

**Revisonal study on the genus *Mimastra*  
(Coleoptera: Chrysomelidae: Galerucinae):  
Species with unmodified protarsomeres in male.  
Part 1.**

Jan BEZDĚK

Mendel University of Agriculture and Forestry, Department of Zoology, Zemědělská 1, CZ-613 00 Brno,  
Czech Republic; e-mail: bezdek@mendelu.cz

**Abstract.** The first results of a taxonomic study of the type material of the genus *Mimastra* Baly, 1865 are presented for 11 species in which the males do not have modified protarsomeres. Three species are described as new: *Mimastra jelineki* sp. nov. (Indonesia: Java and Bali), *M. kremitovskyi* sp. nov. (China: Yunnan) and *M. riedeli* sp. nov. (India: Uttar Pradesh; Nepal). The following new synonyms are proposed: *Mimastra fortipunctata* Maulik, 1936 = *M. bhutanica* Kimoto, 1982, syn. nov.; *M. malvi* Chen, 1942 = *M. grahami* Gressitt & Kimoto, 1963, syn. nov., and *M. submetallica* Jacoby, 1884 = *M. pectoralis* Kimoto, 1989, syn. nov. *Mimastra badia* Kimoto, 1989 is treated as a valid species and resurrected from the synonymy with *M. polita* Jacoby, 1889. Lectotypes are designated for the following species: *Mimastra pallida* Jacoby, 1896, *M. submetallica* Jacoby, 1884, and *M. sumatrensis* Jacoby, 1884. Both male and female genitalia are described for the first time for almost all species under study.

**Key words.** Coleoptera, Chrysomelidae, Galerucinae, *Mimastra*, taxonomy, new species, lectotype designation, synonymy, resurrection from synonymy, Oriental Region, Palaearctic Region.

## Introduction

*Mimastra* Baly, 1865 is a chrysomelid genus that comprises 48 described species distributed in the Oriental and south-eastern Palaearctic Regions (ZHANG et al. 2006). Identification keys for species of *Mimastra* from smaller geographical areas can be found in a number of publications (e.g. MAULIK 1936, GRESSITT & KIMOTO 1963, KIMOTO 1989, MOHAMEDSAID 1992, ZHANG et al. 2006). A complete revision of the genus based on the examination of the types is however lacking. The aedeagi have been illustrated only rarely and the female genitalia not at all. The concepts of many *Mimastra* species are therefore poorly understood.

A complete revision of the types of all known *Mimastra* species is a long-term process. Therefore I decided to publish the results in a series of several papers, starting with a study of primary types of species in which the males posses simple, unmodified protarsomeres. About one third of *Mimastra* species are characterised by modified, hook-like or discoidal protarsomeres in male. These species will be revised in separate papers. A key to identification of *Mimastra* will be published after the revision of all species.

## Material and methods

All measurements were made with an ocular grid mounted on a MBS-10 stereomicroscope at 16× (body length) and 32× magnification (remaining measurements).

The material is housed in the following collections:

BMNH	Natural History Museum, London, UK (Sharon Shute, Maxwell V. L. Barclay);
BPBM	Bernice P. Bishop Museum, Honolulu, Hawaii, USA (Al Samuelson);
IZCAS	Institute of Zoology, Chinese Academy of Sciences, Beijing, China (Li-Jie Zhang);
JBBC	Jan Bezdeček collection, Brno, Czech Republic;
JSPC	Jaromír Strejček collection, Praha, Czech Republic;
MCZ	Museum of Comparative Zoology, Harvard University, Cambridge, Massachusetts, USA (Philipp D. Perkins);
MDGC	Manfred Döberl collection, Abensberg, Germany;
MSNG	Museo Civico di Storia Naturale 'Giacomo Doria', Genova, Italy (Fabio Penati, Roberto Poggi);
NHMB	Naturhistorisches Museum, Basel, Switzerland (Eva Sprecher-Uebersax, Michel Brancucci);
NMEG	Naturkundemuseum, Erfurt, Germany (Matthias Hartmann);
NMPC	National Museum, Praha, Czech Republic (Jiří Hájek);
RMNH	Nationaal Natuurhistorische Museum ('Naturalis'), Leiden, Netherlands (Fred van Assen);
RNDC	René Novák collection, Drnovice, Czech Republic;
SMNS	Staatliches Museum für Naturkunde, Stuttgart, Germany (Wolfgang Schwaller);
USNM	National Museum of Natural History, Smithsonian Institution, Washington D.C., USA (Alexander Konstantinov);
VKBC	Vladimír Kremitovský collection, Brno, Czech Republic;
ZMUH	Zoologisches Institut und Zoologisches Museum, Universität von Hamburg, Hamburg, Germany (Hans Riefenstahl).

Exact label data are cited for all type specimens; a double slash (//) divides data on different labels and a single slash (/) divides data in different rows. Type localities are cited in the original spelling. Other comments and remarks are placed in square brackets: [p] – preceding data are printed, [h] – preceding data are handwritten, and [w] – white label.

## Taxonomy

### Genus *Mimastra* Baly, 1865

*Mimastra* Baly, 1865: 253. Type species: *Mimastra arcuata* Baly, 1865, by original designation.

*Anthraxantha* Fairmaire, 1878 in DEYROLLE & FAIRMAIRE (1878): 137. Type species: *Anthraxantha davidi* Fairmaire, 1878, by monotypy. Synonymised with *Mimastra* by JACOBY (1888): 351.

*Brachita* Allard, 1889: 103. Type species: *Brachita terminata* Allard, 1889, by subsequent designation (GRESSITT & KIMOTO 1963: 535). Synonymised with *Mimastra* by ALLARD (1890): 80.

**Differential diagnosis.** *Mimastra* can be distinguished from other externally similar genera (especially *Hoplasoma* Jacoby, 1884 and *Haplosomoides* Duvivier, 1890) by the combination of the following characters: body moderately elongate, parallel or slightly divergent posteriad, glabrous (usually with very fine scarce hairs in the posterior third of elytra), antennae filiform, pronotum with transverse depression, anterior and posterior margins of pronotum bordered, anterior coxal cavities opened posteriorly, posterior tibiae without spines, claws appendiculate.

**Distribution.** Indian subcontinent, China and South-East Asia (southwards to Sumatra, Java, Bali, Borneo and the Philippines).

***Mimastra badia* Kimoto, 1989, stat. restit.**

(Figs. 1, 5, 22)

*Mimastra badia* Kimoto, 1989: 85 (key), 86 (original description).

*Mimastra badia*: MEDVEDEV (2002): 256 (synonymized with *M. polita* Jacoby, 1889).

**Type locality.** ‘Laos, Vientiane Prov., Ban Van Eue’.

**Type material examined.** PARATYPES: 2 ♂♂ 1 ♀, ‘LAOS: / Vientiane Prov. / Ban Van Eue / 30.VIII.1967 [w, p] // Native / Collector / BISHOP [w, p] // PARATYPE [blue label, p] // *Mimastra / badia / n. sp. [w, p]*’ (BPBM). 1 ♀, ‘LAOS: / Vientiane Prov. / Ban Van Eue / 15.II.1967 [w, p] // Native Collector / BISHOP MUSEUM [w, p] // PARATYPE [blue label, p] // *Mimastra / badia / n. sp. [w, p]*’ (BPBM) [female not corresponding to *M. badia*]; 1 ♀, ‘LAOS: Vientiane / Prov., Gi Sion / Vill., de Tha Ngone / 2.I.1966 [w, p] // Native Collector / BISHOP MUSEUM [w, p] // PARATYPE [blue label, p] // *Mimastra / badia / n. sp. [w, p]*’ (BPBM) [female of *Mimastra submetallica*]; 1 ♀, ‘LAOS: / Sedone Province / Paksong / 16.V.1965 [w, p] // Native Collector / BISHOP [w, p] // PARATYPE [blue label, p] // *Mimastra / badia / n. sp. [w, p]*’ (BPBM) [female of *Mimastra submetallica*].

**Differential diagnosis.** Dorsum including apical margin of elytra uniformly yellow. Underside yellow, metathorax and abdomen black. Legs yellow, apices of tibiae gradually darkened, tarsi infuscate. Aedeagus as in Fig. 1. Spermatheca as in Fig. 5. Body length according to the original description: 5.30–6.80 mm; body length of examined paratypes: males 5.50–5.90 mm; female 5.75 mm.

**Distribution.** Laos, Thailand, Vietnam (KIMOTO 1989).

**Comments.** According to the original description (KIMOTO 1989), the type series includes the holotype deposited in BPBM and 153 paratypes deposited in BPBM and the Kitakyushu Museum of Natural History and Human History (Fukuoka, Japan). I had the opportunity to examine six paratypes of *M. badia* from BPBM. Three paratypes from ‘Vientiane prov., Ban Van Eue, 30.VIII.1967’ that fit the original description and are in my opinion conspecific with the holotype (not examined) refer to true *M. badia*. Two female paratypes with yellow abdomen (from ‘Vientiane prov., Gi Sion vill.’ and ‘Sedone prov., Paksong’) undoubtedly belong to *M. submetallica*. Another paratype (female) from ‘Laos, Vientiane prov., Ban Van Eue, 15.II.1967’ is a female of an unidentified *Mimastra* species, different from *M. badia*. This female has a black collar on the base of the head and black margin of the elytral apex.

MEDVEDEV (2002) synonymized *M. badia* with *M. polita* Jacoby, 1889. My comparison of the type material of both species revealed differences in the structure of the aedeagus (Figs. 1, 11–12). Based on the material examined, *M. badia* is resurrected from the synonymy with *M. polita*.

### *Mimastra fortipunctata* Maulik, 1936

(Figs. 2, 6, 23)

*Mimastra fortipunctata* Maulik, 1936: 527 (key), 542 (original description).

*Mimastra fortipunctata*: WILCOX (1973): 483 (catalogue); KIMOTO (1982): 13; MEDVEDEV (1992): 14; MEDVEDEV & SPRECHER-UEBERSAX (1999): 311 (catalogue); KIMOTO (2001): 41; KIMOTO (2005): 61 (catalogue).

*Mimastra bhutanica* Kimoto, 1982: 14 (original description), **syn. nov.**

*Mimastra bhutanica*: KIMOTO (2005): 61 (catalogue).

**Type localities.** *Mimastra fortipunctata*: not given in the original description. Based on the labels of the holotype, the type locality is 'E. Himalayas, Kurseong' [= Karsiyang, 26°52'N 88°16'E, West Bengal, India]. *Mimastra bhutanica*: 'Bhutan, Kharbani'.

