A revision of the family Helotidae (Coleoptera: Cucujoidea) : VIII. The guerinii species-group of the genus Neohelota

Autor(en): **Lee, Chi-Feng / Votruba, Petr**

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A revision of the family Helotidae (Coleoptera: Cucujoidea): VIII. The *guerinii* species-group of the genus *Neohelota*

by Chi-Feng Lee and Petr Votruba

Abstract. The *guerinii* species-group of *Neohelota* Ohta is revised. Fifteen species are recognized, including four new species described herein: *N. cuccodoroi* sp.nov., from Indonesia, Laos, Thailand, and Vietnam; *N. laosensis* sp.nov., from Laos and Myanmar; *N. smetanai* sp.nov., from China (Sichuan); and *N. valentinae* sp.nov., from Laos and Nepal. Ten new synonyms are proposed: *Helota yezoana* Kôno, 1939 and *Neohelota lini* Lee et Satô, 2006 are junior synonyms of N. *cereopunctata* (Lewis, 1881); *Helota desgodinsi* Ritsema, 1893 and *H. pustulata* Ritsema, 1893 are junior synonyms of *Neohelota curvipes* (Oberthür, 1883); *Neohelota chunlini* Lee et Satô, 2006 is a junior synonym of *N. elongata* (Ritsema, 1905); *Neohelota babai* Lee et Satô, 2006 is a junior synonym of *N. guttata* (Ritsema, 1893); *Helota epipleuralis* Ritsema, 1914 is a junior synonym of *Neohelota intermedia* (Ritsema, 1905); *Helota magdalenae* Ritsema, 1910 and *H. grouvellei* Ritsema, 1910 are junior synonyms of *Neohelota ocellata* (Ritsema, 1881); *Helota neglecta* Ritsema, 1915 is a junior synonym of *Neohelota sumbawensis* (Ritsema, 1909). Lectotypes are designated for the following species: *Helota ceropunctata* Lewis, 1881; *H. magdalenae* Ritsema, 1910; and *H. serratipennis* Ritsema, 1891. A key for the *guerinii* species-group is provided. Figures of protibiae, genitalia, internal sacs, eighth abdominal tergites, and fifth abdominal ventrites are given for all species.

Key words. Helotidae – *Neohelota* – *guerinii* species-group – revision

Introduction

Helotidae is an inadequately known and originally monogeneric family of cucujoid beetles. KIREJTSHUK (2000) divided the family into five genera: *Helota* MacLeay, *Neohelota* Ohta, *Afrohelotina* Kirejtshuk, *Metahelotella* Kirejtshuk, and *Strophohelota* Kirejtshuk. Species within the genera *Helota* and *Metahelotella* have been revised (LEE 2007, 2008, 2009a, b).

Members of *Neohelota* are similar to *Helota* in possessing two pairs of oval yellow spots on the elytra, but they differ in having a flat pronotum. *Neohelota* is the most diverse genus within the family, comprising 60 species in the Oriental and eastern Palaearctic regions. LEE (2010) divided this genus into six species-groups, of which the *laevigata* and *helleri* groups have been revised (LEE 2010). The *candezei* group was revised by LEE & VOTRUBA (2011).

The *guerinii* group can be distinguished from the others by a combination of characters: yellowish-brown antero-lateral angles or sides of pronotum (except *Neohelota brevis* and *N. sumbawensis*), yellowish-brown hypomeron and prosternum (except *N. brevis* with bronze hypomeron), and bronze coloured legs. It is one of the most diverse groups, comprising 21 valid species. Most of them (17 species) were described a hundred years ago and descriptions of 13 of the species were based on single type specimens. Many synonyms are therefore to be expected, arising out of individual variation or sexual dimorphism.

The biology of *Neohelota* was unknown until LEE & SATÔ (2006) studied the Taiwanese species of Helotidae. Adults of the genus were always found on flowers, suggesting that members of *Neohelota* are anthophilous.

Material and Methods

The descriptive terminology follows LEE & SATÔ (2006). The types of all known species and 297 additional specimens were examined for this article.

Abbreviations for the museums or institutions holding the specimens used in this study are:

BMNH ..... The Natural History Museum, London, United Kingdom (M. Barclay)
BPBM ..... Bernice P. Bishop Museum, Honolulu, Hawaii, USA (G. A. Samuelson)
DEI ..... Deutsches Entomologisches Institut im ZALF, Müncheberg, Germany (L. Zerche)
EIHU ..... Hokkaido University, Sapporo, Hokkaido, Japan (M. Ôhara)
ERMI ..... Enrico Ruzzier Collection, Mirano, Italy
EUMJ ..... Ehime University, Matsuyama, Japan (H. Yoshitomi)
MHNG ..... Muséum d'Histoire Naturelle, Geneva, Switzerland (G. Cuccodoro)
MNHN ..... Muséum National d'Histoire Naturelle, Pairs, France (A. Taghavian & T. Deuve)
MSNG .... Museo Civico di Storia Naturale "Giacomo Doria", Genova, Italy (R. Poggi)
MTD ..... Museum für Tierkunde, Dresden, Germany (O. Jäger)
NHMB ..... Naturhistorisches Museum, Basel, Switzerland (M. Brancucci)
NMPC ..... National Museum, Praha, Czech Republic (J. Hájek)
NMW ..... Naturhistorisches Museum, Wien, Austria (M. Jäch)
RMNH ..... Nationaal Natuurhistorische Museum, Leiden, Netherlands (F. Assen)
SMNS ..... Staatliches Museum für Naturkunde, Stuttgart, Germany (W. Schawaller)
TARI ..... Taiwan Agricultural Research Institute, Taichung, Taiwan (C.-F. Lee)

Key to species of the *Neohelota guerinii* species-group

1. Pronotum transversely trapezoidal. ..... 2.
– Lateral margin of pronotum rounded (Figs 84, 85). ..... ***N. smetanai* sp.nov.**
2. Entire pronotum bronze. ..... 3.
– Antero-lateral angles and/or sides of pronotum broadly bordered with yellowish-brown. ..... 4.
3. Proepisternum greenish-bronze, same colour as pronotum ..... ***N. brevis* (Ritsema)**
– Proepisternum yellowish-brown, different colour from pronotum. ..... ***N. sumbawensis* (Ritsema)**
4. Elytral apices serrate. ..... 5.
– Elytral apices smooth. ..... 9.
5. Elytral apices continuously serrate (Figs 90–93). ..... 6.
– Elytral apices rounded, serration present before apices (Figs 16, 17, 60, 61, 106, 107). ..... 7.
6. Apical halves of internal margins of meso- and metatibia in males flattened and with dense, elongate hairs; extremely densely elongate setae along apical margin of fifth abdominal ventrite in male (Fig. 96); elytral apices in female acute (Fig. 93). ..... ***N. serratipennis* (Ritsema)**

– Apical halves of internal margins of meso- and metatibiae in male weakly flattened and with scattered elongate hairs (Fig. 37); less dense elongate setae along apical margin of fifth abdominal ventrite in male; elytral apices in female narrowly rounded (Figs 38, 91). ..... ***N. guttata* (Ritsema)**

7. Elytra relatively wide, about 1.77× longer than wide; female elytral apices divergent and rounded (Figs 6, 17, 53, 61). ..... 8.
– Elytra relatively narrower, about 2.08–2.36× longer than wide (Figs 33, 34); female elytral apices divergent and tapering (Fig. 34). ..... ***N. elongata* (Ritsema)**

8. Sides of pronotum broadly bordered with yellowish-brown (Fig. 5); male protibia without a deep notch at apical 1/3 (Fig. 19). ..... ***N. cuccodoroi* sp.nov.**
– Antero-lateral angles of pronotum yellowish-brown (Fig. 52); Male protibia with a deep notch at apical 1/3 (Fig. 63). ..... ***N. intermedia* (Ritsema)**

9. Sides of pronotum bordered with yellowish-brown (Figs 7, 8, 56–59). ..... 10.
– Only antero-lateral angles of pronotum yellowish-brown. ..... 11.

10. Dorsum bronze; sides of pronotum broadly bordered with yellowish-brown (Fig. 7). ..... ***N. curvipes* (Oberthür)**
– Dorsum greenish-bronze; sides of pronotum narrowly bordered with yellowish-brown (Fig. 56–59). ..... ***N. ocellata* (Ritsema)**

11. Anterior and posterior spots on elytron situated between the third and seventh striae (Figs 35, 36). ..... ***N. guerinii* (Hope)**
– Anterior and posterior spots on elytron situated between other striae, anterior spot between fourth and sixth or seventh, posterior spot between third and sixth striae. ..... 12.

12. Anterior spot on elytron situated between fourth and seventh striae, posterior spot between third and sixth striae (Figs 31, 32). ..... ***N. dohertyi* (Ritsema)**
– Anterior spot on elytron situated between fourth and sixth striae, posterior spot between third and sixth striae. ..... 13.

13. Large species, more than 10.0 mm in length. ..... ***N. valentinae* sp.nov.**
– Small species, less than 9.0 mm in length. ..... 14.

14. Elytra slender, 1.94–2.06× longer than wide (Figs 3, 4), apices divergent rounded in females (Fig. 4). ..... ***N. cereopunctata* (Lewis)**
– Elytra wider, 1.83× longer than wide (Figs 54, 55), apices conjoined rounded in females (Fig. 55). ..... ***N. laosensis* sp.nov.**

Taxonomy

Neohelota brevis (Ritsema, 1891)

Helota brevis Ritsema, 1891c: 199; Ritsema, 1891d: 227 (key); Ritsema, 1896: 133 (species known from Sumatra); Ritsema, 1909: 182 (key); Ritsema, 1910: 80 (key); Ritsema, 1911: 104 (list); Ritsema, 1915a: 134 (two specimens preserved in the Leiden Museum); Ritsema, 1915b: 235 (key); Wegrzynowicz, 2000: 395 (list).
Neohelota brevis: Kirejtshuk, 2000: 28.

Type material. The holotype ♀ of *Helota brevis* Ritsema is labelled: "Wahnes Borneo / brevis Rits Borneo / *Helota brevis*, Rits. type ♀ / HOLOTYPE (red label) / Ex Musćo Van de Poll 1909 / Muséum Paris ex Coll. R. Oberthür 1952". It is glued on the card and deposited at the MNHN.
Other materials examined (10 specimens). 1 ♀, INDONESIA, Java (DEI); 1♂, J. L. Weyers Indrapoera Sumatra occ. (RMNH); 1♂, INDONESIA, Sumatra, Benakat (Nursery site). 6.ii.1983, leg. H. Makihara (TARI); 1♂, 3♀♀, INDONESIA, Sumatra, Payakumbuh area, Harau Halley env., iv.–vi.2006, leg. St. Jakl (NMPC); 2♂♂, MALAYSIA, Pahang, Benom Mts., 15 km E Kampong Dong, 03°53′N 103°01′E, 1.iv.1998, leg. Dembický & Pacholátko (NMHB); 1♀, MALAYSIA, Sarawak, Bau District, Pangkalan Tebang, 300–450 m, 6.ix.1958, leg. T. C. Maa (BPBM).

Description. M a l e . Length 8.8 mm; width 3.1 mm. Dorsal surface (Fig. 1) greenish-bronze; antennae blackish-brown but with antennomeres 1–2 and 9–11 yellowish brown; yellowish-brown spot on pronotum reduced; each elytron with two yellow spots between third and seventh striae. Ventral surface pale yellow with head and proepisternum greenish-bronze. Legs yellowish-brown with tibiae and apical third of femora greenish-bronze, tarsi and claws dark brown.

Dorsal surface of head randomly and densely punctate; ventral surface with more pronounced punctures. Pronotum 0.69 times longer than wide, lateral margins straight, moderately crenulate, sides narrowing apically, surface with dense, regular punctures, shortened at middle of base. Elytra 1.83 times longer than wide, widest at basal 1/3, narrowing toward apices, each elytron with a very small apical tooth, apical third of lateral margin minutely and remotely serrate; apex widely rounded, intervals between striae with additional pronounced punctures. Thoracic ventrites with random and pronounced punctures, reduced medially and basally on metaventrite. Punctures on abdominal ventrites very small. Protibia (Fig. 10) moderately curved, dorsally depressed in apical 1/3 of internal edge. Fifth abdominal ventrite (Fig. 11) with apical margin emarginate, but truncate at median area, surface with dense, stout setae confined to medial area, several elongate setae along apical margin, apical margin with dense, elongate setae. Eighth abdominal tergite (Fig. 9) longitudinal, apical margin slightly convex. Penis (Fig. 13) with apical margin emarginate midway, forming two tubular processes directed outwards, dorsal lobes with curved and acute apices, sides parallel, a little narrower than penis, notch between connection of dorsal lobes pronounced, basal with a median notch, extremely deep, reaching base of apical processes. Parameres (Fig. 14) longitudinal, subapically narrowed, apex forming two acute apical processes, notch between processes shallow and wide; laterally margined with dense, elongate setae, sides of ventral surface with sparse, tiny setae, basal margin truncate. Internal sac (Fig. 15) with one pair of longitudinal sclerites at apex, covered with teeth; one pair of curved sclerites internally margined with teeth at centre, one straight flagellum at base, basally connecting with an Y-shaped sclerite ventrally (Fig. 12).

F e m a l e (Fig. 2): Length 9.5 mm; width 3.4 mm. Differing from male in straight protibiae and acute elytral apices with serration along apical margin reduced.

Remarks. In specimens from West Malaysia the apical margin of the elytron is smooth in males.

Differential diagnosis. *Neohelota brevis* is similar to *N. sumbawensis* in the bronze pronotum without yellowish-brown spots or stripes, but is easily distinguished from the latter by the bronze proepisternum (in contrast to the yellowish-brown proepisternum in *N. sumbawensis*).

Distribution. Indonesia, Malaysia.

Neohelota cereopunctata (Leiws, 1881)

Helota cereo-punctata Lewis, 1881: 255; Ritsema, 1891d: 227 (key); Ritsema, 1911: 104 (list);
Helota cereopunctata: Olliff, 1883: 55 (list); Ritsema, 1889: 111 (list); Ritsema, 1891d: 227 (key); Ritsema, 1893c: 183 (key); Ritsema, 1915a: 134 (one type and two specimens preserved in the Leiden Museum); Ritsema, 1915b: 235 (key); Jakobson, 1915: 900 (list); Ohta, 1929: 108 (key); Kôno, 1939: 159 (list); Lafer, 1992, 276 (key); Wegrzynowicz, 2000: 395 (list).
Helota cecopunctata (sic!): Fleutiaux, 1886: 220.
Neohelota ceropunctata: Kirejtshuk, 2000: 28.
Helota yezoana Kôno, 1939: 158. **syn. nov.**
Neohelota yezoana: Kirejtshuk, 2000: 30.
Neohelota lini Lee et Satô, 2006: 537. **syn. nov.**

Type material. Lectotype ♂ of *Helota cereopunctata* Lewis, here designated to preserve stability and to make the use of this name more universal, is labelled: "Japan G. Lewis 1910-320 / Type (circular label with red margin) / *Helota cereo-punctata* Lewis ♂ type". It is glued on the card and deposited at the BMNH. Three paratypes (1♂, 2♀♀) with the same data as lectotype are also deposited at the BMNH. A paralectotype ♀ deposited at the RMNH is labelled: "Co-Type / Cat No. 50a / Japon Lewis / *cereopunctata* Lewis examplaire typique / *Helota cereopunctata* ♀ Lewis / M. Sédilllot Japon". Another paralectotype ♀ deposited at the MNHN is labelled: "Japan (circular label) / *Helota cereopunctata* Lewis / CoTYPE (red label) / Museum Paris Coll. M. Pic".
One paratype ♂ of *Helota yezoana* Kôno at the EIHU, is labelled: "Hokkaido H. Kôno (on the back: Jozankai 1935 VI 2) / *Helota yezoana* Kôno ♂ Type (red)".
Other materials examined (20 specimens). 1♂, CHINA: Guizhou, Leigongshan, Xijiang, 29v.–2.vi.1997, 1200–1900 m, leg. Bolm (NHMB); 1♀, CHINA, Sichuan, Nitou Tatsienlu, leg. Em. Reitter (NMPC); 1♂, 1♀, CHINA, Yunnan, Kunming, Huating Shan (Xi Shan), 2200 m, 10.v.1987, leg. H. Wakahara (EUMJ); 2♀♀, CHINA, Yunnan, Lijiang env., 2400 m, 26°45′357″N 99°59′635″E, leg. R. Novak (NMPC); 1♀, JAPAN, Hokkaido, Sapporo, Jôzankei, 24.vi.2006, leg. H. Yoshitomi (EUMJ); 2♂♂, JAPAN, Honshu, Yamanashi Pref., Enzan city, Sagashio, 11.vi.2005, leg. H. Kurihara (TARI); 1♀, JAPAN, Shikoku, Ehime Pref., Omogokei, 31.v.1981, leg. M. Tsuneoka (EUMJ); 1♂, JAPAN, Tsushima, Nagasaki Pref., Ariake-yama, 22–23.v.1982, leg. Y. Notsu (TARI); 1♀, same locality, 23.v.1957, leg. K. Baba (EUMJ); 1♀, same locality, 12.v.1978, leg. A. Oda (EUMJ); 1♂, 1♀, JAPAN, Tsushima, Nagasaki Pref., Mt. Mitake, 31.vii.1979, leg. M. Kotani (EUMJ); 1♂, TAIWAN, Hsinchu, Lidonshan, 1.iv.2007, leg. Y.-L. Lin (TARI); 1♂, TAIWAN, Hsinchu, Talulintao, 19.iv.2008, leg. Y.-L. Lin (TARI); 1♀, same locality, 24.vi.2009, leg. Y.-F. Hsu (TARI); 1♀, TAIWAN, Taichung, Anmashan, 19.ix.2011, leg. C.-F. Lee (TARI); 1♂, TAIWAN, Taoyuan, Paling, 8.xi.2009, leg. M.-H. Tsou (TARI).

Remarks. The Japanese specimens lack yellowish-brown spots on the antero-lateral angles of the pronotum. Ritsema (1915) indicated that the proepisternum is bronze or metallic green, but this is not correct. The proepisternum in this species should be yellowish-brown.

