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Afrotropical taxa of the genus *Mesa* SAUSSURE 1892 (Hymenoptera, Tiphiidae, Myzininae)

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A b s t r a c t : Afrotropical taxa of the genus *Mesa* SAUSSURE are treated. Twelve new species are described: *Mesa campsa* nov.sp., *Mesa dioica* nov.sp., *Mesa eriosoma* nov.sp., *Mera erythrodira* nov.sp., *Mesa hyloides* nov.sp., *Mesa maliana* nov.sp., *Mesa nama* nov.sp., *Mesa oligotyla* nov.sp., *Mesa pentatyla* nov.sp., *Mesa sahariana* nov.sp., *Mesa pyrrhoprocta* nov.sp., *Mesa xanthogramma* nov.sp.

Synonymies of: - *Mesa hottentotta* SAUSSURE 1892, *Elis* (*Mesa*) *spoliata* TURNER 1912 and *Elis* (*Mesa*) *permutans* TURNER1935 with *Plesia abdominalis* GUÉRIN 1838; - *Elis* (*Mesa*) *spinicollis* TURNER 1917 with *Myzine ruficeps* SMITH 1855; - *Plesia reticulata* CAMERON 1905 and *Elis* (*Mesa*) *mutica* TURNER 1917 with *Myzine xanthocera* GERSTAECKER 1870; - *Elis* (*Mesa*) *heterochroa* TURNER 1917 with *Mesa heterogamia* SAUSSURE 1892; - *Elis* (*Mesa*) *longiventris* TURNER 1912 with *Plesia incisa* CAMERON 1905, are proposed.

Lectotypes of the following taxa: *Plesia abdominalis* GUÉRIN 1838, *Myzine capitata* SMITH 1855, *Myzine ruficeps* SMITH 1855, *Myzine torrida* SMITH 1879, *Elis* (*Mesa*) *longiventris* TURNER 1912, *Plesia* (*Mesa*) *adelogamia* TURNER 1908, *Plesia* (*Mesa*) *hova* TURNER 1908, *Plesia* (*Mesa*) *erythropoda*: TURNER, *Plesia* (*Mesa*) *pyxidata* TURNER 1911, *Elis* (*Mesa*) *ametalla* TURNER 1911, *Elis* (*Mesa*) *apicipennis* TURNER 1912, *Elis* (*Mesa*) *coeruleipennis* TURNER 1913, *Elis* (*Mesa*) *nyanzae* TURNER 1912 are designed.

New combinations of name under *Mesa* are established: *Myzine ruficeps*, *Myzine torrida*, *Plesia rufofemorata* CAMERON 1905, *Plesia incisa*, *Plesia* (*Mesa*) *erythropoda*, *Plesia* (*Mesa*) *asmarensis* TURNER 1909, *Plesia* (*Mesa*) *pyxidata*, *Elis* (*Mesa*) *ametalla*, *Elis* (*Mesa*) *apicipennis*; *Elis* (*Mesa*) *coeruleipennis*, *Elis* (*Mesa*) *nyanzae*, *Elis* (*Mesa*) *diversicornis* TURNER 1917, *Elis* (*Mesa*) *herrero* TURNER 1935.

K e y w o r d s : Myzininae, *Mesa*, afrotropical.

Introduction

SAUSSURE (1892) within his "section des Plesiites" (alternative to the "section des Meria") was the first to operate the distinction between New and Old World taxa among the females pertaining to the "groupe des Plesia". Before him the Old World female taxa were described under the names *Myzine* LATREILLE 1803 and *Plesia* JURINE 1807 (actually *Myzinum* LATREILLE 1803), the former retained by him for all the male members of the sub family since adequate criteria for their splitting were not found. He grouped these females under the new name *Mesa* enclosing seven taxa: *Plesia*

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abdominalis GUÉRIN 1838, *Myzine xanthocera* GERSTAECKER 1870, *Plesia fedtschenki* SAUSSURE 1880, *Mesa heterogamia* n.sp., *Mesa atopogamia* n.sp., *Mesa Peringuey* n.sp., *Mesa hottentotta* n. sp. After him CAMERON (1905 & 1910) kept using the name *Plesia*, while TURNER (1908 and 1910) used *Plesia* (*Mesa*), then (from 1911 forward) *Elis* (*Mesa*). The name *Mesa* was definitely employed by KROMBEIN (1937), who successively created (1968) the new name *Hylomesa* for some species from equatorial areas of Africa and Southeasteern Asia displaying particular habitus and ecology. Thenceforth only minor contributions and no comprehensive treatment of the group was tried before GORBATOVSKY (1979) who introduced some character states to differentiate it from the remainder groups of the subfamily. ARGAMAN (1994) introduced the term Mesini and at the same time created new generic names (*Xylunka, Taywola, Nyuka*), sunken to junior synonyms of *Mesa* by BONI BARTALUCCI (2004a, 2004b) who added new character states.

Biogeography

Among the Myzinin tribes, Mesini have the largest geographical distribution, ranging over Afrotropical, Oriental and Southern Palaearctic Regions. Their distribution is a matter worthy of remark. It is the only tribe so far recorded with many taxa from Oriental Region where neither xeric nor desert areas occur. Differently from Meriini, the members of the present group appear to dislike arid and semidesertic areas. In the whole Northern Africa only the new species *Mesa sahariana* lodges, where otherwise large number of Meriin taxa are present. Similar situation occurs in Arabian peninsula and xeric areas of Middle East and central Asia, where Mesin fauna appears to be residual. In Austral Africa otherwise more taxa seem to be fitted to arid areas of the SW regions. A consistent number of taxa are present in the humid equatorial belt, where on the contrary Meriin wasps are rare (very few taxa from Kenya and Tanzania). Absolute disjoinedness between Oriental and Afrotropical taxa well emerges from data: within the group *Mesa*/*Hylomesa*: no representatives of the Oriental Region have been found in the Afrotropical and vice versa. Moreover a restricted distribution range of most of the Old World species hitherto comes out from records, even though deeper investigations could change that situation. In Afrotropical Region only *Mesa ruficeps* and *M. xanthocera* ranges from Kenya and Nigeria to Southern Africa and Namibia, *Mesa picta* BONI BARTALUCCI 2004 from Angola to Sènégal, *M. coeruleipennis* from Uganda to Guinea and Sénegal. The representatives of *Hylomesa* show marked inclination to wet conditions, inhabiting only rainforest areas. One endemic species in Uganda and 4/5 species different from it in Oriental Region; this fact too is well consistent with the above said disjoinedness of taxa. Since these Regions are remote from each other and at the present time severed by huge, extremely arid areas, we could argue that origin of the Mesin group traces back on the age when Africa and Asia were well joined and before the vast desert areas of the Arabian peninsula and surroundings came out, an event presumed to begin about at mid cenozoic (20 Mya).

Biology

Females have digger customs (but *Hylomesa* members), probably searching for a ground

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beetle larva as a prey, which is paralyzed and hauled into the soil, apparently without nesting care The hints (ARGAMAN 1994) to the larvas seized by *Mesa*, even if reliable, neither are referred to nor supported by any recorded note. Reports of visited flowers are extremely poor: *Acacia* blooms in South Africa and *Foeniculum vulgare* in Rhodes, besides one report about feeding on honeydew on Sorgum leaves.

Morphological terms and methods

Abbreviations

The terminology used in the descriptions mainly follows BONI BARTALUCCI (2004; and 2011 for the term "progena").

A = **A**ltitudo (eight)
c = **c**arina
Ca = **Ca**put (head)
CB = **C**ella **B**asalis (basal cell)
CC = **C**ella **C**ostalis (costal cell)
CD = **C**ella **D**iscoidalis (discoidal cell)
cHy = **c**arina **Hy**postomae (hypostomal keel)
CM = **C**ella **M**arginalis (marginal cell)
cOc = **c**arina **Oc**cipitis (-alis).
CPM = **C**ella **P**ara **M**arginalis (paramarginal cell)
CSB = **C**ella **S**ub **B**asalis (sub basal cell)
CSD = **C**ella **S**ub **D**iscoidalis (sub discoidal cell)
CSM = **C**ella **S**ub **M**arginalis (sub marginal cell)
d = **d**iametros (diameter)
Em = **E**pi**m**eron
Es = **E**pi**s**ternum
F = **F**oemina (female).
FoO = **F**ossa **O**ris (oral cavity)
G = **G**ena
Hy = **Hy**postoma
I = **I**ntervallum (distance)
L = **L**ongitudo (length)
LA = **LA**titudo (width)
LaSt$_2$ = **La**mellae meso**St**erni (mesosternal lobes)
M = **M**as (Male)
m = **m**argo (edge)
med = **med**ianus (median, mid)
mpm = **m**argo **p**ara**m**andibularis (paramandibular edge)
MPS = Multiporous Plate Sensillum
mR = **m**icro- **R**eticulum (microreticulation)
N$_1$ = pro**N**otum.
N$_3$ = meta**N**otum.
O = **O**culus (eye)
ol = **o**cellus **l**ateralis (lateral ocellus)
om = **o**cellus **m**edianus (median ocellus)
p. = **p**unctum (punctured. puncture -s)
P = **P**ropodeum
Pal = **Pa**lpus **l**abialis (labial palpus)
Pam = **Pa**lpus **ma**xillaris (maxillary palpus)
PoG = **Po**ns **G**enarum (genal bridge)
pos = **pos**terior (back)
Scf = Sensilla curvata fascia (bent bristles belt)
Sc$_1$ = **Sc**utum
Sc$_2$ = **Sc**utellum
Ssa = **S**cleritis **s**ub**a**ntennalis (subantennal sclerite
sts = **s**utura **t**rans **s**cutum (transscutal suture)
smm = **s**utura **m**eso-**m**etapleuralis (meso-metapleural suture)
St$_3$ = meta**St**ernum (mesosoma)
Ste = **St**ernum (metasoma)
sul = **su**lcus **l**ateralis (lateral furrow)
su$_3$ = **su**lcus metapleurae (metapleural line)
sum = **su**lcus intra **m**etapleuras (transmetapleural line)
Te = **Te**rgum
Tg = **Tg**ula
Tsa = **T**uberculum **s**upra **a**ntennam (supra antennal lobe)
X = co**X**a

! = 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, those referred to the wing veins excluded. In the descriptions of labels, *italic* characters mean handwriting.

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The frontal aspect of the head is performed perpendicularly to the virtual plane ideally meeting **ol** and tip of clypeal lamella; dorsal aspect is performed along the virtual plane of the occipital carina.

The drawings of volsella and gonosquama show their inner aspects, unless otherwise indicated. Genitalia are settled in a solidified drop of 5,5-dimethyl hidantoin formaldheyd (5,5-DMHF) on transparent support; to make clear details they are gently coloured by yellow eosine. Hair and punctuation have been overlooked in most of the drawings, but genitalia. 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 MEMA (Centro di Microscopia elettronica e di microanalisi) of the University of Florence.

Tribe M e s i n i (Palaearctic, Oriental and Afrotropical)

Genera *Mesa* SAUSSURE 1892 and *Hylomesa* KROMBEIN 1968

ARGAMAN 1994: 90.
BONI BARTALUCCI 2004b: 22-25.

In general habitus *Mesa* females show similarities with females of tribe Myzinini (stout body, mostly punctured integument; also wing venations of both fore and hind wing are almost identical and very distinct from Meriini and to remind their differences could be useful (see also BONI BARTALUCCI 2004b). Members of *Hylomesa* are easily recognizable mainly by strongly backward produced head and strong gradulus present on 1st tergal disk. Like other members of Old World Myzininae *Mesa* and relatives are well distinct from American Myzinini (fig. 1, 2, 3) and Australian Austromyzinini mainly by 2 character states (BONI BARTALUCCI 2004b):

– **cOc** never broken ventrally by the hypostoma whose ventral border (the **cHy**) is never prominent over the plane of the lower genae; **FoO** clearly shorter than genal areas in ventral aspect ♀ & ♂); consequently **PoG** normally expressed (♀ & ♂) (figs 42, 170).

– First metamerus always petiolate; first tergum overlies sternum just backward; forward either it gets ribbon-like and fused to the sternum or is absent; in the last case the petiole is formed by the sternum only (figs 4, 66) (♀ & ♂).

  The latter (shared only with Meriini) it is unique within the whole Tiphiidae (sensu antiquo). Because of that, it carries a strong weight both in taxonomic and geographical considerations.

Distinctive characters from Meriini

Females

Φα Scape with scattered pits and hair throughout (fig. 5)

Φβ Flagellomeri covered throughout by approached, densely packed sensilla trichoidea; their surface bears both rounded and elongated **MPS** with expressed dorsal surface (the **MP**) (fig. 6)

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Φχ Fully winged; fore wing always with ten functional cells getting 9/10 of its total length; ***CM*** (***R1*** vein always detached from the wing border) and three ***CSM*** expressed; pterostigma obsolete (fig.7)

Φδ Hind wing: veins ***cu-a*** of the hindwing distinctly antefurcal (fig. 8)

Φε Hind wing: ***Cu-a***, ***M-a***, ***Rs-a*** almost reaching the wing outer border; ***Rs*** and ***M*** both almost as long as ***M***+***Cu*** vein and running sub longitudinally; they are 4-5 times longer than ***r-m*** vein which is well distinct (fig. 8)

Φϕ Dispersal secondary hamuli are present on the ***C*** vein of the hind wing

Φγ Fore tibial spur with an apex far shorter than trunk; velum as long as ¾ of the entire spur (fig. 9)

Φη The velum of the fore basitarsal notch is combed (fig 10)

Φι Upper surface of the apical tarsomeri and base of claws entirely covered by short bristles (fig. 11)

Φφ Ventral hind femur with a strongly laminated portion (fig. 12)

Φκ Hindtibia: outer surface with a lot of conical spines; straight dorsal and ventral edge, parallel to eachother (fig. 13)

Φλ Most of ventral border of mid and hind tibia acutely carinated (fig. 14)

Φμ Basal hind tarsomerus: inner surface with a stripe of densely packed hair and ventral edge with a row of short, variously arranged, round tipped "spines", the "scopa" (fig. 15)

Φν Second hind tarsomerus with a sort of "scope" along its inner surface (fig. 16)

Φο Distal borders of metameri distinctly combed (fig. 17)

Φπ 6th tergum (epipygium) sub-flattened and more or less wrinkled/sculptured, with a pygidial area well expressed even though not bordered by carinae (fig. 18)

Males

Μα Closed mandibular socket (fig. 19)

Μβ Hypostomal carina (**cHy**) shifting laterally toward the outer mandibular condyle producing a distinct progena (fig. 19)

Μχ Apical three maxillary palpi (**Pam**) very elongated up to twice the length of the basal ones (fig. 20)

Μδ Prepectal sclerite not freely articulated, fused with the anterolateral border of mesepisternum (**Es$_2$**) (fig. 21)

Με 7th sternum length 1/2 to 2/5 of the 7th tergum in lateral aspect (fig. 22)

Μϕ Gonosquama and volsella bearing strongly modified bristles and/or spines (figs 23-28)

Μγ Base of volsella with few strong short, often black spines (fig. 24, 37,48,61,70,85,92,97 etc.)

Μη Cuspis mostly almost half total volsellar length

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Genus *Mesa* SAUSSURE 1892

Species type: *Plesia abdominalis* GUÉRIN 1838.

Mesa SAUSSURE 1892: 244.
Mesa SAUSSURE 1892: KROMBEIN (1937: 27, 29-30).
Mesa SAUSSURE 1892: KROMBEIN (1949: 27).
Mesa SAUSSURE 1892: JACOT GUILLARMOD (1953: 17-18).
Mesa SAUSSURE 1892: GORBATOVSKY (1979: 612, 615).
Mesa SAUSSURE 1892: GORBATOVSKY (1981: 110).
Mesa SAUSSURE 1892: ARGAMAN (1994: 90).
Nyuka ARGAMAN 1994: 90.
Xylunka ARGAMAN 1994: 90.
Taywola ARGAMAN 1994: 91.
Mesa SAUSSURE 1892: BONI BARTALUCCI (2004a: 365-379).
Mesa SAUSSURE 1892: BONI BARTALUCCI (2004b: 24-25).

Species with heavy sexual dimorphism, even though both sexes are fully winged. More often than not the examination of male genitalia only permits a doubtless identification.

F e m a l e s . Pattern of mouthparts like in figs 43-44. Medium sized wasps, size ranging from 10 to a bit more than 20 mm, stout bodied, with strong legs apt to dig soil with dilated tibiae and femurs. They also show punctured integument everywhere, with a general habitus like *Myzinum* and *Tiphia*. They are normally black and black with more or less red areas; only three taxa (*Plesia picticollis* MORAWITZ 1890, *Mesa picta* BONI BARTALUCCI 2004 and the new species *Mesa xanthogramma*) show light markings.

The following features are common to all specimens.

Scape, mandibles, shadows on tegula and legs, **LaSt$_2$**, veins, shadows on metameri, are brownish. Mandible, flagellum, **Em$_3$**, posterior and lateral **P** are always without any **mR.** Whitish hair throughout in most of taxa.

Head. More or less evident median vertical groove on the lower frons between **Tsa**. Clypeus with a median vertical ridge, very broadly based. **cOc** and **PoG** (as long as 1/5 **FoO** from clypeus to posterior inner border of hypostoma) always well expressed ventrally but in *Mesa abdominalis* where it wears out near **PoG** which is ill defined. Mandible with a vestigial very small preapical tooth on inner edge, more often than not undetectable because of usage. Mesosoma - pronotal (**N$_1$**) disk: rounded fore border, rarely distinctly angled (fig. 58); apical border almost dull; postero ventral lateral area more or less wrinkled or shagreened. Prepectal sclerites freely articulated with **es$_2$** and largely visible in lateral aspect. Mesepisternum (**Es$_2$**): anterior surface a bit concave and strongly known from median surface (fig. 30) by different **p** and distinct more or less rounded angle, only rarely produced in acute carina like a sort of short omaulus. Propodeum: disk evenly rounded with undetectable distinction between horizontal and posterior areas, but in few taxa; subhorizontal disk with a more or less impressed and sized median longitudinal furrow (*M. capensis* show otherwise a median obscure swelling); lateral areas well severed from disk by sharp angle and always completely wrinkled. Very small pterostigma, almost obsolete. **X$_1$** with a longitudinal carina, flanked by a shallow furrow on ventral inner border (like in *Meria*). Metasoma – **sul** of 1st tergum extending toward the middle at the base of its vertical surface without meeting eachother (fig. 66); 1st sternum with many very small **p** bearing very weak bristles throughout. 2nd tergum with fairly deep gradulus at its base with weak buttressing ridges along its length (something reminding *Tiphia*).

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Φμ and **Φν** appears to be the only autapomorphies of females within the subfamily. They share many characters states with females of both Myzinini and Austromyzinini (**Φα, Φβ, Φε, Φφ, Φγ, Φη, Φι, Φκ, Φπ),** with the sole Myzinini (**Φχ, Φδ, Φφ, Φλ**) and with the sole Austromyzinini (**Φο**).

Males. Pattern of mouthparts like figs 90. Slender built on, with slim legs, size ranging from 8 to 21 mm. Black with (only rarely without) yellow or creamy white light patterns. Always with brown shadows on scape, articulations and tips of mandible, dark parts of legs, pterostigma and veins, lateroterga, apical metamerus. Humeral plate yellow/ yellowish. Hair whitish. Fine transversal **mR** present on tergal surfaces more often than not. Denser **p** on lower lateral frons and at the base of **Tsa**.

Head. The apical edge of **Tsa** is semitransparent in specimens with subapical light stripe. In most of taxa there is a distinct median notch between **Tsa** (best in dorsal aspect). Even though less produced than in members of Tiphiinae, they show a distinct progena (fig. 19). Flagellomeri no more than three times longer than thick; basal flagellomeri (2-6) and last one normally about 2.4 times longer than thick, while 7-10 are slightly thicker. The width of **Scf** (the stripe with sensilla curvata**)** is often wider than thickness of elements and sometimes not well detectable with optical tools. Very dense sensilla trichoidea with sparse sensilla basiconica on most of their surface (figs 31, 32). Mandibles with a strong subapical tooth on inner edge. **PoG** as long as half **FoO** and always with a median suture expressed like a prominent ridge. Whitish hair throughout (but in *M. capensis*).

Mesosoma - $\mathbf{N_1}$ disk: more or less tightened forward in dorsal aspect, its width about 6/10 half width of head in most of taxa; in most of taxa it shows a subapical light stripe (only two have a median light spot); in some taxa it is completely black. **P** disk: evenly rounded without clear distinction between horizontal, posterior and lateral areas; densely **p** (**iS** lesser than their diameter) throughout, but a narrow wrinkled stripe on lateral areas along $\mathbf{Em_3}$. $\mathbf{LaSt_2}$ almost puncture-less. $\mathbf{X_1}$ with a strong laminated keel like in females.

Metasoma - 1st metamerus elongated (1st sternum always far longer than wide in ventral aspect). 1st **Te** with irregularly packed and scattered **p**. 1st **Ste** with very scattered **p**, mostly smooth and shining. 2nd **Te** and **Ste** with regularly packed shallow small **p**, with **I** far larger than their diameter. 2nd to 6th tergal surfaces almost always with a very fine transversal **mR**. Lateral furrows present on 1st to 5th **Te**. Graduli severing exposed from concealed surfaces present usually on 2nd to 5th **Te** (only *M. haemorroidalis*, lack them and *M. capensis* shows them only on 2nd and 3rh **Te**). Volsella and gonosquama show strongly modified bristles and/or spines.

Males show much more derived states than females. Good reliable autapomorphies for the males appear to be the character states **Mβ, Mδ, Mε, Mφ** and **Mγ**; state **Mα** is shared only with two species of two distinct genera of Meriini, **Mη** with one.

This study has based on two "milestones": the examination of types and the determinations performed by R.E. TURNER and chiefly by J.C. GUILLARMOD, without which the coupling of sexes would be impossible for most of recorded taxa. He published only few of them, but fortunately labelled most of South African material. His fundamental action will be stressed each time during the description of single taxon.

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Here the list of the best tools to discriminate taxa follows:

Fa – Hypostomal carina

1 = ventrally well expressed and distinctly severed from occipital carina **(cOc)**, so that genal bridge **(PoG)** is well expressed

2 = wearing out ventrally, so that genal bridge **(PoG)** is illy expressed

Fb – Occipital carina

1 = complete on upper side along vertex

2 = more or less wearing out along vertex

Fc – Posteroventral corner of N_1

1 = wrinkled

2 = not wrinkled

Fd – Mesopleura (Es_2)

1 = vertical angle between outer median and anterior surfaces expressed by a short omaulus on upper side

2 = even rounded vertical angle between outer median and anterior surfaces

Fe – Propodeal disk

1 = with distinct median furrow

2 = no median furrow

Ff – Gradulus at the base of visible 3rd tergum

1 = present

2 = absent

Fg – Gradulus at the base of 4th tergum

1 = present

2 = absent

Fh – 6th tergum (Pygidium)

1 = with longitudinal wrinkles for more than half its length

2 = without or with longitudinal wrinkles for less than half is length

Ma – Ventral border of clypeus

1 = semitransparent

2 = dark, opaque

Mb – Flagellomeri

1 = with tyloida (fig. 33)

2 = no tyloida

Mc – 7th flagellomerus: ratio L/LA

1 = as large as or larger than 1.9

2 = as large as or lesser than 1.75

Md – Pronotal disk, median fore border

1 = with a distinct more or less prominent carina (keel), flanked by broad shallow groove

2 = simply angled, with even surface

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Me – Pronotal disk, anteroventral corner

1 = producing distinct more or less acute toothlike process outwards
2 = producing no more than low blunt process

Mf – Hind femur, apical ventral border

1 = tapering in an acute lamina (fig. 34)
2 = tapering in a simply rounded keel at the best

Mg –2nd and 3rd tergal surfaces

1 = bipunctate throughout by larger shallow **p** among numerous small **p**
2 = with more or less isometric **p**

Mh –Dorsal surface of 7th tergum (= epipygium)

1 = clearly notched; notch as deep or deeper than basal width oflateral lobes
2 = not notched or if so, notch far less deep than basal width of alteral lobes

Mi – Sub apical surface of 1st sternum

1 = with many **p** bearing small hair
2 = without **p**

Ml – Cuspis of volsella

1 = its axis forming a distinct angle (no more than 110°) with main axis of the base
2 = its axis about coaxial with main axis of the base

Mm – Light markings on metasoma

1 = present
2 = absent

		Ma	Mb	Mc	Md	Me	Mf	Mg	Mh	Mi	Ml	Mm	Fa	Fb	Fc	Fd	Fe	Ff	Fg	Fh
1	*Mesa haemor-roidalis*	2	2	1	2	2	1	2	1	1	2	1								
2	*Mesa nodosa*	1	2	1	2	2	2	2	2	2	2	2	1	1	1	2	1	2	2	1
3	*Mesa abdominalis*	1	2	1	2	2	2	1	1	1	2	1	2	1	1	2	2	1	2	1
4	*Mesa capensis*	2	1	2							2	2	1	1	1	2	2	1	2	2
5	*Mesa capitata*	2	2	1	2	2	2	2	1	1	2	1	1	1	1	2	1	1	2	1
6	*Mesa ruficeps*	2	2	1	1	1	2	2	2	1	2	2	1	2	1	1	1	2	2	1
7	*Mesa xanthocera*	2	2	1	1	2	2	2	2	1	1	°	1	1	1			2	2	1
8	*Mesa torrida*												1	1	2	2	1	2	2	1
9	*Mesa heterogamia*	1	2	1	2	2	1	2	1	2	2	1	1	1	2	2	1	1	2	1
10	*Mesa donaldsoni*	2	2	2	2	2	2	2	2	1	1	°	1	2	1	2	1	2	2	1
11	*Mesa rufofemorata*	2	2	1	2	2	2	2	1	1	2	1	1	1	1	2	1	1	2	2
12	*Mesa incisa*	1	2	1	2	2	2	2	1	2	2	1		1		2	1	1	2	2
13	*Mesa adelogamia*	1	2	2	2	2	2	2	1	1	2	1	1	1	1	2	1	1	2	1
14	*Mesa hova*	2	2	2	1	2	2	2	2	2	2	2	1	1	2	1	1	2	2	1
15	*Mesa innotata*												1	2	1	2	1	1	2	1
16	*Mesa erythropoda*	2	2	1	2	2			1		2	1	1	2	1	2	1	1	1	1
17	*Mesa asmarensis*	2	2	1	1	2	2	2	2	2	1	1	1	1		2	2	1	1	1
18	*Mesa saussurei*	2	2	1	1	2	2	2	2	2	2	°	1	1	1	2	1	2	2	1

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		Ma	Mb	Mc	Md	Me	Mf	Mg	Mh	Mi	Ml	Mm	Fa	Fb	Fc	Fd	Fe	Ff	Fg	Fh
19	*Mesa pyxidata*												1	1	2	2	1	2	2	1
20	*Mesa ametalla*	1	2	1	2	2	2	2	2	2	1	1								
21	*Mesa apicipennis*												1	2	1	2	1	1	2	1
22	*Mesa coeruleipennis*	1	2	1	1	2	2	2	2	1	2	1	1	1	1	2	1	2	2	1
23	*Mesa nyanzae*	2	2	1	1	2	2	2	2	2	1	1								
24	*Mesa diversicornis*	1	2	1	2	2	2	2	2	1	1	2								
25	*Mesa angolensis*												1	2	1	2	1	2	2	1
26	*Mesa herrero*	2	2	2	2	2	2	2	2	2	2	1	1	2	1	2	1	2	2	1
27	*Mesa tandrona*	2	2	1	1	2	2	2	2	1	2	2	1	2		1		2	2	1
28	*Mesa marovatana*	2	2	1	1	2	2	2	2	1	2	2	1	1		1		2	2	1
29	*Mesa madecassa*	2	2	1	1	2	2	2	2	1	2	2	1	1		1		2	2	1
30	*Mesa krombeini*	2	2	1	1	2	2	2	2	1	2	2								
31	*Mesa picta*	1	2	1	2	1	2	2	1	2	1	1	1	2	1	2	1	1	2	1
32	*Mesa campsa*	2	2	1	2	2	1	1	1	1	2	1	1	1	2	2	1	1	2	1
33	*Mesa dioica*	1	2	2	2	1	2	2	2	2	1	1	1	2	1	2	1	1	2	2
34	*Mesa eriosoma*	1	2	1	2	2	1	1	2		2	1								
35	*Mesa erythrodira*												1	1	1	2	1	1	2	1
36	*Mesa hyloides*												1	1	2	2	1	2	2	1
37	*Mesa maliana*	1		2	2	2	2	2	2	1	2	1								
38	*Mesa nama*	1	2	2	2	2	2	2	2	2	1	1								
39	*Mesa oligotyla*	1	1	1	2	1	2	2	2	2	2	1	1	2	1	2	1	1	1	1
40	*Mesa pentatyla*	1	1	1	2	2	2	2	2	2	1	1	1	1	2	2	1	1	2	1
41	*Mesa pyrrhoprocta*	1	2	1	2	1	2	2	2	2	2	1	1	2	1	2	1	1	1	2
42	*Mesa sahariana*	1	2	1	2	1	2	1	1	2	1	1	1	1	1	2	1	1	2	1
43	*Mesa silvana*	1	2	1	2	1	2	2	2	2	1	1								
44	*Mesa tylocera*	1	1	2	1	1	2	1	2	1	1	1								
45	*Mesa xanthogramma*	1	2	1	2	1	1	2	1	1	2	1	1	1	2	2	1	2	2	1

° means variability between states 1 and 2.

Other useful tools, about which a simple binary discrimination has not been found, are for females: coloration, propodeal disk punctuation, shape of the stripe of bristles (the "scopa") on basal hindtarsomerus (shape of the ventral border of clypeus is not reliable stool since it can wear itself out with usage.

Males. Shape of ventral clypeus, shape of genitalia.

Up to the present nine taxa are known uniquely from male sex (*hemorrhoidalis, ametalla, nyanzae, diversicornis, krombeini, eriosoma, maliana, nama, tylocera*), seven from female sex (*torrida, pyxidata, innotata, apicipennis, angolensis, erythrodira, hyloides*). Hypothesis about eventual connections among them are discussed under relative items. Specimens belonging to still unpublished species, waiting for more definite determination, exist at BMNH.

Description of genitalia of known males is given. Genitalia of *M. hova* (described as *M.*

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nodosa), *M. saussurei*, *M. krombeini* (described as *M. seyrigi*), *M. marovatana*, *M. madecassa*, *M. tandrona* are well described by KROMBEIN (1949), of *M. nodosa* by BONI BARTALUCCI (2005).

Key to species

Females

1

α Metasoma with white or yellow stripes

2

αα Metasoma black and/or ferruginous red, without any light marking

3

2

α White markings on head, mesosoma and metasoma. Dark brown legs

***Mesa picta* BONI BARTALUCCI 2004**

β Yellow stripes on pronotal disk and metasoma only. Ferruginous legs

***Mesa xanthogramma* nov.sp.**

3

α **cOc** worn out along vertex

4

αα **cOc** complete and unbroken near vertex, even though becomes a little irregular in some specimens

13

4

α Ventral **cOc** wearing out, therefore **PoG** is illy defined and detectable (fig. 42)

***Mesa abdominalis* (GUÉRIN 1838)**

αα **cOc** well expressed ventrally, therefore **PoG** is defined and detectable

5

5

α Gradulus absent at the base of both 3rd and 4th terga

6

αα Gradulus present on 3rd tergum at least

9

6

α Head and mesosoma completely black

7

αα Head & mesosoma more or less read coloured

8

7

α Antennae dark brown, last terga red

***Mesa donaldsoni* (FOX 1898)**

αα Antennae orange, metasoma completely black

***Mesa angolensis* (BERLAND 1925)**

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8

α Frons and vertex mostly smooth with only very small **p** around ocelli; few medium sized **p** on pronotal disk; postscutellar area like rounded kerb; simple median furrow on propodeal disk wich show regular large **p** along its posterior area; the whole of the legs but coxae bright ferruginous

***Mesa ruficeps* (SMITH 1879)**

α Frons and vertex with regularly spaced strong **p**; strong **p** organised in longitudinal rows on pronotal disk; flattened postcutellar area; widely based bisected median furrow on propodeal disk with posterior area strongly and irregularly sculptured

***Mesa tandrona* KROMBEIN 1949**

9

α Gradulus present only at the base of 3rd tergum

10

αα Gradulus present on 3rd and 4th tergum too

11

10

α Completely black with dark brown antennae and legs; wings hyaline

***Mesa innotata* (TURNER 1908)**

β Antennae, legs, and apical abdomen light brown; wings darkened with hyaline apical

***Mesa dioica* nov.sp.**

11

α 6th tergum (epipygium) completely wrinkled but narrow apical stripe. Only tibiae and tarsi ferruginous red

***Mesa oligotyla* nov.sp.**

αα 6th tergum with longitudinal wrinkles only on its subapical third at best

12

12

α Head and most of mesosoma with weakly impressed **p**. $\mathbf{Sc_1}$ and $\mathbf{Sc_2}$ with very few and small **p**. Propodeal disk finely sculptured. Mandible, scape, 1st flagellomerus, and the whole of legs (but coxae) bright orange ferruginous. Metasoma black. Medium sized

***Mesa erythropoda* (TURNER 1908)**

β Head and most of mesosoma with well impressed **p. P** more coarsely **p**. Metasoma largely red coloured. Small sized

***Mesa pyrrhoprocta* nov.sp.**

13

α Gradulus present on 3rd and 4th tergum too. Flagellum brown. Apical three metameri reddish. 6th tergum mostly wrinkled

***Mesa asmarensis* (TURNER 1909)**

αα Gradulus absent on 4th tergum

14

14

α Gradulus absent on 3rd tergum

15

αα Gradulus present on 3rd tergum

17

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15

α Size no more than 13 mm. Rounded angle between median and anterior surfaces of **Es$_2$**. Red head and sometimes partly mesosoma. Red only scape and basal flagellomerus. Wings brownish

***Mesa hova* (TURNER 1908)**

αα Size more than 15 mm. Angle between median outer and anterior surfaces of **Es$_2$** produced to acute laminated carina. Red head and partly mesosoma at least. Red antenna. Wings more yellow coloured

16

16

α Legs bright red. Red coloration also gets **Es$_2$**, **P**ropodeum and base of metasoma.