**Type material examined.** *Mimastra fortipunctata*: HOLOTYPE: unsexed, 'Type [white round label with red collar, h] // D'Abreu [vertically] / Ind. Mus. / Kurseong / 6000 ft. / E. Himalayas [p] / II-VIII [h] -09. [w, p] // Mimastra / fortipunctata [h] / S. Maulik [p] / Type 1936 [w, h] // Brit. Mus. / 1939- [p] 149 [w, h]' (BMNH). PARATYPES: 1 spec. unsexed, 'Mus. Collr. [vertically] / Damukdia / Ghat / E. Bengal / 22-VII-07 [w, p] // Ind. Mus. [w, p] // 951 / 16 [w, p] // Mimastra / fortipunctata [h] / S. Maulik det. [p] Mlk. / paratype 1936 [w, h] // Brit. Mus. / 1939- [p] 149 [w, h]' (BMNH); 1 ♂, 'Mus. Collr. [vertically] / Damukdia / Ghat / E. Bengal / 22-VII-07 [w, p] // Ind. Mus. [w, p] // 947 / 16 [w, p] // Mimastra / fortipunctata Mlk.[h] / S. Maulik det. [p] / paratype 1936 [w, h] // Brit. Mus. / 1939- [p] 149 [w, h]' (BMNH); 1 ♂, 'Mus. Collr. [vertically] / Siliguri / N. Bengal. / 18-20.VII.07 [w, p] // Ind. Mus. [w, p] // 979 / 16 [w, p] // Mimastra / fortipunctata Mlk.[h] / S. Maulik det. [p] / paratype 1936 [w, h] // Brit. Mus. / 1939- [p] 149 [w, h]' (BMNH); 1 spec. unsexed, 'C. Paiva [vertically] / Ind. Mus. / Darjiling / E. Himalayas / alt. [p] 7000 [h] ft. [p] / 5 [h] -VIII-09. [w, p] // Mimastra / fortipunctata Mlk. [h] / S. Maulik det. [p] / paratype 1936 [w, h] // Brit. Mus. / 1939- [p] 149 [w, h]' (BMNH).

*Mimastra bhutanica*: HOLOTYPE: ♀, 'Kharbandi / 700 m [p] 9.1975 [w, h] // Bhutan, Dorjee / Khandu Dukpa [w, p] // PHOTO [red label, p] // HOLOTYPE [red label, p] // Mimastra / bhutanica / Kimoto, n. sp. [w, h]' (NHMB).

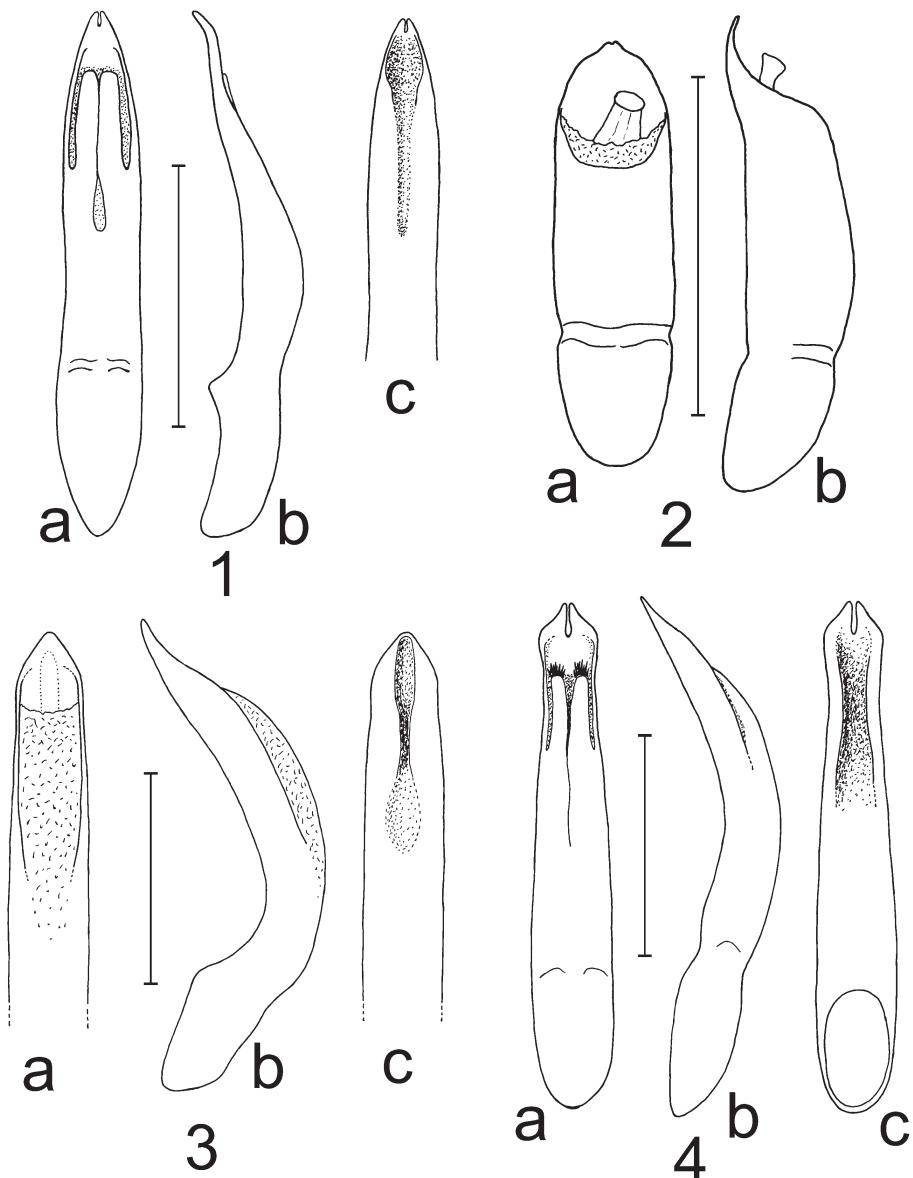
**Additional material examined. INDIA: WEST BENGAL:** 1 ♂ 1 ♀, Darjeeling, 7000 ft., 9.viii.1924, Major R. W. G. Hingston leg. (BMNH). **ARUNACHAL PRADESH:** 114 spec. (3 ♂♂ 3 ♀♀, remaining spec. unsexed), 8 km S Jamiri, Sessa vicinity, 350 m, 27°07'-09'N 92°34'E, 26.v.-4.vi.2005, L. Dembický leg. (BMNH). **BHUTAN:** 1 ♀, Dorjee Khandu, Chasilakha, 1978 (NHMB).

**Differential diagnosis.** Due to the small body size and characteristic black pattern on the elytra (Fig. 23), *M. fortipunctata* cannot be confused with any other *Mimastra* species. Aedeagus as in Fig. 2. Spermatheca as in Fig. 6. Body length: males 4.00–4.60 mm; females 4.00–5.20 mm.

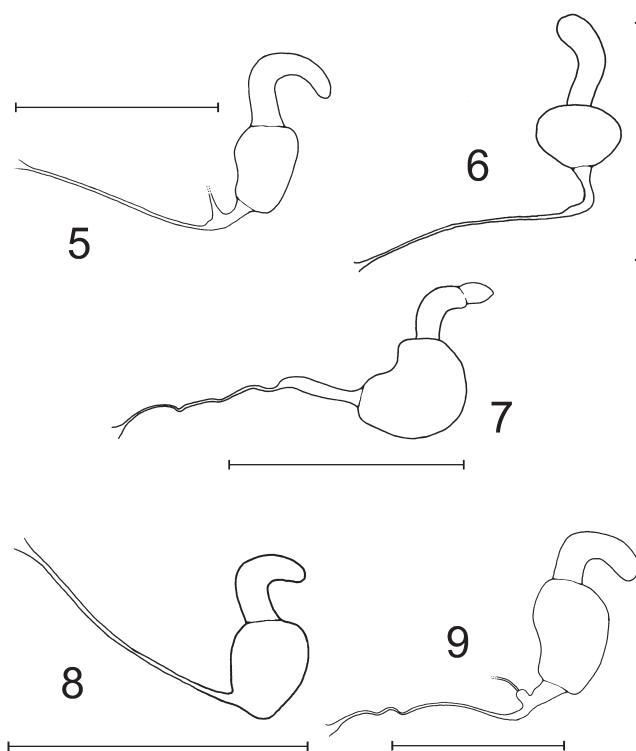
**Distribution.** Bhutan (KIMOTO 1982), India (MAULIK 1936), Nepal (MEDVEDEV 1992, KIMOTO 2001).

**Comments.** KIMOTO (1982) described *M. bhutanica* based on two specimens (holotype and paratype) deposited in NHMB and distinguished it from *M. fortipunctata* by a finer punctuation of the elytra. My comparison of the type material of both species and numerous other recently collected specimens showed no difference in the intensity of elytral punctures. The holotype of *M. bhutanica* is a pale specimen with slightly reduced black pattern on the elytra that falls fully within the variability range of *M. fortipunctata*. *Mimastra bhutanica* is thus proposed here as a new synonym of *M. fortipunctata*.

*Mimastra fortipunctata* was originally described from 29 specimens (MAULIK 1936). I have found the holotype and four paratypes in BMNH; the depository of the remaining paratypes is unknown to me.



Figs. 1–4. Aedeagus (a – dorsal view; b – lateral view; c – ventral view). 1 – *Mimastra badia* Kimoto, 1989; 2 – *M. fortipunctata* Maulik, 1936; 3 – *M. maai* Gressitt & Kimoto, 1963; 4 – *M. malvi* Chen, 1942. Scale bars: 1 mm.



Figs. 5–9. Spermatheca. 5 – *Mimastra badia* Kimoto, 1989; 6 – *M. fortipunctata* Maulik, 1936; 7 – *M. maai* Gressitt & Kimoto, 1963; 8 – *M. pallida* Jacoby, 1896; 9 – *M. polita* Jacoby, 1889. Scale bars: 0.5 mm.

### *Mimastra maai* Gressitt & Kimoto, 1963

(Figs. 3, 7, 25)

*Mimastra maai* Gressitt & Kimoto, 1963: 536 (key), 539 (original description).

*Mimastra maai*: WILCOX (1973): 483 (catalogue).

**Type locality.** ‘Ta-chu-lan, Shaowu Distr., Fukien Prov.’ [Fujian, China].

**Type material examined.** HOLOTYPE: ♂, ‘Fukien, S. China / ShaoWu, TaChu [p] Lan [h] / VI-10-42 [h] T. C. Maa [w, p] // HOLOTYPE [p] ♂ [h] / *Mimastra / maai* [h] / Gressitt & Kimoto [red label, p] // *Mimastra / maai* / Holo. Gr.+Kim. [h] / J. L. Gressitt det. [p] 61 [w, h]’ (BPBM). PARATYPE: ♀, ‘Fukien, S. China / ShaWu, TaChuFung / FaoStu [p] / VI-13 [h] –1 [p] 2 [h] T. C. Maa [w, p] // ALLOTYPE [p] / *Mimastra / maai* [h] / J. L. Gressitt [red label, p] // *Mimastra / maai* / ♀ Gress. + Kim. [h] / Gressitt & Kimoto det. 196 [p] 2 [w, h] // *Mimastra / sp.* † / *maai* [h] / Det. S. Kimoto [p] allo. [w, h]’ (BPBM).

**Additional material examined.** VIETNAM: VINH PHU prov.: 6 spec. unsexed, Tam Dao, 900–1400 m, 3.–11.v.1985, J. Jelinek leg. (NMPC); 5 spec. unsexed, Tam Dao, 27.v.–2.vi.1986, J. Macek leg. (NMPC); 1 spec. unsexed, Tam Dao, 6.–20.v.1990, M. Kalabza & Z. Košťál leg. (JBBC); 59 spec. unsexed, Tam Dao, 900–1200 m, 11.–17.v.1996, P. Spáčil leg. (JBBC); 1 spec. unsexed, Tam Dao, 5.–23.v.1990, O. Černý leg. (FKCC); 1 spec. unsexed, Tam Dao, 800–1200 m, 12.–22.iv.1986, L. Medvedev & S. Golovatch leg. (SMNS); 11 spec. unsexed, Tam Dao, 11.–13.v.1975, L. Medvedev & Dang Dap leg. (SMNS). LIEN SON prov.: 1 spec. unsexed, Sa Pa, 12.–17.v.1990, O. Černý leg. (FKCC); 1 ♀, Montes Mauson [= Mau Son Mountains], H. Fruhstorfer leg. (ZMHB).

