Length: 3.4–4.4 mm.

**Remarks.** The generic position of this species is unclear. I give it preliminary allocation to *Antiphula* JACOBY, 1892. It has the general appearance of a very small *Cneorane* BALY, 1865, but differs from this genus in its almost closed anterior coxal cavities. The typical *Antiphula* with the single species *A. semifulva* JACOBY, 1892 has the prothorax strongly narrowed towards the base, elytra with raised basal part, and a different colour.

*Antiphula discalis* sp.nov.

Fig. 55

**Material examined.** Holotype male (NHMB) and 3 paratypes (NHMB, 1 ex. – LM): Thailand, Umphang river (16.07N, 99.00E), 1000 m, 28.IV–6.V. 1991, V. Kubáň.

**Description.** Very near to preceding species, differs mostly in colour and in structure of aedeagus.

Fulvous, elytra greenish-black with fulvous lateral and apical margins, vertex sometimes darkened to black. Antennae of male as long as body, of female reach behind middle of elytra. Upperside with finer punctures, almost imperceptible, especially on elytra. Aedeagus (Fig. 55) longitudinally grooved on underside.

Length: 3.6–4.2 mm.

## Alticinae

*Luperomorpha minutissima* sp.nov.

Fig. 56

**Material examined.** Holotype male (NHMB) and 5 paratypes (NHMB, 2 ex. – LM): NW Thailand, Mae Hong Son, Ban Huai Po, 1600–2000 m, 9–16.V.1991, J. Horák.

**Description.** Black; head, 5 basal segments of antennae, prothorax and legs, except hind femora red fulvous; humeral area of elytra sometimes more or less reddish.

Body robust. Head impunctate, with dense microsculpture, especially on vertex; frontal tubercles feeble, subquadrate, poorly delimited behind; interantennal space

carinate. Antennae short, reaching a little behind humerus, segments 2 and 3 equal, a little longer than broad, 4–10 slightly thickened, a little longer, subequal, each of them about 1.2–1.3 times as long as wide. Prothorax 1.6–1.7 times as wide as long, broadest in middle, with sides rounded, evenly convex, impunctate, but very densely microsculptured. Elytra 1.4 times as long as wide, evenly convex, with very sparse shallow punctures among dense microsculpture. Segment 1 of anterior and mid tarsi enlarged in male. Aedeagus (Fig. 56) almost straight in lateral view.

Length: 1.65–1.8 mm.

**Differential diagnosis.** Near *L. nigripennis* DUVIVIER, 1892 and *L. maini* SCHERER, 1969, both from India, but body much smaller, aedeagus very different, without triangular acute apex, antennal segments robust.

***Sphaeroderma capitis* sp.nov.**

Fig. 57

**Material examined.** Holotype male (LM): Thailand, Khao Sok (8.55N, 98.45E), 12. XI. 1995, M. Mostovsky.

**Description.** Red fulvous with antennae and legs more pale, head black.

Body short ovate, strongly convex. Head with sharp interantennal ridge and transverse frontal tubercles; vertex impunctate, very glossy. Antennae almost as long as body, proportions of segments: 13–7–6–9–10–9–10–10–11–11–19. Prothorax glossy, very finely and sparsely punctate. Scutellum triangular, impunctate. Elytra with 7–8 rather regular rows of punctures, confusedly punctate along suture. Segment 1 of anterior and mid tarsi strongly widened in male. Aedeagus (Fig. 57) with finger-like process on apex, underside with elongate groove before apex, longitudinally impressed in middle part.

Length: 4.2 mm.

**Differential diagnosis.** This species is near *S. tonkineum* CSIKI, 1940, but the latter species has frontal tubercles poorly delimited behind, prothorax distinctly punctate, elytra nearly irregular punctate, antennae short and head fulvous. *S. nigriceps* SCHERER, 1969 has black antennae and legs.

