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Taxonomical study of Chrysomelidae (Coleoptera) from Nepal

by L. N. Medvedev and Eva Sprecher-Uebersax

Abstract. 13 new species are described, all but one from Nepal: *Lema eroshkinae* (Indochina), *L. kimotoi*, *Cryptocephalus pokharensis*, *Thelyterotarsus costatus*, *Trichochrysea truncata*, *Xanthophorus nepalica*, *Cleoporus lineatus*, *Tricliona microdentata*, *Semenovia daccordii*, *Pyrrhalta martensi*, *Calomicrus annapurnae*, *Japonitata mirabilis*, *Agonita laeta*. New synonyms: *Melixanthus luridus* Motschulsky-b.sp. (= *M. placidus* Baly), *M. atricillus* Suffrian (= *C. kuluensis* Lopatin), *Coenobius fulvipes* Baly (= *C. lateralis* Weise, *C. fulvicornis* Jacoby, *C. manipurensis* Jacoby, *C. pallipes* Jacoby, *C. bhaktai* Lopatin, *C. pakistanicus* Lopatin, *C. wittmeri* Lopatin), *Nodina robusta* Jacoby (= *N. crassipes* Jacoby), *Pyrrhalta scutellata* Hope (= *P. tumida* Gressitt & Kimoto), *Altica cyanea* Weber (= *A. nepalensis* Döberl), *Bromioides* Jacoby (= *Pachnephoptus* Reitter). *Basilepta nepalense* Chûjô is transferred to *Cleorina* Lefèvre. *Cleorina takizawai*.- n.n. for *C. nepalensis* Takizawa 11 species are firstly recorded for Nepal. Keys for *Lema nigricollis* group, *Nodina* and *Colaspoides* are given.

Key words. Chrysomelidae - Nepal - taxonomy - new species - new synonyms

Introduction

During our preparation of a catalogue of Chrysomelidae from Nepal we have found some new species and a few synonyms which are given below as well as notes for species recorded for the first time from Nepal. A key for a few genera is also given.

The abbreviations are used for depository places of type material:

NHMB Naturhistorisches Museum Basel
 EM Naturkundemuseum Erfurt
 HMB Hungarian Museum of Natural History Budapest
 SMNS Staatliches Museum für Naturkunde Stuttgart
 LM L. N. Medvedev's collection

Lema nigricollis group

The species usually cited as *L. nigricollis* Jacoby, 1891 seems to be incorrectly interpreted. KIMOTO & GRESSITT (1979) mentioned this species in the key for Indochina as having a „pronotum with 2 distinct transverse furrows“ (page 233). All our indications for *L. nigricollis* (MEDVEDEV, 1985) and very possibly a record for Nepal (TAKIZAWA, 1987) belong to the species with 2 transverse grooves on prothorax. On the other side, KIMOTO (1967) indicated *L. nigricollis* for Sikkim and Darjeeling. We have seen a specimen from Sikkim with Kimoto's determination, which is another species with one transverse groove on prothorax. We accept this species to be a real *L. nigricollis*, because M. JACOBY (1908) definitely indicates „the thorax with a single sulcus“ (page 70). We have also a specimen from Burma with 2 grooves on prothorax with determinations: „*L. haematomelas* Lacordaire“ (Jacoby's handwriting) and „*L. nigricollis* Jacoby, det. Heinze“ and quite identical specimen from Sumatra with a label „*L. drescheri* Heinze, in litt.“.

Because of all this we propose the following key for the *Lema* species with black prothorax and fulvous elytra.

- 1 Prothorax with one transverse groove. Antennae, prothorax and legs entirely black
- Prothorax with two transverse grooves. Antennae and head black, vertex with two red spots. Base of prothorax mostly red3

- 2 Head black, vertex with two red spots and longitudinal groove, its anterior angle about 60°. Prothorax moderately constricted in middle (Fig.1), practically impunctate. Underside black with apex of last sternite red. Body large, 6-7 mm. Assam, Sikkim, Burma*L. nigricollis* **Jacoby**
- Head entirely black, vertex with small fovea, its anterior angle about 90-100°. Prothorax strongly constricted in basal third (Fig.2), distinctly punctate in middle and near anterior angles. Underside red with sides of metasternum black. Body small, 3.6-4 mm. North Vietnam, Northwest Thailand..... *L. eroshkinae* **sp.n.**
- 3 Underside and legs entirely black. Elytra with very weak basal swelling and feebly or indistinctly impressed behind it. Length 6-6.5 mm. Nepal, Burma, Vietnam, Sumatra*L. kimotoi* **sp.n.**
- Underside and legs at least partly red or fulvous. Elytra distinctly swollen on base and clearly depressed behind swelling4
- 4 Prothorax strongly constricted just behind middle, nearly impunctate. Head and antennae black. Underside and hind femora red, fore and mid femora red beneath. Length 6.8 mm. East China (Chekiang)*L. becquarti* **Gressitt**
- Prothorax weakly constricted behind middle, rather closely and strongly punctate. Head reddish brown, darkened behind, antennae reddish brown. Underside castaneous with testaceous apex of abdomen, legs castaneous with pale tarsi. Length 5.8 mm. West China (Szechuan).....*L. piceocastanea* **Gressitt & Kimoto**

