

## Research article

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# Revision of *Monolepta* Chevrolat, 1836 species from North-East Africa (Coleoptera: Chrysomelidae: Galerucinae)<sup>\*\*</sup>

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<sup>\*\*</sup>VIII. part of the revision of Afrotropical *Monolepta*

<sup>\*\*</sup>53. contribution to the taxonomy, phylogeny and biogeography of the Galerucinae

**Abstract.** Here, the species of *Monolepta* Chevrolat, 1836 from North-East Africa are taxonomically revised. From this region, covering the states of Egypt, Sudan, South-Sudan, Ethiopia, Eritrea, Djibouti and Somalia, 15 species are known, seven of them: *M. longiuscula* Chapuis, 1879; *M. postrema* Chapuis, 1879; *M. euchroma* Fairmaire, 1883; *M. nigropicta* Laboissière, 1938; *M. marginethoracica* Laboissière, 1940a; *M. nigrocruciata* Laboissière, 1940b; and *M. gobensis* Laboissière, 1940b are endemic to the Highlands of Ethiopia and Eritrea. Further eight species occur in the region, but have wider distribution in Africa: *M. cruciata* Guérin de Méneville, 1847; *M. lepida* Reiche, 1858; *M. vincta* Gerstaecker, 1871; *M. vinoso* Gerstaecker, 1871; *M. ephippiata* Gerstaecker, 1871; *M. citrinella* Jacoby, 1899; *M. leuce* Weise, 1903; and *M. jeanneli* Laboissière, 1920 with *M. kiwuensis* Weise, 1924 as new synonym. Some species have been revised before, and then only additional collecting data are given here. *Monolepta longiuscula*, *M. postrema* and *M. nigropicta* are revised for the first time. Next to detailed redescription of these species, distribution maps and an identification key are given for all species.

**Key words.** Taxonomy, revision, lectotype designation, synonymy, Africa, Afrotropical Region, Ethiopian Highlands, distribution map, identification key.

## INTRODUCTION

In the last catalogue of the Galerucinae (Wilcox 1973), 180 species of *Monolepta* Chevrolat, 1836 from tropical Africa were listed. Most of these species have been described between 1890 and 1950 (Wagner 2017). With very few exceptions, the descriptions by preceding authors were based on external characters only. The allocation to *Monolepta* and other genera of the “Monoleptines” (Wilcox 1973) was mostly typological. In an ongoing revision of this group, the Afrotropical species of *Monolepta* turned out as polyphyletic, and many species have to be transferred to other groups in the meantime (Wagner 2004, 2017).

After revision of the generotype of *Monolepta*, *Monolepta bioculata* (Fabricius, 1781), and a redefinition of *Monolepta* (Wagner 2007a), seven parts on the taxonomic revision of afrotropical “true” *Monolepta* have been published, six parts according to “coloration types” (Wagner 2000a, b; 2001, 2002, 2003, 2005, 2007b), one with focus of the specific fauna of Namibia (Wagner 2016).

Another peculiar fauna of these beetles with high endemism is found in North-East Africa, in particular in the Ethiopian Highlands. Seven species are endemic to the states of Ethiopia and Eritrea, further eight species occur in both countries and the adjacent states of Egypt, Sudan, Djibouti and Somalia, but have also a wider distribution in Africa. Some of these species been already revised in other parts of the revisions cited above, and here only the diagnosis and an update of collection and distributional data are given. Some of the endemic species are revised here for the first time, including figures on external and genitalic patterns. An identification key for all *Monolepta* species from North-East Africa is given.

## MATERIAL AND METHODS

A standard set of figures is given for each species. These include illustrations of the coloration (dorsal view), including the right antenna, where black coloration is indicated by black, yellow coloration by white, and red coloration by dot-shading. In polymorphic taxa more than one

coloration type is figured. Note that usually also transitions between the given coloration types occur, i. e., that only typical and frequently found coloration types are illustrated, but there might be more in some species. The basal four antennomeres of usually two different males and females, dorsal and lateral view of the median lobe including the endophallic structures, and ventral view of the median lobe without the endophallic structures (for classification see Wagner 2000a), the spermathecae of two (if available) different females, and bursa-sclerites of one female are figured. Morphometric measurements were made for external characters. Absolute measurements are: total length from the clypeus to apex of the elytron, length of elytron, maximal width of both elytra (usually in the middle or posterior third of the elytra), and width of pronotum. Relative measurements are: length to width of pronotum, maximal width of both elytra to length of elytron, length of second to third antennomere, and length third to fourth antennomere. The number of specimens measured is given in the description under "total length". If not stated otherwise, lectotypes are herein designated in order to fix the species identity and to preserve the stability of nomenclature in these taxa according to article 74.7.3. of the Code on Zoological Nomenclature.

The subsequent redescriptions and descriptions are based on labelled specimens from the following collections. Acronyms used and responsible curators in brackets: Bishop Museum, Honolulu (BPBM; A. Samuelson); Natural History Museum, London (BMNH; M. Geiser, M. Barclay); Brigham Young University collection, Provo, Utah (BYUC; Shawn Clark); private collection Ron Beenens, Nieuwegein, The Netherlands (CBe); private collection Jan Bezdek, Brno, Czech Republic (CBz); private collection Anthony Drane, UK (CDr); private collection Uwe Heinig, Berlin, Germany (CHe); private collection Frantizek Kantner, Budějovice, Czech Republic (CKa); private collection Lev Medvedev, Moscow, Russia (CMe); Hungarian Museum of Natural History, Budapest (HNHM; O. Merkl); Institute Royal des Sciences Naturelle de Belgique, Brussels (IRSN; P. Limbourg); Museo Civico di Storia Naturale, Genova (MCGD; R. Poggi); Museo Civico di Storia Naturale, Trieste (MCST; A. Colla); Museo ed Instituto di Zoologia Sistematica, Università di Torino (MIZT; M. Daccordi); Musée National d'Histoire Naturelle, Paris (MNHN; A. Mantilleri); Museum für Naturkunde, Berlin (MNHB; J. Frisch, J. Willers); Musée Royal d'Afrique Centrale, Tervuren (MRAC; M. de Meyer); Museum of Zoology, Helsinki (MZHF; H. Silfverberg); Museo Zoológico "La Specola", Firenze (MZUF; L. Bartolozzi); Naturhistorisches Museum Basel (NHMB; E. Sprecher-Übersax); Naturhistorisches Museum Wien (NHMW; H. Schillhammer); Naturhistoriska Riksmuseet, Stockholm (NRHS; J. Bergsten); Natuurhistorisch Museum Leiden (NNML; R. de Jong); Senckenberg Deutsches Entomologisches Institut,

Eberswalde (SDEI; L. Behne); National Museum of National History, Washington (USNM; A. Konstantinov); Zoologisches Forschungsinstitut und Museum Alexander Koenig, Bonn (ZFMK; D. Ahrens, K. Ulmen); Zoological Institute St. Petersburg (ZISP; A. Kirejtshuk); Zoologisches Institut und Zoologisches Museum der Universität, Hamburg (ZMUH; M. Husemann).

## RESULTS

### Species endemic to Ethiopia and Eritrea

#### *Monolepta longiuscula* Chapuis, 1879

(Figs 1–2)

*Monolepta longiuscula* Chapuis, 1879: 23.

**Type material.** *Holotypus*. Female, "Abyss., Raffray / Regione boschiva da Goundet ad Adoua, 1000–2000m, 1873 / 5/8" (MCGD). There is no information on specimen numbers in the original description, and I treat the only available specimen as holotype.

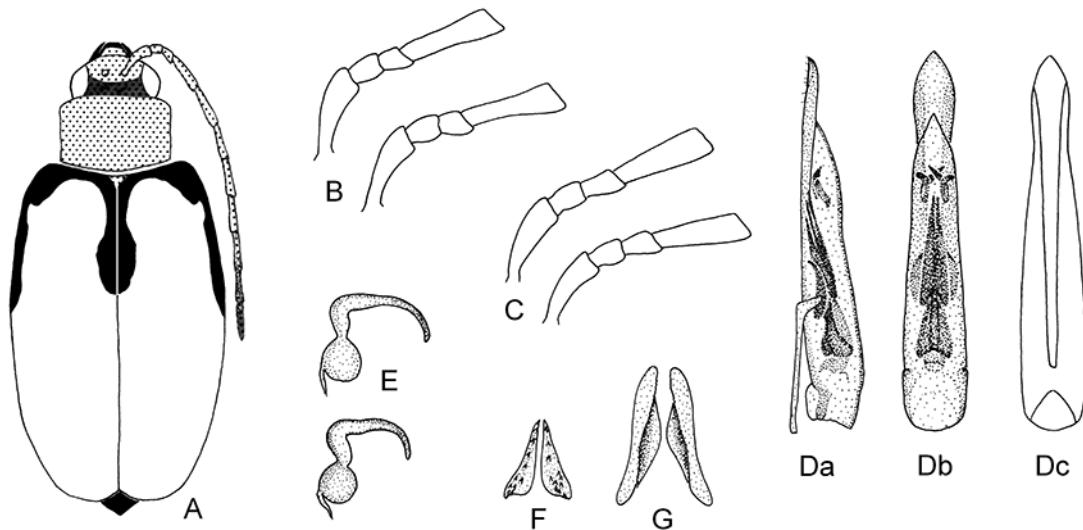
**Further material studied.** 9 specimens, 5 findings. **Eritrea.** 2 ex., Asmara, 15.00N/38.56E (IRSN, MNHB); 3 ex., Adi-Caie, 14.50N/39.21E, IX.1902, A. Andreini (MZUF). – **Ethiopia.** 2 ex., Abyss., Raffray, coll. G. Allard (MNHN); 2 ex., Adigrat, 14.16N/39.27E, V.1963, Linnavuori (MZHF).

**Redescription.** *Total length.* 4.00–4.80 mm (mean: 4.60 mm; n = 6).

**Head.** Yellowish-red to red, vertex contrasting black, labrum red, labial and maxillary palpi yellow. Antennae entirely yellow to reddish-yellow, last two to three antennomeres more brownish, not contrasting black (Fig. 1A). Antennomeres slender, second and third in males significantly broader (Fig. 2A), second and third antennomeres usually of same length, length of antennomeres two to three 1.00–1.14 (mean: 1.07), length of antennomeres three to four 0.32–0.42 (mean: 0.37).

**Thorax.** Prothorax entirely yellowish-red (Fig. 1A), pronotum small and broad, pronotal width 1.10–1.40 mm (mean: 1.26 mm), pronotal length to width 0.60–0.64 (mean: 0.63), very finely punctured, shining. Elytral coloration predominantly yellow, elytral base, humerus, first third of outer margin including epipleura, and about one third of suture black, with slight subapical enlargement of the black sutural patch (Fig. 1A). Elytra very slender, elytral length 3.00–4.10 mm (mean: 3.60 mm), width of both elytra 1.90–2.50 mm (mean: 2.23 mm), with width of both elytra to length of elytron 0.62–0.70 (mean: 0.66). Scutellum red or black. Meso- and metathorax yellowish, legs yellow to reddish-yellow.

**Abdomen.** Black, strong contrasting to the yellowish underside of thorax (Fig. 1A).



**Fig. 1.** *Monolepta longiuscula* Chapuis, 1879. A. Colour pattern. B. Basal antennomeres, males. C. Dto., females. D. Median lobe, a. lateral, b. dorsal, c. ventral, without endophallic structures. E. Two different spermathecae. F. Bursa-sclerite, dorsal. G. Dto., ventral.

**Male genitalia.** Median lobe slender, conical, significantly narrowed in the apical quarter, with broad and flat apex (Fig. 1D), straight and sometimes with fine setae (Fig. 1Da). Tectum broad, pointed at apex (Fig. 1Db), ventral groove slender, nearly parallel sided (Fig. 1Dc). Lateral endophallic spiculae short, small and characteristically twisted, median spiculae thin and slender, ventral spiculae large with one hook (Fig. 1Db, Dc).

**Female genitalia.** Spermatheca with small spherical nodulus, slender middle part and long cornu (Fig. 1E). Dorsal part of bursa sclerites slender, sub-triangular (Fig. 1F), ventral part slender triangular, outer margin finely undulate (Fig. 1G).

**Diagnosis.** In size and body shape most similar to *M. vincata* and *M. ephippiata*. *Monolepta vincata* with reduced transverse elytral band does not occur in North-East Africa, while the most dominant coloration type is with particular broad band (Fig. 15Ac, Ag), median lobe at apex more broad and flat in *M. longiuscula*, dorsal endophallic spiculae of other type (Figs 1D, 15D). *Monolepta ephippiata* with somewhat similar dorsal coloration (Fig. 13Ab), but than at least with median elytral spot, median lobe very different with narrow and pointed apical part and very different endophallic armature (Figs 1D, 13D).

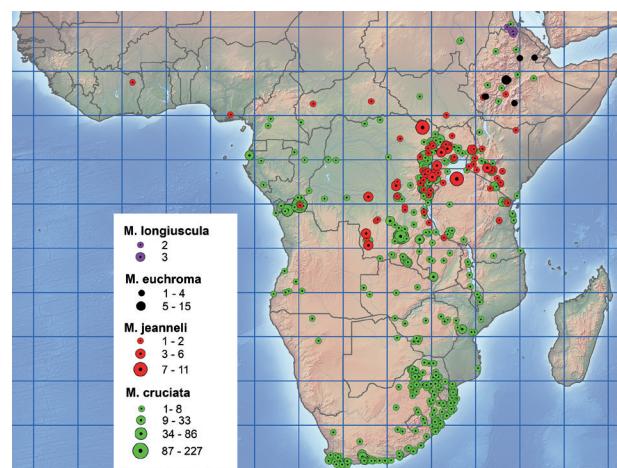
**Distribution and ecology.** An obviously very rare species collected in the surroundings of Asmara in Eritrea and few adjacent locations of Ethiopia, partly without detailed location data (Fig. 2).

#### *Monolepta postrema* Chapuis, 1879

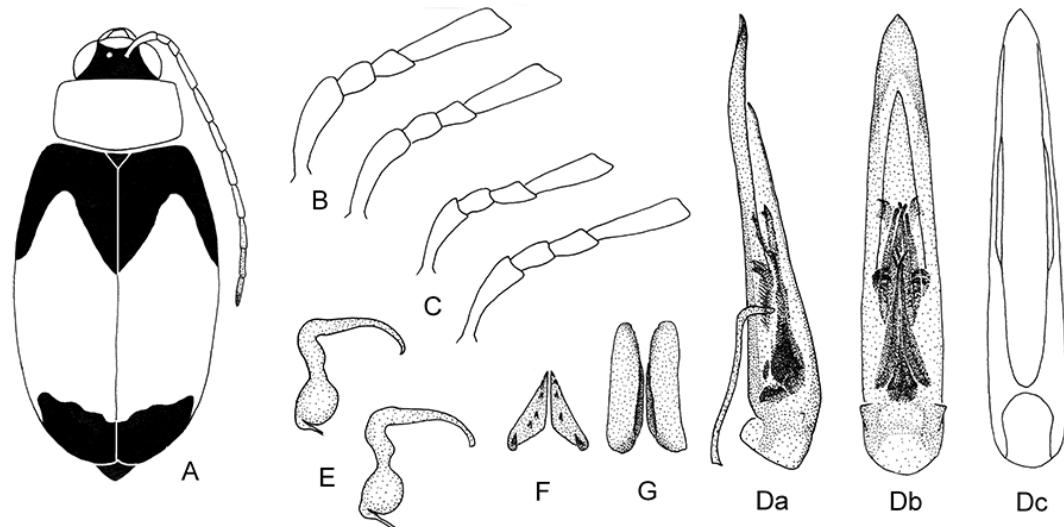
(Figs 3–4)

*Monolepta postrema* Chapuis, 1879: 22.

