

# New and poorly known species of *Cryptocephalus* Geoffroy, 1762 from the Palearctic and Oriental regions (Chrysomelidae, Cryptocephalinae)

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## New and poorly known species of *Cryptocephalus* Geoffroy, 1762 from the Palearctic and Oriental regions (Chrysomelidae, Cryptocephalinae)

by Lev N. Medvedev

**Abstract.** 20 new species: *C. shapaensis*, *C. bacboensis*, *C. dongnaicus* (Vietnam), *C. nahinus* (Laos), *C. semistriatus* (Laos, Thailand), *C. roseofulvovus*, *C. keralensis*, *C. megalayanus*, *C. tamilnadensis* (India), *C. kubani*, *C. jani*, *C. pseudoincisus*, *C. schawalleri*, *C. pseudovirens* (China), *C. olegi* (Thailand, Vietnam), *C. chiangdaoensis* (Thailand), *C. laotanus* (Laos), *C. triangulomimus* (Nepal), *C. mohamedsaidi*, *C. sarawacensis*, *C. romantsovi* (Malaysia) and one new subspecies: *C. pallidipennis kalimpongi* (India) are described; redescriptions or additional data for *C. binotatithorax* Pic, 1920, *C. sinuatolineatus* Pic, 1920 and *C. dimidiatus* Suffrian, 1860 are given. *C. kuznetzovi* L. Medvedev, 1992 is reduced to a subspecies of *C. eroshkinae* L. Medvedev et Samoderzhenkov, 1987. *C. vouauxi* Achard, 1920 is removed from nominate subgenus to subgenus *Asionus* Lopatin, 1988. *C. zinovjevi* L. Medvedev, 1973 from the Russian Far East and northern Mongolia is reported for the first time for China. *C. delkeskampii* Gressitt et Kimoto, 1961 is a new synonym for *C. sinuatolineatus* Pic, 1920.

**Key words.** Chrysomelidae – *Cryptocephalus* – Oriental region – new taxa

### Introduction

The huge genus *Cryptocephalus*, including about two thousand species, is still poorly known in all regions except the Palearctic and Nearctic. In the Oriental region, keys exist only for China (GRESSITT & KIMOTO 1961), Indochina (KIMOTO & GRESSITT 1981) and Taiwan (CHÛJÔ 1954, KIMOTO & TAKIZAWA 1997), but they need revision. Many new species have been described since they were published, while only a single monograph exists (JACOBY 1908), without a real key, for the whole Indian subcontinent. All the islands of south-eastern Asia are especially poorly studied, with a single revision of this region published in the 19th century (BALY 1867). In the last 30 years almost a hundred new Oriental species have been described. Nevertheless, this fauna still has a number of unknown species, some of which are described below.

#### Abbreviations for the collections housing the material examined

NHMB	.....	Naturhistorisches Museum Basel, Switzerland
SMNS	.....	Staatliches Museum fuer Naturkunde, Stuttgart, Germany
LM	.....	Lev N. Medvedev collection, Moscow, Russia

### Taxonomy

#### *Cryptocephalus shapaensis* sp.nov.

**Material examined.** Holotype (female): Vietnam, prov. Hoanglienchon, Shapa, 4.II.1978, leg. L. Medvedev (LM).

**Description.** Head black with fulvous clypeus, antennae black with five basal segments fulvous, at least beneath, prothorax red with black central stripe widening towards the

front but not touching fore-margin (Fig. 1), elytra metallic blue, pygidium and underside (except prosternum) black, legs black with fulvous trochanters, anterior femora fulvous beneath.

Clypeus impunctate, flat, delimited from subantennal groove by a ridge at the sides; frons and especially vertex punctate, upper interocular space a little wider than interantennal space. There is also a smooth tubercle above each antennal insertion. Antennae reach middle of elytra, segments 3–11 subequal in length, segments 6–11 very slightly widened, about 3 times as long as wide. Prothorax 1.9 times as wide as long, strongly narrowing towards the front, hind angles acute, surface convex, lustrous and impunctate, with oblique and deep impressions before scutellum, which is divided by an elevated area. Scutellum elongate cordiform, with deep groove in middle, impunctate. Elytra 1.25 times as long as wide in humeri, posterior slightly narrowed, elevated near scutellum, with regular rows of strong punctures, weaker on apical slope, interspaces narrow, with fine punctures. Pygidium densely punctate. Anterior margin of prosternum bent downwards, hind margin not toothed, with slight central protuberance, surface flat and strongly punctate. Abdominal sternite 1 with ridge in anterior third of each side more or less parallel to elytral margin. Fifth abdominal sternite with very deep and punctured groove (in most species this groove is usually smooth).

Length of body: 5.5 mm.

**Distribution.** Vietnam.

**Differential diagnosis.** Near *C. tamdaoensis* L. Medvedev et Samoderzhenkov, 1987, differs in bicolored prothorax, black legs and deep grooves on prothorax before scutellum.

### *Cryptocephalus bacboensis* sp.nov.

**Material examined.** Holotype (female): Vietnam, prov. Hasonbinh, Mok Chau, 9.X.1979, leg. L. Medvedev (LM).

**Description.** Colour of head, antennae and upperside as in preceding species, prothorax red with black, rounded, ovate, central stripe narrowing to base and not touching anterior margin (Fig. 2), pro- and mesosternum fulvous, metasternum and abdomen black with fulvous intercoxal processes of metasternum and the first abdominal segment, legs including coxae fulvous.

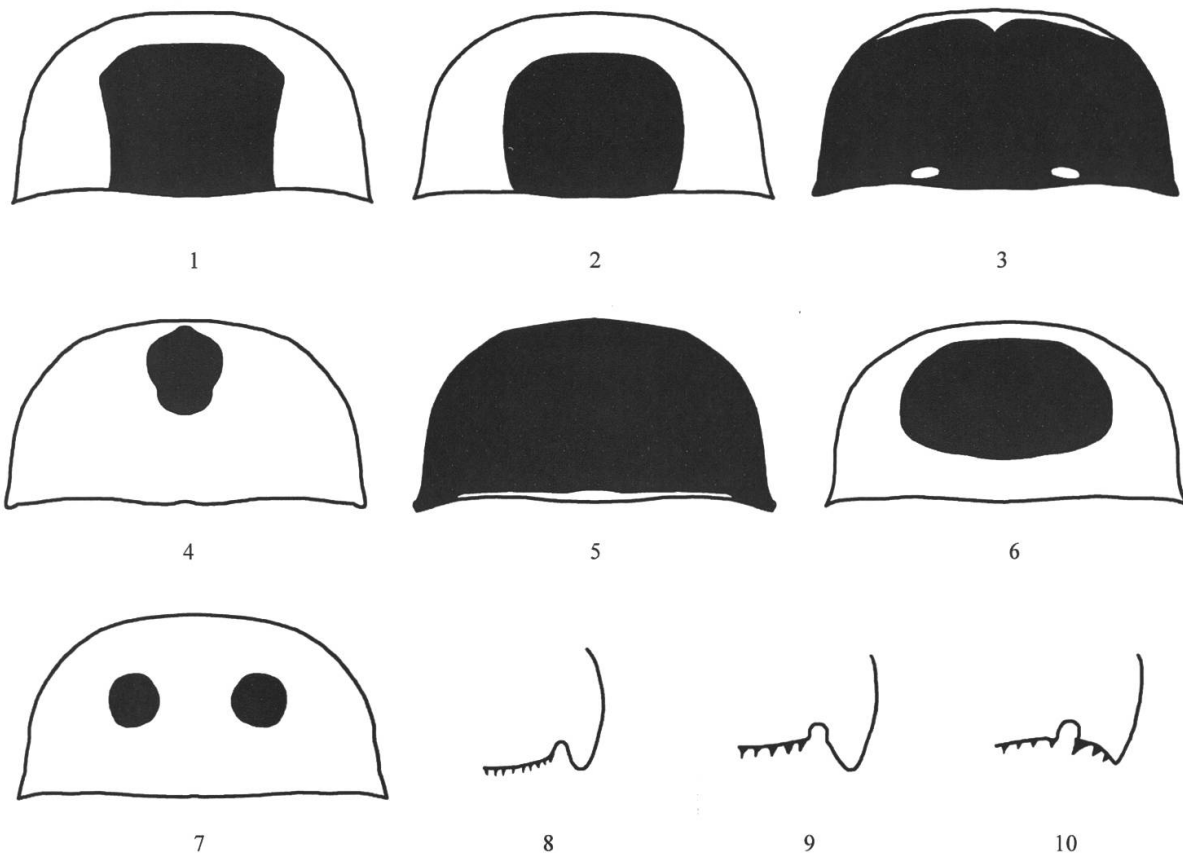
Morphologically this species is very near to the foregoing and differs in only a few points.