Lema (s.str.) *eroshkinae* **sp.n.**

Fig. 2

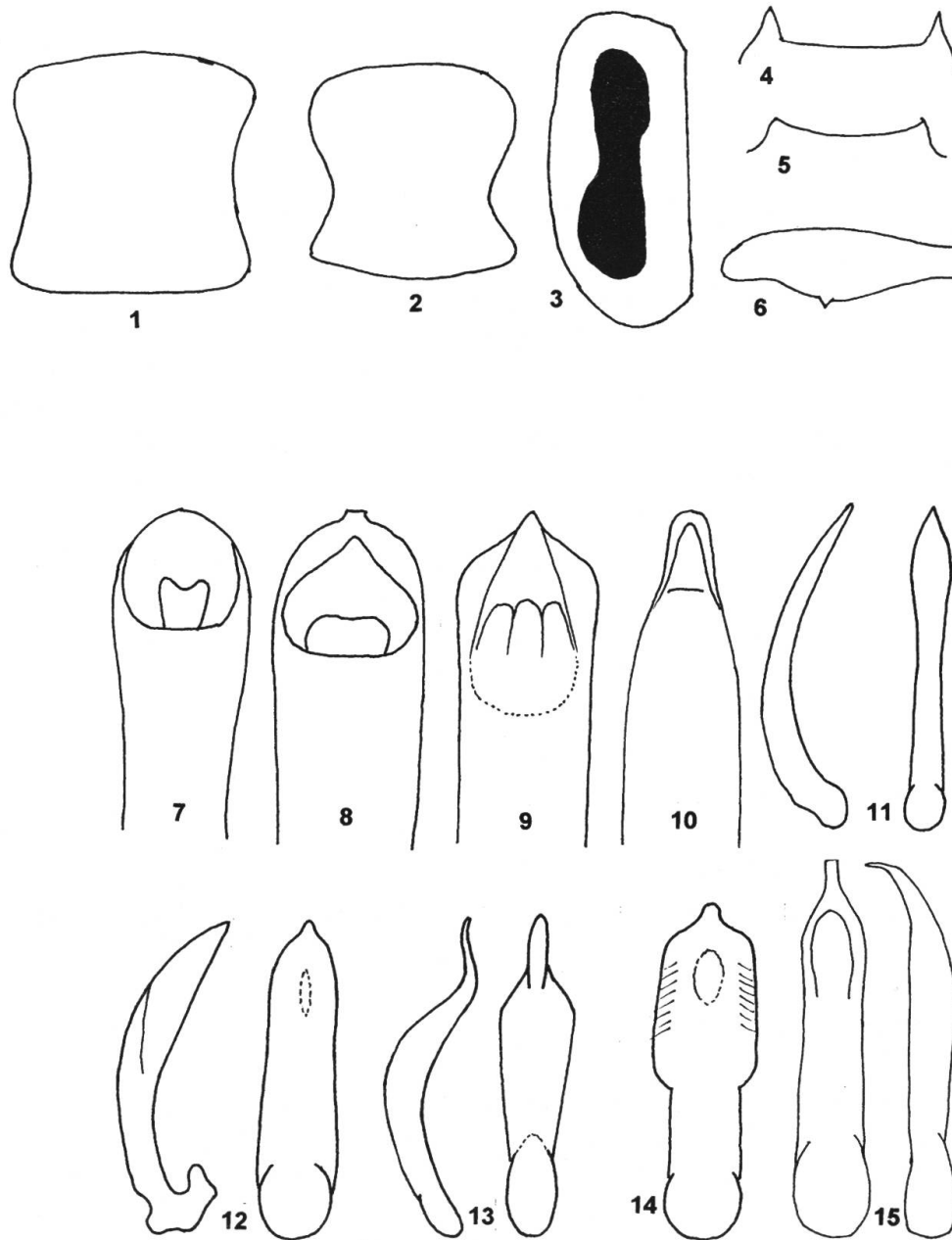
Holotype and 2 **paratypes** (LM): Vietnam, prov. Vinh-Phu, Tam Dao, 800-1200 m, forest, 12-22.iv.1986, L. Medvedev & al.; 1 **paratype** (NHMB): NW Thailand, Soppong-Pai, 1800 m, 1-6.v.1991, Pacholátko.

Diagnosis. Near *L. nigricollis* Jacoby, differs in the form and sculpture of prothorax, small size and fulvous underside.

Description. Black, elytra and underside red, sides of metasternum black. Head with eyes almost as wide as prothorax, clypeus triangular, punctured and pubescent, frontal tubercles sharply delimited, smooth and shining, vertex with anterior angle about 90-100°, smooth and shining, with a small round fovea in middle. Eyes strongly convex, feebly emarginate. Antennae reaching basal quarter of elytra, segment 3 longer than 2 and a little shorter than 4, segment 5 longer than 4, next segments subequal to 4. Prothorax as long as wide, strongly constricted in basal third, very convex before constriction, with double row of strong punctures in middle and a group of punctures along anterior margin and especially near anterior angles. Scutellum trapeziform. Elytra 1.5 × as long as wide, slightly swollen at base, without distinct postbasal impression, with regular rows of rather strong punctures not weakened apically; scutellar row short. All tarsi very thin and long.

Length of body: 3.6-4 mm.

Name derivation. This species is dedicated to Miss Galina Eroschkina, studying Eumolpinae of Vietnam, who took part in collecting this material.



Figs 1-15. 1-2: Prothorax: 1, *Lema nigricollis* Jacoby. 2, *L. eroshkinae* sp.n. 3, *Cryptocephalus pokharensis* sp.n., elytron. 4-5: *Trichochrysea truncata* sp.n., anterior margin of clypeus: 4, ♂. 5, ♀. 6, *Tricliona microdentata* sp.n., anterior femur. Figs 7 -15: aedeagus: 7, *Nodina dhadinga* Medvedev, dorsal. 8, *N. robusta* Jacoby, dorsal. 9, *N. parvula* Jacoby, dorsal. 10, *N. nepalensis* Takizawa, dorsal. 11, *Colaspoides subrugosa* Jacoby, ventral and lateral. 12, *C. bengalensis* Duvivier, ventral and lateral. 13, *Semenowia daccordii* sp.n., ventral and lateral. 14, *Trichochrysea truncata* sp.n., ventral. 15, *Calomicrus annapurnae* sp.n., ventral and lateral.

***Lema* (s.str.) *kimotoi* sp.n.**

Lema nigricollis: KIMOTO & GRESSITT, 1979: 233, 250 (nec Jacoby); MEDVEDEV, 1985: 74

Holotype and 1 **paratype** (LM): South Vietnam. Prov. Gialai-Contum, Buon-Loi, 40 km N Ankhe, 700 m, 1.vii.1982, L. Medvedev; 1 **paratype** (NHMB): Prov. Hoang-Lien-Shon, Shapa, 11.-15.v.1990, V. Kubáň; 1 **paratype** (NHMB): East Nepal, Arun Valley, Chichila, 1950 m, 11.v.1983, Haenni; 1 **paratype** (LM): Vietnam, Prov. Gialai-Contum, Bien Ho, 16.x.1979, L. Medvedev; 2 **paratypes** (LM): Vietnam, Prov. Lam-Dong, Bao Lok, 2.vi.1980, L. Medvedev; 1 **paratype** (LM): Burma, Carin Cheba, 900-1100 m, v.-xii.1888, L. Fea, with Heinze's label „*L. nigricollis* Jacoby“; 1 **paratype** (LM): Sumatra 1883, Machik.