***Mesa madecassa* KROMBEIN 1949**

β Mid and hind legs dark brown. Propodeum and metasoma blackish

***Mesa marovatana* KROMBEIN 1949**

17

α 6th tergum without or with longitudinal wrinkles for less than half its length

18

αα 6th tergum with longitudinal wrinkles for more than half its length

19

18

α Great size. Completely black with dark brown hair throughout. Propodeal disk without median furrow rather with a blunt broad ridge. 6th tergum with deeply impressed **p** for about 3/4 its length; apical fourth finely sculptured

***Mesa capensis* (LEPELETIER 1845**

β Medium size. Completely black/brown with whitish hair throughout. Propodeal disk with strong median furrow. 6th tergum with feebly impressed **p** for about basal half its length; apical half finely sculptured

***Mesa rufofemorata* (CAMERON 1905)**

χ Medium size. Black with obscure ferruginous metasoma, but 1st tergum

***Mesa incisa* (CAMERON 1905)**

19

α Head and/or mesosoma with orange red coloration

19

αα Head and mesosoma black/brown without any red coloration

23

19

α **N$_1$**: pronotal plate as high as length of disk in dorsal aspect, of horizontal disk, its surface mostly smooth without hair

20

αα **N$_1$**: pronotal plate low, as high as half length of disk in dorsal aspect

21

20

α Ventrally prominent clypeus (fig. 106). No stripe of micro **p** on vertex along **cOc.** Mouthparts elongated, glossa apically bifid and far longer than prementum. Head always at least partly red. Scopa: fig. 107

***Mesa adelogamia* (TURNER 1908)**

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β Clypeus more squared (fig. 57). Stripe of micro **p** on vertex along **cOc.** Mouthparts like *abdominalis*, glossa shorter than prementum. Head black. Scopa: fig. 59

***Mesa capitata* (SMITH 1855)**

21

α Pronotum only red. Scopa: fig. 196

***Mesa erythodira* nov.sp.**

αα Head and mesosoma or only head with red coloration

22

22

α Only head orange red. Size: 18 mm. Head (but genae), antennae, fore tibiae and tarsi orange yellow. Pronotal disk, $\mathbf{Sc_1}$ and $\mathbf{Sc_2}$ distinctly bipunctate by very small **p** among sparse large deep **p**. Wings deeply darkened. Scopa: fig. 200

***Mesa hyloides* nov.sp.**

αα Head and mesosoma red. Antennae and legs dark brown. Pronotal plate with dense micro **p** and dense low white vestiture along its upper edge. $\mathbf{N_1}$, $\mathbf{Sc_1}$ and $\mathbf{Sc_2}$ not bipunctate. Wings much less darkened

***Mesa heterogamia* SAUSSURE 1892**

23

α flagellum bright yellow

***Mesa xanthocera* (GERSTAECKER 1871)**

αα flagellum brown/black

24

24

α Body completely brown/black without any red coloration

25

αα Metasoma more or less red

28

25

α More or less extended carina between subhorizontal and posterior surfaces of propodeum

26

αα No distinct carina between subhorizontal and posterior surfaces of propodeum

27

26

α Scape red. Coarse surface of posterior area of propodeum and 1st sternum, without distinct small **p**

***Mesa saussurei* (TURNER 1910)**

β Dark brown scape**.** Posterior area of propodeum almost mat with distinct sparse **p**. Surface of 1st sternum almost mat with very fine and small **p**

***Mesa coeruleipennis*(TURNER 1913)**

27

α Darkened ***CM***. Bright orange legs

***Mesa nodosa* (GUÉRIN 1837)**

β No differentiated ***CM***. Brown legs

***Mesa herero* (TURNER 1935)**

28

α Only 6th tergum ferruginous

29

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β Metasoma completely or mostly ferruginous

30

29

α Legs brown. Wrinkles on 6th tergum getting apical border without wrinkle free stripe along it

***Mesa pyxidata* (TURNER 1911)**

β Legs bright ferruginous, but coxae. Wrinkles of 6th tergum do not get apical border, leaving a smooth stripe along it

***Mesa pentatyla* nov.sp.**

30

α Mesosoma and head largely reddish brown to light brown

***Mesa torrida* (SMITH 1879)**

αα Mesosoma and head black/dark brown

31

31

α Scape reddish brown; flagellum brown on upper side and light brown ventrally; median furrow on propodeal disk large and well defined by lateral ridge; 1st tergum bright ferruginous as the remainder of metasoma

***Mesa sahariana* nov.sp.**

β Scape and flagellum dark brown; median furrow on propodeal disk narrow and ill defined; 1st tergum largely brown

***Mesa campsa* nov.sp.**

Males

1

α Tyloida present on at least three flagellomeri

2

αα Tyloida absent

5

2

α Tyloida only present on last five flagellomeri at the best

3

αα Tyloida present on eight flagellomeri at least

4

3

α Tyloida present on last five flagellomeri

Mesa pentatyla

α Tyloida present only on last three flagellomeri

Mesa oligotyla

4

α Black integument without light markings. Brown black hair throughout. Long strong black bristles on the sides of 6th sternum. Large size (more than 16 mm)

Mesa capensis

β Integument largely spotted by light markings. Whitish hair throughout. No black bristles on 6th sternum. Smaller size (10 mm)

***Mesa tylocera* nov.sp.**

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5

α Ventral border of the clypeus dark and opaque

6

αα Light and semitransparent ventral border of the clypeus

21

6

α Fore border of $\mathbf{N_1}$ disk with a distinct lamella

7

αα No lamellar carina along fore border of $\mathbf{N_1}$ disk, which is simply angled

15

7

α Lamella along fore border of $\mathbf{N_1}$ disk ending at anteroventral corner with an acute, outwards prominent tooth. Bright ferruginous legs

Mesa ruficeps

αα No tooth at anteroventral corner of $\mathbf{N_1}$, but only low blunt prominence at the best. Brown/black legs

8

8

α Ventral edge of clypeus with distinct median notch between two sub acute process; its depth as width of **om**. Light apical markings on terga (but occasional specimen of *M. xanthocera*).

9

αα Ventral edge of clypeus with shallow to very shallow median notch, far less deeper tha width of **om**. Metasoma without any light markings

11

9

α Ventral petiole with two parallel longitudinal ridge. Subapical surface of 1st sternum without **p**.

***Mesa nyanzae* (TURNER 1913)**

αα Simply rounded ventral petiole. Subapical surface of 1st sternum with many **p**

10

10

α Cuspis of volsella forming a suborthogonal angle (a bit less than 110°) with its base. Stout aedeagus (fig. 79). Small lateral spots on terga at the best

Mesa xanthocera

β Cuspis of vlsella sub coassial with its base. Slender aedeagus. (fig. 126), Narrow apical stripe on terga

Mesa asmarensis

11

α Apical surface of 1st sternum smooth, without any **p**

Mesa hova

αα Apical surface of 1st sternum largely **p**

12

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12

α 7th tergum without evident lateral carinae delimiting a distinct epipygial surface

Mesa marovatana

7th tergum with more or less extended epipygial surface, delimited laterally by distinct keels

13

13

α **Em_3** surface crossed throughout by horizontal wrinkles

Mesa tandrona

αα **Em_3** surface mostly smooth without wrinkles

14

14

α **N_1** lenghtened, ratio **La_p/Am_m** about 1.4

***Mesa krombeini* (BONI BARTALUCCI 2005)**

β **N_1** less lenghtened, ratio **La_p/A_m** about 1.2

Mesa madecassa

15

α Apical inner ventral edge of hind femur with distinct lamellar carina

16

αα Apical inner ventral edge of hind femur normally rounded either simply keeled without any lamellar process

17

16

α Pyriform spines along upper border of hindtibia
β Ventral edge of hind femur produced to strong lamellar process for half its length
χ Terga without graduli
δ Strong longitudinal wrinkles on basal half of epipygium whose apical half is ferruginous

***Mesa haemorroidalis* (GUÉRIN 1837)**

αα Sub conical spines on hind tibia
ββ Less high lamellar process only on last fourth of hind femur
χχ Graduli present on 2nd to 5th terga
δδ Epipygium completely brownish and mostly smooth, without any wrinkle

Mesa campsa

17

α Epipygium clearly notched; notch as deep or deeper than width of lateral lobes

18

β Epipygium either entire either wiyh a shallow notch, far less deep tha width of lateral lobes

20

18

α Ferruginous legs (but coxae)

Mesa rufofemorata

αα Brown black legs

19

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19

α Strongly prominent downwards median clypeus: ratio **LA/A$_m$** about 2.6 in frontal aspect

β Light markings are lemon yellow

χ Gonosquama like fig. 60

Mesa capitata

αα Far less prominent downwards median clypeus: ratio **LA/A$_m$** about 4.2

ββ Light markings are white and/or creamy white

χχ Gonosquama like fig. 119

Mesa erythropoda

20

α Large size: 12- 17 mm

β Cuspis of volsella forming a suborthogonal angle (less than 110°) with its base

Mesa donaldsoni

αα Smaller size: 10-14 mm

ββ Apical surface of 1st sternum without **p**

χχ Cuspis of volsella sub coassial with its base

Mesa herero

21

α Epipygium clearly notched; notch as deep as or deeper than basal width of lateral lobes

22

αα Epipygium either entire either with a shallow notch, less deep than width of lateral lobes

27

22

α Apical inner ventral edge of hind femur with distinct lamellar carina. Mid and hind legs light reddish

Mesa abdominalis

αα Apical inner ventral edge of hind femur normally rounded either simply keeled without any lamellar process. Legs black/brown

23

23

α Broad subtriangular median spot on **N$_1$** disk without subapical stripe

24

αα Subapical light stripe on **N$_1$** disk

25

24

α broad shallow notch without distinct lateral lobes

β Strong round tipped tooth on anteroventral corner of **N$_1$**

χ 1st tergal surface without any **mR**

δ 2nd and 3rd tergal surfaces not bipunctate

ε Apical half of ventral edge of gonosquama bordered by strong spines

Mesa xanthogramma

αα Ventral median edge of clypeus with clear notch making evident lateral lobes

ββ No tooth on anteroventral corner of **N$_1$**

χχ 1st tergal surface with **mR** evident at 20x

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δδ 2nd and 3rd tergal surfaces irregularly bipunctate

εε Strong spines only on apical ventral border of gonosquama

Mesa heterogamia

25

α Anteroventral corner of N_1 disk produced in a distinct acute tooth

Mesa picta

αα Anteroventral corner of N_1 disk unarmed, with a blunt prominence only

26

26

α Ventral median edge of clypeus with detectable notch

β Ratio La_p/A_m of N_1 disk about 2.5 in dorsal aspect

χ Tergal surfaces bipunctate

δ Carina severing horizontal surface of lobes of epipygium from lateral sub vertical surface of 7th tergum extending no more than half its length

ε Gonosquama: fig. 102

Mesa incisa

αα Ventral median edge of clypeus sub straight without detectable notch

ββ Ratio La_p/A_m of N_1 disk more than 3 in dorsal aspect

χχ Tergal surfaces not bipunctate

δδ Carina severing horizontal surface of lobes of epipygium from lateral sub vertical surface of 7th tergum extending for about all its length

εε Gonosquama: fig. 108

Mesa adelogamia

27

α Two parallel longitudinal ridge with furrow between them on ventral petiole ***Mesa saussurei***

αα Simply rounded ventral petiole.

28

28

α Fore border of N_1 disk with a distinct lamella

Mesa coeruleipennis

α No lamellar carina along fore border of N_1 disk, which is simply angled

29

29

α Apical inner ventral edge of hind femur with distinct lamellar carina

***Mesa eriosoma* nov.sp.**

αα Apical inner ventral edge of hind femur normally rounded either simply keeled without any lamellar process

30

30

α Apex of **Tsa** and basal three flagellomeri bright ferruginous. Clypeus with a median notch broad, as wide as twice width of **om**

***Mesa diversicornis* (TURNER 1917)**

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αα Apex of **Tsa** either brown either light spotted; basal three flagellomeri brown/black. Ventral border of clypeus with a shallow or narrow notch at the best

31

31

α Trochanters, femurs and tibiae light ferruginous-brown. Metasoma without light markings

Mesa nodosa

αα Metasoma with light markings. Legs brown/black with light markings

32

32

α No tooth on anteroventral corner of $\mathbf{N_1}$ disk

β Flagellum monochrome, blackor dark brown

33

αα Anteroventral corner of $\mathbf{N_1}$ disk with more or less prominent tooth

ββ Flagellum bichrome, with light brown or yellow ventral side

35

33

α Clypeus with narrow but distinct notch on ventral edge

β Apical surface of 1st sternum with many **p**

χ Cuspis of volsella sub coassial with its base

δ Outline of gonosquama like in fig.

***Mesa maliana* nov.sp.**

αα Clypeus with almost straight median ventral edge without distinct notch

ββ Apical surface of 1st sternum without **p**

χχ Cuspis of volsella forming a suborthogonal angle (abit less than 110°) with its base

δδ Different outline of gonosquama

34

34

α 7th flagellomerus with a ratio **L/LA** a bit more than 2. $\mathbf{N_1}$ disk with strongly arched apical border. Digitus sub rectangular. Aedeagus stout and sub triangular

***Mesa ametalla* (TURNER 1911)**

β 7th flagellomerus with a ratio **L/LA** about 1.7. $\mathbf{N_1}$ disk with less arched apical border. Digitus subtriangular with tapering apex. Aedeagus with slender apex

***Mesa nama* nov.sp.**

35

α Distinctly bipunctate surfaces of 2nd and 3rd terga

β Epipygium distinctly notched, with detectable lateral lobes

Mesa sahariana

αα No bipunctate surfaces of 2nd and 3rd terga

ββ Epipygium with very shallow notch, lateral lobes undetectable

36

36

α 7th flagellomerus with a ratio **L/LA** about 1.6

β Narrow acute tooth on anteroventral corner of $\mathbf{N_1}$ disk

Mesa dioica

αα 7th flagellomerus with a ratio **L/LA** more than 1.9

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ββ Broadly based rounded tooth on anteroventral corner of N_1 disk

37

37

α Brown underside of flagellum

β X_1 completely light yellow

Mesa silvana

αα Yellow underside of flagellum

ββ Ventral surface of X_1 only yellow

Mesa pyrrhoprocta

Mesa haemorroidalis (GUÉRIN 1837)

Myzine haemorroidalis GUÉRIN 1837: 576. Holotypus ♂: South Africa = /*Afrique Delalande*/ (round label) /*Myzine haemorroidalis Guér Mag. Zool. Cap*/ /Museum Paris Afrique austral Delalande/ (green label) /Type/ (red types), MHNP!

Elis (*Mesa*) *fusiformis* TURNER 1919: 44-45. Holotypus ♂: /Cape Colony Kraaifontein Lightfood/ /*Elis* (*Mes*) *fusiformis Turn Type*/ (autographic) /Type/ (red label) /Methoca concinna B ♂ - new/ /SAM Hym A003346/ SAM!

Mesa haemorroidalis - BONI BARTALUCCI 2004a: 36.

Material. ♂

South Africa = (1) /Rapenburg Cape Flats 1-14.X.1920/ /S. Africa R.E. Turner 1920-424/ BMNH; (1) /Stelenburg 17.9.23 C.J. Joubert/ /Pres. By Com. Inst. Ent. B.M. 1948-182/ /*Mesa fusiformis* (*Turn*) ♂ *det* C.J. Guillarmod/ BMNH; (2) / Africa Cape Prov. Pakhuis Pass Sept. 1961 SA Museum Exped – Cape Town/ SAM.

Female sex unknown. Male (figs 35-38) can be well known from other taxa by absence of graduli at the base of terga and by strong lamina along half ventral border of hind femur. Distinct also by the ferruginous coloration of final metameri and strong wrinkles at the base of 7th tergum. which shows a deep notch.

Distribution range: South Africa.

Mesa nodosa (GUÈRIN 1837)

Myzine nodosa GUÈRIN 1837: 577. Lectotypus ♂: Madagascar = /Goudot Madagascar 1829/ (rounded) /Museum Paris Madagascar Goudot 86-39/ /*Myzine nodosa* Guer mag. zool./ /TYPE/, MHNP!

Myzine nodosa: SAUSSURE (1892: 240).

Elis (*Mesa*) *nodosa*: TURNER (1912: 713).

Mesa seyrigi KROMBEIN 1948: 64-66 (♀ only).

Mesa nodosa: BONI BARTALUCCI (2004a: 1228).

Mesa nodosa: BONI BARTALUCCI (2005: 1084-1085 ♀ & ♂).

Material. ♀. Madagascar = (5) /Madagascar Ste Marie Umgeb. Cocoteraie Robert 15-20.10.1992 Madl/ NHMW (4), MZUF (1); (1) /Madagascar Sainte Marie Fret de Kalalao 6-15.6.1995 Madl/ NHMW.

♂. Madagascar = (1) /Madagascar/ MSNG; (7) /Madagascar Ste Marie Umgeb. Cocoteraie Robert 15-20.10.1992 Madl/ NHMW (5), MZUF (2).

Female: fig. 39. Male, redescribed by BONI BARTALUCCI (2005), with semitransparent ventral border of clypeus, entire apical epipygium and absence of light markings on metasoma; female is known by the darkened ***CM***. Endemic to Madagascar.

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Mesa abdominalis (GUÈRIN 1838)

Plesia abdominalis GUÉRIN 1838: 57. Lectotypus ♀ (here designated in order to ensure the name proper and consistent use) - South Africa = /Cap / /*abdominalis Guèrin type d. Guér.*/(autographic) /Type/ (red) /C.ne de Saussure/ MHNG!

Mesa abdominalis: SAUSSURE (1892: 244 ♀).

Mesa hottentotta SAUSSURE 1892: 245 ♀ (Lectotypus ♀ - South Africa = /Cap / /43/ /*Pseudoplesia hottentotta Sss Cap ♀*/ (blue autographic) /Type/ (red) MHNG!) **Syn. nov.**

Elis (*Mesa*) *abdominalis*: TURNER (1912: 707 ♀).

Elis (*Mesa*) *spoliata* TURNER 1912: 711. Lectotypus ♂ (here designated in order to ensure name proper and consistent use) – South Africa = /Algoa bay Capland Dr. Braun *8.3.96*/ /Brauns Coll. 1912-44/ /10/ /*Elis spoliata Type Turn.*/ (autographic) /Type/ (rounded with red outer ring) BMNH. **Syn.nov.**

Elis (*Mesa*) *permutans* TURNER 1935: 348-349 ♀ . **Syn. nov.**

Elis (*Mesa*) *abdominalis*: Turner (1935: 350-351 ♂).

M a t e r i a l . ♀. Africa = (1) /Umtata Trapskei 18.ii-18.iii.1923/ /S. Africa R.E. Turner Brit. Mus. 1923-189/ /*Elis* (*Mesa*) *spoliata Turn Type ♀ RET 1934*/ (autographic) /Type/ (rounded with red outer ring) BMNH; (5) /Umtata Trapskei 18.ii-18.iii.1923/ /S. Africa R.E. Turner Brit. Mus. 1923-189/ BMNH; (2) /Witzenberg Vall. ♀ District Cape Prov. 21-23.XII.1920/ /S. Afr. R.E. Turner Brit. Mus. 1921-38/ /Elis longiventris Turn/ /*Mesa permutans* (*Turn*)/ /*Mesa hottentotta Sauss det 1949* C.J. Guillarmod/ BMNH; (1) /Witzenberg Vall. 3500 ft Ceres District Cape Prov. 21-23.XII.1920/ /S. Afr. R.E. Turner Brit. Mus. 1921-38/ /Elis longiventris Turn/ /*Mesa permutans* (*Turn*)/ /Paratype/ (rounded with yellow outer ring) /*Mesa hottentotta Sauss det 1949* C.J. Guillarmod/ BMNH; (1) /Mossel bay Cape province 15-28.III.1922/ /S. Afr. R.E:Turner Brit. Mus. 1922-153/ /*Mesa spoliata* (*Turn*) *♀ det 1947* C.J. Guillarmod/ BMNH; (1) /*S. Africa Cape peninsula N of Cape point 3.XII.1931 R.E. Turner BM 19.* South 3500 ft Ceres *38-6*/ /*Elis* (*Mesa*) *sp. N. ?*/ BMNH; (2) /RSA Mpumalanga 20 km SW Lidenburg 20-30.XI.2003 J. Halada leg/ OLML; (2) /RSA W Cape 20 km N Citrusdale 27.X.1999 leg. M. Halada/ OLML;
♂. South Africa = (1) /Capetown Jan-Apr 1915/ /J.G. Bridwell Collection/ USNM; (2) /Wint-hoek Tullbagh 3600 ft- April 1916 R.M.L./ BMNH; (1) /Mossel bay Cape Province 15-28.III.1922/ /S. Africa R.E. Turner Brit. Mus. 1922-153/ BMNH; (1) /Umtata Trapskei 18.ii-18.iii.1923/ /S. Africa R.E. Turner Brit. Mus. 1923-189/ /*Mesa spoliata* (*Turn*) *♂ det 1947* C.J. Guillarmod/ BMNH; (1) /Cape Province Ceres April 1925 S. Africa R.E. Turner Brit. Mus. 1925-210/ BMNH; (1) /Cape province Ceres Aprl 1925/ /S. Afr. R.E. Turner Brit. Mus. /*Mesa spoliata* (*Turn*) *♂ det 1947* C.J. Guillarmod/ BMNH; (1) /South Africa Pletenenberg bay CP III.14-68 Paul S. Spangler/ USNM.

Female: figs 5, 7-12, 14-18, 29, 40- 44. Male: figs 45-49.

In spite of its being the species type of the genus, it has not been well recognised by authors after SAUSSURE; they probably did not examine the type preserved at Geneva Museum. The typus shows: ventral side of **cOc** wearing out ventrally near **Hypc**, so that **PoG** is illy defined (this character state is uniquely expressed within the genus); very short and shallow, almost undetectable median furrow on propodeal disk; gradulus on 3rd tergum too, well impressed longitudinal wrinkles on most of 6th tergum with a lot of intermingled **p** and a smooth stripe along apical border. Its recent examination permits to propose the above said synonymies.

The first one is based on identity of lectotypes preserved at Geneva Museum; their unique difference is the darker dull ferruginous coloration of metasoma in Saussure's lectotype.

The second synonymy has been based on TURNER's and GUILLARMOD's actions. They associated in labels under the name *M. spoliata* males identical to its lectotype with female specimens identical to *M. abdominalis* lectotype (probably referring to the series from Umtata). TURNER labelled one of these female specimens as female type (sic) of *Elis* (*Mesa*) *spoliata*. In his very short description (1935) about these females he referred

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"sixth tergite punctured", but their examination revealed a longitudinally wrinkled element with a lot of intermingled **p** and a smooth stripe along apical border, the exact pattern of GUÉRIN's taxon.

There is no ground to doubt about the aforesaid association, since the authors passed many years on the field in South Africa, even though they did not publish anything more about.

TURNER never referred about his direct examination of type of *M. abdominalis*. HE (1912) just catalogued it without any note, then (1935) described a male under the same name recording "a number of both sexes taken on the same plant, but not coupled". From description this male has dark clypeus and light markings only on metasoma. It seems to be identical to male specimens preserved at BMNH, that JACOT-GUILLARMOD labelled "*Mesa abdominalis"* together with females which really differ from the type and belongs to another species (see under *M. campsa* nov.sp.).

Third synonymy has been grounded on the examination of the paratype specimen of *E. permutans* at BMNH, identical to lectotype of *M. hottentotta*.

Female specimens show variability about colour of metasoma; specimens referred to *M. hottentotta* have also longer and denser whitish hair on head and pronotum.

Darker males with reduced light markings on the legs could appear very like to *M. rufofemorata*, but the presence of semitransparent border of clypeus and light marking on hind femur easily distinguish it.

Mesa capensis (LEPELETIER 1845)

Tiphia capensis LEPELETIER 1845, pl. 35, fig. 1 (Typus: ?) ♀.
Mesa peringuey SAUSSURE 1892: 245. Lectotypus ♀ - South Africa = /Calvinia/ /Cap/ /41/ /*Cosila peringuey* n.sp. Sss ♀/ (blue autographic) /Type/ (red) /C.ne Saussure/MHNG!
Plesia (*Mesa*) *capensis*. TURNER (1908: 506).
Myzine nigrita TURNER 1910: 391-392 ♂ (type at MNHU).
Elis (*Mesa*) *capensis*: TURNER (1912: 709 ♀).
Elis (*Mesa*) *capensis*: TURNER (1935: 348 ♀).
Mesa capensis: JACOT-GUILLARMOD (1953: 17-18).
M a t e r i a l . ♀. South Africa = (23) /Swart Doring R. Namaqualand – 2-3.10.1966 S.A.M./ SAM (20) MZUF (3); (2) /7-10 m SW of Matjiesfontein – 15.10.1966 S:A.M./ SAM; (1) /S. Afr. C.P. Genes 12 Oct. 1982 VB. Whitehead/ SAM (2) /Tows R. – 16.10.1966 S.A.M./ SAM; (1) /Kamies Kron Namaqualand – Museum Staff Sept. 1930/ SAM; (5) /Augusfontein (Calvinia) C.P. – Museum Staff 9.1947/ /*Mesa capensis* (*Lep*) det 1948 ♀ CJ Guillarmod/ /A003201/ /SAM; (1) /Nieuwouptville Braundkop SA Museum – Mus Staff Sept 1941/ /A003205/ SAM.
♂. South Africa = (1) /*O'okiep S Warden 1884*/ BMNH; (1) /*M'fogosi Zulu L. WE Jones 8.1912*/ /*Myzine klugii Westw Turn*/ /RE Turner det./ /*Mesa capensis* (*Lep*) ♂ det 1948 CJ Guillarmod/ /A003204/ SAM; (1) /Augusfontein (Calvinia) C.P. – Museum Staff 9.1947/ /*Mesa capensis* (*Lep*) det 1948 ♂ CJ Guillarmod/ /A003201/ SAM.

TURNER (1935) named the SAUSSURE's taxon under *Elis* (*Mesa*) *capensis*. JACOT-GUILLARMOD (1953) established the synonymy with *Myzine nigrita*.

TURNER (1912) discovered that figure of LEPELETIER's taxon do not show a *Tiphia* but effectively a member to the genus he called *Elis* (*Mesa*) at that moment. Both TURNER and JACOT GUILLARMOD agree on the interpretation of this species even though they did not examine the type (which probably has been lost) and the latter clearly argued: "... I followed Turner in the interpretation of this species although it is not certain whether the

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species as here understood is actually the same as Lepeletier's, but, of all species known to me, it is the one that come nearest to Lepeletier's description and figure". Here their interpretation has been followed. About the sex association JACOT GUILLARMOD himself asserts to have grounded the synonymy with *M. nigrita* upon geographical distribution without any definite proof, but it is really hard to harbour some doubt about his action.

Female (figs 50-52) is probably the giant of the genus, getting 22 mm. Completely black it shows a blunt median longitudinal ridge on propodeal disk, instead of furrow like in all other taxa of the genus. Gradulus on 3rd tergum. The hair is also normally brown/black almost throughout, lighter in some populations from Namaqualand. Male (figs 53-55) is completely black too, with ventrally prominent clypeal lamella, dark hair throughout, stout flagellomeri (many of them with prominent stout tyloida), tuft of strong black bristles on the sides of 7th tergum.

Mesa capitata (SMITH 1855)

Myzine capitata SMITH 1855: 74. Lectotypus ♀ (here designated in order to ensure the name proper and consistent use): South Africa = /*Int. S. Africa – 43 19* (on the reverse)/ (rounded) /*capitata Sm Type*/ /Type/ (rounded with red outer ring) BMNH!

Myzine clavata SAUSSURE 1892: 242 ♂.

Elis (*Mesa*) *auriflua* TURNER 1912: 705 ♀.

Elis (*Mesa*) *capitata*: Turner (1926: 107 ♀).

Mesa capitata: JACOT GUILLARMOD (1953: ♀ & ♂).

M a t e r i a l . ♀. South Africa = (1) /Mamathes Basutoland 13.1.1946 C. Jacot Guillarmod/ /*Mesa capitata* (*Smith*) ♀ *det 1947* C.J. Guillarmod/ BMNH; (1) /Basutoland Mamathes 13-I.1948 Miss M.H. Mann/ /*Mesa capitata* (*Smt*) *det 1949* C.J. Guillarmod/ BMNH; (2) South Africa Trsvl Mooketsi 14-18.Feb. 1966 Krombein & Spangler/ USNM; (2) /RSA Mpumalanga 20 km SW lidenbrug 20-30.XI.2003 J. Halada leg/ OLML; (1) /Orange free State Chicago Lindley dist. 1.1-10.1 1949/ /*Mesa capitata* (*Smith*) *det 1949* CJ Guillarmod/ /A003286/ SAM.
♂. South Africa = (1) /Mamathes Basutoland 28.XII.1945 C. Jacot Guillarmod/ /*Mesa capitata* (*Smith*) ♂ *det 1947* C.J. Guillarmod/ BMNH; (1) /Orange free State Chicago Lindley dist. 1.1-10.1 1949/ /*Mesa capitata* (*Smith*) *det 1949* CJ Guillarmod/ /A003286/ SAM. Zimbabwe = (7) /Zimbabwe 50 km S. Bulawayo Matobo 3-5.12.98 leg. Marek Halada/ OLML.

Female: figs 56-59 Male: figs 60-61.

Female has high and polished pronotal plate and darkened wings. Males in general aspect and genitalia are very close to *M. adelogamia*. They differ in having dark opaque ventral border of clypeus, **SCF** as large as about 2/3 thickness of flagellomeri. The authority for their acknowledgment is JACOT-GUILLARMOD, who established both the synonymy with *M. clavata* and the sex association through the specimens he labelled. Female shows gradulus on 3rd tergum too.

N o t e . Turner himself wrote about poor conditins of the type, lacking wings too.

Mesa ruficeps (SMITH 1855) comb.nov.

Myzine ruficeps SMITH 1855: 75. Lectotypus ♀ (here designated in order to ensure the name proper and consistent use): South Africa = /Port Natal – 49 29 (on the reverse)/ (rounded) /*ruficeps type Sm*/ /Type/ (rounded wit red outer ring) BMNH!

Plesia (*Mesa*) TURNER 1908: 502 ♂.

Mesa atopogamia SAUSSURE 1892: 245.

Elis (*Mesa*) *ruficeps* subsp. *atopogamia* & subsp. *diapherogamia* TURNER 1911: 304 ♀.

Elis (*Mesa*) *ruficeps*: TURNER (1912: 706 ♀ & ♂).

Elis (*Mesa*) *ruficeps* subsp *atopogamia*: TURNER (1912: 706 ♀ & ♂).

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Elis (*Mesa*) *spinicollis* TURNER 1917: 353-354. Holotypus ♂ – Zimbabwe = /*Bulawayo* Rhodesia *11 Feb 1912* G. Arnold/ / *Elis* (*Mesa*) *spinicollis Turn. Type*/ (autographic) /Type H. T./ (rounded with red outer ring) BMNH! **Syn.nov.**

M a t e r i a l . ♀. Angola = (7) / Angola (A37) 5 mls NE Negola 25.III.1972/ /Southern African Exp. B.M. 1972-1/ BMNH. Kenya = (1) /T.H.E. Jalkson Arabuko Forest Malindii 5.40/ /Pres.by Com. Inst. Ent. B.M. 1972-2/ BMNH. Malawi = (1) /Nyasaland SW Shore L. Nyassa btwn Ft. Johnston & Monkey bay 1650 ft 25 Feb-Mch 4 1910 S.A. Neave//1910-353/ /*Mesa ruficeps atopogamia Saus det 1949* C.J. Guillarmod/ BMNH. Mozambique = (3) /Lour- Marquez Port. S. Afr. Enri Junod/ /Feb. 1915 Moryo Basutoland- Afr. Cornell Lot. 447 sub 137 H. Junod/ CUIC. South Africa = (1) /S. Africa Natal St. Lucia estuary 9-10.Feb 1974 AB Curnem/ USNM; (1) /S. Afr. Zululand N 21.III.1951 AL. Capener/ /D.G. Shappirio Collection 1970/ USNM; (1) /South Africa Trsvl Nooketsi 14-18.Feb.1968 Krombein & Spangler/ USNM; (2) /RSA Kwaza Zulu Natal 6.12.2002 Mbazwana lg Mrek Halada/ OLML; (1) /Pretoria Transvaal Jan 6 1922/ CUIC. Zimbabwe = (1) /S. Rhodesia H.S. Lesson B.M. 1923-122/ BMNH; (1) /N. Rhodesia Chigali 24.4.54 9932 Fitzgerald/ BMNH; (1) /Zimbabwe 30 km W Harare 29.11.1998 leg J. Halada/ OLML; (1) /W Zimbabwe 60 km N Bulawayo Maraposa Rd 1.1.1999 M. Snižek leg/ OLML.

♂. Mozambique = (1) /Mozambique Inhambane pr 5x29 25 km N. massing XII.2003 J. Halada lg/ OLML. Malawi = (1) /Nyasaland SW Shore L. Nyassa btwn Ft. Johnston & Monkey bay 1650 ft 25 Feb-Mch 4 1910 S.A. Neave//1910-353/ /*Mesa ruficeps atopogamia Saus det 1949* C.J. Guillarmod/ BMNH; (1) /Nyasaland SW of Lake Chilwa 12 Jan 1914 S.A. Neave/ BMNH. Nigeria = (1) /654 27 K W of Lagos Nigeria 6.IV.1975 J. Riley/ BMNH. South Africa = (1) /Waterberg distr 1890/ /1915-319/ BMNH; (1) /Transvaal A.J. Cholmley 1906-225/ BMNH; (1) /Natal Weenen I-III. 1924 H.P. Thomassen/ /Pres. By Imp. Bur. Ent. Brit. Mus. 1929-407/ BMNH; (1) /S. Africa Natal St. Lucia estuary 9-10.Feb 1974 AB Curnem/ USNM; (1) /South Africa Kruger Natl Park Pretoriuskop 20-21.Feb. 1968 Krombein & Spangler/ USNM; (1) /Pretoria Transvaal Jan 22 1922/ CUIC. Zimbabwe = (1) /E. Zimbabwe Mount Selinda 12.XII.1998 lg J. Halada/ OLML.