Clypeus concave, delimited from subantennal grooves by elevated ridges. Scutellum longitudinally concave. Hind margin of prosternum with two quite long teeth and a slight protuberance between them, its surface longitudinally elevated.

Length of body: 5.2 mm.

**Distribution.** Vietnam.

**Differential diagnosis.** See key. These two species, together with *C. tamdaoensis* L. Medvedev et Samoderzhenkov, 1987, form a natural group near to *C. festivus* Jacoby, 1890 from China, but differ in having lateral ridges on the first abdominal sternite. All

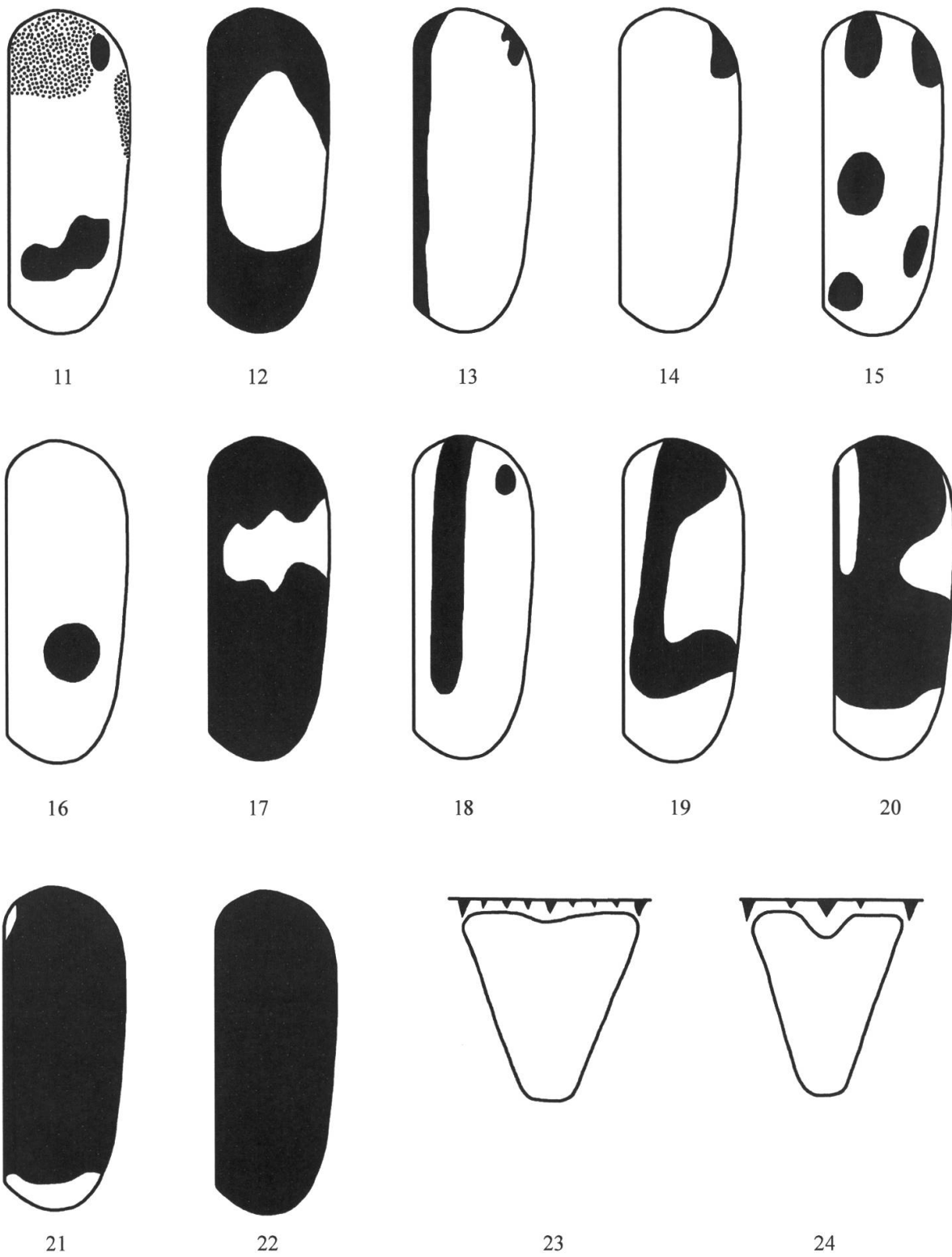


**Figs 1–10.** 1–7. Pattern of prothorax: 1 – *C. shapaensis* sp.nov.; 2 – *C. bacboensis* sp.nov.; 3–5 – *C. semistriatus* sp.nov.; 6 – *C. mohamedsaidi* sp.nov.; 7 – *C. dimidiatus* Suffrian. 8–10. Basal margin of prothorax; right side: 8 – *C. roseofulvus* sp.nov.; 9 – *C. jani* sp.nov.; 10 – *C. incisus* sp.nov.

three of these species appear to be very rare and to date each is represented by only a single female specimen. They might be discriminated as follows:

- 1(2) Prothorax and legs fulvous. Prothorax before scutellum flattened, but without distinct impressions. Length 5.5 mm. Vietnam: Tam Dao. ....  
..... ***C. tamdaoensis* L. Medvedev et Samoderzhenkov, 1987**
- 2(1) Prothorax fulvous with black central stripe and two distinct impressions before scutellum.
- 3(4) Clypeus flat. Scutellum with deep central groove. Hind margin of prosternum not toothed. Mesosternum, metasternum, abdomen and legs black. Length 5.5 mm. ....  
..... ***C. shapaensis* sp.nov.**
- 4(3) Clypeus concave with raised lateral ridges. Scutellum longitudinally concave. Hind margin of prosternum with two quite long teeth. Mesosternum and legs fulvous, metasternum and abdomen black with fulvous intercoxal processes. Length 5.2 mm. ....  
..... ***C. bacboensis* sp.nov.**





**Figs 11–24.** 11–22. Elytral pattern: 11– *C. roseofulvus* sp.nov. (punctured area – fulvous colour, white area – red colour), 12 – *C. nahinus* sp.nov.; 13–14 – *C. semistriatus* sp.nov.; 15 – *C. triangulomimus* sp.nov.; 16 – *C. megalayanus* sp.nov.; 17 – *C. keralensis* sp.nov.; 18–22 – *C. sinuatolineatus* Pic. 23, 24. Scutellum and middle of basal part of prothorax: 23 – *C. dongnaicus* sp.nov.; 24 – *C. binotaticollis* Pic.

***Cryptocephalus roseofulvus* sp.nov.**

**Material examined.** Holotype (female): southern India, Kerala, Quillon district, Thenmala, V.1993, leg. T.R.S. Nathan (LM). Paratype (female): southern India, Kerala, Trivandrum district, 3000 ft, V.1989, leg. T.R.S. Nathan (LM).

**Description.** Red-fulvous, antennae reddish-fulvous with six apical segments piceous, prothorax rusty red, in holotype with anterior and lateral margins pale flavous, prothorax, scutellum and elytra with very narrow basal margin black, scutellum sometimes with black apex, elytra red, in holotype with humerus black, basal band and obliquely transverse preapical spot pale flavous (Fig. 11), in paratype with only triangular patch in humeral angle of elytra black; pygidium, underside and legs pale fulvous.

Body robust, almost parallel-sided. Head distinctly punctate, with slight longitudinal impression on frons narrowing to vertex, clypeus not divided from frons, with straight anterior margin, upper interocular space a little narrower than interantennal space. Antennae reach anterior third of elytra, proportions of segments 2–4 are 5-10-10, preapical segments about 3–3.5 times as long as wide. Prothorax 1.8 times as wide at base as long, narrowed towards the front, with acute hind angles and a distinct notch between them and denticulate hind margin (Fig. 8). Surface strongly convex, with dense longitudinal strigosity mixed with elongate punctures.. Scutellum trapeziform, almost quadrate, not notched basally, lustrous and with a few fine punctures. Elytra 1.3 times as long as wide at the shoulders, with regular rows of punctures, almost indistinct in apical third, and flat interspaces with very thin transverse sculpture. Pygidium comparatively flat, with dense punctures and pubescence. Prosternum subquadrate, feebly concave on anterior margin, distinctly bidentate on hind margin.

Length of body: 4.5 mm.

