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## The Afrotropical genera of the subtribe Meriina (Hymenoptera, Tiphidae, Myzininae)

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**Abstract:** An extended key of the genera of the tribe Meriina, including taxa of the afrotropical fauna, is proposed. Three genera, *Afromeria*, *Allomeria*, *Meriodes* and four species, *Afromeria microtera*, *Afromeria poliorykta*, *Meriodes picea*, *Macromeria rhousiogastra* are described for the first time. New combinations are established: *Myzine capicola* (TURNER 1913) under *Afromeria*; *Myzine braunsi*, *Myzine eurygaster* (TURNER 1916) and *Myzine ceresensis* (TURNER 1926) under *Meriodes*; *Myzine (Pseudomeria) semirufa* GERSTAECKER 1857, *Myzine (Meira) immaculata* CAMERON 1910 and *Myzine infradentata* (TURNER 1913) under *Macromeria* S. SAUNDERS 1850; *Myzine pinguis* (TURNER 1916) under *Allomeria*. Lectotypes of *Myzine eurygaster* and *Myzine ceresensis* are designated.

**Key words:** Myzininae, *Afromeria*, *Allomeria*, *Macromeria*, *Meriodes*.

### Introduction

The subtribe Meriina was proposed as natural group by BONI BARTALUCCI (2004), with an enclosed key restricted to the genera of the Palaearctic Region. The impetus for the present paper was the goal to complete the generic revision of the subtribe, whose members actually range through Palaearctic and Afrotropical Regions. The examination of a lot of material from BMNH, SAM, TMP and NNM permitted to try a more comprehensive treatment, extended to Afrotropical fauna. A lot of new species, most belonging to *Meria*, have been recognised and most of them will be described in a paper apart while some of these show several particular character states and/or their combination that elsewhere have been typically considered to hold taxonomical consistence at generic level within the subfamily. Their eventual inclusion into older generic groups could cause loss of taxonomic settlement, especially about the well established genera *Meria* and *Poecilotiphia*, therefore the choice to adopt new generic taxon names has been made, feeling confident that more copious material and chiefly more knowledge about sex associations could be add other arrangements. The evolutionary meaning of most of the character states appears actually quite obscure. They are described, illustrated and discussed below within the frame of an extended generic key based upon the revision of the aforesaid key previously established for the Palaearctic taxa which are otherwise only named here without any commentary about. Among the latters only *Meria* and *Myzinella* representatives have been so far recorded from Afrotropical Region too, the biogeographic meaning of which was previously proposed in BONI BARTALUCCI (2004).

### Material and methods

The terminology used in the descriptions follows BONI BARTALUCCI (2004).

Abbreviations. Those referred to the wing structures are in italics and those referred to the wing veins excluded.

<b>A</b> = height (Altitudo)	<b>MPS</b> = Multiporous Plate Sensillum
<b>Ca</b> = head (Caput)	<b>N<sub>1</sub></b> = proNotum.
<b>CB</b> = basal cell (Cella Basalis)	<b>N<sub>3</sub></b> = metaNotum.
<b>CC</b> = costal cell (Cella Costalis)	<b>O</b> = eye (Oculus)
<b>CD</b> = discoidal cell (Cella Discoidalis)	<b>ol</b> = lateral ocellus (ocellus lateralis)
<b>CHy</b> = hypostomal keel (carina Hypostomae)	<b>om</b> = median ocellus (ocellus medianus)
<b>CM</b> = marginal cell (Cella Marginalis)	<b>p.</b> = puncture (-s), punctured
<b>cOc</b> = carina Occipitis (-alis).	<b>P</b> = Propodeum
<b>CPM</b> = paramarginal cell (Cella Para Marginalis)	<b>Pal</b> = labial palpus (Palpus labialis)
<b>CSB</b> = sub basal cell (Cella Sub Basalis)	<b>Pam</b> = maxillary palpus (Palpus maxillaris)
<b>CSD</b> = sub discoidal cell (Cella Sub Discoidalis)	<b>PoG</b> = genal bridge (Pons Genarum).
<b>CSM</b> = sub marginal cell (Cella Sub Marginalis)	<b>Sc<sub>1</sub></b> = Scutum.
<b>D</b> = diameter (Diametros)	<b>Sc<sub>2</sub></b> = Scutellum.
<b>dP</b> = propodeal tooth (dens Propodei)	<b>Ssa</b> = subantennal sclerite (Scleritis subantennalis)
<b>eN<sub>1</sub></b> = pronotal collar (extensio proNoti)	<b>sts</b> = transscutal suture (sutura trans scutum)
<b>Em</b> = Epimeron	<b>smm</b> = meso-metapleural suture (sutura meso-metapleuralis)
<b>Es</b> = Episternum	<b>St<sub>3</sub></b> = metaSternum
<b>F</b> = female (Foemina).	<b>sul</b> = lateral furrow (sulcus lateralis)
<b>FoO</b> = oral cavity (Fossa Oris)	<b>su<sub>3</sub></b> = metapleural line (sulcus metapleurae)
<b>G</b> = Gena	<b>sum</b> = transmetapleural line (sulcus intra metapleuras)
<b>Hy</b> = Hypostoma	<b>Ta</b> = Tarsus
<b>I</b> = distance (Intervallum)	<b>Tg</b> = Tegula
<b>L</b> = length (Longitudo)	<b>Ti</b> = Tibia
<b>LA</b> = width (LAtitudo)	<b>To</b> = Torulus
<b>LaSt<sub>2</sub></b> = mesosternal lobes (Lamellae mesoSterni)	<b>Tsa</b> = supra antennal loess (Tuberculum supra antennam)
<b>M</b> = Male (Mas)	<b>X</b> = coXa
<b>mpm</b> = paramandibular edge (margo paramandibularis)	

! = Types examined; () = digits between round brackets in the chorological items mean number of specimens; // = delimit the single label. Abbreviations for wing structures are in italics. In the descriptions of labels, italic characters mean handwriting.

The frontal aspect of the head is performed perpendicularly to the virtual plane A indicated by the relative line on the Fig. 1A; dorsal and lateral aspects, perpendicular to each other, are performed along the virtual plane B on the occipital carina.

The drawings of the volsella and gonostylus show respectively their inner and outer aspect, unless otherwise indicated. Henceforth the outermost pair of appendages of male genitalia will be termed "gonostylus" (with its portions basi- and disti-stylus). Genitalia are settled in a solidified drop of 5,5-dimethyl hidantoin formaldehyd (5,5-DMHF) on a transparent support. Hair and punctuation have been overlooked in most of the drawings. Most of the hair has been drawn off by the specimens used for the SEM analysis too.

SEM pictures have been performed by Maurizio Ulivi at the "Centro di Microscopia elettronica e di microanalisi" of the University of Florence.

Here the specimens used for drawings and photos are listed (apart those directly cited under described taxa).

- Braunsomeria* sp. 1 ♂: /Botswana B6 11 m N of Ghanzi 14.IV.1972/, BMNH (Fig. 116)
- Meria tripunctata* (ROSSI 1790). 1 ♀: /Italia, Toscana, Principina a mare (GR), su Echinophora 07.VII.1989, Boni Bartalucci leg./, MZUF (Figs 4, 83, 111, 112). 1 ♂: / Italia, Toscana, Principina a mare (GR), su Echinophora 07.VII.1989, Boni Bartalucci leg./, MZUF (Fig. 6, 7, 115).
- Meria rufifrons* (FABRICIUS 1804). 1 ♀: /Natal Eastcourt/ /1913-319/ /E. Haviland 1894/, MZUF (Figs 2, 81, 82, 84)
- Meria aurantiaca* (GUÉRIN 1837). 1 ♀: /Grecia. Rodi. Paradissi beach. 4.VIII:1990 Boni Bartalucci leg./, MZUF (Fig. 1, 1A).
- Myzinella maura* BONI BARTALUCCI 2001. 1 ♀: holotype, MHNP. (Fig. 5).
- Poecilotiphia rousseli* (GUÉRIN 1838). 1 ♀: /Corsica. Portovecchio: Pinarello. Spiaggia 21/27-VII-1992 Boni Bartalucci leg./, MZUF (Fig. 113).
- Poecilotiphia albomaculata* CAMERON 1902: 1 ♂: lectotype, BMNH (Fig. 7A)
- Poecilotiphia mogadorensis* (TURNER 1911). 1 ♂: /Maroc Tiznit, Sidi Moussa 3/V/1947 J. De Beaumont/ /mogadorensis Turner det. D. Guiglia/, MSNG (Fig. 114).
- Poecilotiphia collarinata* BONI BARTALUCCI 1997. 1 ♂: paratype from Egypt, MZUF (Fig. 6A)

### Key to Genera

#### 1

- a 10 flagellomeri
  - b Flagellomeri completely devoid of any prominent sensilla. Their surface shining and hairless (but few bristles on the four basal elements) with only few rounded MPS on their anteroventral surface
  - c  $N_1$  always well greater than visible  $Sc_1$  in dorsal aspect
  - d Brachypterous, with no more than seven cells with tubular veins, up to scale-like winged. The more winged species show the Paramarginal Cell (*CPM*) as the result of the melting between *CM* and 3<sup>rd</sup> *CSM* through the loss of the apical *Rs* vein and the confluence between the veins *RI* and *3rs-m*. The apical veins of the same *CPM* and the 2<sup>nd</sup> *CD* are nebulous and the withdrawal of the *2rs-m* towards the middle of the wing (just below the pterostigma) occurs; the tubular veins barely get at most half the length of the fore wing. The hind wing too show a withdrawal of the cells with tubular veins toward its base with drastic reduction of the length of the *Rs*, *M* and *M+Cu* veins
  - e Entire, not at all combed velum on the fore basitarsal notch
  - f 6 visible metameri
  - g Metasoma without any apical hook
- ..... Females 2
- aa 11 flagellomeri
  - bb Flagellomeri with a mate surface, completely covered either by both prominent sensilla and sub elliptic MPS either by the MPS alone
  - cc Visible  $Sc_1$  greater than  $N_1$
  - dd Always holopterus, normally with ten fully functional cells and with a well expressed marginal cell (*CM*). Where the latter lacks and/or there is a reduced number of cells, the tubular veins always get more than half the length of both the fore and hind wing
  - ee Combed velum of the fore basitarsal notch (entire only in the genus *Iswara*)
  - ff 7 visible metameri

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gg apical metamerus (8<sup>th</sup> sternum) converted to a strong upward hook  
 ..... Males 10

2

- a Paramandibular edge (**mpm**) meeting outer segment of hypostomal carina (**cHy**) before the latter merges with inner clypeal surface, so there is no genal surface getting clypeus (Fig. 1) [in the supposed female *Afromeria* the foremost outer segment of hypostomal carina wears out into a broad shallow but well distinct furrow which meets **mpm** before the clypeal inner border
- b **Pam** and **Pal** always 6- and 4- segmented respectively (with the sole exception of *Tamerlanella*)
- c Forecoxa with a longitudinal strong ridge, flanked by inner groove, along the whole inner edge of its ventral surface (Fig. 111)
- d Tufts of short whitish bristles along the ventral apical edge of the 1<sup>st</sup> and 2<sup>nd</sup> fore tarsomeri (Fig. 2). The sole *Myzinella* shows the state 2dd
- e First tergum with either a deep furrow or just a narrow impression joining the lateral furrows with an actual solution of the integument between sloping tergal and upper petiolar surfaces; the latter formed only by 1<sup>st</sup> sternum (Fig. 112)  
 .....3
- aa **mpm** merges into the genal surface slightly bending forwards, never meeting outer **cHy** which reaches inner clypeal surface. Genal surfaces gets clypeus (Fig. 3)
- bb **Pam** and **Pal** always more or less reduced, with the exception of *Parameria*, so far monotypic genus, which shows the state b
- cc **X<sub>1</sub>** without any longitudinal ridge on its ventral surface in most of taxa. *Parameria* shows the state 2c, while it is partially produced in the *Poecilotiphia* species of the group *nigripes*
- dd Fore tibia and basal fore tarsomeri without any tuft of short hair (Fig. 113)
- ee No furrow, without any solution of the integument, between the sloping tergal and upper petiolar surfaces. The latter apparently formed only by a ribbon like extension of the tergal surface  
 .....8

3

- a **Pam** 6-, **Pal** 4- segmented
- b Wings variable, always with some detectable cell even in the only recorded taxon (i.e. *Meria lineata* SICHEL 1859) with scale-like wings. Edges never completely fringed by long hair.
- c Tufts of short hair also near the insertion of the foretibial spur (but *Myzinella*)
- d Strigilis functional, foretibial spur and basitarsal notch with a well produced velum
- e Transmetapleural line (**sum**) well expressed
- f Petiole slender, 1.5 times to twice longer than wide in ventral aspect, forming an obtuse but clear angle with the sloping down tergal surface in lateral aspect  
 .....4
- aa Pam 4-, **Pal** 3- segmented
- bb Wings reduced, without any detectable cell and with the edges completely fringed by long hair
- cc No tuft of short hair at the base of the fore tibial spur

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- dd Strigilis not functional, foretibial spur and basitarsal notch without any velum
- ee **sum** not expressed. **em<sub>3</sub>** surface and lateral propodeal area almost lying on the same plane
- ff Petiole just a bit longer than wide, its upper surface lying on about the same plane as the sloping down tergal surface (in lateral aspect) .....  
 ..... Palaeartic *Tamerlanella* BONI BARTALUCCI 2004

4

- a **Tsa** shifted laterally with toruli clearly separate by a distance about as long as their width
- b **FoO** with a sub triangular shape
- c Fore wing always with six functional cells, even if the veins are weakened. Pterostigma large and longer than scape, with uniform surface without any inner differentiated area
- d Jugum smaller and far shorter than clavus in the hind wing, where **M** and **Rs** veins lack distally to the **Rs-m** venation (Fig. 5)
- e No tufts of short hair on the fore tibia and basal fore tarsomeri
- f Row of points on 2<sup>nd</sup> to 6<sup>th</sup> terga and sterna, medially severed and shifted far from the distal border of the elements. They are strongly bent backward, subtending two well distinct areas from the remainder and severed from each other by a distance longer than their basal width
- g Probably the most minute female specimens of the subfamily, their size normally about 5 mm and never overcoming 7 mm. No light markings .....  
 ..... (Palaeartic and Afrotropical) *Myzinella* GUGLIA 1959
- aa **Tsa** fused or not, but toruli always separated by a distance far lesser their width
- bb **FoO** posteriorly rounded with sub parallel sides
- cc Fore wing variable, till scale-like; in most of the species the fore wing has six functional cells at least. Pterostigma, where it exists, well shorter than scape and more often than not with a differentiated inner area
- dd Where the fore-wing has six cells at least, the jugum is always greater and a bit shorter than clavus in the hind wing, where the **M** and/or **Rs** veins distally to the **Rs-m** venation are always expressed (Fig 4)
- ee Dense tufts of short whitish bristles at the apex of the 1<sup>st</sup> and along the ventral edge of the 2<sup>nd</sup> foretarsomerus at least
- ff Row of points on the tergal and sternal surface variable, sometimes sub parallel and very close to the distal border, sometimes weakly bent at most, but never subtending well distinct far distanced areas
- gg Size always more than 6 mm, up to 22 mm and mostly with light spots and patterns .....5

5

- a Glossa notched apically (well detectable in ventral aspect) (Figs 8). One afrotropical taxon show state aa
- b The complex glossa-paraglossa well longer than prementum and as long as or longer than twice labial palp. Paraglossa as long as or a bit less than half glossa
- c Posterior lingual plate elongated, elliptic, with the main axis more than twice the minor one
- d Labrum ventral aspect - Surface beneath the line of strong bristles with a clear broad notch and medially much broader (more than twice) than the surface before it (Fig. 9)

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- e Mandible frontal aspect - The furrow starting from the subapical tooth delimits a lobe ending with a second blunt process on the inner side (Fig. 81) (only two afrotropical taxa are out of the rule)
- f Foretibial spur - Well distinct tooth on the trunk just beneath velum. Apex never shorter than velum (Fig 83)
- g The vast majority of species with light patches on terga  
.....(Palearctic and Afrotropical) *Meria* ILLIGER 1807
- aa Glossa without notch apically (Figs 26, 72)
- bb The complex glossa-paraglossa shorter than prementum and as long as or shorter than labial palp. Paraglossa as long as or 2/3 shorter than glossa.
- cc Posterior lingual plate neither elongated neither elliptic
- dd Labrum ventral aspect – Back profile almost straight either with a very broad notch, but in this case the surface beneath the line of punctures much narrower medially (twice or less than twice) than the surface before it (Figs 25, 57)
- ee The furrow starting from the subapical tooth wears out upward without delimiting any lobe on the inner side of the mandible (Figs 22, 74)
- ff Foretibial spur without tooth beneath velum (Fig. 30, 77). In *Meriodes* it is similar to state 5f but apex is clearly shorter than velum (Fig. 63)
- gg No light patches on the metasoma  
.....6

6

- a The forward outer segment of **cHy** wears out into a shallow broad furrow which meets **mpm** well before the clypeal inner border. (Fig. 23)
- b Distance of the very small subapical tooth from the tip of of the mandible about 1/10 of the whole mandible length (Fig. 22)
- c Densely punctured area on the anterior genal area, between mandible and **FoO**. Every puncture bearing stout black hispid hair, giving it a bearded appearance in lateral aspect (Fig. 24)
- d Rounded ventral projection of Metasternum (**St<sub>3</sub>**) (Fig. 28)
- e Sparse hair, as long as pterostigma, along the anterior edge of the forewing just before it (Fig. 29)
- f 2<sup>nd</sup> **CSM** present and petiolated. Pterostigma large, its area about ¾ th area of 1<sup>st</sup> **CD** with a large "fenestra" which occupies most of its surface (Fig. 29)
- g Fore tibial spur with an eceptionally long apex, almost three times longer than trunk (Fig. 30)
- h Hindtibial spurs isometric, one of them medially enlarged (Fig. 31)
- i Claws very weakly bifid (Fig. 32)
- j 1<sup>st</sup> sternum with large median smooth area  
.....(Afrotropical) *Afromeria* nov.gen.
- aa The forward outer segment of **cHy** does not wear out in a broad furrow and meets **mpm** before the latter merges with inner clypeal surface (like in *Meria*)
- bb Distance of the subapical tooth from the tip of the mandible as long as or more than 1/4 of the whole mandible length (Fig. 62, 74)
- cc Only sparse punctures bearing weak bristles on the genae
- dd Ventral projection of the **St<sub>3</sub>** somehow flattened and with a sharp posterior edge
- ee No hair along the fore edge of the fore wing near the pterostigma
- ff 2<sup>nd</sup> **CSM** absent. Pterostigma less than 1/3 the area of 1<sup>st</sup> **CD**, with a smaller "fenestra" (Fig. 59, 75)

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- gg Fore tibial spur with apex shorter than trunk (Figs 63, 77)
- hh Always present major and shorter hind tibial spurs (Fig. 78)
- ii Claws with a strong inner process, appearing deeply bifid (Fig. 79A)
- jj 1<sup>st</sup> sternum almost completely punctured