Diagnosis. Differs from *L. nigricollis* Jacoby in having two transverse grooves on prothorax, from Chinese *L. becquarti* Gress. and *L. piceocastanea* Gressitt & Kimoto in black underside and legs, as well as the other sculpture of elytra.

Description. Black, vertex with two red spots, scutellum and elytra reddish fulvous.

Body robust. Head with pubescence longer on clypeus and shorter along eyes, clypeus smooth, triangular. Frontal tubercles elongate triangular, convex, distinctly separated behind from vertex, which is smooth anteriorly and punctured in hind part. Eyes deeply emarginate. Antennae reaching anterior quarter of elytra, segment 2 short, subglobular, segment 3 about 1.5× as long as 2 and equal to 4, segment 5 longer than 4 and subequal to the next segments. Prothorax 1.2× as wide (in the broadest place) as long, strongly constricted just behind middle, strongly widened anteriorly and moderately to base, surface with two transverse grooves, anterior groove interrupted in middle, punctation fine and very sparse, not distinct. Elytra 1.7× as long as wide, with very feeble postbasal depression and rows of strong punctures, not weakened to apex; interspaces flat on dorsum, costate on apex and along side margin.

Length of body: 5.6-6.7 mm.

***Aspidolopha lesagei* Takizawa, 1987**

Remarks. We have studied the holotype of this species and found that it belongs to the American genus *Saxinis*. There is no doubt that it is a case of mislabelling. A more exact determination will be published later; for the moment we exclude this species from the Nepalese fauna.

***Aetheomorpha nitidicollis* (Jacoby, 1908) comb.n.**

Material examined. Nepal, Annapurna Mts., Marsyangdi valley, Syangde, 1000-1200 m, 25.viii.1995, Schmidt, 1 ex.

Remarks. Recorded for the first time from Nepal, it was described from Assam in the genus *Aspidolopha*. The specimen in question was compared with the type.

***Aetheomorpha pictipennis* (Jacoby, 1892)**

Material examined. Nepal, Annapurna Mts., Marsyangdi valley, Syangde, 1000-1200 m, 25.viii.1995, Schmidt, 1 ex.

Remarks. Recorded for the first time from Nepal, it was described from Burma and found also in Vietnam. Specimen compared with the type.

***Melixanthus luridus* (Motschulsky) stat.n.**

Monachus luridus Motschulsky, 1866, Bull. Mosc. 39: 411 (resurrected from synonymy to *M. hians* Suffrian, 1860)

Melixanthus placidus Baly, 1877, Trans. Ent. Soc. London: 217, **syn.n.**

Material examined. Nepal, Pokhara, 28-31. iii. 1994, Ahrens, 2 ex.

Remarks. We have studied Motschulsky's types of *M. luridus* from Sri Lanka and found their full identity with *M. placidus* Baly. Motschulsky's species was synonymized with *M. hians* Suffrian by J. Weise, but according to the description the latter species is much smaller and with the prothorax distinctly punctate.

Distribution. Firstly recorded for Nepal, widely distributed in South China and Indochina (all indications as *M. placidus* Baly).

***Melixanthus atricillus* (Suffrian, 1854)**

Melixanthus kuluensis Lopatin, 1979, **syn.n.**

Remarks. *Melixanthus kuluensis* Lopatin, 1979 from North India is a new synonym of this species, widely distributed in India and Indochina.

Genus *Coenobius* Suffrian, 1857

More than 30 species are known from India and neighbouring regions; at least 12 of them were recorded from the Himalayan area. This genus was never deeply revised; descriptions of many species were based on 1-2 specimens. Among them black species with fulvous legs are especially difficult for determination. Practically only 3 characters were used for this group: colour of antennae (entirely fulvous or with black apical segments), punctuation of prothorax (impunctate, finely punctate at sides or strongly punctate at sides and finely in the middle) and lateral grooves of prothorax (present or absent).

We had an opportunity to study most of Jacoby's types in the Museum of Comparative Zoology (Cambridge) and Weise's types in the Zoological Museum of Berlin, as well as Lopatin's types in the Natural History Museum (Basel). Formally these species divide as follows:

1. Antennae with black apical segments. Prothorax without lateral grooves:

C. fulvipes Baly - prothorax mostly strongly punctate, sometimes punctures rather feeble.

C. manipurensis Jacoby - prothorax impunctate or with a few punctures laterally; legs often more or less darkened, but not black.

C. bhaktai Lopatin - in type series (3 ex.) prothorax either distinctly punctate at sides and finely in middle, or finely punctate; 1 paratype with traces of lateral grooves. Antennae described as entirely fulvous, but 2 specimens have last two segments darkened, 1 specimen with 4 darkened segments.

C. pakistanicus Lopatin (type series 3 ♀) - prothorax distinctly (2 ex.) or feebly (1 ex.) punctate, 1 specimen has traces of lateral grooves. Antennae are given in the description as fulvous, but two apical segments are darkened (2 ex.).

C. chalceus, det. Lopatin - a series of 22 specimens in the Basel Museum, erroneously determined (the real *C. chalceus* Jacoby has aeneous upperside and black legs). Prothorax varies from impunctate to distinctly punctate, lateral grooves in a few specimens more or less distinct, hind legs often more or less darkened.

2. Antennae with black apical segments. Prothorax with lateral grooves:

C. wittmeri Lopatin (type series 2 ♂♂) - prothorax punctate at sides in holotype and practically impunctate in paratype.

C. pallipes, det. Lopatin - a series in Basel Museum from Bhutan and North India. Prothorax smooth or punctate on sides. Corresponds well to Jacoby's description except black antennal segments.

C. laevicollis, det. Lopatin - 2 specimens in NHMB from Bhutan. Prothorax finely or strongly punctate on sides.

3. Antennae entirely fulvous. Prothorax without lateral grooves:

C. fulvicornis Jacoby. Description based on 2 specimens from Assam, prothorax more or less punctured on sides. M. Jacoby mentioned in the description that its difference from other species is doubtful because of possible variation.