Female: figs 29, 62-67. Male: figs 68-71.

It is a polymorphic taxon about female body coloration and male wings darkening, the fair variability about occurs within the same population without any clear geographical distinction. From that the plethora of names, but here any criticism about is not debated. The type of *E.* (*M.*) *spinicollis* has completely hyaline wings, the remainder of characters, genitalia enclosed, are identical with males with darkened apical wings.

In a general way females are well characterized by the great size, **cOc** wearing out near vertex, lamina along the border between discal and anterior surfaces of $\mathbf{Es_2}$, absence of gradulus on 3rd tergum, males by the absence of any light markings on the body, ferruginous fore and mid legs, lamina along fore border and acute tooth on anteroventral corner of $\mathbf{N_1}$, laminated apical femur, notched 7th tergum, big digitus on volsella.

N o t e . The present records from Kenya and Nigeria not only are a novelty like Angola, but establish also a huge expansion of its distribution range out of Austral Africa.

Mesa xanthocera (GERSTAECKER 1871)

Myzine xanthocera GERSTAECKER 1871: 353 n.35. T y p u s ♀ - Tanzania, MNHU.

Plesia (*Mesa*) *xanthocera*: SAUSSURE (1892: 245).

Myzine xanthocera (1870): DALLA TORRE (1897: 130).

Plesia reticulata CAMERON 1905: 300 – Holotypus ♂- South Africa = /Brak Kloof Jan 95 Mrs G. White/ /*Plesia reticulata Cam. Type Brak Kloof*/ (autographic) /Holotype ♂ *Plesia reticulata* Cameron *teste* C.J. Guillarmod/ Albany Museum. **Syn.nov.**

Elis (*Mesa*) *xanthocera*: TURNER (1912: 709).

Elis (*Mesa*) *incerta* TURNER 1912: 710. Holotypus ♂: South Africa = /Howick Natal J.P. Cregoe 1903 13/ /*Elis incerta Turn Type*/ (autographic) /Type H.T./ (rounded wit red outer ring) BMNH! Lacking flagella.

Elis (*Mesa*) *xanthocera*: TURNER (1916: 460).

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Elis (*Mesa*) *mutica* TURNER 1917: 353. Holotypus ♂: Zimbabwe = /Rhodesia *Bulawayo 21 Dec* 19*11* G. Arnold/ /*Elis* (*Mesa*) *mutica Turn Type*/ (autographic) /Type H.T./ (rounded wit red outer ring) BMNH! **Syn.nov.**

Elis (*Mesa*) *xanthocera*: TURNER (1926: 107).

Plesia reticulata: JACOT-GUILLARMOD (1961: 3).

M a t e r i a l . ♀. Botswana = (1) /Botswana Kuke park 20à59'S 22°25'E 14-25.IV.1972/ /Southern African Exp. 1972-1/ BMNH; Namibia = (1) /SW Africa Komgai 1-6.IV.1972/ /Southern African Exp. 1972-1/ BMNH; (1) /SW Africa Swakop. R 3 mls S Okahandja 7.IV.1972/ /Southern African Exp. 1972-1/ BMNH; Malawi = (1) /Nyasaland Blantyre IV.1957 KLM Krauss B.M. 1957-458/ BMNH; South Africa = (1) /S. Africa Natal Ingogo III.1902/ BMNH; (1) /S Africa Bechuanaland Ngamiland Nov. 1930-Jan 1931 GD. Hale Car. B.M. 1931-160/ BMNH; (1) /Cape province Somerset East 1-26.1.1931/ /Brit. Mus. 1931-95/ /*Mesa xanthocera* (*Gerst*) *♀ det 1947* C:J:Guillarmod/ BMNH; (1) /Queenstown Cape Province 3.500 ft 16.I-10.II 1923/ /S. Africa RE Turner Brit. Mus 1923-140/ /*Elis* (*Mesa*) *xanthocera Gerst. ♀ det Turn*/ /A003307/ SAM; (1) /Bronkhorstpruit Dam Tvl 21.11,64 HN Empey/ / Mesa xanthocera det HN Empey/ /A003319/ SAM; Tanzania = (1) /Tanzania Mkomazi Game Reserve, Ibaya hill 03°58'40S 37°47'13E 15-30 April 1996/ /S. van Noort Malaise trap, wet montane forest margin bordering *Setaria*/*Panicum* grass/ /SAM HYM AO180095/ SAM.

♂. Botswana = (1) /Botswana (B9) L. Ngami 12 mls NE Sehithwa 16-17.IV.1972/ Southern African Exp. 1972-1/ BMNH; Kenya = (1) / Kenya Kilagumi Tsavo 27.XI.1972 Coll. A. Mochi/ USNM; Mozambique = (1) /Mozambique Gaza pr 30.XII.2003 45 km W Xai. Xai J. Halada leg/ OLML; South Africa = (2) /Queenstown Cape province 3500 ft 16.I-10.III.1923/ /South Africa R.E. Turner Brit. Muse. 1923-140/ //*Mesa xanthocera* (*Gerst*) *♂ det 1947* C:J:Guillarmod/ BMNH; (1) /Cape Province Katberg 1-10.V.1933/ /S. Africa RE:Turner Brit. Mus./ BMNH; (2) /Bronkhorstpruit Dam Tvl 21.11,64 HN Empey/ / Mesa xanthocera det HN Empey/ /A003319/ SAM; (1) /Natal Estcourt Haviland/ /Elis (mesa) reticulata Cam/ /R.E. Turner determ/ /A003344/ SAM; Zimbabwe = (1) /Zimbabwe 30 km W Harare 29.II.1998 lg J. Halada/ OLML; Tanzania = (1) / Tanzania Mkomazi Game Reserve, Ibaya hill 03°58'40S 37°47'13E 26 Nov-10 Dec 1995/ /S. van Noort Malaise trap, *Acacia/Commiphora/Combretun* Bushland/ /SAM HYM AO 17951/ SAM; (1) Tanzania Mkomazi Game Reserve, Ibaya hill 03°58'40S 37°47'13E 14 April-3 May 1996/ /S. van Noort Malaise trap, *Acacia/Commiphora/Combretun* Bushland/ /SAM HYM AO 18240/ SAM.

Female: figs 74-76. Male: figs 77-79.

Past authors like TURNER and JACOT GUILLARMOD are the authorities about the interpretation of this taxon. Female well distinct by the colour of flagellum; gradulus present only on 2nd tergum. The sex association and synonymy of *Plesia reticulata* has been performed in labels by JACOT-GUILLARMOD. He published the description of type of *Plesia reticulata* preserved at Albany Museum hinting at its synonymy with *M. xanthocera*, but did not formalize it. The type of *P. reticulata* has been as unaccessible to me as that of *Plesia carbonaria* and other CAMERON's types at Albany Museum, but I feel right to establish the synonymy all the same in memory of his authority. Before him TURNER (1926) established the synonymy of his *E.* (*M.*) *incerta* with *M. xanthocera* since he took "both sexes in large numbers at Queenstown in January 1923 on *Mimosa*-blossom" Types of *Elis* (*Mesa*) *incerta* and *Elis* (*Mesa*) *mutica* are identical to eachother and both perfectly fit with males identified as *M. xanthocera* by JACOT-GUILLARMOD, genitalia enclosed, as specimen from Natal determined as *E.* (*M.*) *reticulata* by TURNER does too.

Here probably *Plesia carbonaria* CAMERON 1905 could be listed, basing it on the shallow description by the author. Both Turner and Jacot Guillarmod did not give any clear hint about. On the other hand both collections at BMNH and SAM do not list specimens so classified, a fact which makes us think that both abovesaid authors did not retain it a good species. Nevertheless whichever doubt will be dissipated only by the examination of the type, so far unaccessible to me.

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The unique difference occurring among male specimens here recorded is the stochastic absence/presence of small light spots on clypeus and sides of terga in some of them.

N o t e . DALLA TORRE (1897) recorded this taxon with the year 1870 and TURNER (1912, 1916, 1926) followed him, but the year of publication is actually 1871.

Mesa torrida (SMITH 1879) comb.nov.

Myzine torrida SMITH 1879: 178. Lectotypus ♀ (here designated in order to ensure the name proper and consistent use) - Gambia = /*Gambia*/ /*63 81*/ (rounded) /*Myzine torrida* (*type*) *Sm.*/ /Type/ (rounded with red outer ring) BMNH!

Elis (*Mesa*) *torrida*: TURNER (1912: 708).

Female. figs 72-73.

Head and mesosoma with spreading reddish brown shadows, with light brown Tsa, scape, most of clypeus and legs but coxae. Metasoma completely light ferruginous. **cOc** complete near vertex, anteroventral corner of $\mathbf{N_1}$ not wrinkled, median furrow dividing propodeal disk, gradulus absent both on 3rd and 4th terga, 6th tergum wrinkled but apical stripe. Male unknown.

Mesa heterogamia SAUSSURE 1892

Mesa heterogamia SAUSSURE 1892: 244. Lectotypus ♀ - Mozambique = /Mozambiq/ (blue) /*Mesa heterogamia Sa* ♀/(autographic) /TYPE/ (red) /C.ne de Saussure/ /Lectotypus *Mesa heterogamia* SAUSSURE 1892 Boni Bartalucci des 1998/ MHNG!

Elis (*Mesa*) *heterogamia*: TURNER (1912: 706).

Elis (*Mesa*) *heterochroa* TURNER 1917: 61-62 ♀ & ♂ - **Syn.nov.**

Mesa heterogamia: BONI BARTALUCCI (2004a: 365, fig. 1 ♀ & ♂).

M a t e r i a l . ♀. Malawi = (1) /Nyasaland Mlanji Boma 2400ft 26-30 Apr & 3-5 May 1910 S.A. Neave/ BMNH; (1) /Mlanje Nyasaland 11-12.1912 S.A. Neave/ /1913-140/ BMNH; (1) /Nyasaland Mlanje 23 Apl 1913 S.A. Neave 1913-140/ BMNH; (1) /Nyasaland Mlanje Mch 26 1913 S.A. Neave 1913-140/ /*Mesa heterochroa* (*Turn*) ♀ *det 1949* C.J. Guillarmod/ BMNH; Zimbabwe = (2) /Zimbabwe 50 km S. Bulawayo Matobo 3-5.12.98 leg. Marek Halada/ OLML.
♂. Angola = (1) /Angola (A42) Roçadas 40.III.1972/ /Southern African Exp. 1972.1/ BMNH; Malawi = (1) /Nyasaland Mlanji Boma 2400ft 26-30 Apr & 3-5 May 1910 S.A. Neave/ BMNH (1) /Nyasaland Mlanje 2 Jan 1914 S.A. Neave 1913-140/ BMNH; (1) /Nyasaland Mlanje Mch 26 1913 S.A. Neave 1913-140/ BMNH; South Africa = (1) /S. Africa: Natal St. Lucia Estuary 9-10 feb. 1974 A.B. Gurney/ USNM; Zimbabwe = (1) /Rhodesia Matopos nat-l park IV-1 & 2-1968 paul S. Spengler/ USNM; (1) /E. Zimbabwe Mount Selinda 12.XII.1998 lg J. Halada/ OLML; (1) /E. Zimbabwe Mutare Nyazura 20.XII.1998 lg M. Snižek/ OLML; (30) /Zimbabwe 50 km S. Bulawayo Matobo 3-5.12.98 leg. Marek Halada/ OLML.

Female: figs 80- 82. Male: figs 83-86.

Considered the Species type by KROMBEIN (1937), JACOT GUILLARMOD (1953) & BONI BARTALUCCI (2004), but SAUSSURE (1892) first listed *M. abdominalis* (GUÉRIN 1838. Females show pronotal plate with many small **p** bearing weak white hair; gradulus on 3rd tergum too; 6th tergum resembling that of *M. abdominalis* with only few intermingled **p**. Males can be acknowledged by the large subtriangular light spots on mid pronotal disc, instead of subapical stripe, a character state uniquely derived among afrotropical taxa and only shared by the new taxon *M. xanthogramma* from Nigeria. Some specimens have a bit darker ventral edge of the clypeus which always shows a distinct median notch. Yellow spot on mid clypeus, tip of **Tsa**, coxae, tips of femurs and tibiae. Apical yellow stripes also on 2nd to 6th terga and two very small apical spots on the sides of 2nd to 5th

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sterna. Deep notch on epipygium. Examination of female specimen labelled *M. heterochroa* and male with the same label do not reveal any morphological difference from other specimens but female coloration, a character state normally carrying some variability into the same population. JACOT GUILLARMOD is the authority for the sex association.

Mesa donaldsoni (FOX 1896)

Cosila donaldsoni FOX 1896: 549. T y p u s ♀ - Somalia.
Elis (*Mesa*) *aliciae* TURNER 1912: 704-705.
Elis (*Mesa*) *donaldsoni*: TURNER (1913: 737).
Xylunka donaldsoni: ARGAMAN (1994: 90).
Elis (*Mesa*) *donaldsoni*: BONI BARTALUCCI (2004a: 369-371 ♂ figs 4-13).
M a t e r i a l . ♀. Tanzania = (1) /Tanganyika Shinyanga Makumbo 12.4.1956 A.D. Robertson 192/ /prep by Com ? Ent B.M. 1963-4/ /*Elis* (*Mesa*) *aliciae Turn* G.E.S. Nixon det.1972/ BMNH.
♂. Kenya = (6) /Kenya Kilagumi Tsavo 27.XI.1972 Coll. A. Mochi/ USNM; Somalia = (1) / Somalia Sar Uanle programma litorale 1 trans A trapp. Data *3.XI.71 ore 18* Zona2 Direz.*T*/ MZUF; Tanzania (?) = (1) /Ostafrika Jkutha/ NHMW; (1) /Tanzania Mkomazi Game Reserve, Kamakota hill 4°14'S 38à24E 4 Dec 1995, S. Van Noort, On Ficus ingens (Miq.) Miq. with ripe fig crop/ /SAM-HYM AO17967/ SAM.

Female: figs 87-89. Male: figs 90-92.

Large sized. Female with worn out **cOc** near vertex and bright ferruginous last two metameri. Male characterized by sub-parallel sided pronotum in dorsal aspect, stout metasoma, prominent epipygium with shallow notch on 7th tergum, strongly angled volsella. TURNER established the synonymy with his *E.* (*M.*) *aliciae*. The new records strengthen the sex association made by BONI BARTALUCCI (2004a). Apparently confined to Equatorial Eastern Africa (Southern Somalia, Kenya and Tanzania).

Mesa rufofemorata (CAMERON 1905) comb.nov.

Plesia rufofemorata CAMERON 1905: 298 Holotypus ♂ - South Africa = /O'okiep 9.90/ /174/ /*Plesia rufofemorata* Cam. Type Dunbrody/ /Holotype ♂ *Plesia rufo-femorata* Cameron/ Albany Museum.
Elis (*Mesa*) *rufofemorata*: TURNER (1912: 713 ♂).
Plesia rufofemorata: JACOT-GUILLARMOD (1961: 3 ♂).
M a t e r i a l . ♀. South Africa = (1) /Cape Province Ladismith 28 Sept. 1948 C.J. Guillarmod/ /*Mesa rufofemorata* (*Cam*) *det 1949* C.J. Guillarmod/ BMNH; (2) /Augustfontein (Calvinia) C.P. – Mus. Exp. Sept. 1943/ /*Mesa rufofemorata* (*Cam.*) ♀ *Det 1947* C.J. Guillarmod/ /A003379/ SAM. ♂. South Africa = (1) /Cape Province Ladismith 16 Sept. 1948 C.J. Guillarmod/ /*Mesa rufofemorata* (*Cam*) *det 1949* C.J. Guillarmod/ BMNH; (1) /Cape Province Ladismith 27 Sept. 1948 C.J. Guillarmod/ /*Mesa rufofemorata* (*Cam*) *det 1949* C.J. Guillarmod/ BMNH; (1) /Natal Eastcourt/ /*Mesa reticulata*/ BMNH; (5) /Augustfontein (Calvinia) C.P. – Mus. Exp. Sept. 1943/ /*Mesa rufofemorata* (*Cam.*) ♂ *Det 1947* C.J. Guillarmod/ /A003379/ SAM; (2) /South Africa, Western Cape, Travellers Rest, Sevilla, 32°04'374S 19°04'837E 328m 20.VIII.2007, R. Stanway, BE, pollinating Euphorbia mauritanica dry Mountain Finbos/ /Meria sp 3 Det Van Noort 2008/ /A021958-9/ SAM.

Female: figs 93-95. Male: figs 96-98.

Sex association has been made in labels by JACOT-GUILLARMOD. Female has complete **cOc**, gradulus on 3rd tergum, absence of longitudinal wrinkles on most of 6th tergum. Male: opaque ventral edge of clypeus; neither lamina along fore border nor tooth on anteroventral corner of pronotum; rounded apical hind femur; bipunctate surface of terga;

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p on apical surface of 1st sternum; notch of epipygium as deep as width of lateral lobes; ferruginous brown fore and mid legs; hind femur without light markings. Similar in general aspect and genitalia to *M. spoliata* (actually *M. abdominalis*), from which is clearly known by opaque ventral border of clypeus, darker ferruginous colour of legs, no light spot on hind femur, no bipunctate surface of 2nd and 3rd terga and genitalia.

Mesa incisa (CAMERON 1905) comb.nov.

Plesia incisa CAMERON 1905: 320. T y p u s ♂ - South Africa, Albany Museum.

Elis (*Mesa*) *longiventris* TURNER 1912: 712. Lectotypus ♂ (here designated in order to ensure name proper and consistent use) - South Africa = /Willowmore Capland Dr. Brauns/ /Brauns Coll. 1912-44/ /*Elis longiventris Turn Type*/ (autographic) /Type/ (rounded wit red outer ring) /17/ /Elis (Mesa) longiventris, Turn./ BMNH. **Syn.nov.**

Elis (*Mesa*) *incisa*: TURNER (1912: 713 ♂).

M a t e r i a l . ♀. Namibia = (1) /SW Africa Cape Town Beaufort west 1.V.1934 J. Ogilvie/ /*Mesa incisa* (*Cam*) *det 1947* ♀ C:J:Guillarmod/ BMNH; (2) /Okahandja 27.1-2.11.1928/ /S. Afric RE Turner Brit Mus 1921-247/ /Elis (Mesa) longiventris Turn/ BMNH; South Africa = (1) /Cape Province Matjess Fontein 7-13.XI.1928/ /S. Afric RE Turner Brit Mus 1928-522/ /Elis (Mesa) longiventris Turn/ /*Mesa incisa* (*Cam*) ♀ *det 1947* C.J. Guillarmod/ BMNH; (1) /Cape Prov. Mossel bay 4.XI.1938/ /S. Africa R.E. Turner Brit. Mus. 1939-56/ BMNH; (1) /Spitzkop Loingsburg SA Museum – Mus. Staff Mar. 1937/ /Mesa incisa Cam. ♀ C.J. Guillarmod det 1945/ /A003353/ SAM; (1) /Mossel bay S. Africa Mar-Apr 1930 R.E. Turner/ /Cornell U. lot.805/ CUIC.
♂. Namibia = (1) /Namibia Khorixas Distr. Huab river at Krone 721 20°07'09S 13°54'21E 23-26.X.1998 Kirk Spriggs & Marais malaise Trap sample/ NNIC; South Africa = (1) /Ceres Cape Province 3500 ft Jan 1921/ /S. Afric. R.E. Turner Brit Mus 1921-78/ /Elis (Mesa) longiventris Turn/ BMNH; (1) /Mossel bay Cape province May 1921/ /S. Afric RE Turner Brit Mus 1921-248/ /Elis (Mesa) longiventris Turn/ /*Mesa incisa* (*Cam*) ♂ *det 1947* C.J. Guillarmod/ BMNH; (1) /Mossel Bay Cape Province Sept 1921 / /S. Afric. R.E. Turner Brit Mus 1921-412/ BMNH; (1) /Mossel Bay Cape Province Dec 1921 / /S. Afric. R.E. Turner Brit Mus 1922-25/ BMNH; (1) /Cape Prov. Mossel bay 16.XII.1938/ /S. Africa R.E. Turner Brit. Mus. 1939-56/ BMNH; (10) /South Africa Cape Seven weeks Poort. 20 may 1964 SA MuseumExp./ SAM (9) MZUF (1); (1) /South Africa W Cape Constantiaberg L80 500 m 34°02'S 18°23?E/ SAM; (1) /S. Africa Cape P. Brand Fontein Reserve 36°40'S 19°62'E 16-18 October 1992 S. Van Noort/ SAM; (1) /Ceres Lightfoot – 1917/ /*Elis longiventris Turn*./ /R.E. Turner determ/ /*Mesa incisa Cam*. ♂ C.J. Guillarmod det 1945/ /A003353/ SAM.

Female: figs 99- 101. Male: figs 102-104.

Many specimens of both sexes exist at BMNH and SAM so labelled by JACOT-GUILLARMOD. Lectotype of *E.*(*M.*) *longiventris* has identical character states (genitalia enclosed) with male specimens labelled *M. incisa* by JACOT GUILLARMOD who very probably examined the type at Albany Museum, inaccessible to me. To confirm the aforesaid synonymy with *E. longiventris*, performed by him just in labels and never published, appears to be the best action to do.

Females have complete **cOc** and 6th tergum without wrinkles. Gradulus on 3rd tergum too. Males are slender with semitransparent ventral border of clypeus, no lamella along fore-border of N1 disk, notched epipygium, pale yellow light markings.

Mesa adelogamia (TURNER 1908)

Plesia (*Mesa*) *adelogamia* TURNER 1908: 503-504 - Lectotypus ♀ (here designated in order to ensure name proper and consistent use): South Africa = /Maseru, Basutoland/ BMNH.

Elis (*Mesa*) *adelogamia*: TURNER (1912: 706 ♀).

Mesa adelogamia: JACOT-GUILLARMOD (1953: 18).

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M a t e r i a l . ♀. South Africa = (1) /Mamathes Basutoland 20.11.1945 C. Jacot Guillarmod/ /*Mesa adelogamia* (*Turn*) ♀ *det 1947* C.J. Guillarmod/ BMNH; (1) /Pretoria Transvaal Jan 22 1922/ CUIC; Zimbabwe = (1) /Zimbabwe 50 km S. Bulawayo Matobo 3-5.12.98 leg. Marek Halada/ OLML; (1) /E. Zimbabwe Mutare Nyazura 20.XII.1998 lg M. Snižek/ OLML. ♂. South Africa = (1) /*Hensleys ???? Basutoland 6.I.1948* C.J. Guillarmod/ /*Mesa adelogamia* ♂ *det* 1949 C.J. Guillarmod/ BMNH; (2) /South Africa Trsvl 5ml W Warmbad 24-25 Feb 1968 Krombein & Spangler/ USNM.

Female: figs 105-107. Male: figs 108-110.

Female very similar to *M. capitata* for the high polished pronotal plate, but it is well known from it by quite longer mouth parts and different scopa. Gradulus on 3rd tergum. Red coloration of head, $\mathbf{N_1}$ and $\mathbf{Sc_1}$ can vary in extension.

Male too has similar genitalia to *M. capitata*, with narrow and short apical gonosquama, but it has semitransparent ventral border of clypeus (dark and opaque in *M. capitata*) and more slender flagellomeri. Apparently confined to Austral Africa. Jacot Guillarmod is the authority for the sex association.

Mesa hova (TURNER 1908)

Plesia (*Mesa*) *hova* TURNER 1908: 504-505 – Lectotypus ♀ (here designated in order to ensure name proper and consistent use): Madagascar = /*Tamatave XII-I*/ /*Plesia* (*mesa*) *hova Turner Type*/ /Type/ (red with red outer ring) BMNH!

Elis (*Mesa*) *hova* TURNER 1912: 707 ♀.

Mesa nodosa: KROMBEIN (1948: 62-64 ♀ & ♂).

Mesa hova: BONI BARTALUCCI (2005: 1085 ♀ & ♂).

M a t e r i a l . ♀. Madagascar = (6) /Betroka I.33 A. Seyrig Coll/ CUIC; ♂. Madagascar = (2) /Betroka I.33 A. Seyrig Coll/CUIC; (1) /Ihosy Madag. III.33 A. Seyrig Coll/CUIC; (1) /Maroantsetra Madagasc./CUIC.

Endemic to Madagascar. Female (figs 111-112) and male described by KROMBEIN (1948) under *M. nodosa.*

Mesa erythropoda (TURNER 1908) comb.nov.

Plesia (*Mesa*) *erythropoda*: TURNER (1908: 504-505 ♀) - Lectotypus ♀ (here designated in order to ensure name proper and consistent use): Botswana = /*Lake Ngami*/ (rounded) /*Plesia* (*Mesa*) *erythropoda Turner Type*/ /Type/ (red with red outer ring) BMNH! (described from two specimens).

Elis (*Mesa*) *erythropoda*: Turner (1912: 709-710 ♀).

M a t e r i a l . ♀. Malawi = (1) /Nyasaland Mlanje May 6 1913 S.A. Neave 1913-140/ /*Mesa erythropoda* (*Turn*) ♀ *det 1949* C.J. Guillarmod/ BMNH; (1) /Nyaka P.F. Afr. RF Lawrence – *Feb 1924*/ /Sam. Hym. A002581/ BMNH; Zimbabwe = (1) /Saw Mills S. Rhodesia 27/12/1923 Rhod. Museum/ /*Mesa erythropoda* (*Turn*) ♀ *det 1950* C.J. Guillarmod/ /South African Museum ex national Museum Bulawayo/ /Sam Hym A003364/ SAM; ♂. Zimbabwe = (1) /Saw Mills S. Rhodesia 27/12/1923 Rhod. Museum/ /*Mesa erythropoda* (*Turn*) ♂ *det 1950* CJ Guillarmod/ /South African Museum ex national Museum Bulawayo/ /Sam Hym A003364/ SAM; (1) /Sawmills S. Rhodesia 12.12.1926 G. Arnold/ /*Mesa erythropoda* (*Turn*) ♂ *det 1950* CJ Guillarmod//Sam Hym A003368/ SAM.

Female: figs 115-118. Male: figs 119-120.

TURNER (1912) refers to further records from Lake Ngami.

Female. Mandibles and antennae light brown, bright ferruginous legs but coxae. cOc complete even though a bit irregular along vertex. Gradulus present on 3rd and 4th tergum. Well distinct species by bright ferruginous legs and mat aspect for the presence of only shallow sparse **p** everywhere.

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Male. Clypeus with dark ventral edge and broad shallow notch. Bipunctate surface of tergal surfaces. Very peculiar gonosquama (similar pattern only shown by *M. eriosoma*). Epipygium with distinct apical notch as deep as width of lateral lobes. Ivory white light marking: transversal spot on tip of **Tsa**, mid clypeus and at the base of mandibles; subapical thin stripe on $\mathbf{N_1}$ disk; $\mathbf{LaSt_2}$; tip of femurs, dorsal tibiae and tarsi; thin apical stripe on 2nd to 6th terga and two small apical spots on the sides of 5th and 6th sterna.

Apparently confined to Austral Africa.

Mesa innotata (TURNER 1908)

Plesia (*Mesa*) *innotata* TURNER 1908: 506-507. T y p u s ♀ - Zimbabwe OUM.
Elis (*Mesa*) *innotata*: TURNER (1912: 709 ♀).

M a t e r i a l . ♀. Malawi = (1) /Nyasaland Mlanje Boma 2400 ft 26-30 Apl & 5 May 1910 S.A. Neave/ /*Mesa innotata*(*Turn*) *det 1947* C.J. Guillarmod/ BMNH; (1) / Nyasaland Mlanje. May 6 1913 S.A. Neave 1913-140/ /*Mesa innotata* (*Turner*) ♀ *det 1947* CJ Guillarmod/ BMNH.

Female: figs 113-114.

The identification of this taxon is hitherto somehow uncertain, since the type at OUM actually can not be found (personal information by Mr J.E. Hogan Hope Entomological Collections, OUM). The present description has been based on specimens so labelled by Jacot Guillarmod who did not refer anything about direct examination of the type.

Gradulus present also on 3rd tergum. Deep furrow on mid propodeal disk. Dark brown/black legs.

Male unknown. One specimen bears the same label of the type of *M. ametalla* and TURNER (1912) hinted at their coupling, but no further proof was furnished.

Mesa asmarensis (TURNER 1909) comb.nov.

Plesia (*Mesa*) *asmarensis* TURNER 1909: 481-482. Lectotypus ♂ - Erythrea = /Asmara Eritrea VI/ /*Plesia asmarensis Turn. Type*/ (autographic) /Turner Coll. 1909-49/ /Type/ (rounded with red outer ring) /Lectotypus *Plesia asmarensis Turner* Design. *Gorbatovsky 1981*/ /*Mesa asmarensis* (*Turn*) Gorbatovsky det. 1987/ BMNH!
Elis (*Mesa*) *asmarensis*: TURNER (1912: 712 ♂).

M a t e r i a l . ♀. Ethiopia = (1) /Etiopia Illubabor Loc 79 Dintorni di Buré (o Burò) m 700-1800 28-29.X.1975 P. Brignoli leg/ MSNP. ♂. Ethiopia = (2) /Ethiopia Sardo 29.VII.46 K.M. Guichard BM 1946-39/ BMNH.

Female: figs 121-122. Male: figs 123-126.

The female specimen is ascribed to this taxon just on the base of geographical provenance. It is black with ferruginous last apical metameri; **cOc** complete; gradulus present on 3rd and 4th terga.

Male. Dark ventral border of clypeus, distinctly notched. Laminated fore border of pronotal disk. Aedeagus with a finger like apex.

Mesa saussurei (TURNER 1910)

Plesia (*Mesa*) *saussurei* TURNER 1910: 394. T y p u s ♀ - Madagascar = /Antananarivo/ MNHU (described from two specimens).
Elis (*Mesa*) *saussurei*: TURNER (1912: 709 ♀).
Mesa saussurei: KROMBEIN (1948: 59-62 ♀ & ♂).
Mesa saussurei: BONI BARTALUCCI (2005: 1085 ♀ & ♂).

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M a t e r i a l . ♀ Madagascar = (1) /Ihosy A. Seyrig Madagascar III.33 A. Seyrig/ CUIC; (1) /Maevatanana Madagascar XII.32/ CUIC; (1) /Bekily Madag. III.32 A. Seyrig Coll/ CUIC (2) /Betroka Madag. I.33 A. Seyrig Coll/ CUIC; (1) /Kalambatitra/ CUIC. ♂ Madagascar = (1) /Maevatanana Madagascar XII.32/ CUIC; (2) /Bekily Madag. III.32 A. Seyrig Coll/ CUIC; (2) /Betroka Madag. I.33 A. Seyrig Coll/ CUIC; (1) /Kalambatitra/ CUIC; (1) /Tananarive Madagscar Cornell Univ. Lot. 79 sub 1/ CUIC.

Female: figs 127-128.

Female redescribed by KROMBEIN (1948) together with male sex. Endemic to Madagascar.

***Mesa pyxidata* (TURNER 1911) comb.nov.**

Plesia (*Mesa*) *pyxidata* TURNER 1911: 617-618. Lectotypus ♀ (here designated in order to ensure proper name and consistent use) - Zimbabwe = /NE Rhodesia Mid Luangwa vy 23-31 Aug. 1910 3-1,800 f S.A. Neave/ /1911-177/ /*Elis* (*Mesa*) *pyxidata Turn. Type*/ (autographic) /Type/ (rounded with red outer ring) BMNH!

Elis (*Mesa*) *pyxidata*: TURNER (1912: 709 §).

M a t e r i a l . ♀. Zimbabwe = (1) /S. Rhodesia Belt Bridge IV.1932/ /Miss. A. Mack./ BMNH.

figs 129-131. Well characterized by ferruginous 6th tergum, completely wrinkled till apical border and without any smooth or microreticulated stripe along it. Gradulus present on both 3rd and 4th terga.

Male unknown.

Apparently confined to Zimbabwe.

***Mesa ametalla* (TURNER 1911) comb.nov.**

Elis (*Mesa*) *ametalla* TURNER 1911: 305 – Lectotypus ♂ (here designate to ensure proper name and consistent use) Malawi = /Nyasaland Mlanjie Boma 3400 ft 26-30 April & 3-5 May 1910 S.A. Neave/ /1910-353/ /*Plesia ametalla Turn. Type*/ (autographic /Type/ (rounded with red outer ring) BMNH!

M a t e r i a l . ♂. Malawi = /Nyasaland Mlanjie march 20 1913 S.A. Neave/ /1913-140/ BMNH.

Male: figs 132-134.

N o t e . TURNER in its original diagnosis wrote "Almost certainly the male of *E. innotata*, Turn., which was taken in considerable numbers, at the same time. *E. heterogamia*, Sauss., a larger species, also occur more sparingly in the same locality". Unfortunately he gave no news about examination of the type of the former and J.C. GUILLARMOD, who performed a lot of sex association for austral taxa, did not refer anything about too, so that the coupling can not be confirmed. Males ascribed to *M. heterogamia* are definitively different from it.

Female unknown.

***Mesa apicipennis* (TURNER 1912) comb.nov.**

Elis (*Mesa*) *apicipennis* TURNER 1912: 707 - Lectotypus ♀ (here designated in order to ensure proper name and consistent use): Kenya = /Brit. E. Afr. Makindu 3.300 ft Apl.5-7.1911 S.A. Neave/ /*Elis* (*Mesa*) *apicipennis Turn Type*/ /Type/ (rounded with red outer ring) BMNH!