.....7

7

- a Well produced lamella on the ventral edge of the clypeus; its height about ½ lateral clypeal height in frontal aspect (Fig. 54, 60)
- b Frontal surface of the mandible with only a short furrow just near the subapical tooth (Fig. 55, 62)
- c Labrum ventral aspect - Height 1/8 its width (Fig. 57)
- d **Pal** shorter than glossa-paraglossa complex
- e Posterior lingual plate slender and gutta like, with forwards tapering apex
- f Vertical sides of **N<sub>1</sub>** disk almost completely smooth
- g Fore wing - 1<sup>st</sup> **CSM** slightly tapering toward wing edge and width of its apical third about 2/3 its basal width. (Fig. 59), (like in *Meria*, fig. 82)
- h Hind wing - **Rs** and **r-m** not known from eachother. **Rs-a** not expressed. **Cu** vein not detectable (Fig. 59), like in *Meria*
- i Fore tibial spur - Velum much protruded from the trunk (Fig. 63)
- j Hind tibial spurs stylus-like with subparallel border and not enlarged apically
- k Length of basal two hind tarsomeri all together like length of hind tibia at most (like in *Meria*)
- l Basal hind tarsomerus with scattered bristles, not arranged in a row (like in *Meria*, fig. 84)
- m 6<sup>th</sup> tergum with no sculpture, but only with microreticulation only detectable at 30x magnification.
- n Microreticulation covering the integument of the whole body, but flagellum, mandible and **LaSt<sub>2</sub>**
- o Medium size  
..... (Afrotropical) *Meriodes* nov.gen.
- aa Very thin lamella on the ventral edge of the clypeus; its height only ¼ the lateral clypeal height in frontal aspect (Fig. 97)
- bb Frontal surface of the mandible with a long longitudinal furrow originating from the insertion of the subapical tooth, running over ½ the length of the mandible at least (Fig. 74, 97)
- cc Labrum ventral aspect - Height ¼ its width
- dd Labial palp longer than glossa-paraglossa complex (Fig. 72, 73)
- ee Posterior lingual plate stout and subtriangular, with backward directed apex
- ff Vertical sides of **N<sub>1</sub>** disk almost completely and regularly punctured
- gg Fore wing. 1<sup>st</sup> **CSM** strongly tapering toward wing edge, assuming a "flask" appearance; width of its apical third less than ½ its basal width (Fig. 75)
- hh Hind wing - **Rs** and **r-m** well distinct from eachother and **Rs-a** well expressed. **Cu** vein short and still detectable (Fig. 76)
- ii Fore tibial spur - Velum only slightly protruded from the trunk (Fig. 77, 99)
- jj Hind tibial spurs enlarged subapically, spatula-like (Fig. 78, 100)
- kk Length of basal two hind tarsomeri all together about 1.5 times length of hind tibia

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- ll Basal hind tarsomerus with punctures arranged in a well distinct rough row on their back surface, bearing long bristles as long as  $\frac{3}{4}$  its length (Fig. 79)
- mm 6<sup>th</sup> tergum with evident (at 10x too) sculpture
- nn Microreticulation present only on small surfaces of the integument
- oo Great size, the largest of the entire tribe  
 ..... (Afrotropical) *Macromeria* WESTWOOD 1835

8

- a Fore surface of the mandibles almost flat and smooth, without strong longitudinal furrows
- b Pam 6- and Pal 4- segmented
- c Fore wing with six cells bordered by tubular veins
- d Hind wing with jugum smaller than clavus
- e Pterostigma with a large transparent area
- f Foretibial spur - apex hardly developed and very shorter than trunk
- g Large white markings on metasoma and often on mesosoma too
- h Lateral furrows on 1<sup>st</sup> to 3<sup>rd</sup> terga  
 ..... (Palaeartic) *Parameria* GUÉRIN 1837
- aa Fore surface of the mandibles not flattened and with a longitudinal furrow
- bb Palpi variously reduced, always less than 6- and 4- segmented
- cc Foretibial spur - apex strongly developed about as long as the trunk
- dd Fore wing variable from scale-like up to with six functional cells
- ee In the latter forms, the jugum is always greater than clavus in the hind wing
- ff Where present, the pterostigma is homogeneous without any inner differentiated area
- gg No light markings anywhere (but individual aberrations)
- hh **sul** on 1<sup>st</sup> to 4<sup>th</sup> terga  
 .....9

9

- a Scape with a stripe of densely packed pits bearing bristles as long as its length from its base just to apex, along the upper and ventral surfaces
- b **Em<sub>3</sub>** normally higher, rarely as high as, than half the **smm**
- c Upper meta pleural sulcus (**su<sub>3</sub>**) straight
- d Metasternum (**St<sub>3</sub>**) with sub flattened ventral apophysis, lying about on the same plane of the **LaSt<sub>2</sub>**
- e The edge of the wings is simple without long fimbriae, only *P. mogadorensis* (TURNER 1911) bears quite long bristles on their apical half
- f Strigilis functional. Both fore tibial spur and basal fore tarsomerus always with a notch bearing a velum; in some species with reduced wings the notches are less deep and velum reduced, even though clearly expressed  
 ..... (Palaeartic) *Poecilotiphia* CAMERON 1902
- aa Scape with more scattered pits, not shaping a stripe and ending well far from its apex, on the upper and ventral surfaces; the bristles shorter than its length
- bb **Em<sub>3</sub>** shorter than half the **smm**
- cc Upper portion of **su<sub>3</sub>** bent backward



- dd **St<sub>3</sub>** with narrow and flat, parallel apophysis, sub vertical to the main axis of the body
- ee Very long (as long as or longer than the height of the hind wing), densely set bristles along the whole of the edges of the wings (only the supposed female of *I. mateui* show similar conditions to *Parameria*)
- ff Strigilis not functional. Both fore tibial spur and basal fore tarsomerus without detectable notch and velum  
..... (Palaeartic) *Iswara* WESTWOOD 1851 / *Komarowia* RADOSZKOWSKY 1886

- a Eye in frontal aspect with a well detectable broad notch on its inner border (*Tamerlanella* shows state aa) (Fig. 41, 46, 54)
- b Mouthparts normally not reduced and **FoO** large, almost as long as genal area in ventral aspect, its back almost reaching the ventral portion of the **co**. **PoG** more often very short and feebly expressed, rarely attaining to 1/5 the **FoO** length (only in *Tamerlanella* it gets  $\frac{3}{4}$  **FoO**)
- c Flagellomeri - In most of the taxa the sensilla curvata and also most of sensilla basiconica are arranged in more or less wide longitudinal stripe, where sensilla basiconica crowd best, from 2<sup>nd</sup> or 3<sup>rd</sup> element to the apical one. In the sole *Meriodes* they are arranged in placoids like state 10cc. Sensilla trichoidea are spread throughout elsewhere. In *Myzinella* the sensilla curvata seem to spread all over its surface. *Tamerlanella* show an almost completely hairless flagellum, a similar condition occurring in *Iswara*
- d Fore coxa (Fig. 111) with a longitudinal strong ridge, inward flanked by a groove, along the whole inner edge of its ventral surface
- e Simple row of bristles parallel to the combed velum, on the ventral surface of the basal fore tarsomerus (Fig. 6)
- f Basal hind tarsomerus entirely covered all around its surface by approached hair, shorter than its diameter (Fig. 115) (*Tamerlanella* and *Afromeria* show state 10ff)
- g 8<sup>th</sup> sternum - The enlarged base of the dorsal flattened area covers the underlying basal portion of the element for no more than 1/5 its length (in dorsal aspect) (Fig. 7, 15, 88)
- h Volsella always without any sword like apophysis
- i Dististylus more often with a longitudinal ridge on its ventral (lateral in the drawings) surface delimiting a depression (Fig. 21, 53, 39). Many exceptions in all the genera  
..... 11
- aa Inner border of the eye just lightly bent or almost straight, without evident notch (Fig. 101)
- bb Mouthparts often strongly reduced; even though Pam and Pal are 6-, -4 segmented, FoO is reduced, never getting the ventral portion of **co**; **PoG** always well expressed, up to as long as **FoO**
- cc Flagellomeri - Sensilla curvata bounded into well detectable semi elliptic placoids present on the last seven elements at most (Fig. 114). Trichoid sensilla are either spread throughout the remainder of the surface either absent. Sensilla basiconica normally absent, present in few taxa near the placoids (extensively present only in *Parameria* which shows *Macromeria*-like state)
- dd Ventral surface of **X<sub>1</sub>** either without strong longitudinal ridge along its inner edge or sometimes only with a feeble furrow not completely produced along its entire length (*Poecilotiphia* of the group *nigripes*). Otherwise *Allomeria* and *Parameria* show the character state 10d
- ee Ventral surface of the basal foretarsal notch without any row of bristles (Fig. 6A)
- ff Basal hind tarsomerus without short approached hair at least on its upper surface, replaced by scattered thin bristles longer than its diameter (Fig. 116). *Parameria* and the sole *Poecilotiphia rousselii* show state 10f

1266

- gg 8<sup>th</sup> sternum - The enlarged base of the dorsal flattened area covers the underlying basal portion of the element for 1/3 its length at least (up to more than 1/2 in some taxa) [*Iswara* / *Komarowia* have state 10g and otherwise they show all the other character states from aa through ii] (Fig. 7A)
- hh Volsella normally with lateral sword like apophysis. *Allomeria* and *Zezelda* show state 10g. Elsewhere its absence has sporadic distribution with only six instances altogether in two genera
- ii Dististylus with a smooth dorsal surface, always without any ridge  
.....16

11

- a Eyes with a sub straight inner border
- b **PoG** well expressed, as long as 3/4 the **FoO**
- c **Hyc** and **PoG** sunken under the plane of the genal areas in ventral aspect
- d Mandibular socket either closed or with a strong paramandibular process
- e Flagellomeri: completely hairless and smooth, but sensilla curvata into very small placoids on the last four flagellomeres
- f **Pam** 4-, **Pal** 3- segmented
- g Fore wing - Apex of the **CM** drawn back toward pterostigma, overcome by apex of 3<sup>rd</sup> **CSM**
- h Dorsal surface of the basal fore tarsomerus only with scattered bristles
- i Basal hind tarsomerus almost smooth with only scattered long setae
- j Petiole stout and short; its upper surface lying on the same plane as the sloping down tergal surface  
..... *Tamerlanella* BONI BARTALUCCI 2004
- aa Eyes with a notched inner border
- bb **PoG** poorly expressed (sometimes almost undetectable) up to 1/5 the **FoO** at the best
- cc **Hyc** and **PoG** (where well expressed) a bit prominent over the contiguous genal areas
- dd Open mandibular socket. Paramandibular process absent or very poorly expressed
- ee In the vast majority of taxa sensilla curvata and most of basiconica are set up in longitudinal stripe. Scattered basiconica also along the border of the stripe. In the sole *Meriodes* sensilla curvata are arranged in placoids like in *Poecilotiphia*. The remainder of flagellar surface is completely covered by sensilla trichoidea.
- ff **Pam** 6-, **Pal** 4- segmented
- gg Fore wing - **CM** overcoming apex of 3<sup>rd</sup> **CSM**
- hh Dorsal surface of the basal fore tarsomerus completely covered by approached short hair
- ii Basal hind tarsomerus entirely covered all around its surface by approached hair, shorter than its diameter (only *Afromeria* show the state i)
- jj Petiole more often slender, where short and stout its upper surface forming a blunt but clear angle with the sloping down tergal surface  
.....12

12

- a **Tsa** and **To** widely separated, their distance greater than width of single torulus. Above them the frons looks like a shed-roof

1267

- b Median area of clypeus and **Ssa** protruding up, flattened and complanar with the plane of the frons and the dorsal surface of the **Tsa**
- c **FoO** sub triangular; **PoG** always well expressed
- d Flagellomeri. Sensilla curvata and sensilla basiconica spread throughout while sensilla trichoidea are absent
- e Forewing: 3<sup>rd</sup> **CSM** about as high as wide
- f Hind wing: jugum twice greater and higher than clavus
- g First metamerus elongated, more than twice longer than wide in dorsal aspect (from the apical border to the tip of the petiole)
- h Post-gradular surface suddenly and strongly raised above the pre-gradular surface, till to form a sub perpendicular Stepp (best in lateral aspect)
- i Gonostylus always with simple surface
- j Digitus appearing "crushed" in lateral aspect  
 .....*Myzinella* GUIGLIA 1959
- aa **Tsa** touching each other at their insertion point on the frons; distance between **To** less than their width
- BB **Ssa** with only a median vertical broadly based keel which meets the inner point of insertion of the **Tsa** clearly under the plane of the frons (best in lateral aspect)
- cc **FoO** semielliptic, **PoG** more often than not very short and hardly detectable
- dd Sensilla curvata bounded to longitudinal stripes or placoids. Where present, sensilla basiconica well crowded within the stripes and only scattered elsewhere
- ee Forewing: 3<sup>rd</sup> **CSM** clearly wider than high
- ff Hind wing: jugum just a bit greater and higher than clavus
- gg First metamerus never more than 1.5 times longer than wide
- hh Post-gradulus lower than pre-gradulus surface (in lateral aspect)
- ii Gonostylus mostly with a more or less strong longitudinal keel delimiting an apically open depression on its ventral edge (lateral in figures)
- jj Digitus not crushed, its height  $\frac{1}{4}$  volsellar height at least  
 ..... 13

13

- a Glossa notched apically (well detectable in ventral aspect) (Fig. 10)
- b The complex glossa-paraglossa as long as or just a bit shorter than praementum; the latter is only  $\frac{3}{5}$  of the former. Paraglossa as long as or less than half glossa
- c Posterior lingual plate strongly elongated, 5 times longer than wide (ventral aspect)
- d Fore tibial spur - Straight profile of the velum (Fig. 8)  
 .....*Meria* ILLIGER 1807
- aa Glossa without notch apically (Figs 12, 66, 89)
- bb The complex glossa-paraglossa shorter than prementum and as long as or shorter than labial palp. Paraglossa as long as or  $\frac{2}{3}$  shorter than glossa
- cc Posterior lingual plate never so elongated
- dd Fore tibial spur - Velum with a more or less concave outer profile (Fig. 49)  
 ..... 14

- a Foreprofile of the collar with a broad notch (in dorsal aspect) (Fig. 14, 17)
  - b Mesepisternum (**Es<sub>2</sub>**)- Longitudinal stripe of densely packed transversal short wrinkles along the **smm**
  - c Dorsal propodeum with well distinct subhorizontal from posterior surface by an almost orthogonal angle. Length of the median subhorizontal area always less than half the length of the postscutellar area of **N<sub>3</sub>**
  - d Basal hind tarsomerus without short approached hair at least on its upper surface, replaced by scattered thin bristles longer than its diameter
  - e Compressed first metamerus. Width of the sub horizontal surface of 1<sup>st</sup> tergum more than 4 times its median height at least (in dorsal aspect). First sternum strongly compressed transversally with subvertical and subhorizontal surfaces orthogonal to each other (Fig. 19, 36) (in *capicola* they shape a protruding median "tubercle")
  - f Petiole as long as wide, with a very broadened base (best in ventral aspect) (Fig. 35)
  - g Strong flattened bristles along the apical 2<sup>nd</sup> to 6<sup>th</sup> sternal borders and at the corners of the 1<sup>st</sup> to 6<sup>th</sup> terga. Less flattened modified bristles are present at the sides of the 7<sup>th</sup> tergum too
  - h 7<sup>th</sup> tergum. Sharp apices of the epipygial lobes. Apical width of the sub triangular notch about as long as its height (Fig. 20, 37)
  - i 7<sup>th</sup> tergum. Deep gradulus expressed sideways without solution, shaping a broad semicircular hollow around the spiracle and making distinct laterotergum from the remainder of tergum (Fig. 38)
  - j 7<sup>th</sup> sternum. Squared profile in back aspect with flattened horizontal area and lateral longitudinal keels.
  - k 7<sup>th</sup> metamerus - Epipygial lobes as long as (or just a bit shorter than) exposed sternum in lateral aspect (Fig. 38)
  - l 8<sup>th</sup> sternum (anal hook) with a strong subbasal median tooth on its dorsal surface (Fig. 15)
  - m Digitus subtriangular with tapering apex, not overcoming cuspis in lateral aspect (Fig. 16, 21, 39)
- .....(Afrotropical) *Afromeria* nov.gen.
- aa Foreprofile of the collar straight (in dorsal aspect)
  - bb **Es<sub>2</sub>** - Longitudinal stripe along the **smm** almost smooth and shining without short densely packed transversal wrinkles
  - cc Dorsal propodeum more often rounded without well distinct subhorizontal from posterior area. Where it occurs the height of the subhorizontal area well longer than the height of the postscutellar area
  - dd Basal hind tarsomerus with short approached hair all around, on its upper surface too
  - ee Not compressed first metamerus. Width of the sub horizontal surface of first tergum less than twice its median height (in dorsal aspect). First sternum more elongated with broadly rounded surface, without well distinct subvertical and subhorizontal surfaces in lateral aspect
  - ff Petiole longer than wide, with a poorly broadened base (in ventral aspect)
  - gg Nowhere modified bristles
  - hh 7<sup>th</sup> tergum. Very stout and blunt apices of the epipygial lobes (Figs 43, 86)
  - ii 7<sup>th</sup> tergum. Gradulus more often absent either incomplete, not getting the lateral spiracles. No distinct laterotergum from the remainder of tergum (Fig. 51)
  - jj 7<sup>th</sup> sternum. Rounded horizontal area without lateral longitudinal keels and with U-shaped profile in distal aspect
  - kk 7<sup>th</sup> metamerus - Epipygial lobes very shorter than exposed sternum in lateral aspect (Fig. 51)

1269

- ll 8<sup>th</sup> sternum (anal hook) simple, like in *Meria*, without any supplementary tooth mm. Sub rectangular digitus with rounded apex, well overcoming cuspis in lateral aspect (Figs 44, 53, 70, 89) .....15

15

- a Flagellum - Sensilla curvata arranged in longitudinal stripes where the sensilla basiconica (as long as  $2 \times 10^{-2}$  mm) crowd mostly
- b No furrow, at the most a broad impression, between sloping down 1<sup>st</sup> tergal and petiolar surfaces, without any solution of the integument
- c **sul** on 1<sup>st</sup> to 6<sup>th</sup> terga, vestigial one on 7<sup>th</sup> tergum
- d Lobes of the epipygium always with horizontal area well known from subvertical laterala sides
- e 8<sup>th</sup> sternum (anal hook) stout in lateral aspect with a convex upper surface and without longitudinal prominent ribs (Fig. 88)
- f Aedeagus with rounded head and extended ventral process in lateral aspect (Figs 90-92)
- g Dististylus with a smooth dorsal surface, always without any ridge  
..... (Afrotropical) *Macromeria* WESTWOOD 1835
- aa Flagellum - Sensilla curvata bounded into placoids like in *Poecilotiphia* (Fig. 114) on 3<sup>rd</sup> to 11<sup>th</sup> flagellomeri. Sensilla basiconica absent
- bb Distinct furrow between sloping down 1<sup>st</sup> tergal and petiolar surfaces with solution of the integument. Petiolar surfaces formed only by 1<sup>st</sup> sternum
- cc **sul** on 1<sup>st</sup> to 5<sup>th</sup> terga
- dd 7<sup>th</sup> tergum (epipygium). Surface of the lobes rounded in apical aspect, horizontal area by no means distinct from vertical surfaces
- ee Anal hook (8<sup>th</sup> sternum) slender with a flat upper surface and prominent longitudinal ribs (like in *Meria*)
- ff Aedeagus evenly tapering toward apex, not swollen, without extended ventral process (Figs 44, 53, 71)
- gg Dististylus with a longitudinal ridge on its ventral (lateral in the drawings) surface delimiting a depression (Figs 44, 53, 70)  
..... (Afrotropical) *Meriodes* nov.gen.