**Differential diagnosis.** *Mimastra maai* is close to *M. malvi*. Both species have very similar coloration (head and pronotum yellow, elytra dark metallic blue with thin yellow margins) but differ in the shape of the pronotum (1.45 times as broad as long in *M. maai*, 1.95 times as broad as long in *M. malvi*) and the structure of the aedeagus (Figs. 3–4). Spermatheca as in Fig. 7.

**Distribution.** China: Fujian (GRESSITT & KIMOTO 1963), Vietnam (present paper).

**Comments.** Originally described from three specimens: holotype (male) and one paratype (female) deposited in BPBM and one paratype (female) deposited in the California Academy of Science (San Francisco, USA).

### *Mimastra malvi* Chen, 1942

(Figs. 4, 24)

*Mimastra malvi* Chen, 1942: 30 (original description).

*Mimastra malvi*: GRESSITT & KIMOTO (1963): 536 (key); WILCOX (1973): 483 (catalogue); YANG (1992a): 570; YANG (1992b): 339;

*Mimastra grahami* Gressitt & Kimoto, 1963: 536 (key), 537 (original description), **syn. nov.**

*Mimastra grahami*: WILCOX (1973): 483 (catalogue); YANG (1992a): 570; YANG (1992b): 339.

**Type localities.** *Mimastra malvi*: ‘Szechwan: Pehpei’ [= Beibei, 29°49'N 106°26'E Sichuan, China]. *Mimastra grahami*: ‘S. Shensi’ [= South Shaanxi, China].

**Type material examined.** *Mimastra malvi*: not examined.

*Mimastra grahami*: PARATYPES: ♀, ‘Chunking / 2000ft / V.6-27.30 [w, p] // Szechuan / CHINA / DCGraham [w, p] // US [w, p] // PARATYPE [p] / ♀ / *Mimastra / grahami* [p] / Gressitt & Kimoto [yellow label, p] // *Mimastra / grahami* [h] / Gressitt & Kimoto det. 19 [p] 59 [w, h]’ (BPBM); ♀, ‘Szechuan / CHINA / DCGraham [w, p] // Suifu / ft / May ‘24 [w, p] // US [w, p] // PARATYPE [p] / *Mimastra ♀ / grahami* [p] / Gressitt & Kimoto [yellow label, p] // *Mimastra / grahami* [h] / Gressitt & Kimoto det. 19 [p] 59 [w, h]’ (USNM).

**Additional material examined.** CHINA: SICHUAN: 1 ♂ 1 ♀, Wenquan, 2.iv.1940, (IZCAS).

**Differential diagnosis.** Externally, *M. malvi* is very similar to *M. maai* but differs in having a more transverse pronotum (see under *M. maai*) and the structure of the aedeagus (Figs. 3–4).

**Distribution.** China: Shaanxi (GRESSITT & KIMOTO 1963), Sichuan (CHEN 1942, GRESSITT & KIMOTO 1963), Hunan (YANG 1992a,b).

**Comments.** *Mimastra malvi* was described from five specimens from Sichuan: Pehpei. Unfortunately, the type series could not be located at IZCAS (ZHANG, pers. comm. 2007). On the other hand, two specimens collected in Wenquan (close to Pehpei) were available to study. They perfectly fit the description of *M. malvi* and are conspecific with the paratype of *M. grahami*. Undoubtedly, *M. grahami* is a new synonym of *M. malvi*.

### *Mimastra pallida* Jacoby, 1896

(Figs. 8, 10, 26)

*Mimastra pallida* Jacoby, 1896a: 139 (original description).

*Mimastra pallida*: JACOBY (1897): 408; WILCOX (1973): 484 (catalogue); KIMOTO (1990): 208; MOHAMEDSAID (1992): 116 (key); MOHAMEDSAID (2000): 351; MOHAMEDSAID (2004): 98 (catalogue).

*Mimastra* (*Mimastra*) *pallida*: WEISE (1924): 125 (catalogue).

**Type locality.** ‘Si-Oban, also Borneo’ (JACOBY 1896a). Due to the present lectotype designation, the type locality is restricted to ‘Si-Oban’ [= Sioban, 2°10'S 99°43'E, Sipora Island, Sumatra, Indonesia].

**Type material examined.** LECTOTYPE (designated here): ♂, ‘Mentawai / Si Oban IV–VIII / Modigliani 94 [w, p] // Typus [w, red letters, p] // pallida / Jac. [w, p] // Mimastra / pallida / Jac. [blue label, h] // Museo Civico / di Genova [w, p]’ (MSNG). PARALECTOTYPES: 1 ♂, 1 spec. unsexed, ‘Mentawai / Si Oban IV–VIII / Modigliani 94 [w, p] // Teste / Jacoby [yellow label, p] // Museo Civico / di Genova [w, p]’ (MSNG); 2 spec. unsexed, ‘Mentawai / Si Oban IV–VIII / Modigliani 94 [w, p] // Museo Civico / di Genova [w, p]’ (MSNG); 1 spec. unsexed, ‘Mentawai / Si Oban IV–VIII / Modigliani 94 [w, p] // 163 [pale green label, p] // Mimastra / pallida / n. sp. Jac. [white label with vertical red stripe, h] // Museo Civico / di Genova [w, p]’ (MSNG); 1 spec. unsexed, ‘Co- / type [round white with yellow collar, p] // Mentawai / Si Oban IV–VIII / Modigliani 94 [w, p] // Museo Civ. / Genova [orange label, p] // Jacoby Coll. / 1909-28a [w, p] // Mimastra / pallida / Jac. [blue label, h]’ (BMNH). A colour photo of one paralectotype (unsexed) and its labels deposited in MCZ is available online at: <http://mcz-28168.oeb.harvard.edu/mcztypedb.htm>. The specimen bears the following labels: ‘Mentawai / Si Oban IV–VIII / Modigliani 94 [w, p] // 211 [grey label, p] // Mimastra / pallida / n. sp. Jac. [w, h] // Type [p] 18178 [red label, h]’. All specimens examined (except the one from MCZ) are provided with a red printed label: ‘LECTOTYPUS [or PARALECTOTYPUS], / *Mimastra pallida* / Jacoby, 1896 / des. J. Bezděk 2008’.

**Additional material examined.** INDONESIA: SUMATRA: 1 spec. unsexed, Sipora Is., Sereinu, v–vi.1894, Modigliani leg. (BMNH); 1 ♂ 2 ♀ 2 spec. unsexed, Batu Is., 1896–1897, H. Raap leg. (MSNG). MALAYSIA: PAHANG: 1 ♂ 1 ♀, Cameron Highlands, Tanah Rata, 35 km SEE of Ipoh, 4°28'N 101°23'E, 1500 m, 21.–24.iv.2001, M. Říha leg. (JBBC).

**Differential diagnosis.** Dorsal side yellow, ventral side usually completely yellow, but in two paralectotypes with infuscate metasternum and abdomen. Legs yellow, femora with a black stripe on the outer side near apex, middle and hind tibiae more or less darkened. This species resembles *M. sumatrensis* by the yellow dorsum, but is smaller in size and the aedeagi of both species are completely different (Figs. 10, 18). Spermatheca as in Fig. 8. Body length: males 4.85–5.95 mm (lectotype 5.00 mm); females 5.85–6.00 mm.

**Distribution.** Indonesia: Sipora Is. (JACOBY 1896) and Batu Is. (JACOBY 1897); ‘Borneo’ (JACOBY 1896); Malaysia: Sabah (MOHAMEDSAID 2000) and Pahang (present paper).

**Comments.** JACOBY (1896a) did not specify the number of type specimens. The main part of the type series (six specimens) is deposited in MSNG and one additional specimen is found in BMNH and MCZ each. One male from MSNG is designated here as the lectotype.

Two specimens from Malaysia, Pahang, identified as *M. pallida* have more slender and longer tarsomeres but the aedeagus is almost identical with the males from the type series.

### *Mimastra polita* Jacoby, 1889

(Figs. 9, 11–12, 27)

*Mimastra polita* Jacoby, 1889: 211 (original description).

*Mimastra polita*: ALLARD (1890): 84 (key); MAULIK (1936): 532 (key); WILCOX (1973): 484 (catalogue); MEDVEDEV (2002): 256 (designation of lectotype).

*Mimastra* (*Mimastra*) *polita*: WEISE (1924): 125 (catalogue).

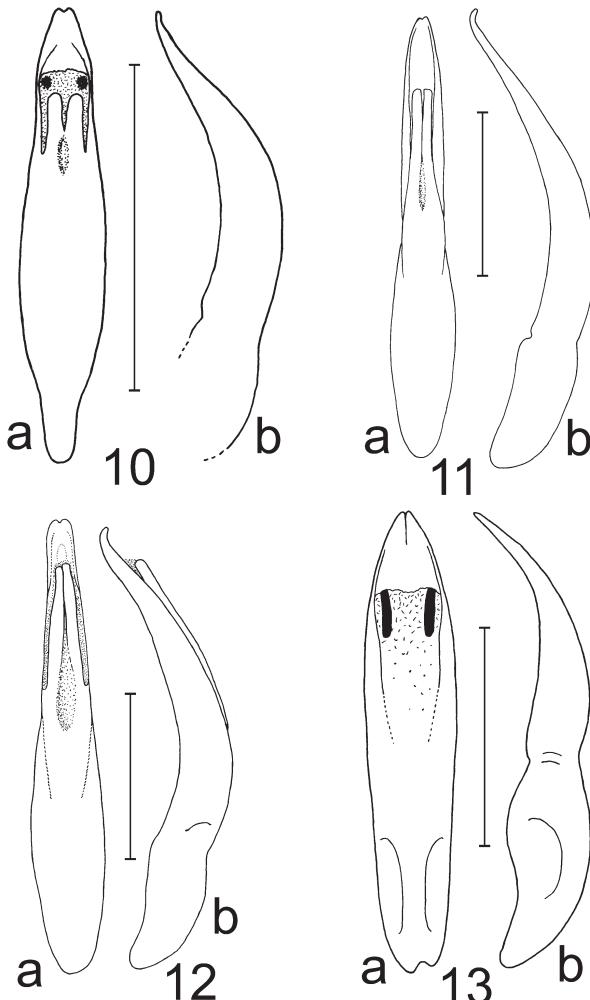
**Type locality.** ‘Tenasserim, Thagatà [= Thagyettaw, 13°45'N 98°09'E, Myanmar].

**Type material.** LECTOTYPE (designated by MEDVEDEV (2002)): ♂, ‘Tenasserim / Thagatà / Fea. Apr. 1887 [w, p] // polita / Jac. [w, h] // Mimastra / polita Jac. [blue label, h] // SYNTYPUS [p] / Mimastra / polita / Jacoby, 1889 [orange label, h] // Museo Civico / di Genova [w, p] // Hololectotype / Mimastra / polita Jac. / L. Medvedev design. [red label, h]’ (MSNG). PARALECTOTYPE: 1 ♀, ‘Tenasserim / Thagatà / Fea. Apr. 1887 [w, p] // SYNTYPUS [p] / Mimastra / polita / Jacoby, 1889 [orange label, h] // Museo Civico / di Genova [w, p]’ (MSNG). A colour photo of one paralectotype (unsexed, probably male) and its labels deposited in MCZ is available online at: <http://mcz-28168.oeb.harvard.edu/mcztypedb.htm>. The specimen bears the following labels: ‘Tenasserim / Thagatà / Fea. Apr. 1887 [w, p] // Mimastra / polita Jac. [blue label, h] // 1st Jacoby / Coll. [w, p] // Type [p] 18179 [red label, h]’.