Differential diagnosis. This species was thoroughly described under the name *Neohelota lini* by LEE & SATÔ (2006). *Neohelota cereopunctata* is similar to *N. valentinae* and *N. laosensis* in the smooth elytral apices and the anterior spot on the elytra between fourth and sixth striae, but differs in its slender elytra (1.94–2.06× longer than wide).

Distribution. China, Japan, Taiwan.

Neohelota cuccodoroi sp.nov.

Type material. Holotype♂: "TAM DAO TONKIN (= VIETNAME) H. PERROT / Coll. H. Perrot in Coll. M. Curti MHNG-1991 (MHNG). Paratypes: 1♂: "KALIMANTAN (in INDONESIA) – SOUTH KANDANGAN distr. 900 m LOKSADA vill. 17 km NE 9.10.1997 s. Jakl lgt" (NMPC); 7♂♂, 7♀♀, same as holotype (MHNG); 1♀: "LAOS-NE, Houa Phan prov., 20°13′09–19″N 103°59′54″-104°00′03″E, 1480–1550 m, PHOU PANE Mt., 9–16.vi.2009, David Hauk leg. / NHMB Basel, NMPC Prague Laos 2009 Expedition: M. Brancucci, M. Geiser, Z. Kraus, D. Hauck, V. Kubáň" (NHMB); 1♀, LAOS. Louangphrabang prov., 20°33–4′N 102°14′E, Ban Song Cha (5km W), 1200 m, 1–9.V.1999, leg. Vit Kubáň (NMHB); 1♀, same data but with 10–16.V.1999 (NMHB); 2♀♀, same but with 24–30.IV.1999 (NMHB); 4♀♀: "LAOS. Louangnamtha prov., 21°09′N 101°10′E, Namtha ? Muang Sing, 900–1200 m, 5–31.V.1997, leg. Vit Kubáň (NMHB); 1♀: "LAOS-N (Oudomxai), 1–9.V.2002, ~1100m, 20°45′N 102°09′E, OUDOM XAI (17km NEE), J. Chalupek leg." (NMPC); 1♂: "LAOS-NE, Xieng Khoung prov., 19°37–8′N 103°20–1′E, 30km NE Phonsavan : Ban Na Lam? Phou Sane Mt., 1300–1700 m, 10.–30.v.2009, M. Geise leg. / NHMB Basel, NMPC Prague Laos 2009 Expedition: M. Brancucci, M. Geiser, Z. Kraus, D. Hauck, V. Kubáň" (NHMB); 1♀, same but with "D. Hauck leg." (NHMB); 1♀, same but with "Z. Kraus leg." (NHMB); 2♂♂: "LAOS Nong het Xienkhouang Prov. 5.IV.2007 N. Ohbayashi leg." (EUMJ); 1♀: "[LAOS] Nong Het Xieng Khoang 24.VI.2006 J. Yamasako leg." (EUMJ); 1♂: "THAILAND: NW. Chiangmai Prov. Chiangdao, 450m, IV-5-1958 / J. L. Gressitt Collector" (BPBM); 1♂: "NW THAILAND 8–18.V. MAE HONG SON 1992 BAN HUAI PO 1600–2000m J. HORAK LEG." (NMPC); 1♂: "N. VIETNAM (TONKIN) TAMDAO 12.–25.5.1989 PACHOLÁTKO Leg. / Preiwilliger Museumsverein Basel 1989" (NMHB).

Description. Male. Length 7.5 mm, width 3.2 mm. Dorsal surface (Fig. 5) dark bronze; antennae yellowish-brown, scape with one dark spot, three distal antennomeres darkened; sides of pronotum yellowish- brown, without clear delimitation; each elytron with two yellow spots between third and seventh striae. Ventral surface pale yellow; head and elytral epipleuron metallic green. Legs yellowish-brown with tibiae and apical 1/4 of femora metallic green; tarsi dark brown.

Dorsal surface of head randomly and densely punctate; ventral surface with more pronounced punctures. Pronotum 0.68 times longer than wide, lateral margins weakly crenulate, sides narrowing apically, surface randomly and densely punctured, abbreviated at middle of base, larger punctures at sides. Elytra 1.77 times longer than wide, widest at base, narrowing regularly towards apices; each elytron with two very small apical teeth, apical third of lateral margin minutely and remotely serrate, apices divergent and widely rounded (Fig. 16). Thoracic ventrites with random and pronounced punctures, reduced medially and basally on metaventrite. Punctures on abdominal ventrites very small. Protibiae (Fig. 19) moderately curved, internal margin dorsally and strongly depressed in apical half. Fifth abdominal ventrite (Fig. 20) with sinuate apical margin, surface with dense, elongate setae confined to medio-apical area along apical margin; several extremely elongate setae at sides. Eighth abdominal tergite (Fig. 18)

transversely oval, apical margin rounded, or weakly emarginate midway. Penis (Fig. 21) with short, wide apical process, apex truncate, sides parallel, apico-lateral angles with scattered fine teeth, internal margin slightly emarginate; dorsal lobes a little narrower than penis, with acute apices, notch between connection of dorsal lobes pronounced, sides parallel; basal margin with extremely deep notch, exceeding internal margin, apically widened. Parameres (Fig. 22) wide, widest near middle; apical margin with a shallow notch midway; ventral surface with short, dense setae, basal margin truncate, with a number of elongate setae at sides and outer margins. Internal sac (Fig. 23) with one pair of elongate and lateral sclerites on ventral surface of apex, inner margin with teeth; one elongate sclerite at dorsal surface of apex, bases bifurcate, disc basally covered in dense teeth, with erect process at middle of base; one pair of lateral longitudinal sclerites dorsally covered in dense teeth, bases of lateral longitudinal sclerites dorsally covered by a short sclerite, apically margined with teeth; one elongate sclerite between longitudinal sclerites; one pair of lateral elongate sclerites at base, bases recurved.

F e m a l e (Fig. 6). Length 7.0–7.9 mm; width 2.9~3.4 mm. Differs from male in straight protibiae, yellowish-brown spots on pronotum reduced towards the rear, elytra subapically serrate, and elytral apices angular (Fig. 17).

Etymology. The species is named for Dr. Giulio Cuccodoro, Curator at the Muséum d'Histoire Naturelle, Geneva, Switzerland, who provided us with many specimens of this new species.

Differential diagnosis. This new species is very similar to *Neohelota intermedia* in sharing remotely serrate elytral apices and wide elytra, but differs in wide, yellowish-brown stripe along the lateral margin of the pronotum, larger anterior yellow spots on elytra (between third and seventh striae), and more curved protibia lacking an abruptly deep notch in males.

Distribution. Indonesia, Laos, Thailand, Vietnam.

Neohelota curvipes (Oberthür, 1883)

Helota curvipes Oberthür, 1883: 60; Olliff, 1884: 101 (synonymized with *H. guerinii*); Ritsema, 1889: 105 (status recurred); Ritsema, 1891a: 889 (description of female); Ritsema, 1891d: 227 (key); Ritsema, 1894: 103 (species known from Myanmar); Ritsema, 1911: 104 (list); Ritsema, 1915a: 132 (two specimens preserved in the Leiden Museum); Ritsema, 1915b: 233 (key); Jakobson, 1915: 900 (list); Wegrzynowicz, 2000: 396 (list).

Neohelota curvipes: Kirejtshuk, 2000: 28.

Helota Desgodinsi Ritsema, 1893a: 131; Ritsema, 1893b: 160 (list); Ritsema, 1894: 111 (description of female); Ritsema, 1911: 104 (list); Ritsema, 1915a: 132 (nine specimens preserved in the Leiden Museum); Ritsema, 1915b: 233 (key). **syn. nov.**

Helota desgodinsi: Jakobson, 1915: 900 (list); Wegrzynowicz, 2000: 396 (list); Wegrzynowicz, 2000: 396 (list).

Neohelota desgodinsi: Kirejtshuk, 2000: 28.

Helota pustulata Ritsema, 1893a: 133; Ritsema, 1893b: 160 (list); Ritsema, 1894: 118 (description of male); Ritsema, 1911: 106 (list); Ritsema, 1915a: 132 (one specimens preserved in the Leiden Museum); Ritsema, 1915b: 233 (key); Jakobson, 1915: 900 (list); Wegrzynowicz, 2000: 402 (list). **syn. nov.**

Neohelota pustulata: Kirejtshuk, 2000: 30.

Type material. The holotype ♂ of *Helota curvipes* Oberthür is labelled: "Curvipes R. Oberthür. India / Ex-Musćo Mniszech / Helota curvipes R. Oberthür, TYPE Col. novit. I. p. 60 / *Helota guerini*, Hope. / S. Olliff vidit 1884 / Ritsema vidit 1892 / Inde / Ritsema 1899 / Compared with type / Muséum Paris ex Coll. R. Oberthür 1952". It is glued on the card and deposited at the MNHN.
The holotype ♂ of *Helota desgodinisi* Ritsema is labelled: "Pedong Desgondins / *Helota Desgodinisi* Rits. ♂ type / Ritsema vidit 1892 / Ritsema vidit 1894 / Ritsema vidit 1899 / HOLOTYPE (red label) / Muséum Paris ex Coll. R. Oberthür 1952". It is glued on the card and deposited at the MNHN.
The holotype ♀ of Helota pustulata Ritsema is label: "Pedong Desgondins / *Helota pustulata* Rits. ♀ type / Ritsema vidit 1892 / Ritsema vidit 1894 / Muséum Paris ex Coll. R. Oberthür 1952". It is glued on the card and deposited at the MNHN.
Other materials examined (122 specimens). 1♂, CHINA, Yunnan, Maande, 14.v.2010, leg. W.-H. Lin (TARI); 2♂♂, 2♀♀, INDIA, Bhimtal nr Naini Tal, 1500 m, 10.vi.1978, leg. F. Smetacek (RMNH); 1♂, INDIA, Darjeeling, Homea 1230m, 17.iv-1985, leg. B. Bhakta (NHMB); 1♂, INDIA, Darjeeling, Pedong 1300m, 20.iv.986, leg. B. Bhakta (NHMB); 1♂, INDIA, Jhatingri, Mandi. Punjab, 6000 ft, leg. H. G. Champion (BMNH); 1♀, INDIA, Meghalaya, 9km NW of Jowai, 1400m, 25°30′N 92°10′E, 12.v.1999, leg. Dembický & Pacholátko (NHMB); 1♀, INDIA, Ranikhet, v.1949, leg. I. M. Newell (BPBM); 1♀, INDIA, Sikkim east, Gantok env., 2000–2500 m, Fambong-Lho forest, 8–15.vii.1997, leg. J. Schneider (NMPC); 10♂♂, 10♀♀, LAOS: Houa Pan prov., Ban Saluei ? Phou Pane Mt., 20°12–13.5′N 103°59.5′–104°01E, 1340–1870 m, 10.v.–16.vi.2009, leg. M. Brancucci & local coll. (NHMB); 1♂, 2♀♀, LAOS: Houa Pan prov., Phou Pane Mt., ~20°13′N 104°00′E, 1–16.vi.2009, leg. M. Brancucci (NMHB); 2♂♂, 1♀, same locality, 7.iv.25.v.2010, leg. C. Holzschuh (BMNH); 3♂♂, 2♀♀, same locality, 27.iv.–1.vi.2011,leg. C. Holzschuh (BMNH); 7♂♂, 7♀♀, same locality, 11.iv.–15.v.2012, leg. C. Holzschuh (BMNH); 1♂, 2♀♀, LAOS. Louangnamtha prov., Namtha ? Muang Sing, 21°09′N 101°19′E, 900–1200m, 5–31.v.1997, leg. Vit Kubáň (NHMB); 1♂, 1♀, LAOS. Phongsaly prov., Phongsaly env., 1500m, 21°41–2′N 102°06–8′E, 28.V.–20.VI.2003, leg. Vit Kubáň (NHMB); 2♂♂,same, but with leg. Brancucci (NHMB); 5♂♂, 1♀, same, but with leg. Pacholátko (4♂♂: NHMB; 1♂, 1♀: NMPC); 1♀, same, but with 28.v.–30.vi.2003 (NHMB); 1♀, same, but with 6–17.v.2004 (NHMB); 4♂♂, 3♀♀, LAOS, Sekong prov., Bolavens-Pl., N-slope ca. 10km N Mg. Tha Theng, 500–700m, 29–30.v.1996, leg. Schillhammer (NMW); 1♂, LAOS, Xaisomboung, Mt. Phu Bia, 14–26.x.2006, leg. Native collector (EUMJ); 1♂, LAOS, Xienghouang, Nong Het, 5.iv.2007, leg. N. Ohbayashi (EUMJ); 1♀, MYANMAR, Hpimaw, Kachin St., 30.vi.2003, leg. A. Abe (EUMJ); 1♂, NEPAL, Annapurna Mts., Marsyandi vall., Syange, 1100 m, 25.viii.1995, leg. O. Jäger (MTD); 1♀, NEPAL, Arun V., Chichila 1950m – Mure 2000m, 1,vi.1983, leg. M. Brancucci (NHMB); 1♂, NEPAL, Arun V., Dolikorkha-Mongmaya, 1.vi.1988, leg. Lebisc & Probst (NMPC); 1♀, NEPAL, Arun V., Lamobagar Gola 1400m, 9–14.vi.1983, leg. M. Brancucci (NHMB); 1♂, NEPAL, Arun V., Mure 2000m – Num 1550m, 4–7.vi.1983, leg. M. Brancucci (NHMB); 1♀, NEPAL, Bagm ati, Sindhupalchok, Dapkakhaka 2100m, 11.vi.1989, leg. M. Brancucci (NHMB); 1♀, NEPAL, Gandaki Zone, Pokhara env., 900–1200 m, 31.v.2001, leg. M. Pejcha (NMPC); 1♂, NEPAL, Kosi – 8♂♂, Khandbari, 27°22′N 87°12′E – river S of Bote Bash 27°27′N 87°11′E, 1100–1550m, 2.vi.2001 (NHMB); 1♂, NEPAL, Kakani, 2000 m, nr. Kathmandu, 17.ix.1981, leg. M. Sakai (TARI); 1♂, NEPAL, Kathmandu Tal Shivapuri Lekh, Mulkharka, sw. Bagmati, 2200 m, 27°47′04″N 85°24′24″E, 22.v.2005, leg. O. Jäger (MTD); 1♀, THAILAND, Chiang Mai, Doi Suthep, 1–5.vi.1986, leg. H. Hirasawa (EUMJ); 1♂, THAILAND. Mae Hong Son, 15–20.v.1996, leg. A. Rudrna (NMPC); 3♂♂, 3♀♀, THAILAND. Mae Hong Son, Ban Hui Po, 1600–2000m, 9–16.v.1991, leg. J. Horák (NHMB); 2♂♂, 1♀, same but with "17–23.v.1991" (NMPC); 9♂♂, 3♀♀, same but with "8–18.v.1992" (9♂♂, 2♀♀: NMPC; 1♀: NMW); 1♂, 2♀♀, same locality, 8–17.v.1992, leg. S. Bily (NHMB); 1♀, THAILAND. Soppong-Pai 1800m, 1–6.v.1991, leg. Pacholátko (NHMB); 1♀, same, but with 25.iv.–5.V.1992 (NMW); 1♂, VIETNAM. Hoang Lien Son prov., Sa Pa, 11–15.v.1990 leg. Kubán (NHMB).

Description. Male. Length 7.6–9.4 mm, width 3.2–3.8 mm. Dorsal surface (Fig. 7) bronze to dark bronze; antennae yellowish-brown, scape with one dark spot, two distal antennomeres darkened; antero-lateral angles of pronotum yellowish-brown, without clear delimitation; each elytron with two yellow spots between third and seventh striae. Ventral surface pale yellow; head and elytral epipleuron metallic green. Legs yellowish-brown with tibiae and apical 1/4 of femora metallic green; tarsi dark brown.

Dorsal surface of head randomly and densely punctate; ventral surface with more strongly pronounced punctures. Pronotum 0.66–0.68 times longer than wide, lateral

margins weakly crenulate, sides narrowing apically, surface randomly and densely punctured, abbreviated at middle of base, large punctures at sides. Elytra 1.86–2.03 times longer than wide, widest at base, sides parallel; each elytron with a very small apical tooth, apex truncate; each elytron with ten striae, with additional punctures between fifth and tenth striae. Thoracic ventrites with random and pronounced punctures, reduced medially and basally on metaventrite. Punctures on abdominal ventrites very small. Protibiae (Fig. 25) slightly curved, internal edges ventrally depressed at apical 1/3, dorsally depressed at centre. Fifth abdominal ventrite (Fig. 26) with sinuate apical margin, surface with dense, elongate setae confined to medio-apical area along apical margin; numerous extremely elongate setae at sides. Eighth abdominal tergite (Fig. 24) slightly narrowed at centre, apical margin truncate. Penis (Fig. 28) with apex as wide as dorsal lobes, apical margin widely rounded, sides parallel; dorsal lobes with acute and curved apices, notch between connection of dorsal lobes pronounced, sides parallel; basal margin with extremely deep notch, reaching apex of penis, apically widened. Parameres (Fig. 29) elongate, widest at middle; apical margin with a moderate notch midway, a pair of small processes at sides of notch; ventral surface with short, dense setae, basal margin truncate, with a number of elongate setae at sides and outer margins. Internal sac (Fig. 30) with one longitudinal dorsal sclerite and one triangular ventral sclerite at apex, dorsal sclerite with a number of teeth on apex, ventral sclerite with one median longitudinal row of erect teeth; pair of curved sclerites at centre, with teeth along outer margin, flagellum straight at base, base of flagellum slightly bifurcate and recurved in lateral view (Fig. 27), connected to Y-shaped sclerite that has a small process at basal 1/3, apex covered in teeth.

F e m a l e (Fig. 8). Length 7.6~9.9 mm; width 3.3~3.9 mm. Differs from male in straight protibiae and tapering and divergent elytral apices, yellowish spots on pronotum reduced towards base.

Remarks. Indian specimens are larger, lack additional punctures between fifth and ninth striae, and the internal margins of the anterior spots on the elytra exceed the fourth striae.