**Type material.** *Lectotype.* Male, “Abyss. Raffray / *Monolepta postrema* Chap. / additional label (added later): Regione boschiva da Goundet ad Adoua, 1000–2000 m, 1893 / Museo Civico di Genova / Lectotypus *Monolepta postrema* Chapuis, 1879” (MCGD). This designation. Chapuis mentioned several specimens in his original publication without designation of a holotype: “De Scio; récolée par M. Antinori à Lit Marefia, en Mai, et à Mahal Uonu en Septembre. Trouvée aussi par M. Raffray entre Goundet et Adoua”.



**Fig. 2.** Distribution of *M. longiuscula*, *M. euchroma*, *M. jeanneli*, *M. cruciata*.

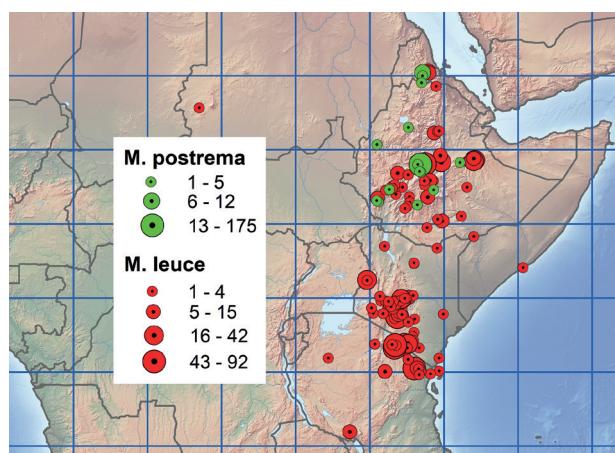


**Fig. 3.** *Monolepta postrema* Chapuis, 1879. A. Colour pattern, B. Basal antennomeres, males. C. Dto., females. D. Median lobe, a. lateral, b. dorsal, c. ventral, without endophallic structures. E. Two different spermathecae. F. Bursa-sclerite, dorsal. G. Dto., ventral.

**Paralectotypes.** 1 female, same data as lectotype (MCGD); 2 females, Scioa, Lit-Marefia, V.1877, Antinori (MCGD).

**Further material examined.** 260 specimens, 54 findings. **Eritrea.** 1 ex., Erythree (ZMUH); 1 ex., Asmara, 15.00N/38.56E (MNHN); 1 ex., dto. (HNHM); 2 ex., dto. (NHMW); 4 ex., dto., Chéren, coll. Clavareau (MRAC); 2 ex., dto., Staudinger, ex coll. J. Weise (MNHB); 1 ex., IX.1905, N. Baccari (MCGD); 4 ex., Umg. Asmara, VII.2001, L. & M. Stalmans (IRSN); 5 ex., Ghinda, 15.20N/38.56E (2 ex. MNHB, 1 ex. NMNH, 2 ex. NHRS); 2 ex., Adi-Ugri, 14.53N/38.49E, VIII.1901, IX.1902, A. Andreini (MZUF). – **Ethiopia.** 5 ex., Raffray (MNHN); 2 ex., coll. Chapuis (IRSN); 3 ex., Bogos, coll. Duvivier / Kraatz (2 ex. IRSN, 1 ex. SDEI); 7 ex., Abyssinia, 1881, Raffray (MNHN); 2 ex., Abyssinia, 1928, Mrs. G. McCreag (USNM); 2 ex., Alitiéne, coll. Kraatz (SDEI); 6 ex., Tigre, 1850, Schimper (MNHN); 2 ex., Abyssinia, Tschtscher, VI.1911, Kovács (HNHM); 1 ex., Das, X.1911, R. J. Storley (BMNH); 2 ex., Scioa, Let. Marefia, 6.50N/35.56E, 1881 / VII.1897, Antinori / Raga-zzi (MCGD); 3 ex., Addis Abeba, 9.02N/38.42E (ZISP); 6 ex. coll. Le Moult (ZMUH); 33 ex., Dr. Schürhof (MNHB); 1 ex., 1899, Sason (ZISP); 1 ex., VI.1905, M. de Rothschild (MNHN); 1 ex., IX.1926, J. Omer-Cooper (BMNH); 32 ex., 1928, Schürhoff (MNHB); 65 ex., 1930, Schürhoff (MNHB); 5 ex., VII.–IX.1933, L. Sáska (NHRS); 4 ex., X.1948, II.1949, “in flowers of garden roses”, H. Scott (BMNH); 1 ex., Tadese Bogale, V.1956 (USNM); 12 ex., VIII.1963, P. M. Schroeder (NMNH); 4 ex., 2400 m, II.1967, G. M. Shitaye (BMNH); 5 ex.,

II.1972, H. Silfverberg (MZHF); 1 ex., VIII.1988, L. Medvedev (CMe); 1 ex., 2500 m, X.1990, L. N. Medvedev & E. Samoderzhenkov (CMe); 1 ex., II.1995, Bastianini (MIZT); 2 ex., near Adis Allem, 9.01N/38.24E, 2600 m, IX.1926, H. Scott, “cultivated country” (BMNH); 1 ex., Djem-Djem Forest, 2800 m, IX.1926, H. Scott “from grassy open space” (BMNH); 4 ex., Shoa, Wachacha Ravine near Addis Abeba, 2700 m, IX.1926, H. Scott, “from native shrub” (BMNH); 2 ex., between Djem-Djem and Wouramboulchi, 3000 m, X.1926, J. O. Cooper (BMNH); 2 ex., Simien, Derasghie, 3200 m, XII.1952, H. Scott, “from flowering trees & busches” (BMNH); 1 ex., Belletta Forest, 7.32N/36.31E, VI.1963, Linnavuori (MZHF); 1 ex., Agheresalam, 6.29N/38.21E, VI.1963, Linnavuori



**Fig. 4.** Distribution of *M. postrema*, *M. leuce*.

(MZHF); 2 ex., Ambo, 7.32N/36.31E, VI.1977, L. Medvedev (CMe); 1 ex., Akaki River, 8.50N/38.43E, XI.1980, sweep-netting, A. Demeter (HNHM); 1 ex., Mt. Menagesha, 8.55N/38.35E, X.1980, sweep-netting, A. Demeter (HNHM); 2 ex., Shewa, 6.58N/35.46E, 1986–1990, Ing. Dedoch (CBz); 1 ex., Debre Zeyt, 10.35N/35.48E, V.1989, K. Werner (MZUF); 1 ex., Ambo/Guder, 2400 m, VII.1990, K. Werner (MZUF); 2 ex., Arsi, Wondo Genet, 7.30N/39.30E, 1850 m, VI.1990, K. Werner (MZUF); 5 ex., Ambo, 650 m, XI.–X.1990, L. Medvedev (CMe); 3 ex., Kaffa Pr., 1850 m, 40 km W Bonga, IV.2007, J. Halada (NME); 1 ex., Amhara Region, Debre Tabor, Debre-sena, 11.51N/37.59E (BYUC); 2 ex., Oromia reg., Hirna, 9.15N/41.08E, 2315 m, V.2011, V. Hula & Niedobova (CBz).

**Redescription.** Total length. 4.80–5.60 mm (mean: 5.20 mm; n = 16).

**Head.** Labrum and frons yellowish, frons sometimes brownish, vertex always black (Fig. 3A), labial and maxillary palpi yellow, terminal palpomeres often brownish. Antennae yellow, usually only last antennomere with brownish to black tip (Fig. 3A). Antennomeres slender, second and third in males significantly broader (Fig. 3B), second and third antennomeres usually of same length, length of antennomeres two to three 0.94–1.15 (mean: 1.02), fourth antennomere usually three times longer than third, length of antennomeres three to four 0.33–0.42 (mean: 0.37).

**Thorax.** Prothorax entirely yellow, pronotum pale yellow, broad, pronotal width 1.40–1.55 mm (mean: 1.48 mm), pronotal length to width 0.58–0.62 (mean: 0.60), very finely punctured, shining. Elytral coloration characteristic and of constant type, predominantly yellow, black at base, black colour elongated about the first third of the elytra laterally including epipleura and triangle-like along the suture, apical part black (Fig. 3A). Elytral length 3.80–4.40 mm (mean: 4.11 mm), width of both elytra 2.40–2.80 mm (mean: 2.58 mm), slender, width of both elytra to length of elytron 0.59–0.67 (mean: 0.63). Scutellum brownish-red to black. Meso- and metathorax yellow, as legs.

**Abdomen.** Entirely yellow in about one third of material examined, but mostly yellow with contrasting black anal-sternite and pygidium, rarely also other abdominal segments with darker outer margin.

**Male genitalia.** Median lobe broad, homogenously conical (Fig. 3Db, Dc), apex slightly bent dorsally (Fig. 3Da). Tectum small, conical (Fig. 3Db), ventral groove very broad (Fig. 3Dc). Lateral endophallic spiculae short, broad, claw-like, median spiculae and slender, ventral spiculae large, comb-like (Fig. 3Db).

**Female genitalia.** Spermatheca with small spherical nodulus, broader and long middle part and long cornu (Fig. E). Dorsal part of bursa sclerites slender, sub-trian-

gular (Fig. F), ventral part triangular, outer margin finely undulate (Fig. G).

**Diagnosis.** Very characteristic by the black basal elytral coloration that is elongated triangularly along the suture. This species shows very low variation in color pattern and can be only dismissed in this respect with *Bicolorizea cavidorsis* (Fairmaire, 1893), that occur sympatrically and is widely distributed in Ethiopia (Heunemann et al. 2015). Also the broad conical aedeagus is a rare pattern in African *Monolepta* species.

**Distribution and ecology.** Widely distributed and abundant in Ethiopia and Eritrea, particularly in montane regions, recorded up to 3200 m (Fig. 4).

#### *Monolepta euchroma* Fairmaire, 1883

(Figs 2, 5)

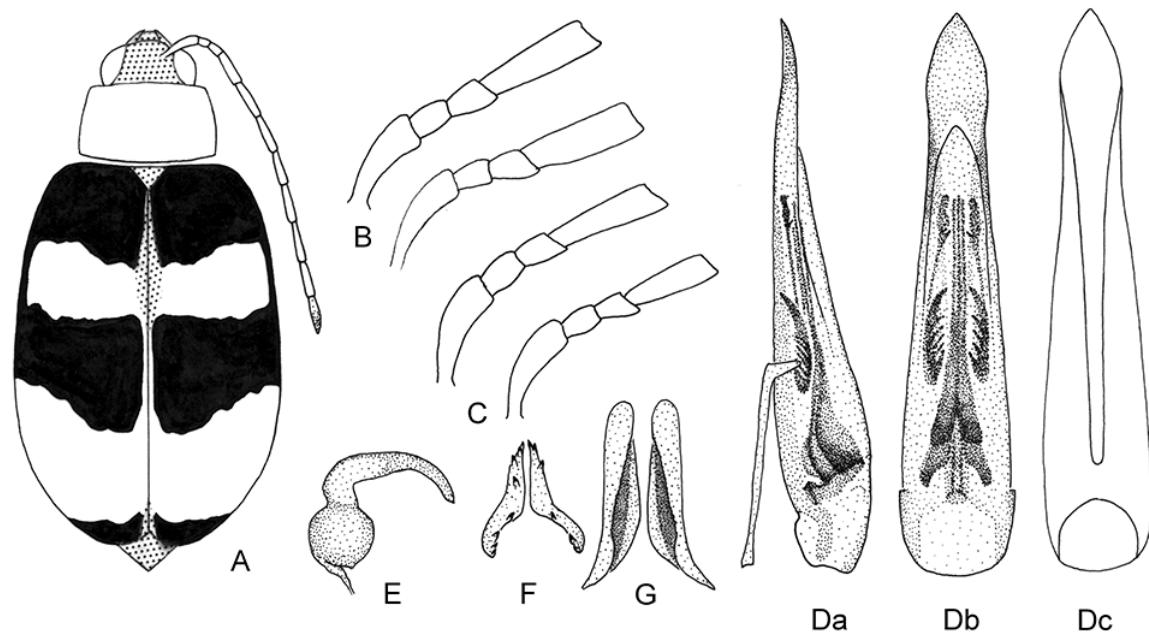
*Monolepta euchroma* Fairmaire, 1883: 111.

**Further material examined. Ethiopia.** 19 specimens, 4 findings. 2 ex., Addis Abeba, Neri, 1941 (USNM); 15 ex., Addis Abeba, 9.01S/38.45E, “roses”, IX.1963, P. M. Schroeder (USNM); 1 ex., Bale, 6.40N/39.40E, IX.2000, P. Leonard (IRSN); 1 ex., Kaffa Pr., 1850 m, 40 km W Bonga, 7.16N/36.04E, IV.2007, J. Halada (NME).

**Remarks.** A detailed redescription was published in Wagner (2007b). Next to the two type specimens from “Abyssinie A. Raffray Voy. 1881” (MNHN), only ten specimens have been studied of this obviously rare species (Wagner 2007b).

**Diagnosis.** External and genital characters of this large species are most similar to *M. vinosa* which is obviously phylogenetically closely related. Both species occur sympatrically in the Ethiopian Highlands whereas *M. vinosa* has a much wider distribution covering most regions of the Afrotropis. However, there are some constant differences in detail between both species. The elytral pattern of *M. euchroma* is dominated by the black transverse bands (Fig. 5A), with elytral apex always black but not red margined like in *M. vinosa* with similar predominantly black elytra (Fig. 16A). The female genitalic morphology (spermathecae and bursa sclerites, Figs 5E–G, 16E–G) of both species are not clearly distinguishable, but the median lobe of *M. euchroma* is more slender, the ventral groove is narrow, and lateral endophallic spiculae have a small apical enlargement (Fig. 5D), but not hammer-like as in *M. vinosa* (Fig. 16D).

**Distribution and ecology.** Only known from few montane sites in the Ethiopian Highlands (Fig. 2).



**Fig. 5.** *Monolepta euchroma* Fairmaire, 1883. **A.** Colour pattern. **B.** Basal antennomeres, males. **C.** Dto., females. **D.** Median lobe, a. lateral, b. dorsal, c. ventral, without endophallic structures. **E.** Spermathecae. **F.** Bursa-sclerite, dorsal. **G.** Dto., ventral.

#### *Monolepta nigropicta* Laboissière, 1938

(Figs 6–7)

*Monolepta nigropicta* Laboissière, 1938: 146.

**Type material.** *Lectotype.* Female, “Da Sancurar agli Amarr, IV.1896, Bottego leg.” (ZMUH); paralectotype: 1 female, “Neghelli, Marzo, 1937; Miss. E. Zavattari nei Borana A. O. I.” (MCST). This designation. Laboissière mentioned two specimens in his original description without designation of a holotype “Borana Galla: Sancurar (Bottego 1896), un exemplaire, ma collection; Neghelli, un exemplaire, Zavattari leg. (MCST)”. Type locality: Ethiopia, Neghelli, 5.30N/39.05E.