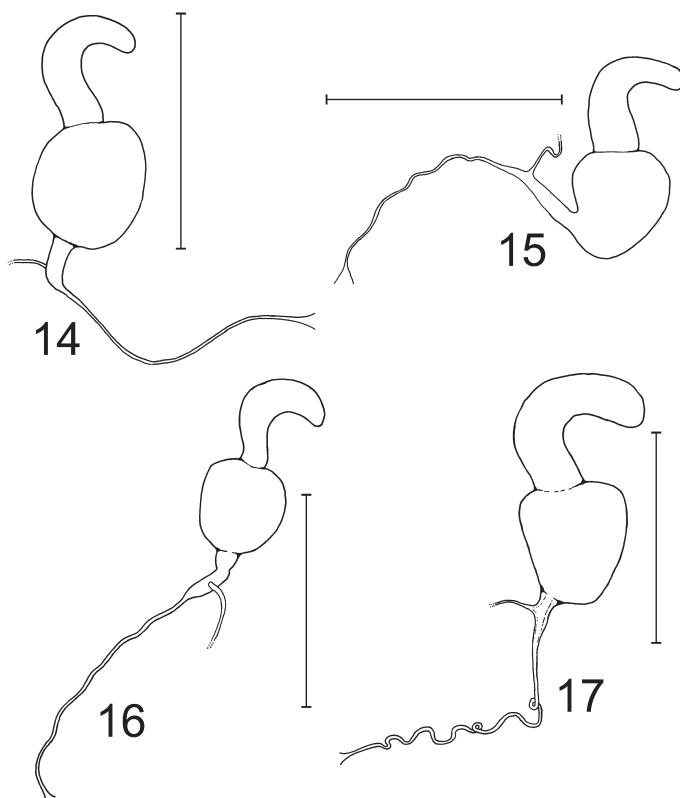
**Additional material examined.** MYANMAR: Tenasserim, 10.iv.1994, 3 ♂♂ 1 ♀, without collector’s name (NMEG). VIETNAM: VINH PHU prov.: 23 ♂♂ 6 ♀♀, Tam Dao, 70 km NW of Hanoi, 21°27'N 105°39'E, 900–1200

m, 11.–17.v.1996, P. Spáčil leg. (JBBC). **THAILAND:** MAE HONG SON prov: 1 ♂, Kiwiom pass near Soppong, 19°26'N 98°19'E, 1400 m, 23.vi.–2.vii.2002, R. & H. Fouqué leg. (JBBC). **INDIA:** MEGHALAYA: 1 ♂, ca 8 km N of Shillong, 25°38'N 91°54'E, 1200m, 7.–9.v.2004, R. Businský leg. (NMPC); 1 ♂, SW of Cherrapunjee, 25°13'–14'N 91°40'E, 900m, 1.–24.v.2005, L. Dembický leg. (BMNH).

**Differential diagnosis.** Dorsum yellow, extreme apices of elytra black. Ventral side yellow, metasternum and abdomen black. Legs yellow, femora and tibiae with narrow black stripe on outer side, middle and especially hind tibiae gradually darkened to apex, tarsi black. *Mimastra polita* can be distinguished from similar species (*M. badia*, *M. pallida* and *M. submetallica*)



Figs. 10–13. Aedeagus (a – dorsal view; b – lateral view). 10 – *Mimastra pallida* Jacoby, 1896; 11 – *M. polita* Jacoby, 1889 (lectotype); 12 – *M. polita* (male from India: Meghalaya); 13 – *M. submetallica* Jacoby, 1884. Scale bars: 1 mm.



Figs. 14–17. Spermatheca. 14 – *Mimastra submetallica* Jacoby, 1884; 15 – *M. sumatrensis* Jacoby, 1884; 16 – *M. jelineki* sp. nov.; 17 – *M. kremitovskyi* sp. nov. Scale bars: 0.5 mm.

mainly by the unusual structure of the aedeagus, which is relatively thin and its extreme apex is distinctly curved. The aedeagus of the lectotype is weakly sclerotized (Fig. 11); a fully sclerotized aedeagus is shown in Fig. 12. Spermatheca as in Fig. 9. Body length: males 7.20–8.15 mm (lectotype 7.20 mm); females 7.85–9.10 mm.

**Distribution.** Myanmar (JACOBY 1889, present paper), Vietnam, Thailand, India: Meghalaya (present paper).

**Comments.** Two males from India, Meghalaya, have a large black apical spot on each elytron but the aedeagus is identical with that of the specimens from other regions.

#### *Mimastra submetallica* Jacoby, 1884

(Figs. 13–14, 28)

*Mimastra submetallica* Jacoby, 1884: 43 (original description).

*Mimastra submetallica*: ALLARD (1890): 84 (key), WILCOX (1973): 484 (catalogue), KIMOTO (1990): 208 (catalogue), MOHAMEDSAID (1992): 116 (key), MOHAMEDSAID (1995): 263, MOHAMEDSAID (1998a): 80, MOHAMEDSAID (1998b): 260, MOHAMEDSAID (1999a): 130, MOHAMEDSAID (1999b): 15, MOHAMEDSAID & HOLLOWAY (1999): 166, MOHAMEDSAID (2000): 310, MOHAMEDSAID (2004): 98 (catalogue).

*Mimastra (Mimastra) submetallica*: WEISE (1924): 125 (catalogue).

*Mimastra Platteeuwi* Duvivier, 1890: 33 (original description).

*Mimastra platteeuwi*: ALLARD (1890): 83 (key), JACOBY (1897): 407, WILCOX (1973): 484 (catalogue), KIMOTO (1990): 208 (catalogue), MOHAMEDSAID (1992): 117 (= *submetallica* Jacoby, 1884).

*Mimastra (Mimastra) Platteeuwi*: WEISE (1924): 125 (catalogue).

*Mimastra pectoralis* Kimoto, 1989: 84 (key), 88 (original description), **syn. nov.**

*Mimastra badia* Kimoto, 1989: 86 (partim) (see comments under *M. badia*).

**Type localities.** *Mimastra submetallica*: Originally described from 'Silago, Sidjoendoeng, Si Bakoe, the District of Rawas and Koetoer' (JACOBY 1884). According to the present lectotype designation, the type locality is restricted to 'Koetoer' [Sumatra, Indonesia]. *Mimastra platteeuwi*: Sumatra [by the title]. *Mimastra pectoralis*: 'Laos, Sedone Prov., Paksong'.

**Type material examined.** *Mimastra submetallica*: LECTOTYPE (designated here): ♂, 'Koetoer / 6.78 [grey label, h] // Mimastra / submetallica / Jac. [blue label, h]' (RMNH). PARALECTOTYPES: 1 ♂, 'Koetoer / 6.78 [grey label, h]' // Coll. Veth [w, p]' (RMNH); 1 ♀, 'Koetoer / 6.78 [grey label, h]' (RMNH); 1 ♀, 'Sid. [= Sidjoendoeng] / 7.77 [grey label, h]' (RMNH); 1 ♀, 'Sumatra / Exped. [w, h] // Si. Br. [= Si Bakoe] / 14/7 77 [grey label, h]' // Jacoby Coll. / 1909-28a. [w, p] // submetallica Jac [w, h]' (BMNH) [probably female of *M. semimarginata*]. Colour photos of one paralectotype (♀) and its labels deposited in MCZ are available online at: <http://mcz-28168.oeb.harvard.edu/mcztypedb.htm>. The specimen bears the following labels: 'Sumatra / Exped. [w, h] // Koetoer / 6.78 [grey label, h]' // 1st Jacoby / Coll. [w, p] // Type. [p] 18175 [red label, h]'. The specimens (except those from MCZ and BMNH) are provided with a red printed label: 'LECTOTYPUS [PARALECTOTYPUS, resp.], / *Mimastra subme- / tallica* Jacoby, 1884 / des. J. Bezděk 2008'.

*Mimastra platteeuwi*: HOLOTYPE: ♀, 'Sumatra / Dr. Platteeuw [w, h] // Collect. / Duvivier [w, p] // Mimastra / Platteeuwi / Duviv. / Type [w, h] // TYPE [pink label, p] // A. Duvivier det. [p] / Mimastra / Platteeuwi Duv. [w, h] // cf. Ann. Soc. Ent. / Belg., [p] C. R. XXXIV, / 1890, p. 33–34 [w, h] // V. Laboissière [p] rev. [h], 1939: [w, p] / Mimastra / Platteeuwi / Type [w, h] // sec. Weise, Col. Cat. / Junk (78), 1924: [p] p. 125 / M. (Mimastra) / Platteeuwi Duv. [w, h]' (ISNB).

*Mimastra pectoralis*: PARATYPES: 1 ♀, 'LAOS: / Borikhane Prov. / Pakkading / 13.VII.1965 [w, p] // Native Collector / BISHOP MUSEUM [w, p] // PARATYPE [blue label, p] // Mimastra / pectoralis / n. sp. [w, h]' (BPBM); 1 ♀, 'LAOS: / Vientiane Prov. / Ban Van Eue / 15.X.1967 [w, p] // Native Collector / RONDON-BISHOP MUS. / COLLECTION [w, p] // PARATYPE [blue label, p] // Mimastra / pectoralis / n. sp. [w, h]' (BPBM); 1 ♂, 'THAILAND / Nakhon Nayok Prov. / Khaoyai Nat. Park / 6.VI.1965 [w, p] // P. D. Ashlock / Collector / BISHOP MUS. [w, p] // U. S.-Japan / Coop. Sci. / Program [w, p] // PARATYPE [blue label, p] // Mimastra / pectoralis / n. sp. [w, h]' (BPBM); 1 ♀, 'CAMBODIA / Kiri Rom, 700 m. / 31.III.1-7.IV.61 [w, p] // N. R. Spencer / Collector / BISHOP [w, p] // PARATYPE [blue label, p] // Mimastra / pectoralis / n. sp. [w, h]' (BPBM); 1 ♀, 'LAOS: Sayaboury / 25.VIII.1966 [w, p] // Native Collector / BISHOP MUSEUM [w, p] // PARATYPE [blue label, p] // Mimastra / pectoralis / n. sp. [w, h]' (BPBM); 1 ♀, 'VIET NAM: Fyan / 1200 m. / 11.VII.–9.VIII. '61 [w, p] // N. R. Spencer / Collector / BISHOP [w, p] // PARATYPE [blue label, p] // Mimastra / pectoralis / n. sp. [w, h]' (BPBM).

**Additional material examined.** **LAOS:** BOLIKHAMXAI prov.: 1 spec. unsexed, 8 km NE of Ban Nape, 18°21'N 105°08'E, 600 m, 1.–18.v.2001, C. L. Peša leg. (JBBC). VIENTIANE prov.: 1 ♀, Gi Sion vill., Tha Ngone, 2.i.1966, native collector leg. (BPBM) [paratype of *Mimastra badia*]. SALAVAN prov.: 1 ♀, Paksong, 16.v.1965, native collector leg. (BPBM) [paratype of *Mimastra badia*]. **MALAYSIA:** PAHANG: 1 ♀, 30km NE of Raub, Lata Lembik, 3°56'N 101°38'E, 200–400 m, 22.iv.–15.v.2002, E. Jendek & O. Šauša leg. (JBBC). PERAK: 1 ♀, Felda Lasah vill., 48 km NNE of Ipoh, 05°02.3'N 101°12.3'E, 120–390 m, 13.–21.iii.2001, P. Šomody leg. (FKCC); 1 ♂ 1 ♀, Taman Negara N. P., Kuala Tahan, primeval forest, 5.–9.iii.2007, V. Hula, L. Purchart & F. Růžička leg. (JBBC); 1 ♂ 1 ♀, Perak, Doherty leg. (BMNH); Taiping, viii.1984, 1 spec. unsexed, without collector's name (MDGC).