Female: figs 135-136.

It has not anymore hind tarsi. **cOc** broadly vanishing near vertex. Median suture of **PoG**

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produced in a strongly prominent ridge on the near genal surfaces. Well produced wrinkles on postero ventral corner of $\mathbf{N_1}$. Very short, subtriangular median furrow at the base of propodeal disk, severed by posterior surface by distinct angle. Gradulus on 2nd and 3rd terga too.

Male unknown.

Mesa coeruleipennis (TURNER 1913) comb.nov.

Elis (*Mesa*) *coeruleipennis* TURNER 1913: 737-738. Lectotypus ♀ :(here designated in order to ensure proper name and consistent use): /Uganda Prot.[ectorate]. Between Kumi & N.E. shore L. Kioga. 3,400-3,600 ft.//Aug. 18-20, 1911 S.A. Neave/ /1912-193//*Elis* (*Mesa*) *coeruleicornis* Type *Turn*./ BMNH.

M a t e r i a l . ♀. Gambia = (7) Gambia Keneba malaise IX-X.1975 H.C.D. Speight/ BMNH; Ghana = (1) /Place: Nyanskpala Ghana Date: 28.6.65 Konaf/ /Hy-114/ /C.I.E. Collection A 1649/ (red) /Mesa/ BMNH; Nigeria = (1) /Nigeria Samaru 4.IX.1970 ward Coll./ BMNH; (1) /N. Nigeria Zaria Samaru 6.VI.1972 J.I. Musa/ /feeding on honeydew on Sorgum leaves/ BMNH.
♂. Gambia = (1) Gambia Keneba malaise IX-X.1975 H.C.D. Speight/ BMNH; Nigeria = (1) /N. Nigeria Zaria Samaru 7.VI.1971/ /feeding on sorghum leaves/ BMNH; (1) /N. Nigeria Zaria Samaru 15.VI.1971/ BMNH; (1) /N. Nigeria Zaria Samaru 6.VII.1972/ BMNH; (2) /Nigeria Llora Lu State Aug 1974 J.T. Medler coll/ BMNH; (1) N. Nigeria Zaria Samaru 6.VI.1972 J.I. Musa/ /feeding on honeydew on Sorgum leaves/ BMNH; Senegal = (1) /Senegal Nioro du Ryi XI.1983/ /Sp LB 312 a pearl mallet C.I.E. R 17916/ /LB312/ BMNH.

Female: figs 137-139. Male: figs 140-146.

Female completely black. Wings strongly darkened. Deeply impressed oblong **p**, packed in longitudinal rows on frons and $\mathbf{N_1}$ disk and $\mathbf{Sc_2}$.**cOc** complete on the upper side. **P** disk clearly known from posterior declivitous surface by a prominent transversal ridge; it shows a large median furrow which cross it completely from **stm** to that ridge. Scopa like in fig. 139. No gradulus both on 3rd and 4th terga. 6th tergum completely crossed by longitudinal wrinkles with narrow smooth stripe along apical border.

Male. Described forv the first time. Size = 13.5 mm. Black. Yellow: most of mandible and clypeus but semitransparent ventral edge; subapical **Tsa**; apical palpi; subapical stripe on $\mathbf{N_1}$ disk; fore tegula; perimeter of $\mathbf{LaSt_2}$; ventral surface of $\mathbf{X_1}$and $\mathbf{X_2}$, most of legs; apical stripe on 1st to 6th terga, two very small lateral spots on 2nd to 5th sterna. Wings hyaline. Clypeus with hair covering underlying integument. Very dense **p** on **Tsa**, clypeus, temples and lower genae, along fore border and anterolaterally on$\mathbf{N_1}$ disk, $\mathbf{Es_2}$.

PoG longer than half **FoO**, its suture like a prominent ridge. Mid flagellomeri with a ratio **L**/**LA** mor than 2.4. Lamellar carina along fore border of $\mathbf{N_1}$ disk, with blunt anteroventral corner; its ratio $\mathbf{LA_{pos}/L_{med}}$ about 2.6. Apical 1st sternal surface largely **p**. Epipygium with median ridge and very shallow broad notch.

N o t e . The present association has been proposed on the base of identity of labels. At BMNH 10 specimens exist (6 from Senegal, 2 from "French Soudan", 1 from Niger, 1 from Mali) which look very like it, but have bicolour wings with hyaline basal half and darkened apical half.

D i s t r i b u t i o n a r e a . Northern equatorial belt from Uganda to Senegal.

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Mesa nyanzae (TURNER 1913) comb.nov.

Elis (*Mesa*) *nyanzae* TURNER 1912: 709. Lectotypus ♂ (here designated in order to ensure proper name and consistent use): Kenya = /Brit. E. Africa Lusinga I. E. Vic. Nyanza Apl. 25-26. 19II S.A. Neave/ /1912-193/ /*Elis* (*Mes*) *Nyanzae Type Turn*/ (autographic) BMNH.

figs 147-149. Opaque ventral edge of the clypeus, laminated foreborder of pronotal disk with no anteroventral tooth. Two short prallelel longitudinal keels on ventral petiole.

Distribution range: Typical locality. In the original diagnosis Turner hinted to eventual coupling with *M. euryclea* (= *angolensis*), but there is no proof about and the typical localities do not suit well. On the contrary it could be the male of the new taxon *M. hyloides*.

Mesa diversicornis (TURNER 1917) comb.nov.

Elis (*Mesa*) *diversicornis* TURNER 1917: 352-353. Holotypus ♂: /Nyasaland Mlanje Feb 14 1913 S.A. Neave 1913-140/ /Type H.T./ (Rounded with red outer ring) BMNH!

figs: 150-153. Probably the real male of *M. angolensis* (as already pointed out by JACOT GUILLARMOD 1953), whose females have been caught in the same locality at the same time. Very distinct species by the red scape, pedicel and basal flagellomeri. Very broad shallow notch on ventral border of clypeus. Shallow and narrow notch on epipygium. Body without any light marking.

Mesa angolensis BERLAND 1925

Mesa angolensis BERLAND 1925: 150. T y p u s ♀ - Angola.
Elis (*Mesa*) *euryclea* TURNER 1926: 106 ♀.
Mesa angolensis: JACOT-GUILLARMOD (1953: 18 ♀).

M a t e r i a l . ♀. Angola = (1) /Angola (A20) 10 mls Cacula 5.III.1972/ /Southern African Exp. 1972.1/ BMNH; Malawi = (2) /Nyasaland Mlanje 10 feb 1914 S.A. Neave/ /1914-416/ /*Mesa angolensis Berland ♀ det 1947* C.J. Guillarmod/ BMNH.

Female: figs 154-155. Similar to *M. xanthocera* in general aspect, but it has larger size, brighter orange antennae, wearing out **cOc** near vertex. I follow the authority of Jacot Guillarmod about its identification.

Mesa herrero (TURNER 1935) comb.nov.

Elis (*Mesa*) *herrero* TURNER 1935: 349-350 ♀ & ♂ Holotypus ♀: Namibia = /Okahandja 27.i-2.ii.1928/ /S.W. Africa R.E. Turner Brit. Mus. 1928-100/ /*Elis herrero Type Turner*/ /Type/ (rounded with red outer ring) BMNH!

M a t e r i a l . ♀. Namibia = Paratypus: (1) /Okahandja 3-9.ii.1928/ /S.W. Africa R.E. Turner Brit. Mus. 1928-119/ /Paratype/ (rounded with yellow outer ring) /*Mesa herrero* (*Turner*) det 1947 C.J. Guillarmod/ BMNH!
♂. Namibia = Paratypes: (1) /Okahandja 17-23.ii.1928/ /S.W. Africa R.E. Turner Brit. Mus. 1928-144/ /Type/ (rounded with red outer ring) /*Elis* (*Mesa*) *herero* (sic!) *Allotype Turner*/ BMNH!; (1) /Okahandja 17-23.ii.1928/ /S.W. Africa R.E. Turner Brit. Mus. 1928-144/ /Paratype/ (rounded with yellow outer ring) /*Mesa herero* (sic!) (Turn) det 1947 C.J. Guillarmod/ BMNH; (1) /SW Africa Sehenna 18.II.34 L. Ogilvie B.M. 1934-148/ BMNH.

Female: figs: 156-157.

HT and examined female PT show acute tip of mandibles and ventral border of clypeus with three distinct notch, while the other examined female show consumed mandibles and even clypeal border, the notches worn out by usage.

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Male: figs 158-160

Pale yellow: spot on clypeal disk, base of mandible, subapical pale yellow stripe on N_1 disk, apical femurs, dorsal tibiae, tarsi, apical stripe on 1st to 5th terga. Shallow notch on clypeus and epipygium. No laminated keel along foreborder and no anteroventral tooth of N_1 disk.

D i s t r i b u t i o n r a n g e : Namibia.

Mesa madecassa KROMBEIN 1949

Mesa madecassa KROMBEIN 1949: 66-68. H o l o t y p u s ♂ - Madagascar = /Bekily madag. XII 32 A. Seyrig Coll/ /Hym slides 2444/ / ♂ *Type Mesa madecassa* Krombein Det Karl V. Krombein/ /Holotype Cornell University N° 2427/ (red) CUIC! Paratypus ♀ - Madagascar = /Madagascar *Bekily. III 30* A. Seyrig/ / ♀ *Allotype Mesa madecassa* Krombein Det Karl V. Krombein/ /Allotype Cornell University N° 2427/ (red) CUIC!

Female: fig. 161. Male genitalia described by KROMBEIN (1949).

D i s t r i b u t i o n r a n g e : Madagascar.

Mesa marovatana KROMBEIN 1949

Mesa marovatana KROMBEIN 1949: 68-69. - H o l o t y p u s ♂: Madagascar = /Tananarive Madagascar Cornell Univ lot 879 sub1/ /Hym slides 2445/ / ♂ *Type Mesa marovatana* Krombein Det Karl V. Krombein/ /Holotype Cornell University N° 2426/ (red) CUIC! Paratypus ♀: Madagascar = /Tananarive Madagascar Cornell Univ lot 879 sub1/ / ♀ *Allotype Mesa marovatana* Krombein Det Karl V. Krombein/ /Allotype Cornell University N° 2426/ (red) CUIC!

Female: fig. 162. Male genitalia described by KROMBEIN (1949).

D i s t r i b u t i o n r a n g e : Madagascar.

Mesa tandrona KROMBEIN 1949

Mesa tandrona KROMBEIN 1949: 6 9 - 7 1 . H o l o t y p u s ♂: Madagascar = /V.d. Sambirano Madagascar A. Seyrig Coll./ /Hym slides 2446/ / ♂ *Type Mesa tandrona* Krombein Det Karl V. Krombein/ /Holotype Cornell University N° 2428/ (red) CUIC. Paratypus ♀: Madagascar = / V.d. Sambirano Madagascar A. Seyrig Coll./ / ♀ *Allotype Mesa tandrona* Krombein Det Karl V. Krombein/ /Allotype Cornell University N° 2428/ (red) CUIC! Examined specimen.

M a t e r i a l . ♀. Madagascar = (1) /V. d. Sambirano Madagascar A. Seyrig Coll/ CUIC.

Female: fig. 163. Male genitalia described by KROMBEIN (1949).

Distribution range: Madagascar.

Mesa picta BONI BARTALUCCI 2004

Mesa picta BONI BARTALUCCI 2004a: 375-379. H o l o t y p u s ♀: Senegal = /Senegal Nioro du Ryi IX.1985 malaise trap/ BMNH. Paratypes ♀ - Senegal = (1) /Seneg/ MSNG. Angola = (1) /Angola/ B.MNH. Paratype ♂ - Senegal = (2) /Senegal Nioro du Ryi IX.1985 malaise trap/ BMNH

M a t e r i a l . ♀. Senegal = (1) /Senegal Nyoro du Ryi IX.1985 Malaise trap/ BMNH.

♂. Senegal = (7) /Senegal Nyoro du Ryi IX.1985 Malaise trap/ BMNH.

Female: figs 164-165. Male: figs 166-168.

D i s t r i b u t i o n r a n g e . Hitherto largely disjoined records along Atlantic coast. Well distinct female taxon by the large light markings throughout the body.

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Mesa krombeini BONI BARTALUCCI 2005

Mesa krombeini BONI BARTALUCCI 2005: 1086. H o l o t y p u s ♂: Madagascar = /Tananarive Madagascar Cornell Univ lot 879 sub1/ /Hym slides 2447/ /♂ *Allotype Mesa seyrigi* Krombein Det Karl V. Krombein/ /Allotype Cornell University N° 2429/ (red) /Holotypus *Mesa krombeini* BONI BARTALUCCI des 2005/ (red) /Holotypus Cornell U. N° 7294/ (red) CUIC!

Mesa seyrigi KROMBEIN 1949: 64-66 (♂ only).

M a t e r i a l . ♂. Comoros = (1) /Mt Chougi Mayotte 9 Février 2004 Rèc. Parmaudeau/ /MHN Run. Ins. 4237/ MHNR.

Male genitalia described by KROMBEIN (1949).

D i s t r i b u t i o n r a n g e : Madagascar and Comore islands.

Mesa campsa nov.sp.

H o l o t y p u s ♀: South Africa = /Camps Bay Cape Province 1-20.X.1920/ /S. Africa R.E. Turner 1920-437/ /*Mesa abdominalis Guer.* ♀ Det C. Jacot Guillarmod/ BMNH.

P a r a t y p e s ♀: South Africa = (2) Camps Bay Cape Province 1-20.X.1920/ /S. Africa R.E. Turner 1920-437/ BMNH; (3) /Camps Bay Cape Province 22-24.X.1920/ /S. Africa R.E. Turner 1920-437/ BMNH; (1) /S. Africa Cape Province Van Rhyn's pass 11-21.XI.1931/ BMNH.

P a r a t y p e s ♂: South Africa = (1) /Camps Bay Cape Province 1-20.X.1920/ /S. Africa R.E. Turner 1920-437/ /*Mesa abdominalis Guer.* ♂ Det C. Jacot Guillarmod/ BMNH; (3) /Camps Bay Cape Province 1-20.X.1920/ /S. Africa R.E. Turner 1920-437/ BMNH; (2) /Camps Bay Cape Province 22-24.X.1920/ /S. Africa R.E. Turner 1920-437/ BMNH; (1) /Camps Bay Cape Province 22-24.X.1920/ /S. Africa R.E. Turner 1920-437/ /*Mesa abdominalis Guer.* ♂ Det C. Jacot Guillarmod/ BMNH.

Female: figs 169-171. Body size = 12 mm.

Female. Body size = 11 mm. Black. Ferruginous metasoma but petiole, declivitous 1st tergal surface and 1st sternum which are brown.

cOc complete. **Hyc** does not touch ventral **cOc** so that **PoG** is well expressed with distinct median suture. Lateral $\mathbf{N_1}$: fig.29. Lateral **P** with many (more than 40) very fine subhorizontal wrinkles. Scopa; fig. 171. Gradulus present on 3rd tergum, absent in 4th one. 6th tergum mostly wrinkled.

Male: figs 172-176. Body size = 11mm.

Black. Brown: clypeal disk; flagellum; semitransparent tegula; most of legs; apical 6th and 7th metameri. Yellow: small median spot on clypeus which has dark ventral edge, most of mandible; very subtle subapical spot on **Tsa**; ventral $\mathbf{X_1}$, spot on $\mathbf{X_2}$, markings on fore legs; apical narrow stripe on 1st tergum; apical stripe with strongly indented fore edge on both sides, appearing three spotted, on 2nd to 4th **Te**; two lateral spot on 5th tergum, 2nd to 4th sterna. Wings hyaline.

Mid flagellomeri with a ratio **L**/**LA** about 2.4. Ventral edge of median clypeal lamina almost straight. $\mathbf{N_1}$ disk with bluntly angled fore border and no tooth on its anteroventral border; its ratio $\mathbf{LA_{pos}}/\mathbf{L_{med}}$ about 3.3. Fore and back edges of $\mathbf{Em_3}$ like a stitch. Acutely laminated ventral apical hind femur. Tergal surface with sparse (**I** larger than their diameter) differently sized **p** but not clearly bipunctate. Apical 1st sternal surface with **p**. 7th tergum with short epipygium and rounded lateral edge just along its apical lobes; median notch as large as lateral lobe.

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N o t e . Female looks like *M. abdominalis*, but it shows lesser size, different $\mathbf{N_1}$, sub-horizontal surface of **P**, scopa and especially a well developed **PoG**.

Derivatio nominis. From the typical locality.

***Mesa dioica* nov.sp.**

H o l o t y p u s ♂ - Yemen= /Yemen Al Kowd 15-28.II.1993 A. Van Harten mal. Trap/ ZMA
P a r a t y p u s ♂ - Somalia = /Brit. Somaliland Hargeisa V.1949 KM. Guichard 13.H.1951.406/ BMNH.
P a r a t y p e s ♀ - Yemen = (1) /Yemen Al Kowd 15-28.II.1993 A. Van Harten mal. Trap /, ZMA; (1) /Al Kowd IV.1993 A. Van Harten Mal. Trap/ ZMA.

Female: figs 177-179.

Black. Brown: antennae, legs and metasoma but ferruginous last two metameri and apex of 4th one. Wings very pale yellowish.

cOc worn out along vertex. Sub elliptic furrow on **P** disk; posterior area with irregular and ill defined **p**; postero lateral areas with very fine wrinkles. Epipygium mostly **p**, with a narrow wrinkled subapical stripe (as wide as ¼ total length of epipygium). Gradulus present on 3rd tergum, absent on 4th one. **mR** (at x40) on $\mathbf{Es_1}$, $\mathbf{Es_2}$, among **p** on propodeal disk, metameri but last one and 1st tergum.

Male (Holotype): figs 180-187. Body size: 9 mm.

Black. Pale yellow: the whole clypeus apart the semitransparent ventral border, subapical **Tsa**, spot on lower genae near base of mandible, upper half of mandibles, spot on antero-ventral tooth and subapical stripe on $\mathbf{N_1}$ disk, half tegula, perimetral $\mathbf{LaSt_2}$, ventral coxae, most of legs, apical stripe with waving fore edge on 1st to 6th terga and 2nd to6th sterna. Flagellum bicolor, brown upperside, orange ventral side. Wings hyaline.

Mid flagellomeri thick with a ratio **L/LA** more than 2.2. Fore border of $\mathbf{N_1}$ disk distinctly angled but without prominent lamina, its anteroventral corner with acute tooth. $\mathbf{Em_3}$ feebly corrugated throughout. No bipunctate terga. Epipygium with longitudinal swelling and convex profile in lateral aspect, with a very shallow, almost undetectable, median notch.

Paratype from Somaliland differs in having two spots instead of subapical stripe on sterna, a bit lesser thick flagellomeri, and a bit deeper median notch of epipygium.

Derivatio nominis. From the Greek word διοικέω meaning to live apart, in two houses.

***Mesa eriosoma* nov.sp.**

H o l o t y p u s ♂ - Namibia = /Namibia Lüderitz Scorpion hill 27°49'S 16°36'E 09-12.VIII.1997 Marais & Kirk-Spriggs Malaise trap/ /NNIC.

Holotype. figs 188-193. Body size: 13.5 mm.

Black. Pale yellow: the whole of clypeus but semitransparent ventral edge; subapical **Tsa**; apical palpi; two lateral subapical stripes on $\mathbf{N_1}$ disk; half tegula; most of $\mathbf{LaSt_2}$; ventral surface of coxae, tarsi and most of legs; narrow apical stripe on 1st to 6th terga; two lateral apical stripes on 2nd to 6th sterna. Wings hyaline.

PoG about half **FoO**. Mid flagellomeri with a ratio **L/LA** mor than 2.4. No keel along fore border neither tooth on antero ventral corner of $\mathbf{N_1}$ disk. $\mathbf{Em_3}$ with strong wrinkles

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along the **smm**. Hind femur with a distinct ventral longitudinal lamella apically. 1st to 5th tergal surfaes bipunctate by sparse large **p** among very small **p**. Epipygium short and prominent upon the remainder of 7th **Te** with very shallow median notch. Very long dense hair (longer than mid flagellomeri) on most of head and mesosoma, covering underlying integument on clypeus, frons, pronotal disk, $\mathbf{Es_1}$, $\mathbf{Es_2}$ and **P**. Long hair also on tergal surface.

N o t e . Distinct by the dense long hair on head and mesosoma and very narrow gonosquama.

Derivatio nominis. From the Greek words έριον = wool and σώμα = body because of the dense hair on the head and mesosoma.

***Mesa erythrodira* nov.sp.**

H o l o t y p u s ♀: South Africa = /South Africa Mooketsi Feb 17 1968 Krombein & Spangler/ USNM.

figs 194-197. Body size = mm. 13 mm.

Black. The whole $\mathbf{N_1}$ is ferruginous. Wings hyaline.

Close to (*M. capitata*) it differs in: - red coloration limited to pronotal disk (extended to $\mathbf{Sc_1}$ and $\mathbf{Sc_2}$), - different shape of the head in frontal and dorsal aspect, - lacking of stripe of numerous micro **p** on vertex along **cOc** (present), - stouter basal three maxillary palps, - less high and definite, completely **p** pronotal plate, - broadly rounded angle between it and $\mathbf{N_1}$ disk, - finer and weaker wrinkles on its posteroventral corner, - larger (ratio **LA/A** about 2.2; in *M. capitata* about 2.5) and flat (swollen) postscutellar area, - coarser discal and posterior areas of **P**, - hyaline wings (darkened), - scopa on basal hind tarsomerus, - weaker and shorter longitudinal wrinkles on 7th tergum.

Derivatio nominis. From the Greek words ερυθρός = red and δειρή = neck.

***Mesa hyloides* nov.sp.**

H o l o t y p u s ♀ - Zaire = /Belgian Congo Beni Ituri Forest IX.1946/ BMNH.

figs 198-200. Body size = 19 mm.

Black and oranged yellow.

Oranged yellow: The whole of the head but temples, genae, ocellar area, lateral clypeal disk, base of mandibles; foretibia and tarsus. Wings strongly darkened. **cOc** complete. Pronotal plate with densely packed small **p**. $\mathbf{N_1}$ disk, $\mathbf{Sc_1}$, $\mathbf{Sc_2}$ and $\mathbf{Es_1}$ bipunctate numerous small **p** among sparse very larger **p**. Lateral $\mathbf{N_1}$ without any wrinkles on posteroventral corner. Large deeply impressed **p** on the disk of $\mathbf{Es_2}$. Subhorizontal surface of **P** mat because of very small **p** an **mR**, well distinct from posterior surface which bears sparse large impressed **p**. Lateral areas of **P** with very fine and shallow wrinkles. Very sparse and small **p** on tergal surfaces, becoming denser towards 5th one. Bipunctate surface of 2nd to 6th **Ste**. Epipygium (6th tergum) longitudinally wrinkled but apical stripe. Temples, genae, the whole of metasoma with **mR** on surfaces among **p** detectable at x30. Very fine transversal **mR** on metasoma but 1st sternum and epipygium.

N o t e . It lacks right antenna, right tarsus and most of final Tarsomeri. Well distinct taxon, with slender aspect, looking very like to specimens of *Hylomesa* in colour pattern and habitus. From the relative proximity of the typical localities we could infer its coup-

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ling with *M. nyanzae*, but we are dealing with areas owing high biodiversity and to extrapolate that synonymy without more definite proof it would be a hazardous action.

***Mesa maliana* nov.sp.**

H o l o t y p u s ♂ - Mali = /Mali Outaguna 7.X.1976 K. Guichard/, BMNH.
P a r a t y p u s ♂ - Mali = /*MALI Watasouna VII.78 G.P.*/ BMNH.

Holotype: figs 201-208. Body size: = 11 mm.

Black. Ventral flagellum is brown. Yellow: basal mandible; tip of last flagellomerus; ventral half of clypeus but semitransparent edge; subapical **Tsa** with semitransparent edge; subapical stripe on $\mathbf{N_1}$ disk; perimetral border of $\mathbf{LaSt_2}$; ventral $\mathbf{X_1}$; apex of femurs;, most of tibiae;, tarsi; apical stripe with waving fore edge on 1st to 6th terga; two small lateral spots on 2nd to 5th sterna. Wings hyaline.

Flagellum short, mid flagellomeri with a ratio **L**/**LA** about 1.8, stripe of **Secu** more than 100% thickness of elements. $\mathbf{N_1}$ disk with a ratio $\mathbf{LA_{pos}/L_{med}}$ about 3.4; fore border of its disk with a ridge worn out medially; no anterovantral tooth. Tergal surface not bipunctate. Ventral petiole with a longitudinal dhallow furrow. Apical 1st sternum with few p. Epipygium with a shallow notch and strong lateral ridges delimiting it from lateral surfaces. Volsella moderately angled.

N o t e . Small species, distinct by short flagellum and large narrow $\mathbf{N_1}$, besides genitalia.

Derivatio nominis. From the typical locality.

Female unknown

***Mesa nama* nov.sp.**

H o l o t y p u s ♂ - Namibia = /Namibia distr. Outjo Bergsattel 53 WSW Outjo 20°12'16S-15°41'10E gps 1300-1400 m 19.02.1994 lg. H & R Rausch lf 94-32/ OLML.

figs 209-214. Body size = 9 mm.

Black. Pale yellow: the whole of clypeus but semitransparent ventral edge; subapical **Tsa**; apical palpi; two narrow subapical stripes on $\mathbf{N_1}$ disk; half tegula; most of $\mathbf{LaSt_2}$; ventral surface of $\mathbf{X_1}$, spots on $\mathbf{X_2}$ and $\mathbf{X_3}$; most of legs; very narrow apical stripe on 1st to 5th terga. and last metamerus are brown. Wings hyaline.

PoG area depressed. Mid flagellomeri with a ratio **L**/**LA** mor than 2.4. $\mathbf{Em_3}$ mostly wrinkled. Fore border of $\mathbf{N_1}$ disk bluntly angled but medially where a line of carina exists; only blunt prominence on its anteroventral corner; ratio $\mathbf{LA_{pos}/L_{med}}$ about 2.5. Hind femur simple. Apical surface of 1st sternum smooth and **p**-less. Tergal surface without secondary **p**. Last tergum noticeably tapering apically, with distinct epipygium by lateral carinae; very shallow median notch.

N o t e . Small species with angled volsella and tapered aedeagus.

Derivatio nominis. From the name of the people inhabiting SW Africa.

Female unknown

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***Mesa oligotyla* nov.sp.**

H o l o t y p u s ♂ - Zimbabwe = /Zimbabwe 50 km S. Bulawayo Katobo, 3-5.XII.98 leg Marek Halada/, OLML.

P a r a t y p e s ♂ - Zimbabwe = (10) /Zimbabwe 50 km S. Bulawayo Katobo, 3-5.XII.98 leg Marek Halada / (9) OLML (1) MZUF.

P a r a t y p e s ♀ - South Africa = (1) /South Africa Trsvl. 5 ml W. Warmbad II-24.25 1968 Paul Spangler/ /From coll. U.S.N.M./ USNM - Zimbabwe = (1) /Rhodesia Matopos Natl'l Pk. IV-1 & 1.1968 Paul J. Spangler/ /taken in malaise trap/ USNM; (6) /Zimbabwe 50 km S. Bulawayo Katobo, 3-5.XII.98 leg Marek Halada / (5) OLML (1) MZUF.

Female: figs 215-216. Body size: 11-13 mm.

Black. Ferruginous: tip of last flagellomerus, tibiae and tarsi. Apex of fore wing slightly darkened.

Medially impressed **p** on head and $\mathbf{N_1}$ disk, mostly with **I** larger than their diameter; more densely packed with **I** shorter than their diameter on $\mathbf{Es_2}$ disk. Very weak p on $\mathbf{Sc_1}$, $\mathbf{Sc_2}$, coxae and metameri. **P**: weak **p** densely packed medially along the furrow, sparsely on anterior lateral corners;posterior areabipunctate by larger among many micro **p**. **mR** detectable only on metameri.

cOc complete event though a bit shortky irregular at the vertex. Gradulus on 3rd and 4th terga too. 6th tergum mostly wrinkled.

Male (Holotype): figs 217-222. Body size: 13.5 mm.

Black. Yellow: mandible; the whole of clypeus but semitransparent ventral edge; subapical **Tsa**; apical four and three **Pam** and **Pal** respectively; subapical stripe (worn out at the middle) and anteroventral corner of $\mathbf{N_1}$ disk; fore half tegula; ventral $\mathbf{X_1}$ and $\mathbf{X_2}$; most of fore leg; apical mid and hind tibiae; dorsal mid and hind femur; apical stripe on 1st to 6th terga; two small lateral apical spots on 2nd and 3rd terga, becoming narrow apical stripes on 4th and 5th sterna. Wings hyaline.

Suture of **Pog** expressed as prominent ridge. Well evident tyloida on last three flagellomeri, obscure one on 8th element; mid flagellomeri with a ratio **L**/**LA** about 2.4. No acute keel along fore border nor prominent tooth on antero ventral corner of $\mathbf{N_1}$ disk with a ratio $\mathbf{LA_{pos}/L_{med}}$ about 3.2. Apical hind femur rounded. Tergal surface bipunctate by small shallow **p** among micro**p**. No **p** on apical surface of 1st sternum. Epipygium without distinct notch and rounded laterally without strong carina. Volsella angled.

Variability mainly about size: males from 11 to 14 mm, females from 12 to 14 mm.

Derivatio nominis. From the Greek words ολίγος = few and τύλη = callosity, callus

***Mesa pentatyla* nov.sp.**

H o l o t y p u s ♂: Angola = /Angola (A40) Tundavala 8-10 mls NW Sa da Bandeira 27-29.III.1972/ /Southern African Exp. B.M. 1972.1/ BMNH.

P a r a t y p e s ♀: Angola = (2) /Angola (A40) Tundavala 8-10 mls NW Sa da Bandeira 27-29.III.1972/ /Southern African Exp. B.M. 1972.1/ BMNH; (1) /Angola (A6) Tundavala 8 mls NW Sa da Bandeira 23.II.1972/ /Southern African Exp. B.M. 1972.1/ BMNH.

P a r a t y p e s ♂: Angola = (2) /Angola (A11) Bruco 26.II-2.III.1972/ /Southern African Exp. B.M. 1972.1/ BMNH.

Female: figs 223-225. Body size: 13 mm.

Black. Bright ferruginous: tip of ventral clypeus, mandibles, scape, legs but coxae.

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Wings weakly yellowish. **p** deeply impressed on head and mesosoma, denser and often coalesced on lower frons, ocellar area, posterior vertex, middle disk and anterior lateral area of $\mathbf{N_1}$, outer disk of $\mathbf{Es_2}$. Disk and posterior surface of **P** completely sculptured with no distinct **p** but a little area near anteroventral corner of disk; fine wrinkles on its lateral areas. **mR** and shallow and sparse **p** (**I** far larger than their diameter) on **Te**, deeper **p** on **Ste**. **cOc** complete, even though somehow rough near vertex, with low buttressing ridge along it on temples and genae. Rough wrinkles on postero ventral corner of $\mathbf{N_1}$. Median furrow well defined by lateral ridges crossing the whole **P** disk. Gradulus present on 3rd tergum too. 6th tergum almost completely wrinkled but apical border.

N o t e . It is very close to (*M. erythropoda*) in coloration, but differs in: red scape (dark brown); dark brown flagellum (bicolor, with reddish ventral side); **cOc** with buttressing ridges on temples and genae (absent); roughly wrinkled lateral $\mathbf{N_1}$ (largely shagreened with only short fine wrinkles); disk and posterior surface of **P** completely sculptured with no distinct **p** (with small, shallow **p** and distinct **I** throughout); gradulus on 3rd tergum only (gradulus on both 3rd and 4th terga).

Male (Holotype): figs 226-230; body size: 14 mm.

Black. Yellow: the whole clypeus, mandibles, subapical stripe and anteroventral corner on $\mathbf{N_1}$ disk, foreborder of tegulae, the whole $\mathbf{X_1}$ and most of $\mathbf{X_2}$, ventral apex of $\mathbf{X_3}$ ventral femurs, fore tibiae, all tarsi, apical stripe with waving fore edge on 1st to 6th **Te**. Bipunctate area around ocelli and vertex by sparse small **p** among larger ones. Variabilty in size, 12 to 14 mm.

Epipygium without median notch and completely convex (well evident in back aspect) with a very weak lateral ridge just apically.

Derivatio nominis. From the number (πέντε = five) of flagellar tyloida.

***Mesa pyrrhoprocta* nov.sp.**

H o l o t y p u s ♀: Nigeria = /Olokemeji Ibadan Nigeria/ /Bridwell Collection/ /From Coll. USNM/ USNM.

P a r a t y p e s ♀: Gambia = (1) /Gambia Keneba Malaise IX-X.1975 M.C.D. Speight/ BMNH; Ivory Coast = (2) /Cote d'Ivore Bouaké VI.1983 A.B. Stam/ BMNH; Nigeria = (2) /Olokemeji Ibadan Nigeria/ USNM.

P a r a t y p e s ♂ : Nigeria = (1) /Olokemeji Ibadan Nigeria/ /Bridwell Collection/ /From Coll. USNM/ USNM; (1) /Olokemeji Ibadan Nigeria/ USNM.

Female (Holotype): figs 231-233. Size = 10 mm.

Black. Light brown: most of flagellum, mandible, tarsi. Brown: scape and legs. Ferruginous: apical narrow stripe on 2nd and 3rd, most of 4th, the whole of 5th and 6th metameri. Wings hyaline.

Sparse **p** on head, mid pronotal disk, $\mathbf{Sc_1}$, $\mathbf{Sc_2}$, $\mathbf{Es_1}$, ventral $\mathbf{Es_2}$, **Te** and **Ste**. Mid Pronotal disk and $\mathbf{Es_2}$ disk with denser **p**, often coalesced. Lateral $\mathbf{N_1}$ with small short wrinkles. **P**: disk with often coalesced **p**; posteroir surface bipunctate by many small among sparser larger **p**; lateral surface with very fine wrinkles.

cOc worn out shortly about vertex. Gradulus present on 3rd an 4th **Te** too.