C. lateralis Weise. Prothorax strongly punctate at sides, feebly in middle. JACOBY (1908) indicates: „Whether this species is specifically differs from *C. fulvipes* is doubtful“.

4. Antennae fulvous. Prothorax with lateral groove:

C. pallipes Jacoby. Prothorax impunctate. In large series from Bhutan, Nepal and Darjeeling area (more than a hundred specimens) we can find forms corresponding to all species mentioned above and many transitional specimens. Lateral grooves and punctures of prothorax are especially variable. No constant characters were found for dividing this material in a few species.

Because of this we reduce all representatives of the group in question to one species:

***Coenobius fulvipes* Baly, 1877**

C. lateralis Weise, 1903, **syn.n.**

C. fulvicornis JACOBY, 1908, **syn.n.**

C. pallipes JACOBY, 1908, **syn.n.**

C. manipurensis JACOBY, 1908, **syn.n.**

C. bhaktai Lopatin, 1995, **syn.n.**

C. pakistanicus Lopatin, 1995, **syn.n.**

C. wittmeri Lopatin, 1995, **syn.n.**

***Coenobius baronii* Lopatin, 1979**

Material examined. East Nepal, Chitre-Tatopani, 110-2500 m, 11.v.1984, C. Holzschuh, 1 ex.

Remarks. The specimen in question has a less strongly punctured prothorax and fulvous apices of elytra, but in all main characters corresponds well with Lopatin's type.

***Coenobius indicus* Weise, 1913**

Material examined. Nepal, Gandaki N Pokhara, 30.vii.1995, 2000 m, O. Gorbunov, 1 ♂ (LM).

Remarks. This species, described from South India, was determined under question. The specimen from Nepal has fulvous anterior legs with dark tarsi, mid and hind legs piceous black with dark brown knees; all tarsi are long and broad.

***Cryptocephalus* (s.str.) *pokharensis* sp.n.**

Fig. 3

Holotype (♀, LM): Nepal, Annapurna Mts., Gandaki N Pokhara, 2000 m, 30.vii.1995, O. Gorbunov.

Description. Fulvous, elytra and especially head paler than prothorax, basal teeth of prothorax, breast and abdomen (except process between coxae) black, elytra with narrow basal emargination, longitudinal stripe, shortened on both ends (Fig. 3), epipleura and

narrow lateral margin under humerus black.

Body elongate, cylindrical. Head flat, sparsely punctate on clypeus and middle of frons, impunctate laterally near eyes, distance between eyes almost twice as wide as between antennal bases. Antennae (broken) thin and long, segment 2 twice as long as wide, 3 almost twice as long as 2, 4 a little longer than 3, 5 is longest, about 6× as long as wide, 6-8 slightly widened, about 4-5× as long as wide. Prothorax 1.65× as wide as long, strongly convex, narrowed anteriorly, distinctly denticulate at base, very finely and sparsely punctate, shining. Scutellum triangular, flat, not notched on anterior margin. Elytra parallel-sided, 1.3× as long as wide, with regular rows of punctures and flat or feebly convex, impunctate interspaces, shining. Epipleura with a row of punctures. Pygidium feebly convex, punctate and microsculptured. Prosternum with anterior margin concave, posterior margin incised in middle, with two teeth. Claws with obtuse tooth.

Length 4.3 mm.

Remarks. We can not connect this species with any Indian species, having a stripe on elytra, because of the cylindrical body, the unspotted prothorax, the pale suture and humeral tubercle. It resembles more or less *C. delkeskampi* Gressitt & Kimoto, 1961 from China, which however has, except the other coloration, a quite different structure of head.

***Thelyterotarsus costatus* sp.n.**

Holotype (♀, LM): Nepal, Prov. Karnali: Distr. Kalokot, 3 km S Jubia, 1850 m, 26.v.1995, A. Weigel.

Diagnosis. Near *T. zarudnii* Jacobson, 1916 from Iran and Afghanistan and *T. similis* Lopatin, 1976 from Central Asia, but differs immediately in having very distinct ridges on elytra. It is the first typical representative of the genus in the Oriental region.

Description. Head black with flavous anterior part, antennae black with fulvous basal segments, prothorax fulvous with punctures, a spot before scutellum and an angular spot black or pitch on each side; scutellum black with fulvous extreme apex. Elytra fulvous, longitudinal stripe along lateral margin (not touching it) from humerus to apex, elongate spot on apical slope near suture and punctures black or very dark brown. Underside black, hind margins of abdominal sternites and apex of pygidium narrowly fulvous. Legs fulvous with darkened apices of tarsi.

Head with long sparse hairs, clypeus with large sparse punctures, frons and vertex more densely punctate, frons about twice as broad as diameter of eye. Antennae reach middle of body, segment 2 globular, segment 3 almost twice as long as 2, segments 3-11 subequal. Prothorax 1.5× as wide as long, narrowed anteriorly, with strong sparse punctures, shining, not pubescent. Scutellum broad triangular, punctured and pubescent. Elytra 1.4× as long as wide, shining, bare, with strongly elevated basal margin, ending with small acute tooth and with 2 ridges: sharp lateral ridge from humerus to apex and another more feeble and short one inside of the first. Surface strongly and densely punctate, without any traces of rows, interspaces as wide as punctures. Pygidium broadly rounded at apex, covered with white pubescence.

Length of body: 3.7 mm.