16

- a **Tsa** with a flattened upper surface and without transparent fore border
- b Width of the **om** normally about 1/15 the width of the head in frontal aspect (i.e. **LA<sub>Ca</sub>** / **D<sub>om</sub>** about 15. in only two taxa about 11)
- c Genal bridge complanar or a bit prominent over the contiguous genal areas
- d Flagellar surface with sensilla trichoidea spread throughout (lacking in *Zezelda*), but into the placoids where only sensilla curvata exist
- e **su<sub>3</sub>** straight
- f Subtrapezoidal 3<sup>rd</sup> *CSM* (not expressed in *Zezelda*) much wider than high and the distance of its outer border from apex of the wing as long as its width
- g Basitarsal notch with an entirely combed velum
- h Fore tarsomeri having weak spines far shorter than following element on their outer apex; their dorsal surface covered throughout by short bristles

1270

- i Metameri with clear strangling among them (but *Zezeida*)
- j Strong graduli on the basal terga at least
- k Apical border of 7<sup>th</sup> sternum with a notch in ventral aspect
- l Apical border of 7<sup>th</sup> sternum broadly U-shaped in back aspect
- m Strong flattened bristles on the apical border of the sterna and laterally on the terga (but *Zezeida* and only one taxon belonging to *Poecilotiphia*)  
.....17
- aa **Tsa** with transparent foreborder and swollen dorsal surface
- bb Width of the **om** normally about 1/6 the width of the head in frontal aspect (i.e. **LA<sub>Ca</sub>** / **D<sub>om</sub>** about 6). In only one taxon it falls down to 1/9
- cc Genal bridge clearly depressed with regard to the near genal surfaces in ventral aspect (in *Lamprowara* very shallowly so)
- dd Flagellum without any hair but sensilla curvata into placoids on the last elements (slender conical bristles present on the basal three flagellomeres in *Lamprowara*)
- ee **su<sub>3</sub>** more or less bent backward
- ff Sub squared 3<sup>rd</sup> **CSM**, about as high as wide up to petiolate; the distance of its outer border from the apex of the wing more than twice, up to more than three times its width
- gg Basitarsal notch with a velum either just with a combed apical half or entire, without any combed portion
- hh Outer apex of fore tarsomeres with spines as long as or longer than the following element. Dorsal surface with only scattered short bristles
- ii Metameri without evident strangling among them
- jj No strong graduli on metameri
- kk Apical border of 7<sup>th</sup> sternum without any notch in ventral aspect
- ll Apical border of 7<sup>th</sup> sternum V-shaped in back aspect mm Nowhere strong flattened bristles  
.....20

17

- a Eye shorter than 2/3 of the height of the head (Figs 101, 102)
- b Eye with a sub rectilinear inner border (Fig. 101)
- c Reduced palpal formula: **Pam** 3 and **Pal** 2 segmented
- d **St<sub>3</sub>** with sub parallel ventral lobes
- e Volsella without sword-like lateral apophysis  
.....18
- aa Eye longer than 2/3 of the height of the head
- bb Eye with a clearly concave inner border and without prominent outline in frontal aspect
- cc Regular palpal formula: **Pam** 6, **Pal** 4 segmented
- dd **St<sub>3</sub>** with divergent ventral lobes
- ee Volsella with sword-like lateral apophysis (but few taxa)  
.....19

18

- a Eye with a strongly prominent outline in frontal aspect (Fig. 101)

1271

- b **om** small, about ¼ the width of the eye in frontal aspect and just a bit larger than 1/3 the width of the median flagellomeri. Ratio  $LA_{Ca} / LA_{om}$  about 45
- c Closed mandibular socket (Fig. 103)
- d **FoO** sub rounded (Fig. 103)
- e Flagellomeri with spread out hair on basal flagellomeri
- f Three **CSM** and **CM** expressed
- g Hind coxa with inner dorsal keel
- h Hind wing venation like that of *Meria* and most of the males of the tribe. **Rs** and **M** shorter but comparable to the length of **M+Cu** and subparallel to the longitudinal axis of the wing
- i Hind wing - jugum just a bit greater and higher than clavus
- j First tergum with a deep furrow joining the lateral furrows with an actual solution of the integument between sloping tergal and upper petiolar surfaces. The latter is formed only by 1<sup>st</sup> sternum
- k Metameri with clear strangling among them
- l Metameri with large transversal deep slits on the whole width of 2<sup>nd</sup> to 6<sup>th</sup> sterna; either deep graduli or slits on 2<sup>nd</sup> to 6<sup>th</sup> terga. **sul** on 1<sup>st</sup> to 6<sup>th</sup> terga
- m Dististylus strongly narrowed and arched
- n Penis valve of the aedeagus with a membranaceous tip and hammer-like shape in lateral aspect  
.....(Afrotropical) *Allomeria* nov.gen.
- aa Eye outline slightly prominent in frontal aspect
- bb **om** enlarged, larger than half the width of the eye in frontal aspect and half the width of the median flagellomeri. Ratio  $LA_{Ca} / LA_{om}$  about 13
- cc Open mandibular socket
- dd FoO subtriangular
- ee Flagellomeri without hair but sensilla curvata into placoids of the last elements
- ff Only first **CSM** present. **CM** lacking too
- gg Hind coxa without inner dorsal keel
- hh Hind wing venation like that of *Macromeria* females. **Rs** and **M** much shorter than **M+Cu** and subperpendicular to the longitudinal axis of the wing
- ii Hind wing - Jugum twice greater and higher than clavus
- jj Neither furrow nor narrow impression, without any solution of the integument, between the sloping tergal and upper petiolar surfaces; the latter apparently formed only by a ribbon like extension of the tergal surface
- kk Metameri without strangling among them
- ll Metameri with weak gradulus on the 2<sup>nd</sup> tergum only. No other deep graduli neither deep slits. **sul** only on 2<sup>nd</sup> tergum mm.... Dististylus large and normally shaped, like in the remainder taxa of the tribe
- nn Penis valve of the aedeagus normally swollen like in *Meria* without membranaceous Tipp  
.....(Afrotropical) *Zezelda* ARGAMAN 1994

19

- a Flagellum with a longitudinal stripe where sensilla curvata and sensilla basiconica (as long as  $2 \times 10^{-2}$  mm) are crowded. Sensilla trichoidea spread out elsewhere
- b Anterior surface of the scape with a keeled perimeter
- c Jugum of the hind wing with a well rounded outer margin and smaller than clavus

1272

- d Basal hind tarsomere covered by approached short hair all around
- e Either deep slits and/or large transversal deep hollows, on the whole width of 2<sup>nd</sup> to 6<sup>th</sup> sterna; either deep graduli or slits, on 2<sup>nd</sup> to 6<sup>th</sup> terga
- f Apical border of 7<sup>th</sup> sternum with an entire profile, without any notch, in ventral aspect
- g Attachment of anal hook far removed from the apical border (as it occurs in Iswara)
- h Volsella with an exceedingly long digitus (as long as the same volsella)  
 .....*Parameria* GUÉRIN 1837
- aa Flagellum without strong conical spinules; sensilla bounded into the placoids
- bb Anterior surface of the scape without keeled perimeter
- cc Jugum of the hind wing with a sub straight outer margin, parallel to the jugal fold and almost as high as or just a bit higher than clavus
- dd Upper surface of basal hind tarsomere without approached short hair
- ee Neither deep hollows nor slits on the whole width of the metameri; just one species (sahelica) show deep slits, ending well before reaching the lateroterga, on 3<sup>rd</sup> to 6<sup>th</sup> sterna
- ff Apical border of 7<sup>th</sup> sternum with a distinct notch in ventral aspect
- gg Attachment of anal hook very near the apical border
- hh Volsella without an exceedingly long digitus as long as the same volsella  
 .....*Poecilotiphia* CAMERON 1902

20

- a Ratio **L/A** of the single flagellomeres about 2-2.5 at most
- b Flagellar surface with scattered sensilla trichoidea only on the basal two flagellomeres; elliptical placoids with sensilla curvata at the base of the last 4 flagellomeres
- c **Pam** 6-, **Pal** 4-segmented
- d Pronotal plate well expressed, with either blunt and clear angle or keel delimiting its upper border
- e Metasternal lobes lightly but clearly divergent from each other almost subparallel to the main axis of the body
- f **CM** distally opened
- g Velum of the foretibial spur with an almost straight edge
- h Strong keel on the upper inner border of the hind coxa
- i 7<sup>th</sup> sternum quite shorter than 7<sup>th</sup> tergum in lateral aspect
- j 7<sup>th</sup> tergum with a keel dividing horizontal from vertical surface of the lobes, which are shining and lacking any micro reticulation
- k 7<sup>th</sup> tergum without preapical row of points. Only scattered weak short bristle on its horizontal surface
- l 8<sup>th</sup> sternum strongly enlarged basally in dorsal aspect  
 .....*Lamprowara* BONI BARTALUCCI 2004
- aa Flagellomeres 3 times longer than high at least
- bb Flagellar surface absolutely without sensilla trichoidea. Longitudinal placoids with sensilla curvata present only in Komarowia at the base of the last 2 flagellomeres at most
- cc **Pam** 3-, **Pal** 2-segmented
- dd Neither pronotal plate nor clear angle between horizontal disk and sloping down surface expressed
- ee Lobes of the **St**<sub>3</sub> sub parallel and subvertical to the main axis of the body



1273

- ff **CM** closed
- gg Velum of the fore tibial spur with a strongly arched edge
- hh Upper inner border of the hind coxa rounded, without any keel
- ii 7<sup>th</sup> sternum only a bit shorter than 7<sup>th</sup> tergum in lateral aspect
- jj 7<sup>th</sup> tergum without any keel dividing horizontal from vertical surface of the lobes
- kk 7<sup>th</sup> tergum with a row of preapical row of points bearing bristles well longer than the height of the notch in dorsal aspect. Lobes with a well detectable micro reticulation even at x20 magnifications
- ll 8<sup>th</sup> sternum without strong basal enlargement

.....21

21

- a **Pam** 3- segmented, the apical one isometric with the basal ones
- b Basitarsal notch with an entire velum, without any combed structure
- c The preapical rows of points on the sides of the terga strongly bent forward and widely broken off about the middle of the element
- d 7<sup>th</sup> tergum with a very narrow (width 1/5 height at most) notch having sub parallel and weakly prominent borders
- e **sul** hardly detectable only on the 1<sup>st</sup> tergum. In some species it is present on the 2<sup>nd</sup> tergum but it does not overtake the spiracle
- f Apical border and preapical groove of 1<sup>st</sup> sternum forwards convex in ventral aspect
- g 8<sup>th</sup> sternum without longitudinal keels and abruptly narrowing from 2/3 its length towards apex
- h Inner surface of the volsella without any row of straight densely packed bristles
- i Quite big digitus with a tapering top ("gnome hat-like"). Its height as long as or longer than 1/3 the height of volsella
- j Sword like process, where present, always less long than 1/2 the height of the volsella, rising directly from the main body of the volsella and looking like a giant bristle
- k Most of the body is evenly translucent and straw-coloured, but most of the head which is dark brown

..... *Iswara* WESTWOOD 1851

- aa **Pam** 2 segmented. Where 3 segmented the median segment is modified and the apical one atrophied, in some instance hardly detectable
- bb Velum of the basitarsal notch with a combed apical half
- cc Preapical rows of points on terga clearly forward directed about the middle, but only weakly bent and shortly broken off about the middle
- dd 7<sup>th</sup> tergum with a sub triangular notch (apical width up to as long as height) and clearly divergent inner borders
- ee **sul** well detectable at least on the 1<sup>st</sup> and 2<sup>nd</sup> tergum, when present on 3<sup>rd</sup> it is vestigial and not overtaking the spiracle. In some taxa previously ascribed to *Melaniswara* they are well expressed up to 4<sup>th</sup> tergum and vestigial on the 5<sup>th</sup>
- ff Apical border and preapical groove of the 1<sup>st</sup> sternum straight in ventral aspect
- gg 8<sup>th</sup> sternum with prominent keels (one ventral, two lateral and two dorsal) and evenly tapering to apex
- hh Median area of the volsella very thinned, almost vanishing. Its inner surface with straight densely packed bristles downward directed along its upper border
- ii Quite small digitus. its height no longer than 1/4 the height of volsella

- jj Sword like process always present and much longer than  $\frac{1}{2}$  the volsellar height, rising from a lateral process of the volsella (as in *Poecilotiphia*)
- kk Most of the species have either whitish or pale yellow coloured patterns on a straw-coloured or light brown body, besides a darker head; two species look like *Iswara*  
 .....*Komarowia* RADOSZKOWSKY 1886

The following discussion concerns only the Afrotropical genera. Treatment about afro-tropical taxa of the genera *Meria* and *Myzinella* will be dealt with in an incoming paper.

***Afromeria* nov.gen.**

**Species type:** *Myzine capicola* TURNER 1913

Among the items of the key which identify the males of this genus from the nearest relatives, the character states 14 a, i, j, k could be considered valid autapomorphies. Eyes, flagellomeri, forecoxa and genitalia are like in *Meria*. The clypeal disk is strongly swollen. Hind coxa has a supplementary longitudinal keel running along its ventral inner edge. Elsewhere the flattened bristles of the metasoma occur in *Poecilotiphia*, where they lack on terga more often than not, and *Parameria*, where they lack on 7<sup>th</sup> tergum. The multiple deep transversal hollows and graduli and/or invaginations, on the metasoma, occur elsewhere in *Parameria femorata*, *Myzine pinguis* and *Myzine braunsi* TURNER 1912. The character state 14i occurs somehow just in *Parameria* males, where otherwise the large semicircular hollow does not exist and no laterotergum can be known from the remainder of tergum.

The female character states of the key are based on a unique specimen from Namibia. Besides to formal convenience to avoid taxonomical crowd, its attribution to the female sex of *A. microtera* and to the new genus is purely arbitrary, inferred from its intermediary features among different genera, which are explained under the relative issue.

**Derivatio nominis.** From the synthesis of the praefix Afro- from Africanus with *Meria*. Gender feminine.

**Distribution.** Namibia and South Africa.

***Afromeria capicola* (TURNER 1913) nov.comb.**

*Myzine capicola* TURNER 1913: 734

**Holotype** ♂: South Africa = /Pr. b sp Meier/(blue) /1911-33/ /*Myzine capicola* Type Turner/(autographic) /Type/(rounded with red outer ring) /B.M. Type Hym. 15131/, BMNH !

**Material:** ♂ - South Africa = (2) /Cape province Matjiesfontein 1-18.XII.1928/ /South Africa R.E.Turner Brit. Mus. 1929-15/, BMNH; (1) /Cape Province Matjiesfontein 7-13 xi 1928/ /R.E. Turner Brit. Mus. 1928-522/, BMNH; (13) /S.W. Africa Aus. Jan 1930/ /R.E. Turner. Brit. Mus. 1930-117/ (one specimen has an additional label = *Meria capicola* (Turn) male det J.C. Guillardmod), BMNH. (1) /Cap/ /*M. caffra* n.sp./ (blue, autographic) /Type/(red) /C.ne de Saussure/, MHNG; (1) /Cap/ /*M. caffra* n.sp. Peringuey/(blue, autographic) /Type/(red) /C.ne de Saussure/, MHNG; (1) /Hex. R. 1.1.83/ / C. ne de Saussure/, MHNG. Namibia = (1) /Riverside Bethanje SE 2618 Ca 23-26 oct. 1971/ /H4932/ /NNIC/, NNMW

Male. Figs 12-16A (Matjiesfontein specimen compared to holotype).

SAUSSURE labelled some specimens with the new name *Meria caffra*, but he never pub-

lished it. It has the 1<sup>st</sup> sternal surface exceptionally prominent, culminating in a sort of tubercle. The 2<sup>nd</sup> sternum has a median longitudinal broad hollow; the following sterna till 6<sup>th</sup> have a strong high gradulus, not rectilinear, with a backward median end in ventral aspect and a pocket-like invagination followed by a large deep hollow which gets medially the apical border, parting the postgradular surface in two poop-like prominences. 7<sup>th</sup> sternum with two lateral shallow hollows. The lateral keels of 7<sup>th</sup> sternum are strongly laminated and protruding. The tips of the epipygial lobes are very sharp and pointed. The gonostylus lacks the ventral keel.

**D i s t r i b u t i o n .** Namibia and South Africa.

**N o t e .** The 16 specimens at BMNH furnished by TURNER do not pertain at all to a possible typical series, since their seizure occurred well after its naming.

***Afromeria microtera* nov.sp.**

**H o l o t y p e** ♂ - Namibia = /Arnhem 222 Windhoek SE 2218 Ca 23-28 Oct.1972/ /H 15062/ /NNIC/ (blue), NNMW.

**P a r a t y p e s** ♂ - Namibia = (1) / Arnhem 222 Windhoek SE 2218 Ca 23-27 Oct.1972/ /H 15062/ /Namibian National Insect Collection/ (blue), NNMW; (1) /Windhoek SE 2217 Ca 26-27 Oct 1973/ /Namibian national Insect Collection/ (blue), NNMW; (1) /Windhoek SE 2217 Ca 16-18 Nov 1973/ /Namibian national Insect Collection/ (blue), NNMW.

**P a r a t y p e** ♀ - Namibia = /Upper Ostrich gorges 22° 29'S 14° 59'E. Swakopmund Dist. 10april-08May 1984 J. Irish; H. Liesner/ /Namibian national Insect Collection/ (blue), NNMW

**Male** (holotype) Figs 17-21A. Measurements - body length: 11 mm

Black, brown, light brown, pale yellow.

Brown – Antennae. Tip of mandibles. Tip of **Tsa**. Ventral border of clypeus. Subcoastal vein. Tip of forecoxa. Mid and hind coxae, femurs and trochanters but light surfaces. The whole of metasoma but 1<sup>st</sup> sternum which is blackish and the light markings.

Light brown – Veins of the wings and a small ventral portion of tibiae.

Pale yellow – Most of mandibles. Two lateral spots along the fore border and a subapical stripe on the **N<sub>1</sub>** disk. Most of ventral fore femur, apical ventral mid and hind femurs, most of tibiae and all tarsi. Apical stripe along the border of 1<sup>st</sup> to 6<sup>th</sup> terga and 2<sup>nd</sup> to 6<sup>th</sup> sterna.

Hair whitish, never covering underlying integument.

Modified flattened bristles like in *A. poliorykta* sp.n., even though less strong; hardly detectable at the posterior corner of 1<sup>st</sup> tergum and at the sides of 7<sup>th</sup> tergum.

Punctuation quite impressed with interspaces as long as or longer than single diameter throughout head and mesosoma. Punctures more densely packed on the lower frons, lower propodeal disk, while less dense on the metasoma.

Head – Ratio **L/LA** of the median flagellomeres about 1.7. Base of hypostoma and **PoG** dark and only lightly swollen. **PoG** clearly expressed, as long as 1/5 the length of **FoO**. Stripe of sensilla curvata covering more than the width of the median flagellomeres in beneath aspect.

Mesosoma – **N<sub>1</sub>** disk without either anteroventral tooth either keel along its fore border, which forms a clear angle with pronotal plate. Scutellum and postscutellar area flattened with smooth median surfaces. Subhorizontal area of the propodeum very thin and clearly

known from the flattened posterior area, without any ridge between.

Metasoma – Terga less swollen than in *A. poliorykta*. Subhorizontal surface of 1<sup>st</sup> sternum with width about 9 times its median height. The same ratio is about 3.8 for the 2<sup>nd</sup> tergum. Tergal and sternal structures somehow like in *A. poliorykta*, even though less stressed. Otherwise it lacks the lateral extension of the deep transversal hollows behind graduli on 3<sup>rd</sup> to 6<sup>th</sup> terga (therefore the relative **sul** are well detectable in lateral aspect) and on 3<sup>rd</sup> to 6<sup>th</sup> sterna too (therefore there is not any lateral laminated keel under lateroterga).

**Note**. Similar in general habitus and coloration to *A. poliorykta*, it well differs because of its smaller size, shape and sculpture of metameri, epipygium and genitalia. In *A. microtera* the sides of 3<sup>rd</sup> to 6<sup>th</sup> terga are not hollowed. The bristles on the corners of 1<sup>st</sup> tergum and at the sides of 7<sup>th</sup> tergum too are weaker and less flattened than in the former. The aedeagus is more slender than in the two aforesaid taxa *Afromeria poliorykta* nov.sp.

Female. Figs 22-32. Measurements: body length = 14 mm – Forewing length = 7.5 mm

Pitch black, brown and ferruginous.

Brown – **Tsa**. Scape. Forecoxa and all the femurs.

Light brown/Ferruginous – Mandibles. Tibiae and tarsi, tegulae. Veins. Pterostigma with darker inner spot. The whole of metasoma.

Head - Clypeus punctured throughout (but the narrow ventral lamella) more densely in the median area. Very dense small **p.** on lower frons, between **Tsa** and area between **FoO** and mandibular socket. **PoG** well expressed, its length ½ the **FoO**. Vertex with a well defined irregular row of medially impressed **p.** enlarging sideways. Head smooth and shining elsewhere. Upper scape with a large stripe of dense **p.** worn out before its ending.