Male: figs 234-240. Body size = a bit less than 10 mm.

Black. Light brown: underside of flagellum. Brown: veins and pterostigma, dark portions

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of the legs. Yellow: mandible, clypeus with semitransparent border; subapical stripe and anteroventral corner on N1, apical stripe on 2nd to 6th tergum.

Flagellomeri with a ratio **L/A** more than 2. Pronotal disk without laminated keel along its fore border and with a prominent tooth on its anteroventral corner. Epipygium with a broad shallow notch.

Derivatio nominis. From the Greek words πυρρός = red and πρωκτός = back

***Mesa sahariana* nov.sp.**

H o l o t y p u s ♂ - Egypt = /Gebel Elba Egypt 1.33 Dr. H. Priesner/, OLML.
P a r a t y p u s ♀ - Lybia = /Tripolitania Tin Alcun (V. Iseien) X.1936 G. Scortecci/ MSNM.

Female: figs 241-242.

Black. Metasoma is completely ferruginous but brown petiole. Wings hyaline. Calcaria and spines light yellowish. **cOc** complete on the upper side along vertex. Rounded edge between outer and anterior surfaces of $\mathbf{Es_2}$. ¾ epipygium wrinkled, with dense apical micro**p**. Gradulus present on 3rd tergum, absent in 4th one. Scopa: fig. 242.

Male: (Holotype): figs 243-248. Body size: 14 mm.

Black. Ferruginous underside of flagellum. Pale yellow: the whole clypeus but semitransparent ventral edge; subapical **Tsa**; lateral spot on fore border and subapical stripe on $\mathbf{N_1}$ disk; median spot on $\mathbf{Sc_2}$ and postscutellar area; ventral $\mathbf{X_1}$ and $\mathbf{X_2}$ and trochanters; most of the remainder of legs; apical stripes with waving fore edge on 1st to 6th terga and 2nd to 6th sterna. Wings hyaline. Mid flagellomeri with a ratio **L**/**LA** about 2.4. No acute keel along fore border, with acute prominent tooth on antero ventral corner of $\mathbf{N_1}$ disk with a ratio $\mathbf{LA_{pos}/L_{med}}$ about 2.9. Apical hindfemur rounded. $\mathbf{Em_3}$ without **p** and wrinkles. Bipunctate tergal surface. No **p** on apical 1st sternum. Notch on 7th tergum as large as its lateral lobes, with a median longitudinal ridge. Volsella angled.

N o t e . Notwithstanding the distance of the relative typical localities their coupling has been proposed because of the rarity of taxa of this genus in Palaerctic Region and particularly their being the unique records from Saharian Region and Northern Africa. Besides genitalia there are no very distinctive character states apart the contextual presence of anteroventral tooth and absence of laminated carina along fore border of $\mathbf{N_1}$ disk. Female is distinct from other female taxa with ferruginous metasoma by the shape of clypeus and scopa.

***Mesa silvana* nov.sp.**

H o l o t y p u s ♂: Kenya = /Kenya Arabuko Sokoke forest (30 km S di MALINDI) 8-24.VI.1998 alla luce L. Bartolozzi & A. Sforzi legit / MZUF.
P a r a t y p e s ♂: (2) Kenya = /Kenya Arabuko Sokoke forest (30 km S di Malindi) 8-24.VI.1998 alla luce L. Bartolozzi & A. Sforzi legit /, MZUF; (1) Zimbabwe = /W-Zimbabwe 60 km N Bulawayo Maraposa Rd XII.1998 leg M. Snižek/, OLML.

Male: (Holotype): figs 249-255. Body size: 10 mm.

Black. Ventral side of flagellum dark yellow. Pale yellow are: mandible; the whole of clypeus but the semitransparent ventral edge; subapical **Tsa;** the anteroventral tooth and subapical stripe on $\mathbf{N_1}$; fore half tegula; the whole of $\mathbf{X_1}$ and $\mathbf{X_2}$, fore and mid trochanter and femur, tibiae (but longitudinal stripe) and tarsi, most of $\mathbf{X_3}$ and hind femurs; apical

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stripe on 1st to 6th **Te**; small lateral spots on 3th and 6th, narrow apical stripe on 4th and 5th **Ste**. Wings hyaline.

No tyloids on flagellomeri. Fore border of $\mathbf{N_1}$ disk clearly angled without lamellar keel, with a blunt prominence on its anteroventral corner; ratio $\mathbf{LA_{pos}/L_{med}}$ about 2.3 in dorsal aspect. Bipunctate surface of 2nd to 5th terga by sparse shallow larger **p** among small **p**. Apical ventral edge of hind femur rounded. Rounded ventral petiolar surface. Apical surface of 1st **Ste** without **p**. 1st metamerus very slender, ratio **L**/**LA** of 1st **Ste** more than 4. Epipygium with a very shallow median notch, delimited laterally only by a rounded angle.

N o t e . It belongs to a group of taxa with very slender and small males (no more than 11 mm) having strongly angled volsella. Besides genitalia it is distinct by the completely yellow $\mathbf{X_1}$ and $\mathbf{X_2}$. Paratype from Zimbabwe shows more dilated bristles both on volsella and gonosquama.

Derivatio nominis. From Silvanus, ancient latin god of forests.

***Mesa tylocera* nov.sp.**

H o l o t y p u s ♂- Kenya = /Coll A. Mochi *6.XII.72 Watamu Malindi Kenya*/ MSNP.

Holotype. figs 256-262. Body size: 10 mm.

Black. Yellow: mandible; the whole of clypeus but semitransparent ventral edge and two oval areas; subapical **Tsa**; subapical stripe and anteroventral corner of $\mathbf{N_1}$ disk; perimeter of tegula and $\mathbf{LaSt_2}$; tarsi; fore and mid trochamters; most of mid tibia and femur; apex of hind tibia and femur; ventral surface of $\mathbf{X_1}$ and $\mathbf{X_2}$; two lateral spots on 2nd **Te**; narrow apical stripe on 3rd to 5th **Te**. Wings hyaline.

Tsa not complanar, forming a clear angle in frontal aspect. Flagellum thickening toward apex. Very short, almost undetectable tyloid on 6th, median half 7th, as long as element on 8th to 10th, on basal half 11th Pronotum with a distinct lamellar keel along its fore border and tooth on its anteroventral corner. Ventral apex of hind femur simply rounded. 2nd to 5th tergal surfaces bipunctate.. 1st metamerus very slender, ratio $\mathbf{L/LA_{pos}}$ of 1st sternum a bit less than 4, its apical surface with few **p**. Epipygium with a very shallow median notch, delimited laterally only by a rounded angle.

Very distinct species by the presence of tyloida on flagellum. It is a very rare condition within the entire subfamily, present in only three other taxa of *Mesa*.

Derivatio nominis. From the Greek word τύλη = callosity, callus and κερα = horn.

***Mesa xanthogramma* nov.sp.**

H o l o t y p u s ♀: Nigeria = /369 W Nigeria: Ilaro Forest 4.I.1974 J. Riley/ BMNH.

P a r a t y p i ♀: Nigeria =; (1) /Olokemeji Ibadan Nigeria / USNM; (1) /Nigeria *Akure W* State *X* 1974 J.T. Medler coll/ BMNH.

P a r a t y p i ♂ : Nigeria = (2) /Olokemeji Ibadan Nigeria / USNM; (1) /*Hgape* (?) *Lagos Nigeria Oct 1914*/ USNM; (1) /425 W Nigeria: Ilaro Forest 7.IV.1974 J. Riley/ BMNH; (3) /Nigeria *Fashola* W State X-1974 J.T. Metler Coll/ BMNH.

Female (Holotype): figs 263-265. Siz 14 mm.

Black. Orange-yellow: ventral half clypeus, coolar, subapical stripe on pronotum, apical stripe (with a lateral spot just before it on 2nd to 5th) on 1st to 5th **Te** and 2nd to 5th **Ste**.

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Ferruginous apex of **Tsa**, scape, basal flagellomerus, mandible, the whole of legs but coxae. 6th one is reddish brown and wrinkled but apical stripe. Wings flushed with yellow.

p: sparse with **I** larger than their diameter on most of the head, $\mathbf{Sc_1}$, $\mathbf{Sc_2}$, ventral $\mathbf{Es_2}$; denser on posterior ¾ $\mathbf{N_1}$ disk; very shallow and sparse on terga, which appear somehow shining, a bit more impressed on sterna. Pronotal plate and anterior third of $\mathbf{N_1}$ disk with many micro **p** bearing short appressed whitish hair. Lateral $\mathbf{N_1}$ with sparse **p** anteriorly, without any wrinkles on postero ventral corner which bears micro **p** and hair like anterior pronotal disk. **P**: disk having long median parallel sided furrow with area of dense small **p** along it, then a less **p** area and beside it along lateral edge a narrow area with sparse large **p** among many micro **p** bearing short appressed hair; the last set up is also on posterior surface; fine wrinkles on lateral surface where short appressed hair exist too.

mR detectable at x40 on $\mathbf{N_1}$, $\mathbf{Sc_1}$, $\mathbf{Sc_2}$, smooth areas of **P** disk, terga.

coC complete; **Em3** regularly covered by micro **p** and hair; no gradulus on 3rd and 4th **Te**.

Male: figs 266-271; body size: mm 12 mm

Black. Brown: dark portions of the legs. Yellow: ventral half clypeus with semitransparent border, most of mandible, subapical **Tsa**, transversal spot at the middle and small spot on anteroventral corner of $\mathbf{N_1}$, ventral $\mathbf{X_1}$ and $\mathbf{X_2}$, partly $\mathbf{X_3}$, light portions of the legs, two lateral small spots on 2nd **Te**, apical stripe worn out medially on 3rd **Te**, apical narrow stripes with waving fore edge on 4th and 5th **Te**. Very feeble **p** on head and mesosoma. **P** disk appearing somehow lustrous because of small shallow **p** with **I** larger than their diameter among them. No laminated keel along fore border and strong tooth on anteroventral corner of $\mathbf{N_1}$. $\mathbf{Em_3}$ wrinkled throughout. Apical hind femur tapering in an acute lamina

Derivatio nominis. From the Greek words ξανθός = yellow and γραμμή = line because of the yellow stripe on the female metasoma.

Acronyms

BMNH = Natural History Museum, London; CUIC = Cornell, University Insect Collection Ithaca; MHNG = Museum d'Histoire Naturelle, Genéve; MHNP = Museum d'Histore naturelle, Paris; MHNR= Museum Histoire Naturelle Réunion; MNHU = Museum für Naturkunde der Humboldt-Universität, Berlin; MSNG = Museo Civico di Storia naturale "G. Doria", Genova; MSNM = Museo Storia Naturale Milano; MSNP = Museo Storia Naturale, Pisa; MZUF = Museo Zoologico de "La Specola", Firenze; NHMW = NaturHistorisches Museum Wien; NNIC = National Namibian Insect Collection, Windhoek; OLML = Oberösterreichische Landes Museum, Linz; OUM = Oxford University Museum; SAM = South African Museum, Cape Town; TMP = South African Transvaal Museum, Pretoria; USNM = United States National Museum, Washington; ZMA = Zoologisch Museum Amsterdam.

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Zusammenfassung

Vorliegende Arbeit behandelt die aftrotropischen Arten der Gattung *Mesa* SAUSSURE (Hymenoptera, Tiphiidae, Myzininae). Zwölf neue Arten konnten beschrieben werden: *Mesa campsa* nov.sp., *Mesa dioica* nov.sp., *Mesa eriosoma* nov.sp., *Mera erythrodira* nov.sp., *Mesa hyloides* nov.sp., *Mesa maliana* nov.sp., *Mesa nama* nov.sp., *Mesa oligotyla* nov.sp., *Mesa pentatyla* nov.sp., *Mesa sahariana* nov.sp., *Mesa pyrrhoprocta* nov.sp., *Mesa xanthogramma* nov.sp. An Synonymien ergaben sich und werden vorgeschlagen: *Mesa hottentotta* SAUSSURE 1892, *Elis* (*Mesa*) *spoliata* TURNER 1912 und *Elis* (*Mesa*) *permutans* TURNER1935 mit *Plesia abdominalis* GUÉRIN 1838; - *Elis* (*Mesa*) *spinicollis* TURNER 1917 mit *Myzine ruficeps* SMITH 1855; - *Plesia reticulata* CAMERON 1905 und *Elis* (*Mesa*) *mutica* TURNER 1917 mit *Myzine xanthocera* GERSTAECKER 1870; - *Elis* (*Mesa*) *heterochroa* TURNER 1917 mit *Mesa heterogamia* SAUSSURE 1892; - *Elis* (*Mesa*) *longiventris* TURNER 1912 mit *Plesia incisa* CAMERON 1905. Lectotypen folgender Taxa wurden festgelegt: *Plesia abdominalis* GUÉRIN 1838, *Myzine capitata* SMITH 1855, *Myzine ruficeps* SMITH 1855, *Myzine torrida* SMITH 1879, *Elis* (*Mesa*) *longiventris* TURNER 1912, *Plesia* (*Mesa*) *adelogamia* TURNER 1908, *Plesia* (*Mesa*) *hova* TURNER 1908, *Plesia* (*Mesa*) *erythropoda*: TURNER, *Plesia* (*Mesa*) *pyxidata* TURNER 1911, *Elis* (*Mesa*) *ametalla* TURNER 1911, *Elis* (*Mesa*) *apicipennis* TURNER 1912, *Elis* (*Mesa*) *coeruleipennis* TURNER 1913 und *Elis* (*Mesa*) *nyanzae* TURNER 1912. Neukombinationen unter der Gattung *Mesa* ergaben sich: *Myzine ruficeps*, *Myzine xanthocera*, *Myzine torrida*, *Plesia rufofemorata* CAMERON 1905, *Plesia incisa*, *Plesia* (*Mesa*) *erythropoda*, *Plesia* (*Mesa*) *asmarensis* TURNER 1909, *Plesia* (*Mesa*) *pyxidata*, *Elis* (*Mesa*) *ametalla*, *Elis* (*Mesa*) *apicipennis*; *Elis* (*Mesa*) *coeruleipennis*, *Elis* (*Mesa*) *nyanzae*, *Elis* (*Mesa*) *diversicornis* TURNER 1917, *Elis* (*Mesa*) *herrero* TURNER 1935.

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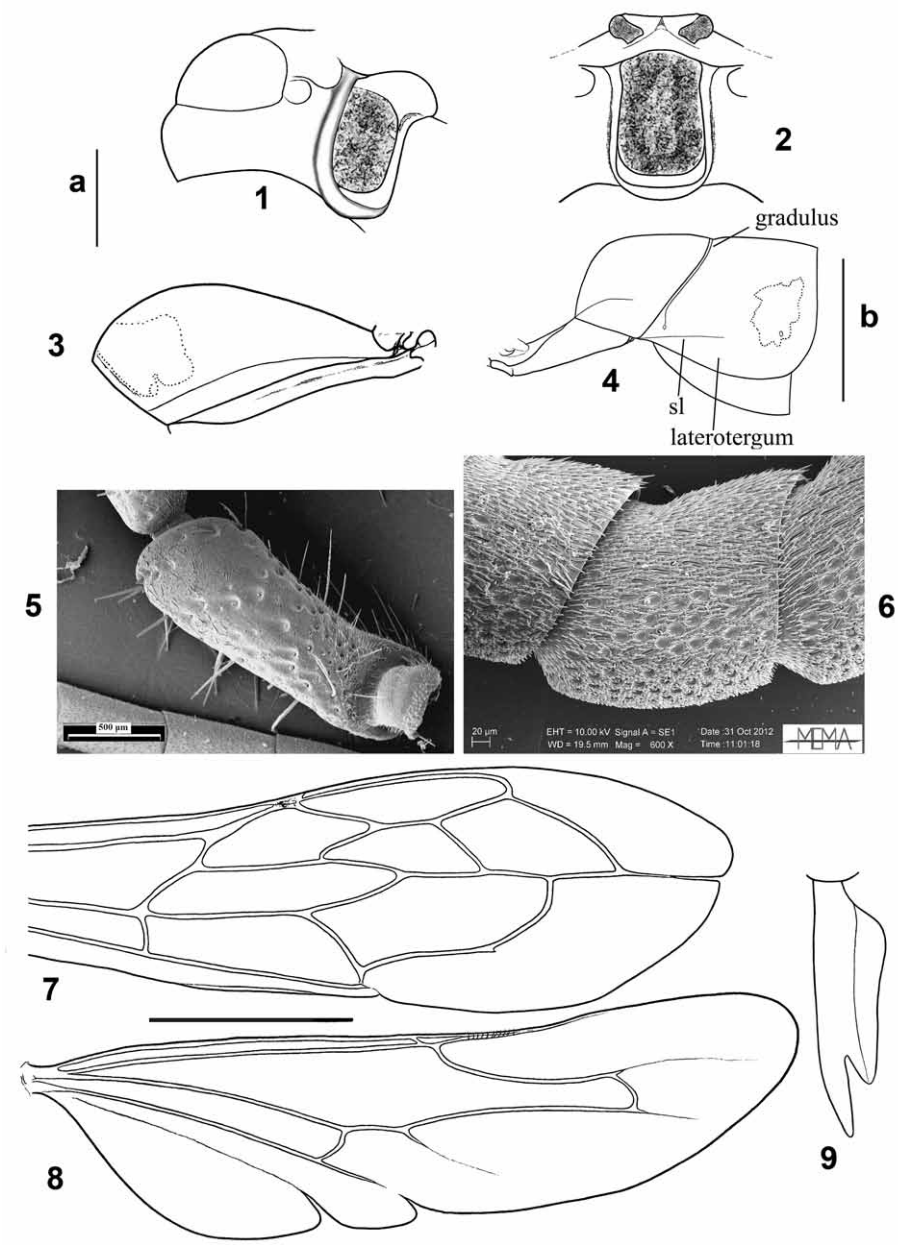

Figs 1-3: *Myzinum* sp. ♀: **(1)** head, lateroventral aspect, **(2)** head, ventral aspect, **(3)** first metamerus, lateral aspect. Fig**. 4**: *Meria* sp. ♀: 1st metamerus, lateral aspect. **Figs. 5-9**: *Mesa* sp ♀: **(5)** scape, **(6)** 5th flagellomerus, **(7)** forewing, **(8)** hindwing, **(9)** fore tibial spur; (1-3: scale bar "a": 1 mm; 4: scale bar "b": 1 mm; 7-8: scale bar: 2 mm; 9: scale bar: 0.5mm).

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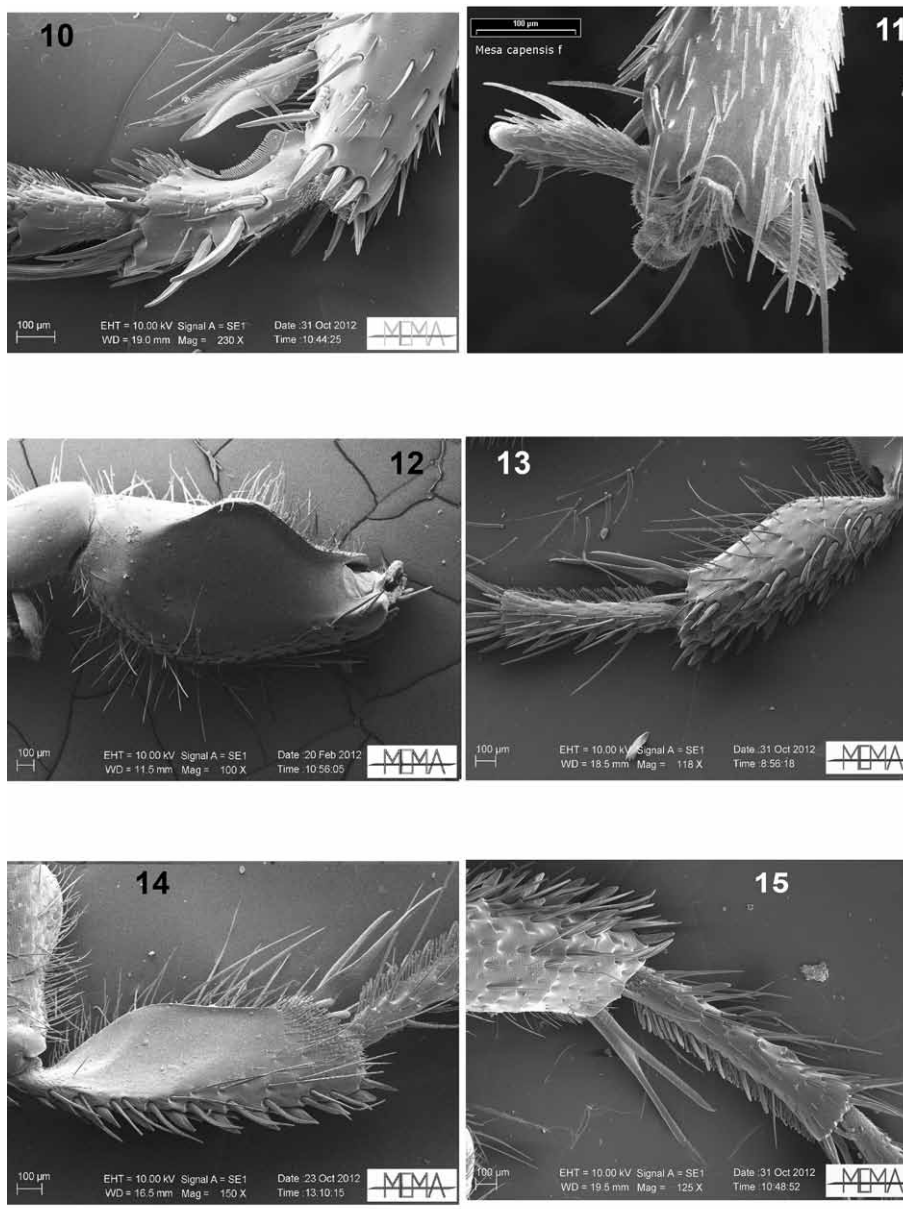

Figs 10-15: *Mesa* sp ♀: **(10)** fore leg, apical tibia and basal tarsomerus, **(11)** apical tarsomerus, **(12)** ventral hind femur, **(13)** hind leg, tibia and basal tarsomerus, **(14)** hind tibia, back aspect, **(15)** hind leg, basal tarsomerus.

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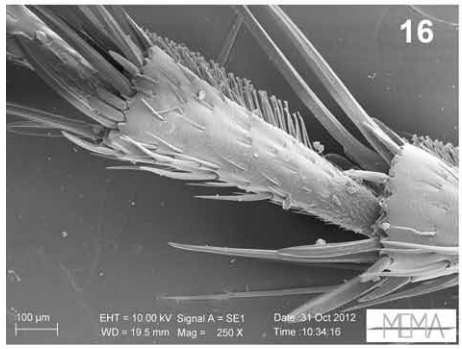

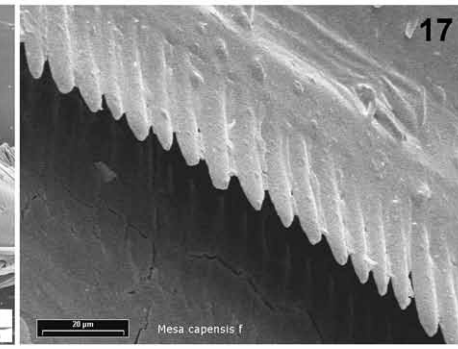

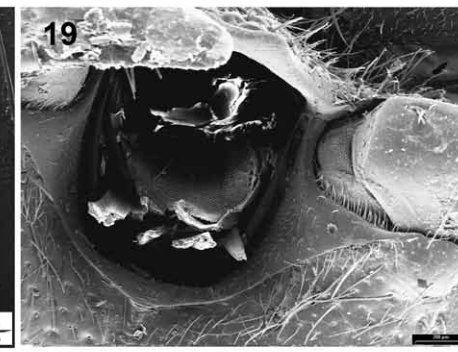

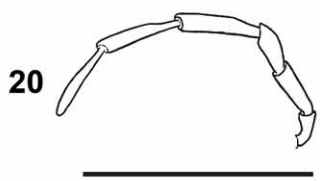

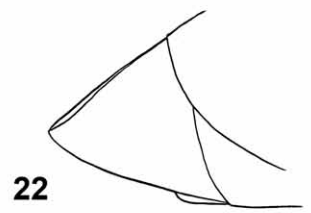

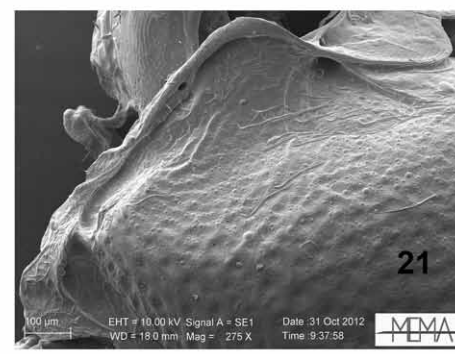

Figs 16-18: *Mesa* sp ♀: **(16)** 2nd hind tarsomerus, **(17)** distal border of metameri, **(18)** epipygium. **Figs 19-22**: *Mesa* sp ♂: **(19)** head, ventral aspect, **(20)** maxillary palpus, **(21)** prepectal sclerite and forehalf Es_2, **(22)** last metamerus, lateral aspect; (20: scale bar: 0.5 mm; 22: scale bar: 1 mm).

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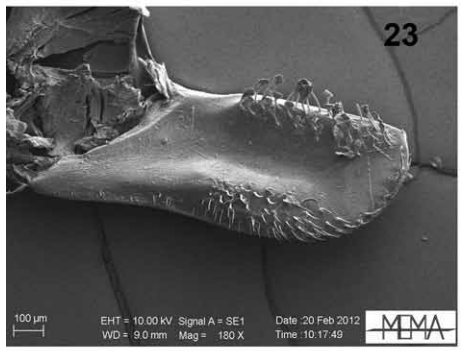

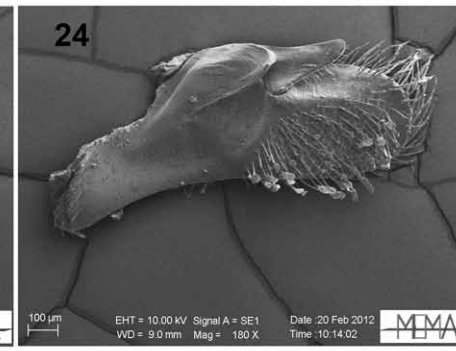

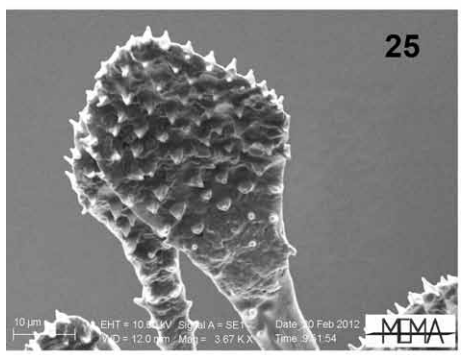

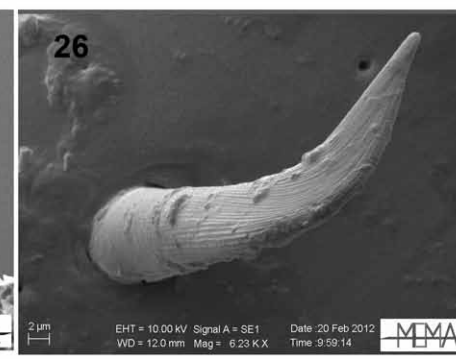

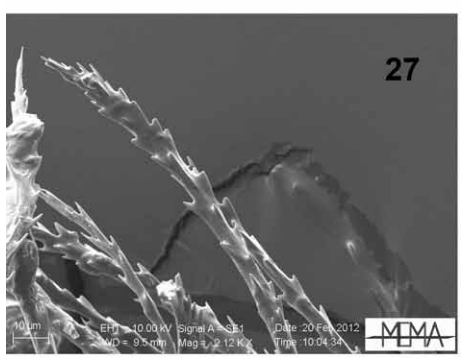

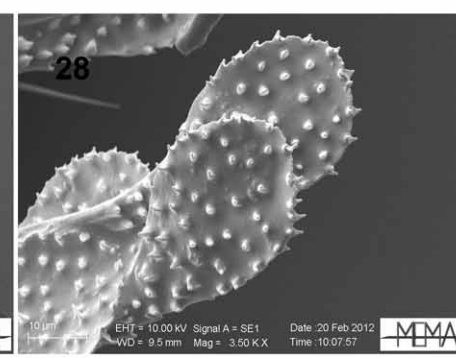

Figs 23-28: *Mesa* sp ♂: **(23)** gonosquama, inner aspect, **(24)** volsella, inner aspect, **(25)** gonosquama: modified bristles, particular, **(26)** gonosquama, spine, **(27)** volsella, bristles, particular, **(28)** volsella: modified bristles, particular.

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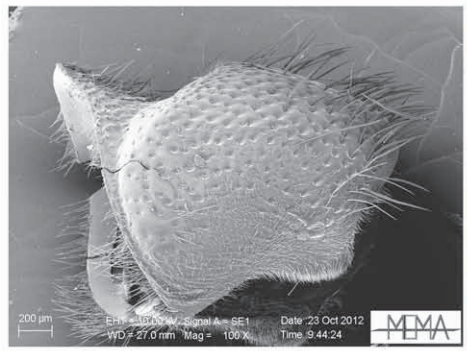

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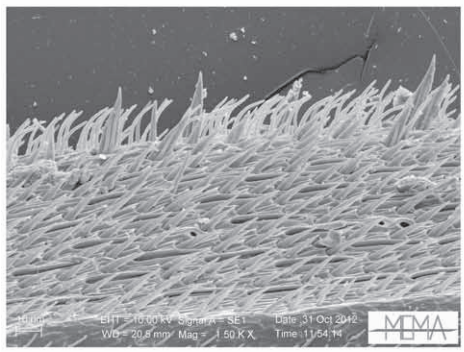

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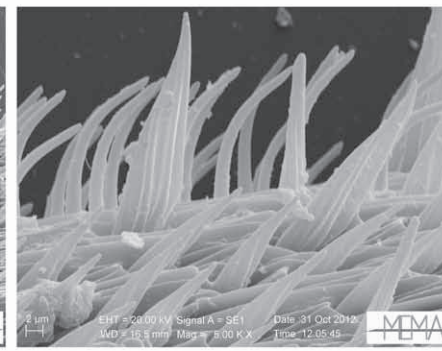

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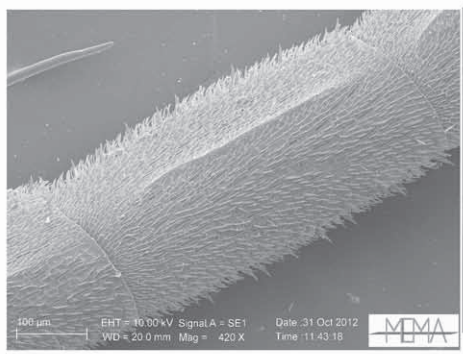

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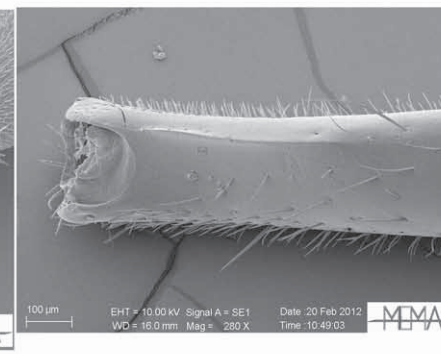

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Figs 29-30: *Mesa* sp ♀: **(29)** pronotum, lateral aspect; **(30)** Es_2 ventral aspect. **Figs 31-34**: *Mesa* sp ♂: **(31)** 7th flagellomerus, **(32)** idem, particular, **(33)** flagellomerus with tyloidum, **(34)** hind femur, ventral apex.

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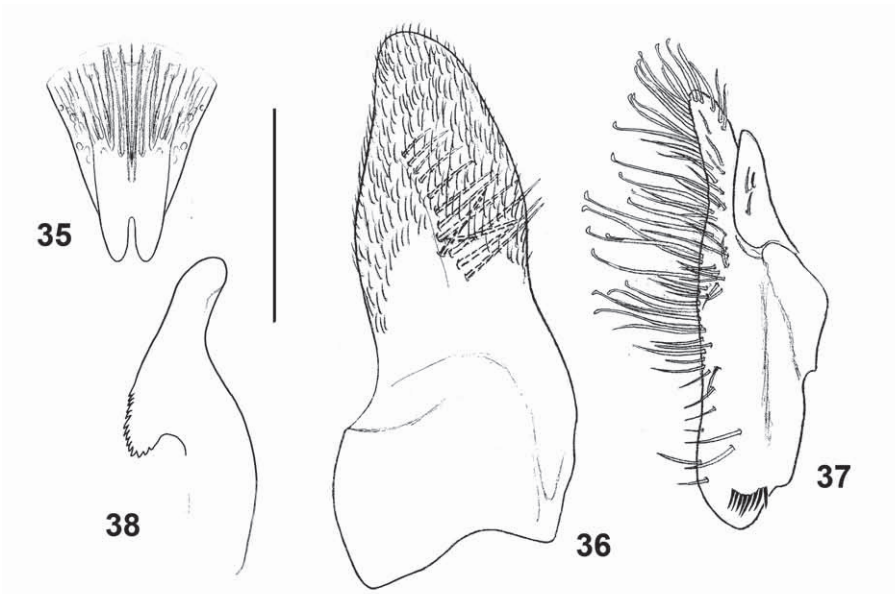

Figs 35-38: *Mesa haemorroidalis* ♂: **(35)** epipygium; **(36)** gonosquama, **(37)** volsella, **(38)** aedeagus. **Fig. 39**: *Mesa nodosa* ♀, habitus. (35: scale bar: 2 mm; 36-38; scale bar: 0.5 mm; 39: scale bar: 5 mm).