**Further material examined. Ethiopia.** 1 ex., Ethiopia, Sidamo Prov., 14/32 km E of Neghelli, 1600 m, V.1974, R. O. S. Clarke leg. (MRAC).

**Redescription** Total length. 4.60–5.40 mm (mean: 4.90 mm; n = 3).

**Head.** Yellow, vertex contrasting black (Fig. 6A), antenna yellow, only terminal antennomere slightly darker, antennomeres slender, length of antennomeres two to three 0.83–0.86 (mean: 0.84), length of antennomeres three to four 0.42–0.50 (mean: 0.45).

**Thorax.** Prothorax yellow, broad, pronotal width 1.50–1.65 mm (mean: 1.58 mm), pronotal length to width 0.58–0.62 (mean: 0.60), very finely punctured, shining. Elytra predominately yellow, with narrow black base, an-

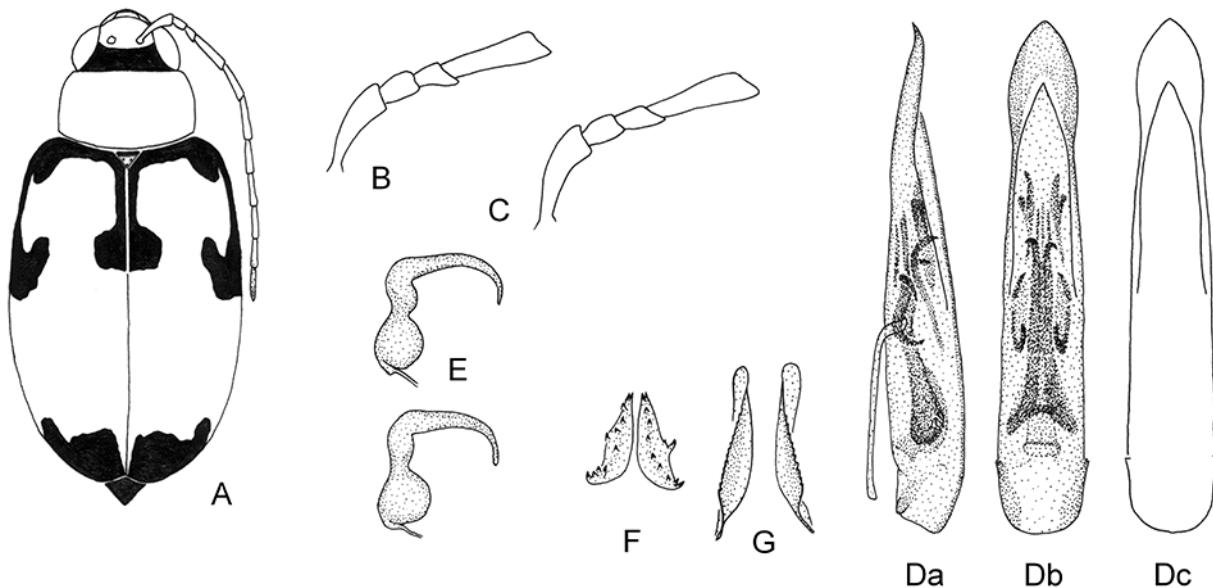
terior half of the outer margin, about one third along the suture and the elytral tip black (Fig. 6A). Elytral length 3.60–4.20 mm (mean: 3.83 mm), width of both elytra 2.30–2.50 mm (mean: 2.40 mm), elytra slender, width of both elytra to length of elytron 0.62–0.68 (mean: 0.63). Scutellum brown to black. Meso- and metathorax, and legs yellow.

**Abdomen.** Yellow, anal sternite and pygidium black.

**Male genitalia.** Median lobe broad, slightly narrowed in the apical quarter (Fig. 6D<sub>a</sub>), apex broad, flat and straight (Fig. 6D<sub>b</sub>), tectum broad, ventral groove slender (Fig. 6D<sub>c</sub>). Lateral endophallic spiculae slender, bifurcate, median spiculae and slender and bent dorsally, ventral spiculae large with one strong hook (Fig. 6D<sub>a</sub>, D<sub>b</sub>).

**Female genitalia.** Spermatheca with small spherical nodulus, slender middle part and long cornu (Fig. E). Dorsal part of bursa sclerites broad, spiny (Fig. F), ventral part slender, outer margin finely serrate (Fig. G).

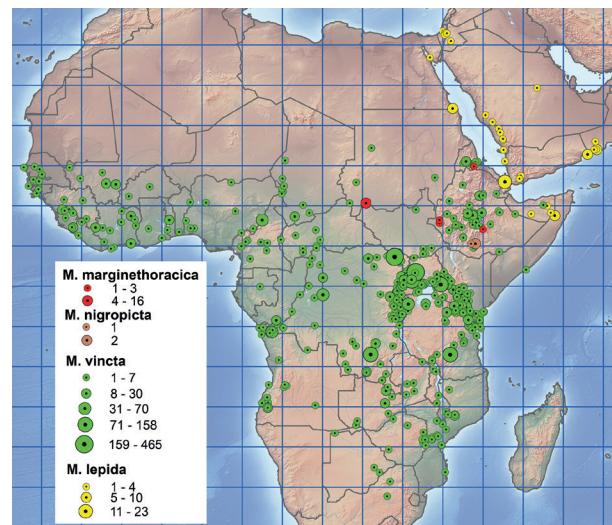
**Diagnosis.** In coloration, size and body shape most similar to some specimens of *M. cruciata* (Fig. 9Ab) and *M. nigrocrucita* (Fig. 13Ab) but not with completely black outer margins. Shape of aedeagus, with broad and flat apical part very different from both other species with slender and conical apical part (Figs 9D, 13D). Somewhat similar to small *M. euchroma* or *M. vinosa*, but those species with partly red elytral coloration, slightly different aedeagus, and very different shape of spermatheca which is slender and long in *M. nigropicta*, and



**Fig. 6.** *Monolepta nigropicta* Laboissière, 1938. A. Colour pattern. B. Basal antennomere, male. C. Dto., female. D. Median lobe, a. lateral, b. dorsal, c. ventral, without endophallic structures. E. Spermathecae. F. Bursa-sclerite, dorsal. G. Dto., ventral.

broad with short middle part in *M. vinosa* and *M. euchroma* (Figs 5E, 16E).

**Distribution and ecology.** Only three specimens are known of this obviously very rare species in Ethiopia (Fig. 7).



**Fig. 7.** Distribution of *M. marginethoracica*, *M. nigropicta*, *M. vincta*, *M. lepida*.

#### *Monolepta marginethoracica* Laboissière, 1940

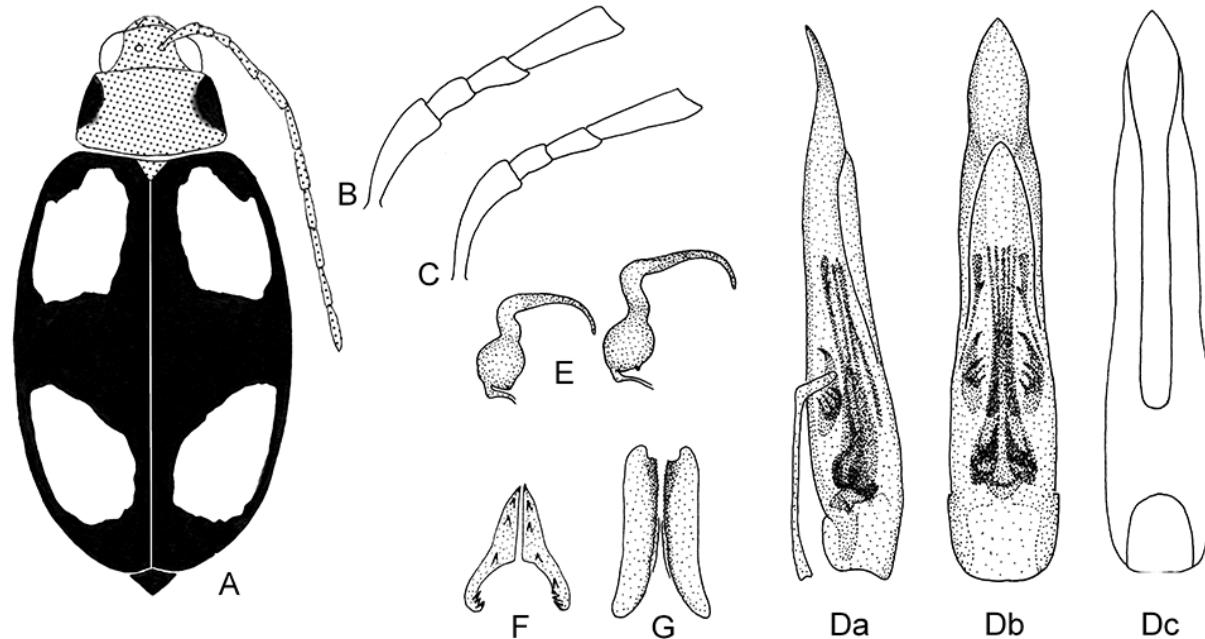
(Figs 2, 8)

*Monolepta marginethoracica* Laboissière, 1940a: 131.

**Remarks.** A detailed redescription was published in Wagner (2007b). Next to lecto-, and paralectotype “Adi Ugri Eritrea VIII / Musée du Congo Erythrée: Adi Ugri Coll. Clavareau / V. Laboissière det. 1940: *Monolepta marginethoracica* m. Type / R. Det. C 4344” (MRAC), 28 specimens have been revised in Wagner (2007b) and no further specimens have been found afterwards.

**Diagnosis.** In coloration, external morphometrics and antennal characters most similar to *M. clienta*, but *M. marginethoracica* is on average larger, and has usually completely black margined elytra, whereas the elytral apex of *M. clienta* is red. Both species are allopatrically distributed and can be clearly distinguished by the male genital morphology (Fig. 7D). In size and male genital structures somewhat similar to *M. vinosa*, but can be easily distinguished by the entirely black margined elytra (Fig. 7A).

**Distribution and ecology.** Only known from few montane sites in Eritrea and Ethiopia. Occurs at the type locality together with *M. longiuscula* Chapuis, 1879, *M. postrema* Chapuis, 1879, and *M. nigrocruciata* Laboissière, 1940 (Fig. 2).



**Fig. 8.** *Monolepta marginethoracica* Laboissière, 1940a. A. Colour pattern. B. Basal antennomere, male. C. Dto., female. D. Median lobe, a. lateral, b. dorsal, c. ventral, without endophallic structures. E. Spermathecae. F. Bursa-sclerite, dorsal. G. Dto., ventral.

***Monolepta nigrocruciata* Laboissière, 1940**

(Figs 9–10)

*Monolepta nigrocruciata* Laboissière, 1940b: 7.

= *Monolepta varians* Weise, in litteris; Wagner 2007b: 141.

**Further material examined.** 6 specimens, 2 findings. **Eritrea.** 3 ex., Eritrea, Umg. Asmara, VII.2001, L. & M. Stalmans (IRSN). – **Ethiopia.** 3 ex., Addis Ababa, Entoto Hill, 9.05N/38.45E, 2840 m, V.2011, Hula & Niedobova (CBz).

**Remarks.** A detailed redescription was published in Wagner (2007b). Next to holo-, and 21 paratypes from “Ethiopi Goba R. de Meulenaere 1934–1935 / V. Laboissière det., 1940: *Monolepta nigrocruciata* m. Type / Mus. Hist. Nat. Belg. I.G. 10.738 / cf. Bull. Mus. Hist. Nat. Belg. XVI. 1940 n° 23, p. 7–8, fig. 1 d” (IRSN), 468 specimens have been studied in Wagner (2007b).

**Diagnosis.** Specimens without elytral cross are most similar to the sympatric *M. gobensis*. The latter has a black pronotum, while specimens of *M. nigrocruciata* without elytral cross and black pronotum are very rare. Furthermore, *M. nigrocruciata* has a broader pronotum (pronotal length to width 0.57–0.63; *M. gobensis* 0.62–0.67) and more slender elytra (width of both elytra to length of elytron 0.62–0.69; *M. gobensis* 0.66–0.71). In any doubtful cases dissection of median lobes and bursa sclerites allow a clear identification of these species in both sexes

(Figs 9D–G, 11D–G). Most similar to *M. nigrocruciata* are some specimens of *M. cruciata* which is also widely distributed in Ethiopia and Eritrea. *Monolepta nigrocruciata* is significantly more slender than *M. cruciata*, but all measured parameters show a more or less wide overlap. Specimens with complete elytral cross (Fig. 9Ac, Ad) should be checked by genital dissection (Figs 9D, 13D–E).

**Distribution and ecology.** An obviously abundant and widely distributed species of the Ethiopian Highlands and surrounding areas in Eritrea and Ethiopia up to 3300 m (Fig. 10).

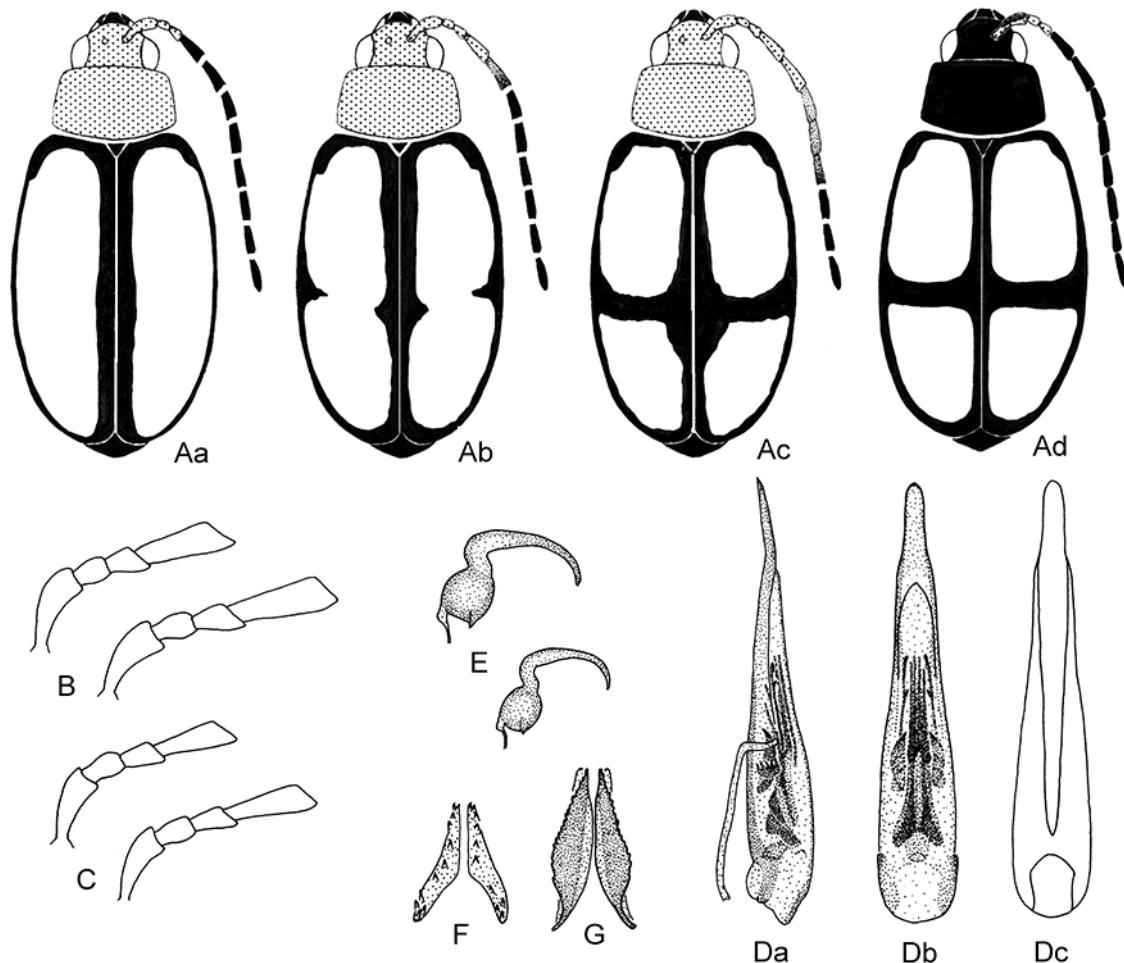
***Monolepta gobensis* Laboissière, 1940**

(Figs 11–12)

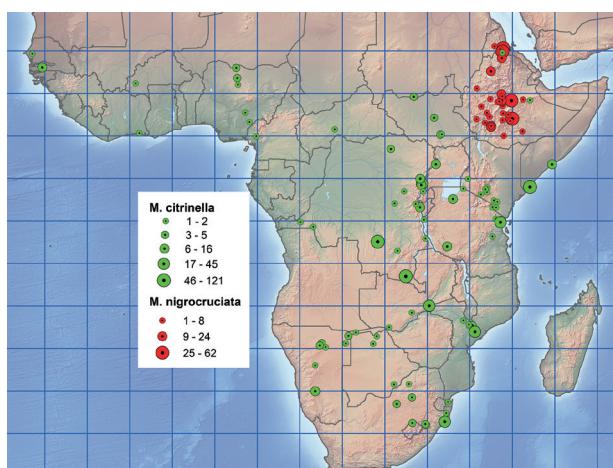
*Monolepta gobensis* Laboissière, 1940b: 8.