**INDONESIA:** SUMATRA: 1 ♀, Riau prov., Bukit Tigapuluh N. P., 0°50'S, 102°26'E, 18.–25.i.2000, J. Bezděk leg. (JBBC); 1 ♀, Lampung prov., Bukit Barisan Selatan N. P., 5°04'S, 104°04'E, 7.–17.ii.2000, J. Bezděk leg. (JBBC); 3 spec. unsexed, Sumatera Utara prov., Prapat env., 1050 m, 2°47'N 98°56'E, 13.vii.1992, U. Buchsbaum leg. (NMEG); 1 spec. unsexed, same data, 31.vii.1992 (NMEG); 2 ♀♀, Sumatra, without additional data (BMNH); 1 ♀, Soekaranda, i.1894, Dohrn leg. (BMNH); 2 ♀♀, Merang, Doherty leg. (BMNH); 1 spec. unsexed, Sinda Raja, 26.iii.1995, U. Buchsbaum leg. (NMEG); 1 ♂ 3 spec. unsexed, Batu Is., 1896–1897, H. Raap leg. (MSNG). JAVA: 1 ♂ 1 ♀, Bogor env., ii.1991, R. Čermák leg. (JSPC). **BALI:** 4 ♂♂ 3 ♀♀, Bali centr., road Seririt – Papuan, ca 15 km,

29.–31.i.1998, R. Červenka leg. (JBBC). **KALIMANTAN:** 1 ♂, 4 spec. unsexed, Kalimantan Tengah Busang, Rekut confl., 0°03'S 113°59'E, viii.2001, Brendell & Mendel leg. (BMNH); 2 ♂♂ 4 ♀♀, Borneo, Pengaron, Doherty leg. (BMNH).

**Differential diagnosis.** *Mimastra submetallica* is well characterized by its unusual coloration: dorsal side yellow, elytra usually with extreme apices black, antennae yellow, only the last 1–2 antennomeres sometimes infuscate, pro- and mesosternum and abdomen yellow, metasternum black, legs bicolorous, coxae and basal three fourths of femora yellow, tibiae, tarsi and apical fourth of femora black. Aedeagus as in Fig. 13. Spermatheca as in Fig. 14. Body length: males 6.25–7.15 mm (lectotype 6.95 mm); females 6.70–8.10 mm.

**Distribution.** Vietnam, Thailand, Cambodia (KIMOTO 1989); Laos (KIMOTO 1989, present paper); Indonesia: Sumatra (JACOBY 1884, DUVIVIER 1890, present paper), Batu Is. (JACOBY 1897), Java, Bali, and Kalimantan (present paper); Malaysia: Pahang (MOHAMEDSAID 1992, present paper), Perak (MOHAMEDSAID 1992, 1995, present paper), Selangor, Pulau Pinang (MOHAMEDSAID 1992), Sabah (MOHAMEDSAID 1999a, 2000), Borneo (MOHAMEDSAID & HOLLOWAY 1999), and Sarawak (MOHAMEDSAID 1998a,b, 1999b).

**Comments.** The comparison of the primary types of *M. submetallica*, *M. platteeuwi* and *M. pectoralis* confirmed that all three taxa are conspecific. *Mimastra platteeuwi* was already synonymized with *M. submetallica* by MOHAMEDSAID (1992). *Mimastra pectoralis* is proposed here as a new synonym of *M. submetallica*.

### *Mimastra sumatrensis* Jacoby, 1884

(Figs. 15, 18, 29)

*Mimastra sumatrensis* Jacoby, 1884: 42 (original description).

*Mimastra sumatrensis*: JACOBY (1896b): 460; ALLARD (1890): 84 (key); WILCOX (1973): 484 (catalogue); KIMOTO (1990): 208 (catalogue); MOHAMEDSAID (1992): 116 (key); MOHAMEDSAID (1997): 167; REID (1997): 37; MOHAMEDSAID (1998b): 260; MOHAMEDSAID (1999a): 131; MOHAMEDSAID (1999b): 15; MOHAMEDSAID & HOLLOWAY (1999): 166; MOHAMEDSAID (2000): 310; MOHAMEDSAID (2004): 98 (catalogue).

*Mimastra* (*Mimastra*) *sumatrensis*: WEISE (1924): 125 (catalogue).

**Type locality.** Originally described from ‘a specimen from Silago and another from the District of Rawas’ (JACOBY 1884). According to the present lectotype designation, the type locality is restricted to ‘District of Rawas’ [= subregion Musi Rawas, South Sumatra, Indonesia].

**Type material.** LECTOTYPE (designated here): ♀, ‘Rawas / 5.78 [grey label, h] // Mimastra / sumatrensis / Jac. [blue label, h]’ (RMNH). The lectotype is provided with one red printed label: ‘LECTOTYPUS, / *Mimastra sumatrensis* Jacoby, 1884 / des. J. Bezděk 2008’.

**Additional material examined. MALAYSIA:** PAHANG: 1 ♀, Gum Musang, Pos Brooke, 4.ii.1992, Zaidi, Ismail & Ruslan leg. (JBBC); 1 ♂, Cameron Highlands, Tanah Rata, 1600 m, 11.–27.ii.2000, J. Horák leg. (JBBC); 2 ♂♂ 8 spec. unsexed, Cameron Highlands, Tanah Rata, 35 km SEE of Ipoh, 4°28'N, 101°23'E, 1500 m, 21.–24.iv.2001, M. Říha leg. (JBBC). PERAK: 1 spec. unsexed, Cameron Highlands, Ringlet, 40 km SE of Ipoh, 4°25'N 101°23'E, 900 m, 25.iv.–5.v.2001, M. Říha leg. (JBBC); 2 spec. unsexed, Cameron Highlands, 30 km E of Taqah, 650 m, 22.–26.iii.2004, without the name of collector (JBBC). **INDONESIA:** SUMATRA: 1 spec. unsexed, Riau prov., Bukit Tigapuluh N. P., 0°50'S 102°26'E, 18.–25.i.2000, J. Bezděk leg. (JBBC); 12 spec. unsexed, Lampung prov., Bukit Barisan Selatan N. P., 5 km SW of Liwa, 5°4'S 104°4'E; 600 m, 7.–17.ii.2000, J. Bezděk leg. (JBBC).

**Differential diagnosis.** *Mimastra sumatrensis* can be easily distinguished from its congeners by the uniformly yellow body and the shape of the pronotum, which is widest at the anterior corners, slightly convergent posteriad and twice as long as broad. *Mimastra pallida* has similar coloration but is usually much smaller in size. Aedeagus as in Fig. 18. Spermatheca as in Fig. 15. Body length: males 8.00–8.85 mm; females 7.75–9.75 mm (lectotype 7.75 mm).

**Distribution.** Indonesia: Sumatra (JACOBY 1896b), Kalimantan (REID 1997); Malaysia: Pahang, Perak (MOHAMEDSAID 1992, present paper), Negeri Sembilan, Selangor (MOHAMEDSAID 1992), Sarawak (MOHAMEDSAID 1997, 1998b, 1999b), Sabah (MOHAMEDSAID 1999a, 2000).

**Comments.** The original description of *M. sumatrensis* was based on two specimens (JACOBY 1884). I have found only one of them (female) in RMNH and designate it as the lectotype. The deposition of the second type specimen is unknown to me.

A colour photo of an unsexed specimen, allegedly a type, and its labels deposited in MCZ is available online at: <http://mcz-28168.oeb.harvard.edu/mcztypedb.htm>. The specimen was collected in Sumatra, Pangherang-Pisang. However, Jacoby examined specimens from Pangherang-Pisang only several years after the description (JACOBY 1896). Therefore, this specimen cannot be treated as part of the type series of *M. sumatrensis*.

## Descriptions of new species

### *Mimastra jelineki* sp. nov.

(Figs. 16, 19, 30)

**Type locality.** Indonesia, Bali, road Seririt-Pupuan.

**Type material.** HOLOTYPE: ♂, 'INDONESIA – BALI cent. / road Seririt – Pupuan / ca 15 km 29. – 31.1.1998 / R. Červenka lgt. 550 m [w, p]' (NMPC). PARATYPES: 1 ♂ 4 ♀♀, same label data as holotype (JBBC); 1 ♀, 'Indonesia Bali / Mt. Batur 1200m / 01.–03.IV.94 / leg. C. Zorn [w, p]' (JBBC); 3 ♀♀, 'Ost Bali / Kintamani / E. Stresemann [yellow label, p] // 1913 [p] / 30 [yellow label, h] // G. / species? [w, h] // Le Moult vend. / via Reinbek / Eng. 1 – 1957 [w, p]' (ZMUH); 1 ♀, 'Banjoewangi / JAVA, 1909 / Mac Gillavry [w, p] // Coll. Veth [w, p]' (RMNH); 2 ♀♀, 'Banjoewangi / Java, 1910 / Mac Gillavry [w, p] // Coll. Veth [w, p]' (RMNH); 2 ♀♀, 'Banjoewangi / Java, 1911 / Mac Gillavry [w, p] // Coll. Veth [w, p]' (RMNH); 1 ♀, '798. [w, h] // 60.15 / E. I. C. [w, p] // Java. / Horsfield. / 60-15 [w, p]' (BMNH). Every specimen is provided with an additional, printed red label: 'HOLOTYPE [or PARATYPE], / *Mimastra / jelineki* sp. nov., / J. Bezděk det. 2008'.

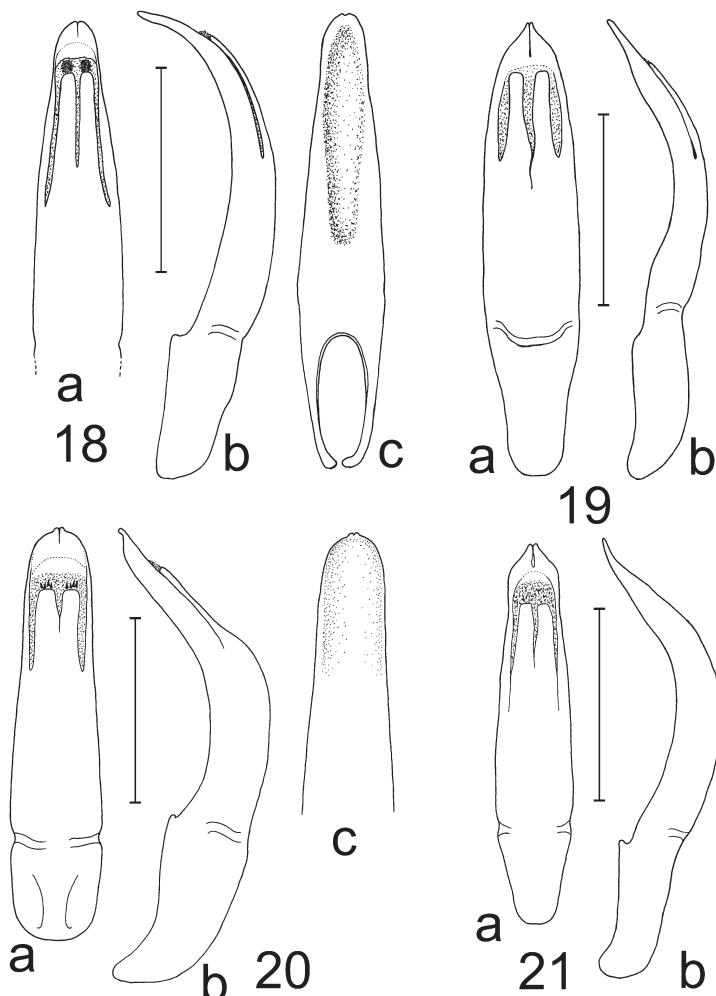
**Description.** Body length: males 7.35–7.45 mm (holotype 7.35 mm); females 7.30–9.10 mm.