Differential diagnosis. *Neohelota curvipes* is similar to *N. cuccodoroi* in that the pronotum is broadly bordered with yellowish-brown but differs in its smooth elytral apices (in contrast to remotely serrate elytral apices in *N. cuccodoroi*).

Distribution. China, India, Laos, Myanmar, Nepal, Thailand, Vietnam.

Neohelota dohertyi (Ritsema, 1891)

Helota Dohertyi Ritsema, 1891a: 898; Ritsema, 1891d: 227 (key); Ritsema, 1894a: 103 (species known from Myanmar); Ritsema, 1911: 104 (list); Ritsema, 1915a: 138 (no specimens preserved in the Leiden Museum); Ritsema, 1915b: 234 (key).
Helota dohertyi: Wegrzynowicz, 2000: 396 (list).

Type material. The holotype ♂ of *Helota dohertyi* Ritsema is label: "Hte Birmanie Mines des Rubis 1200m–2300m Doherty 1890 / Dohertyi Rits. Birmania / Helota Dohertyi, Rits. ♂ type / RITSEMA / Ritsema vidit 1918 / TYPE (red label) / Muséum Paris ex Coll. R. Oberthür 1952". It is glued on the card and deposited at the MNHN.

Other material examined (37 specimens). 9♂♂, 2♀♀, LAOS: Houa Pan prov., Ban Saluei ? Phou Pane Mt., 20°12–13.5′N 103°59.5′–104°01E, 1340–1870 m, 10.v.–16.vi.2009, leg. M. Brancucci & local coll. (NHMB); 1♂, 1♀, same locality, 15.iv.–15.v.2008, leg. Lao collectors (1♂: NMPC; 1♀: NHMB); 1♂, 3♀♀, LAOS:

Houa Pan prov., Phou Pane Mt., ~20°13′N 104°00′E, 1–16.vi.2009, leg. M. Brancucci (NMHB); 1♂, same locality, 28.iv.–6.v.2002, leg. H. Yoshitomi (TARI); 1♀, same locality, 7.iv.–25.v.2010, leg. C. Holzschuh (BMNH); 1♂, 1♀, same locality, leg. C. Holzschuh (BMNH); 1♂, 1♀, LAOS. Phongsaly prov., Phongsaly env., 1500m, 21°41–2′N 102°06–8′E, 28.V.–20.VI.2003, leg. Pacholátko (1♂: NMPC; 1♀: NHMB); 3♂♂, THAILAND. Soppong-Pai 1800m, 1–6.v.1991, leg. Pacholátko (NHMB); 1♀, THAILAND. Mae Hong Son, Soppong, 19°27′N 98°20′E, 1500 m, 7–12.v.1996, leg. Vit Kubáň (NMHB); 1♂, 1♀, same but with "leg. J. Horák (NMPC); 2♂♂, 1♀, same locality, 10–13.v.1993, leg. Vit Kubáň (SMNS); 1♂, same locality, 10–13.v.1993, leg. L. Bocák" (SMNS); 3♂♂, 2♀♀, same locality, 1.v.1992, leg. P. Pacholátko (NMPC).

Description. Male. Length 10.6 mm, width 3.5 mm. Dorsal surface (Fig. 31) dark bronze; antennae yellowish-brown, scape with one dark spot, two distal antennomeres darkened; antero-lateral angles of pronotum yellowish-brown, without clear delimitation; each elytron with two yellow spots between third and seventh striae, internal margin of anterior spots slightly exceeding third striae. Ventral surface pale yellow; head metallic green. Legs yellowish-brown with tibiae, tarsi, and apical 1/4 of femora dark brown.

Dorsal surface of head randomly and densely punctate; ventral surface with more pronounced punctures. Pronotum 0.66–0.70 times longer than wide, lateral margins smooth, non-crenulate, sides narrowing apically, surface irregularly and sparsely punctured, abbreviated at middle of base, larger punctures near lateral margins. Elytra 1.88–1.92 times longer than wide, widest in basal 1/4, sides parallel; each elytron with no apical tooth, apex narrowly rounded; each elytron with ten striae, without additional punctures. Thoracic ventrites with random and pronounced punctures, reduced medially and basally on metaventrite. Punctures on abdominal ventrites very small. Protibiae (Fig. 40) slightly curved, internal edges ventrally depressed at apex, dorsally depressed at apical 1/3. Fifth abdominal ventrite (Fig. 41) with sinuate apical margin, surface with dense, elongate setae confined to medio-apical area along apical margin; one pair of extremely elongate setae near middle. Eighth abdominal tergite (Fig. 39) narrowed at centre, apical margin moderately convex. Penis (Fig. 42) apically narrowed, apical margin truncate, sides parallel; dorsal lobes with narrow apices, notch between connection of dorsal lobes pronounced, sides parallel; basal margin with extremely deep notch reaching halfway between penis and dorsal lobes. Parameres (Fig. 43) elongate, sides parallel; middle of apical margin with a very narrow notch, a pair of small processes close to each other; ventral surface with short, dense setae, basal margin truncate, with a number of elongate setae at sides and outer margins. Internal sac (Fig. 44) with one longitudinal dorsal sclerite and one oblong ventral sclerite at apex, dorsal sclerite with dense teeth on apical half, ventral sclerite with one median longitudinal row of erect teeth; with a pair of curved sclerites at centre, with teeth along outer margin, flagellum straight at base.

Female (Fig. 32): Length 8.3–8.5 mm; width 3.3–3.4 mm. Differs from male in the straight protibiae and tapering, divergent elytral apices.

Differential diagnosis. *Neohelota dohertyi* is similar to *N. guerinii*, *N. valentinae*, *N. cereopunctata*, and *N. laosensis* in possessing smooth elytral apices and the yellowish-brown antero-lateral angles of the pronotum, but is easily distinguished by the anterior yellowish-brown spots on the elytron between the fourth and seventh striae and the posterior spot between the third and sixth striae (in contrast to the anterior and posterior

spots between third and seventh striae in *N. guerinii*, and the anterior spot between fourth and sixth striae and the posterior spot between third striae in *N. valentinae*, *N. cereopunctata*, and *N. laosensis*).

Distribution. Laos, Myanmar, Thailand.

Neohelota elongata (Ritsema, 1905)

Helota elongata Ritsema, 1905a: 121; Ritsema, 1905b: 216 (list); Ritsema, 1911: 105 (list); Ritsema, 1915a: 138 (no specimens preserved in the Leiden Museum); Ritsema, 1915b: 233 (key); Wegrzynowicz, 2000: 397 (list).
Neohelota elongata: Kirejtshuk, 2000: 28.
Neohelota chunlini Lee et Satô, 2006: 534. **syn. nov.**

Type material. The holotype ♀ of *Helota elongata* Ritsema is labelled: "Tonkin Montes Mauson April Mai 2-3000′ H. Fruhstorfer / elongata Rits type Tonkin / Helota elongata Rits. ♀ type / Ritsema vidit 1905 / TYPE (red label) / Muséum Paris ex Coll. R. Oberthür 1952". It is glued on the card and deposited at the MNHN.
Other materials examined (4 specimens). 1♂, CHINA, Guangxi, Tiandeng Co., 500–800 m, 25°53′–23°06′N 106°54′–107°05′E, 27.viii.–1.ix.1998, leg. L. & R. Businsky (NMPC); 1♂, 1♀, TAIWAN, Ilan, Fushan, 13.iv.2011, leg. C.-F. Lee (TARI); 1♂, VIETNAM. Tamdao 80 km N. of Hanoi Pov. Vinh phu, 13.IV.1986 (SMNS); 1♂, same locality, 13–24.v.1989, leg. A. Olexa (NMPC).

Differential diagnosis. This species was thoroughly described by Lee & Satô (2006) under the name *Neohelota chunlini*. It is similar to *N. cuccodoroi* and *N. intermedia* in possessing remotely serrate elytral apices but the elytra are more slender (2.08–2.36× longer than wide).

Distribution. China, Taiwan, Vietnam.

Neohelota guerinii (Hope, 1840)

Helota Guerinii Hope, 1840: 188; Ritsema, 1889: 105 (diagnosis of allied species); Ritsema, 1891d: 226 (key).
Helota Guerini (sic!): Reitter, 1876: 6 (list); Fleutiaux, 1886: 220 (list); Ritsema, 1911:105 (list); Ritsema, 1915a: 132 (three specimens preserved in the Leiden Museum); Ritsema, 1915b: 233 (key).
Helota guerini (sic!): Olliff, 1883: 54 (list).
Helota guerinii: Wegrzynowicz, 2000: 398 (list).
Neohelota guerini (sic!): Kirejtshuk, 2000: 28.

Type material. The holotype ♀ of *Helota guerinii* Hope is labelled: "*Helota Guerinii* Hope Coll. Man III 188 E. Indies (Travancore) / Type / 46 (upper) 6 (lower)". It is glued on the card whose head and prothorax is lost. It is deposited at the BMNH.
Other materials examined (17 specimens) 7♂♂, 9♀♀, INDIA, Karnataka, W. Ghats 20km W Talguppa, Jog Falls, 14°14′N 74°44′E, 500±200m; 22–28.x.2002, leg. P. Pacholátko (NHMB); 1♀, INDIA, Tamil Nadu, Coimbatore env., vii.1980 (NMPC).

Description. M a l e . Length 8.6–9.0 mm, width 3.5–3.6 mm. Dorsal surface (Fig. 35) dark bronze; mandibles and clypeus metallic green; antennae yellowish-brown, scape with one dark spot, two distal antennomeres darkened; antero-lateral angles of pronotum yellowish-brown; each elytron with two large yellow spots between third and seventh striae. Ventral surface pale yellow; head and elytral epipleuron metallic green. Legs yellowish-brown with tibiae and apical 1/4 of femora metallic green; tarsi blackish-brown.

Dorsal surface of head randomly and densely punctate; ventral surface with more strongly pronounced punctures. Pronotum 0.70–0.72 times longer than wide, lateral margins weakly crenulate, basally abbreviated, sides narrowing apically, surface randomly and densely punctured, abbreviated at middle of base. Elytra 1.90–1.96 times longer than wide, widest at base, sides parallel; each elytron with a very small apical tooth, apex widely rounded; each elytron with 10 striae, with a number of additional punctures in the intervals between fourth and tenth striae. Thoracic ventrites with random and pronounced punctures, reduced medially and basally on metaventrite. Punctures on abdominal ventrites very small. Protibiae (Fig. 46) slightly curved, internal edges dorsally depressed from middle to apex. Fifth abdominal ventrite (Fig. 47) with sinuate apical margin, surface with dense, elongate setae confined to medio-apical area along apical margin; numerous extremely elongate setae at sides. Eighth abdominal tergite (Fig. 45) square, narrowed midway, apical margin weakly convex mesally. Penis (Fig. 48) with wide apex, sides parallel, internal margin medially emarginate; dorsal lobes narrowed in apical 1/4, apices rounded, notch between connection of dorsal lobes shallow, sides parallel; basal margin with extremely deep notch, reaching apex of penis, apically widened. Parameres (Fig. 49) elongate, widest at middle; apical margin with a moderate process midway, apex slightly emarginate; ventral surface with short, dense setae, basal margin truncate, with a number of elongate setae at sides and outer margins. Internal sac (Fig. 50) with one pair of apical sclerites, 1ongitudinal sclerite at dorsal surface, with several teeth beyond centre, a longitudinal row of teeth at ventral surface, teeth reduced at the rear; pair of curved sclerites at centre, toothed at margins of apices; straight flagellum at base, base connected with a apically bifurcate sclerite (Fig. 51).

F e m a l e (Fig. 36): Length 9.2–9.5 mm; width 3.5–3.6 mm. Differing from males in straight protibiae and tapering, divergent, acute elytral apices.

Differential diagnosis. *Neohelota guerinii* is similar to *N. dohertyi*, *N. cereopunctata*, *N. valentinae*, and *N. laosensis* in smooth elytral apices and the yellowish-brown antero-lateral angles of the pronotum, but it is easily distinguished by the anterior and posterior spots on the elytron between the third and seventh striae (in contrast to the anterior spot between fourth and seventh striae and the posterior spot between third and sixth striae in *N. dohertyi*, and the anterior spot between fourth and sixth striae and the posterior spot between third and sixth striae in *N. ceropunctata*, *N. valentinae*, and *N. laosensis*).

Distribution. India.

Neohelota guttata (Ritsema, 1893)

Helota guttata Ritsema, 1893a: 134; Ritsema, 1893b: 160 (list); Ritsema, 1911: 105 (list); Ritsema, 1915a: 133 (11 specimens preserved in the Leiden Museum); Ritsema, 1915b: 234 (key); Wegrzynowicz, 2000: 399 (list).

Neohelota guttata: Kirejtshuk, 2000: 28.

Neohelota babai Lee et Satô, 2006: 531. **syn. nov.**

Type material. The holotype ♀ of *Helota guttata* Ritsema is labelled: "Pedong Desgodinis / *Helota guttata* Rits. ♀ type / Ritsema vidit 1892 / Muséum Paris ex Coll. R. Oberthür". It is glued on the card and deposited at the MNHN.

Other mateial examined (33 specimens). 4♂♂, 5♀♀, INDIA. Meghalaya, 9km NW of Jowai, 1400m, 25°30′N 92°10′E, 12.v.1999, leg. Dembický & Pacholátko (NHMB); 1♂, INDIA; Meghalaya, 3km E Tura, 25°30′N 90°14′E, 1150m; 4.v.1999, leg. Dembický & Pacholáko (NHMB); 1♀, same but with "18.iv.1999" (NHMB); 2♀♀, INDIA, Meghalaya, Nokrek NP, W Garo Hills, 1100 m, 25°29.6′N 90°19.5′E, 9–17.v.1996, leg. Jendek & Sausa (NMW); 1♂, INDONESIA, Sumatra, Pawang, v.1991 (NMPC); 2♂♂, 3♀♀, LAOS, Hua Phan prov., Ban Saleui, Phou Pan (Mt.), 20°12′N 104°01′E, 1300–1900m, 11.iv.–15.v.2012, leg. C. Holzschuh (BMNH); 1♂, MYANMAR, Kangfang, Kachin St., 1.vi.2007, leg. A. Abe (EUMJ); 1♀, MYANMAR, Shan State, 35 km N Aungban, 20°55′20″N 96°33′60″E, 1320 m, 31.v.–8.vi.2002, leg. Schillhammer & Mying Hlaing (NMW); 1♂, MYANMAR, Shan State, 5 km SW Kalwa, Ye Ayegan, 20°35′96″N 96°31′80″E, 1380 m, 25.v.2002, leg. Schillhammer & Mying Hlaing (NMW); 1♂, THAILAND, Chiang Mai, Doi Suthep to Doi Pui, 18°49′N 99°00′E, 19–23.iv.1991, leg. L. Dembický (NMHB); 4♂♂, 2♀♀, THAILAND, Chiang Mai, Sanpakia, 19°19′N 98°50′E, 1400 m, 1–15.v.1998, leg. Vit Kubáň (NMHB); 1♀, THAILAND, Mae Hong Son, Ban Hui Po, 1600 m, 8–17.v.1992, leg. S. Bily (NHMB); 1♂, same locality, 8–18.v.1992, leg. J. Horak (NMPC); 1♀, THAILAND, Mae Hong Son, Soppong, 19°27′N 98°20′E, 1500 m, 28–31.v.1995, leg. Vit Kubáň (NMHB); 1♂, same but with "7–12.v.1996" (NMHB); 1♀, same locality, 10–13.v.1993, leg. L. Bocák" (SMNS); 2♂♂, 1♀, THAILAND, Soppong-Pai 1800m, 1–6.v.1991, leg. Pacholátko (NHMB); 1♂, same but with "1.v.1992" (NMPC).

Differential diagnosis. This species was thoroughly described by Lee & Satô (2006) under the name *Neohelota babai*. *Neohelota guttata* is similar to *N. serratipennis* in possessing continuously serrate elytral apices. For diagnosis of both species, see diagnosis of *N. serratipennis*.

Distribution. India, Indonesia, Myanmar, Thailand, Taiwan.

Neohelota intermedia (Ritsema, 1905)

Helota intermedia Ritsema, 1905a: 125; Ritsema, 1905b: 217 (list); Ritsema, 1911: 105 (list); Ritsema, 1915a: 138 (no specimens preserved in the Leiden Museum); Ritsema, 1915b: 234 (key); Jakobson, 1915: 900 (list); Wegrzynowicz, 2000: 399 (list).

Neohelota intermedia: Kirejtshuk, 2000: 28.

Helota epipleuralis Ritsema, 1914: 167; Ritsema, 1915a: 138 (no specimens preserved in the Leiden Museum; Ritsema, 1915b: 233 (key); Wegrzynowicz, 2000: 397 (list). **syn. nov.**

Neohelota epipleuralis: Kirejtshuk, 2000: 28.

Type material. The holotype ♀ of *Helota intermedia* Ritsema is labelled: "British Bootang Maria Basti (now in India) L. Durel / *Helota intermedia* Rits. ♀ type / Ritsema vidit 1905 / TYPE (red label) / Muséum Paris ex Coll. R. Oberthür 1952". It is glued on the card and deposited at the MNHN.

The holotype ♂ of *Helota epipleuralis* Ritsema is labelled: "Tonkin CooBry / Helota epipleuralis Rits. ♂ / TYPE (white label with red letters) / TYPE (red label with black letters) / MUSEUM PARIS A. GROUVELLE 1914". It is glued on the card and deposited at the MNHN.

Other materials examined (2 specimens). 1♂: LAOS, Louangnamtha prov., 21°09′N 101°10′E, Namtha ? Muang Sing, 900–1200 m, 5–31.V.1997, leg. Vit Kubáň (NMHB); 1♀, LAOS, Louangphrabang prov., 20°33–4′N 102°14′E, Ban Song Cha (5km W), 1200 m, 10–16.V.1999, leg. Vit Kubáň (NMHB).

Redescription. Male. Length 6.7 mm, width 2.9 mm. Dorsal surface (Fig. 52) bronze; antero-lateral angles of pronotum yellowish-brown, with clear delimitation; each elytron with two yellow spots, anterior spots between fourth and seventh striae, posterior spots between third and seventh striae. Ventral surface pale yellow; head, anterior and posterior margins of lateral angles of mesoventrite, and elytral epipleuron metallic green. Legs yellowish-brown with tibiae and apical 1/4 of femora metallic green; tarsi dark brown.