**Genus *Platysphaera* gen.nov.** Fig. 58

**Type species:** *Sphaeroderma indochinensis* CHEN, 1934

**Description.** Body rounded oval, moderately convex. Interantennal ridge low, frontal tubercles distinct, transverse. Antennae reach middle of elytra. Prothorax twice as broad as long, rounded laterally, surface without impressions. Elytra wider than prothorax, irregularly punctate, with irregular rows laterally. Epipleurae broad, moderately narrowed behind. Prosternum broad, almost flat, slightly expanded behind. Femora broad and flattened, especially on hind legs, tibiae widened at apex, with deep furrow on outer side, angularly widened before apex, this angulation is rather feeble on fore and hind tibiae and very marked on mid tibiae (Fig. 58), 1st segment of tarsi wide, 2nd small, 3rd strongly widened, not split. Claws appendiculate. Aedeagus with teeth before apex.

**Differential diagnosis.** This genus is near *Sphaeroderma* STEPHENS, 1831, but differs in having angular dilatation of tibiae and less convex body.

*Platysphaera thaiensis* sp.nov. Fig. 59

**Material examined.** Holotype male (NHMB) and 2 paratypes (NHMB, LM): NW Thailand, Doi Suthep, 19–23.IV.1991, J. Farkač. – Paratypes: Thailand, Chumphon prov., Pha To env. (9.48N, 98.47E), 14–21.III.1996, P. Průdek, 3 females.

**Description.** Fulvous with antennal segments 4–11 black, tibiae sometimes darkened. Body ovate, moderately convex. Head impunctate, but finely strigose, clypeus longitudinally ridged, frontal tubercles transverse, delimited behind with a straight line, anterior angles acute and produced to interantennal space. Antennae reach almost to the middle of elytra, segments 2 and 3 subequal, feebly elongate, segment 4 a little longer than 3, next segments more elongate and subequal to each other, about 2–2.5 times as long as wide. Prothorax twice as broad as long, widest at base, lateral margins rounded and not angulate near pore, anterior angles rounded, anterior margin straight. Surface with moderately dense and strong punctures. Elytra 1.1 times as wide as long, with 5–6 rather regular rows of punctures, irregularly punctate on sutural part. All tibiae distinctly angulate on outer side before apex, segment 1 of anterior and mid tarsi widened. Aedeagus (Fig. 59) deeply grooved in apical half of underside; this groove delimited on sides with distinct convexity; there are also small teeth at the base of the apical triangle, more distinct in lateral view.

Length: 3.8–4.2 mm.

**Differential diagnosis.** This species is near *S. indochinensis* CHEN, 1934, which is, however, larger (4.2–4.7 mm), dark reddish brown to piceous, with vertex distinctly punctate, antennae darkened from 5th or 6th segment.