**Distribution.** India.

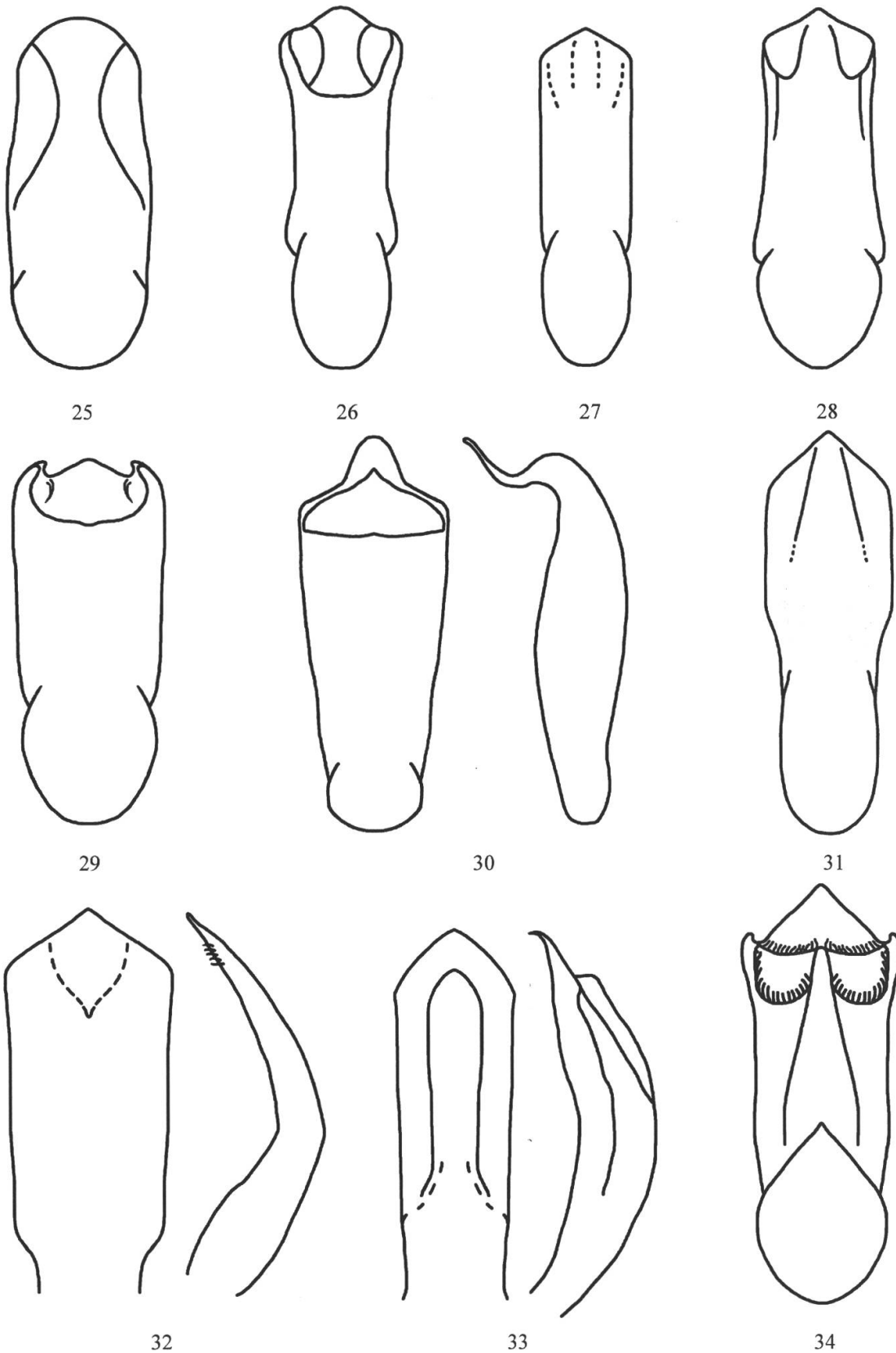
**Differential diagnosis.** In structure of prothorax resembles only *C. cribricollis* Jacoby, 1908, which is much smaller, with entirely fulvous underside and with transverse wrinkles on prothorax. In colour this new species is near the *C. sandrocottus* group, but differs, except in strigose prothorax, in pattern of upperside.

***Cryptocephalus nahinus* sp.nov.**

**Material examined.** Holotype (female); Laos, Khaommuang Prov, Ban Khounham (Nahin), 18°13'N, 104°31'E, 200 m, IV.2005, leg. O. Gorbunov (LM).

**Description.** Black, labrum, clypeus, genae, palpi, two basal antennal segments beneath, very large spot in middle of elytra, touching lateral margin, (Fig. 12) and legs flavous.

Body subparallel-sided, slightly narrowing at the rear and more distinctly towards the front. Head sparsely punctate along eyes and on vertex, frons with shallow triangular impression, upper interocular space as wide as interantennal space. Antennae reach midway along elytra, proportions of segments 2–4 are: 6-11-13, following segments slightly widened, about 4–5 times as long as wide. Prothorax 1.75 times as wide as long, distinctly narrowing towards the front, hind angles acute, surface strongly convex, with very sparse microscopic punctures. Scutellum 1.3 times as long as wide, with truncate



**Figs 25–34.** Aedeagus (v – ventral, l – lateral): 25 – *C. semistriatus* sp.nov., v; 26 – *C. pseudoincisus* sp.nov., v; 27 – *C. incisus* Tan, v; 28 – *C. securus* Weise, v; 29 – *C. kubani* sp.nov., v; 30 – *C. pseudovirens* sp.nov., v, l; 31 – *C. olegi* sp.nov., v; 32 – *C. binotatithorax* Pic, v, l; 33 – *C. chiangdaoensis* sp.nov., v, l; 34 – *C. schawalleri* sp.nov., v.

apex, basal excavation and very fine punctures. Elytra 1.2 times as long as wide, with regular rows of fine punctures, interspaces broad and flat. Pygidium weakly convex, pubescent and finely punctured. Prosternum broad, quadrate, punctate, with two teeth on hind margin.

Length of body: 5.6 mm.

**Distribution.** Laos.

**Differential diagnosis.** Resembles *C. sauteri* Chûjô, 1934, differs in other elytral pattern and fulvous legs.

### *Cryptocephalus semistriatus* sp.nov.

**Material examined.** Holotype (male): N. Thailand, Chiang Mai, Chiang Dao Hill Resort, 19°33'N, 99°5'E, 540 m, 16–22.VIII.2010, leg. O. Gorbunov (LM). Paratypes: same locality and date, 1 male; – Laos, Phongsaly Prov., 28.V.–20.VI.2003, leg. M.Brancucci, 1 female (NHMB), Laos, Khammouang Prov., Ban Khounham (Nahin), 18°13'N, 104°31'E, 200 m, IV.2005, leg. O. Gorbunov, 2 females (LM).

**Description.** The colour of this species appears to be very variable. Head pale flavous, sometimes with black stripe between upper lobes of eyes and small dark spots above antennal bases, antennae black with four basal segments fulvous or entirely fulvous. Prothorax black with flavous anterior margin and two small spots on base or red fulvous with very large black patch occupying two-thirds of surface, excluding basal part and lateral margins (Figs. 3–5). Scutellum black, piceous (holotype) or fulvous. Elytra reddish-fulvous in basal third and fulvous in posterior part or reddish with blackish triangle in humeral area, or pale flavous with humeral spot, broad sutural stripe and narrow lateral and apical margins black (Figs. 13, 14). Pygidium black or fulvous with darkened apex. Underside black to fulvous. Legs piceous with underside of fore-femora fulvous or entirely fulvous. Colour of light parts much paler in male than in female.

Body subparallel, in female slightly narrowed both front and rear. Head impunctate except for a few punctures between upper lobes of eye, clypeus very feebly concave, vertex with longitudinal central groove, upper interocular space as wide as interantennal space. Antennae reach beyond mid-elytra, proportions of segments 2–4 are: 5-7-10, preapical segments about four times as long as wide. Prothorax 1.7 times as wide as long, strongly narrowed anteriorly, hind angles acute, surface practically impunctate, with oblique impression on each side. Scutellum cordiform with truncate apex and deep groove on base. Elytra 1.35 times as long as wide in humeri, inner half of elytron with five regular rows of quite strong punctures, including a shortened scutellar row, and flat or slightly convex interspaces, outer half with confused punctures of same size. Pygidium weakly convex, with dense punctures and microsculptured interspaces. Prosternum with two teeth on hind margin. Fifth abdominal sternite with very large, deep, transverse groove. Aedeagus narrowed in apical quarter, with shortly rounded apex, underside convex with deep impressions on each side near apex divided by a narrow ridge (Fig. 25).