**Further material examined.** 2 specimens, 2 findings. 1 ex., Ethiopia, Arussi Prov., Gobe, 10.VIII.1970, S. Persson (NHRS); 1 ex., Oromia, Mt. Enkuolo, NE slope, 7.24N/39.22E, XII.2016, J. Schmidt (NME).

**Remarks.** A detailed redescription was published in Wagner (2007b). Next to female Holotype “Ethiopi Goba R. de Meulenaer 1934–1935 / V. Laboissière dét. 1940: *Monolepta gobensis* m.” (IRSN) Laboissiere designated 42 paratypes (all IRSN). 62 specimens listed in Wagner 2007b).



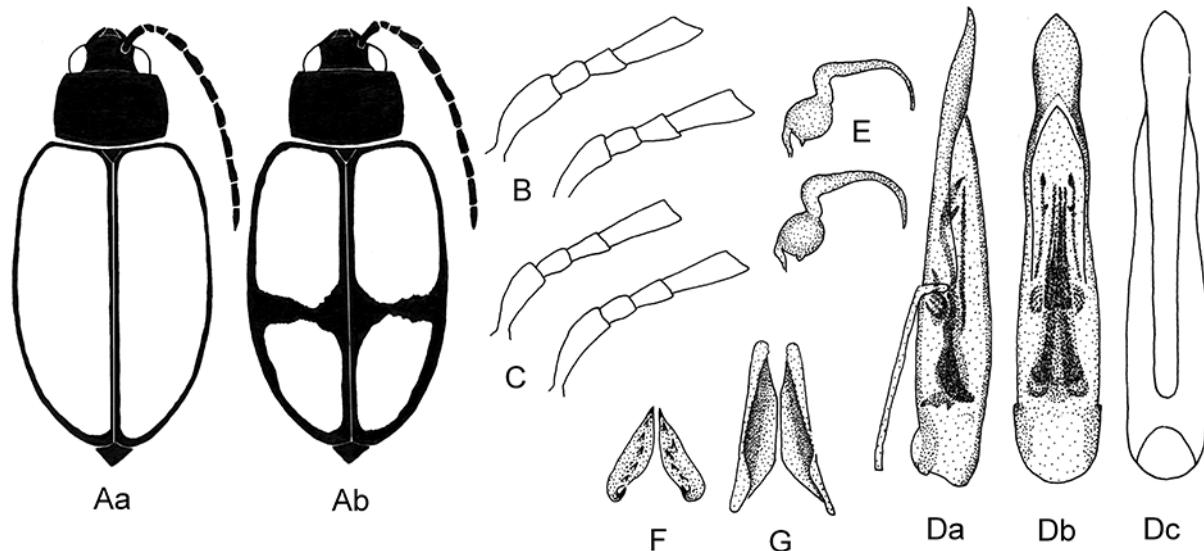
**Fig. 9.** *Monolepta nigrocruciata* Laboissière, 1940b. A. Four different colour patterns. B. Basal antennomeres, males. C. Dto., females. D. Median lobe, a. lateral, b. dorsal, c. ventral, without endophallic structures. E. Spermathecae. F. Bursa-sclerite, dorsal. G. Dto., ventral.



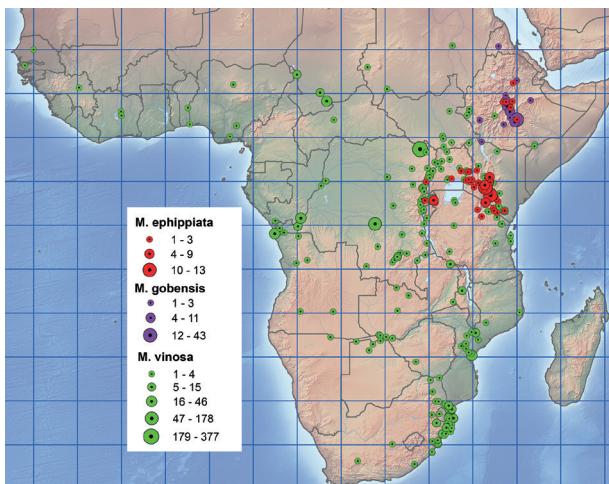
**Fig. 10.** Distribution of *M. citrinella*, *M. nigrocruciata*.

**Diagnosis.** Colour pattern without elytral black cross is most similar to *M. deleta*, in particular to specimens from the Usambaras with brownish to black prothorax. Both species occur allopatrically and *M. deleta* particularly in montane regions of Uganda, Kenya and Tanzania. Specimens with elytral cross are very similar to some *M. nigrocruciata* with black prothorax (Fig. 9Ad) that can occur syntopically in Ethiopia. Male genitalia should be dissected in specimens with this coloration to ensure a correct species identification (Figs 9A, 11A).

**Distribution and ecology.** Restricted to the Ethiopian Highlands in Eritrea and Ethiopia up to 3500 m altitude (Fig. 12).



**Fig. 11.** *Monolepta gobensis* Laboissière, 1940b. A. Two different colour patterns. B. Basal antennomeres, males. C. Dto., females. D. Median lobe, a. lateral, b. dorsal, c. ventral, without endophalllic structures. E. Spermathecae. F. Bursa-sclerite, dorsal. G. Dto., ventral.



**Fig. 12.** Distribution of *M. ephippiata*, *M. gobensis*, *M. vinosa*.

#### Species with wider distribution in Nort-East Africa

##### *Monolepta cruciata* Guérin de Méneville, 1847

(Figs 2, 13)

*Monolepta cruciata* Guérin de Méneville, 1847: 331.

= *Monolepta puncticeps* Chapuis, 1879: 23; Wagner 2007b: 95.

= *Monolepta ludicra* Weise, 1906: 54; Wagner 2007b: 95.

= *Monolepta sternalis* Weise, 1909a: 213; Wagner 2007b: 96.

= *Monolepta notha* Weise, 1927: 21; Wagner 2007b: 96.

= *Monolepta kivuensis* Laboissière, 1929: 152; Wagner 2007b: 96.

= *Monolepta missis* Laboissière, 1931a: 405; Wagner 2007b: 96.

= *Monolepta carmenta* Weise, in litteris: Wagner 2007b: 96.

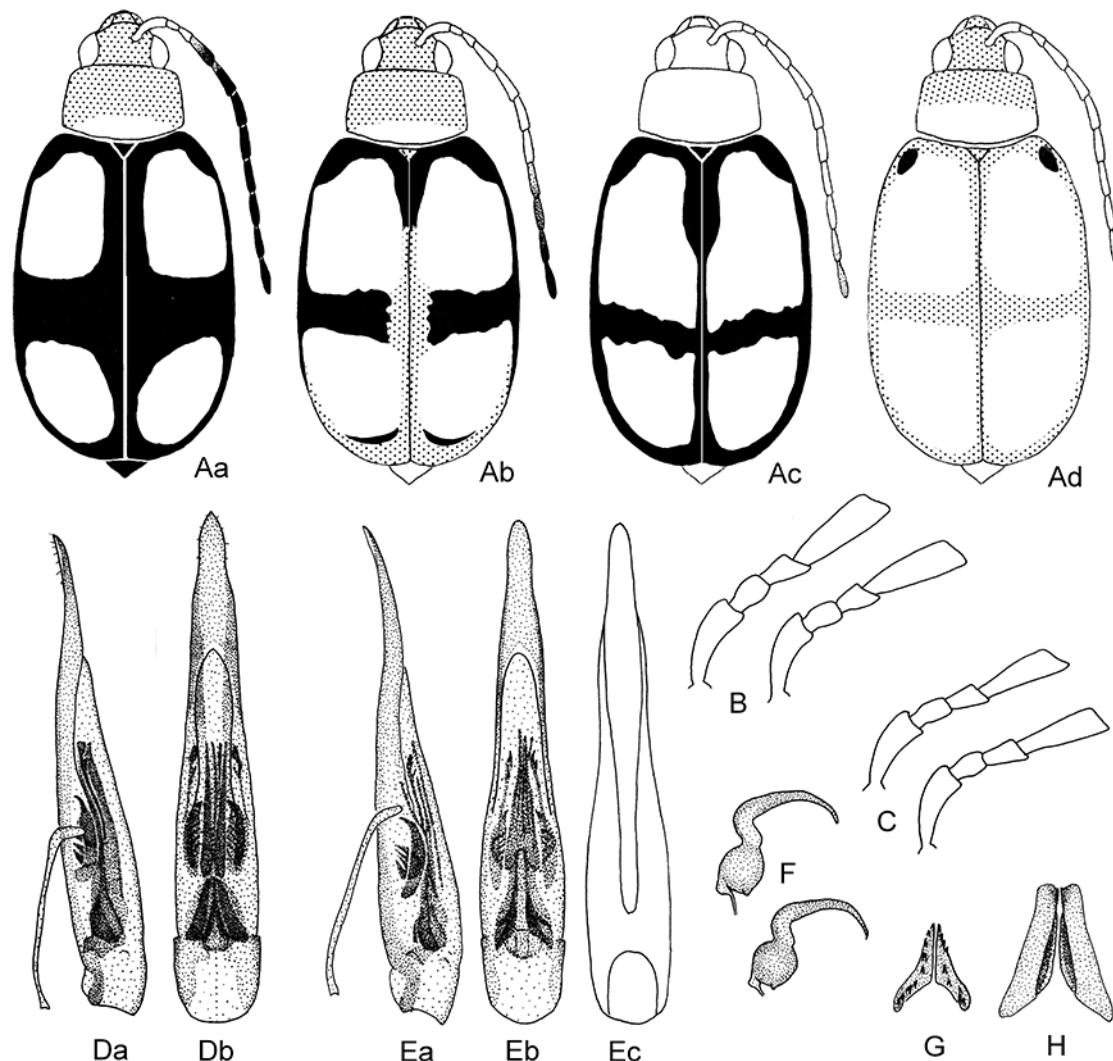
**Further material examined.** 42 specimens, 23 findings. **Angola.** 1 ex. (BMNH). – **Botswana.** 1 ex., Nata, 20.13S/26.11E, XII.1979, C. R. Owen (USNM). – **Ethiopia.** 1 ex., Alemaya, 9.23N/41.56E, VI.1965, A. B. Gurney (USNM). – **Kenya.** 1 ex. Lake Nakuru, 0.28S/36.07E, XI.1896, Dr. Ansorge (USNM); 7 ex., Nairobi, 1.17S/36.50E, XI.1967, C. V. Reichert (USNM). – **Malawi.** 1 ex., Zomba, Upper Shire Riv., 15.21S/35.18E, V.1896, Rendall (USNM). – **Mocambique.** 4 ex., Delagoa Bay, 25.58S/32.35E (USNM); 1 ex., Beira, 19.49S/34.52E (USNM); 2 ex., Lourenzo Marques, 25.58S/32.25E, II.1951, N. L. H. Kraus (USNM). – **South Africa.** 2 ex., Durban, 29.51S/31.01E (USNM); 4 ex., Port Natal, 28.30S/30.30E (USNM); 1 ex., Wellington, 33.38S/18.59E (USNM); 1 ex., Grahamstown, 33.17S/26.32E, X.1899, C le Doux (USNM); 2 ex., Malvern, 26.12S/28.06E, VII.1897 (USNM); 1 ex., Warmbad, 24.55S/28.15E, II.1968, P. Spangler (USNM); 1 ex., Transvaal, Libertas, X.1979, C. R. Owen (USNM). – **Tanzania.** 1 ex., Urambo, 5.04S/32.04E, II.1960, I. A. D. Robertson (BMNH); 1 ex., N-Mara, X.1958, I. A. D. Robertson (BMNH); 2 ex., 30–60 km NE Mpika, 11.40S/31.40E, XI.2004, Snizek (NME). – **Uganda.** 2 ex., Entebbe, 0.05N/32.29E, IX.1972, H. Falke

(USNM); 3 ex., Dokulo, 1.36N/33.10E, XI.1967, C. V. Reichart (USNM). — **Zambia.** 1 ex., Hillwood, Ikilenge, 11.16S/24.18E, X.2013, Smith et al. (BMNH); 1 ex., Lyangu, Liuwa Plain NPO, 14.46S/22.34E, XI.2013, Smith et al. (BMNH).

**Remarks.** A detailed redescription was published in Wagner (2007b, 2016). Type specimens for the valid name and of *M. puncticeps* originated from Ethiopia. A Neotype was designated for *Monolepta cruciata* in Wagner (2007b). Insect material of the expedition of Th. Lefebvre to Ethiopia was deposited in the MCGD, but type material of this species could not be found. The precise description and the excellent figure given in the original description made an allocation to this species very likely. However, since another species, the sometimes very sim-

ilarly coloured *M. nigrocruciata* occur at the type locality of *M. cruciata*, it was reasonable to designate a neotype to fix the species identity. The lectotype of *M. puncticeps* “Abyss. Raffray / Regione boschiva da Goundet et Adoua, 1000–2000 m 1873” (MCGD) was designated as neotype of *M. cruciata*. *Monolepta cruciata* is one of the most abundant and widely distributed species of *Monolepta* in Africa. Nearly 3000 specimens out of 465 findings have been studied insofar (Wagner 2007b, 2016).