A key to the genus *Nodina*

Because all species of *Nodina* are very difficult for determination, we give below a revised key for the species known from Nepal:

- 1 Interspaces of elytral rows very densely punctate. Greenish bronze, antennae and legs fulvous. Length 1.6 mm*N. martensi* L. Medvedev
- Interspaces of elytral rows smooth or indistinctly punctate2
- 2 Legs black (sometimes tarsi dark brown). Antennae black with fulvous bases. Female without lateral ridges on elytra. Anterior margin of clypeus arcuate3
- Legs fulvous or bicolorous, if strongly darkened, then body large.....4
- 3 Upperside unicolorous, dark green or dark blue. Aedeagus (Fig. 7) with feebly convex underside, without apical protuberance. Length 2.3-2.6 mm*N. dhadinga* L. Medvedev, 1992
- Upperside bicolorous, prothorax dark cupreous, elytra blue, violaceous or greenish. Length 2 mm. Indication for Nepal (KIMOTO & TAKIZAWA, 1981) needs confirmation*N. aeneicollis* Jacoby, 1895
- 4 Body large, 2.7-3 mm. Upperside greenish bronze. Anterior margin of clypeus almost straight in ♂, arcuate in ♀. Legs fulvous or with dark knees or dark with more or less fulvous femora. Aedeagus (Fig. 8) with short and truncate apical protuberance, underside distinctly concave in middle*N. robusta* Jacoby, 1892
- Body small, not more than 2.2 mm. Legs mostly entirely fulvous5
- 5 Antennae entirely fulvous. Elytra of ♀ with 3 short ridges laterally. Upperside greenish aeneous. Length 1-2 mm*N. indica* Jacoby, 1895
- Antennae black with fulvous basal segments. Elytra of ♀ not or feebly costate laterally. Upperside greenish aeneous6
- 6 Elytra of ♀ not costate laterally. Head and prothorax less strongly punctate. Aedeagus (Fig. 9). Length 1.9-2.1 mm.....*N. parvula* Jacoby, 1892
- Elytra of ♀ with distinct lateral costa. Head and prothorax more strongly punctate. Aedeagus (Fig. 10). Length 1.5-2.1 mm.....*N. nepalensis* Takizawa, 1987

Nodina robusta Jacoby, 1892

Fig. 8

N. crassipes JACOBY, 1908 syn.n.

Remarks. *N. crassipes* Jacoby, 1908, described from Burma, is a new synonym of *N. robusta* Jacoby 1892. A type of *N. crassipes* was studied. The colour of legs varies in this species from entirely fulvous to almost black.

The specimen, erroneously determined as *N. indica* Jacoby (MEDVEDEV, 1992) very possibly belongs to *N. robusta*, however it is rather small (2.6 mm) and has an aedeagus with apical process less truncate and underside only feebly concave in middle.

Nodina nepalensis Takizawa, 1987

Fig. 10

Remarks. We have a small series of this species, partly from the locus typicus, which fully corresponds to the type series, however the aedeagus of ♂ (Fig. 10) differs a little from Takizawa's pictures, and ♀♀ have one quite distinct ridge on elytra. According to the original description the elytron of ♀ is feebly costate obliquely behind humerus, but in 2 paratypes at our disposal this costa is well developed.

***Trichochrysea truncata* sp.n.**

Fig. 14

Holotype (♂, NHMB): East Nepal, Mechi, Dobhan-Phulvari, 800-1200 m, 8.vi.1986, M. Brancucci. **Paratypes** (1 ♂ LM, 1 ♀ NHMB): Mechi, Gonza-Dobhan, 700-2100 m, 6.vi.1985, M. Brancucci.

Diagnosis. Very near to *T. vestita* Baly, 1860 and *T. severini* Jacoby, 1900, but anterior margin of clypeus almost straight, not deeply arcuate, and lateral teeth of ♂ not widened basally.

Description. Greenish aeneous, purplish or bronze, antennal segments 2 and 3 fulvous, upperside with black long hairs and short pale pubescence. Labrum with metallic shine.

Head densely punctate, with a central tubercle on frons, anterior margin of clypeus almost straight, with a tooth on each side, directed forward and comparatively thin in ♂ (Fig. 4), very small in ♀ (Fig. 5). Antennae with apical segments thin and elongate. Prothorax transverse, densely punctate, with glabrous convexity near anterior angles. Elytra with high humeral tubercle, densely punctate. Aedeagus (Fig. 14) practically the same as in *T. vestita* Baly and *T. severini* Jacoby, but the middle part of underside transversely rugose on sides and distinctly concave in middle.

Length of body: 7.3-8 mm.

***Xanthophorus nepalica* sp.n.**

Holotype (LM): Himalayas, Mt. Everest.

Diagnosis. This species has a general appearance of *Aulexis* and differs from *X. fulvicollis* Bryant, 1954, except for different coloration, narrow frons and larger size. From other oriental species of the genus it differs by the large size, broad head, big eyes and narrow frons, as well as prothorax distinctly narrowed anteriorly.

Description. Entirely fulvous, only 4-11 antennal segments dark brown. Body elongate. Head about 1.3× as wide as anterior margin of prothorax, eyes large, frons narrow, as wide as transverse diameter of eye; clypeus depressed, with large shallow punctures, vertex flat, with punctured stripe along eye, almost smooth in middle. Antennae reaching apical slope of elytra, with segment 3 about 2.2× as long as 2 and subequal to 4. Prothorax 1.35× as wide as long, strongly narrowed from middle to anterior margin, with elevations near hind angles, finely and rather densely punctate. Elytra 1.7× as long as wide, slightly widened towards the rear, with high humeral tubercle, densely punctate.

Length of body: 6.6 mm.

***Cleoporus lineatus* sp.n.**

Holotype and 2 **paratypes** (NHMB): Nepal: Piple, 27-30. vi. 1968, E. Woynarovich.

Diagnosis. Because of the toothed femora, this species might be compared only with *C. jacobyi* Medvedev, 1985 (new name for *Paria lefevrei* Jacoby, 1895), but the latter species has a different type of black pattern on the upperside (if developed) and more small tooth on anterior femora.

Description. Red fulvous, 7 apical segments of antennae, 2 spots in middle of prothorax, suture and longitudinal stripe on elytral interspace 5, abbreviated before apical slope black.

Head impunctate, clypeus divided from frons with depression and from antennal base with a sharp ridge. Frons with a feeble longitudinal groove, deeply excavated above eye. Antennae with segments 2-4 subequal. Prothorax convex, narrowed anteriorly, with side margins feebly rounded and anterior angles acute, surface distinctly punctate in middle. Elytra without postbasal depression, with rows of rather large punctures and smooth interspaces. Anterior femora with comparatively small, but very distinct tooth in middle, middle and hind femora with very small tooth.

Length of body: 3.2 mm.