Length of male: 3.1–3.4 mm. Length of female: 4.1–4.2 mm.

**Distribution.** Thailand, Laos.

**Differential diagnosis.** Resembles *C. laoticus* L. Medvedev, 2004 in same elytral structure, differs in colour of upperside and deep impressions at base of prothorax.

***Cryptocephalus mohamedsaidi* sp.nov.**

**Material examined.** Holotype (female): West Malaysia, Pahang, Fraser's Hill, 3°43'N, 101°44'E, 1300 m, 11–17.VII.2009, leg. O. Gorbunov (LM).

**Description.** Head pale flavous with black: basal two-thirds of labrum, trapeziform spot on anterior margin of clypeus, ocular excavations and vertex, including two very small dark fulvous spots; antennae black with segments 2–5 fulvous and 9–11 dark fulvous; prothorax pale flavous with centred elongate spot in anterior half and very narrow fore- and hind margin black; scutellum black, elytra black with pale flavous band midway (Fig. 6), pro- and mesosternum pale flavous, metasternum black, abdomen and pygidium fulvous, legs fulvous with mid- and hind femora black.

Body elongate, egg-like, widest beyond mid-elytra. Head impunctate, clypeus not divided from frons, spaces between upper ocular lobes and between antennal bases equal. Antennae reach mid-elytra, proportions of segments 2–4 are: 5-7-10, preapical segments about three times as long as wide. Prothorax twice as wide as long, broadest at base, narrowed anteriorly, with obtuse, non-produced hind angles and weakly lobed hind margin, surface impunctate. Scutellum triangular with rounded apex, not incised at base. Elytra 1.2 times as long as wide, surface with regular rows of punctures and quite broad, flat interspaces. Pygidium almost flat. Prosternum with fore-margin triangular and curved downwards, hind margin straight.

Length of body: 4.5 mm.

**Distribution.** Malaysia.

**Etymology.** The species is dedicated to Dr. M. Mohamedsaid, a well-known investigator of Malaysian *Chrysomelidae*.

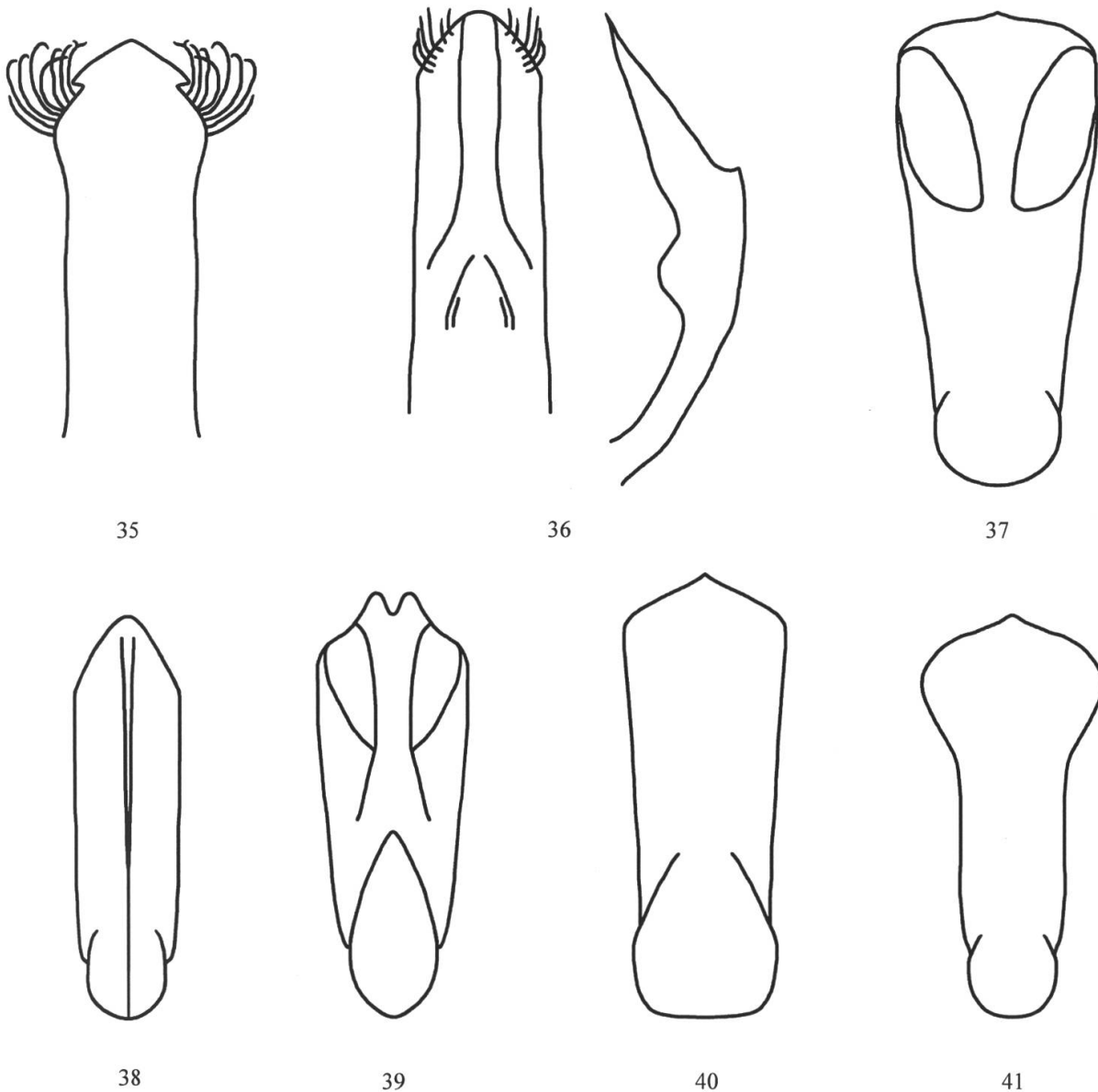
**Differential diagnosis.** I cannot compare this species with any other Oriental *Cryptocephalus* because of its atypical body form, the light apical segments of the antennae and the unusual colour of the head (bicolorous labrum, spot on clypeus, etc.) and prothorax.

***Cryptocephalus jani* sp.nov.**

**Material examined.** Holotype (female): China, prov. Yunnan, Vallis flumin. Soling-ho (LM). Paratypes: Yunnan, Weibaoshan mts., west slope, 25°11'N, 100°24'E, 2000–2800 m, 25–28.VI.1992, leg. David Kral, 2 females (NHMB, LM). Holotype with determination by Kimoto as *C. piceolimbatus* Pic.

**Description.** Head pale flavous with dark fulvous stripe between upper lobes of eyes, antennae black with four basal segments fulvous, prothorax red fulvous with basal margin narrowly black, scutellum pale flavous, entirely margined in black, elytra pale flavous with basal margin narrowly black, other margins narrowly darkened, underside and legs fulvous.

Body parallel-sided. Clypeus not separated from frons, both impunctate, vertex distinctly punctate, with longitudinal groove. Antennae thin, reaching beyond mid-elytra, proportions of segments 2–4 are: 5-8-9, preapical segments 3–4 times as long as wide. Prothorax 1.65 times as wide as long, strongly convex, with posterior angles acute and produced backwards, basal margin with denticulation, incised before hind angles



**Figs 35–41.** 35 – *C. laotanus* sp. nov., v; 36 – *C. pallidipennis kalimpongi* ssp.nov., v, l; 37 – *C. keralensis* sp.nov., v; 38 – *C. megalayanus* sp.nov., v; 39 – *C. dimidiatus* Suffrian, v; 40 – *C. sinuatolineatus* Pic, v; 41 – *C. sarawacensis* sp.nov., v.

(Fig. 9), surface lustrous and impunctate. Scutellum triangular, not notched at base, narrowly rounded at apex, finely punctate. Elytra 1.35 times as long as wide, with regular rows of punctures, more feeble on apical slope, interstices flat or feebly convex, finely microsculptured. Prosternum densely punctate, with obtuse apex. Prosternum as long as wide, hind margin straight, without teeth but with tubercles near hind angles.

Length of body: 3.6–4.0 mm.

**Distribution.** China.

**Etymology.** The species is dedicated to Dr. Jan Bezděk, a well-known specialist in Chrysomelidae and brother of Dr. Aleš Bezdek, to whom the nearest species, *C. alesi*, was dedicated.