Dorsal surface of head randomly and densely punctate; ventral surface with more pronounced punctures. Pronotum 0.66 times longer than wide, lateral margins weakly crenulate, sides narrowing apically, surface randomly and densely punctured, reduced at middle of base, punctures larger at sides. Elytra 1.77 times longer than wide, widest at base, sides narrowing regularly toward apices; each elytron with a very small apical tooth, apical third of lateral margin minutely and remotely serrate, apices divergent and widely rounded (Fig. 60). Thoracic ventrites with random and pronounced punctures, reduced medially and basally on metaventrite. Punctures on abdominal ventrites very small. Protibiae (Fig. 63) moderately curved, internal edges dorsally and slightly depressed at apical half, with a small notch at apical 1/3. Fifth abdominal ventrite (Fig. 64) with truncate apical margin, surface with sparse, elongate setae confined to medio-apical area along apical margin. Eighth abdominal tergite (Fig. 62) transverse, apical margin medially emarginate. Penis (Fig. 65) with bifurcate and acute apices, sides parallel, apico-lateral angles with scattered fine teeth, internal margin emarginate; dorsal lobes as wide as penis, with acute apices, notch between connection of dorsal lobes pronounced, sides parallel; basal margin with extremely deep notch exceeding internal margin; apically widened. Parameres (Fig. 66) wide, widest at apex, narrowed in apical 1/4; apex truncate, apical margin with a shallow notch midway; ventral surface with short, dense setae, basal margin truncate, with a number of elongate setae at sides and outer margins. Internal sac (Fig. 67) with one V-shaped sclerite at apex, bases covered by one longitudinal sclerite, medially dilated; one pair of slender and curved sclerites at middle, recurved at centre; flagellum extremely elongate and coiled several times in anterior portion, posteriorly flattened.

F e m a l e (Fig. 53): Length 7.5 mm; width 3.1 mm. Differs from male in straight protibiae, elytra subapically serrate, and elytral apices divergent, rounded (Fig. 61).

Differential diagnosis. *Neohelota intermedia* is similar to *N. elongata* and *N. cuccodoroi* in possessing remotely serrate elytral apices, but it is easily distinguished by the presence of a deep notch at the internal edges of the protibia in the male.

Distribution. India, Laos, Vietnam.

Neohelota laosensis sp.nov.

Type material. Holotype ♂: "LAOS-NE, Houa Pan prov., 20°12–13.5′N 103°59.5′–104°01E, Ban Saluei→Phou Pane Mt., 1340–1870 m, 10.v.–16.vi.2009; M. Brancucci & local coll. leg. / NHMB Basel, NMPC Prague Laos 2009 Expedition: M. Brancucci, M. Geiser, Z. Kraus, D. Hauck, V. Kubáň"(NHMB). Paratypes: 2♂♂, 7♀♀, same as holotype; 2♂♂, 3♀♀: "LAOS-NE: Houa Pan prov., ~20°13′N 104°00′E, PHOU PANE Mt., 1–16.vi.2009, M. Brancucci leg. / NHMB Basel, NMPC Prague Laos 2009 Expedition: M. Brancucci, M. Geiser, Z. Kraus, D. Hauck, V. Kubáň"(NHMB); 1♂: "LAOS-NE, Xieng Khoung prov., 19°37–8′N 103°20′E, Phonsavan (30km NE) : Phou Sane Mt., ~1400–1500 m, 10.–30.v.2009, Z. Kraus leg. / NHMB Basel, NMPC Prague Laos 2009 Expedition: M. Brancucci, M. Geiser, Z. Kraus, D. Hauck, V. Kubáň" (NHMB); 1♀: "NE LAOS, prov. Ban Saleui, Phou Pan (Mt.) 1300–1900 m, 7.iv.–25.v.2010 20°12′N, 104°01′E leg. C. Holzschuh / BMNH{E} 2012-4 C. Holzschuh" (BMNH); 2♂♂, 1♀, same but with "27.iv.–1.vi.2011" (BMNH); 1♂, 1♀, same locality but with "11.iv.–15.v.2012 / BMNH{E} 2012-14 C. Holzschuh" (BMNH); 1♂: "[MYANMAR] Kangfang Kachin St., 1.VI.2007, A. Abe leg." (EUMJ).

Description. M a l e . Length 8.8 mm, width 3.2 mm. Dorsal surface (Fig. 54) dark bronze; antennae brown, or dark brown, two distal antennomeres darkened; antero-lateral angles of pronotum yellowish-brown; each elytron with two yellow spots,

anterior spots between fourth and sixth striae, posterior spots between third and sixth striae. Ventral surface (Fig. 6) pale yellowish-brown; head metallic green. Legs yellowish-brown with tibiae and apical 1/4 of femora metallic green; tarsi blackish-brown.

Dorsal surface of head randomly and densely punctate; ventral surface with more pronounced punctures. Pronotum 0.63 times longer than wide, lateral margins with crenulation reduced, straight, sides narrowing apically; disc randomly and sparsely punctured, reduced at middle of base. Elytra 1.83 times longer than wide, widest at basal 1/4, narrowing towards apex, apex conjoined, rounded. Thoracic ventrites with random and pronounced punctures, reduced medially and basally on metaventrite. Punctures on abdominal ventrites very small. Protibia (Fig. 69) slightly curved apically, slightly dorsally depressed at apical 1/3 of internal edge. Fifth abdominal ventrite (Fig. 70) with apical margin almost truncate, surface with dense, elongate setae confined to medio-apical area along apical margin; several extremely elongate setae at sides. Eighth abdominal tergite (Fig. 68) square, narrowed at centre, apical margin weakly pointed mesally. Penis (Fig. 72) with apex tapering and tubular, sides parallel; dorsal lobes slightly wider than penis, widest at apical 1/4, apices rounded, notch between connection of dorsal lobes extremely shallow, basal margin with extremely deep median notch, reaching base of tubular apex of penis and slightly widened at apex. Parameres (Fig. 73) elongate, sides parallel, tapering from apical 1/3; apex forming two rounded and recurved processes, groove between processes deep and extremely narrow; laterally margined with dense, elongate setae; ventral surface with sparse, tiny setae, basal margin truncate. Internal sac (Fig. 74) with one longitudinal sclerite at apex, dorso-ventrally flattened; with a pair of curved sclerites at middle, inner sides margined with teeth; flagellum extremely slender and straight, base bifurcate and ventrally recurved (Fig. 71), basally connected with Y-shaped sclerite, with a small process at basal 1/3, apices of Y-shaped sclerite covered with dense teeth.

F e m a l e (Fig. 55): Length 9.5 mm; width 3.5 mm. Differs from male in straight protibiae and tapering and conjoined elytral apices.

Etymology. Named after the type locality.

Differential diagnosis. *Neohelota laosensis* is similar to *N. valentinae* and *N. cereopunctata* in smooth elytral apices and anterior spot on elytra between fourth and sixth striae, but differs from them in smaller body size (<10.0 mm compared to >10.0 mm in *N. valentinae*), and the wider elytra (1.83× longer than wide) in contrast to slender elytra (1.94–2.06× longer than wide).

Distribution. Laos, Myanmar.

Neohelota ocellata (Ritsema, 1881)

Helota ocellata Ritsema, 1881: 79; Olliff, 1883: 54 (synonymized with *H. guerinii*); Ritsema 1889: 105 (status recurred); Ritsema, 1891d: 227 (key); Ritsema, 1909: 182 (key); Ritsema, 1910: 79 (key); Ritsema, 1911: 106 (list); Ritsema, 1915a 132 (two types and 21 specimens preserved in the Leiden Museum); Ritsema, 1915b: 234 (key); Wegrzynowicz, 2000: 402 (list).

Neohelota ocellata: Kirejtshuk, 2000: 30.

Helota Magdalenae Ritsema, 1910: 75; Ritsema, 1911: 105 (list); Ritsema, 1915a: 133 (two types preserved in the Leiden Museum); Ritsema, 1915b: 234 (key). **syn. nov.**

Helota magdalenae: Wegrzynowicz, 2000: 401 (list).
Neohelota magdalenae: Kirejtshuk, 2000: 30.
Helota Grouvellei Ritsema, 1910: 76; Ritsema, 1911: 105 (list); Ritsema, 1915a: 133 (one type preserved in the Leiden Museum); Ritsema, 1915b: 234 (key). **syn. nov.**
Helota grouvellei: Wegrzynowicz, 2000: 398 (list).
Neohelota grouvellei: Kirejtshuk, 2000: 28.

Type material. The holotype ♀ of *Helota ocellata* Ritsema is labelled: "Type / Cat No. 37a / *Helota ocellata* type ♀ Rits. / Muller Java". It is glued on the card and deposited at the RMNH.
The lectotype ♂ of *Helota magdalenae* Ritsema, here designated to preserve stability and to make the use of this name more universal, is labelled: "Co-Type / Cat No. 38a / Mana-Riang Ranau. Palembang April 90. 2-3000′. I. Z. Kannegieter / R. Oberthür Palemb. Sumatra". It is pined on the card and deposited at the RMNH. A paralectotype ♀ deposited at the RMNH has the same data as lectotype but with "Cat No. 38b". Four paralectotypes (2♂♂, 2♀♀) deposited at the MNHN are labelled "Mana-Riang Ranau. Palembang April 90. 2-3000′. I. Z. Kannegieter / Ex Musćo Van de Poll 1909 / *Helota Magdalenae* Rits. ♂ type / Muséum Paris ex Coll. R. Oberthür 1952 / LECTOTYPUS *Helota magdalenae* des. P. Węgrzynowicz". The lectotype designated by Wegrzynowicz, not valid since it has not been published.
The holotype ♀ of *Helota grouvellei* Ritsema is labelled: "Java occident Sukabumi 2000′ 1893 H. Fruhstorfer / Ex Musćo Van de Poll 1909 / *Helota Grouvellei* Rits. ♀ type / Muséum Paris ex Coll. R. Oberthür 1952 / LECTOTYPUS *Helota grouvellei* des. P. Węgrzynowicz" It is pined directly and deposited at the MNHN. A paratype ♀ deposited at the RMNH is labelled:"Co-Type / Cat No. 39a / Mts Kawie Pasoeroean Java / *Helota Grouvellei* ♀ cotype Rits. / Reni Oberthür Mt. Kawie Java". .
Other materials examined (17 specimens). 2♂♂, 2♀♀, INDONESIA, Java, Mt. Argopuro, i.1999 (EUMJ); 1♂, INDONESIA, Java, Mt. Gumitir, x.1999 (EUMJ); 1♀, same locality, iv.1996 (NMPC); 1♂, same locality, xii.1999, leg. local (NMPC); 1♀, INDONESIA, Sumatra, Brastagi, 1300 m, v.1918, le.g J. B. Corporaal (NMPC); 1♂, INDONESIA, Sumatra, Padang, v.1995 (NMPC); 1♀, INDONESIA, Sumatra, Payakumbuh env., v.–vi.1994, leg. local collector (NMPC); 1♀, INDONESIA, Sumatra, Payakumbuh area, harau Halley env., iv.–vi.2006, leg. S. Jakl (NMPC); 1♂, MALAYSIA, Pahang, 16 mile point Cameron Highlands, 21.vi.1984 (EUMJ); 1♂, MALAYSIA, Sabah, Crocker Range, alt. 1400 m, 16 miles N.W. of Keningau, 13.IV.1984, leg. S. Nagai (TARI); 1♂, same but with "15.v.1984" (TARI); 2♂♂, MALAYSIA, Sarawak, Quop, iii.1914, leg. G. E. Bryant (BMNH); 1♀, same but with "iv.1914" (BMNH).

Description. M a l e . Length 6.9–7.0 mm; width 2.9–3.0 mm. Dorsal surface (Fig. 56) greenish-bronze; antennae blackish-brown but with antennomeres 1–2 and 9–11 yellowish-brown; bands along lateral margins of pronotum also yellowish-brown; each elytron with two yellow spots, anterior spots situated between third and seventh striae, posterior spots between fourth and sixth striae. Ventral surface pale yellow with head metallic green. Legs yellowish-brown with tibiae and apical third of femora metallic green, tarsi and claws dark brown.

Dorsal surface of head randomly and densely punctate; ventral surface with more strongly pronounced punctures. Pronotum 0.66–0.69 times longer than wide, lateral margins straight, moderately crenulate, sides narrowing apically, surface with regular, dense punctures, abbreviated at middle of base. Elytra 1.84–1.87 times longer than wide, widest at basal 1/3, narrowing toward apices, each elytron with a very small apical tooth, apex widely rounded, intervals between striae with additional fine punctures. Thoracic ventrites with random and pronounced punctures, reduced medially and basally on metaventrite. Punctures on abdominal ventrites very small. Protibia (Fig. 76) moderately curved, dorsally depressed at apical 1/3 of internal edge. Fifth abdominal ventrite (Fig. 77) with sinuate apical margin, surface with sparse, random, fine setae and dense, stout setae confined to medial area; several elongate setae along apical margin, apical margin with dense elongate setae. Eighth abdominal tergite (Fig. 75) oval, lateral margins narrowed midway, apical margin slightly and medially convex. Penis (Fig. 79) with apex

as wide as dorsal lobes, apical margin emarginate midway, apex narrowly rounded, mesal margin subtruncate, laterally abbreviated; dorsal lobes with curved and acute apices, sides parallel, slightly wider than penis, notch between connection of dorsal lobes pronounced, basal with a median notch, extremely deep, reaching apex of penis. Parameres (Fig. 80) longitudinal, narrowing abruptly near apex, apex forming two round processes, in lateral view recurved and apex swollen, notch between processes shallow and wide; laterally margined with sparse, elongate setae, sides of ventral surface with dense, tiny setae, basal margin truncate. Internal sac (Fig. 81) with a longitudinal apical sclerite at ventral surface, composed of a row of erect teeth, in lateral view entire sclerite covered in teeth; a longitudinal apical sclerite at dorsal surface, apex covered with dense teeth; one pair of curved sclerites internally margined with teeth at centre, another pair straight at base, basally connected with Y-shaped sclerite, with a prominent process at apical 1/3, apices covered with dense, tiny tubercles (Fig. 78).

F e m a l e (Fig. 57): Length 7.2 mm; width 2.9 mm. Differs from male in straight protibiae and acute elytral apices.

Remarks. The specimens from Java have larger spots on the elytra that are situated between the third and seventh striae (Figs 58, 59). These have been described as *Neohelota grouvellei*.

Differential diagnosis. *Neohelota ocellata* is similar to *N. curvipes* in possessing smooth elytral apices and having the sides of pronotum bordered with yellowish-brown. It differs in having a narrower yellowish-brown area along the lateral margin of the pronotum and a greenish-bronze body.

Distribution. Indonesia, Malaysia.

Neohelota serratipennis (Ritsema, 1891)

Helota serratipennis Ritsema, 1891a: 890; Ritsema, 1891d: 227 (key); Ritsema, 1894: 103 (species known from Myanmar); Ritsema, 1911: 106 (list); Ritsema, 1915a: 133 (two types preserved in the Leiden Museum); Ritsema, 1915b: 234 (key); Wegrzynowiczm 2000: 403 (list).
Neohelota serratipennis: Kirejtshuk, 2000: 30.

Type material. Lectotype ♂ of *Helota serratipennis* Ritsema, here designated to preserve stability and to make the use of this name more universal, is labelled: "Co-Type / Cat No. 40a / Carin Chebŕ (in Myanmar) 900–1100 m L. FeaV.XII.88 / Helota serratipennis, ♂, Rits. / L. Fea Burma". It is pined directly and in good condition. It is deposited at the RMNH. The paralectotypes ♀ with the same data as lectotype but with "Cat No. 40b" is also deposited at the RMNH. Two paralectotype (1♂ & 1♀) are labelled: "Carin Chebŕ (in Myanmar) 900–1100 m L. FeaV.XII.88 / Typus (white label with red letters) / SYNTYPUS Helota serratipennis Ritsema, 1891 / Museo Civico di Genova" and deposited at the MSNG.