Male. Body flattened, subparallel, glabrous. Head yellow, base with dark collar, well visible behind eyes and disappeared behind vertex. Antennomeres 1–3 yellow, antennomeres 4–5 gradually darkened, remaining antennomeres black. Pronotum yellow with five small brown spots (two on disc and very small median one and two larger lateral ones before base). Scutellum yellow. Elytra yellow with narrow, parallel-sided metallic green stripe extending from humeral callus to before apex; suture in posterior two thirds and apical angle of elytra narrowly darkened. Prosternum yellow. Mesosternum yellow, sometimes darkened medially. Metasternum and abdomen black. Legs yellow, all femora and tibiae with black stripes on outer side, bases of procoxae usually also darkened, all tarsi dark brown to black.

Labrum transverse, anterior part covered with several long pale setae, anterior margin slightly concave. Anterior part of head semiopaque, almost glabrous, only anterior part of clypeus with long pale setae, several setae also in front of antennal insertions. Frontal tubercles semiopaque, large, subtriangular, slightly elevated, covered with microsculpture, separated from each other by distinct furrow. Interantennal space as wide as transverse diameter of antennal insertion. Vertex semiopaque, covered with fine punctures, glabrous, with only one long pale seta behind each eye. Antennae filiform, 0.90 times as long as body, length ratios of antennomeres 1–11 equal to 14-5-8-17-14-15-15-14-13-15.

Pronotum transverse, 1.70–1.80 times as broad as long, widest at anterior third. Surface lustrous, covered with very small punctures, glabrous, moderately convex, with two longitudinal lateral depressions and impressed median line. All margins distinctly bordered. Anterior margin moderately concave, posterior margin almost straight in middle and rounded on sides. Lateral margins rounded anteriad, nearly straight, convergent posteriad. Anterior angles acute, rounded, slightly produced anteriad, posterior angles obtusely angulate. All angles with setigerous pore bearing one long pale seta.

Scutellum triangular with rounded apex, lustrous, glabrous, covered with microsculpture.



Figs. 18–21. Aedeagus (a – dorsal view; b – lateral view; c – ventral view). 18 – *Mimastra sumatrensis* Jacoby, 1884; 19 – *M. jelineki* sp. nov.; 20 – *M. kremitovskyi* sp. nov.; 21 – *M. riedeli* sp. nov. Scale bars: 1 mm.

Elytra lustrous, slightly divergent posteriad, almost glabrous, posterior quarter scarcely covered with very short, indistinct setae. Humeral calli well developed. Elytral surface covered with small and very dense confluent punctures. Epipleura broad in anterior fourth, gradually narrowed towards apex. Macropterous.

Ventral surface semiopaque, finely punctate and covered with pale hairs. Last ventrite feebly impressed in middle, posterior margin nearly straight.

Hind tarsomere 1 as long as two following tarsomeres combined. Aedeagus as in Fig. 19.

Female. Last ventrite widely subtriangular. Abdomen robust. Spermatheca as in Fig. 16.

**Variability.** Brown spots on pronotum sometimes smaller or missing. Elytral pattern variable, with the metallic green stripe in dark specimens broader, slightly divergent posteriad and reaching the apex.

**Differential diagnosis.** *Mimastra jelineki* sp. nov. resembles *M. limbata* Baly, 1879, *M. kremitskyi* sp. nov., *M. maai* and *M. malvi* in the presence of the longitudinal metallic stripe on the elytra. This stripe is, however, very narrow (other species have the stripe much broader and usually covering most of the disc with only elytral margins remaining pale). Moreover, *M. limbata* differs by the hook-shaped protarsomere in male.

**Etymology.** Dedicated to Josef Jelínek (Czech Republic, Prague), an excellent specialist in Nitidulidae.

**Biology.** Unknown.

**Distribution.** Indonesia: Java and Bali.

### *Mimastra kremitskyi* sp. nov.

(Figs. 17, 20, 31)

**Type locality.** China, Yunnan, Lijiang ( $26^{\circ}49'N$   $100^{\circ}07'E$ ).

**Type material.** HOLOTYPE: ♂, '3.6.2006 Čína / N 26°49', E 100°07' / lgt. Kremitovský [w, p]' (NMPC). PARATYPES: 5 ♂♂ 7 ♀♀, same label data as holotype (1 ♀ in NMPC, 2 ♂♂ 2 ♀♀ in VKBC, remaining spec. in JBBC); 4 ♂♂ 5 ♀♀, 'China, Yunnan, 2500 m, / Lijiang env., 3.-5.vi.2006, / N 26°48',05' E 100°24',74' / R. Novák leg. [w, p]' (2 ♂♂ 2 ♀♀ in RNDC, rest in JBBC). The specimens are provided with additional, printed red labels: 'HOLOTYPE [or PARATYPE], / *Mimastra* / *kremitskyi* sp. n., / J. Bezdeček det. 2008.'

**Description.** Body length: males 8.25–8.80 mm (holotype 8.40 mm); females 8.60–10.55 mm.

Male. Body flattened, subparallel, glabrous. Head orange, base with black collar extending in a triangular shape behind eyes, frontal tubercles and vertex with rhomboidal black spot connected posteriorly with basal collar, anterior part of head with triangular brownish black spot, apices of mandibles black. Antennomeres 1–3 yellow, antennomeres 4–5 gradually darkened, remaining segments black. Pronotum orange with five small black spots forming together the letter M: two spots in the middle of disc, one median spot in front of pronotal base and two lateral spots behind posterior angles (the three median spots connected through a dark brown, vaguely delimited area). Scutellum brownish. Elytra with large metallic black stripe with orange margins covering most of elytral disc including humeral calli and reaching elytral apex; epipleura orange. Prosternum orange with black middle. Mesosternum black, mesoepimera yellow. Metasternum and abdomen black. Fore and middle legs: coxae orange, basally black; trochanters orange; femora orange with narrow black stripe on outer margin and broader black, basally extended stripe on inner margin; tibiae orange, gradually darkened apically, outer side with narrow black stripe. Hind legs: coxae black; trochanters

orange, infuscated in the middle; femora black with paler base and apex; tibiae black. Fore tarsi brownish, middle and hind tarsi black.

Labrum transverse, anterior part with several long pale setae, anterior margin slightly concave. Anterior part of head lustrous, almost glabrous, with several pale setae on anterior part of clypeus and in front of antennal insertions. Frontal tubercles lustrous, smooth, subtriangular, slightly elevated, separated from each other by distinct furrow. Interantennal space 0.9 times as wide as transverse diameter of antennal insertion. Vertex semiopaque, covered with microsculpture, glabrous, impressed behind frontal tubercles. Antennae filiform, 0.90 times as long as body, length ratios of antennomeres 1–11 equal to 20·6·9·18·18·16·16·16·16·14·15.

Pronotum transverse, 1.75 times as broad as long, widest in middle. Surface lustrous, sparsely covered with very small punctures, glabrous, moderately convex, with two longitudinal lateral depressions. All margins distinctly bordered. Anterior margin moderately concave, posterior margin almost straight in middle and rounded on sides. Lateral margins nearly straight and parallel. Anterior angles acute, rounded, slightly produced anteriad, posterior angles obtusely angulate. All angles with setigerous pore bearing one long pale seta.

Scutellum triangular with rounded apex, lustrous, glabrous, almost smooth.

Elytra lustrous, slightly divergent posteriad, glabrous, posterior fourth very scarcely covered with hardly visible setae. Humeral calli well developed. Elytral surface covered with small and very dense, confluent punctures. Epipleura broad in anterior fourth, gradually narrowed towards apex. Macropterous.

Ventral surface semiopaque, finely punctate and covered with pale hairs. Last ventrite with distinct drop-like impression in middle, posterior margin concave.

Hind tarsomere 1 1.3 times as long as two following tarsomeres combined. Aedeagus as in Fig. 20.

Female. Last ventrite widely rounded. Abdomen robust. Spermatheca as in Fig. 17.

**Differential diagnosis.** *Mimastra kremitovskyi* sp. nov. is habitually very similar to *M. limbata* Baly, 1879. Both species differ in the colour of the elytral stripe (metallic black in *M. kremitovskyi* sp. nov., metallic blue-green in *M. limbata*) and the shape of the protarsomere in males (not modified in *M. kremitovskyi* sp. nov., hook-like in *M. limbata*). Other similar species, *M. maaei* and *M. malvi*, are smaller in size and differ in having uniformly yellow pronotum and head and different structure of the aedeagus (Figs. 3–4, 20).

**Etymology.** Dedicated to Vladimír Kremitovský (Czech Republic, Brno), who collected a part of the type series.

**Biology.** Unknown.

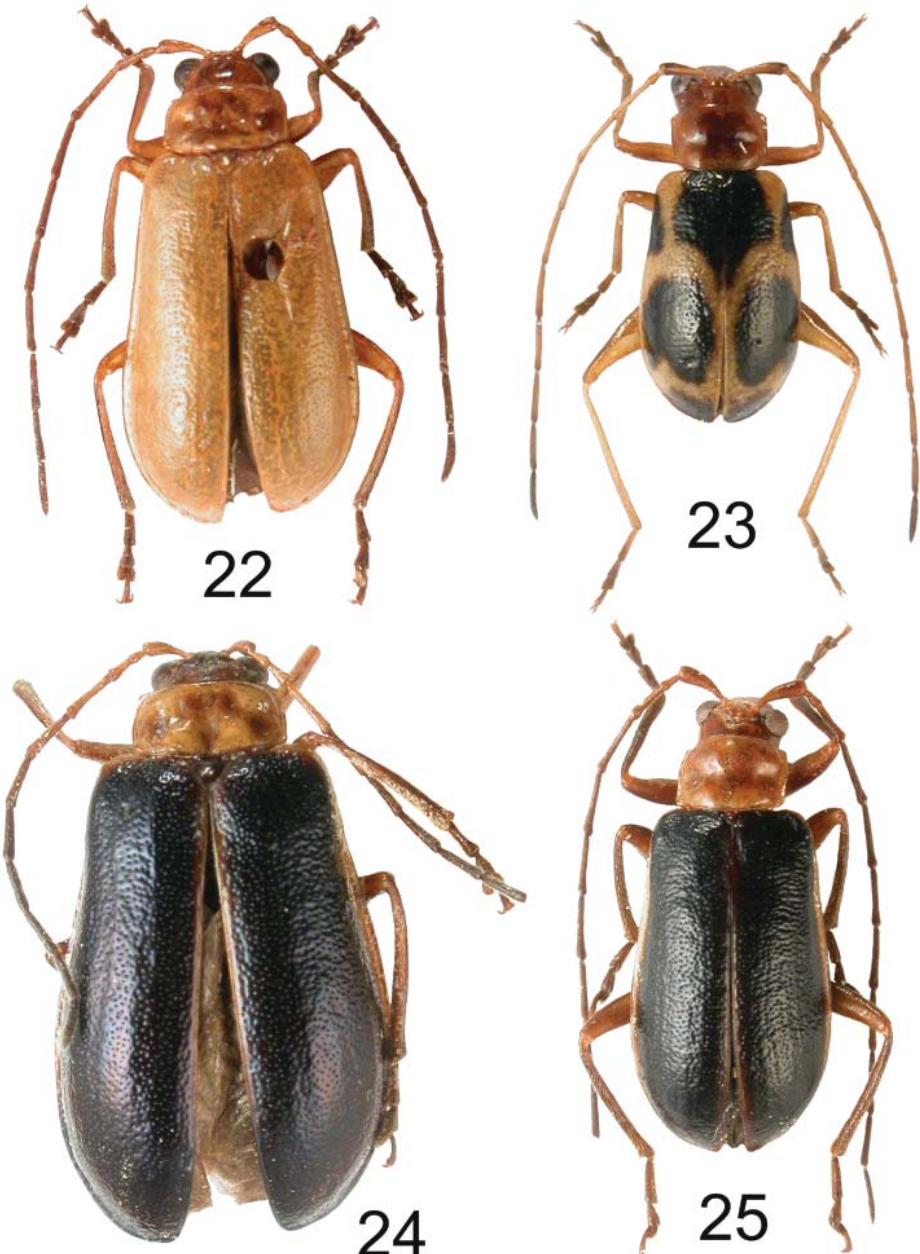
**Distribution.** China: Yunnan.