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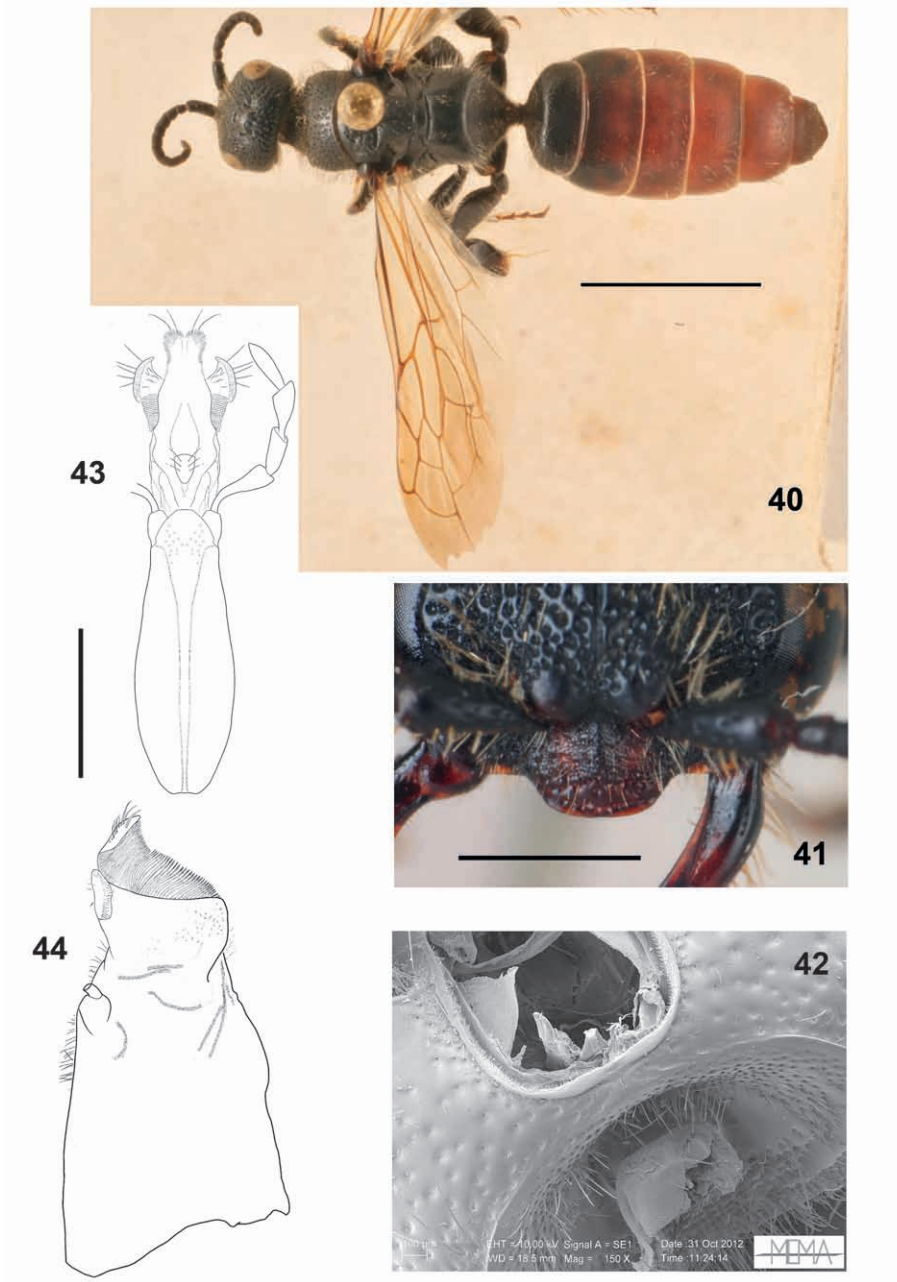

Figs 40-44: *Mesa abdominalis* ♀: **(40)** habitus, **(41)** clypeus and lower head, frontal aspect **(42)** head, ventral aspect **(43)** labium, ventral aspect, **(44)** idem, lateral aspect; (40: scale bar: 5 mm, 41: scale bar: 1 mm, 43-44: scale bar: 0.5 mm).

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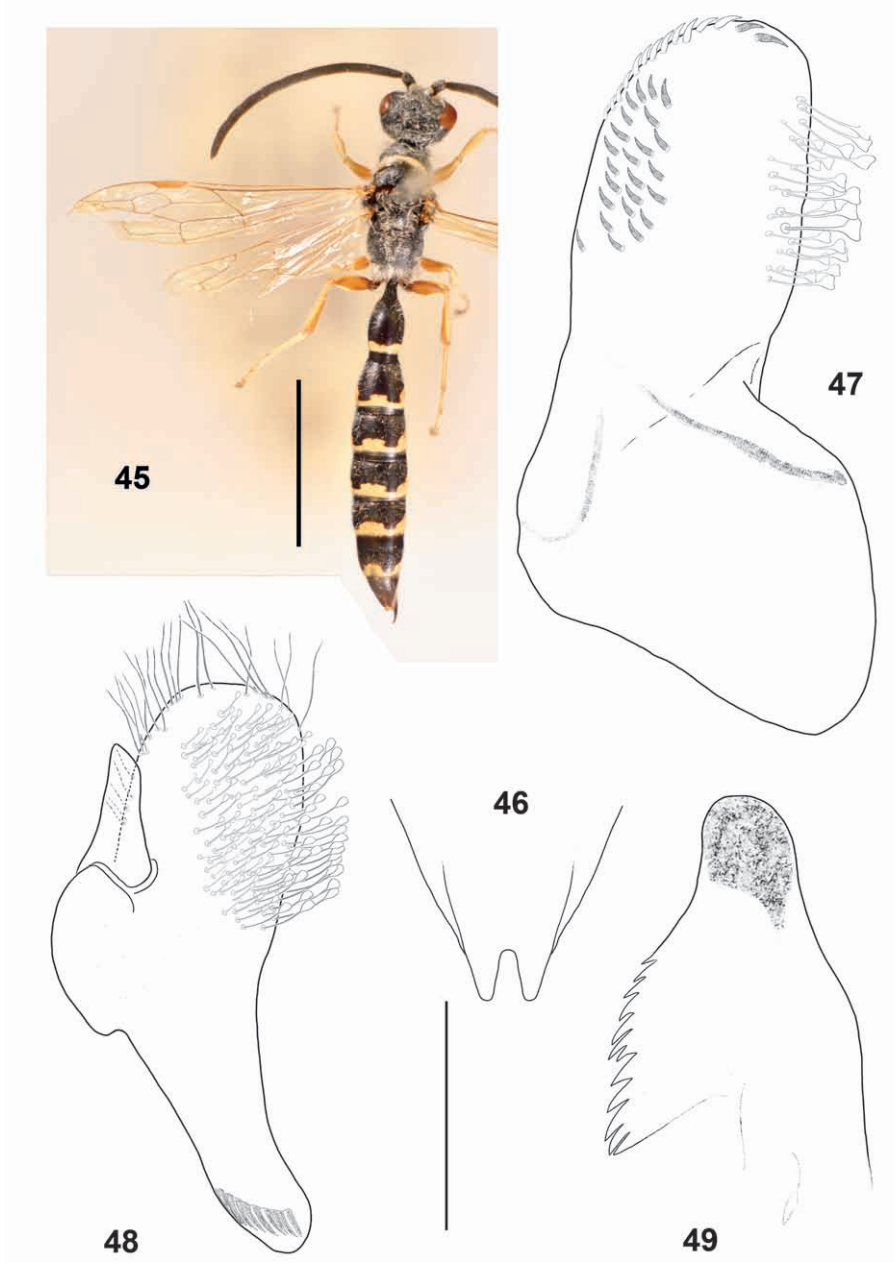

Figs 45-49: *Mesa abdominalis* ♂: **(45)** habitus, **(46)** epipygium, **(47)** gonosquama, **(48)** volsella, **(49)** aedeagus; (45: scale bar: 5 mm, 46: scale bar: 2 mm, 47-49: scale bar: 0.5 mm).

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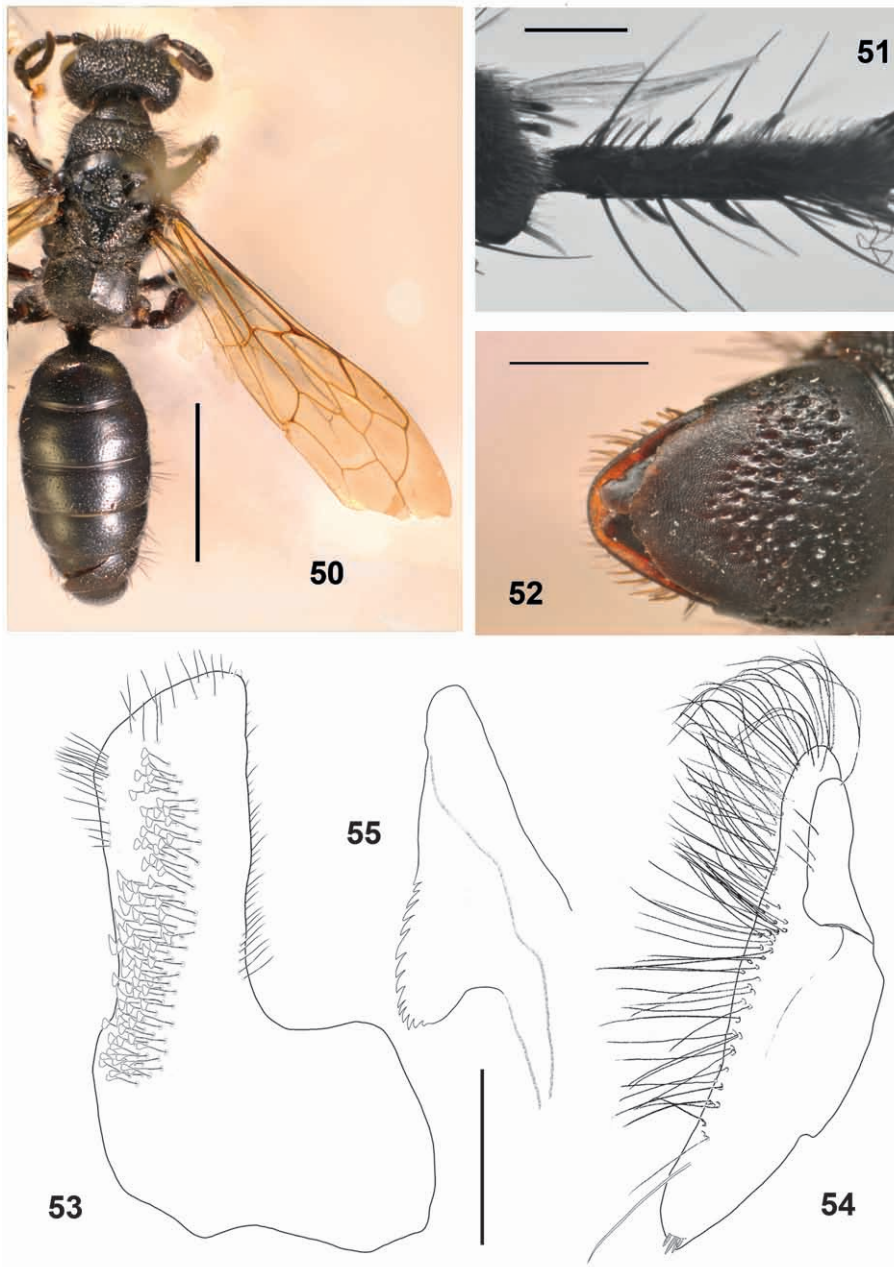

Figs 50-52: *Mesa capensis* ♀: **(50)** habitus, **(51)** basal hind tarsomerus, **(52)** epipygium, **Figs 53-55**: *Mesa capensis* ♂:**((53)** gonosquama, **(54)** volsella, **(55)** aedeagus; (50: scale bar: 5 mm, 51: scale bar: 0,5 mm; 52: scale bar: 1 mm, 53,54,55: scale bar: 0.5 mm).

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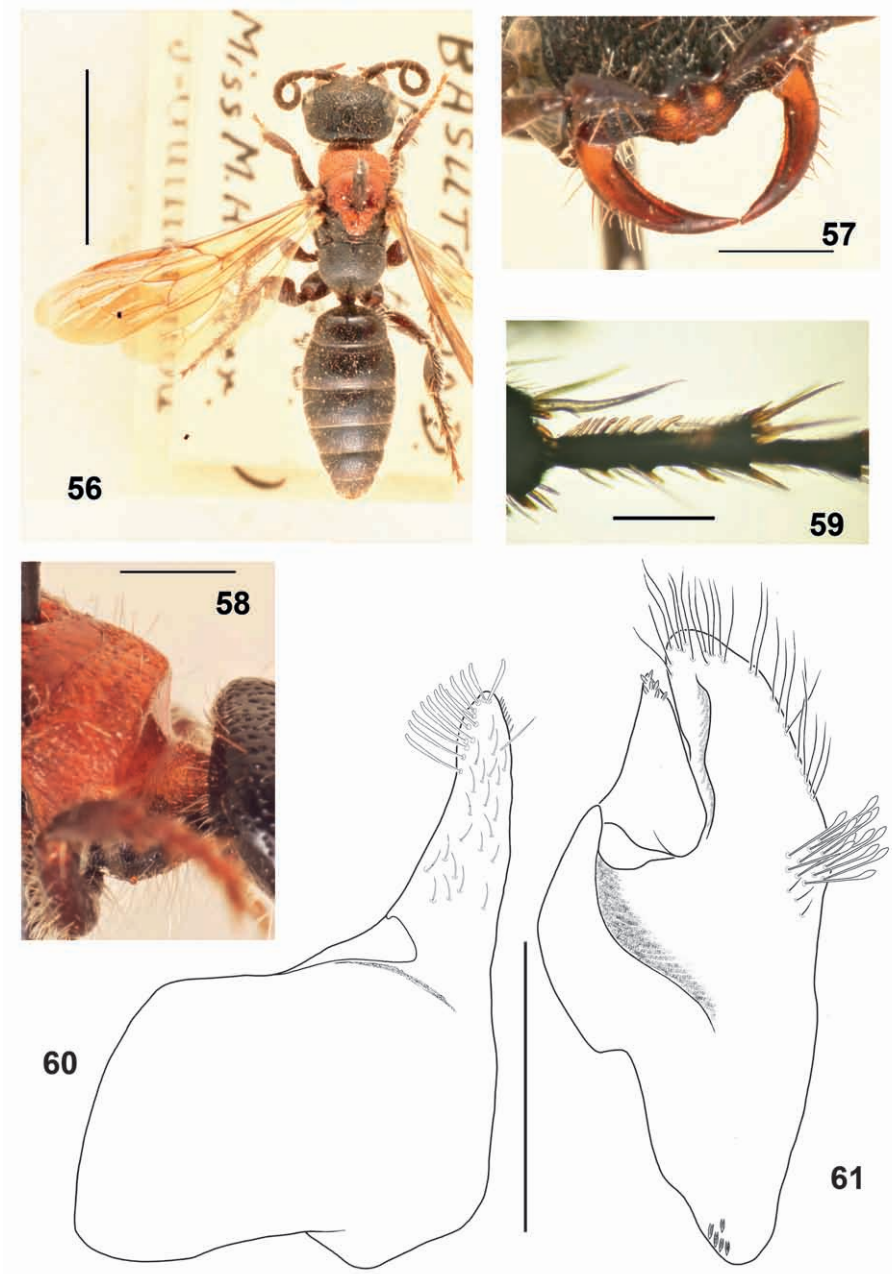

Figs 56-59: *Mesa capitata* ♀: **(56)** habitus, **(57)** clypeus frontal aspect, **(58)** pronotum, latero dorsal aspect**, (59)** basal hindtarsomerus. **Figs 60-61**: *Mesa capitata* ♂: **(60)** gonosquama, **(61)** volsella.

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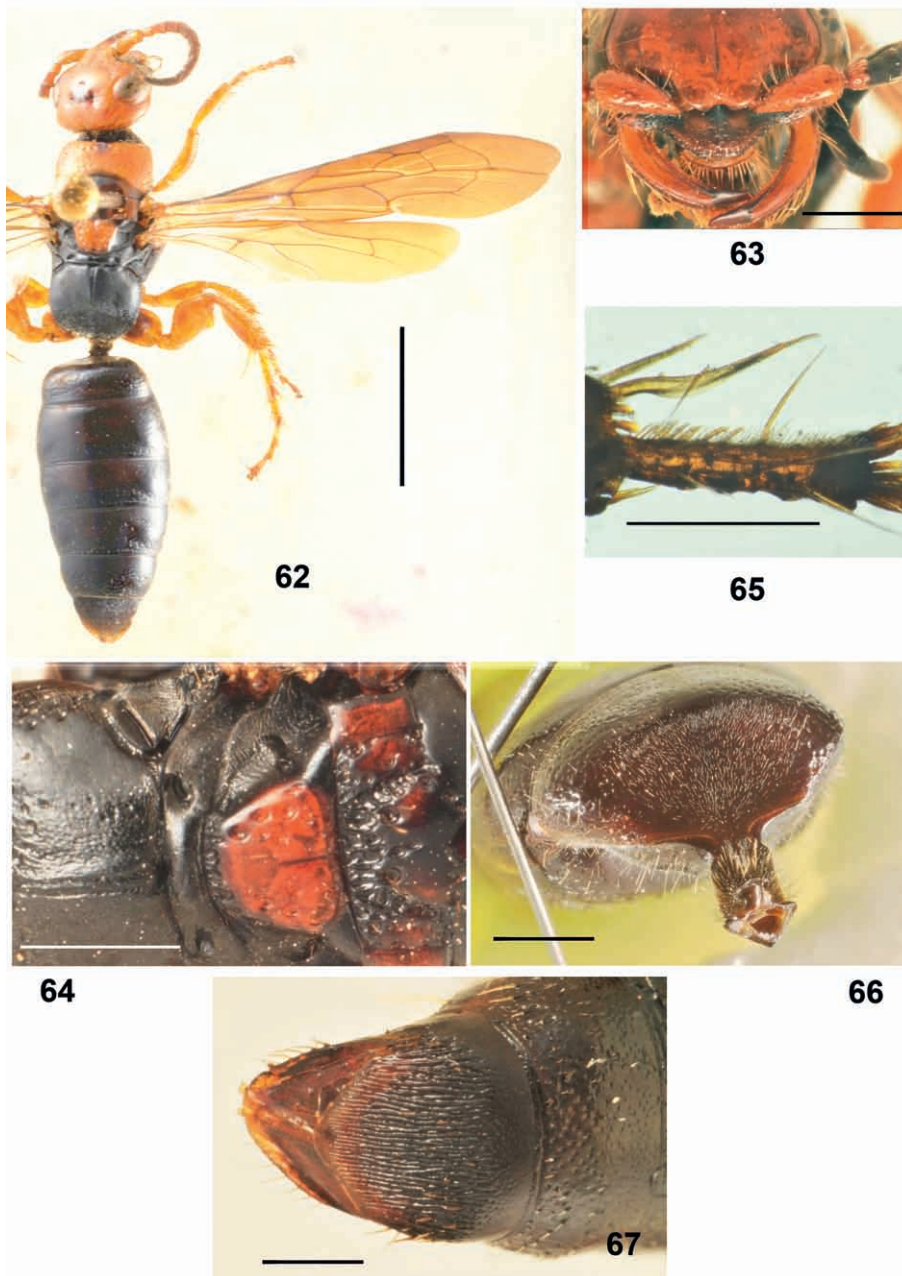

Figs 62-67= *Mesa ruficeps* ♀: **(62)** habitus: **(63)** lower head; frontal aspect; **(64)** dorsal mesosoma, particular; **(65)** basal hindtarsomerus; **(66)** 1st tergum, subvertical disk; **(67)** epipygium; (62: scale bar: 5 mm, 63-64-65: scale bar: 1 mm, 66-67: scale bar: 0,5 mm).

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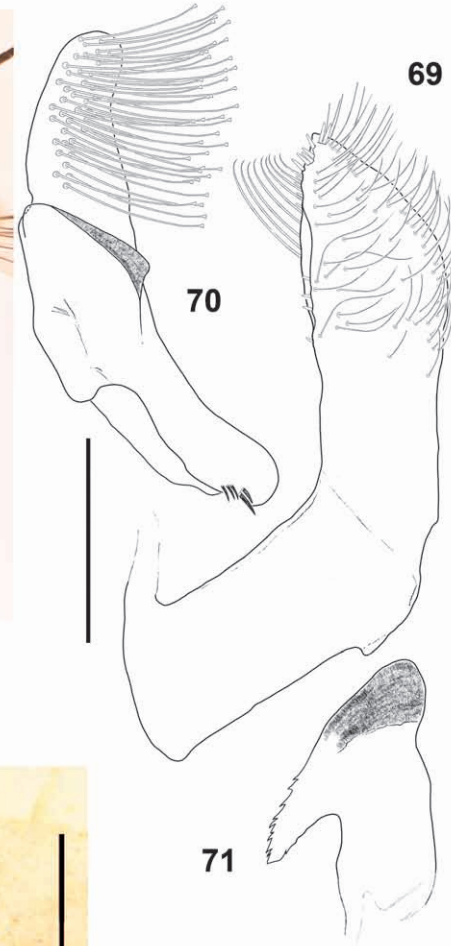

Figs 68-71: *Mesa ruficeps* ♂: **(68)** habitus; **(69)** gonosquama; **(70)** volsella; **(71)** aedeagus. **Figs 72-73-**= *Mesa torrida* ♀: **(72)** habitus; **(73)** basal hind tarsomerus; (68, 72: scale bar: 5 mm; 69,70,71,73: scale bar: 0,5 mm).

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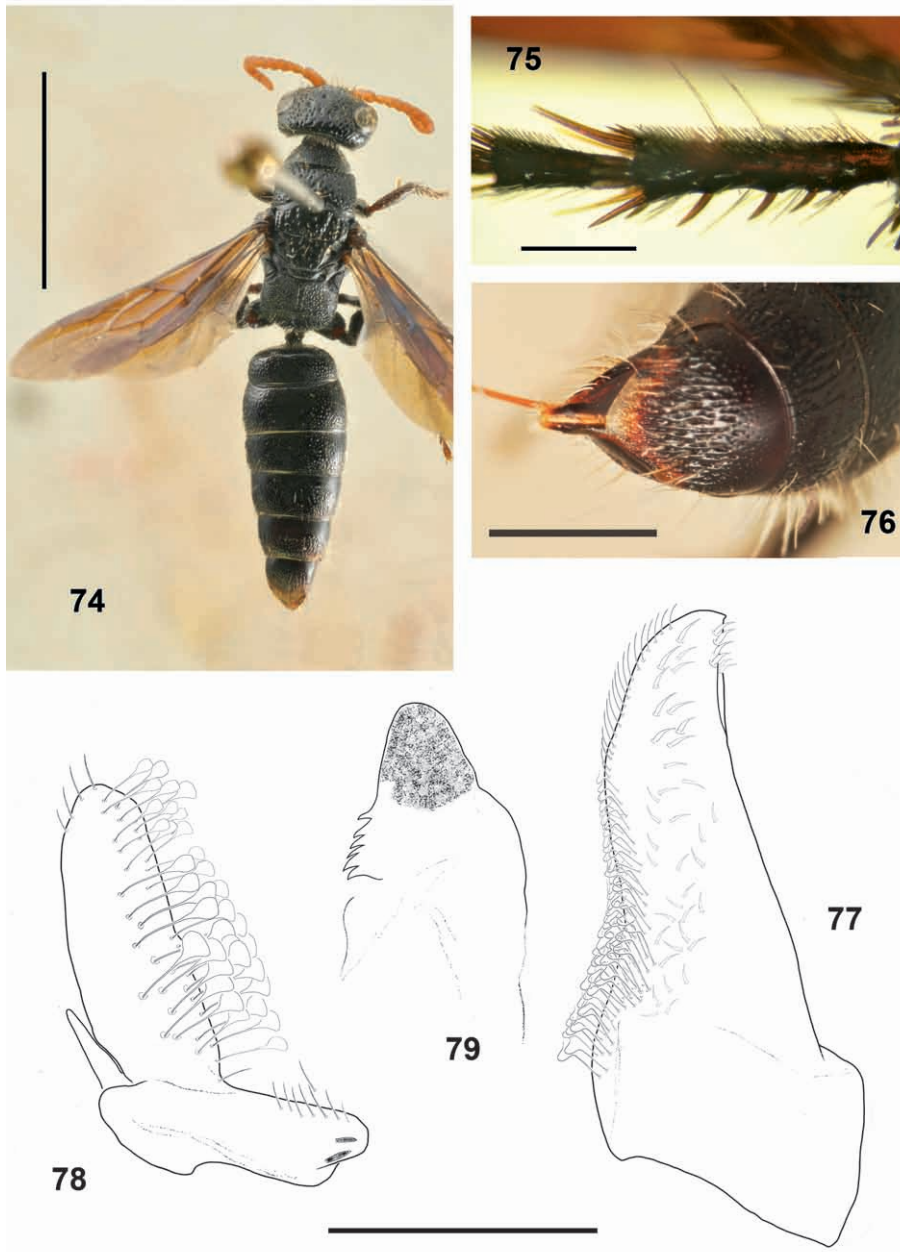

Figs 74-76: *Mesa xanthocera* ♀: **(74)** habitus; **(75)** basal hindtarsomerus; **(76)** epipygium. **Figs 77-79**: *Mesa xanthocera* ♂: **(77)** gonosquama; **(78)** volsella; **(79)** aedeagus; (74: scale bar: 5 mm; 75: scale bar =0,25 mm; 76 scale bar: 1 mm; 77-79: scale bar: 0,5 mm).

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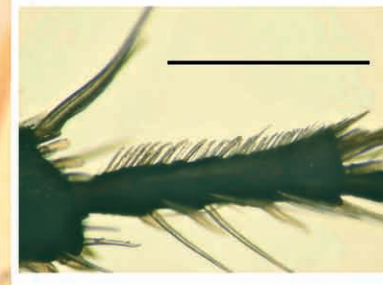

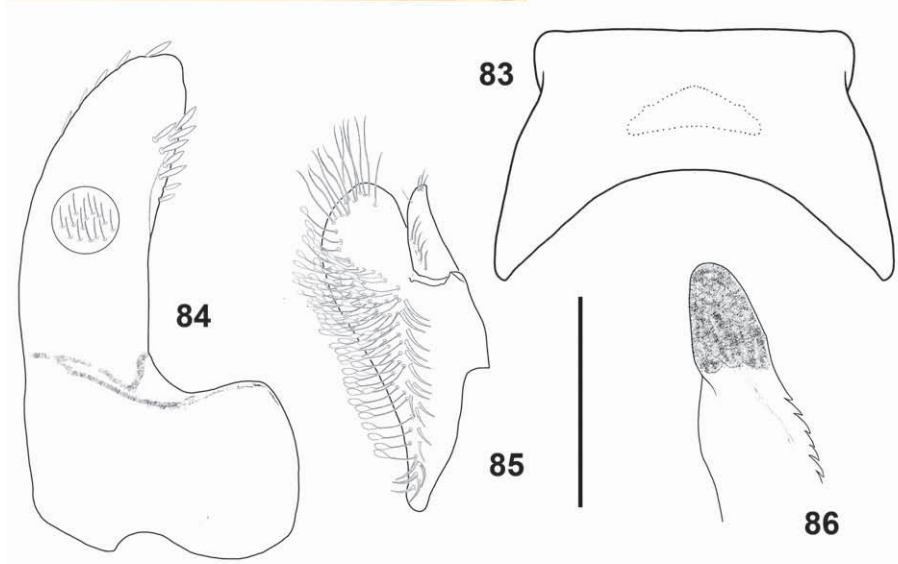

Figs 80-82: *Mesa heterogamia* ♀: **(80)** habitus; **(81)** Head and pronotum, latero dorsal aspect; **(82)** basal hindtarsomerus. **Figs 83-86**: *Mesa heterogamia* ♂: **(83)** pronotum, dorsal aspect; **(84)** gonosquama; **(85)** volsella; **(86)** aedeagus; (80: scale bar: 5 mm; 81,82,83: scale bar: 1 mm; 84-86; scale bar: 0,5 mm).

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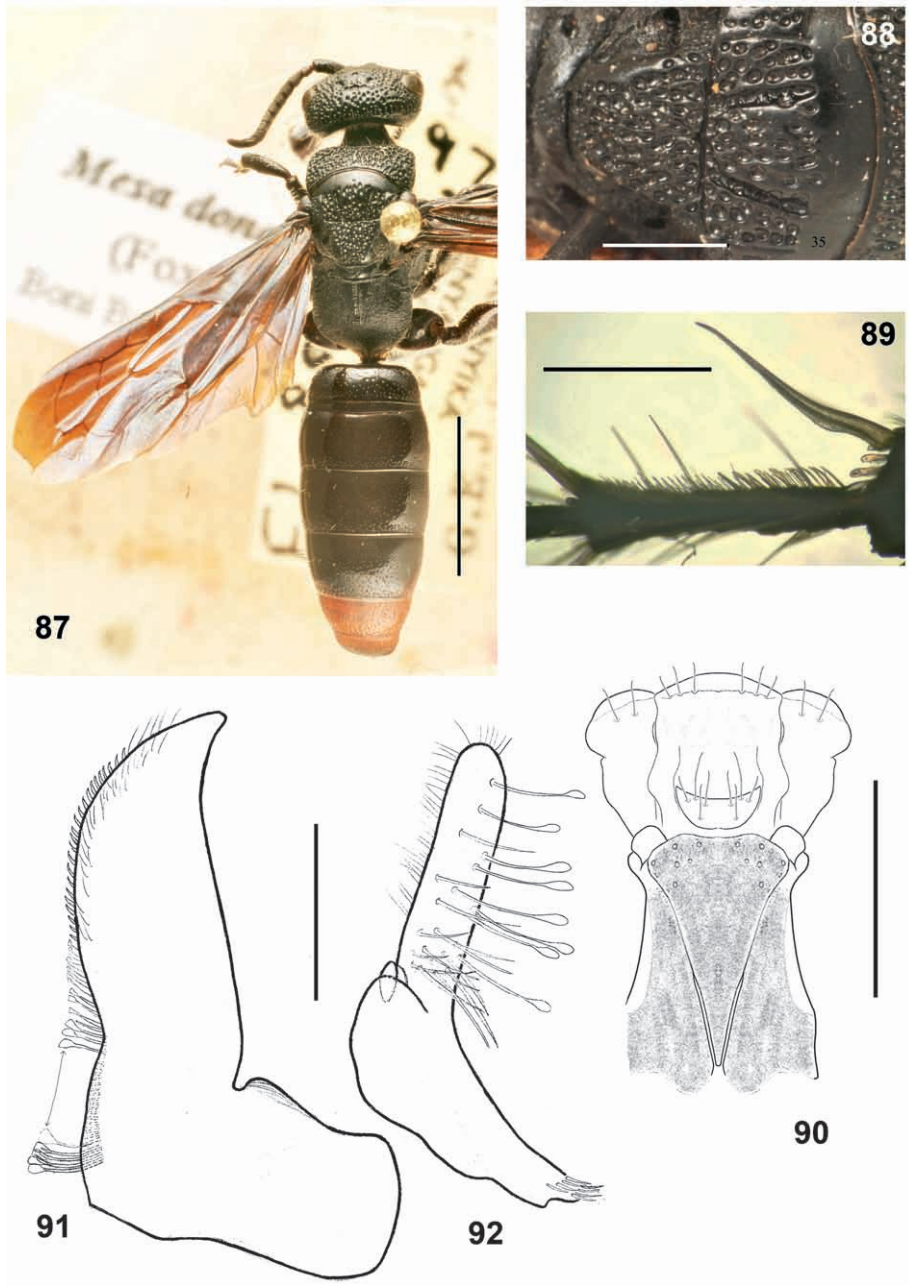

Figs 87-89: *Mesa donaldsoni* ♀: **(87)** habitus; **(88)** mesosoma, particolar; **(89)** basal hindtarsomerus. **Figs 90-92**: *Mesa donaldsoni* ♂: **(90)** labium, ventral aspect; **(91)** gonosquama; **(92)** volsella; (87: scale bar: 5 mm; 88, 89: scale bar: 1 mm; 90-92: scale bar: 0,5 mm).