Other material examined (58 specimens). 1♂, CHINA, Yunnan, Jinghong env., 21°55′785″N 100°47′032″E, 600 m, 12.vi.2006, leg. R. Novak (NMPC); 1♂, 2♀♀, INDIA, Bhatkot, Ranikhet, leg. H. G. Champion (BMNH); 1♀, INDIA, Darjeeling, Durpin, 1200 m, 17.iii.1985, leg. B. Bhakta (NMHB); 1♂, INDIA, Darjeeling, Lolay (KPB), 1000 m, 16.x.1985, leg. C. J. Rai (NMHB); 1♀, INDIA, S. Garhwal, Kumaon, 6500 ft, leg. H. G. Champion (BMNH); 1♀, INDIA, Khaula, Almora, 4500 ft, leg. H. G. Champion (BMNH); 1♂, INDIA, Meghalaya, SW of Cherrapunjee, 900 m, 25°13–14′N 91°40′E, 1–24.v.2005, leg. L. Dembický (BMNH); 1♂, INDIA, Meghalaya; Nokrek NP, 3km S Darbokgiri, 1400 m, 25°27′N 90°19′E, 26.iv.1999 leg. Dembický & Pacholáko (NHMB); 1♀, INDIA; Meghalaya, 3km E Tura, 25°30′N 90°14′E, 500–1150m; 15–22.iv.1999, leg. J. Rolčik (NMPC); 1♂, INDIA, Ranikhet, Kumaon, le.g H. G. Champion (BMNH); 1♀, INDONESIA, Sumatra, Payakumbuh env., v.–vi.1994, leg. local collector (NMPC); 1♀, LAOS: Houa Pan

prov., Ban Saluei→Phou Pane Mt., 20°12–13.5′N 103°59.5′–104°01E, 1340–1870 m, 10.v.–16.vi.2009, leg. M. Brancucci & local coll. (NHMB); 1♂, 2♀♀, same locality, 27.iv.–1.vi.2011, leg. C. Holzschuh (BMNH); 4♀♀, LAOS. Louangnamtha prov., Namtha ? Muang Sing, 21°09′N 101°19′E, 900–1200m, 5–31.v.1997, leg. Vit Kubáň (NHMB); 1♀, LAOS. Phongsaly prov., Phongsaly env., 1500m, 21°41–2′N 102°06–8′E, 28.V.–20.VI.2003, leg. Vit Kubáň (NHMB); 1♀, MALAYSIA, Pahang, Fraser's Hill, 3500–4000 ft, 6.vi.1941 (BMNH); 1♀, MALAYSIA, Pahang, Lubok Tamang, 3500 ft, 20.vi.1923, leg. H. M. Pendlebury (BMNH); 1♂, MALAYSIA, Pahang, Ringlet (= Cameron Highlands), 24.v.1939, leg. H. T. Pagden (BMNH); 1♀, MALAYSIA, Perak, Maxwell Hill, 900–1000 m, above Taiping city, 12–16.i.1995, leg. S. Becvar (NMPC); 1♀, MALAYSIA, Selangor, Bukit Kutu, 3500 ft, 10.iii.1031, leg. H. M. Pendlebury (BMNH); 2♀♀, MALAYSIA, Sarawak, Quop, iii.1914, leg. G. E. Bryant (BMNH); 1♂, 3♀♀, NEPAL, Anklu Khola, Katunjhe-Semri Banjyang, 2100–2150 m, 10.vi.1990, leg. Probst (NMW); 1♂, NEPAL, Dhankuta, Arun-Valley, Lamobagar Gola, 1000–1400 m, 27.v.–3.vi.1980, leg. C. Holzschuh (NMPC); 1♂, NEPAL, Dhawalagiri Myagdi District, Tatopani, 1100–1400 m, 27–28.vi.1986, leg. Probst (NMW); 1♀, NEPAL, Karnali prov., Rara Lake N. P., 3000 m, 9.v.2000, leg. R. Klawitter (NMPC); 1♀, NEPAL, Kathmandu V., Balaju, 1400 m, leg. M. Brancucci (NHMB); 1♀, NEPAL, Kosi – 11♂♂, Num 27°33′N 87°17′E, 1550 m, leg. 8–11.vi.2001 (NMHB); 1♂, NEPAL, SW Manaslu Bhara Pokhari Lekh, unterh. Taksa, 1500–1700 m, 31.iii.1999, leg. O. Jäger (MTD); 1♀, THAILAND, Chiang Mai, Chiagdao, 450 m, 5–11.iv.1958, leg. J. L. Gressitt (BPBM); 3♂♂, 5♀♀, THAILAND, Chiang Mai, Sanpakia, 19°19′N 98°50′E, 1400 m, 1–15.v.1998, leg. Vit Kubáň (NMHB); 1♂, 4♀♀, THAILAND. Mae Hong Son, Ban Hui Po, 1600 m, 8–17.v.1992, leg. S. Bily (NHMB); 1♂, same locality, 8–18.v.1992, leg. J. Horak (NMPC); 1♀, THAILAND. Mae Hong Son, Soppong, 19°27′N 98°20′E, 1500 m, 7–12.v.1996, leg. Vit Kubáň (NMHB); 1♀, same but with "10–13.v.1993" (SMNS); 1♀, same locality, 1.v.1992, leg. P. Pacholáko (NMPC); 1♀, same locality, 28.v.1999, leg. M. Riha (NMPC).

Description. M a l e . Length 9.1–9.4 mm; width 3.3–3.5 mm. Dorsal surface (Fig. 82) bronze; antennae yellowish-brown but with antennomeres 1–2 and 9–11 blackish-brown; antero-lateral angles of pronotum yellowish-brown; each elytron with two yellow spots, anterior spots situated between fourth and seventh striae, posterior spots between third and sixth striae. Ventral surface pale yellow with head metallic green. Legs yellowish-brown with tibiae and apical third of femora metallic green, tarsi and claws dark brown.

Dorsal surface of head randomly and densely punctate; ventral surface with more strongly pronounced punctures. Pronotum 0.66–0.70 times longer than wide, lateral margins straight, moderately crenulate, sides narrowing apically, surface with regular, dense punctures, reduced at middle of base. Elytra 1.69–1.78 times longer than wide, widest at basal 1/3, narrowing towards apices, apical 1/3 of lateral margin strongly serrate; apex widely rounded (Fig. 92). Thoracic ventrites with random and pronounced punctures, reduced medially and basally on metaventrite. Punctures on abdominal ventrites very small. Protibia (Fig. 95) weakly curved, dorsally depressed from apex to apical 1/3 of internal edge. Fifth abdominal ventrite (Fig. 86) with truncate apical margin, extremely dense, stout setae confined to semicircular area along apical margin, several elongate setae along apical margin. Eighth abdominal tergite (Fig. 94) transverse, apical margin medially concave. Penis (Fig. 97) tapering apically, apex narrowly rounded; dorsal lobes with curved and acute apices, sides strongly widened in apical 1/4, much wider than penis, notch between connection of dorsal lobes shallow, basally with a median notch, extremely deep, reaching apex of penis, apex of median notch extremely widened. Parameres (Fig. 98) transverse, widest at centre, apex rounded, with a shallow, wide notch, apical margin with scattered elongate setae; laterally margined with sparse, elongate setae; ventral surface with dense, tiny setae; basal margin truncate. Internal sac (Fig. 99) with a longitudinal apical sclerite at ventral surface, posterior bifurcate, disc

with a longitudinal row of several stout teeth; an anterior tapering sclerite at dorsal surface; a pair of oval sclerites at centre, apically tapering and curved; flagellum extremely elongate and coiled several times in anterior portion, flattened at the rear.

F e m a l e (Fig. 83): Length 9.2–9.6 mm; width 3.2–3.4 mm. Differs from male in straight protibiae and diverse acute elytral apices.

Differential diagnosis. RITSEMA (1893) indicated that *Neohelota guttata* can be distinguished from *N. serratipennis* by its narrower body. In fact, this character is too variable to be diagnostic. In addition to the genital differences, *Neohelota serratipennis* is easily recognized by the moderately flattened subapical internal margin of the meso- and metatibiae, the dense, elongate hairs and truncate apical margin of the fifth abdominal ventrite, and by possessing denser and longer setae along the apical margin.

Distribution. China, India, Laos, Malaysia, Myanmar, Nepal, Thailand.

Neohelota smetanai sp.nov.

Type material. Holotype♂: "CHINA: SE Sichuan Jinfo Shan, 29′01N 107′14E, 1700–1950m 24–29.VI.98, D. Král / 1998 China Expedition J. Farkač, D. Král, J. Schneider & S. Smetana" (NHMB). Paratype: 1♀, same data as holotype (NHMB).

Description. M a l e . Length 6.0 mm, width 2.3 mm. Dorsal surface (Fig. 84) greenish-bronze and shagreened; antennae dark brown, three distal antennomeres darkened; yellowish-brown spot at antero-lateral angle of pronotum almost reduced; each elytron with two yellow spots, anterior spots situated between third and seventh striae, posterior spots between third and sixth striae. Ventral surface pale yellow; head metallic green. Legs yellowish-brown with tibiae and apical 1/4 of femora metallic green; tarsi dark brown.

Dorsal surface of head with random and scattered punctures at centre, denser at sides; ventral surface with scattered and pronounced punctures. Pronotum 0.64 times longer than wide, lateral margins rounded, markedly crenulate, sides narrowing apically, surface with random, scattered punctures. Elytra 1.82 times longer than wide, widest at basal 1/4; each elytron with one very small apical tooth, apices divergent, angular. Thoracic ventrites with random and pronounced punctures, reduced medially and basally on metaventrite. Punctures on abdominal ventrites very small. Protibiae (Fig. 101) weakly curved, widened from apical 1/3 to apex. Fifth abdominal ventrite (Fig. 102) with rounded apical margin, surface with scattered, short setae confined to medio-apical area along apical margin; several extremely elongate setae at sides. Eighth abdominal tergite (Fig. 100) square, apical margin weakly emarginate midway. Penis (Fig. 113) tapering apically, apex rounded, sides parallel; dorsal lobes as wide as penis, with acute apices, notch between connection of dorsal lobes prominent; basal margin with extremely deep notch, exceeding internal margin, apically widened. Parameres (Fig. 114) wide, narrowed at centre; apical margin with a shallow notch midway; ventral surface with scattered, longer setae, basal margin truncate, with a number of elongate setae at dorsal surface along apical margin. Internal sac (Fig. 115) with apical sclerite absent, a pair of medial sclerites at sides, pointed apically; basal sclerite slender, bifurcate at basal 1/3.

F e m a l e (Fig. 85). Length 6.7 mm; width 2.7 mm. Differs from male in straight protibiae, elytral apices divergent rounded.

Etymology. The species is named after Dr. Aleš Smetana, a great Czech and Canadian beetle taxonomist.

Differential diagnosis. *Neohelota smetanai* is easily distinguished from others of this species-group by the rounded lateral margin of the pronotum, which somewhat resembles *N. lewisi* and *N. attenuata* of the *attenuata* species-group.

Distribution. Only known from the type locality.

Neohelota sumbawensis (Ritsema, 1909)

Helota sumbawensis Ritsema, 1909: 183; Ritsema, 1910: 80 (key); Ritsema, 1911: 106 (list); Ritsema, 1915a: 134 (one specimens preserved in the Leiden Museum); Ritsema, 1915b: 234 (key); .
Helota sumbavensis (sic!): Wegrzynowicz, 2000: 404 (list).
Neohelota sumbawensis: Kirejtshuk, 2000: 30.
Helota neglecta Ritsema, 1915b: 238. **syn. nov.**
Neohelota neglecta: Kirejtshuk, 2000: 30.

Type material. The holotype ♀ of *Helota sumbavensis* Ritsema is labelled: "Sumbava / Holotypus (red label) / Helota sumbavensis Rits. ♀ type! / coll. DEI Müncheberg". It is glued on the card and deposited at the DEI. The holotype ♂ of *Helota neglecta* Ritsema is labelled: "Type / Cat No. 49a / Bandar Baroe SUMATRA / ex collect. Moissinac / am *sumbavensis* ♂ Rits. / *Helota neglecta* ♂ Rits. / L. H. D. de Vos tot Nederven Cap. Sumatra orient". It is glued on the card and deposited at the RMNH.
Other material examined (4 specimens). 1♀, INDONESIA, W. Sumatra, v.1992 (EUMJ); 1♂, 1♀, INDONESIA, Sumatra, Payakumbuh env., v.–vi.1994, leg. local collector (NMPC); 1♂, MALAYSIA, Benom Mts., 15 km E Kampong Dong, 03°53′N 103°01′E, 1.iv.1998, leg. Dembický & Pacholátko (NMHB).

Description. M a l e . Length 7.1–7.4 mm, width 2.4 mm. Dorsal surface (Fig. 86) greenish-bronze and shagreened; antennae dark brown, dorsal side of scape metallic green; yellowish-brown spot on pronotum reduced; each elytron with two yellow spots, anterior spots situated between third and seventh striae, posterior spots between third and sixth striae. Ventral surface pale yellow; head metallic green. Legs yellowish-brown with tibiae and apical 1/4 of femora metallic green; tarsi dark brown.

Dorsal surface of head randomly and densely punctate; ventral surface with more pronounced punctures. Pronotum 0.65–0.72 times longer than wide, lateral margins weakly crenulate, sides narrowing apically, surface randomly and densely punctured. Elytra 1.90 times longer than wide, parallel-sided; each elytron with two very small apical teeth, apical third of lateral margin minutely and remotely serrate; apices conjoined rounded (Fig. 106). Thoracic ventrites with random and pronounced punctures, reduced medially and basally on metaventrite. Punctures on abdominal ventrites very small. Protibia (Fig. 109) moderately curved, internal margin dorsally and strongly depressed at apical third. Fifth abdominal ventrite (Fig. 110) with straight apical margin, surface with dense, elongate setae confined to medio-apical area along apical margin; several extremely elongate setae at sides. Eighth abdominal tergite (Fig. 108) transversely, apical margin truncate or weakly emarginate midway. Penis (Fig. 111) strongly tapering apically, apex rounded, sides parallel; dorsal lobes slightly wider than penis, widest at centre, with narrowly rounded apices, notch between connection of

dorsal lobes pronounced; basal margin with extremely deep notch, exceeding internal margin, apically widened. Parameres (Fig. 112) slender, parallel-sided; apical margin with a shallow notch midway; ventral surface with short, scattered setae, basal margin truncate, with a number of elongate setae at dorsal surface along apical margin. Internal sac (Fig. 113) with one apical sclerite basally bifurcate, with several stout teeth at apex; flagellum extremely elongate and coiled several times in anterior portion, flattened at the rear.

F e m a l e (Fig. 114): Length 7.5–8.0 mm; width 2.5–2.6 mm. Differs from male in straight protibiae, elytral apices divergent acute.

Differential diagnosis. See diagnosis of *Neohelota brevis*.

Distribution. Indonesia, Malaysia.

Neohelota valentinae sp.nov.

Type material. Holotype ♂: "LAOS-NE, Houa Pan prov., 20°12–13.5′N 103°59.5′–104°01E, Ban Saluei ? Phou Pane Mt., 1340–1870 m, 10.v.–16.vi.2009; M. Brancucci & local coll. leg. / NHMB Basel, NMPC Prague Laos 2009 Expedition: M. Brancucci, M. Geiser, Z. Kraus, D. Hauck, V. Kubáň"(NHMB). Paratypes: 11♂♂, 7♀♀, same as holotype; 2♂♂, same locality, 15.iv.–15.v.2008, Lao collectors leg. (1♂: NHMB; 1♂: NMPC); 1♂, 2♀♀: "LAOS-NE: Houa Pan prov., ~20°13′N 104°00′E, PHOU PANE Mt., 1–16.vi.2009, M. Brancucci leg. / NHMB Basel, NMPC Prague Laos 2009 Expedition: M. Brancucci, M. Geiser, Z. Kraus, D. Hauck, V. Kubáň"(NHMB); 2♂♂, 9♀♀,: "NE LAOS, Hua Phan prov. Ban Saleui, Phou Pan (Mt.) 1300–1900 m, 27.iv.–1.vi.2011 20°12′N, 104°01′E leg. C. Holzschuh / BMNH{E} 2012-4 C. Holzschuh" (BMNH); 7♂♂, 1♀, same locality but with "11.iv.–15.v.2012 / BMNH{E} 2012-14 C. Holzschuh" (BMNH); 1♂: "LAOS, Luan Namtha Province, Muang Long City, Ban Chakhankham vii.2012 S. Khamphilavong leg. / ENRICO RUZZIER COLLECTION ITALY" (ERMI); 1♂: "E-NEPAL, Arun Valley, Waleng Iswa-Khola – Waleng Siswa-Khola, 1200–750m, 15.–16.6.1992, leg. J. & J. Probst" (NHMB).

Description. M a l e . Length 10.2–11.2 mm, width 3.4–3.9 mm. Dorsal surface (Fig. 88) dark bronze; antennae yellowish-brown, two distal antennomeres darkened; antero-lateral angles of pronotum yellowish-brown; each elytron with two yellow spots, anterior spot between fourth and sixth striae, posterior spot between third and sixth striae. Ventral surface pale yellowish-brown; head metallic green. Legs yellowish-brown with tibiae and apical 1/4 of femora metallic green; tarsi blackish brown.

Dorsal surface of head randomly and densely punctate; ventral surface with more strongly pronounced punctures. Pronotum 0.63–0.67 times longer than wide, lateral margins with crenulations reduced, straight, sides narrowing apically; disc randomly and densely punctured, reduced at middle of base. Elytra 1.95–1.98 times longer than wide, widest at basal 1/4, narrowing towards apex, apex conjoined, rounded. Thoracic ventrites with random and pronounced punctures, reduced medially and basally on metaventrite. Punctures on abdominal ventrites very small. Protibia (Fig. 116) slightly curved apically, slightly dorsally depressed at apical 1/3 of internal edge. Fifth abdominal ventrite (Fig. 117) with apical margin almost truncate, slightly depressed laterally, disc with dense elongate setae confined to medio-apical area along apical margin; several extremely elongate setae at sides. Eighth abdominal tergite (Fig. 115) square, narrowed at centre, apical margin truncate, extremely depressed laterally. Penis (Fig. 119) with apex tubular and sides parallel; dorsal lobes slightly wider than penis,

notch between connection of dorsal lobes extremely shallow, basal margin with an extremely deep median notch, reaching base of tubular apex of penis and slightly widened at apex. Parameres (Fig. 120) elongate, sides parallel, tapering from apical 1/3; apex forming two rounded processes, groove between processes shallow and extremely narrow; laterally margined with dense elongate setae; ventral surface with sparse, tiny setae, basal margin truncate. Internal sac (Fig. 121) with a pair of curved sclerites at apex, inner sides margined with teeth, weakly sclerotized; flagellum extremely slender and straight, base bifurcate and ventrally recurved in lateral view (Fig. 118), connected with Y-shaped sclerite, with a small process at basal 1/3, apices of Y-shaped sclerite covered with dense teeth.

Female (Fig. 89): Length 12.8 mm; width 4.2 mm. Differing from male in straight protibiae and tapering and divergent elytral apices.

Remarks. The specimen from Nepal has the apical margin of the penis truncate and the apical margin of the eighth abdominal tergite rounded (Fig. 114).

Etymology. This new species is named after the second author's daughter, Valentina Votruba.