### *Mimastra riedeli* sp. nov.

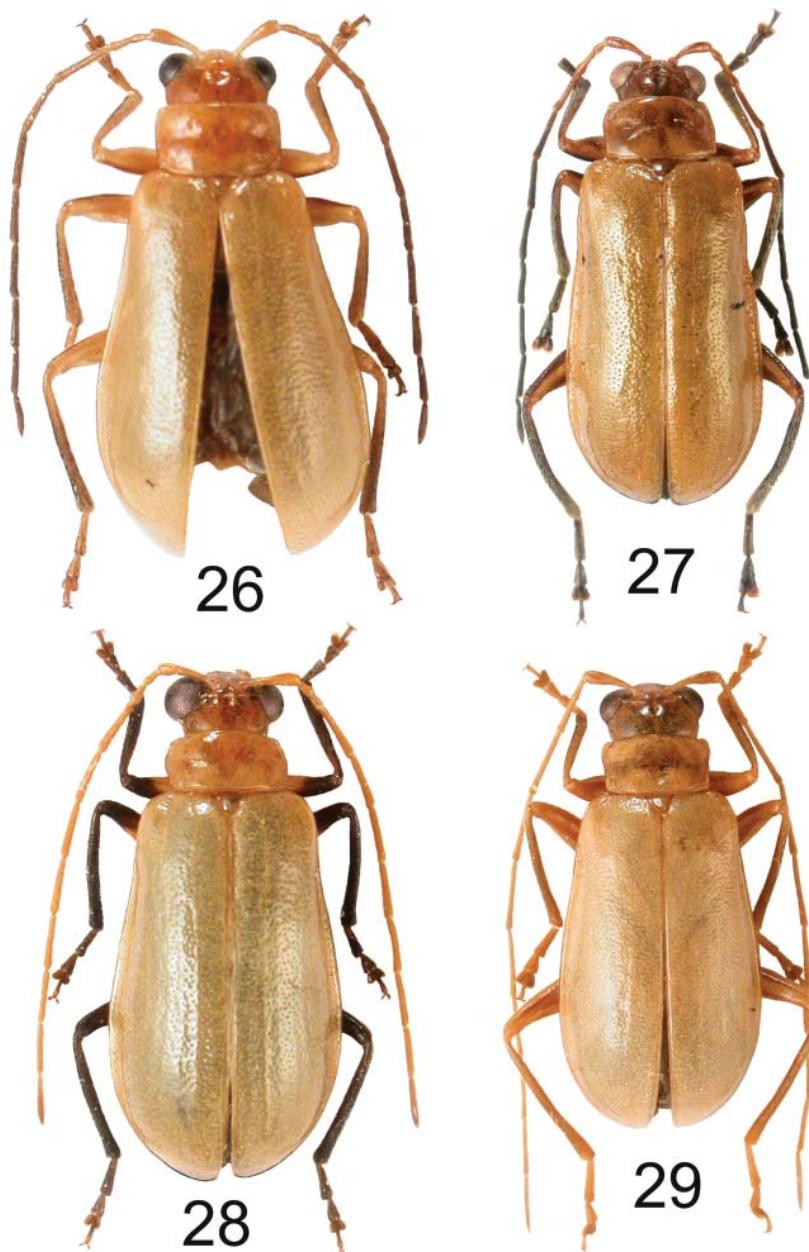
(Figs. 21, 32)

**Type locality.** India, Uttar Pradesh state, Rishikesh, Uttarkashi.

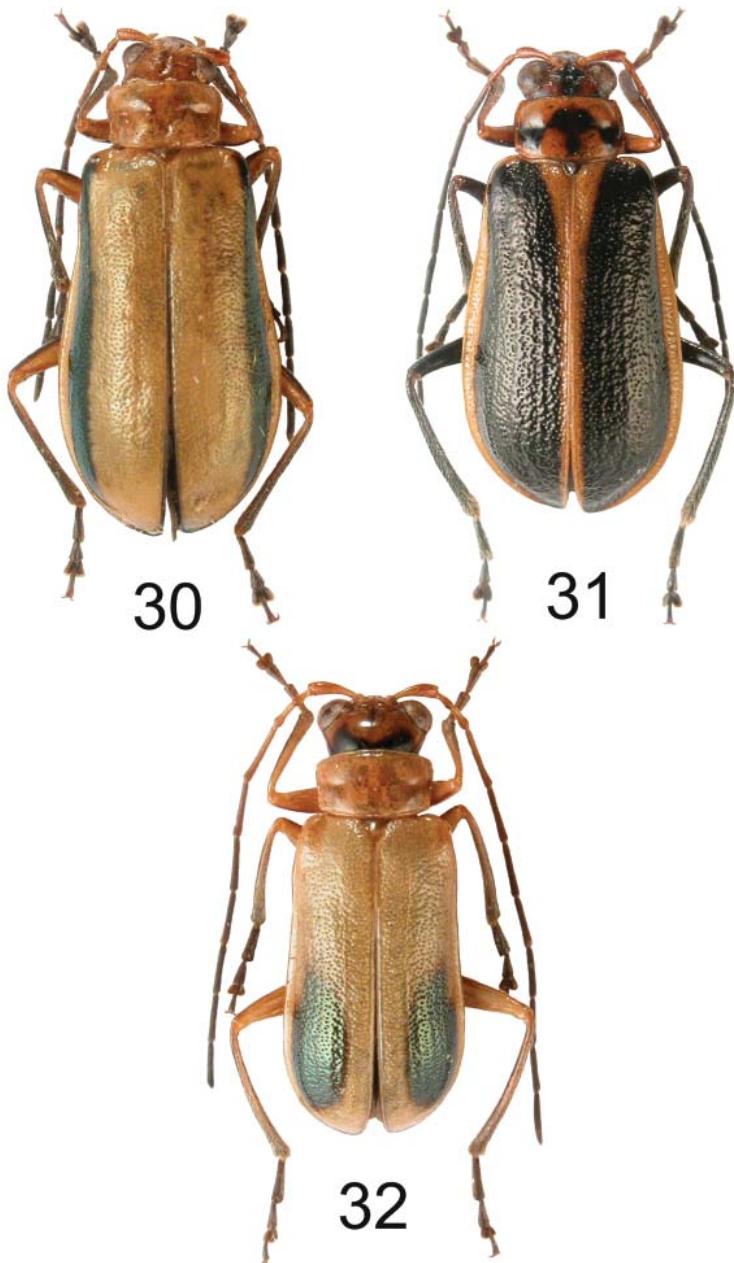
**Type material.** HOLOTYPE: ♂, 'INDIEN: Uttar Pradesh, / Rishikesh, Uttarkashi / 6.7.1989; 1400m / leg. A. RIEDEL [yellow label, p] // *Mimastra / cyanura* Hope [h] / L. N. Medvedev det. 19 [p] 92 [w, h]' (SMNS). PARATYPES: 1 ♂, 'INDIEN: Uttar Pradesh, / Rishikesh, Uttarkashi / 6.7.1989; 1400m / leg. A. RIEDEL [yellow label, p]' (JBBC); 1 ♂, 'NEP: Mahakali/Darchula / env. Makarighar, 29°47'N / 80°50'E 12–1400m 03.VI. / 2005 leg. A. Weigel [w,



Figs. 22–25. Habitus. 22 – *Mimastra badia* Kimoto, 1989 (paratype, male, 5.90 mm); 23 – *M. fortipunctata* Maulik, 1936 (female, 3.85 mm); 24 – *M. malvi* Chen, 1942 (paratype of *M. grahami*, female, 7.80 mm); 25 – *M. maaei* Gressitt & Kimoto, 1963 (male, 6.80 mm).



Figs. 26–29. Habitus. 26 – *Mimastra pallida* Jacoby, 1896 (paralectotype, unsexed, 5.25 mm); 27 – *M. polita* Jacoby, 1889 (male, 8.40 mm); 28 – *M. submetallica* Jacoby, 1884 (male, 7.15 mm); 29 – *M. sumatrensis* Jacoby, 1884 (male, 8.45 mm).



Figs. 30–32. Habitus. 30 – *Mimastra jelineki* sp. nov. (paratype, female, 8.60 mm); 31 – *M. kremitovskyi* sp. nov. (paratype, female, 8.45 mm); 32 – *M. riedeli* sp. nov. (paratype, male, 7.25 mm).

p] (NMEG). The specimens are provided with additional, printed red labels: 'HOLOTYPE [or PARATYPE], / *Mimastra / riedeli* sp. nov., / J. Bezděk det. 2008'.

**Description.** Body length: males 7.20–7.50 mm (holotype 7.50 mm).

Male. Body flattened, subparallel, glabrous. Head yellow, apices of mandibles black, base with dark collar, triangularly extended behind eyes. Antennomeres 1–3 yellow, antennomeres 4–5 gradually darkened, remaining antennomeres black. Pronotum yellow with five small, almost indistinct brown spots (two on disc, three in front of base). Scutellum yellow. Elytra yellow with drop-shaped metallic green spot not touching elytral margins in posterior half of each elytron. Extreme apical angle of elytra darkened. Prosternum, mesosternum and abdomen yellow. Metasternum black with paler anterior and posterior margins. Legs yellow, femora with small dark stripe in apical third on outer side, tibiae with gradually widening black stripes on outer sides and almost completely dark apices, all tarsi dark brown to black.

Labrum transverse, anterior part with several long pale setae, anterior margin slightly concave. Anterior part of head lustrous, with impressed median line, clypeus with long pale setae, several setae also in front of antennal insertions. Frontal tubercles separated from each other by distinct furrow, semiopaque, subtriangular, slightly elevated and covered with microsculpture. Interantennal space as wide as the transverse diameter of antennal insertion. Vertex lustrous, impunctate, glabrous, except one long pale seta behind each eye. Antennae filiform, as long as body, length ratios of antennomeres 1–11 equal to 17-11-14-20-19-18-17-16-16-15-17.