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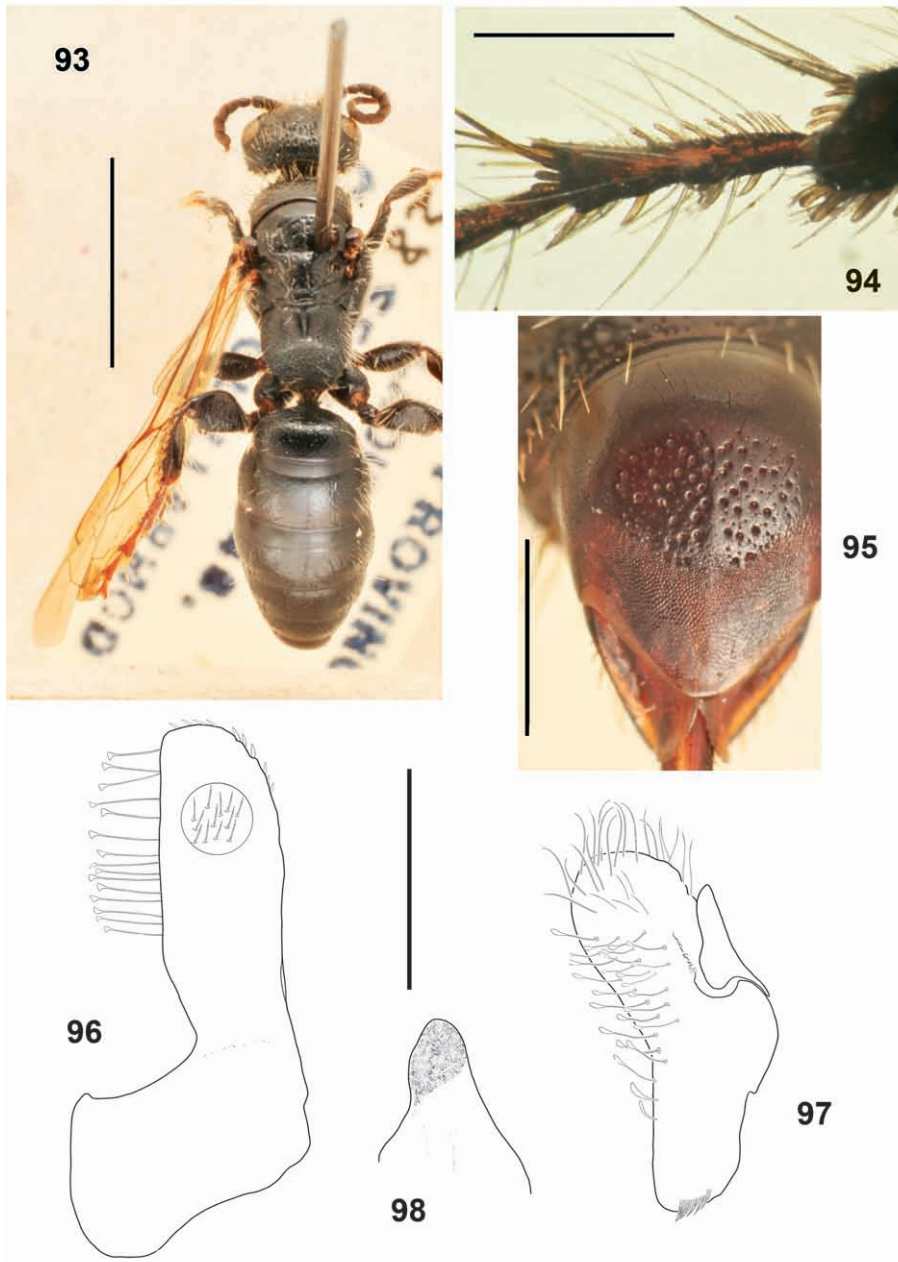

Figs 93-95: *Mesa rufofemorata* ♀: **(93)** habitus; **(94)** basal hindtarsomerus; **(95)** epipygium. **Figs 96-98**: *Mesa rufofemorata* ♂: **(96)** gonosquama; **(97)** volsella; **(98)** aedeagus; (93: scale bar: 5 mm; 94-95: scale bar: 1 mm; 96-98: scale bar: 0,5 mm).

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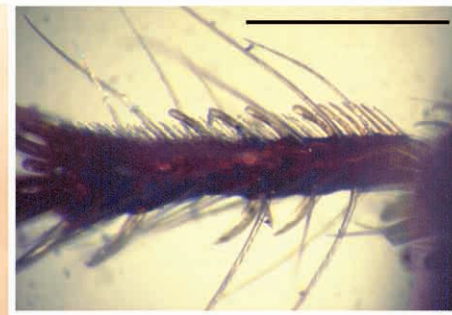

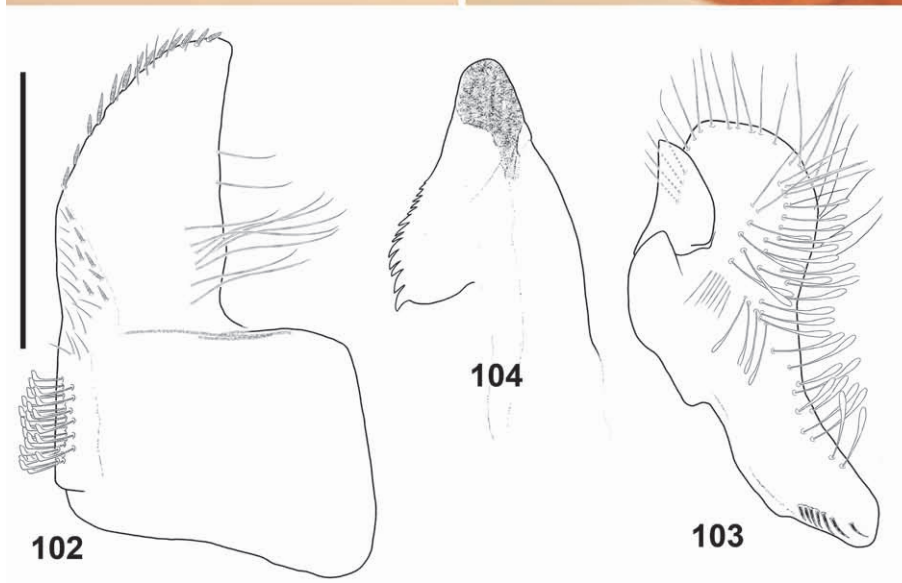

Figs 99-101: *Mesa incisa* ♀: **(99)** habitus; **(100)** basal hindtarsomerus; **(101)** epipygium. **Figs 102-104**: *Mesa incisa* ♂: **(102)** gonosquama; **(103)** volsella: (**104)** aedeagus; (99: scale bar: 5 mm; 101: scale bar: 1 mm; 100, 102-104: scale bar: 0,5 mm).

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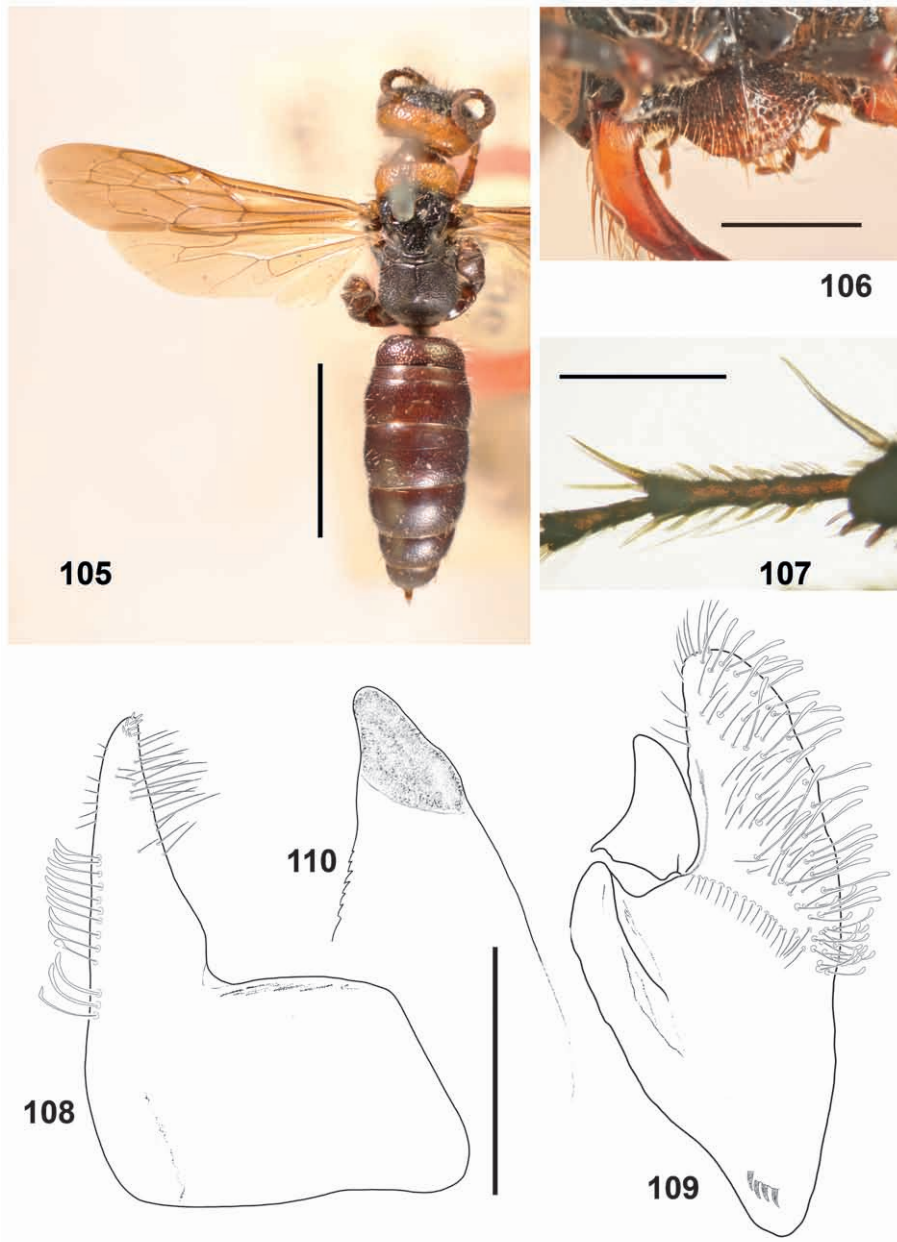

Figs 105-107: *Mesa adelogamia* ♀: **(105)** habitus; **(106)** clypeus, frontal aspect; **(107)** basal hindtarsomerus. **Figs 108-110**: *Mesa adelogamia* ♂: **(108)** gonosquama; **(109)** volsella: **110** aedeagus; (105: scale bar: 5 mm; 107: scale bar: 1 mm; 106, 108-110: scale bar: 0,5 mm).

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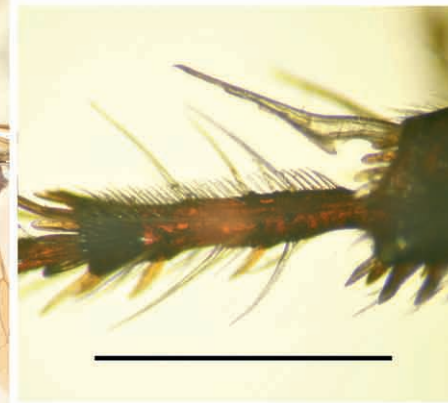

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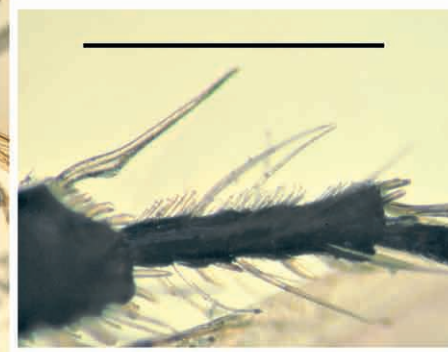

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Figs 111-112: *Mesa hova* ♀:**(111)** habitus; **(112)** basal hindtarsomerus. **Figs 113-114**: *Mesa innotata* ♀: **(113)** general aspect; **(114)** basal hindtarsomerus; (111, 113: scale bar: 5 mm; 112, 114: scale bar: 1 mm).

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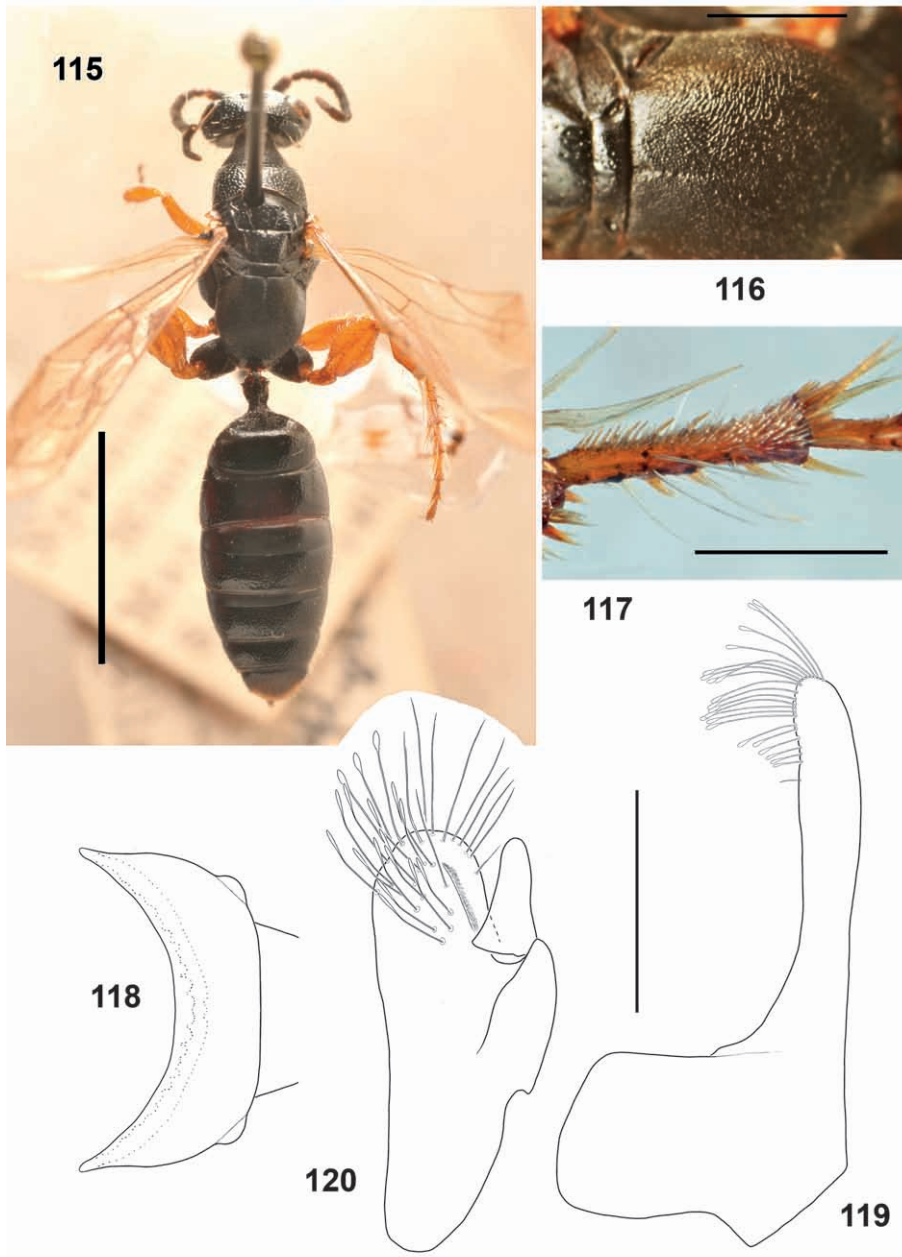

Figs 115-116: *Mesa erythropoda* ♀: **(115)** habitus; **(116)** propodeum, dorsal aspect; **(117)** basal hindtarsomerus; *Mesa erythropoda* ♂: **(118)** pronotum, dorsal aspect; **(119)** gonosquama; **(120)** volsella; (115: scale bar: 5 mm; 116, 117, 118: scale bar: 1 mm; 119, 120: scale bar: 0.5 mm).

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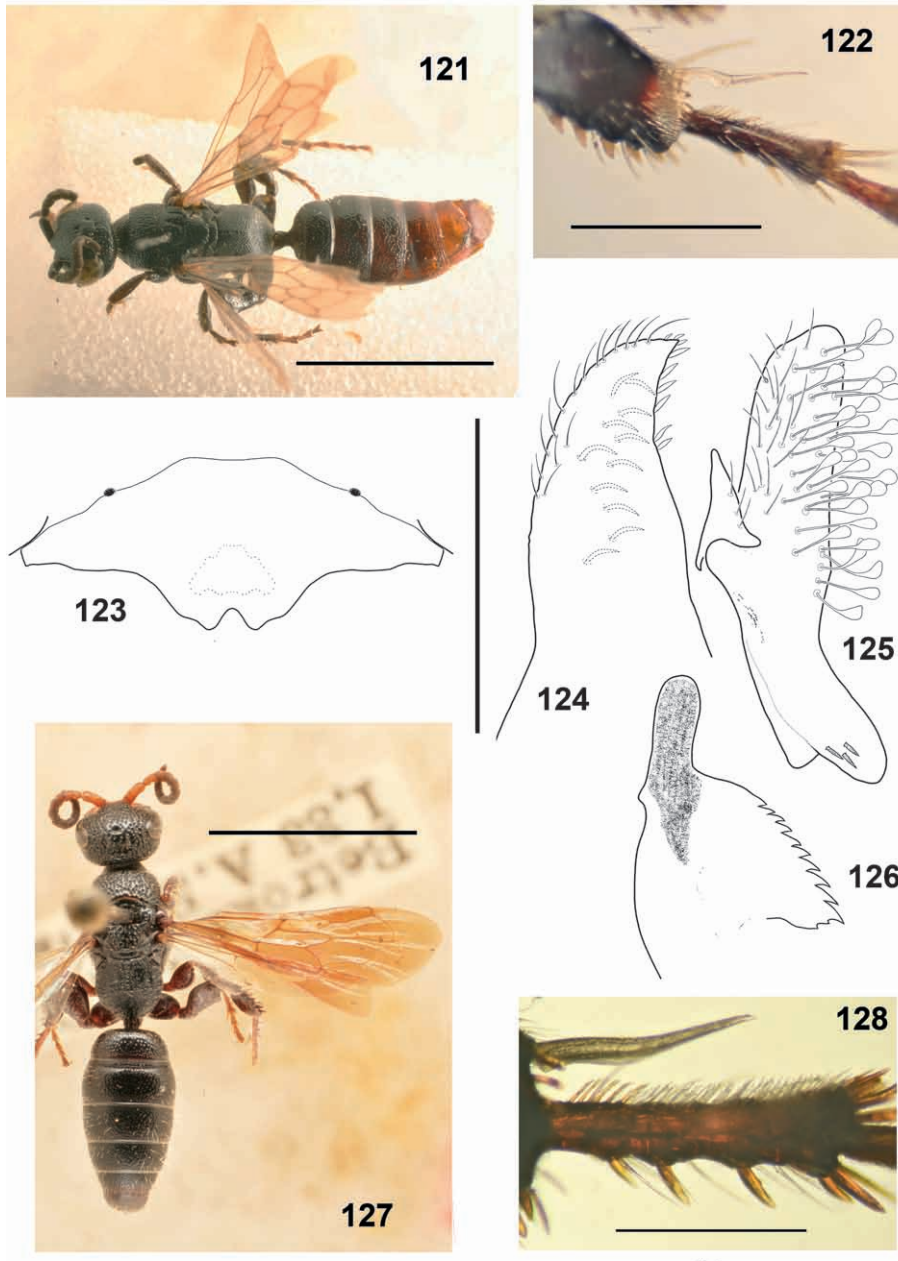

Figs 121-122: *Mesa asmarensis* ♀:**(121)** habitus; **(122)** basal hindtarsomerus. *Mesa asmarensis* ♂: **(123)** clypeus, frontal aspect; **(124)** gonosquama, tip; **(125)** volsella; **(126)** aedeagus. **Figs 127-128**: *Mesa saussurei* ♀: **(127)** general aspect; **(128)** basal hindtarsomerus; (121, 127: scale bar: 5 mm; 116, 122, 123, 128: scale bar: 1 mm; 124, 125, 126: scale bar: 0.5 mm).

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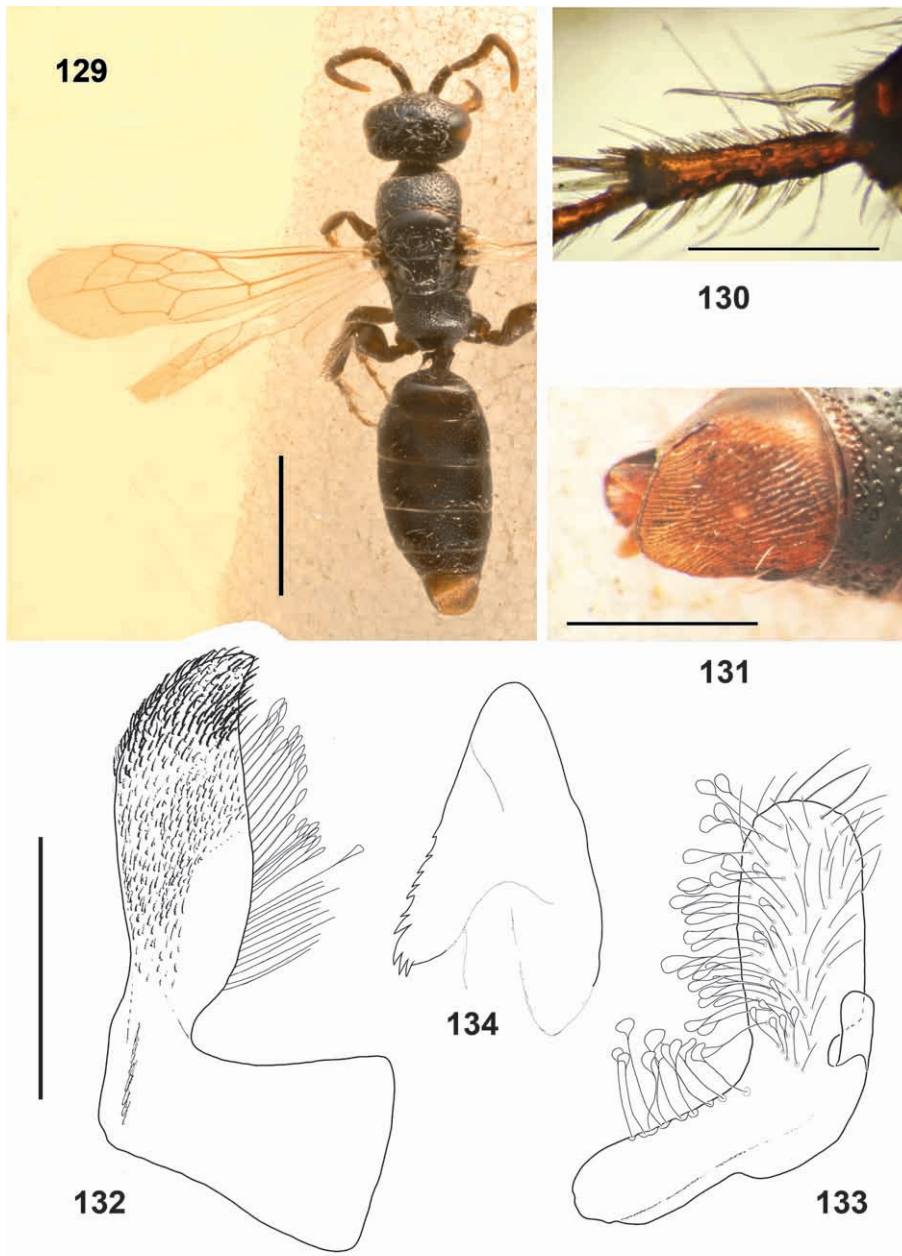

Figs 129-131: *Mesa pyxidata* ♀:**(129)** habitus; **(130)** basal hindtarsomerus; **(131)** pygidium. *Mesa ametalla* ♂: **(132)** gonosquama; **(133)** volsella; **(134)** aedeagus. (129: scale bar: 2.5 mm; 131: scale bar: 1 mm; 130,132, 133, 134: scale bar: 0.5 mm).

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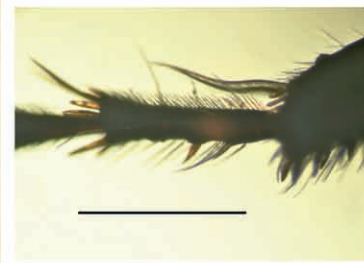

Figs 135-136: *Mesa apicipennis* ♀: **(135)** habitus, lateral aspect; **(136)** forewing. **Figs 137-139**: *Mesa coeruleipennis* ♀:**(137)** habitus **(138)** propodeum; **(139)** basal hindtarsomerus; (135, 136, 137: scale bar: 5 mm; 138, 139: scale bar: 1 mm).

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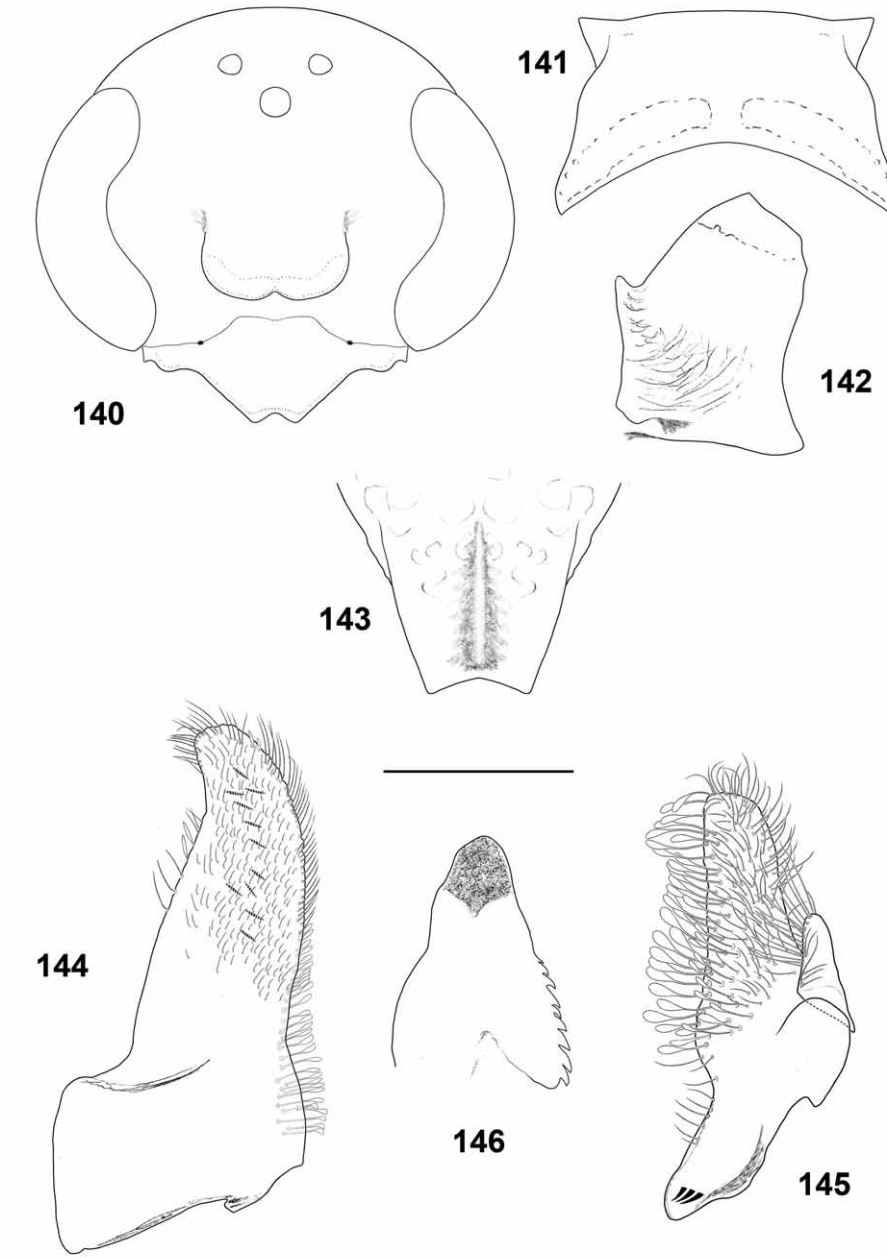

Figs 140-146: *Mesa coeruleipennis* ♂: **(140)** head, frontal aspect; **(141)** pronotum, dorsal aspect; **(142)** pronotum, lateral aspect; **(143)** epipygium, dorsal aspect; **(144)** gonosquama; **(145)** volsella; **(146)** aedeagus; (140, 141, 142: scale bar: 1 mm; 143, 144, 145, 146: scale bar: 0.5 mm).

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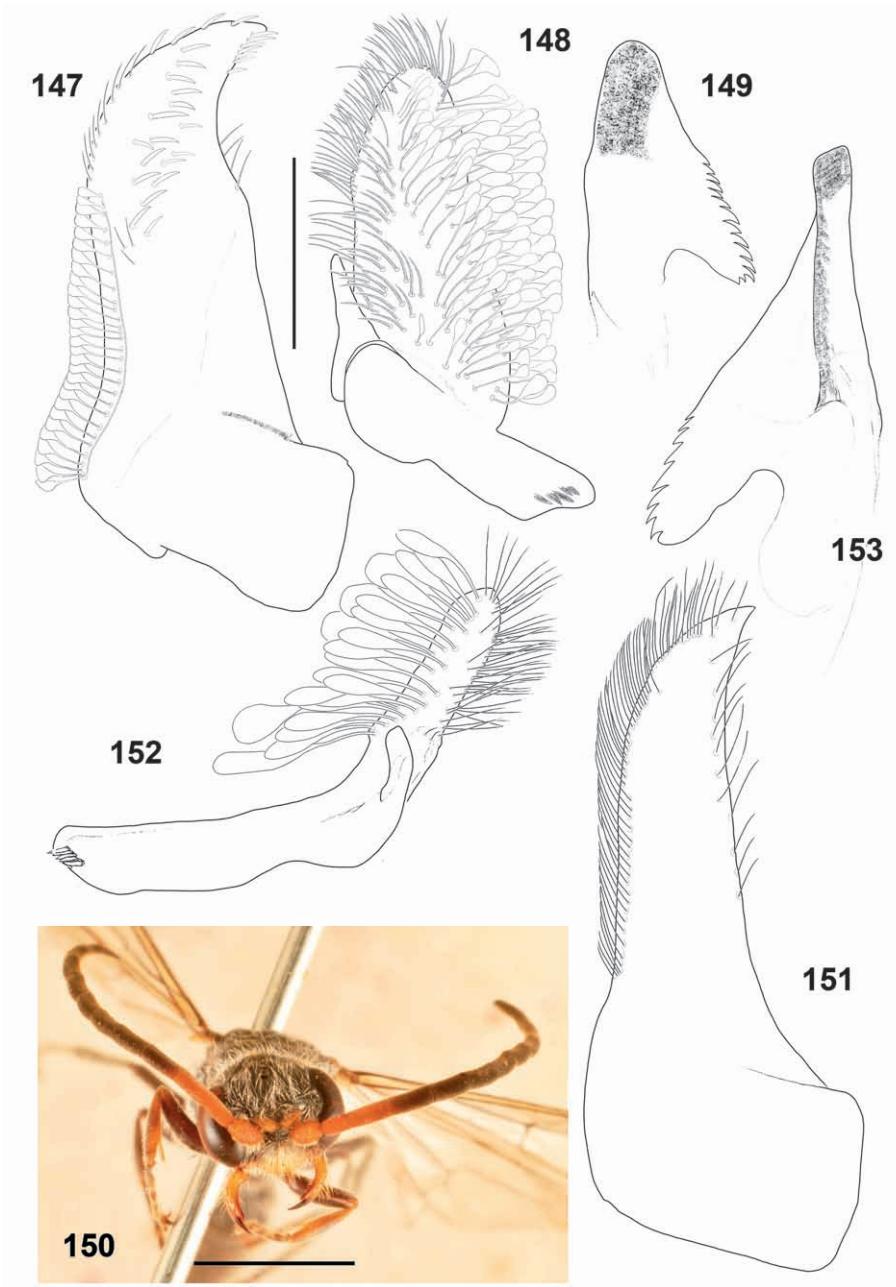

Figs 147-149: *Mesa nyanzae* ♂: **(147)** gonosquama; **(148)** volsella; **(149)** aedeagus. **Figs 150-153**: *Mesa diversicornis* ♂: **(150)** head and antennae, frontal aspect; **(151)** gonosquama; **(152)** volsella; **(153)** aedeagus; (150: scale bar: 2.5 mm; 147-149, 151-153: scale bar: 0.5 mm).

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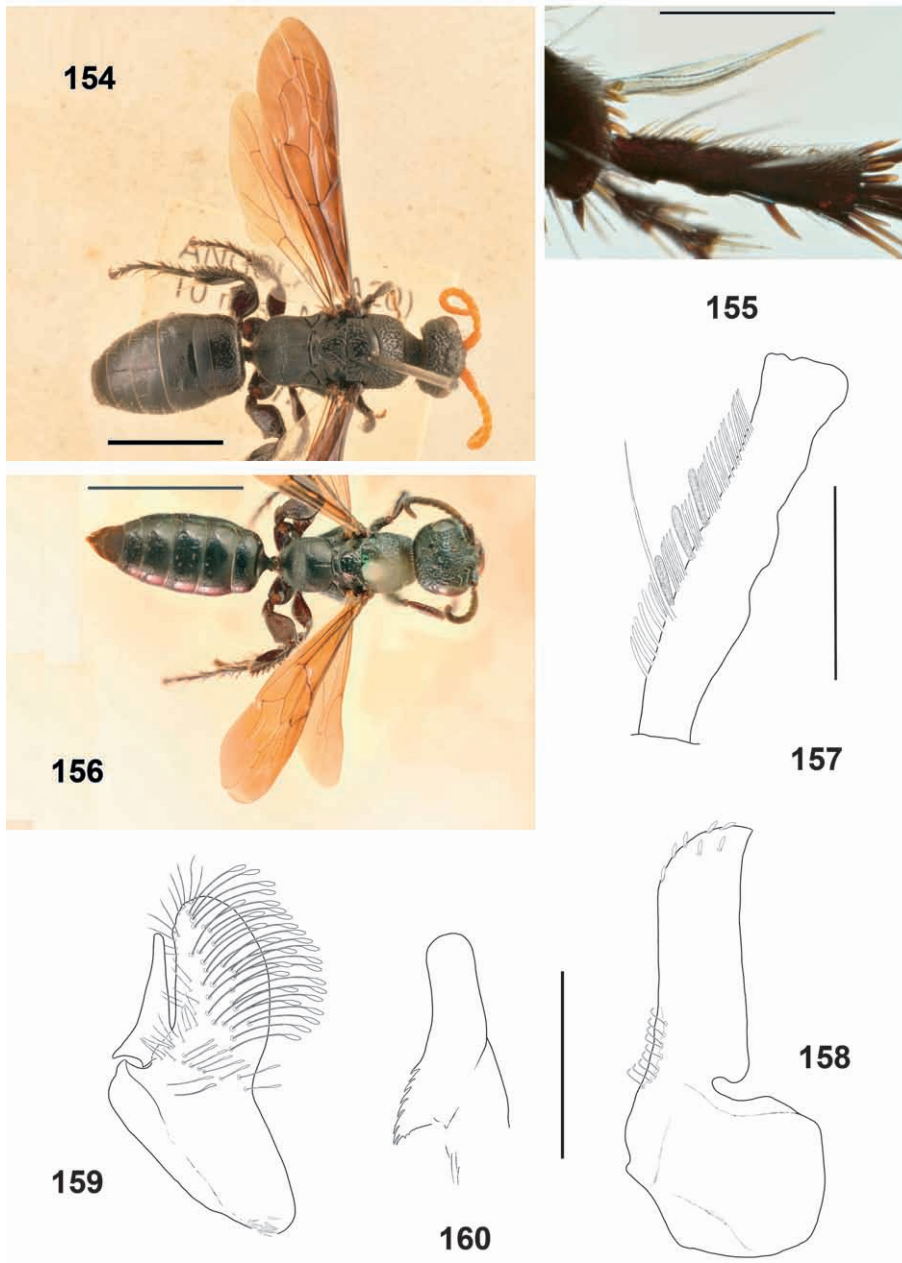

Figs 154-155: *Mesa angolensis* ♀:**(154)** habitus; **(155)** basal hindtarsomerus. **Figs 156-157**: *Mesa herrero* ♀:**(156)** habitus; **(157)** basal hindtarsomerus. **Figs 158-160**: *Mesa herrero* ♂: **(158)** gonosquama; **(159)** volsella; **(160)** aedeagus; (154, 156: scale bar: 5 mm; 155: scale bar: 1 mm; 157-160: scale bar: 0.5 mm).