Mesosoma- Sides of **N<sub>1</sub>** completely punctured. Declivitous anterior surface also completely densely **p.** **Sc<sub>1</sub>**, **Sc<sub>2</sub>** and postscutellar area without any **p.** **Es<sub>1</sub>** swollen with smooth tip. **Es<sub>2</sub>** with a ventral surface densely **p.** throughout and smooth posterior surface. Subhorizontal area of the **P** with **p.** throughout, more densely on the sides. **LaSt<sub>2</sub>** smooth. The twin apophysis of **St<sub>3</sub>** with rounded tips. Bristles as long or longer than height of the pterostigma along the costal vein just before it. Fore tibial spur with an extremely long apex. Basal fore tarsomerus strongly asymmetric in dorsal aspect. Hind tibial spurs isometric, one of them enlarged medially. Claws weakly bifid.

Metasoma –Irregularly spaced **p.** on the whole surface of terga. Sterna with more extended smooth areas. Gradulus well expressed on 2<sup>nd</sup> tergum, very weak on 3<sup>rd</sup>. **sul** present on 1<sup>st</sup> to 4<sup>th</sup> terga.

Very dense short hispid black bristles on the genal area giving to the head a bearded aspect in lateral aspect. Black, short hispid bristles on the frons and declivitous **N<sub>1</sub>** too. Short rameic bristles on the occiput. Longer with rameic reflection hair on collar, lateral **N<sub>1</sub>**, lateral **Es<sub>2</sub>**, lateral propodeal disk, metasoma and legs.

**Note**. The generic association has been made because it possess features present alternatively in *Meria*, *Parameria* and *Poecilotiphia* females, a situation occurring in the males too. There is no safety that some features listed at item 6 could have only specific value. The specific association is only due to the same provenance area and is highly dubitative too.

**E c o l o g y** : unknown

**D i s t r i b u t i o n .** Namibia

**D e r i v a t i o n n o m i n i s .** from the greek μικροτερος = smaller

**V a r i a b i l i t y .** The male paratypes differ just in size: 9-10 mm

***Afromeria poliorykta nov.sp.***

**H o l o t y p e** ♂ - South Africa = /Cape province Matjiesfontein 1-18.XII.1928/ /S. Africa R.E. Turner Brit. Mus. 1929-15/ /*Macromeria klugi* Westwood Det. L.S. Kimsey/, BMNH.

**P a r a t y p e** ♂ - South Africa = /Cape province Prince Albert Rd Nov.1931/ /S. Africa R.E. Turner Brit. Mus. 1931-564/ /*Macromeria klugi* Westwood Det. L.S. Kimsey/, BMNH

**Male (holotype)** Figs 33-39A. Measurements: body length 16,5 mm

Black, brown, orange brown, yellow.

Yellow – Small spots, on the apical femurs and at the base of tibiae. Preapical narrow stripe on **N**<sub>1</sub> disk. Small spot on the inner side of tegula and on humeral plate. Narrow stripe enlarging sideways with waving fore profile along the apical border of 2<sup>nd</sup> to 6<sup>th</sup> terga and 2<sup>nd</sup> to 6<sup>th</sup> sterna.

Brown – Upper surface of flagellum. Semitransparent clypeal lamella and basal hypostoma and genal bridge.

Orange brown – Ventral surface of flagellum. Most of mandibles. The remainder of legs but coxae which are blackish brown.

Head and mesosoma more or less densely and regularly punctured. On clypeus disk, **Es**<sub>2</sub> and propodeum the space among them is less than their diameter. Smooth shining surfaces on temple, median scutellum, postscutellar area and median preapical narrow area on 2<sup>nd</sup> to 6<sup>th</sup> terga. Hair yellowish, denser on clypeus, **Es**<sub>2</sub> and propodeal disk.

Modified strongly flattened bristles present on posterior corners of 1<sup>st</sup> to 5<sup>th</sup> terga enlarging progressively toward the middle of the elements till occurring along the entire border of 6<sup>th</sup> tergum as it occurs on the border of 2<sup>nd</sup> to 6<sup>th</sup> sterna too. Less enlarged bristles are present on the sides of 7<sup>th</sup> tergum too.

Head – Stripe of sensilla curvata a bit less the width of median flagellomeres from beneath. Base of hypostoma and genal bridge, which is very poorly expressed, quite swollen. **cOc** complete. Paramandibular process strongly produced, mandibular socket almost closed (less developed in *A. capicola*). Flagellum thick, the ratio **L/LA** of the median flagellomeres about 1.3.

Mesosoma – Fore border of the **N**<sub>1</sub> disk distinctly angled with pronotal plate with a keel, worn out in the centre, just on its upper third; no tooth on its anteroventral corner. Scutellum and postscutellar area clearly swollen (like in *A. capicola*). Metapleurae (**Em**<sub>3</sub>) mostly punctured and wrinkled, with a narrow shining surface along **smm**. Posterior propodeal surface clearly hollowed, its upper contour with the narrow subhorizontal area like a rough ridge.

Metasoma – Terga swollen, constriction among them well evident in dorsal and lateral aspect. Subhorizontal surface of 1<sup>st</sup> sternum with width about 5 times its median height. The same ratio is about 3.4 for the 2<sup>nd</sup> tergum. Strong graduli on 2<sup>nd</sup> to 7<sup>th</sup> terga. The deep transversal hollows behind graduli on 3<sup>rd</sup> to 6<sup>th</sup> terga extend sideways like in *A. capicola*, therefore the inner dorsal borders of the lateroterga spring up from its surface and the **sul**

running along it are detectable only in dorsal aspect. Elsewhere this feature occurs only in *Allomeria pinguis*. 1<sup>st</sup> sternum strongly prominent and bluntly sharpened. 3<sup>rd</sup> to 6<sup>th</sup> sterna with a subrectilinear gradulus at its basal third; the strongly hollowed postgradular surface is deeply invaginated under it, forming the "colpus" which extends laterally just beneath the lateroterga causing the formation of a strong laminated keel just beneath the ventral border of lateroterga. This occurs in *A. capicola* too and elsewhere in *Parameria femorata*, *A. pinguis* and less strongly in *Myzine braunsi* and *Meria fusiformis* DE GEER 1787. The deep gradulus of 7<sup>th</sup> tergum (state 14i) extends sideways without solution and shapes a broad semicircular hollow around the spiracle. Swollen post-gradulus areas of 3<sup>rd</sup> to 6<sup>th</sup> sterna. The aedeagus is stouter than in most of the taxa of the tribe.

Female: unknown

E c o l o g y : unknown

D i s t r i b u t i o n . Cape province

D e r i v a t i o n o m i n i s . from the greek πολυς = many and ρυκτος = trench.

V a r i a b i l i t y . The paratype does not show any detectable differences.

N o t e . Well known from *A. capicola* because of the coloration, smaller prominence on 1<sup>st</sup> sternum, lack of longitudinal hollow on 2<sup>nd</sup> sternum, straight gradulus on 2<sup>nd</sup> to 6<sup>th</sup> sterna, genitalia. Also the modified flattened bristles are denser, stouter and longer.

#### ***Meriodes nov.gen.***

S p e c i e s t y p e : *Myzine ceresensis* TURNER 1926

The female specimens look like very much females *Meria* in general habitus and most of the character states; they differ mainly in the shape of the glossa and states 7 bb-ee, ii, mm. The lack of any long furrow on the frontal mandibular surface occurs in *Parameria* too, where nevertheless the surface is flat while in *Meriodes* is strongly convex. The body, but the mandibles, completely covered by microreticulation appears to be a unique feature of these females within the subtribe. The complex of the character states 15 aa-dd is unique too in the subfamily and well features the male specimens of *Meriodes*. All the male specimens here quoted show a supplementary longitudinal keel along the ventral inner edge of the hindcoxae (X<sub>3</sub>), a character state which occurs in many afrotropical males *Meria*.

*Myzine ceresensis*, *Myzine braunsi* and *M. picea* sp.n. belong here. *Myzine eurygaster* TURNER 1916 too is placed here even though unhappily, as explained below.

Only the females of *M. ceresensis* and *M. picea* are known.

D e r i v a t i o n o m i n i s . From the combination of *Meria* with the suffix -odes (=to look like). Gender feminine

D i s t r i b u t i o n . Austral Africa.

#### ***Meriodes braunsi* (TURNER 1912) nov.comb.**

*Myzine braunsi* TURNER 1912: 700-701

H o l o t y p e ♂: South Africa = /Willowmore 1-1-1902 Capland Dr. Brauns/ /*Myzine braunsi* Type Turner/ (autographic) /Type/(rounded with red outer ring) /Brauns Coll. 1912-44/ /BM Type Hym. 15.470/, BMNH.

**Paratypes** ♂: South Africa = (2) /Willowmore Capland, 10-03-1902 Dr Brauns / /Brauns Coll. 1912-44/ /Paratype/, BMNH; (1) /Willowmore Capland, 20-03-1902 Dr Brauns/ /Brauns Coll. 1912-44/ /Paratype/, BMNH; (1) /Willowmore, Capland Dr Brauns/ /Brauns Coll. 1912-44/ /Paratype/, BMNH.

**Material**: ♂ - South Africa = (1) /Willowmore 5-1-1902 Capland Dr. Brauns/ /Myzine braunsi Turner/ /S. African Museum A 003172/, SAM; (1) /S.W.Africa Aust Jan 1930/ /R.E.Turner Brit. Mus. 1930- 117/, SAM

Male. Figs 40-44

Very similar to *M. ceresensis* in general habitus, size and coloration; it differs from the latter in the shape of the head and clypeal ventral border in frontal aspect, the placoids on the flagellomeres, N<sub>1</sub> disk in dorsal aspect, the presence of a deep colpus on 2<sup>nd</sup> to 6<sup>th</sup> terga and 3<sup>rd</sup> to 6<sup>th</sup> sterna (lacking in *M. ceresensis*), larger semicircular hollow around spiracle on the sides of 7<sup>th</sup> tergum, 7<sup>th</sup> tergum in dorsal aspect and genitalia

Female. Unknown

**Distribution**. South Africa

***Meriodes eurygaster* (TURNER 1916) nov.comb.**

*Myzine eurygaster* TURNER 1916: 457-458

**Lectotype** ♂ (here designated in order to ensure the name's proper and consistent use): South Africa = /Natal Durban Purch 3-88/ /Myzine eurygaster Type Turner/ (autogr.) /Type/(red) /R.E. Turner det/ /SAM A003152/, SAM !

**Paralectotype** ♂: South Africa = /Natal Umvoti H. Fry./ /1915-319/ *Myzine eurygaster* Cotyp ♂ Turner/(autographic) /Cotype/(rounded with yellow outer ring), BMNH !

**Material**: ♂ - South Africa = (1) /Natal van Reenen Drakesberg Dec 1926/ /S. Africa R.E. Turner Brit. Mus. 1927-25/ /*Meria eurygaster* (Turn) det 1949 C.J. Guillardom/, BMNH

Female. Unknown

**Note**. This combination is purely utilitarian and highly dubitative, since these specimens possess the state 15 aa and cc, but show only partial furrow dividing upper petiolar surface from the tergum, normal epipygium with horizontal very distinct by a keel from lateral areas and round headed aedeagus. On the other hand it has flagellar tyloids like the other members of the genus and basal hind tarsomeres without short approached hair on its upper surface. Because of the flagellomeres this combination is felt better than its transferring to *Meria*.

***Meriodes ceresensis* (TURNER 1926) nov.comb.**

*Myzine ceresensis* TURNER 1926: 109-110

**Lectotype** ♀ (here designated in order to ensure the name's proper and consistent use): South Africa = /Cape province Ceres Jan. 1925/ /Myzine ceresensis Type Turner/(autogr.) /Type H.T/(rounded with red outer ring) /S. Africa R.E. Turner Brit. Mus. 1925-79/, BMNH !

**Paralectotypes** ♂: South Africa = (1) /Cape province Ceres Feb. 1925/ /Myzine ceresensis Type ♂ Turner/(autographic) /Syntype/(rounded with blue outer ring) /S. Africa R.E. Turner Brit. Mus. 1925-79/, BMNH ! (1) /Cape Province Ceres Jan 1925/ /S. Africa R.E. Turner. Brit. Mus. 1925-79/ /Myzine ceresensis Type ♂ Turner/(autographic) /Syntype/(rounded with blue outer ring), BMNH; (3) /Cape Province Ceres March 1925/ /S. Africa R.E. Turner. Brit. Mus. 1925-161/ /Myzine ceresensis Type ♂ Turner/(autographic) /Syntype/(rounded with blue outer ring), BMNH; (1) /Cape Province Ceres April 1925/ /S. Africa R.E. Turner. Brit. Mus. 1925-210/ /Myzine ceresensis Type ♂ Turner/(autographic) /Syntype/(rounded with blue outer ring), BMNH; (3) /Cape Province Ceres 1500 ft Jan 1921/

/S. Africa R.E. Turner. Brit. Mus. 1921-78/ /Myzine ceresensis **Type** ♂ Turner/(autographic) /Syntype/(rounded with blue outer ring), BMNH; (2) /Cape Province Ceres 1500ft Dec 1920/ /S. Africa R.E. Turner. Brit. Mus. 1921-38/ /Myzine ceresensis **Type** ♂ Turner/(autographic) /Syntype/(rounded with blue outer ring), BMNH; (2) /Cape Province Ceres 1500ft Dec 1920/ /S. Africa R.E. Turner. Brit. Mus. 1921-38/ /Myzine ceresensis **Type** ♂ Turner/(autographic) /Syntype/(rounded with blue outer ring), BMNH; (27) /Cape Province Ceres Feb 1925/ /S. Africa R.E. Turner. Brit. Mus. 1925-116/ /Myzine ceresensis **Type** ♂ Turner/(autographic) /Syntype/(rounded with blue outer ring), BMNH; (3) /Cape Town Milnerton Feb 1926/ /S. Africa R.E. Turner. Brit. Mus. 1926-119/ /Myzine ceresensis **Type** ♂ Turner/(autographic) /Syntype/(rounded with blue outer ring), BMNH

**Material.** ♂ - South Africa = (1) /Ceres province Ceres Feb 1925/ /S. Africa R.E. Turner Brit. Mus. 1925-156/ / Myzine ceresensis Turner/(autographic) /A003207/, SAM; (1) /Cape province Ceres Feb. 1925/ /S. Africa R.E. Turner Brit. Mus. 1925-79/, BMNH.

Female. Figs 54-59

Its main differences from *Meria* females are given in the key and illustrated by figures. It shows a clearly detectable and smooth **Es**<sub>3</sub>, severed from the the lateral area of propodeum (which is completely covered with strong oblique wrinkles) by a furrow. This is an almost unique feature in the tribe and absent in *picea*. **Em**<sub>3</sub> finely wrinkled. Brown and dark brown body.

Male. Figs 45-53

Besides the original description it is well featured by the drawings here supplied. Strong graduli are present on terga and sterna.

### ***Meriodes picea nov.sp.***

**H o l o t y p e** ♀ - South Africa = /South Africa W. Cape. cape Town. Above Tokai Forest Constantiaberge Above Donkerboskloof 34°02'S 18° 22'E 460m/ /3-10 March 1995 S. Van Noort Mesic Mtn Fynbos Protea coronata dominated. Malaise trap site 1/, SAM !

**P a r a t y p e** ♀ - South Africa = /South Africa W. Cape. cape Town. Above Tokai Forest Constantiaberge Above Donkerboskloof 34°02'S 18° 22'E 460m/ / 10-17 March 1995 S. Van Noort Mesic Mtn Fynbos Protea coronata dominated. Malaise trap site 1/, SAM !

**P a r a t y p e s** ♂ - South Africa = /South Africa W. Cape. cape Town. Above Tokai Forest Constantiaberge Above Donkerboskloof 34°02'S 18° 22'E 460m/: (2) /9-15 February 1994 5 S. Van Noort Mesic Mtn Fynbos Protea coronata dominated. Malaise trap site 1/, (3) /15-23 February 1994 5 S. Van Noort Mesic Mtn Fynbos Protea coronata dominated. Malaise trap site 1/, (2) /6-13 december 1994 5 S. Van Noort Mesic Mtn Fynbos Protea coronata dominated. Malaise trap site 1/, (1) /3-10 March 1995 S. Van Noort Mesic Mtn Fynbos Protea coronata dominated. Malaise trap site 1/, (1) / 10-17 March 1995 S. Van Noort Mesic Mtn Fynbos Protea coronata dominated. Malaise trap site 1/, SAM!

Female. Figs 60-63 (paratype). Measurements: body length = 9 mm, forewing = 5 mm

Pitch-black with brown shadows on mandibles, flagelli, clypeal disk, palpi, **LaSt**<sub>2</sub>, legs and apical borders of metameri. Wings darkened, the hindwing a bit lighter. Hair brownish. Microreticulation subpentagonal on the head and mesosoma, transversal on metameri.

Head – Base of hypostoma and **PoG** area darkened and moderately swollen. **PoG** well expressed with a prominent suture. Stripe of dense **p.** bearing short black bristles on the scape getting its apex like in *Poecilotiphia*. Head almost completely punctureless. Just few (4-5) **p.** on the lower frons above the tentorial pit, on **Tsa** and vertex, very sparse **p.** on temple and genae.



Mesosoma – **N<sub>1</sub>** disc, **Sc<sub>1</sub>**, **Sc<sub>2</sub>** and postscutellar area completely devoid of **p.**; lateral **N<sub>1</sub>**, **Es<sub>1</sub>** and **Es<sub>2</sub>** sparsely **p.** throughout; propodeal disk more densely **p.** with a well impressed and long median furrow. Lateral propodeal area with subhorizontal very fine wrinkles just on its upper surface, smooth downward. **LaSt<sub>2</sub>** and **Em<sub>3</sub>** smooth and shining. No detectable **Es<sub>3</sub>**. Forewing as similar as to *M. ceresensis*.

Metasoma – Preapical row of **p.** like in *ceresensis*, very rare **p.** elsewhere. 1<sup>st</sup> sternum with very fine **p.** and rugules throughout. Gradulus on 2<sup>nd</sup> and 3<sup>rd</sup> tergum, sul on 1<sup>st</sup> to 4<sup>th</sup> terga.

**Note**. Known from the female of *M. ceresensis* mainly by the shape of the head and clypeal lamella in frontal aspect, pronotal disk in dorsal aspect, lateral **P**, greater size, darker coloration.

Male. Figs 64-71 (Paratype /10-17 March 1995/). Measurements: body length 14,5 mm =, forewing length = 7.5 mm

Black, brown and pale yellow.

Brown – Apical half mandible. Dark portion of the tibiae. Nervulations and pterostigma. Apical tarsomeri

Pale yellow – Median spot on clypeus. Basal mandible. Two lateral stripes either along fore border either apical border of the **N<sub>1</sub>** Tegula, humeral plate and basal veins. Small spot on **LaSt<sub>2</sub>**. Apical small spot on hindcoxa and all the femurs, upper surface of tibiae, tarsomeri but apical one. Continuous preapical narrow stripe on 1<sup>st</sup> tergum. Three preapical spots on 2<sup>nd</sup> to 6<sup>th</sup> tergum and (smaller) on 2<sup>nd</sup> to 6<sup>th</sup> sternum. Small lateral spot at the base of 7<sup>th</sup> tergum.

Dense **p.** on clypeus and most of the head and mesosoma, more scattered on genae, **N<sub>1</sub>** disk, **Sc<sub>1</sub>**, **LaSt<sub>2</sub>**. Densely packed **p.** without no space among them on the **P**. disk. Rare **p.** on most of terga, more densely packed on 1<sup>st</sup> and 2<sup>nd</sup> tergum and along the median constriction of 2<sup>nd</sup> to 6<sup>th</sup> sterna. Whitish hair throughout, denser on the head and mesosoma.

Head – **PoG** well produced, its length 1/5 the width of **FoO** with prominent intergenal suture.

Mesosoma – **Em<sub>3</sub>** mostly smooth. **su<sub>3</sub>** defined by the ends of the strong subhorizontal wrinkles of the lateral **P**.

**Note**. Well distinct from the other taxa of the genus by the disposition of placoids on the flagellomeri, shape of **N<sub>1</sub>** disk in dorsal aspect, 7<sup>th</sup> tergum and genitalia.