**Diagnosis.** Specimens with broad black elytral margins, suture and median transverse band (like Fig. 13Aa) are very similar to *M. elegans*. This species has on average more slender elytra and antennae (Wagner 2007a) is abundant only in West Africa, occurs up to Gabon and Angola, and does not occur in North-East Africa. Most



**Fig. 13.** *Monolepta cruciata* Guérin de Méneville, 1847. A. Four different colour patterns. B. Basal antennomeres, males. C. Dto., females. D. Median lobe, a. lateral, b. dorsal. E. Dto., variation a. lateral, b. dorsal, c. ventral, without endophallitic structures. F. Spermathecae. G. Bursa-sclerite, dorsal. H. Dto., ventral.

specimens of *M. cruciata* in Ethiopia and Eritrea show colour pattern like Fig. 13Ac, much rarer like Fig. 13Ab. Specimens with complete black suture (Fig. 13Ac) show many similarities to some *M. gobensis* Laboissière, 1940 and *M. nigrocruciata* Laboissière, 1940. Dissection of male genitalia (Fig. 9D, 11D, 13D) is sometimes necessary for proper identification.

**Distribution and ecology.** One of the most abundant species of *Monolepta* in Eastern, Central and southern Africa from Eritrea and Cameroon to the Cape (Fig. 2).

#### *Monolepta lepida* Reiche, 1858

(Figs 7, 14)

*Monolepta lepida* Reiche, 1858: 263.

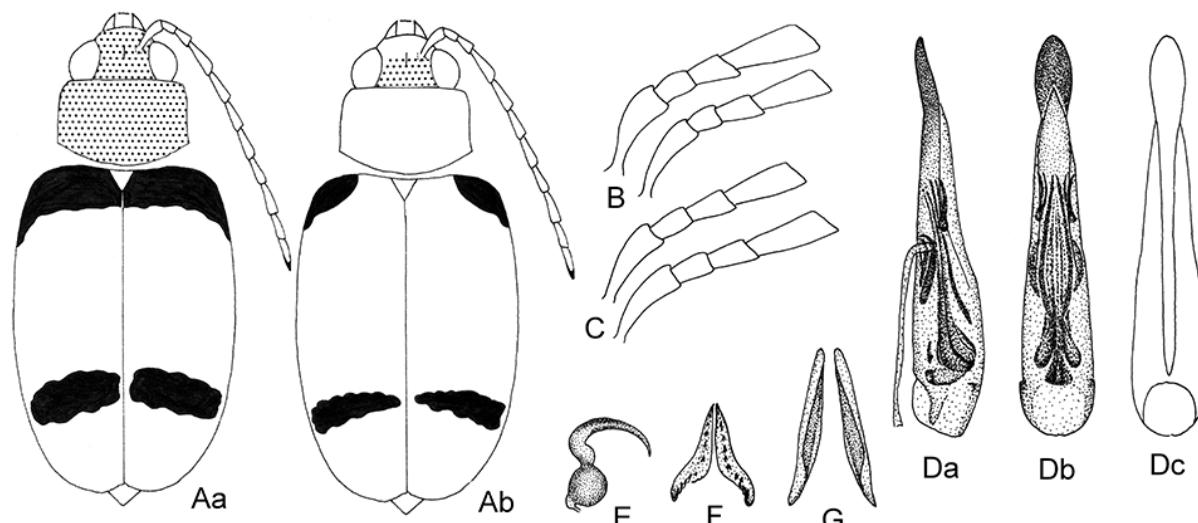
**Further material examined.** 40 specimens, 13 findings. 4 ex., "Arab.", Ehrenb., 30391 (MNHB). – **Egypt.** 1 ex., Gebel Elba, 22.11N/36.21E, VI.1928, coll. Alfieri (USNM); 1 ex., Oasis Feiran, 28.45N/33.40E, V.1935, coll. Alfieri (NHMB); 3 ex., Wadi Feran, II.–III.1935 Sinai, W. Wittmer (NHMB); 9 ex., Gebel Elba, I.1933, III.1938, H. Priesner (NHMB); 1 ex., Wadi Isla, Bir Tarfa, S-Sinai, 32.00N/34.18E, V.1940, coll. Alfieri (USNM). – **Jordan.** 6 ex., Wadi Schaib, 200 m, XI.1957, J. Klapperich (USNM); 1 ex., 5 km N Mabada, 31.46N/35.48E, IV.1994, Volkovich (USNM). – **Oman.** 1 ex., Dhofar, 18.00N/54.00E, X.1979, T. B. Larsen (USNM). – **Palestine.** 2 ex., Jericho, 31.51N/35.27E, IV.1899, Pic 1899 (MNHN); 4 ex., Wadi Aczajot, Engedi Distr., 31.27N/35.23E, IV.1994, Volkovich (USNM). – **Syria.** 2 ex., Baly coll. (BMNH). – **Yemen.** 5 ex., Jabal al Tark, 16.40N/53.05E, X.2005, M. Rejzek (BMNH).

**Remarks.** A detailed redescription was published in Wagner (2005). The holotype originates from Jerusalem (MNHN). 72 specimens out of 26 findings are listed in Wagner (2005), and further 58 specimens in 28 findings in Schlich & Wagner (2010).

**Diagnosis.** Most similar to *M. vincta* and both species occur sympatrically in north-east Africa. Including *M. melanogaster* from southern Africa, these three species are most likely a monophyletic group within *Monolepta* that can be derived from the similarity in external characters, coloration, and male genital patterns. In comparison to *M. vincta*, *M. lepida* is on average larger, and has reduced black elytral coloration (Figs 14–15), while syntopic *M. vincta* often have broad transverse black elytral bands and a black head (Figs. 15Ae, 15Ag, type of *M. alternata* from Ethiopia similar to 15Ac, but with broader transverse black bands).

*Monolepta lepida* can be distinguished by the elongated second and third antennomeres (length of second to third antennomeres: 0.75–0.88, *M. vincta*: 0.86–1.00; length of third to fourth antennomeres: 0.46–0.54, *M. vincta*: 0.27–0.35) and the narrow pronotum (pronotal length to width: 0.63–0.67, *M. vincta*: 0.57–0.64).

**Distribution.** Most specimens are known from the Arabian Peninsula and this species is the only one from the Afrotropical Region that reaches the Palaearctic Region in Israel, Jordan, and Syria. Further few specimens are recorded from Eritrea, Somalia, eastern Sudan, and Egypt (Fig. 7).



**Fig. 14.** *Monolepta lepida* Reiche, 1858. A. Two different colour patterns. B. Basal antennomeres, males. C. Dto., females. D. Median lobe, a. lateral, b. dorsal, c. ventral, without endophallic structures. E. Spermathecae. F. Bursa-sclerite, dorsal. G. Dto., ventral.

***Monolepta vincta* Gerstaecker, 1871**

(Figs 7, 15)

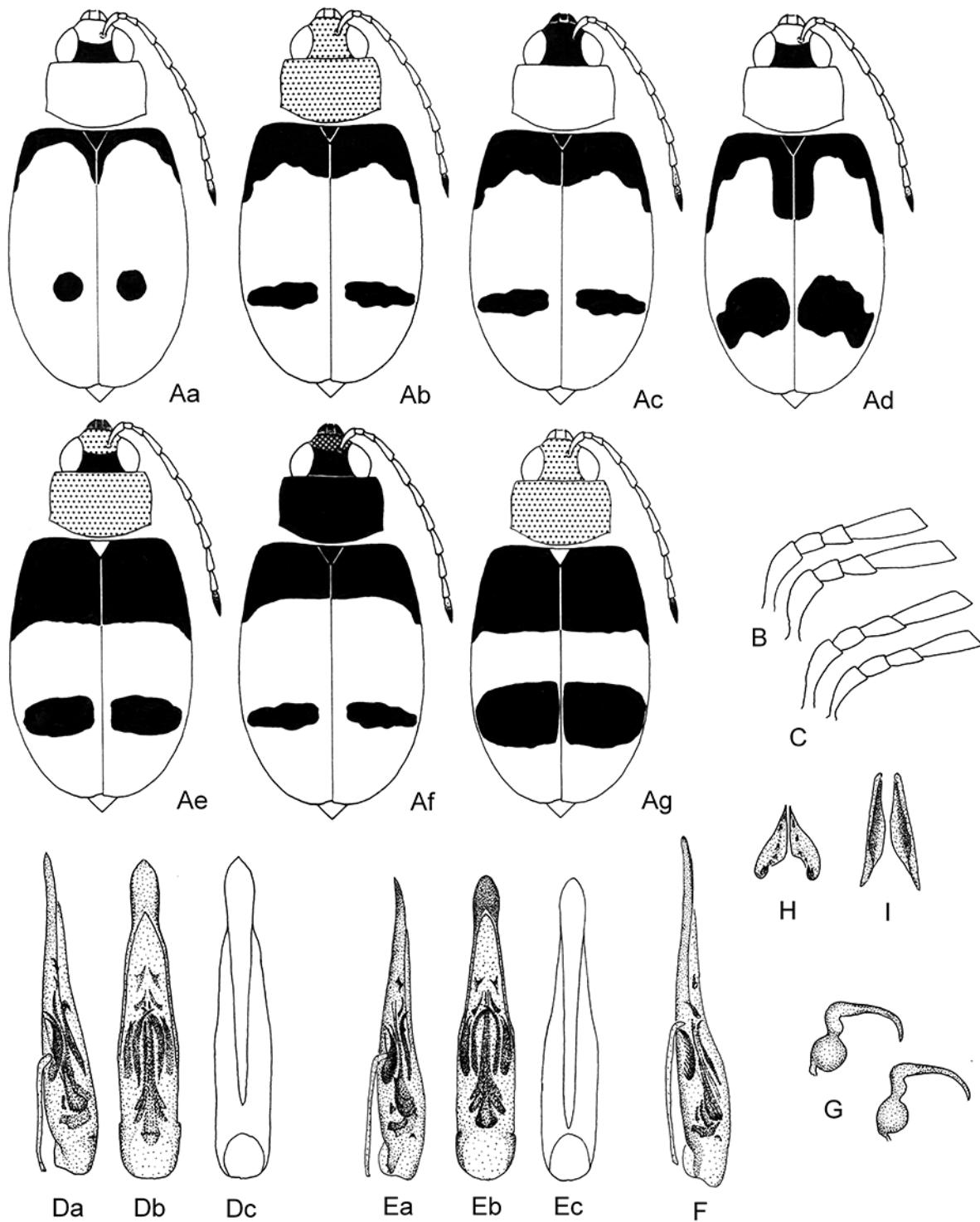
*Monolepta vincta* Gerstaecker, 1871: 83.= *Monolepta alternata* Chapuis, 1879: 23; Wagner 2005: 263.= *Monolepta insignis* Weise 1903: 212; Wagner 2005: 263.= *Monolepta sjöstedti* Weise, 1909: 212; Wagner 2005: 263.= *Monolepta ugandaensis* Laboissière, 1920a: 52; Wagner 2005: 263.= *Monolepta lusingensis* Laboissière, 1920b: 98; Wagner 2005: 263.= *Monolepta bouvieri* Laboissière, 1920b: 98; Wagner 2005: 263.= *Monolepta striola* Laboissière, 1920b: 98; Wagner 2005: 263.= *Monolepta consociata* Laboissière, 1920b: 99; Wagner 2005: 264.= *Monolepta rugifrons* Laboissière, 1920b: 99; Wagner 2005: 264.= *Monolepta femoralis* Laboissière 1940b: 66; Wagner 2005: 263.

**Further material examined.** 160 specimens, 46 findings. **Botswana.** 1 ex., Serowe, 22.54S/26.42E, IX.1987, malaise trap, P. Forchhammer (USNM). – **Ethiopia.** 1 ex., Wallo Prov., 11.30N/40.00E, V.1957, J. E. Lane (USNM); 6 ex., Rock Valley nr. Harar, 9.19N/42.8E, VI.1965, A. B. Gurney, entirely yellow, brownish abdomen, male with narrow brownish elytral base (BMNH). – **Ghana.** 1 ex., Akosombo, 8.16N/3.00E, VI.1973, L. Knutson (USNM). – **Ivory Coast.** 7 ex., Tai NP, 174 m, 5.50N/7.20W, canopy light, III.2017, Aristophanous et al. (BMNH); 6 ex., Mt. Tonkoui peak, 7.27N/7.38W, light, V.2016, Aristophanous et al. (BMNH); 5 ex., Mt. Nimba camp, 7.35N/8.25W, 823 m, V.2016, Aristophanous et al. (BMNH); 1 ex., Kromambira vill., 8.30N/3.37W, 220 m, VIII.2016, Aristophanous et al. (BMNH); 23 ex., Yeale Village, Mt. Nimba, 7.32N/8.25W, IV.2016, Aristophanous et al. (BMNH). – **Kenya.** 1 ex., Chuyulu Hills, 2.35S/37.50E, VI.1938 (USNM); 1 ex., Malindi, 3.13S/40.07E, V.1940, G. W. Jeffery (USNM); 3 ex., Tsavo NP, Kitani Lodge, 3.05S/38.40E, I.1968, Krombein & Spangler (USNM); 3 ex., Amboseli GR, 2.38S/37.14E, I.1968, blacklite, Krombein & Spangler (USNM). – **Liberia.** 1 ex., Mt. Coffee, 6.30N/10.39W, V.1897, coll. O. F. Cook (USNM); 1 ex., Bendija, 1940, W. M. Mann (USNM); 1 ex., Cape Mount, 7.10N/11.00W, 1940, W. M. Mann (USNM); 1 ex., Reputa, 1940, W. M. Mann (USNM); 1 ex., Tropita, IX.1952, on *Citrus*, coll. Blickenstaff (USNM). – **Nigeria.** 3 ex., Olokemeji, 7.20N/4.03E, IV.1936, van Zwaluwenburg & McGough (USNM); 3 ex., Ibadan, 7.23N/3.56E, V.1936, van Zwaluwenburg & McGough (USNM); 1 ex., Gindiri, 9.34N/9.14E, XII.1968 (USNM); 1 ex., Samaru Lake, 11.09N/7.41E, II.1978,

Don & Mignon Davis (USNM); 1 ex., Gashaka Gundi NP, 7.19N/11.35E, IV.2010 (BMNH). – **Sierra Leone.** 5 ex., Tiwai Island, 7.33N/11.21W, 120 m, VI.2016, Takano et al. (BMNH); 1 ex., Outambi-Kilimi NP, 9.40N/12.10W, IX.2009, malaise trap, Takano et al. (BMNH); 1 ex., Njala, 8.00N/10.00W, XI.1916, van Zwaluwenburg & McGough (USNM); 9 ex., Kambana, Moa River, 7.33N/11.05W, VI.2016, light trap, Takano et al. (BMNH); 5 ex., Tiwai Island, Moa River, 7.33N/11.21W, VI.2016, light trap, Takano et al. (BMNH); 5 ex., Loma Mountains, 1050 m, 9.11N/11.05W, VI.2016, light trap, Takano et al. (BMNH). – **South Africa.** 3 ex., Nysvley, 24.29S/28.42E, VI.1976, B. Levey (BMNH). – **South Sudan.** 1 ex., Kajokaji, 3.53E/31.40E, IV.1912, gift ex. MCZ Dupl. Series (USNM); 1 ex., Gilo, 4.02/32.51E, X.1979, A. L. Armstrong (USNM). – **Tanzania.** 1 ex., Lake Manyara, 3.36S/35.56E, 1926, Smithsonian Chryster Exp. (USNM); 5 ex., Est-Usambara, Amani, IX.2003, Th. Wagner (ZFMK); 26 ex., Kilimamoja, Kibaone, 3.23S/35.49E, IV.2012, Light trap, Smith & Takano (BMNH); 8 ex., Orekeryan, Mt. Longido, 2.43S/36.43E, VIII.2012, light trap, Smith et al. (BMNH); 1 ex., Gitting, Mt. Hanang, 4.24S/35.24E, 1946 m, XI.2011, Smith & Takano (BMNH); 1 ex., Mt. Meru NP; 3.14S/36.50E, IV.2012, Smith & Takano (BMNH); 1 ex., Ndarakwai, 3.01S/36.59E, 1310 m, IV.2012, Smith & Takano (BMNH); 1 ex., Maskati, Nguru Mits., 6.03S/37.29E, 1759m, X.2010, Smith & Takano (BMNH); 7 ex., Mt. Hanang, 4.24S/35.24E, 2434 m, V.2012, Smith & Takano (BMNH). – **Uganda.** 1 ex., Kampala, 0.19N/32.35E, VI.1940, A. F. J. Gedye (USNM). – **Zambia.** 2 ex., Kalungu, N. of Isoka, 9.41S/32.43E, 1280 m, XI.2016, Smith et al. (BMNH); 1 ex., Lukuli River, Manda NP, 12.15S/30.53E, XI.2012, Smith & Takano (BMNH); 1 ex., Nkwali, S. Lungwa, 13.07S/31.44E, XI.2012, Smith & Takano (BMNH); 3 ex., Greystone, Kitwe, 12.55S/28.14E, 1179 m, XI.2012, Smith & Takano (BMNH). – **Zimbabwe.** 2 ex. Malvern, 26.12S/28.06E, X.1897 (USNM).