**Differential diagnosis.** Near *C. alesi* L. Medvedev et Bezdek, 2001, having same incisure near hind angles of prothorax, differs well in colour of upperside and legs and non-dentate prosternum. Somewhat resembles *C. piceolimbatus* Pic, 1920 (which explains Kimoto's determination)

### *Cryptocephalus kubani* sp.nov.

**Material examined.** Holotype (male): China, Yunnan Prov, Yulongshan mts, Baishui, 27°8'N, 100°14'E, 2900–3500 m, 7–12.VII.1990, leg. Vit Kuban (NHMB).

**Description.** Black, V-like spot between eyes, clypeus, genae, antennal segments 2–4 and underside of segment 1 red fulvous.

Body almost parallel-sided. Head finely and sparsely punctate, clypeus with concave anterior margin, vertex with longitudinal central groove, upper interocular space practically as wide as interantennal space. Antennae reach mid-elytra, segments 3–5 subequal and thin, following segments slightly widened, about 2.5–3 times as long as wide. Prothorax 1.5 times as wide at base as long, hind angles acute, hind margin without deep excavation before hind angles, surface strongly convex, lateral margin flattened and widened beyond mid-point, with strong punctures, remainder of surface with microscopic, almost imperceptible punctures. Scutellum feebly cordiform, with rounded apex and a few minute punctures. Elytra 1.15 times as long as wide in humeri, very slightly narrowed posteriorly, with subregular rows of punctures, partly confused in middle of outer part, interspaces flat and impunctate. Pygidium quite flat, densely punctate and pubescent. Prosternum not toothed on hind margin. Segment 1 of fore-tarsi markedly widened, mid-tarsi moderately so. Aedeagus (Fig. 29) with tridentate apex, its underside strongly convex with transverse impression before apex, deeper at the sides. Last abdominal sternite with deep transverse impression.

Length of body: 4.7 mm.

**Distribution.** China.

**Etymology.** The species is named after its collector.

**Differential diagnosis.** Near *C. securus* Weise, 1913, differs in other colour of head, more regular elytral rows, but mainly in tridentate apex of aedeagus.

### *Cryptocephalus pseudoincisus* sp.nov.

**Material examined.** Holotype (male): China, N. Yunnan, 30 km N of Lijiang, 3000m, 3.VII.1990, leg. L. & M. Bocak (NHMB). Paratype: China, N. Yunnan, Dali, 1600–2000 m, 5–8.VII.1990, leg. L. & M. Bocak, 1 female (LM).

**Description.** Black, a spot at upper margin of eye, genae and four basal segments of antennae reddish-fulvous.

Body almost parallel-sided. Head and antennae as in preceding species, but vertex without central groove. Prothorax 1.5 times as wide as long, strongly narrowed



anteriorly, hind angles obtusely angulate, hind margin without excavation before hind angles, lateral margin narrow, without strong punctures, surface lustrous, with very distinct but extremely sparse punctures. Scutellum very feebly cordiform, with rounded apex, impunctate. Elytra 1.3 times as long as wide in humeri, very slightly narrowed posteriorly, with regular rows of punctures, quite weak on apical slope, interspaces flat, impunctate, more or less microsculptured. Pygidium and prosternum as in preceding species. Segment 1 of fore- and mid-tarsi distinctly widened. Aedeagus with rounded apex, underside with lateral elongate impressions divided by a broad, convex surface covered with quite dense punctures (Fig. 26). Last abdominal sternite of male flattened at centre.

Length of body: 4.4 mm.

**Distribution.** China.

**Differential diagnosis.** See key.

#### A key to species of the *C. securus* group

Body black.

- 1(2) Hind margin of prothorax with deep incision near hind angle (Fig. 10). Elytra with regular rows of punctures. Head with spot on inner margin of eyes, genae and clypeus (at least partly) fulvous. Aedeagus – Fig. 27. Length 3.2–4.5 mm. China: Yunnan. .... *C. incisus* Tan, 1992
- 2(1) Hind margin of elytra without incision near hind angles.
- 3(4) Elytra with very irregular rows of fine punctures, sometimes almost confusedly punctate. Head with genae and spot in middle of frons red fulvous. Prothorax with posterior half of side margin fulvous. Aedeagus with triangular apex and oblique furrows on each side of underside divided by a broad, slightly convex interspace (Fig. 28). Length 4.5–5.0 mm. China: Kansu. .... *C. securus* Weise, 1913
- 4(3) Elytra, at least in inner part, with regular rows of punctures. Prothorax entirely black. Genae fulvous.
- 5(6) Elytra with subregular rows of punctures, partly confused around midpoint of outer part. Last abdominal sternite of male with deep impression. Head with clypeus and V-like spot on frons fulvous. Aedeagus with tridentate apex (Fig. 29). Length 4.7 mm. .... *C. kubani* sp.nov.
- 6(5) Elytra with regular rows of punctures. Last abdominal sternite of male flattened at centre. Head with reddish spot at upper margin of eye. Aedeagus with rounded apex, with a slight protuberance from centre (Fig. 26). Length 4.4 mm. .... *C. pseudoincisus* sp.nov.

#### *Cryptocephalus pseudovirens* sp.nov.

**Material examined.** Holotype (male): China, NW Sichuan, Maniganggo W env. (31°50'N, 99°7'E), 4100 m, 17.VII.1998, leg. M. Bocak (NHMB). Paratypes: same locality and date, 1 male (LM), 1 female (NHMB).



**Description.** Metallic blue with dark blue underside, antennae black with segment 1 blue and following three or four segments dark piceous, side margin and epipleurae of elytra dark rusty-red with metallic sheen, mostly quite indistinct.

Body cylindrical, almost parallel-sided. Head distinctly punctate and pubescent, more sparsely on vertex, space between upper ocular lobes almost twice as wide as that between antennal bases. Antennae of male reach mid-elytra, of female shorter, proportions of segments 2–4 are: 5-7-10, preapical segments moderately widened, about twice as long as wide. Prothorax 1.5 times as wide as long, broadest at base, side margins rounded, moderately expanded, especially in basal third, hind angles almost right-angled, not produced at the rear, surface lustrous, with strong and moderately dense punctures, denser on sides. Scutellum triangular with rounded apex, about 1.5 times as wide as long, finely punctate at the sides, not notched basally. Elytra 1.35 times as long as wide, barely narrowed posteriorly, strongly and confusedly punctate, partly in irregular rows. Pygidium moderately convex, pubescent and densely punctate. Prosternum weakly elongate, widening towards the rear, anterior margin slightly concave, hind margin almost straight, surface roughly punctate. Fifth abdominal sternite of male with deep transverse impression in posterior half; whole surface densely punctate. Segment 1 of fore-tarsus of male slightly widened. Aedeagus (Fig. 30) with triangular apex, strongly curved in lateral view.

Length of male: 4.4–4.7 mm. Length of female: 5.5 mm.

**Distribution.** China.

**Differential diagnosis.** This beetle has the general appearance of *C. virens* Suffrian, 1847 from Europe and belongs to the same species group, but differs in its entirely metallic body and in the unusual colour of the side margin and epipleurae of elytra (including Chinese specimens).

### *Cryptocephalus* (s.str.) *olegi* sp.nov.

**Material examined.** Holotype (male): N. Thailand, Chiang Mai, Belle Villa Resort, 500 m, 18°48'N, 98°50'E, 24–27.VIII.2010, leg. O. Gorbunov (LM). Paratype: same locality, 1 male (LM); – South Vietnam, Daklak Prov., 10 km. SE Buonmethuot, lake Eakao, 23–24.VI.1983, leg L. Medvedev, 1 male (determined previously as *C. ?humeroobliteratus* Pic, 1927).

**Description.** Black, labrum, 4 basal antennal segments, elytra and legs fulvous, hind femora with black central spot on outer side.

Body robust, subovate. Clypeus trapeziform, finely punctate, divided from frons by a transverse impression between antennal bases, frons and vertex with larger punctures, interantennal space distinctly broader than narrowest width of interocular space. Antennae reach apical third of elytra, proportions of segments: 10-5-9-9-12-14-14-15-15-13-14, preapical segments about three times as long as wide. Prothorax 1.6 times as wide as long, broadest at base and strongly narrowed anteriorly, with almost straight lateral margin, strongly convex, surface lustrous, impunctate, with slight groove at base before scutellum. Scutellum triangular with broadly rounded apex, microscopically punctate. Elytra 1.05 times longer than broad in humeri, narrowed posteriorly, with 11 regular rows of small punctures, their interstices broad, smooth and barely raised even in the lateral area, except for the outermost row. Pygidium with broadly rounded apex.

Prosternum with anterior margin bent downwards, hind margin truncate, slightly bilobed. Segment 1 of anterior tarsus barely widened. Aedeagus – Fig. 31.

Length of body: 4.3 mm.