Pronotum transverse, 1.85–1.90 times as broad as long, widest at anterior third. Surface lustrous, covered with very fine indistinct punctures, glabrous, moderately convex, with two longitudinal depressions laterally. All margins distinctly bordered. Anterior margin nearly straight, posterior margin slightly rounded. Lateral margins nearly straight, slightly convergent posteriad. Anterior angles rounded, posterior angles obtusely angulate. All angles with setigerous pore bearing one long pale seta.

Scutellum triangular with rounded apex, lustrous, glabrous.

Elytra semiopaque, slightly divergent posteriad, almost glabrous, very scarcely covered with very short, indistinct setae. Humeral calli well developed. Elytral surface covered with small and very dense confluent punctures. Epipleura broad in anterior fourth, gradually narrowing towards apex. Macropterous.

Ventral surface semiopaque, finely punctate and covered with pale hairs. Last ventrite feebly impressed medially.

Hind tarsomere 1 1.2 times as long as two following tarsomeres combined. Aedeagus as in Fig. 21.

Female unknown.

**Differential diagnosis.** *Mimastra riedeli* sp. nov. resembles other *Mimastra* species with an apical spot on the elytra, i.e. *M. cyanura* (Hope, 1831), *M. uncitarsis* (Laboissière, 1940), *M. soreli* Baly, 1878 and some colour forms of *M. polita* and *M. semimarginata* Jacoby, 1886. However, *M. riedeli* sp. nov. can be distinguished from these species by the yellow abdomen (black in the other similar species) and the elytral spot not touching apical and sutural margins (in the other species the spot touches at least the apical margin). Moreover, protarsomere 1 is simple in males of *M. riedeli* sp. nov. but modified in males of *M. cyanura*, *M. uncitarsis*, *M. soreli* and *M. semimarginata*.

**Etymology.** Dedicated to Alexander Riedel (Karlsruhe, Germany), a specialist in Attelabidae, who collected two specimens of the type series.

**Biology.** Unknown.

**Distribution.** India: Uttar Pradesh; Nepal.

### Acknowledgements

I would like to thank all curators and colleagues listed in the Material and methods section for giving me the possibility to study their collections. I also wish to thank to Luboš Dembický (Moravian Museum, Brno, Czech Republic) who kindly took the colour photographs by Nikon Coolpix 4500.

This study was supported by Research plan No. MSM6215648905 ‘Biological and technological aspects of sustainability of controlled ecosystems and their adaptability to climate change’, which is financed by the Ministry of Education, Youth and Sports of the Czech Republic. The visits and examinations of the type material in BMNH and RMNH were supported by the Synthesys projects GB-TAF-3702 and NL-TAF-4023, respectively.

### References

- ALLARD E. 1889: Nouvelle note sur les Phytophages. *Bulletin ou Comptes-rendus des Séances de la Société Entomologique de Belgique* **1889**: 102–117.
- ALLARD E. 1890: Troisième note sur les galéucides. *Bulletin ou Comptes-rendus des Séances de la Société Entomologique de Belgique* **1890**: 80–94.
- BALY J. S. 1865: Descriptions of new genera and species of Gallerucidae. *Annals and Magazine of Natural History, Series 3* **16**: 247–255.
- BALY J. S. 1879: List of the phytophagous Coleoptera collected in Assam by A. W. Chennell, Esq., with notes and descriptions of the uncharacterized genera and species. *Cistula Entomologica* **2** (1875–1882): 435–465.
- CHEN S. H. 1942: Galerucinae nouveaux de la faune Chinoise. *Notes d'Entomologie Chinoise* **9**(3): 9–67.
- DEYROLLE H. & FAIRMAIRE L. 1878: Descriptions de Coléoptères recueillis par M. l’abbé David dans la China centrale. *Annales de la Société Entomologique de France, Séries 5* **8**: 87–140.
- DUVIVIER A. 1890: Liste des Coléoptères phytophages recueillis par M. le Dr. Platteeuw dans l’île de Sumatra. *Bulletin ou Comptes-rendus des Séances de la Société Entomologique de Belgique* **1890**: 32–37.
- GRESSITT J. L. & KIMOTO S. 1963: The Chrysomelidae (Coleopt.) of China and Korea. Part 2. *Pacific Insects Monograph* **1B**: 301–1026.
- JACOBY M. 1884: Descriptions of new genera and species of phytophagous Coleoptera from Sumatra. *Notes from the Leyden Museum* **6**: 9–70.
- JACOBY M. 1886: Descriptions of new genera and species of phytophagous Coleoptera from the Indo-Malayan and Austro-Malayan subregions, contained in the Genoa Civic Museum. Third Part. *Annali del Museo Civico di Storia Naturale di Genova* **24**: 41–121.
- JACOBY M. 1888: Descriptions of new species of phytophagous Coleoptera from Kiukiang (China). *Proceedings of the Zoological Society of London* **1888**: 339–351.
- JACOBY M. 1889: List of the phytophagous Coleoptera obtained by Signor L. Fea at Burmah and Tenasserim, with descriptions of the new species. *Annali del Museo Civico di Storia Naturale di Genova* **27**: 147–237.
- JACOBY M. 1896a: Descriptions of the new genera and species of phytophagous Coleoptera obtained by Dr. Modigliani in Sumatra. *Annali del Museo Civico di Storia Naturale di Genova* **36**: 377–501.
- JACOBY M. 1896b: List and descriptions of the phytophagous Coleoptera obtained by Dr. Modigliani from Mentawai Islands. *Annali del Museo Civico di Storia Naturale di Genova* **37** (1896–1897): 126–148.
- JACOBY M. 1897: List of the phytophagous Coleoptera obtained by Mr. H. Raap in the Batu Islands with descriptions of the new species. *Annali del Museo Civico di Storia Naturale di Genova* **38**: 405–411.

- KIMOTO S. 1982: The Galerucinae of Nepal, Bhutan and Northern Territories of India, in the Natural History Museum in Basel, II. (Coleoptera, Chrysomelidae). *Entomological Review of Japan* **37**: 7–24.
- KIMOTO S. 1989: Chrysomelidae (Coleoptera) of Thailand, Cambodia, Laos and Vietnam. IV. Galerucinae. *Esakia* **27**: 1–241.
- KIMOTO S. 1990: Check-list of Chrysomelidae of South East Asia, South of Thailand and West of Irian-Jaya of Indonesia, VI. Galerucinae, 2. *Kurume University Journal* **39**: 201–237.
- KIMOTO S. 2001: The Chrysomelidae (Insecta: Coleoptera) collected by the Kyushu University Scientific Expedition to the Nepal Himalaya in 1971 and 1972. *Bulletin of the Kitakyushu Museum of Natural History* **20**: 17–80.
- KIMOTO S. 2005: Systematic catalog of the Chrysomelidae (Coleoptera) from Nepal and Bhutan. *Bulletin of the Kitakyushu Museum of Natural History and Human History, Series A (Natural History)* **3**: 13–114.
- MAULIK S. 1936: *The fauna of British India including Ceylon and Burma. Coleoptera, Chrysomelidae (Galerucinae)*. Taylor and Francis, London, xv + 648 pp.
- MEDVEDEV L. N. 1992: Chrysomelidae from the Nepal Himalayas, III (Insecta: Coleoptera). *Stuttgarter Beiträge zur Naturkunde, Ser. A (Biologie)* **485**: 1–36.
- MEDVEDEV L. N. 2002: Jacoby's types of Chrysomelidae (Coleoptera) from Burma in the Museo Civico di Storia Naturale „Giacomo Doria“, Genoa. Part 3. *Annali del Museo Civico di Storia Naturale „G. Doria“* **94**: 249–264.
- MEDVEDEV L. N. & SPRECHER-UEBERSAX E. 1999: Katalog der Chrysomelidae von Nepal. *Entomologica Basiliensis* **21**: 261–354.
- MOHAMEDSAID M. S. 1992: The genus *Mimastra* Baly from Peninsular Malaysia (Coleoptera, Chrysomelidae, Galerucinae). *Malayan Nature Journal* **46**: 115–118.
- MOHAMEDSAID M. S. 1995: An inventory of leaf beetles of the subfamily Galerucinae (Insecta: Coleoptera: Chrysomelidae) from Temengor, Hulu Perak, Malaysia. *Malayan Nature Journal* **48**: 259–264.
- MOHAMEDSAID M. S. 1997: Checklist of the Galerucinae from Taman Negara Lambir, Sarawak (Coleoptera: Chrysomelidae). *Serangga* **2**: 153–175.
- MOHAMEDSAID M. S. 1998a: Checklist of the Galerucinae from Taman Negara Gunung Gading, Sarawak (Coleoptera: Chrysomelidae). *Serangga* **3**: 67–85.
- MOHAMEDSAID M. S. 1998b: Additional records of the Galerucinae from Sarawak, with descriptions of new species (Coleoptera: Chrysomelidae). *Serangga* **3**: 247–268.
- MOHAMEDSAID M. S. 1999a: The Galerucinae from Taman Kinabalu Sabah, Malaysia (Coleoptera: Chrysomelidae). *Serangga* **4**: 87–145.
- MOHAMEDSAID M. S. 1999b: The Galerucinae from Sarawak (Coleoptera: Chrysomelidae). *Sains Malaysiana* **28**: 9–18.
- MOHAMEDSAID M. S. 2000: The galerucine beetles from Tibow Sabah (Coleoptera: Chrysomelidae). *Serangga* **5**: 309–314.
- MOHAMEDSAID M. S. 2004: *Catalogue of the Malaysian Chrysomelidae (Insecta: Coleoptera)*. Pensoft, Sofia, Moscow, 239 pp.
- MOHAMEDSAID M. S. & HOLLOWAY J. D. 1999: Biogeography of the Bornean Galerucinae (Coleoptera: Chrysomelidae). *Serangga* **4**: 151–173.
- REID C. A. M. 1997: Chrysomelidae from Kalimantan (Borneo) in the Museum of Zoology, Bogor, Indonesia. *Serangga* **2**: 29–47.
- WEISE J. 1924: Chrysomelidae: 13. Galerucinae. In: JUNK W. & SCHENKLING S. (eds.): *Coleopterorum Catalogus, Pars 78*. W. Junk, Berlin, 225 pp.
- WILCOX J. A. 1973: Chrysomelidae: Galerucinae (Luperini: Luperina). In: WILCOX J. A. (ed.): *Coleopterorum Catalogus Supplementa. Pars 78(3), Second edition*. W. Junk, 's-Gravenhage, 433–664 pp.
- YANG X.-K. 1992a: Chrysomelidae Galerucinae. Pp. 552–589. In: PENG J. & LIU Y. (eds.): *Iconography of forest insects in Hunan China*. Academia Sinica & Hunan Forestry Institute, Hunan, 1–60, 1–4, 1–1473 pp.
- YANG X.-K. 1992b: Coleoptera: Chrysomelidae – Galerucinae. Pp. 331–346. In: HUANG F. (ed.): *Insects of Wuling Mountains area, southwestern China*. Science Press, Beijing, x + 777 pp.
- ZHANG L.-J., YANG X.-K., CUI J.-Z. & LI W.-Z. 2006: A key to the genus *Mimastra* Baly (Coleoptera: Chrysomelidae: Galerucinae) from China, with the description of a new species. *Entomological News* **117**: 203–210.