**Remarks.** A detailed redescription was published in Wagner (2005, 2016). The type specimen of the valid name was described from Mombasa, Kenya. One of the numerous synonyms, *Monolepta alternata*, was described from Ethiopia. It is characterized by the black head and broad transversal bands (similar to Fig. 15Ac). One of the most abundant and wide spread species of *Monolepta* in Africa. Up to now (Wagner 2005, 2016) data on 3112 specimens out of 729 findings were studied.

**Diagnosis.** *Monolepta vincta* is most similar and very closely related to *M. melanogaster* and *M. lepida*. Both species are on average larger, and thus specimens smaller than 3.8 mm total length belong mainly to *M. vincta*. However, there is a high overlap in body size to *M. lepida* which is sympatric to *M. vincta* in North-East Africa.



**Fig. 15.** *Monolepta vincta* Gerstaecker, 1871. A. Seven different colour patterns. B. Basal antennomeres, males. C. Dto., females. D. Median lobe, a. lateral, b. dorsal, c. ventral, without endophallus structures. E–F. Dto., variations. G. Spermathecae. H. Bur-sa-sclerite, dorsal. I. Dto., ventral.

Next to the male genitalic patterns (Figs 14D, 15D–F), good diagnostic external characters are the lesser elongated second and third antennomeres and the broader pronotum in *M. vincta* (details see diagnosis of *M. lepida*). Other similar species like *M. melanogaster* Wiedemann, 1823, *M. buquetii* Chevrolat, 1836, *M. sharonae* Wagner, 2005, or *M. ronbeenenii* Wagner, 2005 occur only in southern and western Africa.

**Distribution and ecology.** This species is widely distributed and abundant in most parts of tropical Africa, but with increasing rarity in southern Africa (Fig. 7).

#### *Monolepta vinoso* Gerstaecker, 1871

(Figs 12, 16)

- Monolepta vinoso* Gerstaecker, 1871: 83.  
 = *Monolepta haroldi* Chapuis, 1879: 22; Wagner 2007: 106.  
 = *Monolepta buraensis* Laboissière, 1920: 52; Wagner 2007: 106.  
 = *Monolepta melanocta* Laboissiere, 1931b: 45; Wagner 2007: 106.  
 = *Monolepta neghellia* Laboissière, 1938: 146; Wagner 2007: 106.  
 = *Monolepta huamboensis* Laboissière, 1939; Wagner 2007: 106.

**Further material examined.** 27 specimens, 10 findings. **Ivory Coast.** 2 ex., 25 km N Bouake, 7.50N/5.00W, X.1971, black light trap, J. A. Gruwell (USNM). – **Kenya.** 1 ex., Rabur, 0.08S/34.49E, XI.1967, C. V. Reichart (USNM). – **Mozambique.** 12 ex., Delagoa Bay, 25.58S/32.25E, F. C. Bowditch, gift ex. MCZ Dupl. Series (USNM); 1 ex., Beira, 19.49S/34.52E, F. Monros coll 1959 (USNM). – **South Africa.** 1 ex., Durban, 29.51S/31.01E, F. C. Bowditch, gift ex. MCZ Dupl. Series (USNM). – **South Sudan.** 1 ex., Lado Distr., Nimule, 3.36N/32.04E, X.1912 (USNM). – **Tanzania.** 1 ex., Ukiriguru, 2.43S/33.01E, VI.1969, I. A. D. Robertson (BMNH). – **Uganda.** 1 ex., „Lado Distr.“, Wadalai, 2.50N/32.35E, X.1912 (USNM). – **Zambia.** 1 ex., 27 km E of Solwezi, 12.11S/26.30E, XI.2005 (NME); 6 ex., Kalungu, N. of Isoka, 9.41S/32.43E, 1280 m, XI.2016, Smith et al. (BMNH).

**Remarks.** A detailed redescription was published in Wagner (2007b, 2016). Type specimens for the valid name originated from Northern Tanzania. Two synonyms, *Monolepta haroldi* “Regione da boschiva Goudet ad Adoua 1000–2000 m 1873 / Abyss. Raffray“ (MCGD), coloration similar to Fig. 16Ab, and *Monolepta neghellia* “Cotype / Miss. E. Zavattari nei Borana A. O. I. Moralev. 1937” (ZMUH), coloration similar to Fig. 16Aa but with entirely black head, were described from Ethiopia. Up to now 1388 specimens out of 262 findings are revised.

**Diagnosis.** *Monolepta vinoso* is one of the largest African *Monolepta* species (total length 4.3–7.1 mm), and most specimens with cross-like elytral pattern longer than 5.5 mm belong to this species. The colour pattern of extended black elytral base, entirely red suture, a subapical black spot that is finely reddish margined (Fig. 16Ac) is very characteristic and allows an easy differentiation from all other species. Some specimens with reduced red suture (Fig. 16Ac) are somewhat similar to very few large *M. cruciata* and the syntopic *M. euchroma*. In those specimens a dissection of the genitalia in both sexes with characteristic structures allows a clear differentiation (Figs 5, 13, 16). For more details for *M. euchroma* see there.

**Distribution and ecology.** One of the most abundant Afrotropical species of *Monolepta*, mainly from savannahs but also known from forest regions (Fig. 12).

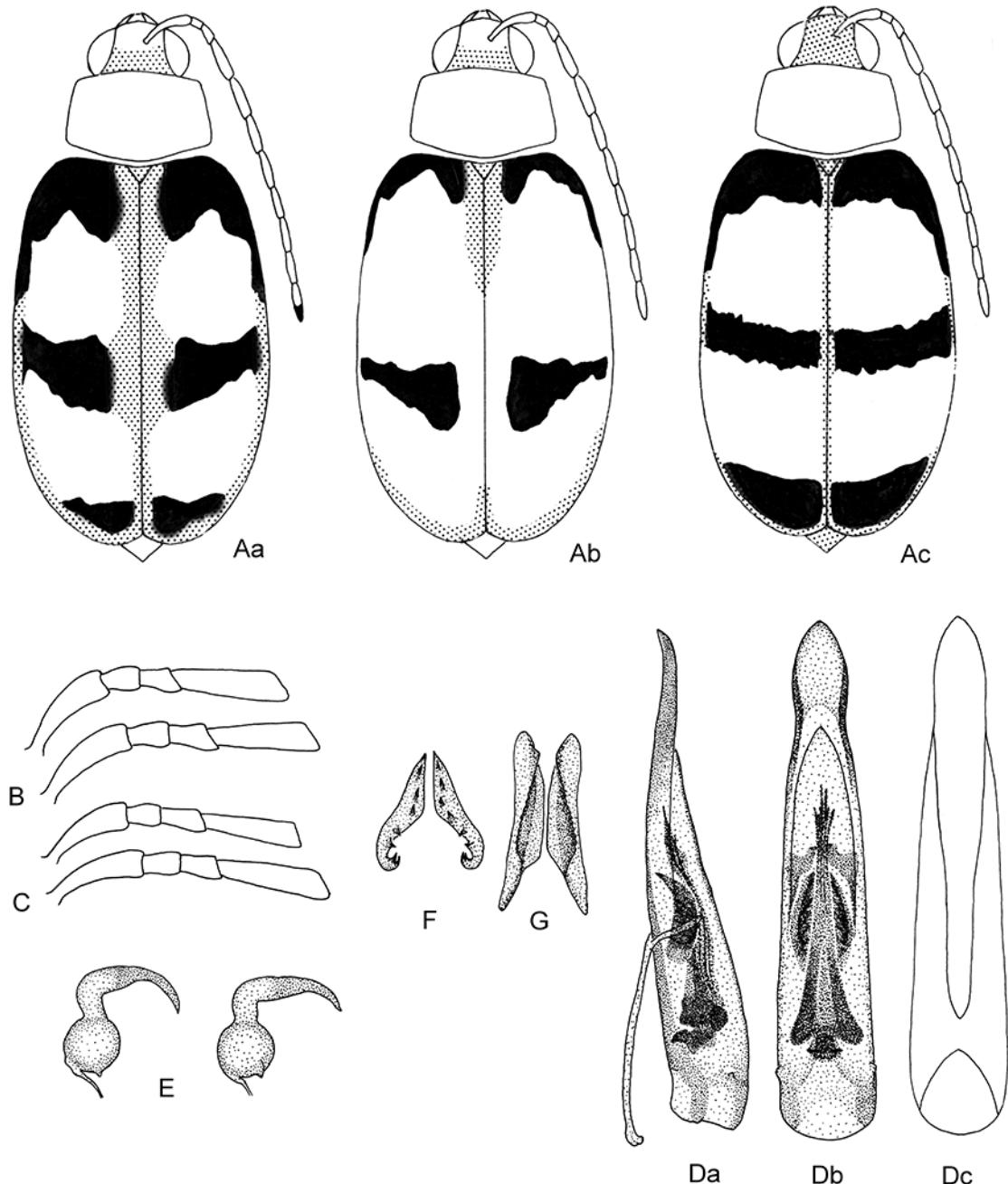
#### *Monolepta ephippiata* Gerstaecker, 1871

(Figs 12, 17)

- Monolepta ephippiata* Gerstaecker, 1871: 84.  
 = *Monolepta sordida* Chapuis, 1879: 23; Wagner 2007: 112.  
 = *Monolepta ephippiata* var. *keniaensis* Laboissiere, 1920: 52; Wagner 2007: 112.  
 = *Monolepta leakeyi* Bryant, 1953: 866; Wagner 2007: 112.  
 = *Monolepta turneri* Bryant, 1953: 867; Wagner 2007: 112.

**Further material examined.** 22 specimens, 10 findings. **Ethiopia.** 1 ex., Oromia reg., Lava fields, nr. Feto, 8.40N/39.29E, 1367 m, V.2011, V. Hula & Niedobova (CBz); 1 ex., Afar, Metahara, 9.10N/39.51E, 1052 m, V.2011, Hula & Niedobova (CBz). – **Kenya.** 1 ex., Mt. Elgon, Salt Lake Estate, 1.08N/34.40E, 2100 m, 17.XII.1937, A. Holm (NHRS); 1 ex., Nantuki, 0.01N/37.04E, II.1968, K. V. Krombein (USNM); 2 ex., Umg. Nairobi, XII.1970, Lichtfang, D. Erber (MNHB); 1 ex., Naro Moru, 0.10S/37.01E, VIII.1978, G. Scudder (BMNH); 5 ex., Lake Naivasha, 0.45S/36.35E, shrub margin, X.2005 (BMNH). – **Tanzania.** 1 ex., Lake Manyara NP, 3.23S/35.52E, XI.2011, Smith & Takano (BMNH); 8 ex., Orekeryan, Mt. Longido, 2.43S/36.43E, VIII.2012, light trap, Smith et al. (BMNH). – **Uganda.** 1 ex., Kakamega Forest, 0.21N/34.52E, VII.2002 (MNHB).

**Remarks.** A detailed redescription on base of 94 specimens out of 45 findings was published in Wagner (2007b). Type locality of the valid name is Lac Jipe in Northern Tanzania. One synonym from Ethiopia is *M. sordida*, Holotype, #, “Abyss. Raffray / 770 / *Monolepta sordida* Chp / Typus *Monolepta sordida*, 1879 / *Regione degli*

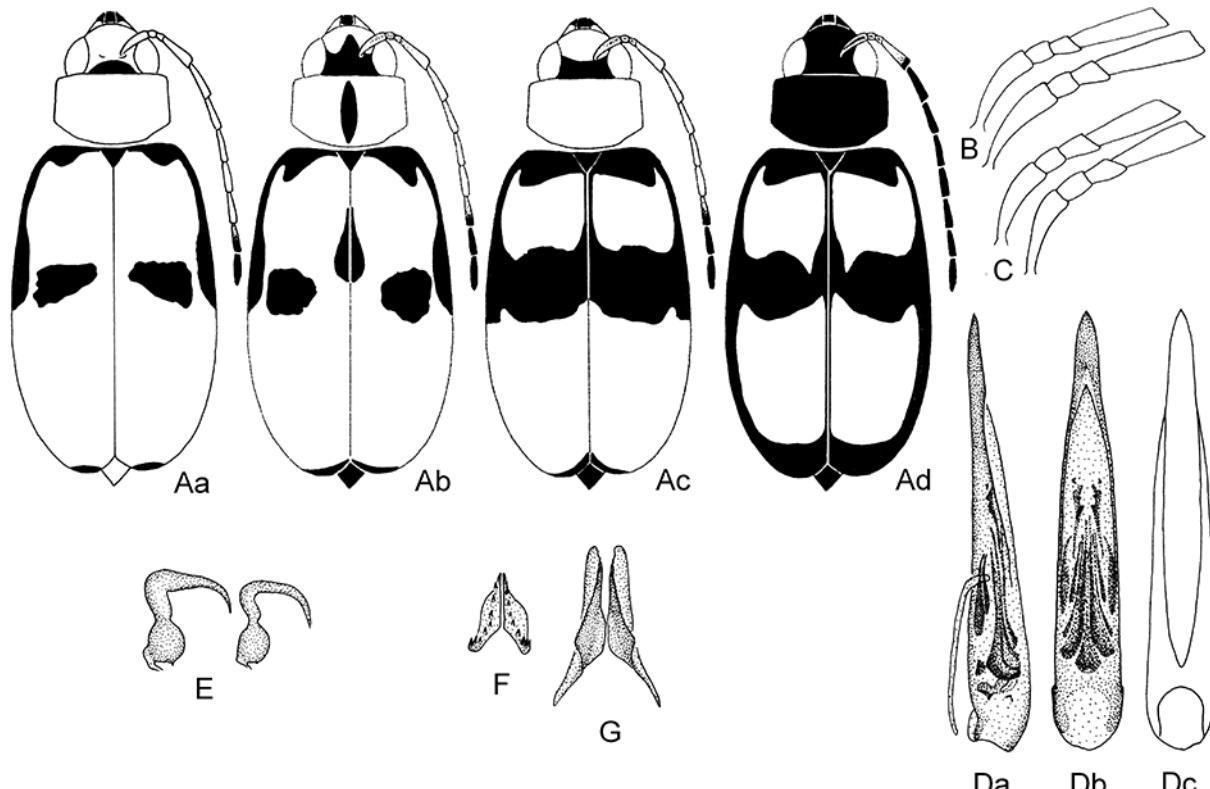


**Fig. 16.** *Monolepta vinosa* Gerstaecker, 1871. A. Three different colour patterns. B. Basal antennomeres, males. C. Dto., females. D. Median lobe, a. lateral, b. dorsal, c. ventral, without endophallic structures. E. Spermathecae. F. Bursa-sclerite, dorsal. G. Dto., ventral.