***Rhyparida khasiensis* Jacoby, 1899**

Rhyparida immaculata JACOBY, 1908, **syn.n.**

Material examined. Nepal: Dhawalagiri, Myagdi District, Tatopani, 1100-1400 m, 27.-28.vi.1986, C. Holzschuh, 1 ex.; Khumjung, Khumbu, 3380 m, 9.v.1979, 1 ex.; Mount Everest, 1 ex.

Distribution. New for Nepal, it was known from East India and Assam.

***Cleorina nepalense* (Chûjô, 1966) comb.n.**

Material examined. West Nepal, Dhawalagiri, Myagdi Distr., Kali-G. Khola, Khopchepani-Gasa, 1600-2000 m, 19.vi.1986, C. Holzschuh, 2 spec.

Remarks. *Basilepta nepalense* Chûjô, 1966 is transferred to the genus *Cleorina*. The specimens at our disposal correspond well to Chûjô's description and have feebly, but distinctly convex proepisterna.

***Cleorina takizawai* nom.n.**

Cleorina nepalensis Takizawa, 1985 nec Chûjô, 1966

Remarks. *Cleorina nepalensis* Takizawa, 1985 must be renamed because of the homonymy with *C. nepalense* (Chûjô, 1966).

***Tricliona puncticeps* Duvivier, 1891**

Tricliona apicata Jacoby, 1895, **syn.n.**

Material examined. Arun Valley, Bile - Arun River, 300-2000 m, 26.v.1983, M. Brancucci, 1 ex.

Distribution. New for Nepal, known from India.

***Tricliona glabricollis* Jacoby, 1908**

Material examined. Arun Valley, Tumilingar, 450 m, 12.vi.1983, M. Brancucci, 1 ex.

Distribution. Recorded for the first time from Nepal, it was known from Bengal and South India.

***Tricliona microdentata* sp.n.**

Holotype and 3 **paratypes** (♀♀ NHMB, LM): West Nepal, Kali Gandaki, Tatopani, 1100-1200 m, 22.-24.v.1984, C. Rai. 1 **paratype** (♀ NHMB): Gandaki, Kopchepani, 1500-1600 m, 21.v.1984, C. Rai.

Diagnosis. Differs from all *Tricliona* species in a *Cleoporus*-like body form and very small tooth on femora.

Description. Colour very variable; sometimes body black, head and prothorax red, 5

basal segments of antennae fulvous, base and apex of elytra more or less reddish; in the other case body dark fulvous, 6 apical segments of antennae black, underside and knees more or less darkened, central part of elytra very often with more or less distinct dark patch.

Body robust, ovate, widened toward the rear, very alike to *Cleoporus variabilis*. Head shining, clypeus sparsely, but distinctly punctate, arcuately emarginate anteriorly, delimited laterally with a ridge, not delimited from frons, which is distinctly broader than transverse diameter of eye. Frons and vertex more sparsely and finely punctured, as compared with clypeus, with longitudinal impressed line and deep ocular grooves, but without excavation above eye. Prothorax 1.65× as wide as long, strongly convex, with maximal width before middle, distinctly narrowed anteriorly, side margins arcuate, anterior angles very acute, surface sparsely, but distinctly punctate. Elytra at base broader than prothorax, 1.2× as long as wide, with feeble postbasal impression; punctured rows finer to apex, interspaces flat, shining, impunctate. All femora with a small tooth (Fig. 6). Propleurae impunctate. Length 3.3-3.7 mm.

Genus *Colaspoides* Laporte, 1833

Two species were found in our large material from Nepal, which are connected with 3 species names registered in the literature: *C. subrugosa* Jacoby, 1908, *C. montana* Jacoby, 1900 and *C. bengalensis* Duvivier, 1892. This genus is very poorly investigated and we are not quite sure about a correct determination, which needs a study of types. However, it seems very likely that *C. montana* Jacoby is identical with *C. bengalensis* Duvivier. Below we give a key for two Nepalese species with figure of aedeagi.

- 1 Prothorax as wide as elytra at base, with maximal width in the middle, strongly and closely punctate. Elytra strongly, in part rugosely punctate, especially on sides, with apical tubercle; in ♀ sides of elytra with two rows of tubercles. Aedeagus thin and long, feebly curved (Fig. 11). Length 4.8-6.5 mm*C. subrugosa* Jacoby, 1908
- Prothorax more narrow as elytra at base, with maximal width before base, distinctly narrowed anteriorly, less strongly punctate. Elytra less strongly punctate, without apical tubercle, ♀ without lateral tubercles. Aedeagus moderately long, more curved, with apex of other form (Fig. 12). Length 4.3- 7.3 mm
.....*C. bengalensis* Duvivier, 1892 (?= *C. montana* Jacoby, 1900)

Genus *Bromiodes* Jacoby, 1895

Pachnephoptrus Reitter 1912, syn.n.

Remarks. During our study of the Himalayan species of *Bromiodes* (at least 3 species at our disposal) we have found that the Palaearctic genus *Pachnephoptrus* Reitter 1912 is a full synonym of *Bromiodes* Jacoby. The only Palaearctic species, *P. weisei* Reitter, 1912, distributed in Transcaucasus and Turkmenistan, differs well from the Himalayan species in having the clypeus densely covered with scales.

***Trichoxantha nigripennis* L. Medvedev, 1992**

Remarks. One specimen from Nepal (Lamobagar Gao, 1400 m) has fulvous elytra margined with black along the sides and the suture, more broadly near scutellum.

***Semenovia daccordii* sp.n.**

Fig. 13

Holotype (♂) and 2 **paratypes** (EM, 2 LM): Nepal: Annapurna Mts., Namun pass, S slope, N bank of Myagdi Khola, 4200 m, 18.viii.1995, Fabrici, Schmidt, Jäger. **Paratypes**: same locality, 28. v. 1995, Schmidt, 1 ex. (LM); Manaslu Mts., Dudh Pokhari Legh, between Simia Kharka and Malamche Kharka, 3300-3500 m, 12.-13.ix.1995, Schmidt, 2 ex. (EM).

Diagnosis. Near *Semenovia nagaija* Daccordi, 1982, but clypeus sharply divided from frons, prothorax with distinct lateral calli, aedeagus of quite different form.