**Distribution.** Thailand, Vietnam.

**Etymology.** I dedicate this fine species to its collector, Dr. Oleg Gorbunov.

**Differential diagnosis.** Near *C. hongshanus* Gressitt, 1942, differs in larger size, entirely black head, prothorax and underside and fulvous legs.

### ***Cryptocephalus binotatithorax* Pic, 1920**

**Material examined.** China, Yun Hsien, IV.1942, leg. Jellison, 1 female; Vietnam, Tuyen Quang, 1.XI.1976, leg. L. Medvedev, 1 female; North Thailand, Chiang Mai, Chiang Dai Hill Resort, 540 m, 16–22.VIII.2010, leg. O. Gorbunov, 2 males, 1 female.

**Additional description.** Hind margin of prothorax with five prescutellar teeth. Scutellum cordiform, 1.3 times as long as wide, with deep and very distinct basal incisure (Fig. 24). Prosternum longer than wide, anterior margin produced into a triangular down-curved tooth, hind margin with two long teeth. Segment 1 of fore- and mid-tarsi scarcely widened. Aedeagus long, thin and feebly curved in lateral view, without pubescence on sides before apex, underside quite convex, with triangular impression before apex (Fig. 32).

Length of body: 5.8–6.3 mm.

**Remark.** This species has the general appearance of *C. pallidipennis* Jacoby, 1908 and *C. gestroi* Jacoby, 1892 and differs mainly in having two small black spots on the prothorax, but also in its cordiform scutellum, elongate prosternum and form of aedeagus.

**Distribution.** China, Thailand.

### ***Cryptocephalus chiangdaoensis* sp.nov.**

**Material examined.** Holotype (male): N. Thailand, Chiang Mai, Chiang Dao Hill Resort, 19°33'N, 99°5'E, 540 m, 16–22.VIII.2010, leg. O. Gorbunov (LM).

**Description.** Fulvous, narrow basal margins of prothorax, scutellum and elytra very narrowly black.

Body parallel-sided. Head finely and sparsely punctate, not pubescent, clypeus separated from frons, with anterior margin feebly concave, space between upper ocular lobes about 1.3 times as wide as that between antennal bases. Antennae reach mid-elytra (three apical segments absent), proportions of segments 2–4 are: 5-12-15; these are lustrous and sparsely pubescent, the following segments slightly widened, dull, densely pubescent, segment 8 about four times as long as wide. Prothorax 1.55 times as wide at base as long, strongly convex, with side margins not visible from above, hind angles acute, but not strongly produced, surface impunctate. Scutellum triangular with truncate apex, incised only very faintly at base. Elytra 1.15 times as long as wide, narrowing slightly towards the rear, with regular rows of punctures, diminished on apical slope, interspaces broad, flat or slightly convex, impunctate. Pygidium flat, distinctly punctate

and pubescent. Prosternum as wide as long, fore-margin broadly rounded and curved downwards, hind margin with two teeth, surface punctate. Apical sternite flattened at centre. Segment 1 of fore- and mid-tarsi widened. Aedeagus (Fig. 33) long, almost parallel-sided, in lateral view thin and weakly curved, underside with strong longitudinal elevation delimited at the sides by deep impressions.

Length of body: 5.3 mm.

**Distribution.** Thailand.

**Differential diagnosis.** Near *C. pallidipennis* Jacoby, 1908, differs in other form of aedeagus, also resembles *C. binotatithorax* Pic, 1920 but has unspotted prothorax and different aedeagus.

### *Cryptocephalus schawalleri* sp.nov.

**Material examined.** Holotype (male): China, Yunnan, N Lijiang, 2400 m, 12.IV.1999, leg. W. Schawaller (SMNS). Paratypes: China, Yunnan, Xi Shan W Kunning, 2100–2200 m, 2.IV.1999, leg. W. Schawaller, 1 female (LM); – Yunnan, Cangshan mts, E slope, 25°42'N, 100°8'E, 2000–2500 m, 21.VI.1992, leg. D. Král, 1 male (LM).

**Description.** Fulvous. Occiput, longitudinal line on vertex antennae except for three or four basal segments, six spots on prothorax in transverse row, sometimes partly reduced, very narrow basal margin of prothorax, scutellum and elytra, abdominal tergites except scutellum (with preapical tergite fulvous at centre or entirely fulvous), upperside of femora, tibiae and tarsi, black. On prothorax, an intermediate spot on each side is elongate, in only one paratype two inner spots present. Each male elytra with four pale longitudinal lines and posterior half of lateral margin narrowly black.

Body elongate ovate, females more robust. Clypeus delimited from frons, punctate, with arcuate anterior margin, frons and vertex punctate near eyes and at the rear, the space between upper ocular lobes as wide as that between antennal bases. Antennae reach apical slope (male) or mid-elytra (female), proportions of segments 2–4 are: 6-9-12, preapical segments three times as long as wide. Prothorax 1.7 (male)–1.9 (female) as wide as long, moderately convex, hind angles obtuse and not produced, surface impunctate. Scutellum triangular with rounded apex, not notched basally. Elytra 1.3–1.35 times as long as wide, with regular rows, interspaces flat or slightly convex. Pygidium feebly convex, punctate and pubescent. Prosternum as long as wide, narrowed in anterior third, hind margin bilobed, without teeth, surface deeply punctate, with longitudinal ridge. Segment 1 of fore- and mid-tarsi slightly widened in male. Aedeagus (Fig. 34) with tridentate apex, underside with preapical grooves divided by a ridge.

Length of male: 4.3 mm. Length of female: 4.7–4.8 mm.

**Distribution.** China.

**Etymology.** I dedicate this species to Dr. Wolfgang Schawaller, who provided me with interesting materials under his care.

**Differential diagnosis.** Resembles *C. lingnanensis* Gressitt, 1942 and *C. binotatithorax* Pic, 1920, differs from the former in spots on the prothorax, colour of legs and abdominal tergites, and from the latter in the form of scutellum and aedeagus.

***Cryptocephalus dongnaicus* sp.nov.**

**Material examined.** Holotype (female): South Vietnam, North Dongnai Prov, Nam Cat Tien National Park, at light HLQ 450, X.2004, leg D. Fedorenko (LM).

**Description.** Body parallel-sided, robust. Clypeus strongly punctate, with concave anterior margin, frons and vertex impunctate, not pubescent, vertex with longitudinal groove, space between upper ocular lobes a little wider than that between the antennal bases. Fulvous, prothorax with two small, round, black spots.

Antennae thin, reaching anterior third of elytra, proportions of segments 2–4 are: 7-15-15, following segments scarcely widened, about three times as long as wide. Prothorax 1.9 times as wide as long, strongly narrowed anteriorly, with straight side margins and acutely produced hind angles, with nine prescutellar teeth on hind margin, surface strongly convex, practically impunctate, with traces of two impressions before scutellum. Scutellum triangular with obtuse apex, about as long as wide, very slightly notched at base, finely and sparsely punctate (Fig. 23). Elytra 1.2 times as long as wide, with regular rows of small punctures, interspaces broad, flat, impunctate. Pygidium feebly convex, densely punctate and pubescent. Prosternum subquadrate, anterior margin produced into a triangular down-curved tooth, hind margin with two long teeth.

Length of body: 8.6 mm.

**Distribution.** Vietnam.

**Differential diagnosis.** General colour of this species is practically the same as in *C. binotatithorax* Pic, 1920, except for the entirely fulvous antennae, but it differs markedly in the form of the scutellum, more numerous prescutellar teeth, subquadrate prosternum and large size. I think that it is nearer to *C. apicipennis* Baly, 1865 and *C. cinnabarinus* Suffrian, 1854. The new species differs from them in having two black spots on the prothorax and entirely fulvous elytra, underside and legs. All three of these species have entirely fulvous antennae and are large.

***Cryptocephalus laotanus* sp.nov.**

**Material examined.** Holotype (male); Laos, Khammouang Prov, Ban Khoungkham (Nahin), 18°13'N, 104°31'E, 200 m, IV. 2005, leg. O. Gorbunov (LM). Paratype: same label, 1 male (LM).

**Description.** Fulvous. Antennae except two basal segments, narrow base of prothorax, scutellum and elytra, tibiae except basal third and tarsi, black.