Agaos XI 1873 Dal fiume Méri Taccazé" (MCGD), coloration similar to Fig. 17Ad.

**Diagnosis.** A small and slender body with peculiar elytral pattern (Fig. 17A) characterizes *M. ephippiata* and

allow a clear differentiation from all other Afrotropical *Monolepta* species. The apical half of the elytra is usually completely yellow with exception of the elytral tip. Most similar in coloration is the allopatrically distributed



**Fig. 17.** *Monolepta ephippiata* Gerstaecker, 1871. A. Four different colour patterns. B. Basal antennomeres, males. C. Dto., females. D. Median lobe, a. lateral, b. dorsal, c. ventral, without endophallic structures. E. Spermathecae. F. Bursa-sclerite, dorsal. G. Dto., ventral.

*M. ephippiatooides* Wagner, 2001, which is restricted to southern Africa. It has a more extended black apical elytral coloration, and a reddish head which is contrasting to the yellow pronotum. It is not closely related since the genitalic characters of both sexes are very different from that of *M. ephippiata*.

**Distribution and ecology.** Restricted to montane areas in East and North-East Africa from Ethiopia through Kenya towards northern Tanzania and Rwanda (Fig. 12). Very abundant in the Rift Valley and the Central Province of Kenya.

#### *Monolepta citrinella* Jacoby, 1899

(Figs 10, 18)

*Monolepta citrinella* Jacoby, 1899: 375.

= *Monolepta michaelseni* Weise, 1914: 265; Wagner 2016: 424.

= *Monolepta eburnea* Laboissière, 1920: 99; Wagner 2016: 424.

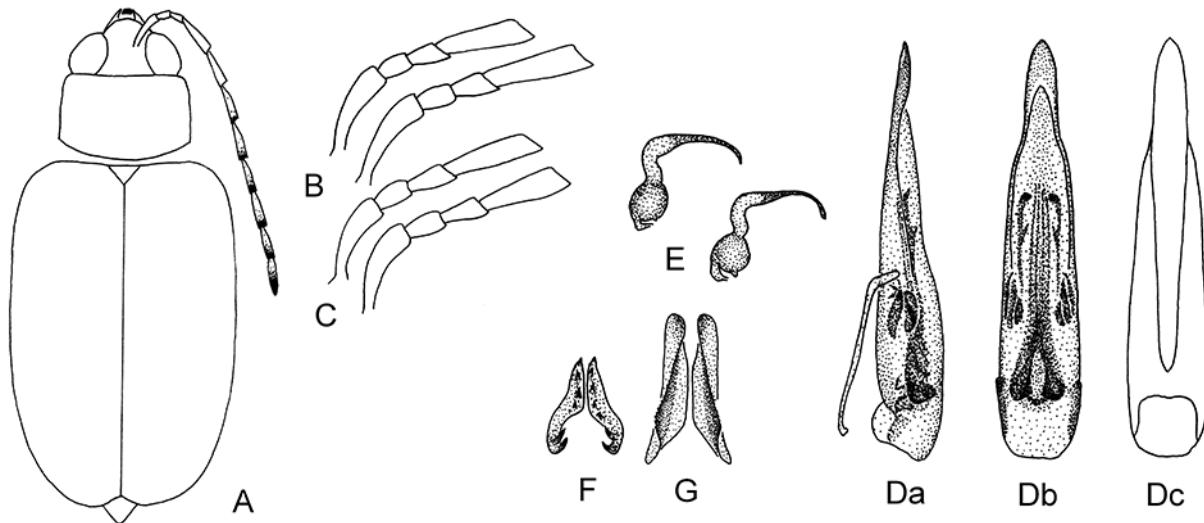
= *Monolepta poriensis* Laboissière, 1920: 100; Wagner 2016: 424.

= *Monolepta oryzae* Bryant, 1948: 62; Wagner 2016: 424.

#### **Further material examined.** 24 specimens, 9 findings.

**Botswana.** 1 ex., Mochudi, 24.23S/26.09E, XII.1979, C. R. Owen (BMNH). – **Ethiopia.** 2 ex., Rock Valley nr. Harar, 9.19N/42.08E, VI.1965, A. B. Gurney (USNM). – **Mozambique.** 1 ex., Maputo Special Reserve, West Gate, 26.30S/32.43E, VI.2017, Aristophanous et al. (BMNH). – **South Africa.** 4 ex., RSA, NW Prov., Kleks-dorf, 26.52S/26.40E, I.2001, Snizek (NME). – Tanzania. 7 ex., Ukariguru, 2.43S/33.01E, IX.1960, I. A. D. Robertson (USNM); 4 ex., Malya, IV.1960, I. A. D. Robertson (USNM); 2 ex., Tarime, 1.21S/34.23E, X.1959, I. A. D. Robertson (USNM). – **Zambia.** 1 ex., Victoria Falls, 17.5S/25.51E, VI.1968, P. Spangler (USNM); 1 ex. Kafue, XII.1919, Univ. Film ex., H. C. Laven (USNM).

**Remarks.** A detailed redescription was published in Wagner (2016), where 1331 specimens out of 225 findings are revised. The type specimen for the valid name originated from Natal in South Africa.



**Fig. 18.** *Monolepta citrinella* Jacoby, 1899. A. Colour patterns. B. Basal antennomeres, males. C. Dto., females. D. Median lobe, a. lateral, b. dorsal, c. ventral, without endophallic structures. E. Spermathecae. F. Bursa-sclerite, dorsal. G. Dto., ventral.

**Diagnosis.** *Monolepta citrinella* is characterized by its entirely yellow coloration. Some specimens are pale yellow, rarely whitish. It is the only species with this coloration in North-East Africa. Other species with entire yellow dorsum like *M. livingstoni* (Jacoby, 1900), *M. pimenteli* Laboissière, 1939, and *M. hiekei* Wagner, 2016 are all restricted to southern Africa.

**Distribution and ecology.** Widely distributed in savannahs and semi-deserts up to desert biomes in tropical Africa (Fig. 10). This almost pan-africotropical distribution has resulted in a large number of synonyms. Many specimens were collected by light trapping (some of them in moth traps, and then completely covered by lepidopteran scales). The absence of an aposematic pattern and large eyes are also typical characters of nocturnal beetles.

#### *Monolepta leuce* Weise, 1903

(Figs 4, 19)

*Monolepta leuce* Weise, 1903: 214.

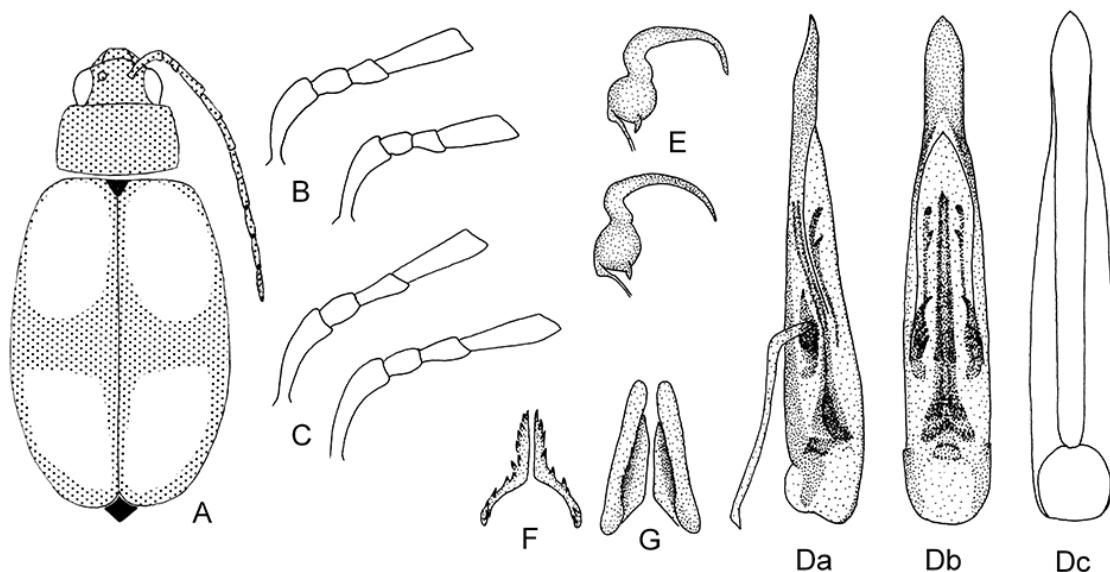
= *Monolepta puncticeps* var. A. Chapuis, 1879: 24.

**Further material examined.** 49 specimens, 17 findings. **Eritrea.** 7 ex., Umg. Asmara, 15.20N/39.00E, VII.2001, L. & M. Stalmans (IRSN). – **Ethiopia.** 15 ex., Alemaya, 9.24N/42.01E, Bob Hill, Celtis Africana, VI.1964 (USNM); 1 ex., Wolisso, Ghion, 8.32N/37.58E, VI.1965, A. B. Gurney (USNM); 5 ex., Rock Valley nr. Harar, VI.1965, A. B. Gurney (USNM); 5 ex., Alemaya, VI.1965, A. B. Gurney (USNM); 2 ex., Jimma, 7.40N/36.50E, VII.1965, A. B. Gurney (USNM); 3 ex., Addis, IV.1971, B. Feinstein (USNM). – **Kenya.** 1 ex.,

Lombwua, 0.02S/37.35E, Sandb. (NHRS); 1 ex., Mt. Elgon, V. Clausnitzer (ZFMK); 1 ex., 30 min., NW Nairobi, I.1968, K. V. Krombein (USNH); 1 ex., Nyeri, 0.25S/36.57E, II.1968, P. J. Spangler (USNM); 1 ex., Gatamayu, 0.58S/36.42E, 2330 m, II.1999, Th. Wagner (ZMFK); 1 ex., L. Naivasha, 0.23S/36.26E, sweeping Lake margin, X.2005 (CDr). – **Tanzania.** 1 ex., Ngorongoro, 3.11S/35.34E, VIII.1978, G. Scudder (BMNH); 1 ex., Segera Camp am Highway Hotel, 5.19S/38.33E, 325 m, 23.II.2008, U Heinig (CHe); 1 ex., Gonja, Chome NR, Soth Pare Mts., 4.15S/37.58E, XII.2011, Smith & Takano (BMNH); 2 ex., Mt. Meru NP; 3.14S/36.50E, IV.2012, Smith & Takano (BMNH).

**Remarks.** A detailed redescription was published in Wagner (2007b) that based on 755 studied specimens. Next to the female lectotype from Tanzania “Type / Mombo 7.99 / *Monolepta leuce* m. / ex. coll. J. Weise” (MNHB), a „variation type“ of *Monolepta puncticeps* var. A., a species synonymised with *M. cruciata* Guérin de Méneville, 1847 was described from Ethiopia “Abyss. Raffray / *Monolepta puncticeps* Chap. Type var.”. The younger name *M. leuce* has priority since the older name is infra-subspecific and thus not available, because a single letter as species name is not conform with the ICZN rules (cf. 11.9.1.).

**Diagnosis.** Most similar to *M. pauperata* which occurs allopatrically in lowland areas of Western Africa and can be easily distinguished by completely yellowish-red underside and the distinct elytral coloration. *Monolepta deleta* that is sympatric in Kenyan and Tanzanian High-



**Fig. 19.** *Monolepta leuce* Weise, 1903. A. Colour patterns. B. Basal antennomeres, males. C. Dto., females. D. Median lobe, a. lateral, b. dorsal, c. ventral, without endophallic structures. E. Spermathecae. F. Bursa-sclerite, dorsal. G. Dto., ventral.

lands, is on average smaller, elytra are broader and the pronotum is narrower and more bulged than in *M. leuce*. Most evident are the complete black antenna and legs of *M. deleta*. There are very few *M. cruciata* with pale elytral coloration similar to *M. leuce* (Figs 13Ad, 19A), but there is at least at black spot at humerus and black subhumeral margins.

**Distribution and ecology.** An abundant species of predominantly montane areas along the East African Rift from Eritrea through Ethiopia, Kenya, Tanzania southwards to Lake Malawi (Fig. 4).

#### *Monolepta jeanneli* Laboissière, 1920

(Figs 2, 20)

*Monolepta jeanneli* Laboissière, 1920: 51.

= *Monolepta burgeoni* Laboissière, 1940: 71; Wagner 2000: 230.

= *Monolepta seminigra* Bryant, 1953: 868; Wagner 2000: 230.

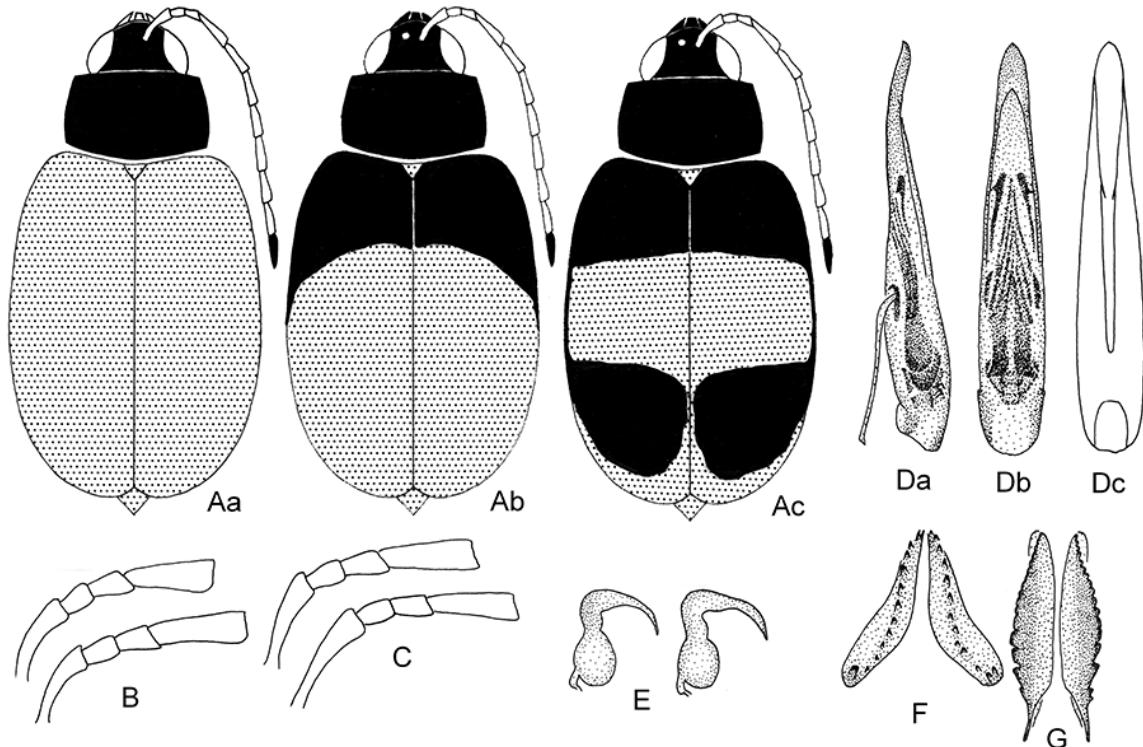
= *Monolepta pallipes* Bryant, 1953: 867; Wagner 2000: 230.