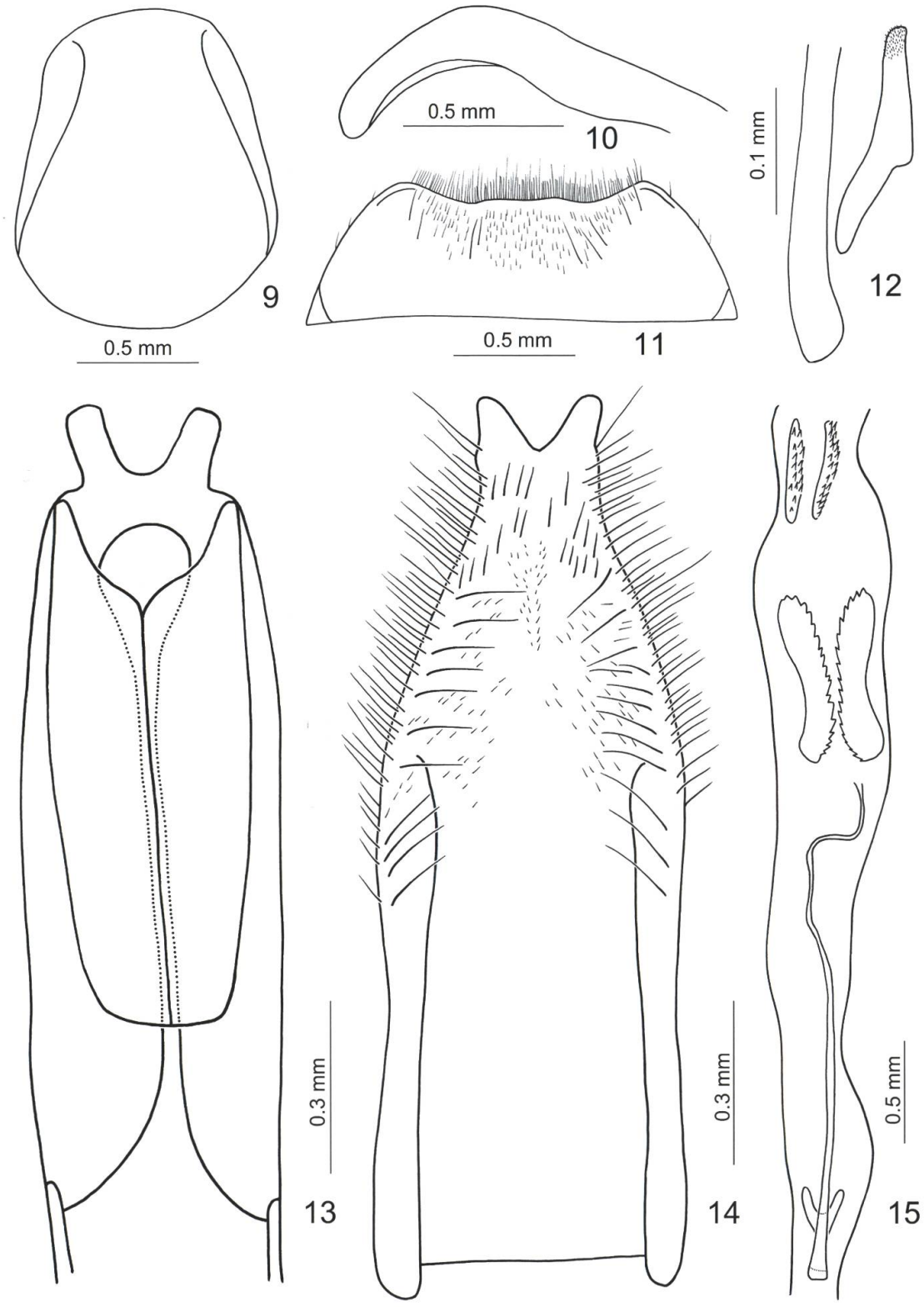
Differential diagnosis. *Neohelota valentinae* is similar to *N. laosensis* and *N. cereopunctata* in smooth elytral apices and the anterior spot on elytra between fourth and sixth striae, but differing in the larger body size (>10.0 mm) and the characteristic eighth abdominal tergite.

Distribution. Laos, Nepal.

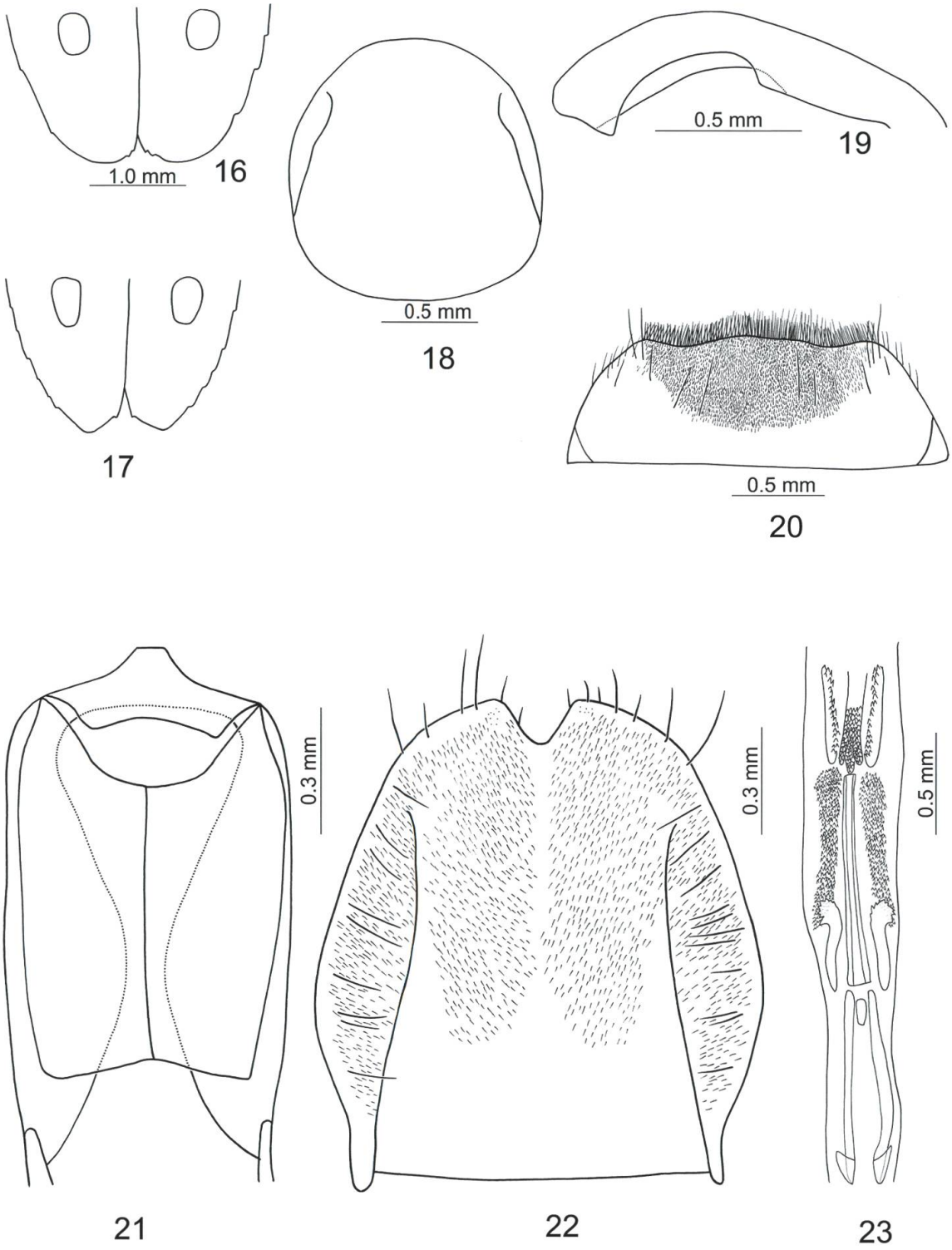
Acknowledgements

I would like to thank the curators mentioned above for the kind loans of type specimens and unidentified material. Our special thanks to C. Carlton who reviewed the first draft. I am indebted to T.-H. Lee for taking the photographs of the specimens.

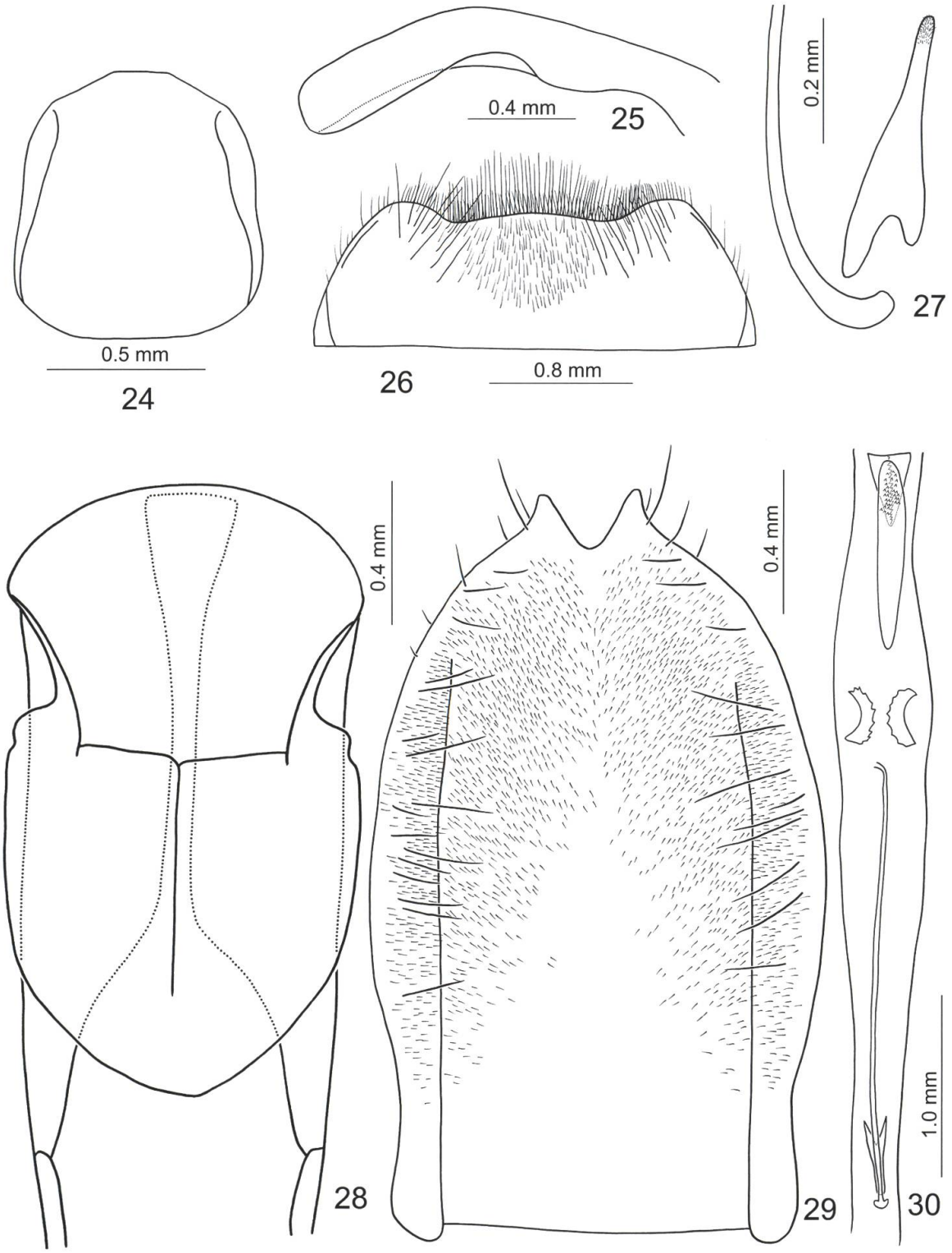
Figs 1–8. Dorsal habitus of *Neohelota* species: 1 – *N. brevis*, male; 2 – *N. brevis*, female; 3 – *N. cereopunctata*, male; 4 – *N. cereopunctata*, female; 5 – *N. cuccodoroi*, male; 6 – *N. cuccodoroi*, female; 7 – *N. curvipes*, male; 8 – *N. curvipes*, female.



Figs 9–15. Diagnostic characters of *Neohelota brevis*: 9 – Eighth abdominal tergite; 10 – Protibia; 11 – Fifth abdominal ventrite; 12 – Base of flagellum, lateral view; 13 – Penis; 14 – Parameres; 15 – Internal sac.

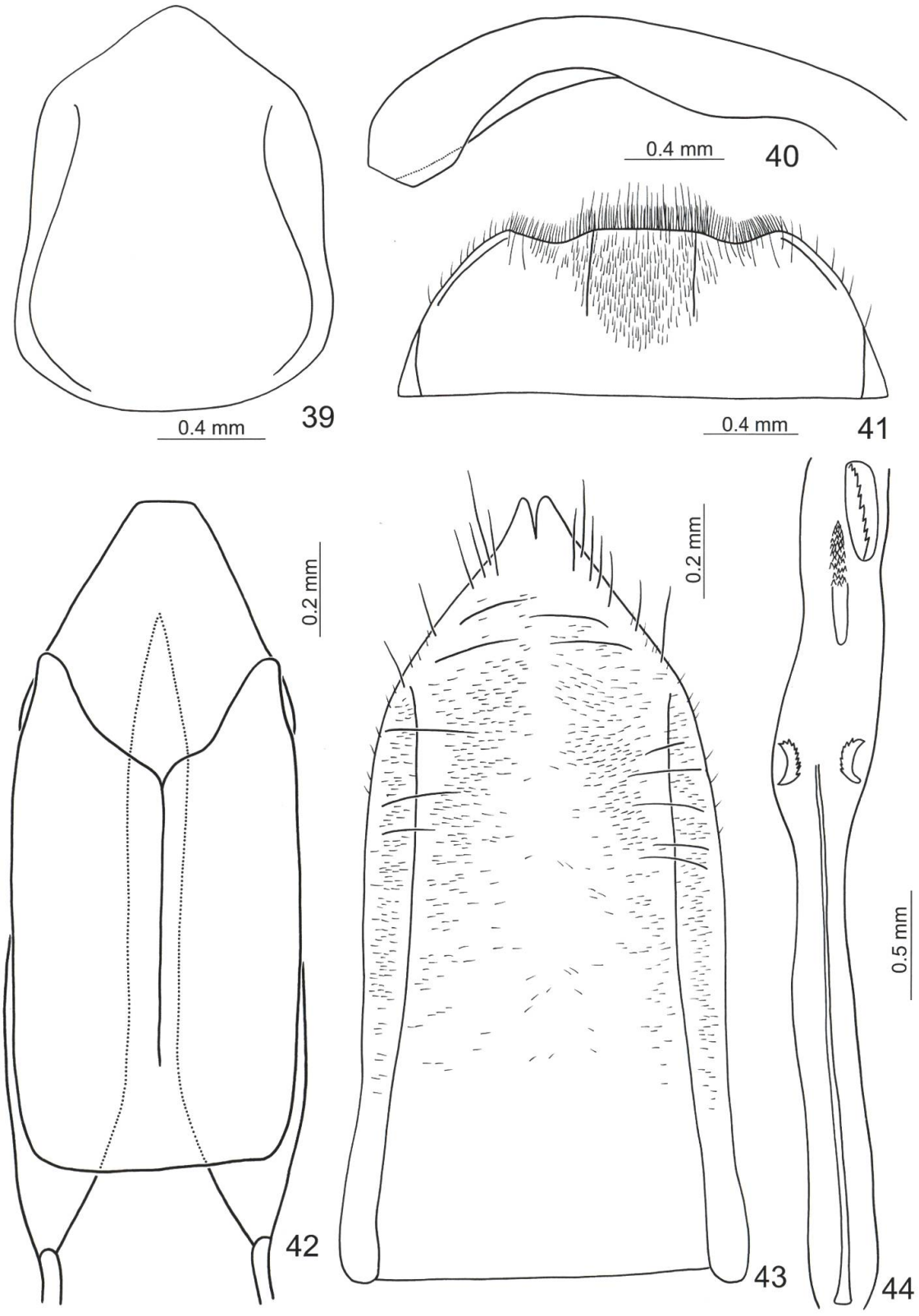


Figs 16–23. Diagnostic characters of *Neohelota cuccodoroi*: 16 – Elytral apices, male; 17 – Elytral apices, female; 18 – Eighth abdominal tergite; 19 – Protibia; 20 – Fifth abdominal ventrite; 21 – Penis; 22 – Parameres; 23 – Internal sac.

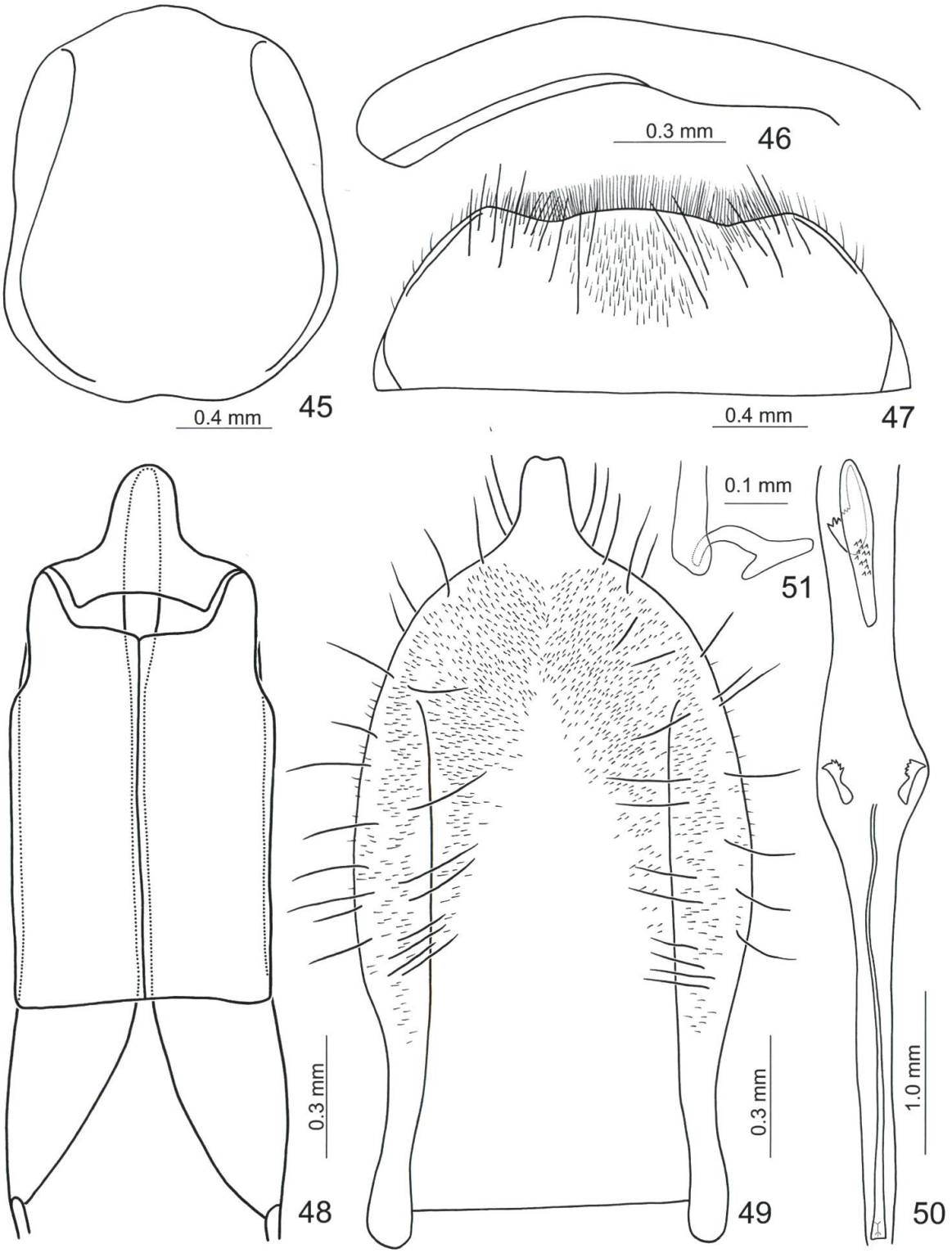


Figs 24–30. Diagnostic characters of *Neohelota curvipes*: 24 – Eighth abdominal tergite; 25 – Protibia; 26 – Fifth abdominal ventrite; 27 – Base of flagellum, lateral view; 28 – Penis; 29 – Parameres; 30 – Internal sac.