**Variability**. The female paratype is a little smaller, about 8,5 mm. The male paratypes show very shallow differences on size and colour.

**Derivatio nominis**. From the coloration of the female.

### **Macromeria SAUNDERS 1850**

**Species type**: *Meria klugii* WESTWOOD 1835

*Macromeria* S. SAUNDERS 1850: 71

*Hemimeria* SAUSSURE 1892: 249 **nov.syn.**

The history of this taxon name suffered many changes about its taxonomical rank since the beginning. SAUSSURE (1892) did not name it at all in his "Groupe des *Meria*". DALLA TORRE (1897:120) consider it (wrongly written *Micromeria* because of a lapsus calami as we easily can infer from the greek ethymology he quote just below: μακρός, = longus

etc.) synonym of *Myzine* LATREILLE 1803 and Turner always followed him. Successively KROMBEIN (1937) consider it a subgeneric group of *Meria* [*Meria* (*Macromeria*) *klugii* (WESTWOOD)] as JACOT-GUILLARMOD (1953: 17, 1961: 4) made too, even though he overlooked any subgeneric distinction in labelling the specimens of *M. klugii* from S. Africa. *Hemimeria* was established by SAUSSURE (1892) basing it on two species, first *Meria* (*Pseudomeria*) *semirufa* GERSTAECKER 1857 then *Myzine savignyi* GUÉRIN 1837 (= *Parameria femorata*). JACOT-GUILLARMOD (1959) well argued about ascribing the SAUSSURE's name to *semirufa* which has so to be considered the type species of *Hemimeria*. According to the present study, we feel there is no generic difference between *M. semirufa* and *M. klugii*, whose relative distance with the other generic groupings is otherwise well ascertained. Hence the aforesaid synonymy.

*Macromeria* appears so far inhabiting exclusively Austral Africa. The females are univocally featured by the states 7e-i, k-l, the males by 15a, c-f. The states 7g, i, k and 15e, f occur only here within the subfamily. The aedeagus (Figs 90-92).is particular with reference to the aedeagus of males of all the remainder of the subfamily (Figs 21A, 71, 93-95)

The members of this taxon get the greatest size within the tribe.

Among them *M. immaculata* appears to be the closest taxon to *Meria*, while *M. infradentata* shows the usual mesosomal modifications occurring in the more brachypterous taxa, i.e. a longest and greater  $N_1$ , shortened  $Sc_1$ , more protruding  $Es_2$ .

### Identification key

- ..... Females 1  
 ..... Males 5
- 1
- a Basal hind tarsomerus with scattered bristles, not arranged in a row (as in *Meria*).  
 b Hind tibial spurs stylus-like with subparallel border and not enlarged apically.  
 c 6<sup>th</sup> tergum smooth and shining without sculpture  
 ..... *M. immaculata* (CAMERON 1910)
- aa Basal hind tarsomerus with punctures arranged in a well distinct rough row on their back surface, bearing long bristles as long as  $\frac{3}{4}$  its length each.  
 bb Hind tibial spurs enlarged apically, spatula - like  
 cc 6<sup>th</sup> tergum with evident (at 10x too) sculpture  
 ..... 2
- 2
- a Mandible with a supplementary subapical tooth, backwardly directed  
 b Pronotal disk in dorsal aspect longer than  $Sc_1$ ,  $Sc_2$  and metanotum all together; longer than wide and a bit wider anteriorly than apically.  
 c  $Es_1$  prominence not rounded, posteriorly keeled with abruptly subperpendicular posterior surface  
 d  $Es_2$  strongly narrowed and subrectangular in dorsal aspect, with almost subparallel anterior and posterior surfaces and sharp posteroventral extension (best detectable in posterodorsal aspect). Anterior surface orthogonal to the main axis of the body.  
 e Wings reduced, forewing length as long as the mesosoma from tip of  $eN_1$  to  $dP$ .  
 ..... *M. infradentata* (TURNER 1913)

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- aa Mandible without supplementary subapical tooth
  - bb Pronotal disk in dorsal aspect as long as **Sc**<sub>1</sub> and **Sc**<sub>2</sub>, as long as wide and not wider basally than apically.
  - cc **Es**<sub>1</sub> evenly rounded without any ventral keeled edge
  - dd **Es**<sub>2</sub> prominence not narrowed and subtrapezoidal in dorsal aspect with anterior and posterior surfaces converging outwardly. Anterior surface forming a large obtuse angle to the main axis of the body. Its posteroventral portion evenly wearing out without any sharp process.
  - ee Wings longer, the tip of the forewing gets the apical border of the 2<sup>nd</sup> tergum.
- .....3

3

- a Clypeal disk mostly flattened with a prominent narrow ventral lamella and some smooth areas on the clypeal disk
  - b Completely black body and strongly darkened wings.
- ..... *M. klugii* (WESTWOOD 1835)
- aa Clypeal disk slightly convex throughout without prominent ventral lamella and completely **p**.
  - bb Reddish area either on mesosoma either on metasoma
- .....4

4

- a Ratio **LA**<sub>C<sub>a</sub></sub>/**A**<sub>C<sub>a</sub></sub> about 1.0
  - b Ratio **LA**<sub>C</sub>/**A**<sub>O</sub> about 0.8.
  - c Ratio **LA**<sub>N<sub>1</sub></sub>/**H**<sub>N<sub>1</sub></sub> about 1.5
  - d Propodeal disk almost evenly rounded, its subhorizontal area roughly detectable, with median height greater than the height of postscutellar area.
  - e Hindtibial spurs spatulated. Both of them are about 9 times longer than wide
  - f Head and mesosoma with large reddish areas; metasoma blackish to brown-black
  - g Wings evenly very darkened
- ..... *M. semirufa* (GERSTAECKER 1857)
- aa Ratio **LA**<sub>C<sub>a</sub></sub>/**A**<sub>C<sub>a</sub></sub> about 1.2
  - bb Ratio **LA**<sub>C</sub>/**A**<sub>O</sub> about 1.4
  - cc Ratio **LA**<sub>N<sub>1</sub></sub>/**H**<sub>N<sub>1</sub></sub> about 2
  - dd Propodeal disk almost evenly rounded, its subhorizontal area roughly detectable, with median height well shorter than the height of postscutellar area
  - ee Hindtibial spurs spoon shaped. Major one is less than 6 times longer than wide, minor less than 5 times longer than wide.
  - ff Head and mesosoma black, metasoma wholly reddish
  - gg Wings dichroic, basal half hyaline and apical half beginning at the the end of the tubular cells moderately darkened
- ..... *M. rhouiogastra* nov.sp.

5

- a Clypeus prominent with flattened median surface
- b Pronotal foreborder laterally hollowed, ending in a blunt tooth sideways oriented
- c **P**. disk evenly rounded, no distinct subhorizontal from declivitous area
- d Terga swollen making evident strong constriction among them in lateral and dorsal aspect.

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- e Aedeagus with toothed ventral process shorter and much stouter than dorsal one in lateral aspect  
..... *M. semirufa* (GERSTAECKER 1857)
- aa Clypeus prominent and evenly rounded
- bb Pronotal foreborder continuous till the anteroventral corner; the eventual tooth is downward directed
- cc **P.** disk with a ridge well severing subhorizontal from declivitous area
- dd Metameri only weakly constricted
- ee Ventral toothed process of aedeagus slender and far longer than dorsal one.  
.....6

6

- a Pronotal plate strongly concave. Distinct keel along the pronotal fore border with a median notch and well expressed anteroventral tooth
- b **X**<sub>3</sub> with an acute longitudinal keel along the inner ventral edge
- c 1<sup>st</sup> sternum surface smooth with only scattered **p.**
- d Yellow markings present and well extended on the head, pronotum and metasoma  
..... *M. infradentata* (TURNER 1913)
- aa Pronotal plate not concave. Neither keel, neither anteroventral tooth along the pronotal fore border
- bb **X**<sub>3</sub> with simply rounded inner ventral edge
- cc 1<sup>st</sup> sternum surface sculptured and rugose
- dd Almost entirely black, with very small light markings limited to the apical corner of 2<sup>nd</sup> to 6<sup>th</sup> terga.  
..... *M. klugii* (WESTWOOD 1835)

***Macromeria klugii* (WESTWOOD 1835)**

*Meria klugii* WESTWOOD 1835: 53. Type (?) ♀: "apud Sierra Leone", ?.

**M a t e r i a l :** ♀ - South Africa = (2) /O'okiep Warden 18-9-1886/ /S.A.212♀/ /S.A. A003084/, SAM; (1) /Willowmore Capland Dr. Brauns 20.11.09/ /23/(red), BMNH; (1) /S. Africa Calvinia 11-16.XI.1931/ /S. Ogilvie/ /Pres. By IMP. INST: ENT B.M.1934-282/ /*Macromeria klugi* Westwood det. L.S. Kimsey/, BMNH. (1) /Clanwilliam Nardow S.A. Museum – Mus. Staff Sep. 1941/ /*Meria klugii* Westw. ♀ Det. C.J. Guillardmod 1940/ /A003086/, SAM.

♂ - South Africa = (2) /O'okiep Warden 18-9-1886/ /S.A.212♂/ /S.A. A003084/, SAM; (1) /Augustfontein (Caslvinia) C.P. – Mus. Exp. Sep. 1947/ /*Meria klugii* Westw. ♂ Det. C.J. Guillardmod 1940/ /A003087/, SAM. Namibia = (1) /Luderitz District 8 km W Rash Pinah 27°59'S 28°51'E 25.26VIII 1998 Kirk-Spriggs E. Marais automatic pit trap/ /NNIC/, NNMW.

Female. Figs 72-79A (specimen from O'okiep)

Male. Figs 85-92 (specimen from O'okiep)

TURNER (1913) ascribed his *Myzine nigrita* TURNER 1910 (♂) to WESTWOOD'S taxon. J. GUILLARMOD (1953) synonymized *nigrita* with *Mesa capensis* (LEPELETIER 1845) and gave the right sex association in labelling specimens at the South African Museums. The description of these males, based on the O'okiep specimen and hitherto never performed as far as I know, here follows.

Measurements. Body length = 18 mm

Black, brown and pale yellow.

Brown – Tip of mandibles, tibiae and tarsi.

Pale yellow - Two very small lateral spots and one median narrow short stripe, often divided, along apical borders of 2<sup>nd</sup> to 6<sup>th</sup> terga.

Wings very slightly darkened apically

Clypeus with a straight ventral border and a small median notch. Distal flagellomeres wider than basal one. Flagelli short, their length about like the length of mesosoma (from tip of **eN**<sub>1</sub> to **dP**). Head 1.1 wider than high in frontal aspect. **PoG** well expressed, ¼ the length of **FoO**. Posterior border of **Hy** and **FoO** straight, forming a sub orthogonal angle with their longitudinal sides.

**N**<sub>1</sub> has a swollen foreborder with a median notch and a broad furrow just after it. **Sc**<sub>2</sub> swollen. **P** with a clear horizontal area severed from the sub vertical posterior one; the former presents laterally a large hollow. **LaSt**<sub>2</sub> not complanar, forming an obtuse angle at their contact line. **X**<sub>3</sub> with a clear angle between ventral and posterior (inner) surface, but without keel.

Declivitous surface of 1<sup>st</sup> tergum forming an orthogonal angle with its upper horizontal surface in lateral aspect.

Dense, mostly without any space among them, well impressed **p**. throughout the head and mesosoma, scape and genae too, except smooth **LaSt**<sub>2</sub> and a smooth stripe along **co** on the temples. **Ssa** strongly wrinkled vertically. Declivitous **P** almost sculpturated by waving irregular wrinkles. **Em**<sub>3</sub> and ventral lateral area of **P** finely wrinkled. Every **p**. bearing brownish hair which is denser on the clypeus, frons, **Es**<sub>2</sub> and **P**.

Metameri with shallow more scattered **p**. and less dense hair.

Distribution. So far it appears to be limited to austral Africa and especially to its Southern and South Western areas. The original indication by Westwood "apud Sierra Leone" is obscure to me.

***Macromeria semirufa* (GERSTAECKER 1857) nov.comb.**

*Myzine* (*Pseudomeria*) *semirufa* GERSTAECKER 1857: 512

H o l o t y p e ♀: South Africa = /Tette Peters S./(grey) /TYPE/(pale red) /6252/ /*semirufa* Gerst\*/(pale blue), MNHU !

*Myzine rufosplendida* TURNER 1913: 729-730 ♀ **nov.syn.**

*Myzine aterrima* TURNER 1917: 351 ♂ **nov.syn.**

M a t e r i a l : ♀ - Botswana = (1) /Botswana (88) L. Ngami, 2 mls NE Sehithwa 15-16.IV 1972/, BMNH. South Africa = (2) /Masiene P.E. Africa R.F. Lawrence – Dec. 1923/ /*Meria semirufa* det 1949 J.C. Guillardmod/ /S.A. Museum A003091/, SAM. Zimbabwe = (1) /Igusi S. Rhodesia 9.3.1941 – National Museum S. Rhodesia/ /*Meria rufosplendida aterrima* ♀ (Turn) det 1949 J.C.Guillardmod/ /S.A. Museum A 003185/, SAM; (1) /Victoria falls Dec 1938 National Museum S. Rhodesia/ /*Meria rufosplendida* ♀ (Turn) det 1949 J.C.Guillardmod/ /S.A. Museum A003186/, SAM. Mozambique = /*Meria semirufa* ♀ Gerstack Mozambico D Gribodo/, MSNG.

♂ - Botswana = (1) /Botswana (88) L.Ngami, 2 mls NE Sehithwa 15-16.IV 1972/, BMNH. South Africa = (1) /Masiene P.E. Africa R.F. Lawrence – Dec. 1923/ /*Meria semirufa* det 1949 J.C. Guillardmod/ /S.A. Museum A003091/, SAM. Zimbabwe = (3) /Igusi S. Rhodesia 9.3.1941 – National Museum S. Rhodesia/ /*Meria rufosplendida aterrima* ♂ (Turn) det 1949 J.C.Guillardmod/ /S.A. Museum A 003185/, South Africa = (1) /Coll.<sup>nc</sup> P. Magretti Africa da Gianelli/ /49/, MSNG.

N o t e . I could not find any difference between the males ascribed to *M. semirufa* and *M. aterrima*, apart the strongly reduced light coloration on the metasoma of the latter. In the females J.Guillardmod ascribed to *M. rufosplendida aterrima* the unique difference found was the absence of gradulus on 3<sup>rd</sup> tergum, present in *M. semirufa* type, but this a variable state in *Meria* too, thence their synonymy is proposed.

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About the identity of *M. rufosplendida*, whose types I did not examine, the authority was J. Guillarmod who certainly examined types at TMP.

Distribution. The whole southern areas of the continent from Angola to Mozambique.

***Macromeria immaculata* (CAMERON 1910) nov.comb.**

*Myzine (Meira) immaculatus* CAMERON 1910: 117

H o l o t y p e ♀: South Africa = /Doornf 29 12 06/ /Myzine Meira immaculatus Cam. Type/ (autographic) /Type hym 1937 Myzine meira immaculatus / (red), TMP!

N o t e . It is similar to *M. semirufa* in general habitus, apart the different coloration. It has completely black body, rufous legs and different shape of head (numbers in brackets refer to semirufa): ratio  $LA/A$  in frontal aspect about 1.2 (1.0). Ratio  $LA_G/LA_O$  in lateral aspect about 1.1 (0.8). Basal hindtarsomeri, hind tibial spurs and 6<sup>th</sup> tergum are like in *Meria*. Mouthparts, shape of the mandibles, fore tibial spur, shape of 2<sup>nd</sup> *CSM* and 1<sup>st</sup> tergal surface are typical of *Macromeria*.

It is known from the sole holotype.

Male. Unknown.

***Macromeria infradentata* (TURNER 1913) nov.comb.**

*Myzine infradentata* TURNER 1913: 728-729

T y p e (-s?) ♀: South Africa = "Orange free state Bothaville (Dr Brauns), October, TMP

M a t e r i a l : ♀ - Botswana = (1) /Botswana (83) 18 mls NE Kalkfontein 12-13.IV.1972/ /Southern African exp. B.M. 1972-1/, BMNH; (1). Namibia = (1) /S.W.-Afr. Ovamboland 27.VIII.1956 Coll. G. Rudebeck Ondonga/, MZUF.

♂ - Botswana = (1) /Botswana (83) 18 mls NE Kalkfontein 12-13.IV.1972/ /Southern African exp. B.M. 1972-1/, BMNH. Namibia = (1) /Ondangua 38km SE Ovamboland SWA SE 1715 Dd 9 May 1971/ /NNIC/; NNMW; (1) /Welverdien 328 Keetmanshop SE 2519 Dd 8-13 Oct 1972/ /NNIC/, NNMW; (1) /NW Etosha nat. park at: 18°43'S, 14°35'E 5 May 1987 J. Irish, E. Marais/, NNMW

N o t e . I did not examine the type, but the taxon is easily recognised through the original description because of the peculiar inwardly apical supplementary tooth on the mandible, unique in the subtribe. Moreover it has reduced length of the wing and more elongated pronotum. The association of sexes was previously performed by J. Guillarmod in labelling specimens at SAM. The male resembles lighter specimens of semirufa in coloration and differs mainly in having a strongly concave pronotal plate and the aedeagus with a long ventral process.

D i s t r i b u t i o n . Namibia, South Africa, Botswana.

***Macromeria rhouiogastra* nov.sp.**

H o l o t y p e ♀: Namibia = /Chulon; Narib Ost 602 24°10'S, 17°42'E Marienthal district 28 Sept.-20 Oct. 1982 M.-L. Penrith Preser. traps. dune/ /H58312/ /NNIC/, NNMW.

Female (holotype). Figs 96-100. Measurements: body length = 16mm – forewing length: 10mm.

Black, brown and light brown, dark ferruginous.

Brown and light brown: clypeus, **Tsa**, antennae, mandibles, **LaSt<sub>2</sub>**, **Ta**.

Dark ferruginous: the whole of metasoma

Head – Frons and vertex mostly smooth. Clypeus completely **p.**, its ventral lamella very narrow and hardly detectable in frontal aspect. **Tsa** very prominent in dorsal aspect. Large Genae.

Mesosoma – Declivitous and lateral areas of pronotal disk, **Es1**, most of **Es2**, subhorizontal area and posterodorsal lateral edge of **P** densely **p.** without space among **p.** The remainder with only more scattered **p.** No wrinkles on lateral **P**. Declivitous dorsal **P** distinctly concave. Wings veins like in *M. semirufa*. Wings yellow, with apical half beginning at the the end of the tubular cells moderately darkened

Metasoma – Very small and shallow scattered **p.** on 1<sup>st</sup> to 5<sup>th</sup> terga. More densely packed **p.** on 1<sup>st</sup> sternum. Larger and more scattered shallow **p.** on 2<sup>nd</sup> to 6<sup>th</sup> sterna. Completely sculptured 6<sup>th</sup> tergum by rough longitudinal rows of small bumps and basally with an irregular evident gradulus worn out medially.

Brown-golden hair throughout, denser and short on occiput and clypeus, longer on **P**.

Microreticulation like in *semirufa*, well detectable at 50x, on large areas of the body but **Tsa**, antennae, genae, lateral **N<sub>1</sub>**, **Es<sub>2</sub>**, dorsal **P**, legs.

Male. Unknown

Known only from the holotype

*Derivatio nominis*. From the colour of metasoma: ρουσιος = reddish and γαστηρ = stomach

*Note*. Well distinct from the colour of wings and metasoma, the shape of hindtibial spurs and sculpture of 6<sup>th</sup> tergum. It lacks most of the flagelli.

### ***Allomeria nov.gen.***

*Species type*: *Myzine pinguis* TURNER 1916. Monotypic.

*Derivatio nominis*. from the greek αλλος (= different from, strange) and *Meria*. Gender feminine.

The colpus on terga and sterna are morphologically like those described in *A. poliorykta*, with the same disposition of the *sul*. Lobes of epipygium (7<sup>th</sup> tergum) rounded laterally without any keel and therefore any differentiated horizontal from vertical surfaces.