= *Monolepta kiwuensis* Weise, 1924; syn. nov.

**Type material.** New synonymy: *Monolepta kiwuensis* Weise, 1924: Holotype, female, „Ituru områd. / Kivu sjön / *Monolepta kiwuensis* m. / Holotypus *Monolepta kiwuensis* Weise, 1924 / *Monolepta jeanneli* Laboissière, 1920 Th. Wagner det.“ (NHRS). Holotype by indication in the original publication „Kiwu See, 1 ♀“.

#### Further material examined.

26 specimens, 19 findings.  
**Congo (Democratic Republic).** 1 ex., Parc Nat. Garamba, Mt. Tungu, VI.1952, Miss. H. de Saeger (MRAC); 1 ex., Parc Nat. Albert, Munagana, 1.18S/29.36E, VIII.1934, G. F. de Witte (IRSN). — **Ethiopia.** 2 ex., Lake Shola, 170 km S of Addis Abeba, 7.40N/38.40E, XI.1990, Fabaceae, L. Medvedev (CMe). — **Kenya.** 1 ex., Chyulu Hills, 2.35S/37.50E, V.1976, ca. 1500 m, J. Krikken (NNML); 1 ex., Mt. Elgon, Kaptega, 1.16N/34.52E, 1980 m, I.1979, T.-E. Leiler (NHRS); 1 ex., Nairobi, 1.17S/36.50E, II.1979, T.-E. Leiler (NHRS); 2 ex., Mt. Elgon, nr. Chepnyalli Cave, dry evergreen montane forest, 2500 m, no. 509, at light, I.1992, O. Merkl & G. Várkonyi (HNHM); 3 ex., Hells Gate NP, 0.56S/36.19E, Tarchonanthus, IV.1998 (CDr); 2 ex., Ol-Njoroma Gorge, Hells Gate, IV.1997 (CDr); 1 ex., Hells Gate NP, sweeping Lake margin, X.2005 (CDr). — **Tanzania.** 1 ex., Morogoro, 6.59S/37.40E, 580 m, light trap, III.–IV.1987, Pócs & Sontera (HNHM); 1 ex., Seronera, XII.1995, lumière, ex. coll. J. Roggeman (CBe); 1 ex., Tanz., 1250 m, 3°50S/30.42E, pr. Igoma, XII.2006, F. Kantner (CKa); 1 ex., Ngorongoro, Sima camp, 2319 m, 3.13S/35.29E., IV.2012, Light trap, Smith & Takano (BMNH); 1 ex., Kilimamoja, Kibaone, 3.23S/35.49E, IV.2012, Light trap, Smith & Takano (BMNH). — **Uganda.** 1 ex., 0.19N/32.35E, Kampala (ZMUH); 1 ex., Kibale Forest, 0.50N/31.06E, Sweep pine, IV.1984, M. Nummelin (MZHF); 1 ex., Budongo F, near Sonso river, 1.45N/31.35E, Th. Wagner (ZFMK); 2 ex., SE of Hoima, XI.2001, Snizek (NME).



**Fig. 20.** *Monolepta jeanneli* Laboissière, 1920. **A.** Three different colour patterns. **B.** Basal antennomeres, males. **C.** Dto., females. **D.** Median lobe, **a.** lateral, **b.** dorsal, **c.** ventral, without endophallic structures. **E.** Spermathecae. **F.** Bursa-sclerite, dorsal. **G.** Dto., ventral.

**Remarks.** A detailed redescription was published in Wagner (2000), based on 175 specimens out of 93 findings. The type material of the valid name originate from the Kikuyu Escarpment in Central Kenya.

**Diagnosis.** Characterized by large, broad size, red elytral coloration, pale yellow legs and antennae. In Ethiopia and Eritrea the only *Monolepta* species with predominantly red dorsal coloration.

**Distribution.** Quite common in Central and East Africa from lowland to montane regions, very rare in northeast Africa (Fig. 2).

#### IDENTIFICATION KEY

The following key can be used for all specimens of “true” *Monolepta* from North-East Africa, including the states Egypt, Sudan, South-Sudan, Ethiopia, Eritrea, Djibouti and Somalia. Up to now, 15 species of *Monolepta* are known from this region, seven of them endemic to the area, mainly from the Ethiopian Highlands.

- 1 Upperside completely yellow; basal antennomeres very slender (Fig. 18B, C); total length 4.0–5.2 mm. Widely distributed in the Afrotropical Region, rarely found in North-East Africa (Fig. 10). – N.B: Several species of galerucines with elongated basimetatarsus, possessing an entirely yellow coloration are known from Africa, some of them originally described in *Monolepta*, but do not belong to this group. Allocation to the genus should be confirmed by genital dissection in doubtful cases.....  
..... *M. citrinella* Jacoby, 1899
- Elytra carmine red, yellow with reddish outer margins, or yellow with black markings ..... 2
- 2 Elytra entirely carmine red (Fig. 20Aa), often with broad black base (Fig. 20Ab), rarely with additional black band in the apical third (Fig. 20Ac); large and broad species, total length 4.50–5.10 mm; ratio length of elytron to maximal width of both elytra 0.72–0.76. Mainly in wet tropical forests of Central and East Africa, rarely found in the Ethiopian Highlands (Fig. 2) ..... *M. jeanneli* Laboissière, 1920
- Elytra yellow, with black markings (e.g. Figs 1A, 5A, 9A, 15A), sometimes with red suture (Figs 13Ab,

- 16A), or with completely red outer margins (Figs 13Ad, 19A) ..... 3
- 3 Elytra black at base, usually as broad band, and one further transverse black band, rarely reduced to a smaller spot (Fig. 15Aa, Ac), in the apical third of elytra; elytral outer margins and apex not black (Figs 14A, 15A) ..... 4
- Elytra yellow, with black markings (e.g. Figs 1A, 5A, 9A), with or without transverse black band in the middle, and usually with black elytral tip and outer margins, sometimes with red suture (Figs 13Ab, 16A), or with completely red outer margins (Figs 13Ad, 19A) ..... 5
- 4 Third antennomere significantly longer than second, length of second to third antennomere 0.75–0.88 (Fig. 14B–C), and about half as long as fourth antennomere, length of third to fourth antennomere 0.46–0.54; pronotum comparatively slender, prontal length to width 0.63–0.67; larger, total length 3.8–5.3 mm; apex of median lobe slightly spoon-like enlarged (Fig. 14D). Abundant in coastal regions of North-East Africa, the Near East and the Arabian Peninsula (Fig. 7) ..... *M. lepida* Reiche, 1858
- Third antennomere shorter, roughly of same length as second, length of second to third antennomere 0.86–1.00, length of third to fourth antennomere 0.28–0.37 (Fig. 15B–C); pronotum broader, prontal length to width 0.58–0.65; on average smaller, total length 3.2–4.7 mm; apex of median lobe more slender, parallel-sided (Fig. 15D–F); most specimens from North-East Africa like coloration type Fig. 15Ae. Abundant species throughout tropical Africa with exception of the South (Fig. 7) ..... *M. vincta* Gerstaecker, 1871
- 5 Elytra with completely red outer margins (Figs 13Ad, 19A) ..... 6
- Elytra at least with significant black base (e.g. Figs 1A, 6A, 17A), rarely with narrow black outer margins and suture (Figs 9Aa, 11Aa) ..... 7
- 6 Dorsum reddish to reddish-brown, elytra with yellow ovate spots in the basal and apical half, separated by a reddish transverse band (Fig. 19A); underside and scutellum contrasting black; total length 3.7–5.3 mm. Restricted to and abundant in the East African Rift and adjacent areas, predominantly montane zones from Eritrea and Ethiopia through Kenya and Tanzania towards Lake Malawi (Fig. 4). ..... *M. leuce* Weise, 1903
- At least with black humeral tip; scutellum and underside yellow (Fig. 13Ad); rare coloration (see duplett 8) .... *M. cruciata* Guérin de Méneville, 1849
- 7 Elytra with entirely (Fig. 16Aa, Ac) or partly red suture (Figs 5A, 13Ab, 16Ab) ..... 8
- Elytra only yellow with dark brown to black markings ..... 10
- 8 Large, total length 4.3–7.1 mm; usually with three black transverse bands and entirely red suture (Fig. 16Aa, Ac), or at least subscutellar red sutural stripe and red scutellum (Fig. 5A, 16Ab); basal antennomeres slender (Figs 5B–C; 16B–C); median lobe broad lanceolate at apex (Figs 5D, 16D), spermatheca with large spherical nodulus (Figs 5E, 16E) ..... 9
- Smaller, total length 4.1–5.2 mm; cross-like elytral pattern with narrow black or partly red outer margins and suture, if suture partly red, subscutellar base black (Fig. 13Ab); basal antennomeres broader, in particular in males (Fig. 13B); median lobe narrowed and slender at apex (Fig. 13D–E), spermatheca with smaller spherical nodulus (Fig. 13F). With exception of the West, one of the most abundant *Monolepta* species in Africa, also frequently found in Ethiopia (Fig. 2) ..... *M. cruciata* Guérin de Méneville, 1849
- 9 Elytra with broad transverse black band, only narrow red along the basal part of suture and at elytral tip, no red along outer suture (Fig. 5A); median lobe more slender, ventral groove narrow, lateral endophallic spiculae have a small apical enlargement (Fig. 5D); rare endemic species of the Ethiopian Highlands (Fig. 2) ..... *M. euchroma* Fairmaire, 1883
- Elytral transverse bands usually narrower, suture entirely red (Fig. 16Aa, Ac) and/or outer elytral margins partly red (Fig. 16Aa–Ac); median lobe broader, ventral groove broader in the middle, lateral endophallic spiculae with hammer-like enlargement (Fig. 16D); widely distributed and abundant throughout the Afrotropical Region (Fig. 12) ..... *M. vinoso* Gerstaecker, 1871
- 10 Elytra with entirely black outer margins and suture, without (Figs 9Aa, 9Ab, 11Aa), or with median transverse band, given a cross-like pattern (Figs 8A, 9Ac, 9Ad, 11Ab, 13Aa, 13Ac) ..... 11
- Elytra not entirely black at margins, usually only in the basal half, without median transverse band and cross-like pattern (Figs 1A, 3A, 6A, 17A) ..... 16
- 11 Pronotum red with significant black margins (Fig. 8A); large, 5.20–5.60 mm; median lobe very broad (Fig. 8D); restricted to Eritrea, Ethiopia and Sudan (Fig. 7) ..... *M. marginethoracica* Laboissière, 1940
- Pronotum yellow to reddish-yellow, without black margins, or entirely black; smaller, 3.90–5.20 mm; median lobe of other type ..... 12

- 12** Elytra with black suture and margins only, without transverse band (Figs 9Aa, 9Ab, 11Aa) ..... **13**
- Elytra with cross-like pattern due to four yellow spots (Figs 9Ac, 9Ad, 11Ab, 13Aa, 13Ac) ..... **14**
- 13** Pronotum broad, pronotal length to width 0.57–0.63 (Fig. 9A), yellow or black; total length at least 3.9 mm, apex of median lobe very slender, parallel-sided (Fig. 9D); abundant and endemic in the Ethiopian Highlands (Fig. 10)..... *M. nigrocruciata* Laboissière, 1940
- Pronotum more slender, pronotal length to width 0.62–0.67 (Fig. 11A), black; smaller, total length 3.5–4.7 mm, apex of median lobe broad, spoon-like (Fig. 11D); abundant and endemic in the Ethiopian Highlands (Fig. 12) .. *M. gobensis* Laboissière, 1940
- 14** Elytra relatively broad, width of both elytra to length of elytron 0.66–0.74; apical part of median lobe slender, conical (Fig. 13D–E); head and pronotum usually yellow (Fig. 13Ac), if pronotum red, at least base yellow (Fig. 13Aa, Ab) (see duplett 8).....  
*M. cruciata* Guérin de Méneville, 1849
- Elytra more slender, width of both elytra to length of elytron 0.62–0.70; apical part of median lobe slender, but more parallel-sided (Fig. 9D) or broad at apex (Fig. 11D); head and pronotum entirely red (Fig. 9Aa–9Ac) or black (Figs 9Ad, 11Ab) ..... **15**
- 15** Apex of median lobe very slender, parallel-sided (Fig. 9D) (see duplett 13) .....  
*M. nigrocruciata* Laboissière, 1940
- Apex of median lobe broad, spoon-like (Fig. 11D) (see duplett 13)..... *M. gobensis* Laboissière, 1940
- 16** Elytra with broad black base, triangularly enlarged along suture (Fig. 3A); large 4.8–5.6 mm; median lobe broad conical towards apex (Fig. 3D); very abundant endemic in the Ethiopian Highlands (Fig. 4)..... *Monolepta postrema* Chapuis, 1879
- Elytra narrow black at base (Figs 1A, 3A, 16A); usually smaller 3.6–5.4 mm; median lobe different..  
**17**
- 17** Elytra with saddle-like black coloration (Fig. 17A); small, total length: 3.6–4.8 mm; median lobe dorso-ventrally compressed, conical, pointed at apex (Fig. 17D); restricted to montane areas of Ethiopia, Uganda, Kenya, Rwanda and northern Tanzania (Fig. 12)..... *M. ephippiata* Gerstaecker, 1871
- Basal half of elytra with narrow black base and margin, along suture somewhat enlarged towards the middle (Figs 1A, 6A); same size or larger; median lobe enlarged at apex (Figs 1D, 6D) ..... **18**
- 18** Smaller, 4.0–4.8 mm; elytra more slender, width of both elytra to length of elytron 0.62–0.70; pronotum red (Fig. 1A); median lobe slender, lateral spiculae twisted (Fig. 1D); rare endemic species of the Ethiopian Highlands (Fig. 2).....  
*Monolepta longiuscula* Chapuis, 1879
- Larger, 4.6–5.4 mm; elytra slightly broader, width of both elytra to length of elytron 0.62–0.68; pronotum yellow (Fig. 6A); median lobe broader, lateral spiculae straight (Fig. 6D); rare endemic species of the Ethiopian Highlands (Fig. 2).....  
*Monolepta nigropicta* Laboissière, 1938

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