Figs 31–38. Dorsal habitus of *Neohelota* species: 31 – *N. dohertyi*, male; 32 – *N. dohertyi*, female; 33 – *N. elongata*, male; 34 – *N. elongata*, female; 35 – *N. guerinii*, male; 36 – *N. guerinii*, female; 37 – *N. guttata*, male; 38 – *N. guttata*, female.

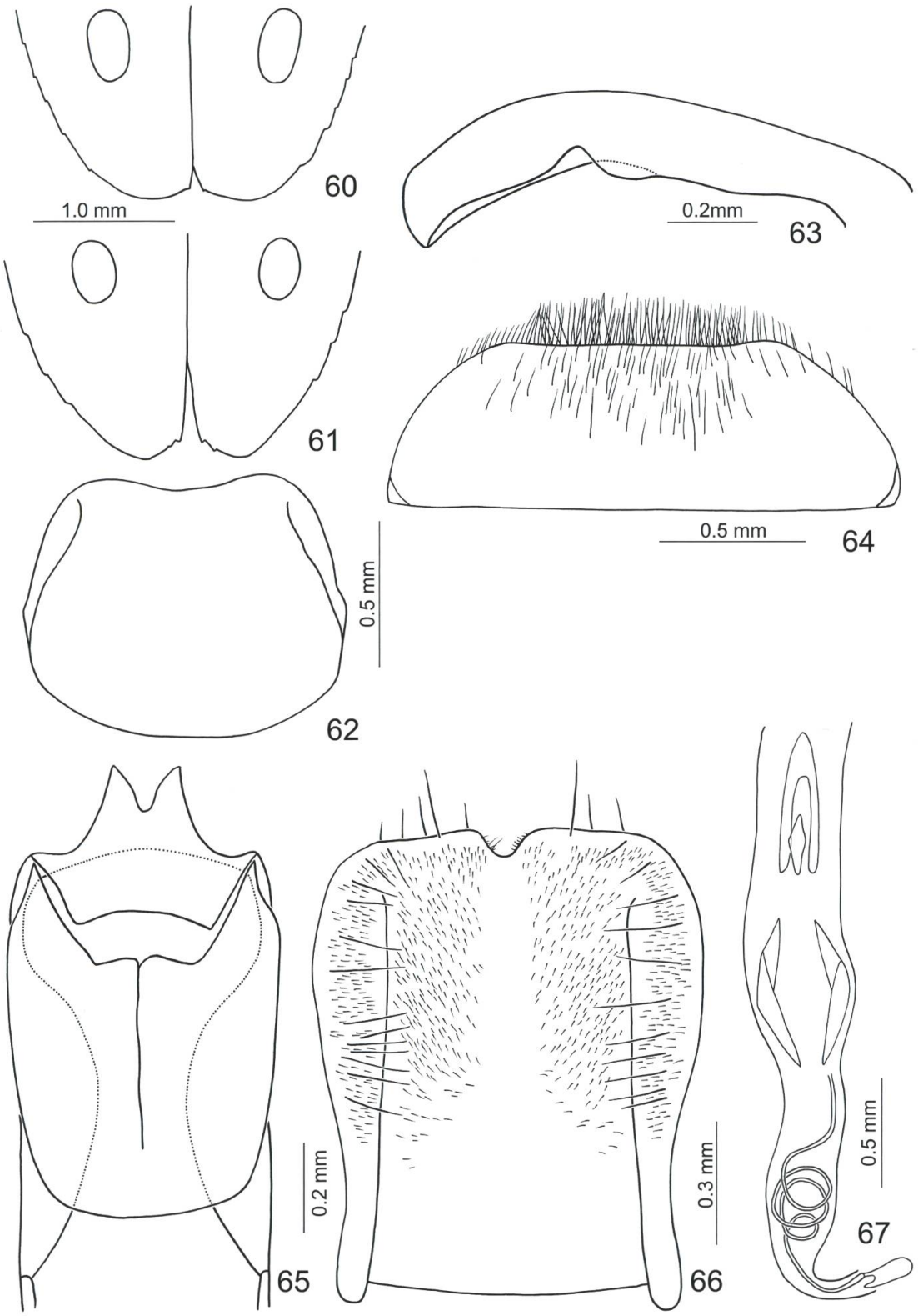


Figs 39–44. Diagnostic characters of *Neohelota dohertyi*: 39 – Eighth abdominal tergite; 40 – Protibia; 41 – Fifth abdominal ventrite; 42 – Penis; 43 – Parameres; 44 – Internal sac.

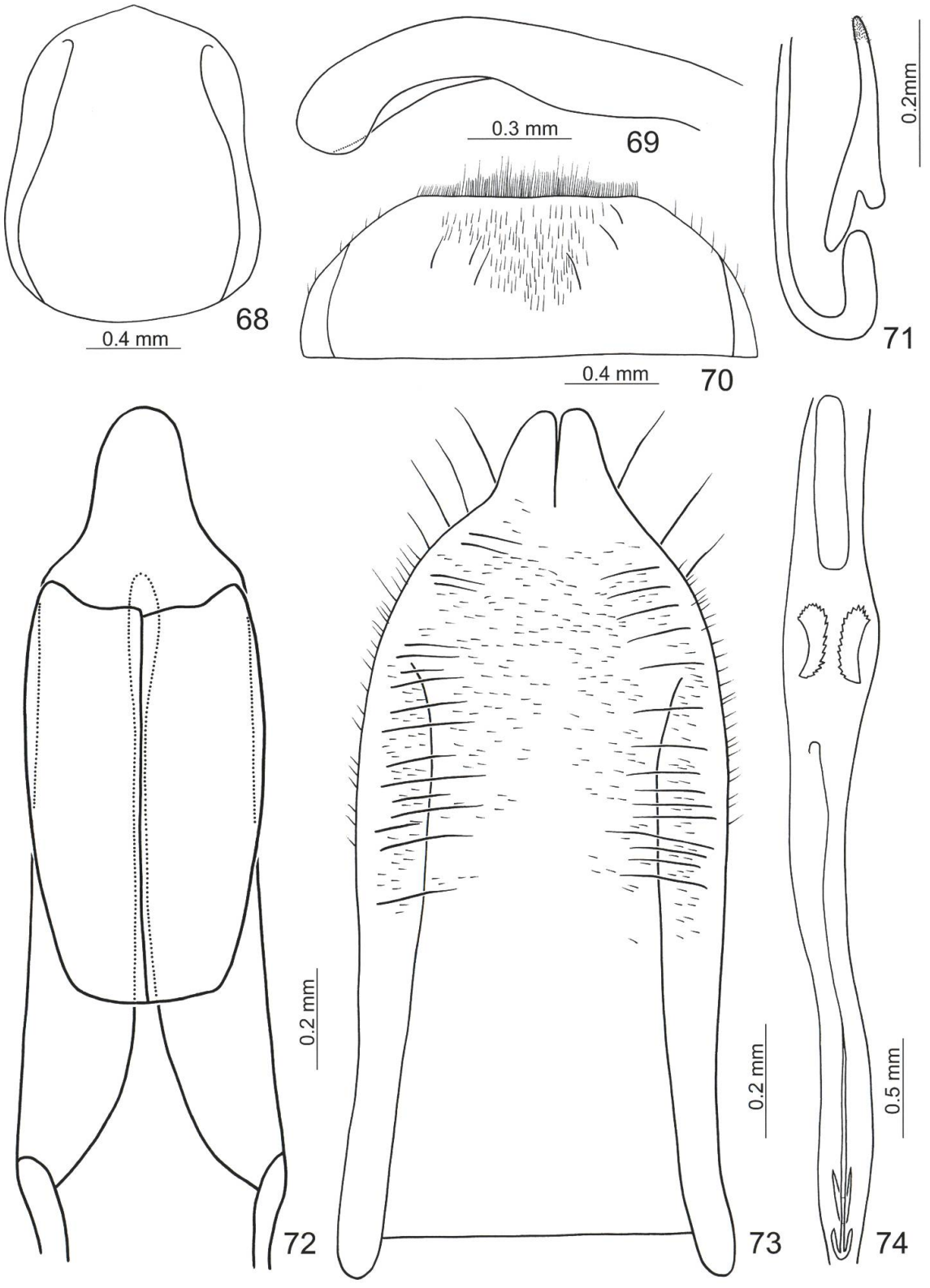


Figs 45–51. Diagnostic characters of *Neohelota guerinii*: 45 – Eighth abdominal tergite; 46 – Protibia; 47 – Fifth abdominal ventrite; 49 – Penis; 50 – Parameres; 51 – Internal sac; 51 – Base of flagellum, lateral view.

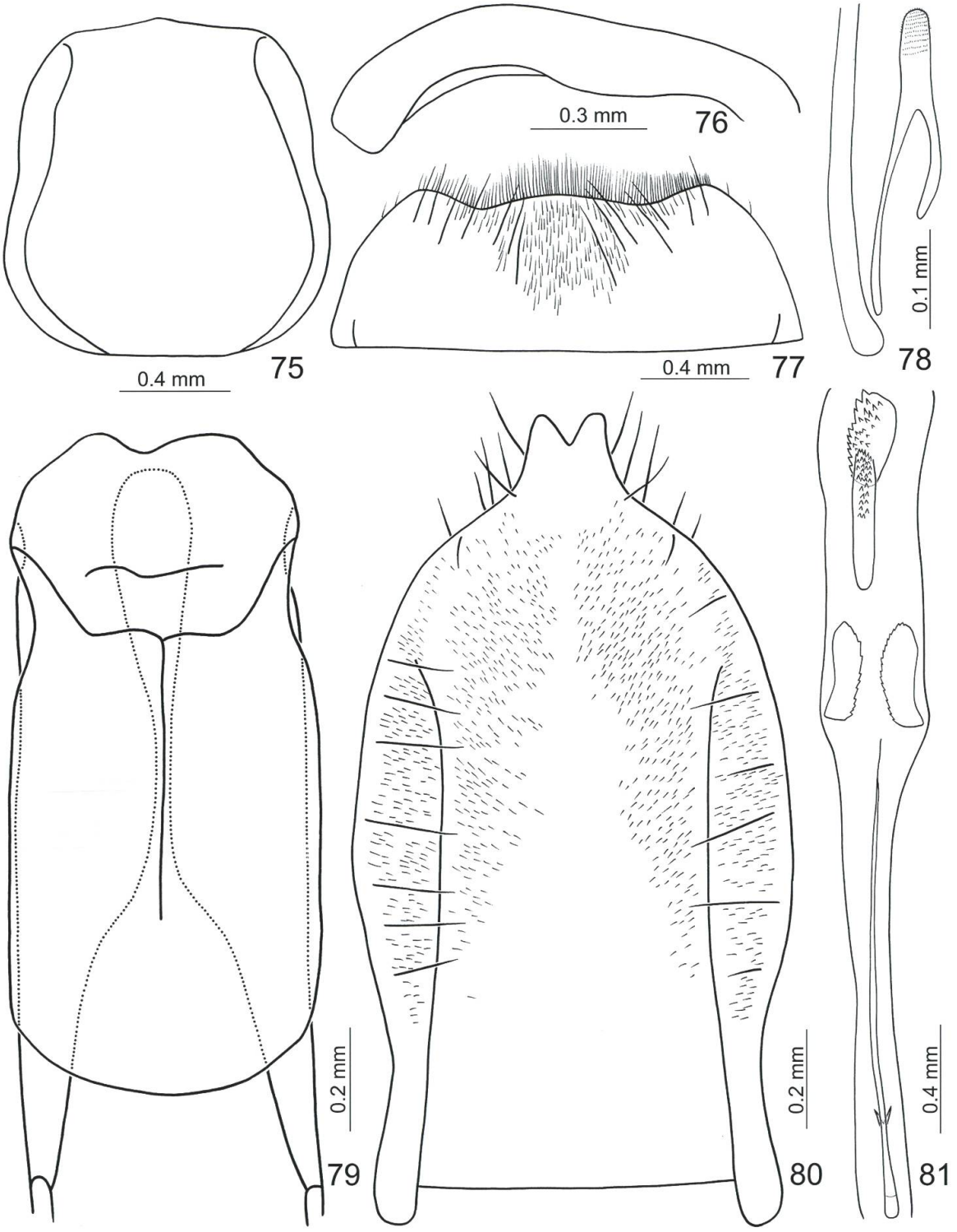
Figs 52–59. Dorsal habitus of *Neohelota* species: 52 – *N. intermedia*, male; 53 – *N. intermedia*, female; 54 – *N. laosensis*, male; 55 – *N. laosensis*, female; 56 – *N. ocellata* from Sumatra, male; 57 – *N. ocellata* from Sumatra, female; 58 – *N. ocellata* from Java, male; 59 – *N. ocellata* from Java, female.



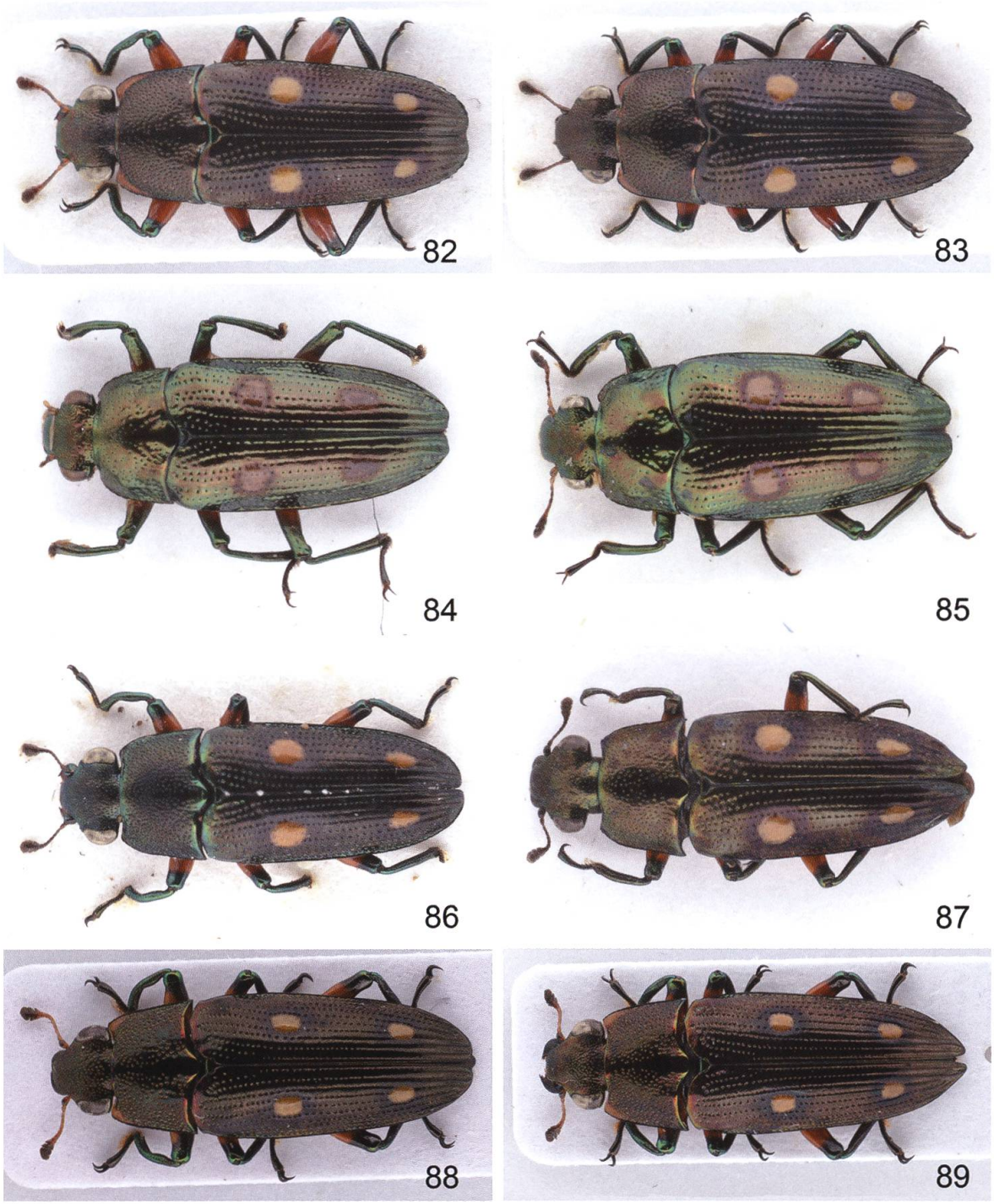
Figs 60–67. Diagnostic characters of *Neohelota intermedia*: 60 – Elytral apices, male; 61 – Elytral apices, female; 62 – Eighth abdominal tergite; 63 – Protibia; 64 – Fifth abdominal ventrite; 65 – Penis; 66 – Parameres; 67 – Internal sac.