The unique combination of the character states 18c, j, l and chiefly the uniquely derived characters within the subfamily 18a, m, n force to segregate this taxon from every others giving it a new taxon name, notwithstanding its unicity.

### ***Allomeria pinguis* (TURNER 1916) nov.comb.**

*Myzine pinguis* TURNER 1916: 458-459

*Holotype* ♂: Zimbabwe = /Rhodesia Sebakwe/ /*Myzine pinguis* Type Turn/(autographic) /R.E.Turner determ/ /Type/(red) /Sam-Hym a003153/, SAM!

Male. Figs 101-110

Dark brown, reddish-brown and pale yellow.

Reddish-brown - Mandible. Wing veins. Legs. Lateral terga and sterna. Apical lobes of the epipygium and anal hook.

Pale yellow – Most of the clypeus. Spot along the inner border of the eyes. One on the outer side of the mandible. Narrow lateral spots on the foreborder and postero dorsal

corner of the **N**<sub>1</sub>. One spot on the postscutellar area. Spots on outer fore tibia, on the ventral forefemur, at the base of hind tibia. Spot on innere tegulae (the remainder transparent). Two weak lateral spots on 1<sup>st</sup> tergum. Two lateral spot and median thin stripe on the apical border of 2<sup>nd</sup> to 6<sup>th</sup> terga and sterna: Transversal spot on 7<sup>th</sup> tergum.

Head - Regularly and densely **p**. but around ocelli and **Ssa** which is vertically wrinkled. Mouthparts not well detectable, but not elongated at all. **Tsa** with a moderate but well distinct notch between them, in dorsal aspect too. Closed mandibular socket. **PoG** about as long as **FoO**, depressed relatively to the mandible condyle, the contiguous genal areas sloping down toward it. Basal three flagellomeres evenly covered by conical sensilla.

Mesosoma – Pronotal disk without keel on its fore border. **Em**<sub>3</sub> horizontally wrinkled. Veins **M-a** and **Cu<sub>1</sub>-a** of the fore wing reach its apical border. Fore tibial spur with a very short apex and inner concave profile. Velum of the basitarsal notch combed only on its outer third. Hind basal tarsomeres completely devoid of dense appressed hair but only with weak scattered bristles ventrally settled in one row.

Metasoma – Deep furrow severing declivitous tergal surface from sternal surface which is roughly sculptured. Strong gradulus on 2<sup>nd</sup> tergum. Colpus on 3<sup>rd</sup> to 6<sup>th</sup> terga and 3<sup>rd</sup> to 6<sup>th</sup> sterna. Semicircular gradulus on the sides of 7<sup>th</sup> tergum. 8<sup>th</sup> sternum broadly enlarged basally.

Known only from the holotype.

Female unknown.

#### ***Zezenia* ARGAMAN 1994**

Species type: *Myzine stigma* TURNER 1912  
(*Zezenia* ARGAMAN 1994: 90)

Note. NAGY (=ARGAMAN) described a new species, *ponderopardalis*, ascribing it to *Dermasothus* MENOZZI 1941, on a specimen from Willowmore South Africa. GORBATOVSKY (1979) synonymized it with TURNER's taxon under the name *Dermasothus stigma*, then (1981) he ascribed it to the genus *Poecilotiphia*. In both of the events he only listed the names without any commentary. ARGAMAN (1994) erected the new taxon name *Zezenia* basing it nominally on *Myzine stigma* as type species, without any connection and absolutely disregarding both his preceding description and GORBATOVSKY's actions. None of them examined the type specimen at BMNH. ARGAMAN supplied the new taxon name with the only hint to "Last tarsal segment of male hind leg very much longer than penultimate one. Forewing without marginal cell and with only an enclosed submarginal cell. Female unknown. Diurnal (Fig.59)." Unfortunately he placed at first the new taxon name under the subfamily Iswariinae (item 19), whose he gave "Male antennal toruli vertical, confined to plane of front." as the main distinctive feature, then under the subordinate tribe Iswariini (item 21) featured by "Male hypostoma narrow, far removed laterally from base of mandibles, by basal width of a mandible." The first assertion is wrong since all the members of the entire complex (without any exception) of the Myzinid wasps have supra antennal lobes (**Tsa**) on lower frons and sub horizontal toruli on their ventral face, a synapomorphy shared with Thynninae, *Pterombrus* and males of Methochinae. Both of these character states do not correspond to the real type preserved at BMNH which has clearly developed **Tsa**, broad **FoO** and hypostoma with open mandibular sockets and without developed paramandibular process. The figure too



by ARGAMAN does not correspond to the type, lacking **Tsa** and having too small ocelli (see the present key). Considering also that the ARGAMAN's description and proposition about *Zezeida* are unfortunately very much poor and shallow, strong doubt about his correct interpretation of the taxon well comes out.

### ***Zezeida stigma* (TURNER 1912)**

*Myzine stigma* TURNER 1912: 699-700

H o l o t y p e ♂: South Africa = /Willowmore Capland Dr Brauns/ /Brauns collection 1912-44//*Myzine stigma* Type Turn/(autographic) /Type/(rounded with outer red ring) /B.M. Type Hym 15.1524/, BMNH!

N o t e . NAGY reports that the holotype specimen of *Dermasothus ponderopardalis* is labelled too /Willowmore Capland (Dr Brauns)/ but there is any proof about its examination by Turner who however does not specify about the number of examined specimens in the original paper. I conclude to exclude it could belong to a possible typical series.

### **Acronyms**

BMNH = Natural History Museum, London; MHNG = Museum d'Histoire Naturelle, Genève; MHNP = Museum d'Histoire naturelle, Paris; MNHU = Museum für Naturkunde der Humboldt-Universität, Berlin; MSNG = Museo Civico di Storia naturale "G. Doria", Genova; MZUF = Museo Zoologico de "La Specola", Firenze; NMNW = National Museum of Namibia, Windhoek; NNIC = National Namibian Insect Collection; SAM = South African Museum, Cape Town; TMP = South African Transvaal Museum, Pretoria.

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### **Zusammenfassung**

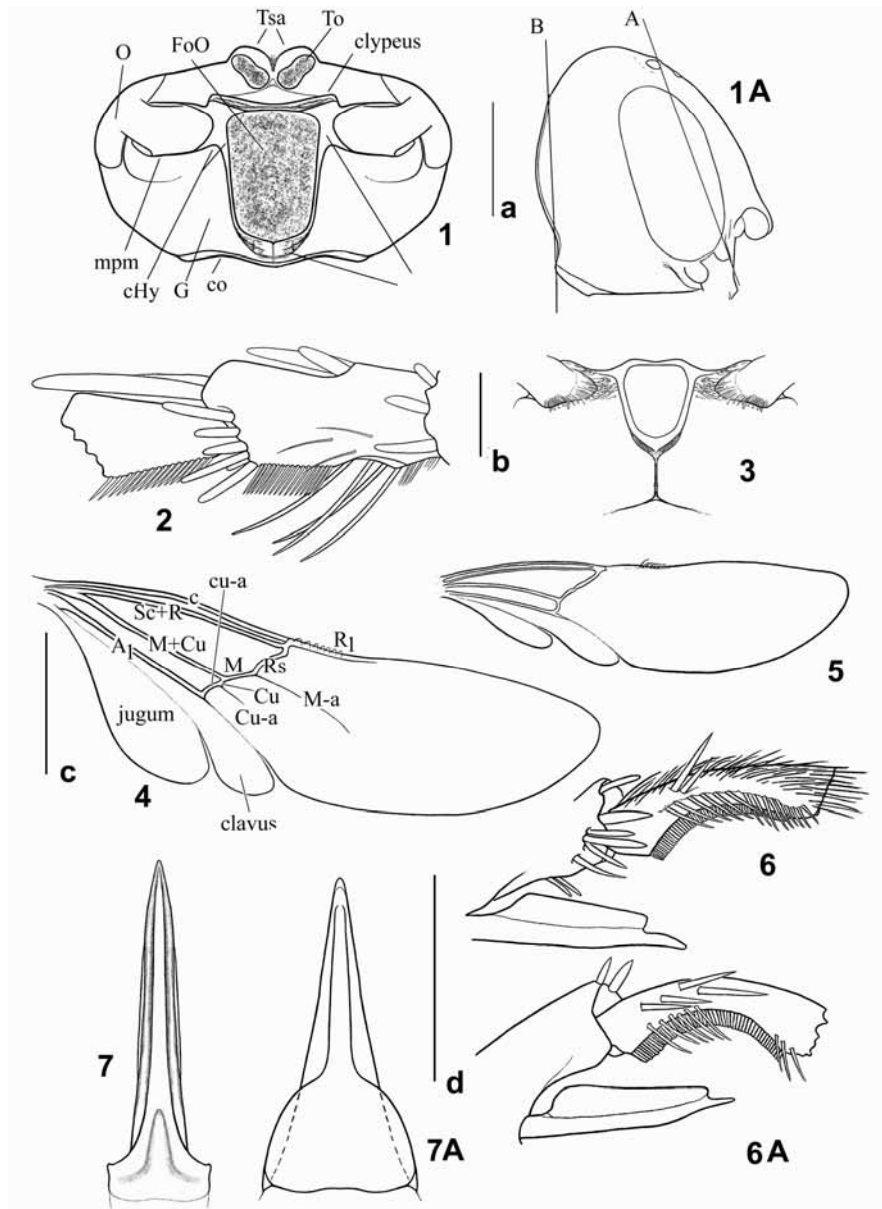
Ein Schlüssel der Gattungen der Tribus Meriina, einschließlich Taxa der afrotropischen Fauna wird vorgestellt. Die drei Gattungen *Afromeria*, *Allomeria*, *Meriodes* sowie die vier Arten *Afromeria microtera*, *Afromeria poliorykta*, *Meriodes picea*, *Macromeria rhousiogastra* sind neu für die Wissenschaft. Folgende Neukombinationen werden vorgenommen: *Myzine capicola* (TURNER 1913) unter *Afromeria*; *Myzine braunsi*, *Myzine eurygaster* (TURNER 1916) und *Myzine ceresensis* (TURNER 1926) unter *Meriodes*; *Myzine (Pseudomeria) semirufa* GERSTAECKER 1857, *Myzine (Meira) immaculata* CAMERON 1910 und *Myzine infradentata* (TURNER 1913) unter *Macromeria* S. SAUNDERS 1850; *Myzine pinguis* (TURNER 1916) unter *Allomeria*. Die Lectotypen von *Myzine eurygaster* und *Myzine ceresensis* werden festgelegt.

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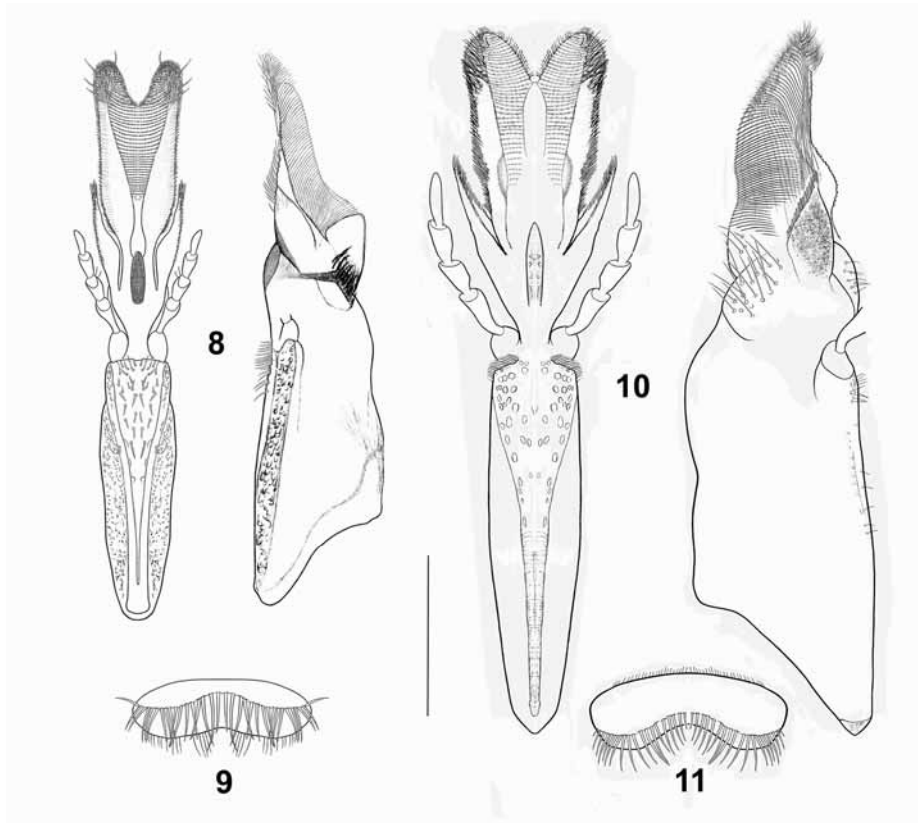
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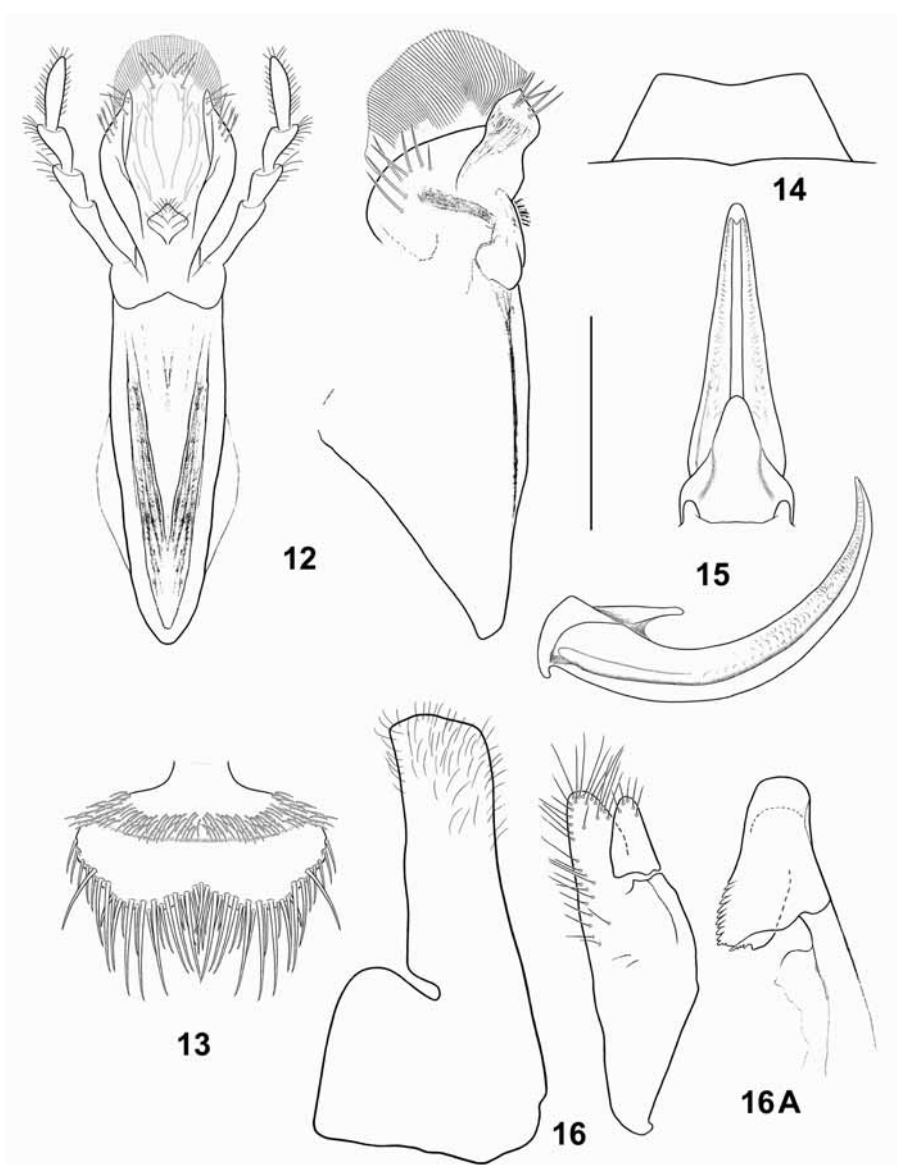
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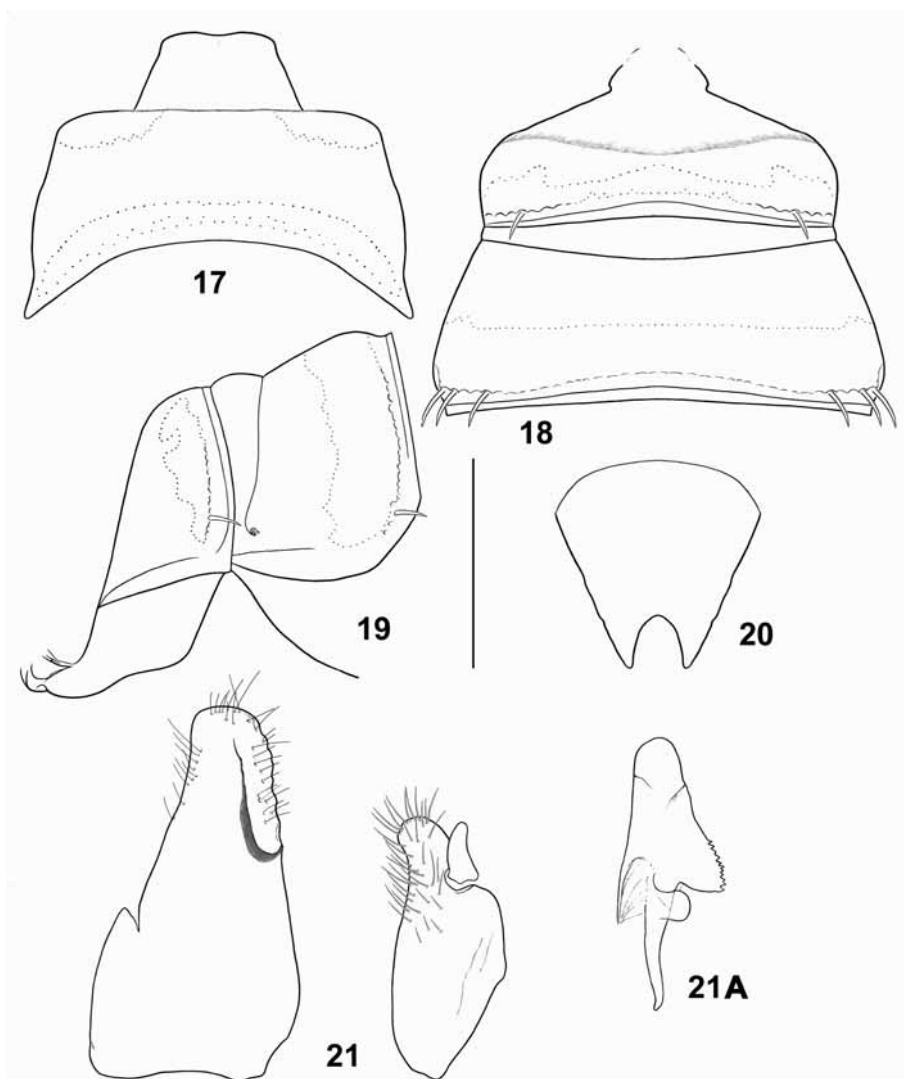
**Figs 1, 1A, 2, 4:** *Meria* ♀. (1) head, ventral aspect; **1A:** head, lateral aspect; (2) basal two fore tarsomeres; **4:** fore wing. **Fig. 3:** *Komarowia* ♀, head, ventral aspect. **Fig. 5:** *Myzinella* ♀, fore wing. **Fig. 6, 7:** *Meria* ♂. (6) fore tibial spur and basal tarsomerus, sub ventral aspect. (7) 8<sup>th</sup> sternum, dorsal aspect. **Fig. 6A, 7A:** *Poecilotiphia* ♂. **6A:** fore tibial spur and basal tarsomerus, sub ventral aspect; **7A:** 8<sup>th</sup> sternum, dorsal aspect. (1, 1A: scale bar "a" = 1 mm) (2: scale bar "b" = 0,25 mm) (3: scale bar "b" = 1 mm) (4, 5: scale bar "c" = 1 mm) (6, 6A, : scale bar "d" = 1 mm) (7, 7A: scale bar "d" = 0,5 mm ).