Body almost parallel-sided. Head as in preceding species, but fore-margin of clypeus almost straight and spaces between upper ocular lobes and antennal bases practically equal. Antennae reach mid-elytra, proportions of segments 2–4 are: 7-12-15, following segments slightly widened, preapical segments about twice as wide as long. Prothorax 1.75 times as wide as long, hind angles feebly produced, subacute, surface impunctate. Scutellum triangular with truncate apex, feebly notched at base, impunctate. Elytra 1.2 times as long as wide, with regular rows of punctures and broad, flat and impunctate interspaces. Pygidium densely punctate and pubescent. Prosternum subquadrate, with anterior margin produced into a triangular down-curved tooth, hind margin concave, with two teeth. Apical sternite with quite a deep transverse impression midway. Segment 1 of fore- and mid-tarsi widened. Aedeagus (Fig. 35) long, thin and

feebly curved in lateral view, with incisure on each side before apex, more or less covered with brush of long, dense and curved hairs, underside with feeble impressions on each side before apex.

Length of body: 4.9–5.4 mm.

**Distribution.** Laos.

**Differential diagnosis.** Morphologically, this species resembles *C. gestroi* Jacoby, 1892 differing in black tibiae and tarsi and a few other small details. The structure of the aedeagus of *C. gestroi* was unknown to me, but my colleague Dr. Jan Bezdek kindly sent me photos of the type of *C. gestroi* Jacoby and a figure of its aedeagus, which differs sharply from the species in question and is almost the same as the aedeagus of *C. pallidipennis* Jacoby (Fig. 36).

Also resembles the very poorly-described *C. punctatobrunnescens* Pic, 1927, but Pic's species is larger (6 mm) and, according to the description, prothorax "*in disco late brunnescente*" and elytra "*brunneo lineato-punctatis*" The aedeagus of Pic's species, described from Hoa-Binh, is unknown.

#### *Cryptocephalus pallidipennis kalimpongi* ssp.n.

**Material examined.** Holotype (male): Indien, Darjeeling District, Kalimpong, 800 m, 15–21.IV.1983, leg. Ch.J.Rai (NHMB). Paratypes: same label, 1 male (LM); – same locality, 25.VII.1978, leg. Bhakta Bahadur, 1 female (NHMB); – Indien, Darjeeling District, Ringkabong, 890 m, 16.IV.1984, leg. Bhakta B., 1 male (NHMB).

**Description.** Morphologically entirely identical with the nominative form, including same structure of aedeagus, differs only in coloration. Fulvous, antennae except two or three basal segments, bases of prothorax, scutellum and elytra very narrowly, tibiae and tarsi black. Aedeagus long, in lateral view thin and feebly curved, underside convex, almost roof-like, with elongate, microsculptured impression on each side (Fig. 36).

Length of body: 5.6–6.6 mm.

**Distribution.** Northern India.

**Differential diagnosis.** Differs markedly from nominative form in colour of antennae and especially the legs; *C. pallidipennis* Jacoby, 1908 has antennae fulvous with blackish terminal segments and legs entirely fulvous.

#### *Cryptocephalus triangulomimus* sp.nov.

**Material examined.** Holotype (female): Western Nepal, Pothana, 5–7.V.1984, leg. C.J.Rai (NHMB).

**Description.** Fulvous, elytra with five black spots in 2-1-1-1 pattern (Fig. 15), basal margins of prothorax, scutellum and elytra narrowly black. Apical antennal segments darkened.

Body elongate ovate. Head very finely and sparsely punctate, clypeus not separated from frons, with arcuate fore-margin. The space between upper ocular lobes twice as wide as that between antennal bases. Antennae reach anterior third of elytra, proportions of segments 2–4 are: 6-7-7, preapical segments about four times as long as wide. Prothorax 1.75 times as wide as long, narrowed anteriorly with rounded side margins,



hind angles rectangular, not produced, surface convex and impunctate. Scutellum triangular with quite an acute apex, weakly notched basally, impunctate. Elytra 1.3 times as long as wide, quite narrow at base and widest in apical third, with slight humeral tubercle, regular rows of punctures and flat interspaces. Pygidium slightly convex, densely punctate and pubescent. Prosternum subquadrate, with weakly concave anterior margin and straight posterior margin.

Length of body: 2.7 mm.

**Distribution.** Nepal

**Differential diagnosis.** This species, having five spots on the elytron, is similar at *C. triangularis* group, but differs in very small size, form of elytra, a different arrangement of elytral spots and unspotted prothorax. In *C. triangularis* Hope, 1831, the elytra are broadest at the base, their spots arranged 2-2-1 and the underside is usually black.

### ***Cryptocephalus keralensis* sp.nov.**

**Material examined.** Holotype (male): South India, Kerala, 15 km SW Munnar (10°2'N, 76°58'E), 1250 m, 1–9.V.1997, leg. Dembicky & Pacholatko (NHMB).

**Description.** Black, four basal antennal segments fulvous, elytra with pale flavous serrate band, broadly interrupted on suture before midway, but passing through epipleurae (Fig. 17).

Body broadest at humeral area, moderately narrowed at each end. Head smooth on clypeus and finely punctate on frons and vertex, the space between the upper ocular lobes a little narrower than that between the antennal bases.

Antennae reach anterior quarter of elytra, proportions of segments 2–4 are: 6-10-10, preapical segments moderately widened, about twice as long as wide. Prothorax broad, twice as wide as long, side margins strongly rounded, hind angles distinctly produced posteriorly, surface strongly convex, lustrous and impunctate. Scutellum triangular, notched at base and appearing cordiform. Elytra 1.2 times as long as wide, with regular rows of punctures, interspaces broad and flat except the two sutural ones, which are more narrow. Pygidium slightly convex, pubescent, finely and densely punctate. Prosternum a little longer than wide, slightly widening towards the rear, anterior and posterior margins almost straight, side margins distinctly ridged. Fifth abdominal sternite flattened at centre, weakly impressed before apical margin. First segment of anterior tarsus moderately widened. Aedeagus – Fig. 37.

Length of body: 4.0 mm.

**Distribution.** India.

**Differential diagnosis.** Near *C. lefevrei* Jacoby, 1895 from southern India, differs in entirely black head and legs and other elytral pattern.

### ***Cryptocephalus tamilnadensis* sp.nov.**

**Material examined.** Holotype (female): South India, Tamil Nadu, Nilgiri Hills, 11 km SE Kotigiri (11°24'N, 76°56'E), Kunchappanai, 1100100 m, 3–15.V.2002, leg. P. Pacholatko (NHMB).

**Description.** Black, anterior margin of clypeus, genae, 5 basal antennal segments (segment 1 darker above); narrow anterior and lateral margins of prothorax, widening at hind angles, fulvous; elytra red-fulvous. Underside of prosternum, mesosternum, anterior margin of metasternum and abdominal process between hind coxae fulvous, latter with small piceous spot midway along anterior margin. All coxae and trochanters fulvous.

Body cylindrical, rounded at both ends. Clypeus impunctate, frons and vertex distinctly punctate, with short, sparse hairs, the space between upper ocular lobes a little more narrow than that between antennal bases. Antennae reach a little beyond humerus, proportions of segments 2–4 are: 8-18-17, preapical segments three times as long as wide. Prothorax 1.65 times as wide as long, broadest at base, narrowed anteriorly with rounded side margins, not visible from above, hind angles acute and produced posteriorly, surface strongly convex, lustrous, practically impunctate, with shallow impression on each side of base near midway. Scutellum triangular with rounded apex, not elevated, impunctate, notched basally. Elytra 1.3 times as long as wide, broadest at base and narrowed posteriorly, with smooth humeral tubercle, regular rows of strong punctures and flat, finely and transversely wrinkled interspaces. Pygidium feebly convex, densely punctate except smooth mid-space, pubescent. Prosternum as long as wide, its anterior margin curved downwards, posterior margin with two teeth.

Length of body: 6.1 mm.

**Distribution.** India.

**Differential diagnosis.** Resembles only *C. evae* Lopatin, 2002, from Nepal, but much larger, prothorax with narrow fulvous emargination along anterior and lateral margin, scutellum black, interspaces of elytral rows finely and densely punctate.

### *Cryptocephalus megalayanus* sp.nov.

Holotype (male): NE India, Megalaya, 3 km E of Tura (25°30'N, 90°14'E), 500–1150 m, 15–22.IV.1999, leg. J. Rolcik (LM). Paratype: same locality and date, leg. Dembicky & Pacholatko, 1 female (NHMB).

**Description.** Fulvous, antennal segments 5–11, very narrow basal margin of prothorax and anterior margin of elytra, round spot just beyond centre of elytra (Fig.16), pygidium of female, metasternum except its process between mid-coxae, abdomen except process between hind coxae and apical half (male) or middle (female) of fifth sternite, black.