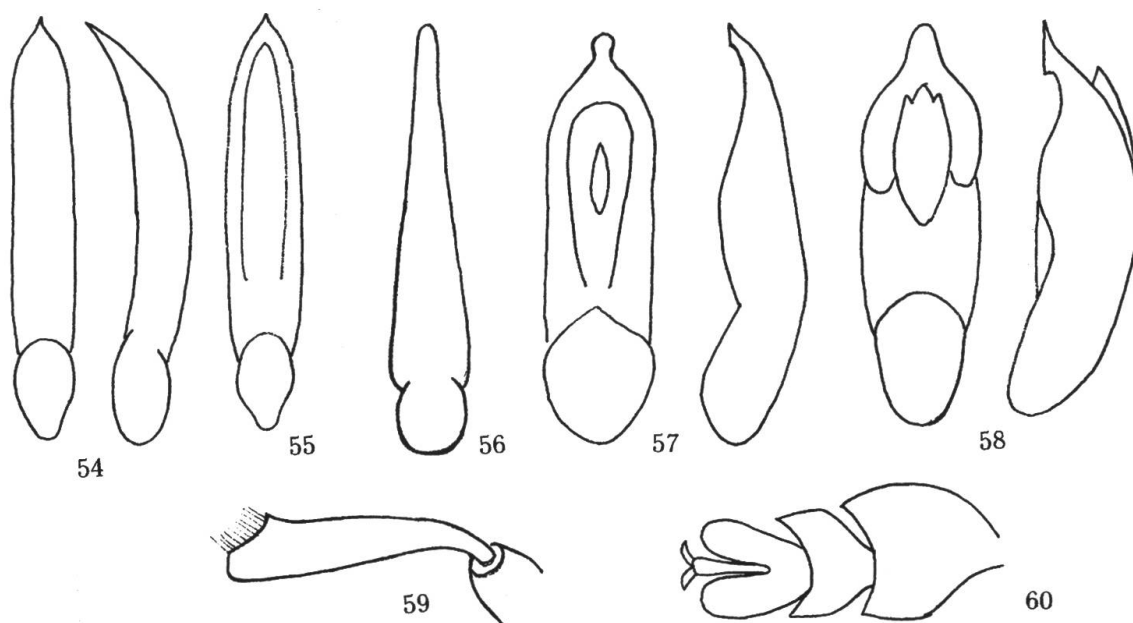
## Hispiinae

*Javeta pubicollis* sp.nov. Fig. 60

**Material examined.** Holotype (NHMB): NW Thailand, Chiang Mai (18.49N, ??.99E), Doi Suthep to Doi Pui, 19–23.IV.1991, L. Dembický; – paratypes: same locality and date, Doi Suthep, J. Farkač, 15 ex. (NHMB, 2 ex. – LM).

**Description.** Pale flavous, antennae, underside except proepipleurae and legs except anterior femora and tibiae black.

Body narrow, elongate, convex. Frons narrow, strongly elevated between and above antennae, vertex impunctate. Antennae equal in length to head and thorax together, thickened apically, with last segment acute on apex. Prothorax about 1.1 times as long as wide, basal margin distinctly bisinuate, anterior margin convex, surface with 4 grooves along anterior margin, divided with obtuse ridges and covered with dense erect hairs; other depressions are near hind angles and before scutellum; a few strong punctures placed in the middle of basal part. Elytra with 10 rows of large punctures, but



**Figs 54–60:** 54 – *Antiphula pallida*, aedeagus; 55 – *A. discalis*, aedeagus; 56 – *Luperomorpha minutissima*, aedeagus; 57 – *Sphaeroderma capitis*, aedeagus; 58 – *Platysphaera indochinensis*, midtibia; 59 – *P. thaiensis*, aedeagus; 60 – *Javeta pubicollis*, anterior tarsus.

outermost row broadly interrupted in middle; interspaces very narrow, 3rd, 5th and 7th ridged. Tarsi very broad, anterior tarsi asymmetrical (Fig. 60).

Length: 5–6 mm.

**Differential diagnosis.** Near *J. pallida* BALY, 1858 from southern India, but antennae, tarsi and underside black, prothorax pubescent on anterior margin. Differs from Chinese *J. foveicollis* GRESSITT, 1939 in having black antennae, underside and legs, different prothorax sculpture and 10 rows of punctures at base of elytra.

#### *Agonita apicata* sp.nov.

**Material examined.** Holotype (LM): Thailand, Khao Sok (8.55N, 98.45E), 12. XI. 1995, M. Mostovsky.

**Description.** Fulvous, elytra black with apical quarter flavous, metasternum black.

Body narrow, elongate. Head impunctate, clypeus quadrangular, feebly transverse. Antennae scarcely reach base of prothorax, segments 1–7 elongate, subequal; 8–10 short, as long as wide; 11 elongate, with acute apex. Prothorax as long as wide, narrowed anteriorly, emarginate on sides, anterior margin with a row of 5 punctures on each side, surface with strong, rather sparse punctures, mostly in centre and near sides, and with oblique impression on each side before base. Scutellum smooth, truncate at apex. Elytra twice as long as wide, slightly broadened towards the rear, with 2 feeble costae. There are 2 rows of punctures between suture and 1st costa and between 1st and 2nd costae, but in the latter case punctures mostly transversely connected and divided with transverse ribs. Humeral costa practically imperceptible (only traces on humerus and

extreme apex; there are 4 rows between 2nd costa and lateral margin in hind part, outermost row reduced anteriorly. Extreme apex very feebly dentate.

Length: 4.2 mm.

**Differential diagnosis.** Near *A. andrewesi* WEISE, 1897 from southern India, differs in fulvous antennae and apical quarter of elytra, black breast and different sculpture of prothorax.

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