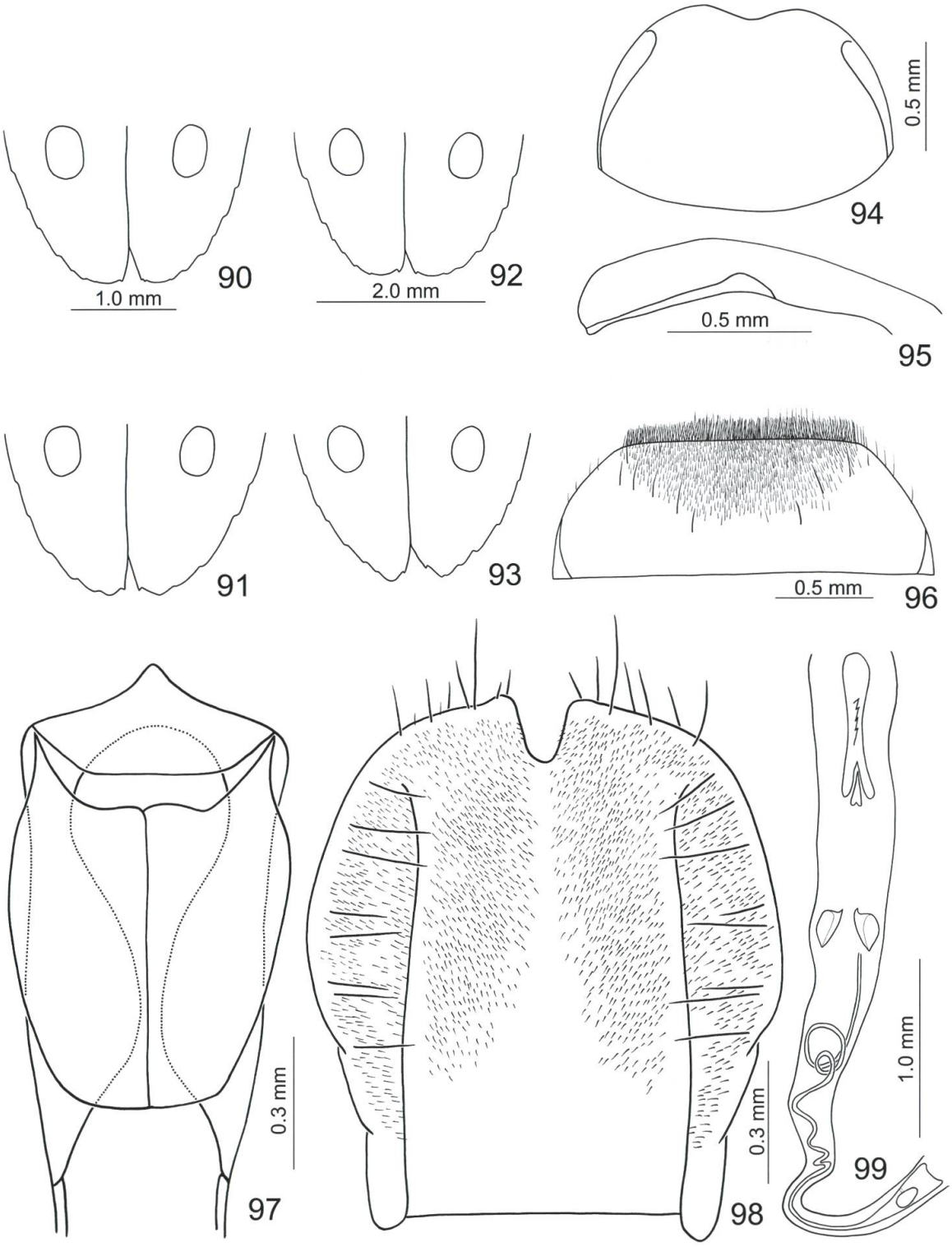
Figs 68–74. Diagnostic characters of *Neohelota laosensis*: 68 – Eighth abdominal tergite; 69 – Protibia; 70 – Fifth abdominal ventrite; 71 – Base of flagellum, lateral view; 72 – Penis; 73 – Parameres; 74 – Internal sac.



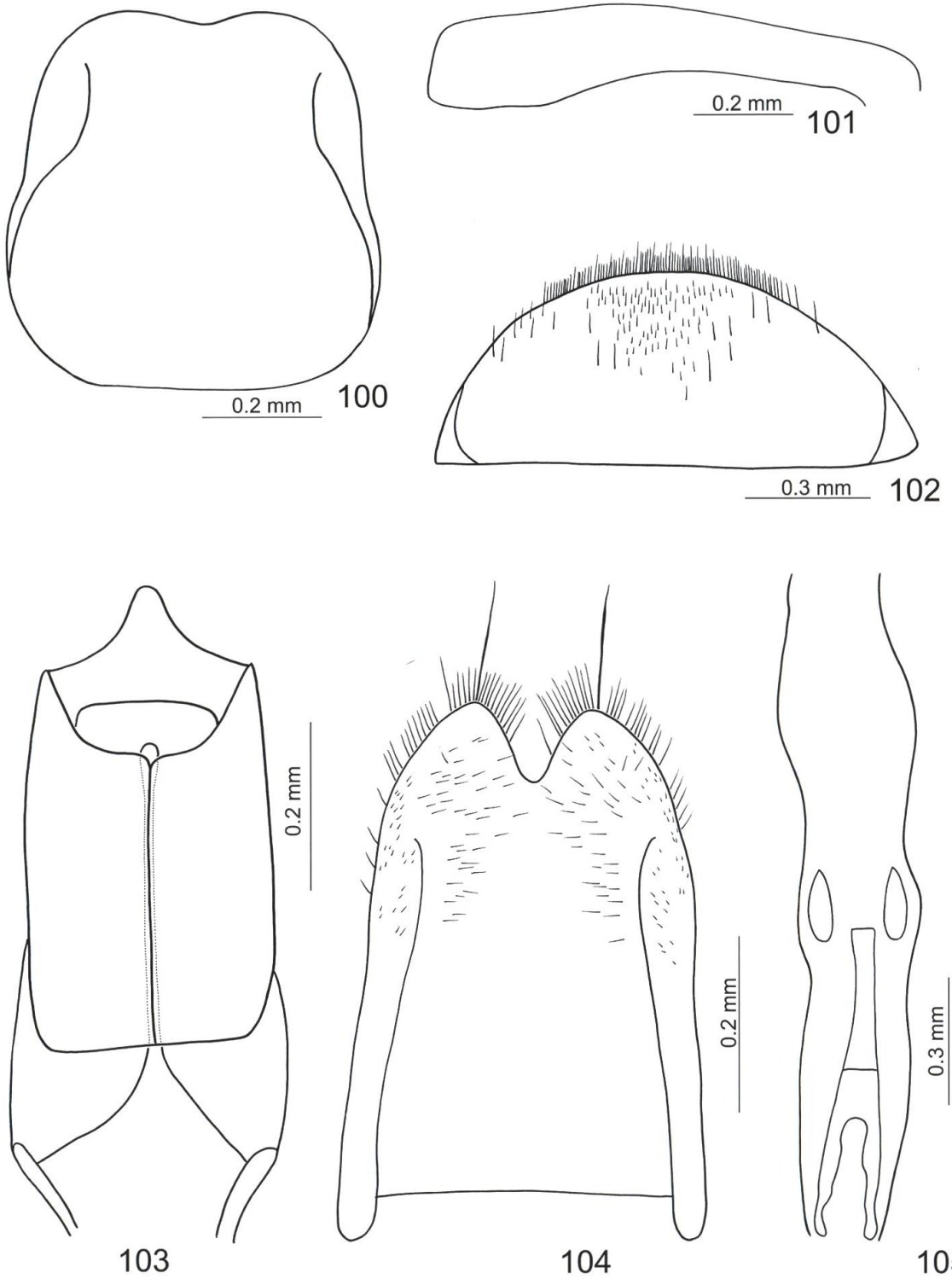
Figs 75–81. Diagnostic characters of *Neohelota ocellata*: 75 – Eighth abdominal tergite; 76 – Protibia; 77 – Fifth abdominal ventrite; 78 – Base of flagellum, lateral view; 79 – Penis; 80 – Parameres; 81 – Internal sac.



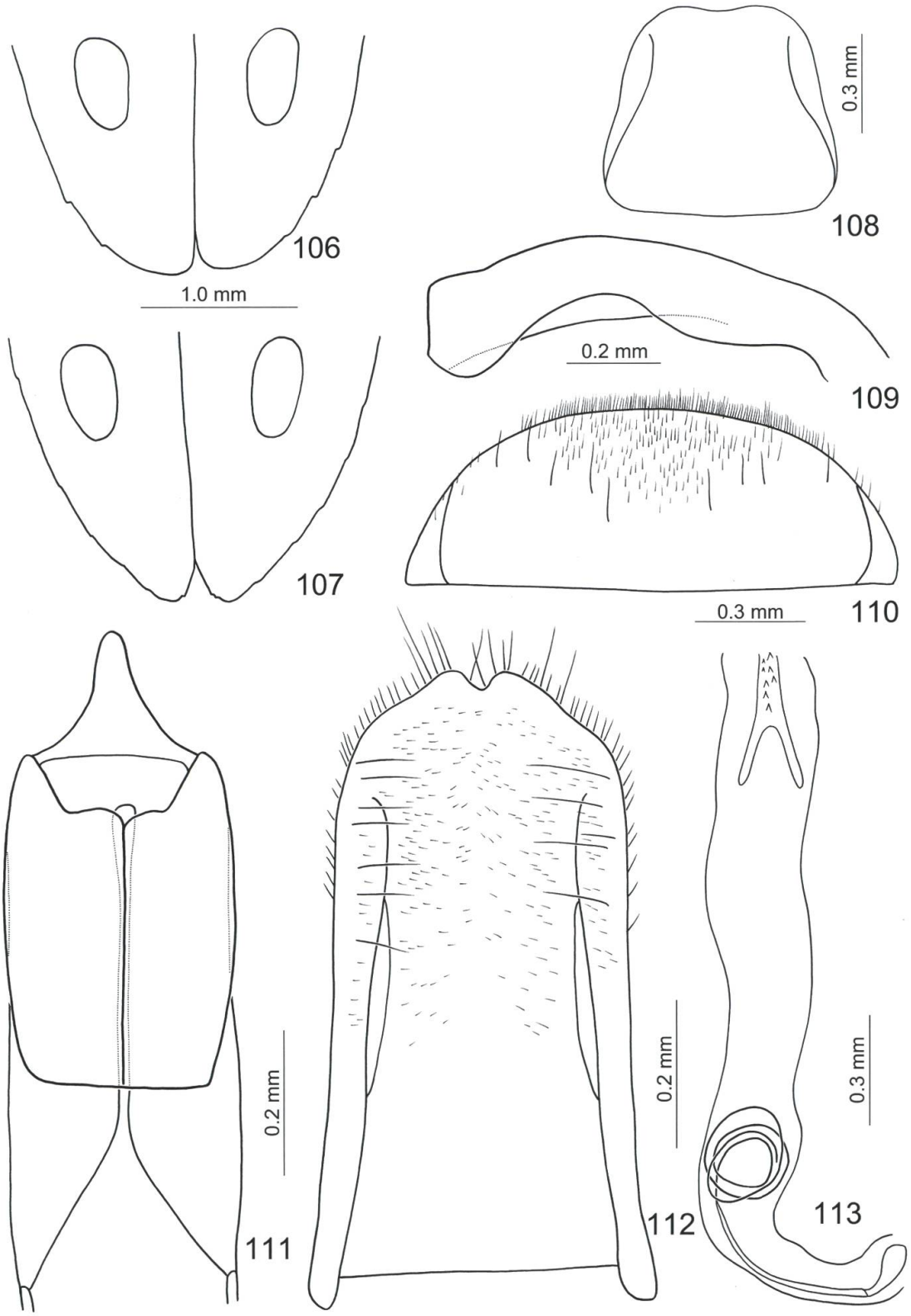
Figs 82–89. Dorsal habitus of *Neohelota* species: 82 – *N. serratipennis*, male; 83 – *N. serratipennis*, female; 84 – *N. smetanai*, male; 85 – *N. smetanai*, female; 86 – *N. sumbawensis*, male; 87 – *N. sumbawensis*, female; 88 – *N. valentinae*, male; 89 – *N. valentinae*, female.



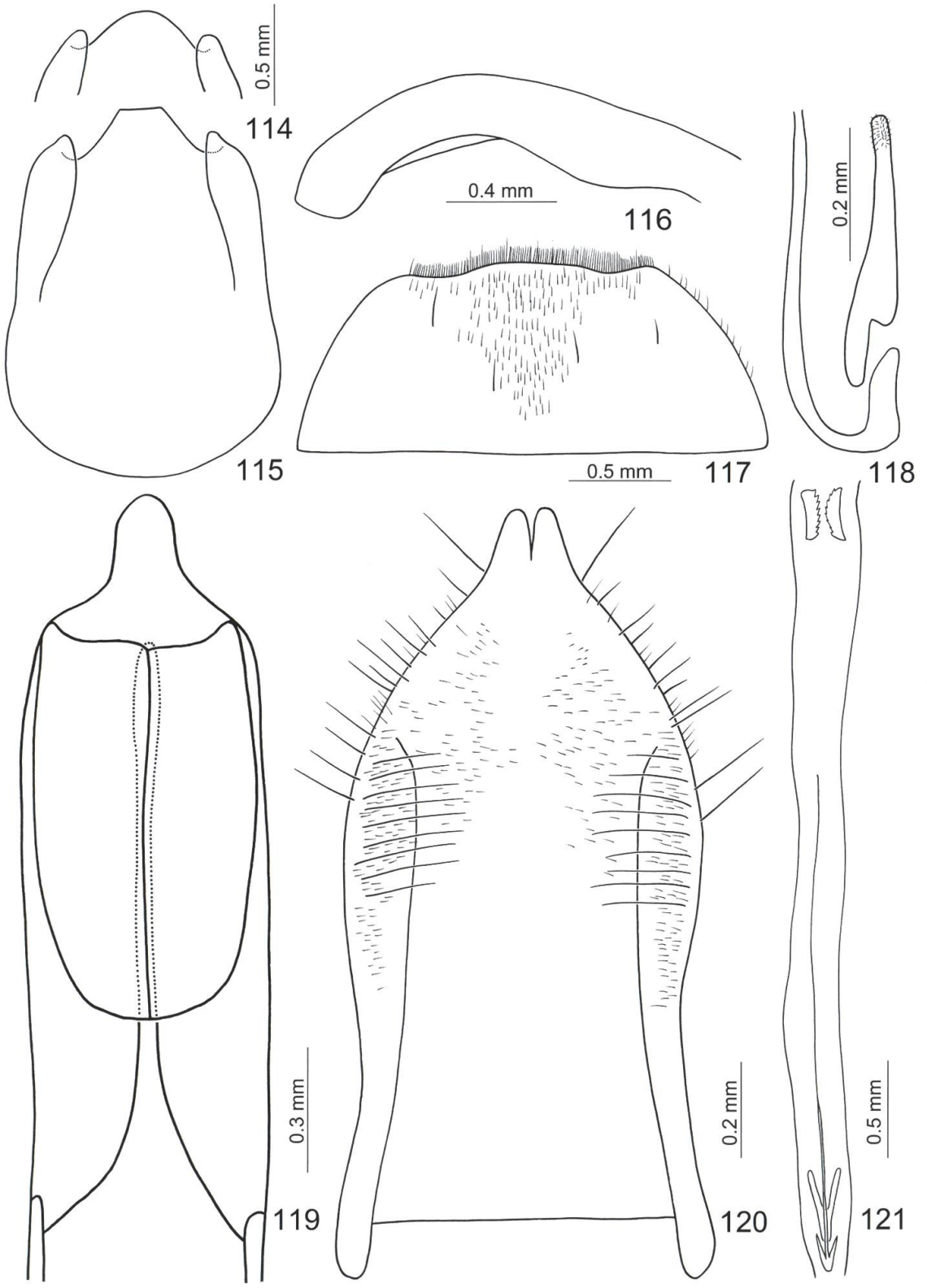
Figs 90–99. Diagnostic characters of *Neohelota guttata* and *N. serratipennis*: 90 – *N. guttata*, elytral apices, male; 91 – *N. guttata*, elytral apices, female; 92 – *N. serratipennis*, elytral apices, male; 93 – *N. serratipennis*, elytral apices, female; 94 – *N. serratipennis*, eighth abdominal tergite; 95 – *N. serratipennis*, protibia; 96 – *N. serratipennis*, fifth abdominal ventrite; 97 – *N. serratipennis*, penis; 98 – *N. serratipennis*, parameres; 99 – *N. serratipennis*, internal sac.



Figs 100–105. Diagnostic characters of *Neohelota smetanai*: 100 – Eighth abdominal tergite; 101 – Protibia; 102 – Fifth abdominal ventrite; 103 – Penis; 104 – Parameres; 105 – Internal sac.



Figs 106–113. Diagnostic characters of *Neohelota sumbawensis*: 106 – Elytral apices, male; 107 – Elytral apices, female; 108 – Eighth abdominal tergite; 109 – Protibia; 110 – Fifth abdominal ventrite; 111 – Penis; 112 – Parameres; 113 – Internal sac.



Figs 114–121. Diagnostic characters of *Neohelota valentinae*: 114 – Apex of eighth abdominal tergite from Nepal; 115 – Eighth abdominal tergite from Laos; 116 – Protibia; 117 – Fifth abdominal ventrite; 118 – Base of flagellum, lateral view; 119 – Penis; 120 – Parameres; 121 – Internal sac.

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Author's addresses:

Shi-Feng Lee
Applied Zoology Division
Taiwan Agricultural Research Institute
Wufeng 413
Taichung
TAIWAN

E-mail: chifeng@tari.gov.tw

Petr Votruba
Rychtáře Šimona 182
CZ-19600 Praha 9
CZECH REPUBLIC

E-mail: pevo@email.cz