Body cylindrical, almost parallel-sided. Head flat, sparsely punctate, more distinctly on frons and vertex, not pubescent, the space between upper ocular lobes about 1.7 times as wide as that between antennal bases in both sexes. Antennae of male reach apical slope of elytra, of female a little shorter, proportions of segments 2–4 are: 7-12-13, preapical segments about three times as long as wide, slightly broadened from base to apex. Prothorax 1.6 times as wide as long, broadest at base and narrowing towards the front, with almost straight side margins, not visible from above, hind angles triangular and slightly produced rearwards, surface strongly convex, with very fine, sparse, very faint punctures and no impressions near basal margin. Scutellum triangular with truncate, non-elevated apex, not notched on basal margin. Elytra 1.2 times as long as

wide, broadest at the shoulders, but narrowing weakly to the rear, with regular rows of punctures and flat interspaces, punctures usually very fine. Pygidium moderately convex, punctate and pubescent. Prosternum trapeziform, strongly widened towards the rear, fore- and hind margins straight, but latter weakly incised midway. Segment 1 of fore-tarsus of male moderately enlarged. Aedeagus – Fig. 38.

Length of male: 2.9 mm. Length of female: 3.6 mm.

**Distribution.** India.

**Differential diagnosis.** Near *C. darjilingensis* Jacoby, 1908, but larger, with different elytral pattern, black underside and other form of prosternum. From *C. nigronotatus* Bryant, 1954 differs in the absence of humeral spot.

### *Cryptocephalus dimidiatus* Suffrian, 1860

**Remark.** Only a female of this species was previously known. I have two specimens, male and female, from Rajasthan, in my collection. The female has an entirely fulvous prothorax (as in the original description), but the male has two round black spots midway along the prothorax (Fig. 7); its aedeagus has a bidentate apex (Fig. 39).

Length of male: 3.8 mm. Length of female: 4.5 mm.

**Distribution.** India.

### *Cryptocephalus sinuatolineatus* Pic, 1920

**Remark.** I have a series of this species with very variable colour of upperside from Sichuan and Yunnan. Most usual is a red prothorax with two black spots which, however, may be enlarged, united or connected to the basal margin, sometimes entirely black; elytral patterns are shown in Figs 18–22. Aedeagus – Fig. 40.

**Distribution.** China.

### *Cryptocephalus eroshkinae kuznetzovi* L. Medvedev, 1992 (stat.nov.)

**Remark.** This appears to be a subspecies *C. eroshkinae* L. Medvedev et Samoderzhenkov, 1987. The aedeagus in both is practically identical, as is a thin, transverse ridge on clypeus just behind the anterior margin, but they differ in the following key.

**Distribution.** Vietnam.

- 1(2) Labrum, metasternum and round spot near apex of pygidium black.  
Vietnam: Gialai Contum prov., Buon Loi. .... *C. eroshkinae eroshkinae*
- 2(1) Labrum, pygidium and underside entirely fulvous. Vietnam: Condao Island.  
..... *C. eroshkinae kuznetzovi* stat.nov.



***Cryptocephalus sarawacensis* sp.nov.**

**Material examined.** Holotype (male): Sarawak, 12 miles S. Kuching, 15.XII.1974, leg. A. Earnshaw (LM). Paratype: same locality, 12.XII.1974, 1 male (LM).

**Description.** Fulvous, frons and vertex darkened, antennae except two basal segments and extremely narrow basal margin of prothorax, scutellum and elytra, black.

Body almost parallel-sided, quite robust. Head finely punctate, not pubescent, clypeus divided from frons, anterior margin concave, the space between upper ocular lobes a little wider than that between antennal bases. Antennae reach anterior quarter of elytra, proportions of segments 2–4 are: 4-6-7, segments 6–10 distinctly widened, about 1.5 times as long as wide. Prothorax 1.6 times as wide as long, side margins rounded, and strongly narrowed anteriorly, hind angles obtuse, not produced rearwards, surface strongly convex, impunctate. Scutellum triangular, not notched basally, with a few microscopic punctures. Elytra 1.1 times as long as wide, slightly narrowing towards the apex, with regular rows of punctures and comparatively broad and flat interspaces. Pygidium finely punctate and pubescent. Prosternum quadrangular, wider than long, hind margin feebly concave, not toothed. Segment 1 of fore- and mid-tarsi feebly widened. Aedeagus (Fig. 41) strongly narrowed to base, with concave underside.

Length of body: 3.0–3.2 mm.

**Distribution.** Borneo.

**Differential diagnosis.** Resembles *C. annulipes* Baly, 1865 in colour, but differs immediately in short antennae, fulvous legs and smooth interspaces on elytra. Also similar in colour and general form to *Melixanthus coctus* Suffrian, 1854, but has distinctly elongate preapical antennal segments. In any case, this species looks as if it is transitional between typical *Cryptocephalus* Geoffroy, 1762 and *Melixanthus* Suffrian, 1854.

***Cryptocephalus romantsovi* sp.nov.**

**Material examined.** Holotype (female): Borneo, Sabah, Keningau district, Trus Madi Mts, 1500 m, 1–3.V.2006, leg. K. Vaksov (LM).

**Description.** Fulvous, each elytron with two large, subquadrate, violaceo-piceous spots (without metallic tint), one at base, the other beyond centre.

Body robust, narrowing to both ends, 1.8 times as long as wide. Clypeus feebly separated from frons, with arcuate anterior margin, impunctate, frons and vertex with longitudinal impression, sparsely or densely (vertex) punctate, the space between upper ocular lobes almost as wide as that between the antennal bases.

Antennae reach anterior third of elytra, thin, proportions of four basal segments are: 16-6-14-15, preapical segments about four times as long as wide. Prothorax twice as wide as long, very convex, narrowing strongly towards the front, hind angles acute and produced rearwards, surface lustrous, with sparse microscopic punctures. Scutellum triangular with rounded apex, not incised on base, with very fine punctures. Elytra 1.25 times as long as wide, almost parallel-sided, with regular rows of punctures, weaker on apical slope, interspaces wide, impunctate, flat or slightly convex. Pygidium slightly convex, densely punctate and pubescent. Prosternum as long as wide, hind margin concave, with two teeth, surface strongly punctate.

Length of body: 7.2 mm.

**Distribution.** Borneo.

**Etymology.** I dedicate this nice species to my colleague Pavel Romantsev, who provided me with interesting material from his collection.

**Differential diagnosis.** Morphologically and in size very alike at *C. cinnabarinus* Suffrian, 1854, differs from it and from similar *C. apicipennis* Baly, 1865, both of which have upperside entirely fulvous, and in pattern on elytra.

### ***Cryptocephalus (Asionus) zinovjevi* L. Medvedev, 1973**

**Material examined.** China, Shanxi, Taibaishan, 20 km S. Wangzhuangbu, 1200 m, 23–26.VII.1998, leg. Bolm, 3 specimens (NHMB).

**Remark.** Firstly record for China, known previously from Russian Far East (Amur District) and northern Mongolia.

**Distribution.** Russia, Mongolia, China.

### ***Cryptocephalus (Asionus) vouauxi* Achard, 1921**

**Material examined.** China, Kansu, Ponggartang, 30.VI.1992, leg. M. Bok, 1 male, 1 female (NHMB). Species previously known from Tsingai (Kukunor).

**Remark.** This species was placed earlier in the nominative subgenus, but it belongs without doubt to subgenus *Asionus* Lopatin, 1988.

**Distribution.** China.

## **References**

- BALY J. (1867): *Phytophaga Malayana*. Trans. Ent. Soc. London. **Ser. 3, 4:** 1–300.
- CHŪJŌ M. (1954). *A taxonomic study on the Chrysomelidae from Formosa. Part VII. Subfamily Cryptocephalinae*. Quarterly Journal of the Taiwan Museum **7(3–4):** 132–248.
- GRESSITT J.L. & KIMOTO S. (1963): *The Chrysomelidae (Coleopt.) of China and Korea*. Part 1. Pacific Insects Monograph, Honolulu **1A:** 1–299
- KIMOTO S. & GRESSITT J.L. (1981): *Chrysomelidae (Coleoptera) of Thailand, Cambodia, Laos and Vietnam*. 2. *Clytrinae, Cryptocephalinae, Chlamisinae, Lamprosomatinae and Chrysomelinae*. Pacific Insects **23(3–4):** 86–391.
- KIMOTO S. & TAKIZAWA H. (1997): *Leaf beetles (Chrysomelidae) of Taiwan*. Tokai University Press, Tokyo, 581 pp.
- JACOBY M. (1908): *The Fauna of British India including Ceylon and Burma. Coleoptera Chrysomelidae. Vol. 1*. London, Taylor and Francis, 534 pp.

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