Description. Dark bronze, underside blackish bronze. Body elongate ovate. Head finely microsculptured, clypeus divided from frons with a sharp impressed line and placed below the level of frons, with 4 punctures in transverse row. Frons and vertex impunctate in middle, with a few punctures near eyes. Labrum feebly emarginate on anterior margin. Antennae reach humeral area of elytra, with slightly thickened 7-11 segments, antennomere 3 distinctly longer than 2 and 4, which are subequal.

Prothorax twice as wide as long, strongly convex, lateral callus distinctly convex, especially basally, where it is delimited with impression. Surface microsculptured, with sparse fine punctures. Scutellum triangular with a few punctures. Elytra ovate, 1.1× as long as wide, without humeral tubercle, punctures fine, confused, not dense; interspaces flat and shining. Epipleura broad at base, narrowed towards the rear. Wings absent. Metasternum much shorter than abdominal segment 1. All tarsi densely pubescent beneath. Male: anterior and mid tarsi feebly widened, last abdominal sternite truncate at apex. Aedeagus (Fig. 13) strongly curved in lateral view, with very long, finger-like apical process, ending with anchor-like tip.

Length of ♂ 5.7-6.7 mm, of ♀ 7.1-7.3 mm.

***Pyrrhalta martensi* sp.n.**

Fig. 16

Holotype (♀) (SMNS): Nepal: N 467, Myagdi Distr., Myagdi Khola N Boghara, 1800-2000 m, 26.v.1995, Martens & Schawaller. **Paratypes**: same locality, N 460, 21.v.1995, 1 ♀ (LM); - West Nepal, Dhawalagiri, Myagdi Distr., Kali-G. Khola, 1600 m, 18.vi.1986, Holzschuh, 1 ♀ (NHMB); West Nepal, Kali Gandaki, Kopchepani, 1500 - 1600 m, 15-21.v.1984, C. Rai, 3 ♀♀ (NHMB).

Diagnosis. Resembles mostly *P. sulcatipennis* Chen, 1942, from China, but head and prothorax with black spots, elytra without longitudinal sulcus and with strongly reduced discal fulvous stripe distinct only at base.

Description. Fulvous, a spot on vertex and 3 spots on prothorax black or dark castaneous; antennae dark with fulvous basal segments and fulvous bases of apical segments. Elytra dark bronze with lateral margin, suture and short stripe inside of humeral tubercle fulvous (Fig. 16). Legs fulvous with apices of tibiae and tarsi black. Pubescence of upperside white or fulvous white.

Clypeus smooth, shining. Frontal tubercles indistinct, punctate and microsculptured, vertex strongly punctate. Antennae about half of body length, segment 2 moderately elongate, segment 3 almost twice as long as 2, next segments a little shorter than 3,

subequal. Prothorax much broader than head, 2.5× as wide as long, side margins arcuate and incised before protruding anterior angles, maximal width is beyond middle. Surface with shallow impression on each side of middle, densely punctate, with narrow interspaces.

Scutellum trapeziform, densely punctate and pubescent. Elytra 1.4× as long as wide, without any impressions or ridges, finely and very densely punctate.

Length of body: 7.6-7.9 mm.

***Pyrrhalta scutellata* Hope, 1831**

P. tumida Kimoto & Gressitt, 1963, **syn.n.**

Remarks. *P. tumida* Kimoto & Gressitt, 1963 is a new synonym of this species. We have studied a specimen of *P. tumida*, determined by S. Kimoto and cited by him for Bhutan (KIMOTO, 1979).

***Agetocera flaviventris* Jacoby, 1879**

Material examined. East Nepal: Arun Valley, Chichila-Mure, 1950-2000m, 1.vi.1983, M.Brancucci, 1 ♀.

Distribution. Recorded for the first time in Nepal, known from Sikkim and Burma.

***Calomicrus annapurnae* sp.n.**

Fig. 15

Holotype. ♂ (ME) and 14 **paratypes** (ME, 2 ex. LM, 1 ex. NHMB): Nepal, Annapurna Mts., Lamjung Himal south of Taunja Danda, 3700 m, 9. viii.1995, Jäger.

Diagnosis. Seems to be very near to *C. yasudai* Chûjô in all external characters, including coloration, but differs immediately in form of aedeagus, which is in the case of *C. yasudai* broad with triangular apex, in lateral view thick and almost not curved.

Description. Dark metallic green or aeneous, especially on elytra, antennae entirely violaceous black, underside dark metallic.

Body elongate, slightly widened posteriorly. Vertex flat, shining, practically impunctate. Interocular space twice as wide as eye, with convex ridge between antennal bases, frontal tubercle convex, sharply delimited, subtriangular. Antennae reach behind middle of elytra, segments 2-4 subequal, each of them about twice as long as wide, next segments more elongate, preapical segments the longest. Prothorax convex side to side, about 1.4× as wide as long, widest in middle, with lateral margins feebly rounded; all angles distinct, but not protruding. Surface shining, very finely and sparsely punctate. Scutellum small, convex, subtriangular with apex rounded, surface smooth and shining, impunctate. Elytra at base much broader than prothorax, gradually widened posteriorly, surface with rather close and strong punctures, interspaces flat, strongly shining. Segment 1 of anterior and middle tarsi moderately triangularly widened in ♂. Aedeagus narrow and long (Fig. 15), slightly narrowed apically, with thin and long apical process arcuately curved downwards.

Length 4.3-5.8 mm.

***Japonitata mirabilis* sp.n.**

Holotype, ♀ (NHMB): West Nepal, Arun Valley, Mure, 2000 m, 2.-8.vi.1983, M. Brancucci. **Paratype**, ♀ (LM): Nepal, Bagmati, Sindhupalchok, Gangjwal, 2500 m, 6.-7.vi.1989, M. Brancucci.

Diagnosis. This species, having all typical characters of the genus, differs from other species immediately in the absence of a lateral ridge on the elytra. It is very alike, especially in character of elytral pattern, to *J. difformis* L. Medvedev & Sprecher, 1997, but differs in the absence of an elytral ridge and the black colour.

Description. Entirely black with fulvous scutellum and elytra; in holotype - elytra unspotted, in paratype elytra with very small humeral spot and two large subquadrate spots on disc black.