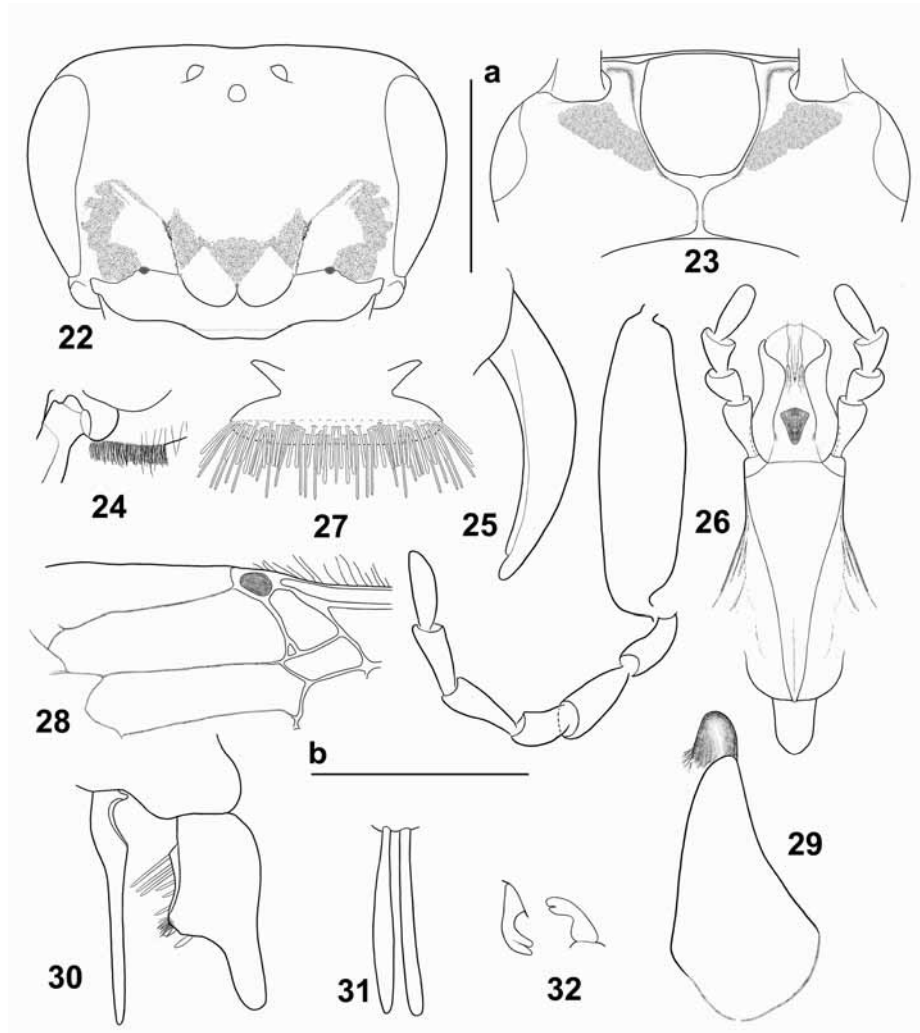
**Figs 8-11.** *Meria tripunctata* (ROSSI 1790) ♀. (8) labium, ventral and lateral aspects; (9) labrum, ventral aspect - *Meria tripunctata* ♂. (10) labium, ventral and lateral aspects, (11) labrum, ventral aspect. (scale bar = 0,5 mm)



**Fig 12-16A.** *Afromeria capicola* (TURNER 1913) ♂. (12) labium, ventral and lateral aspect; (13) Labrum anteroventral aspect; (14) eN<sub>1</sub>, dorsal aspect; (15) 8<sup>th</sup> sternum (anal hook), dorsal and lateral aspect; (16) gonostylus and volsella; 16A: aedeagus lateral aspect. (12, 13, 16, 16A: scale bar = 0,5 mm) (14, 15: scale bar = 1 mm)

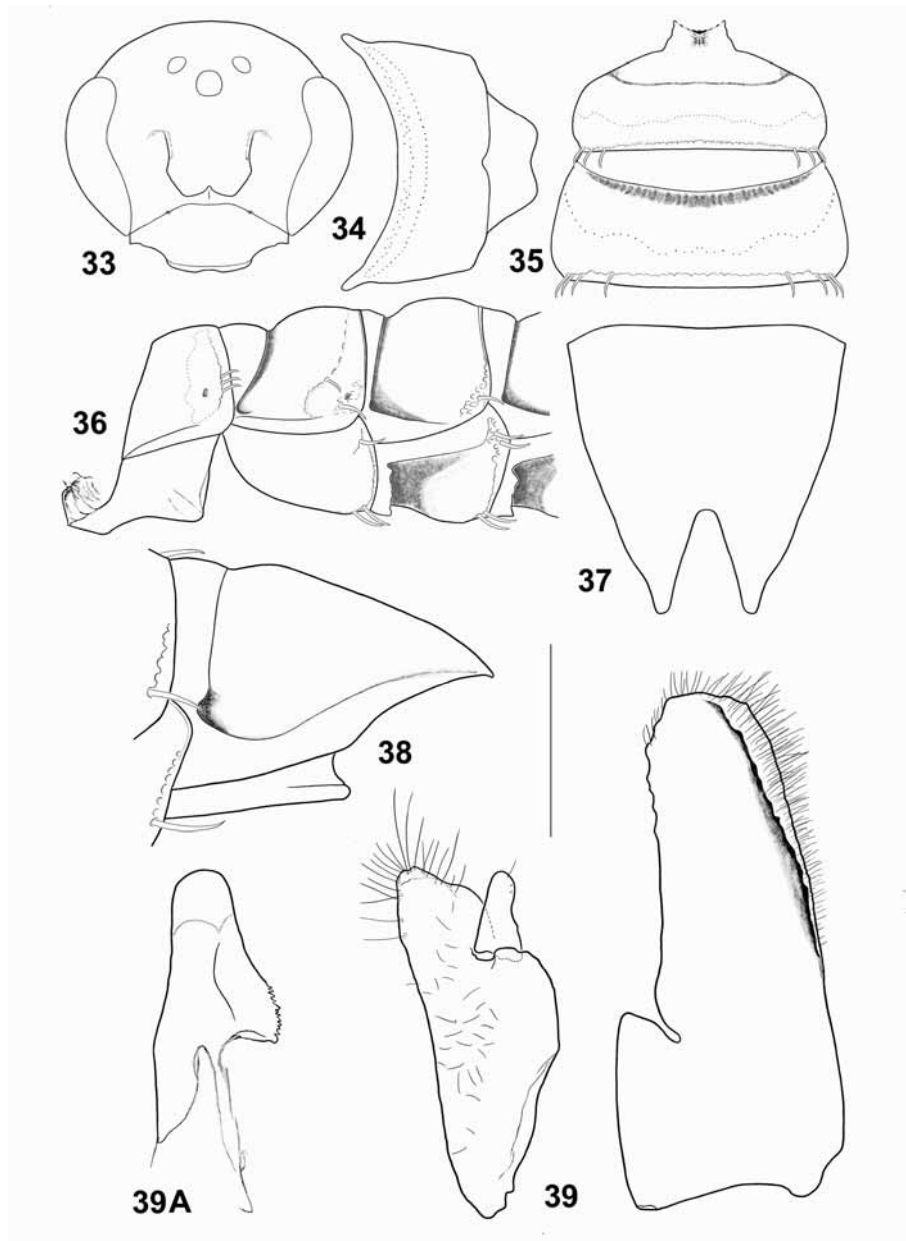


**Figs 17-21A.** *Afromeria microtera* nov.sp. Holotypus ♂. (17) N<sub>1</sub> with eN<sub>1</sub> in dorsal aspect.; (18) basal terga in dorsal aspect; (19) basal metameri in lateral aspect; (20) 7<sup>th</sup> tergum in dorsal aspect; (21) gonostylus and volsella; 21A: aedeagus in lateral aspect. (17, 18, 19, 20: scale bar = 1 mm) (21, 21A: scale bar = 0,5 mm)

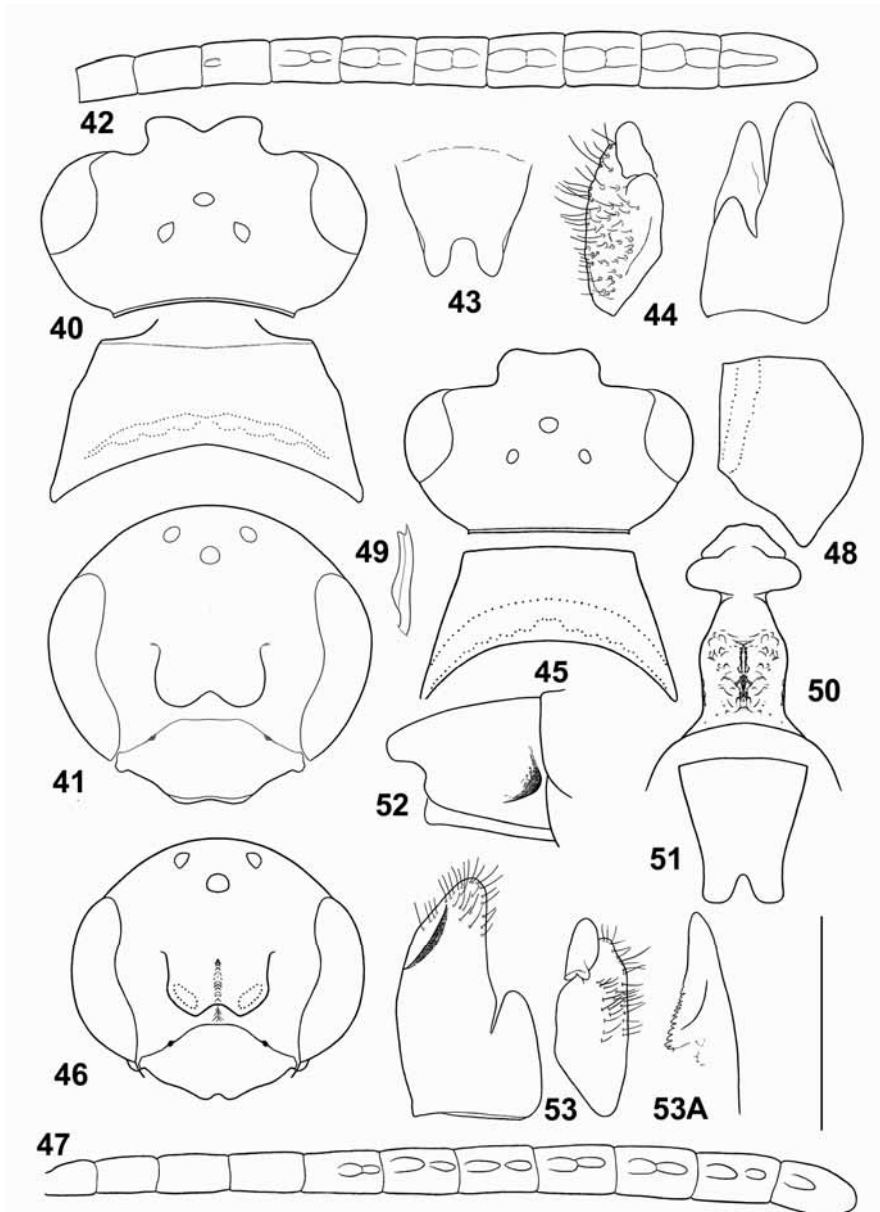


**Figs 22-32.** *Afromeria microtera* **nov.sp.** Paratypus ♀. (22) Head, frontal aspect; (23) head ventral aspect; (24) head, ventral corner, lateral aspect; (25) mandible, frontal aspect; (26) stipe and Pam (left), labium (right) ventral aspect; (27) labrum,  $\frac{3}{4}$  ventral aspect; (28) forewing, particular; (29) LaSt<sub>2</sub> and metasternal lobe, ventral aspect; (30) foretibial spur and basal foretarsomerus; (31) hindtibial spurs; (32) mid and hindtarsal claws. (22, 23, 24: scale bar **a** = 1 mm) (25, 28, 29: scale bar **b** = 1 mm) (26, 27, 30, 31, 32: scale bar **b** = 0,5 mm)

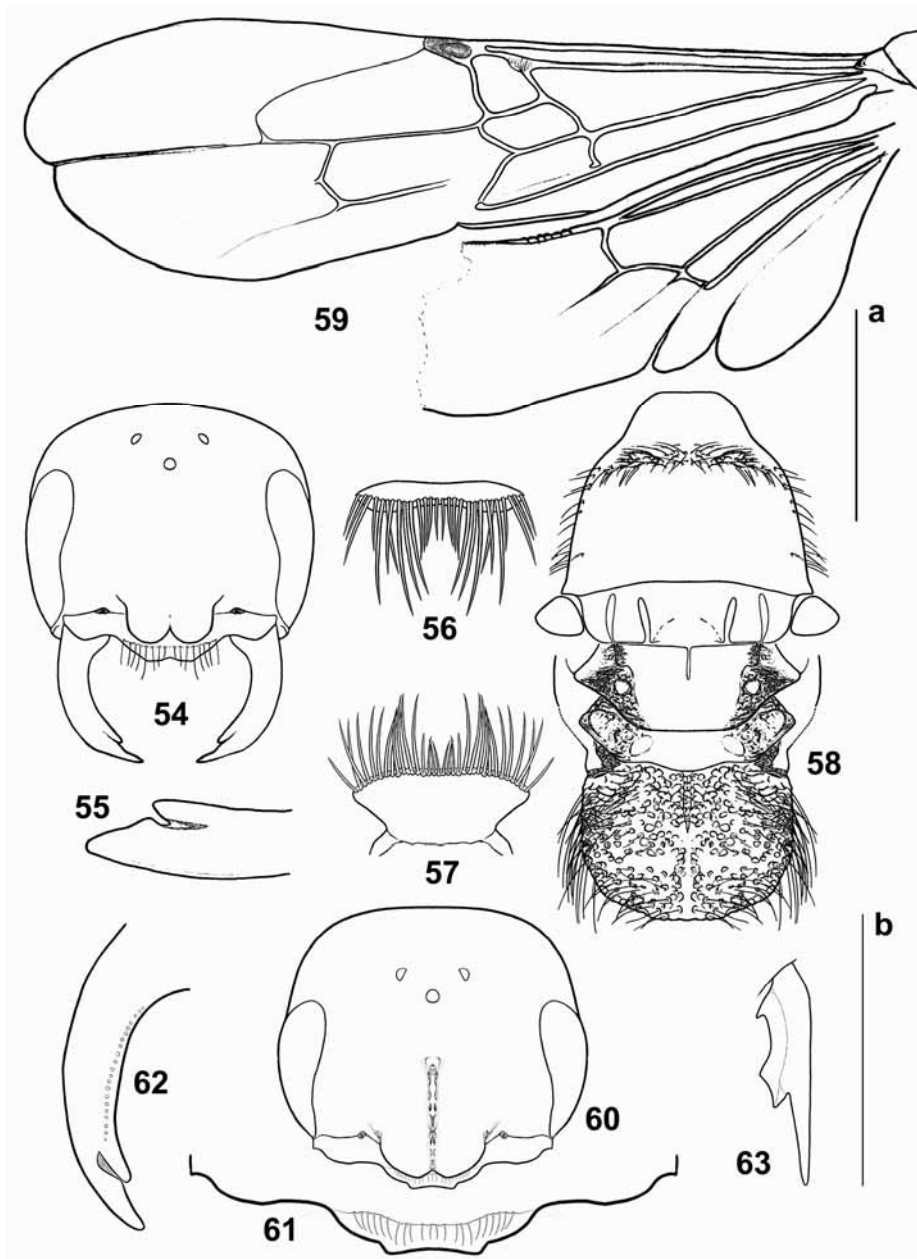




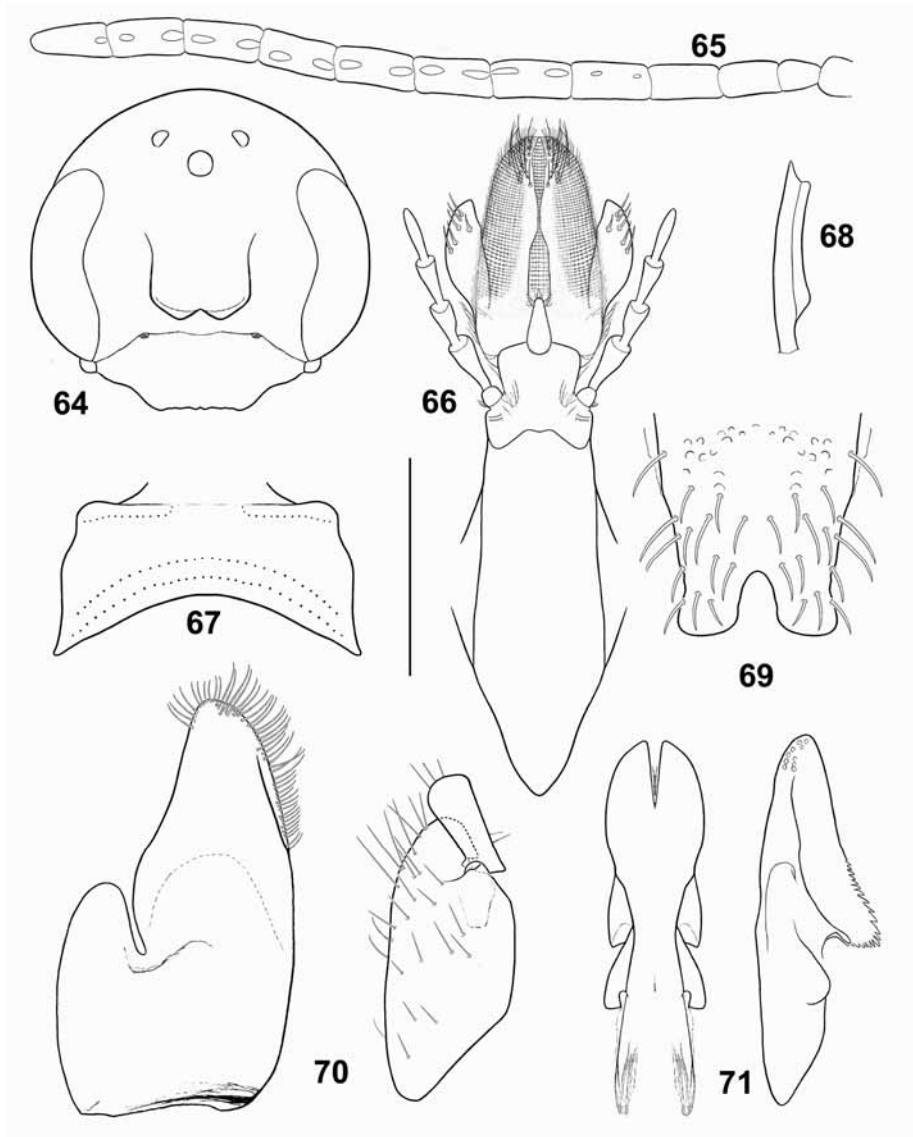
**Figs 33-39A.** *Afromeria poliorykta* **nov.sp.** Holotypus ♂. (33) head, frontal aspect; (34) N<sub>1</sub> with eN<sub>1</sub>, dorsal aspect; (35) basal terga, dorsal aspect; (36) basal metameri, lateral aspect; (37) 7<sup>th</sup> tergum, dorsal aspect; (38) 7<sup>th</sup> metamerus, lateral aspect; (39) volsella and gonostylus; 39A: aedeagus. (33, 34, 35, 36: scale bar = 2 mm) (37, 38: scale bar = 1 mm) (39, 39A: scale bar = 0,5 mm).



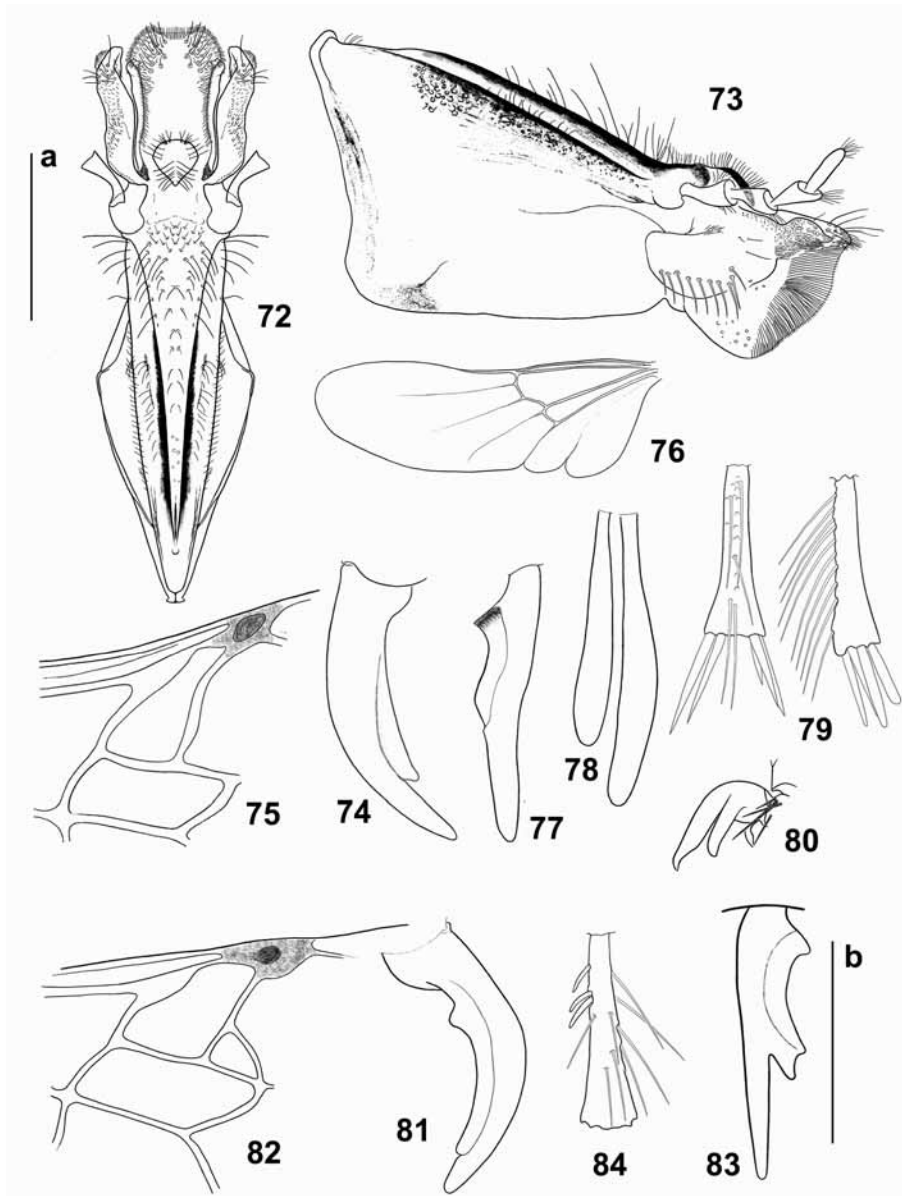
**Figs 40-44.** *Meriodes braunsi* (TURNER 1912) ♂. (40) head and pronotum, dorsal aspect; (41) head, frontal spect; (42) flagellum; (43) 7<sup>th</sup> tergum, dorsal aspect; (44) volsella and gonostylus. **Figs 45-53A.** *Meriodes ceresensis* (TURNER 1926) ♂. (45) head and N<sub>1</sub>, dorsal aspect; (46) head, frontal aspect; (47) flagellum; (48) N<sub>1</sub>, lateral aspect; (49) fore tibial spur; (50) 1<sup>st</sup> tergum, dorsal aspect; (51) 7<sup>th</sup> tergum, dorsal aspect; (52) 7<sup>th</sup> metamerus, lateral aspect; (53) gonostylus and volsella; (53A): aedeagus. (40, 41, 42, 43, 45, 46, 47, 48, 50, 51, 52: scale bar = 1 mm) (44, 49, 53, 53A: scale bar = 0,5 mm).



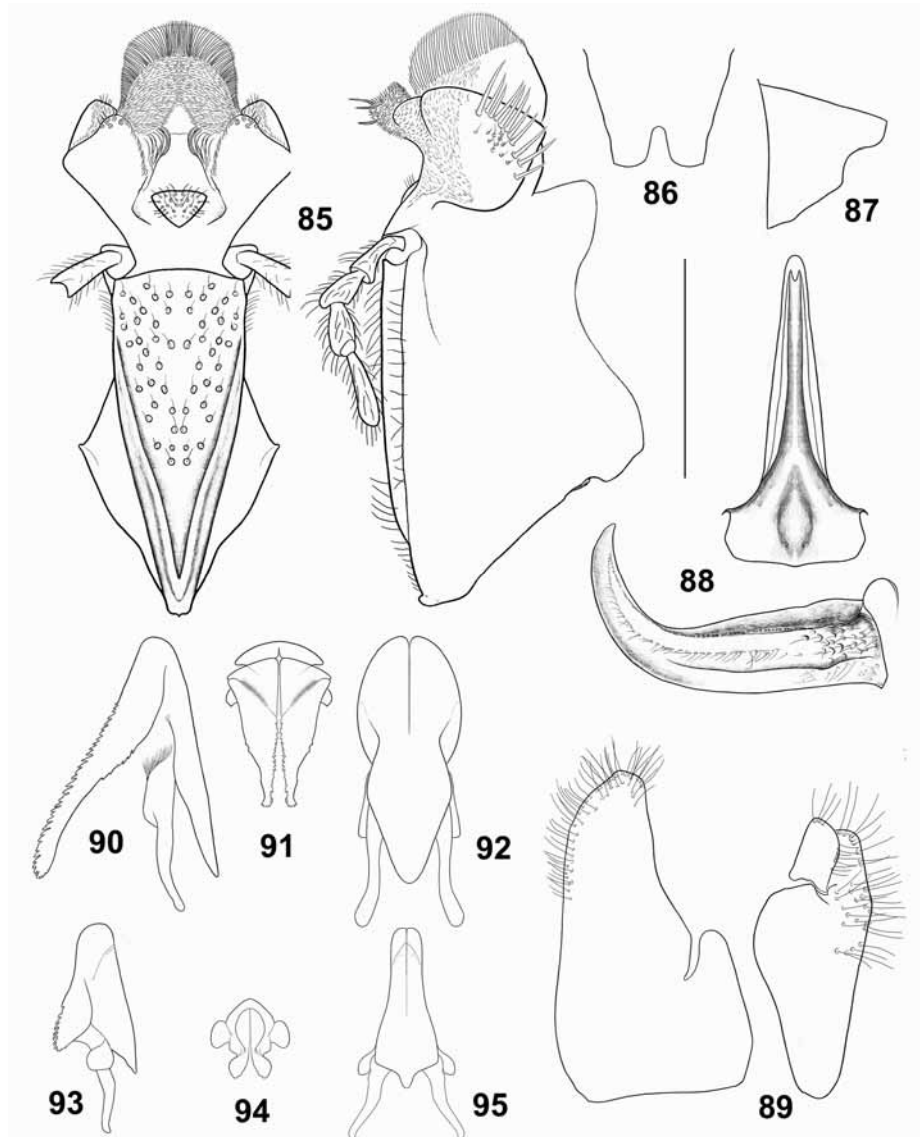
**Figs 54–63.** *Meriodes ceresensis* (TURNER 1926) lectotypus ♀: (54) head, frontal aspect; (55) mandible, apex; (56) labrum, ventral aspect; (57) labrum, frontal aspect; (58) mesosoma, dorsal aspect; (59) wings. *Meriodes picea* nov.sp. paratypus ♀: (60) head, frontal aspect; (61) clypeus, ventral outline in frontal aspect; (62) mandible, frontal aspect; (63) foretibial spur. (scale bar "a": 54, 58, 59 = 1 mm; 55, 56, 57 = 0,5 mm) (scale bar "b": 60 = 2 mm; 61, 62 = 1 mm; 63 = 0,5 mm).



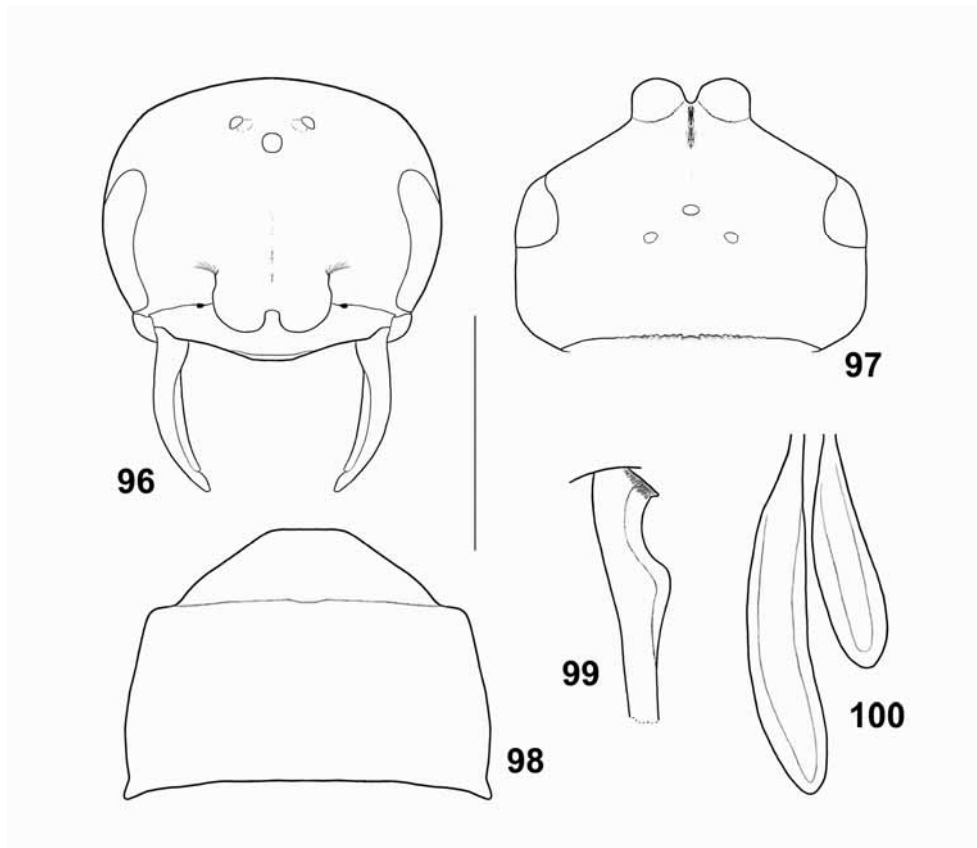
**Figs 64-71.** *Meriodes picea* **nov.sp.** paratypus ♂. (64) head, frontal aspect; (65) flagellum; (66) labium, ventral aspect; (67) pronotum, dorsal aspect; (68) foretibia spur; (69) 7<sup>th</sup> tergum, dorsal spect; (70) gonostylus and volsella; (71) aedeagus, dorsal and lateral aspect. (64, 65, 67: scale bar = 2 mm) (69: scale bar = 1 mm ) (66, 68, 70, 71: scale bar = 0,5 mm).



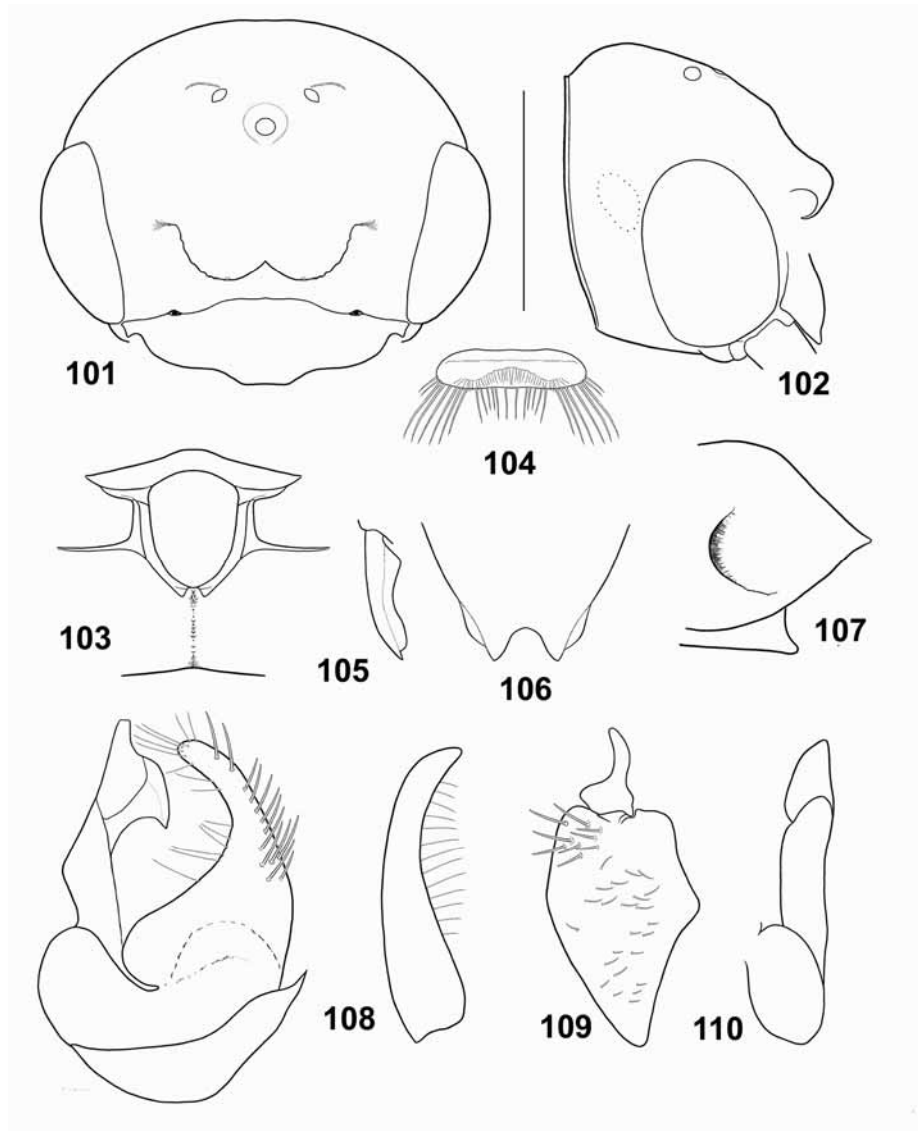
**Figs 72-80.** *Macromeria klugii* ♀. (72) labium, ventral aspect; (73) labium, lateral aspect; (74) mandible; (75) fore wing, particular; (76) hind wing; (77) fore tibial spur; (78) hind tibial spurs; (79) basal hind tarsomerus, dorsal and lateral aspects; (80) claws fore leg. **Figs 81, 82, 84.** *Meria* ♀. (81) mandible; (82) fore wing particular; (84) basal hind tarsomerus. **Fig. 83.** *Meria* ♀: fore tibial spur. (Scale bar "a": 72, 73, 77, 80 = 0,5 mm - 76 = 2,5 mm - 78, 84 = 1 mm - 74, 75, 79, 81, 82 = 1,33 mm). (Scale bar "b": 83 = 0,25 mm).



**Figs 85-92.** *Macromeria klugii* ♂. (85) Labium, ventral and lateral aspects; (86) 7<sup>th</sup> tergum, dorsal aspect; (87) 7<sup>th</sup> tergum, lateral aspect; (88) 8<sup>th</sup> sternum (anal hook), dorsal and lateral aspects; (89) gonostylus and volsella; (90) aedeagus, lateral aspect; (91) aedeagus, apical aspect; (92) aedeagus, dorsal aspect. **Figs 93-95.** *Meria volvulus* ♂. (93) aedeagus, lateral aspect; (94) aedeagus, apical aspect; (95) aedeagus, dorsal aspect. (85: scale bar = 0,5 mm) (86, 87: scale bar = 2 mm) (88 – 95 = scale bar 1 mm).

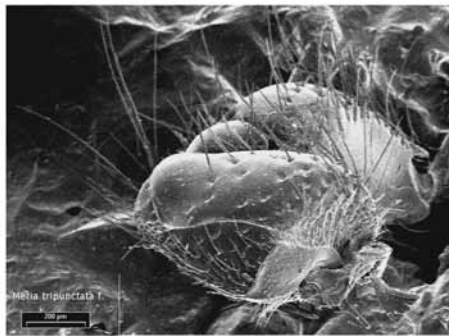


**Figs 96-100.** *Macromeria rhousiogastra* Holotypus ♀. (96) head, dorsal aspect; (97) head, frontal aspect; (98) pronotum, dorsal aspect; (99) fore tibial spur; (100) hind tibial spurs. (96, 97, 98: scale bar = 2 mm) (99: scale bar = 0,5 mm) (100: scale bar = 1 mm).

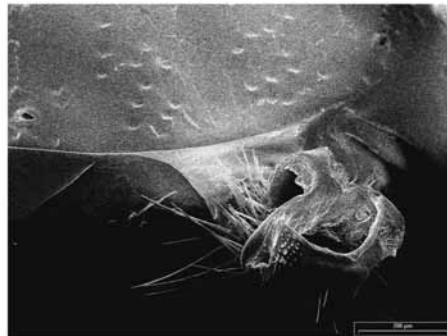


**Figs 101-110.** *Allomeria pinguis* (TURNER 1916) Holotypus ♂. (101) Head, frontal aspect; (102) head, lateral aspect; (103) head, ventral aspect (particular); (104) labrum, ventral aspect, (105) fore tibial spur; (106) 7<sup>th</sup> tergum, dorsal aspect; (107) 7<sup>th</sup> tergum, lateral aspect; (108) genitalia, lateral aspect (left) and gonostylus, ventral aspect (right); (109) volsella; (110) aedeagus, dorsal aspect. (101, 102, 103, 106, 107: scale bar = 1 mm) (104, 105, 108, 109, 110: scale bar = 0,5 mm).





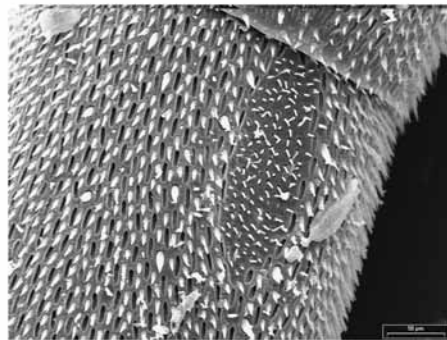
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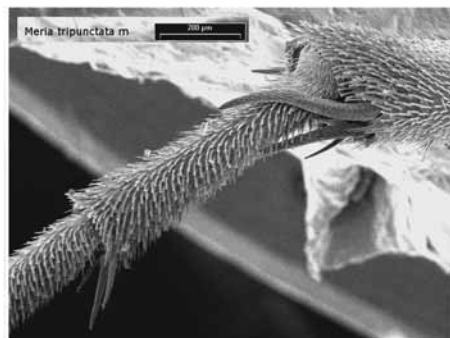
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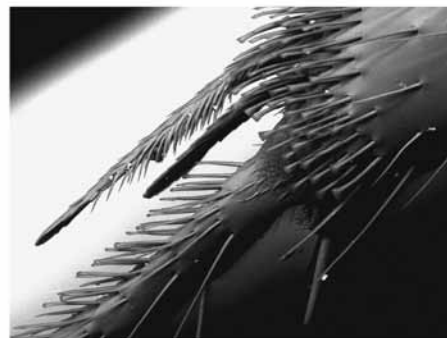
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**Fig. 111-116.** 111-112: *Meria* ♀. (113) *Poecilotiphia* ♀. (114) *Poecilotiphia* ♂. (115) *Meria* ♂. (116) *Braunsomeria* ♂.

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