Head shining, impunctate; interantennal space narrow and carinate, frontal tubercles delimited behind with transverse groove. Antennae reach behind middle of elytra, segment 3 twice as long as 2, segment 4 a little longer than 3, next segments a little shorter than 4. Prothorax 1.65× as wide as long, with maximal width on anterior margin, sides straight, anterior margin straight, basal margin almost straight, with feeble oblique emargination at hind angles, surface shining, impunctate, with very shallow, not very distinct impression on each side. Elytra with high humeral tubercle and very feeble basal convexity, without lateral ridge, but with sides deflected and longitudinally grooved along extreme margin; surface smooth, shining, impunctate, with sparse erect hairs. Anterior coxal cavities distinctly open.

Length of body: 5-5.2 mm.

***Palpoxena nasuta* (Westwood, 1837)**

Material examined. Nepal: Buri Gandaki, Lalubesi-Arket, 1400-1650 m, 6.vi.1990, Probst, 1♂.

Distribution. Recorded for the first time from Nepal, known from North India (United Provinces).

***Altica cyanea* (Weber, 1801)**

A. nepalensis Chûjô, 1966, **syn.n.**

Remarks. *A. nepalensis* Chûjô, 1966 is a new synonym of this species. A small difference in the structure of aedeagus, mentioned by M. Chûjô is entirely inside the spectrum of variability known for *A. cyanea* Weber.

***Mandarella nagpurensis* Duvivier, 1892**

Material examined. Nepal: Langtang, rain forest, 2300-2800 m, 5.vi.1990, S. Bílý.

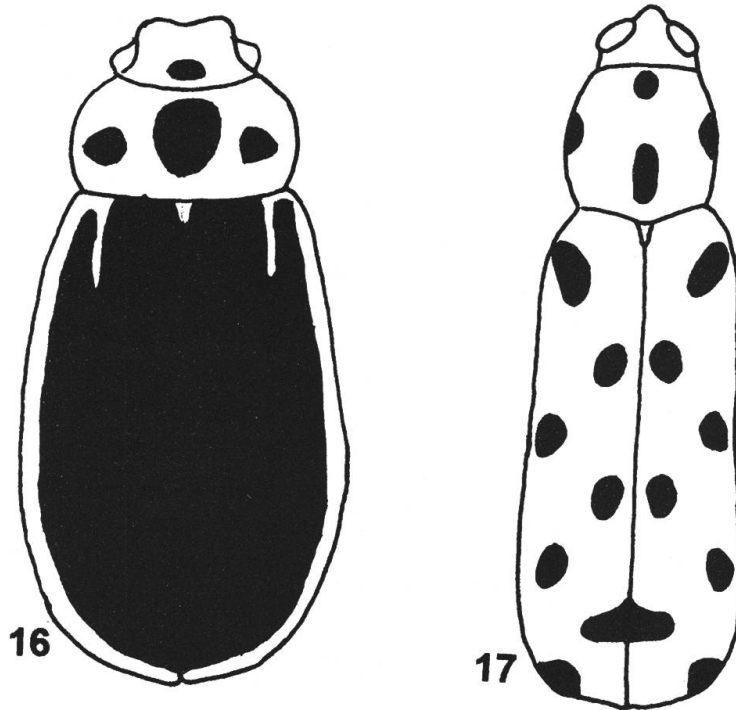
Remarks. We have at our disposal one ♀ which corresponds well to the Duvivier's description, except the body length. Duvivier indicated 5.5-6 mm, but our specimen measures only 3.5 mm.

***Amydus castaneus* Chen, 1935**

A. nepalensis SCHERER, 1989 **syn.n.**

A. gibbicollis DOEBERL, 1991 **syn.n.**

Remarks. According to Scherer, *A. nepalensis* differs from *A. castaneus* only in the shorter preapical segments of antennae. *A. gibbicollis*, according description, has these



Figs 16-17: general view: 16, *Pyrrhalta martensi* sp.n. 17, *Agonita laeta* sp.n.

segments longer than wide, practically the same as in *A. castaneus* (see figures in Scherer's and Doberl's descriptions). We have seen many specimens from Nepal which correspond fully to *A. castaneus* or are transitional in the antennal structure between *A. castaneus* and *A. nepalensis*. All these „species“ are extremely variable in the form of the body, coloration and sculpture of the upperside (we have a specimen, for example, with impunctate upperside).

Anisodera fraterna Baly, 1888

Material examined. Syangya district, Kahule village, 7 km W Syanga, 1600 m, 26.vii.1995, G. Crosba.

Distribution. Found in Nepal for the first time, was known from Northern India and Burma.

Agonita laeta sp.n.

Fig. 17

Holotype (NHMB): East Nepal, Chitre-Tatopani, 1100-2500 m, 11.v.1984, leg. C. Holzschuh. **Paratype:** India, Darjeeling Distr., Paiyue (KPG), 1400 m, 4.iv.1984, leg. C. Rai, 1 ex. (LM).

Diagnosis. Near *A. maculigera* Gestro, 1881, but in the latter species the prothorax is quite differently sculptured and with 5 spots, elytra with 9 spots and the second costa broadly interrupted in the middle, the posterolateral angle more distinct.

Description. Fulvous, 2 very small spots on head just before prothorax, 4 spots on prothorax (1, 2, 1), scutellum and 7 spots on elytra (3 along suture, 4 along side margin) black (Fig. 17).

Body elongate, slightly widened towards the rear. Head practically impunctate, with a few punctures on occiput, longitudinally grooved on vertex. Antennae reaching humeral tubercle, with segments 1-10 almost subequal, not attenuated apically, slightly longer than broad, last segment more elongate. Prothorax as long as wide anteriorly, widened to base, lateral margins feebly rounded, subquadrately emarginate behind anterior angles, hind angles acute. Surface roughly punctate, with narrow longitudinal groove in middle and impression on each side of base. Elytra 2.1× as long as wide, with apical margin feebly serrate and posterolateral angle narrowly rounded, surface with 3 costae: the first and the second are entire, the third is rather feeble, especially in middle: between each pair of costae there are two rows of coarse punctures, basal part between costae 1 and 2 with 3 rows.

Length of body: 5-5.3 mm.

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