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Figs 161: *Mesa madecassa* ♀: habitus, laterodorsal aspect. **Figs 162** =*Mesa marovatana* ♀: habitus, laterodorsal aspect. **Figs 163**: *Mesa tandrona* ♀: habitus. (161-163: scale bar: 5 mm).

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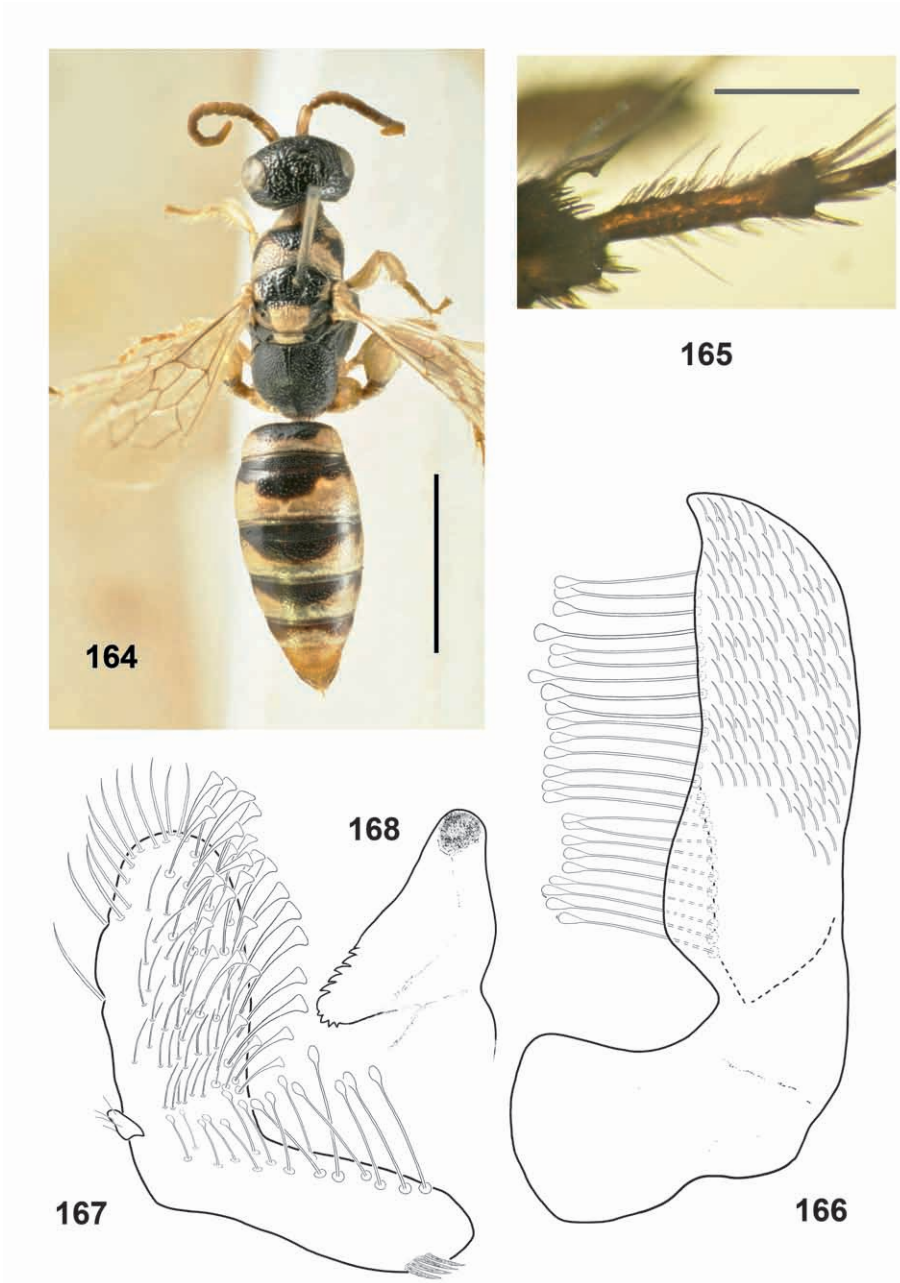

Figs 164-165: *Mesa picta* ♀: habitus. **Figs 166-168**: *Mesa picta* ♂: **(166)** gonosquama; **(167)** volsella; **(168)** aedeagus; (164: scale bar: 2.5 mm; 165-168: scale bar: 0.5 mm).

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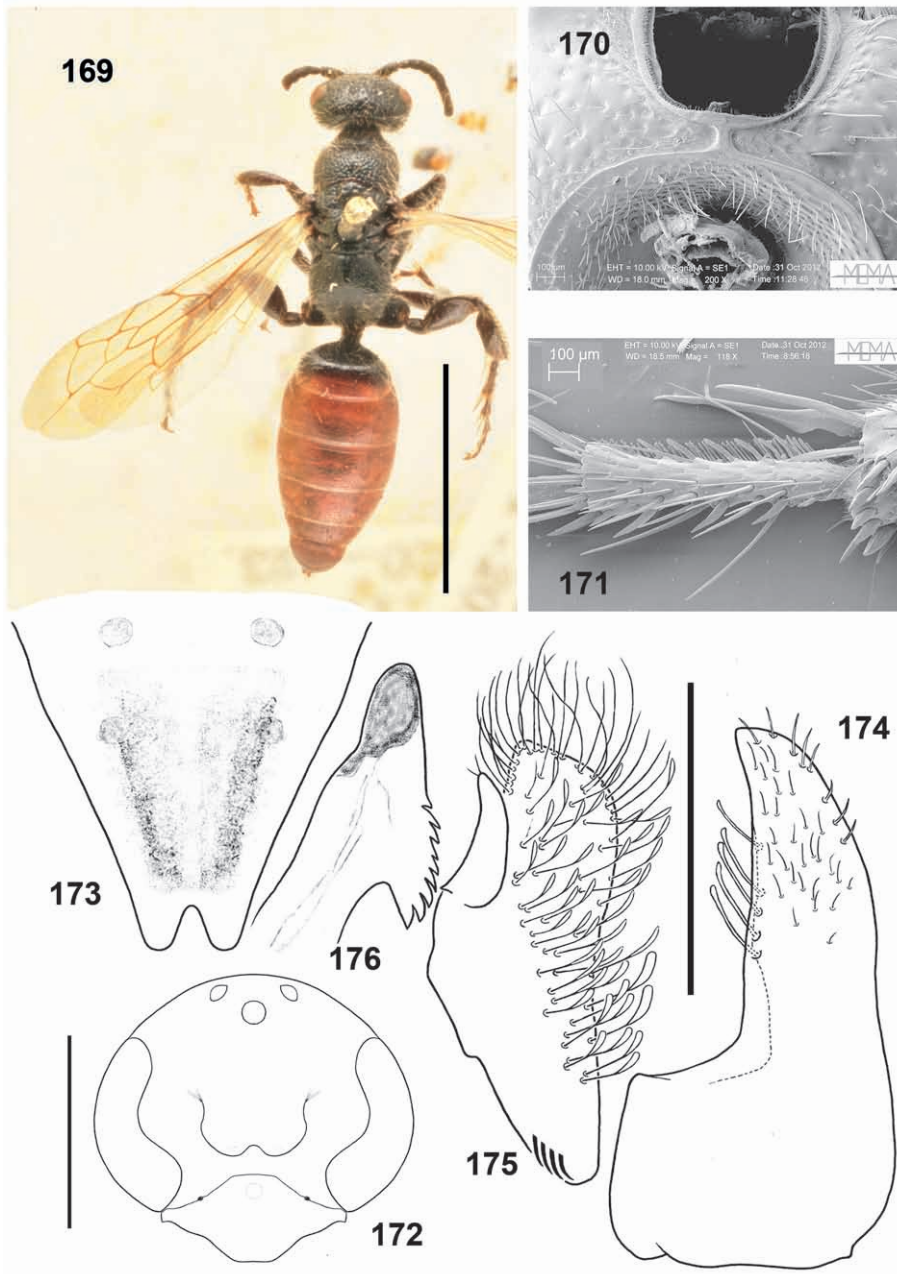

Figs 169-176: *Mesa campsa* ♀: **(169)** habitus; **(170)** head, ventral aspect; **(171)** basal hindtarsomerus. *Mesa campsa* ♂: **(172)** head, frontal spect; **(173)** epipygium; **(174)** gonosquama; **(175)** volsella; **(176)** aedeagus; (169: scale bar: 5 mm; 172: scale bar: 1 mm; 173-176: scale bar: 0.5 mm).

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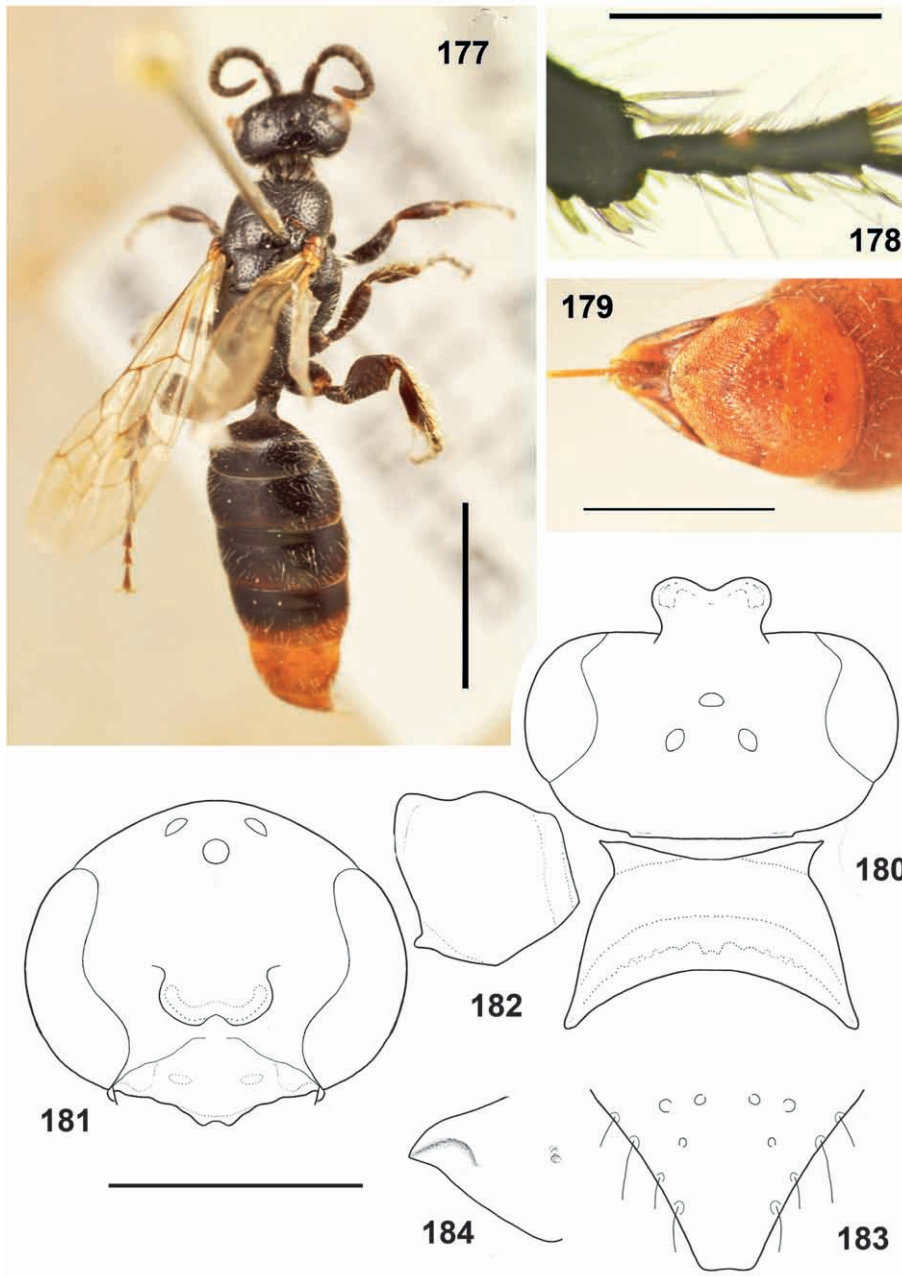

Figs 177-179: *Mesa dioica* ♀: **(177)** habitus; **(178)** basal hindtarsomerus; **(179)** epipygium. **Figs 180-184**: *Mesa dioica* ♂: **(180)** head & pronotum, dorsal aspect; **(181)** head, frontal aspect; **(182)** pronotum, lateral aspect; **(183)** epipygium, dorsal aspect; **(184)** last metamerus, lateral aspect; (177: scale bar: 2.5 mm; 178, 179, 180, 181, 182: scale bar: 1 mm; 183-184: scale bar: 0.5 mm).

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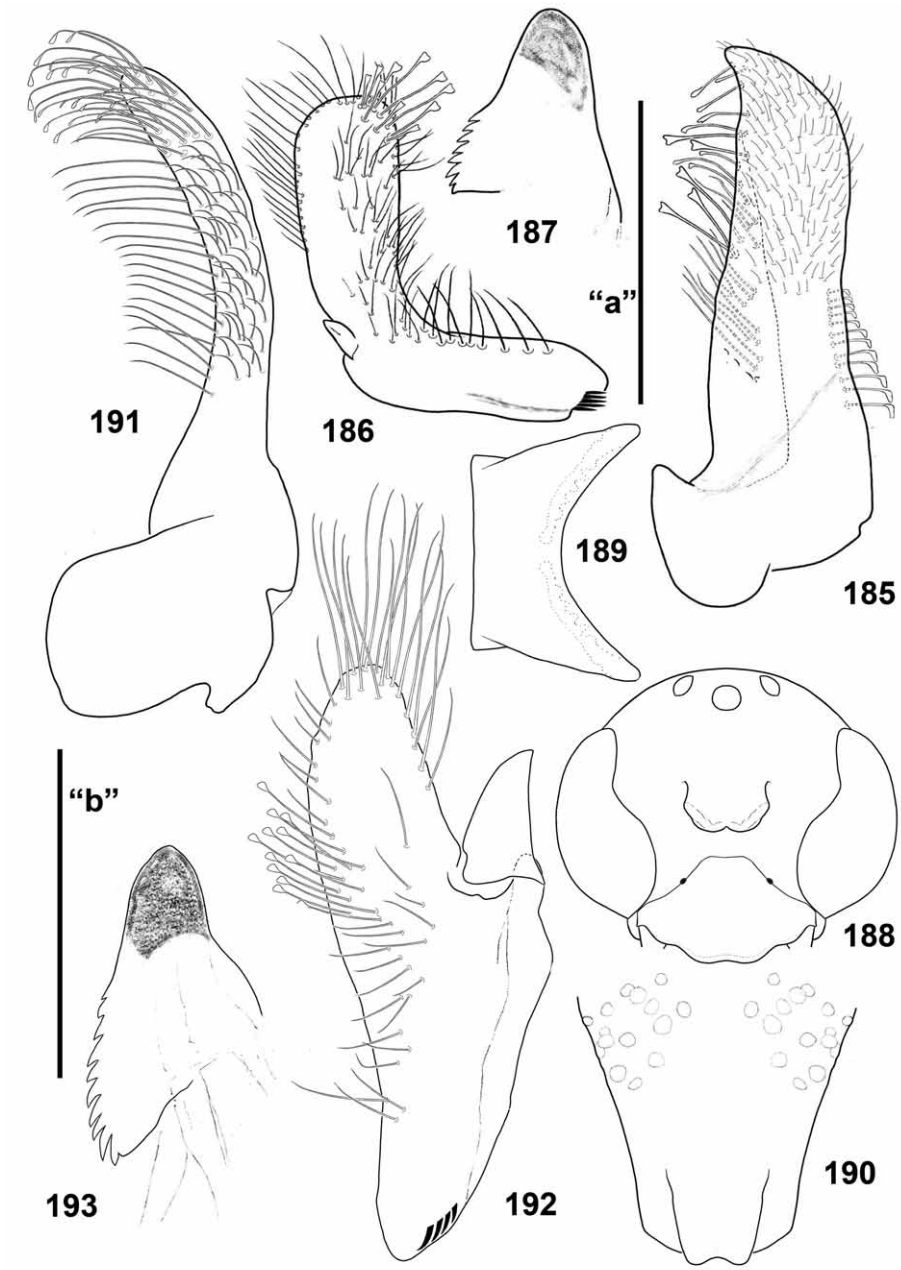

Figs 185-187: *Mesa dioica* ♂: **(185)** gonosquama; **(186)**volsella; **(187)** aedeagus. **Figs 188-193**: *Mesa eriosoma* ♂: **(188)** head, frontal aspect; **(189)** pronotum, dorsal aspect; **(190)** epipygium, dorsal aspect; **(191)** gonosquama; **(192)** volsella; **(193)** aedeagus; (185-187: scale bar "a": 0.5 mm; 188-190: scale bar "b": 1 mm; 191-193: scale bar "b": 0.5 mm).

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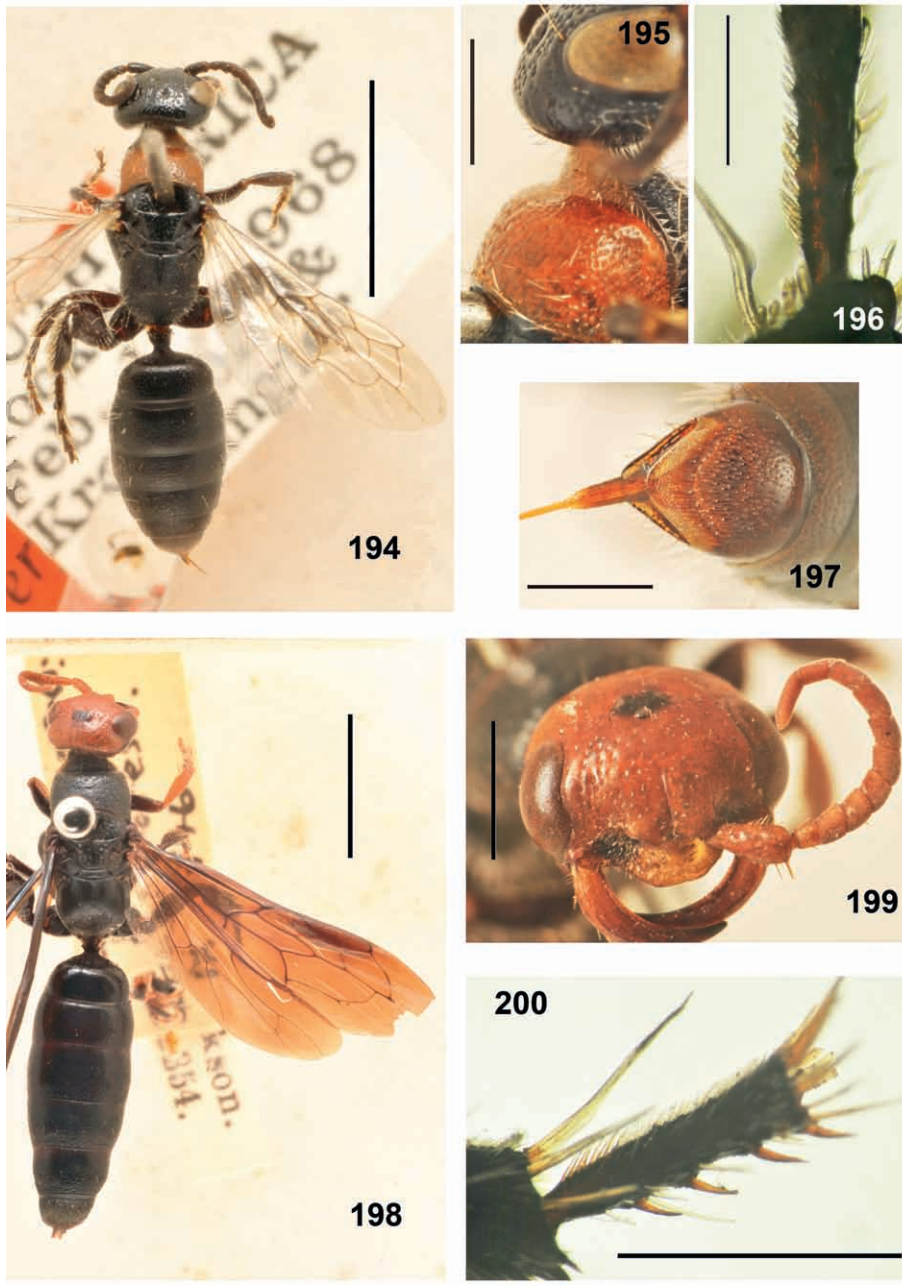

Figs 194-197: *Mesa erythrodira* ♀: **(194)** habitus; **(195)** pronotum, lateral aspect; **(196)** basal hindtarsomerus; **(197)** epipygium. **Figs 198-200**: *Mesa hyloides* ♀: **(198)** habitus; **(199)** head, frontal aspect; **(200)** basal hind tarsomerus; (194, 198: scale bar: 5 mm; 199, 200: scale bar: 2 mm; 195, 197: scale bar: 1mm; 196: scale bar: 0.5mm).

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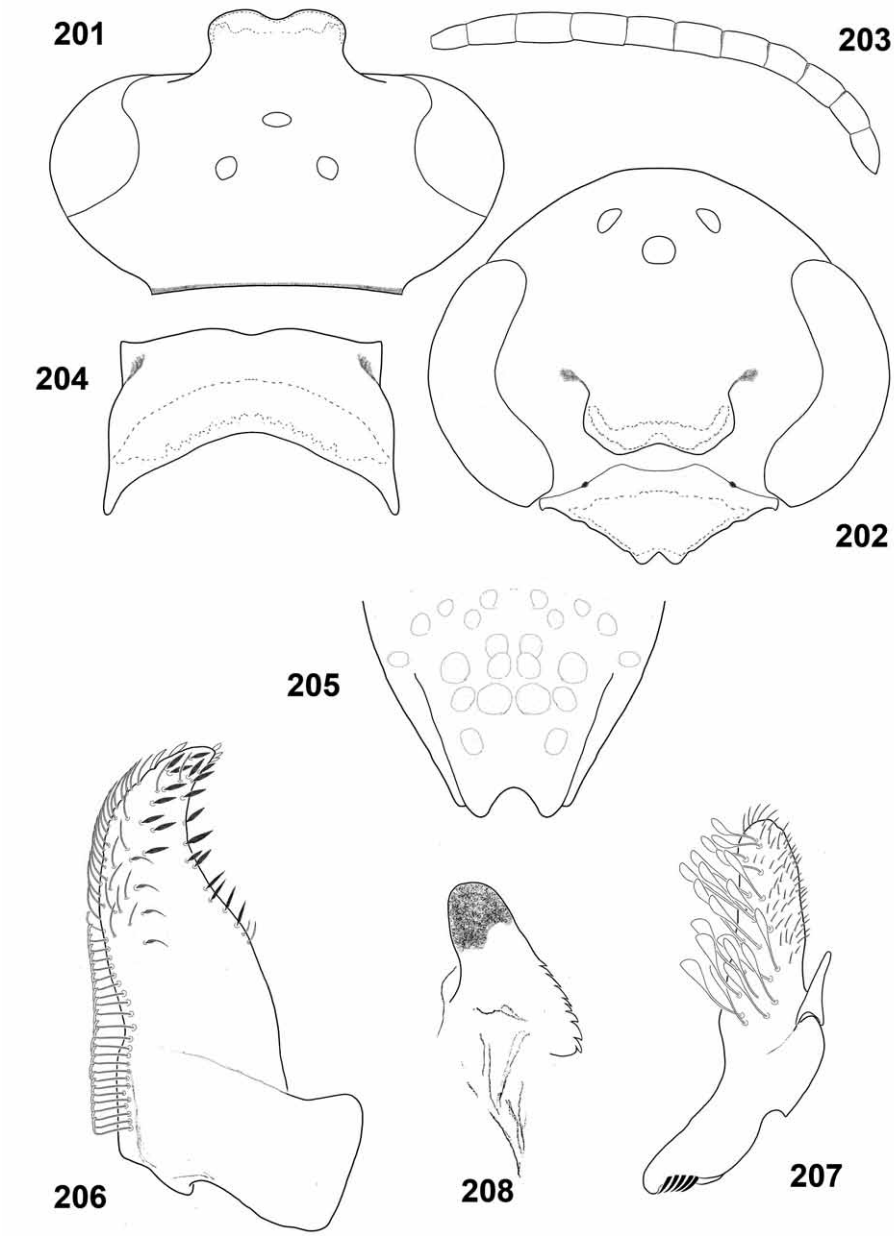

Figs 201-208: *Mesa maliana* ♂: **(201)** head, dorsal aspect; **(202)** head, frontal aspect; **(203)** flagellum; **(204)** pronotum, dorsal aspect; **(205)** epipygium; **(206)** gonoaquama; **(207)** volsella; **(208)** aedeagus; (203: scale bar: 2 mm; 201, 202, 204: scale bar: 1mm; 205-208: scale bar: 0.5 mm).

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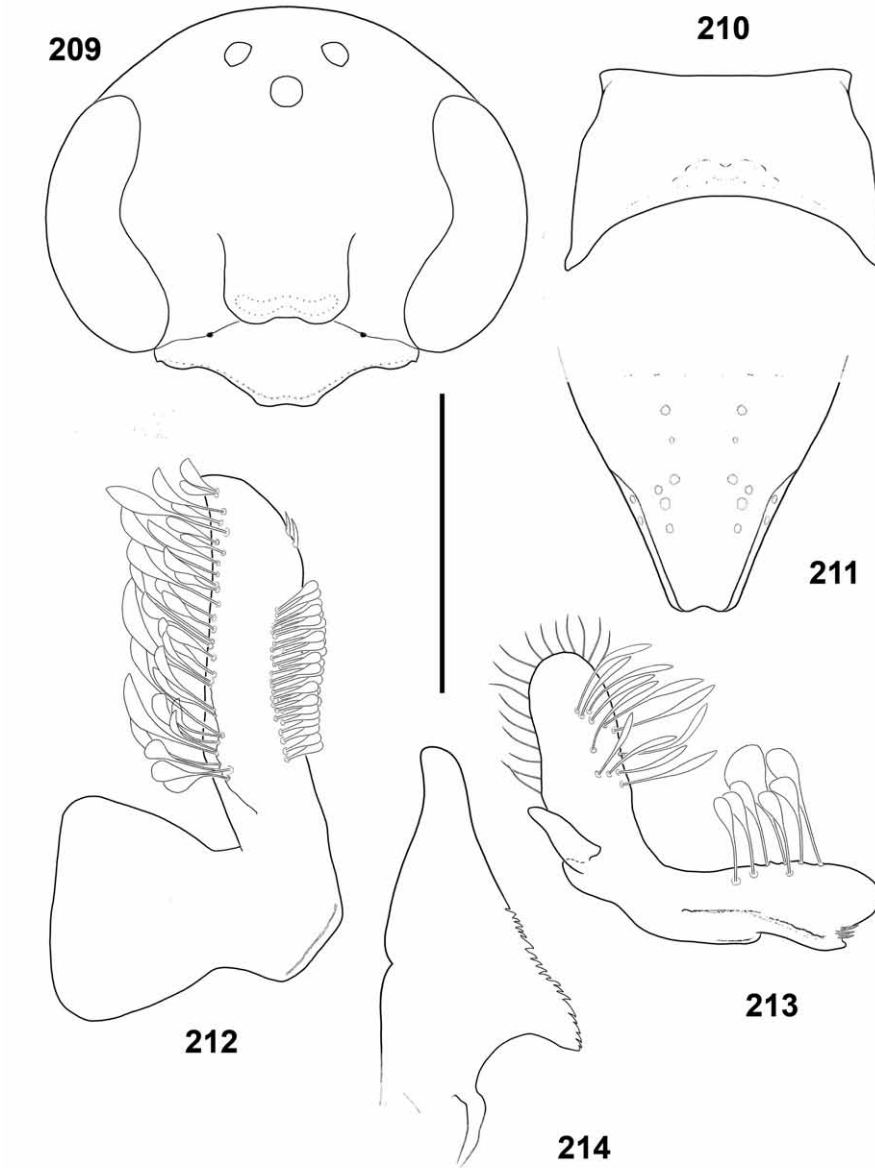

Figs 209-214: *Mesa nama* ♂: **(209)** head, frontal aspect; **(210)** pronotum, dorsal aspect; **(211)** epipygium, dorsal aspect; **(212)** gonosquama;**(213)**volsella; **(214)**aedeagus; (209, 210: scale bar: 1mm; 211-214: scale bar: 0.5mm).

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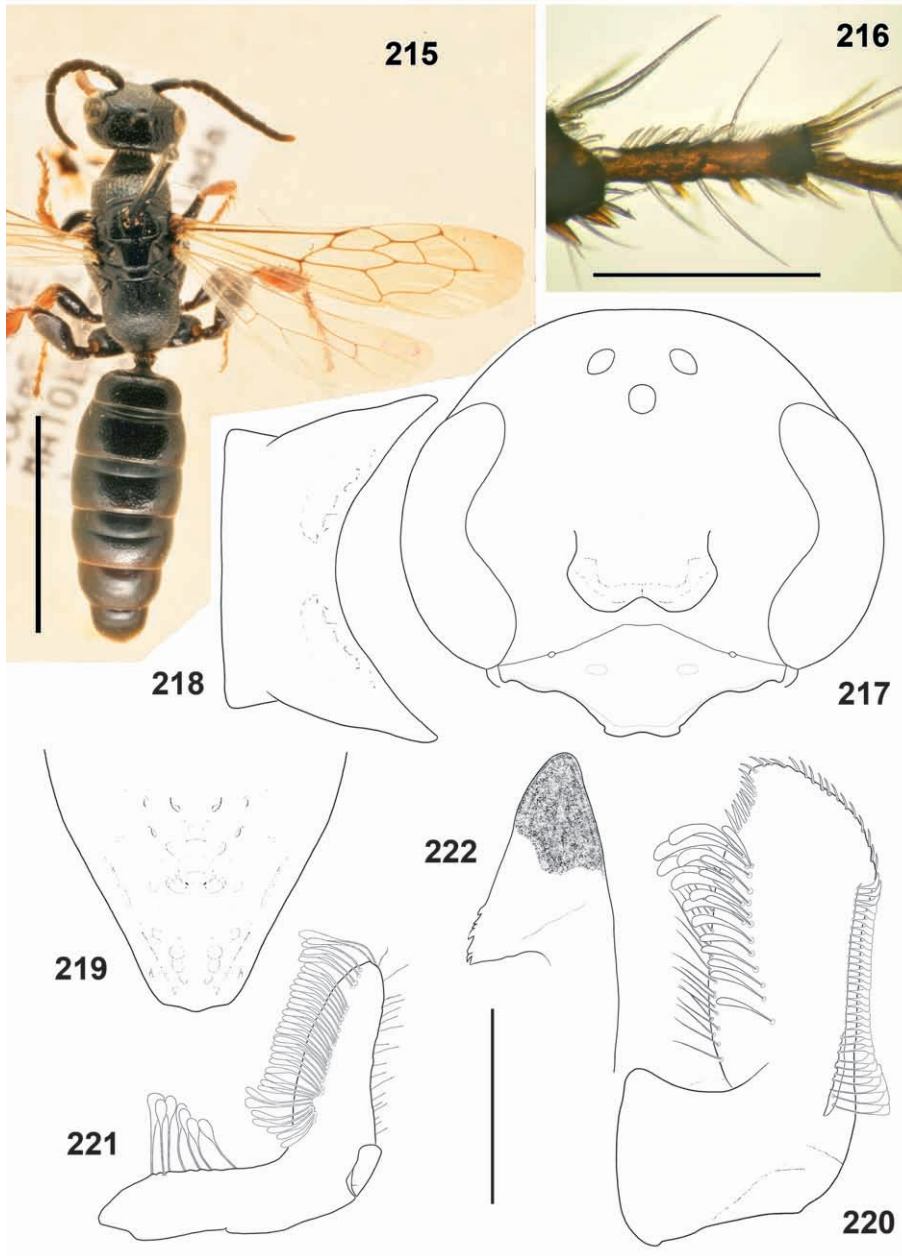

Figs 215-216: *Mesa oligotyla* ♀: **(215)** habitus; **(216)** basal hindtarsomerus. **Figs 217-222**: *Mesa oligotyla* ♂: **(217)**:head, frontal aspect; **(218)** pronotum, dorsal aspect; **(219)** epipygium; **(220)** gonosquama; **(221)** volsella; **(222)** aedeagus; (215: scale bar: 5mm; 216-218: scale bar: 1mm; 219-222: scale bar: 0.5mm).

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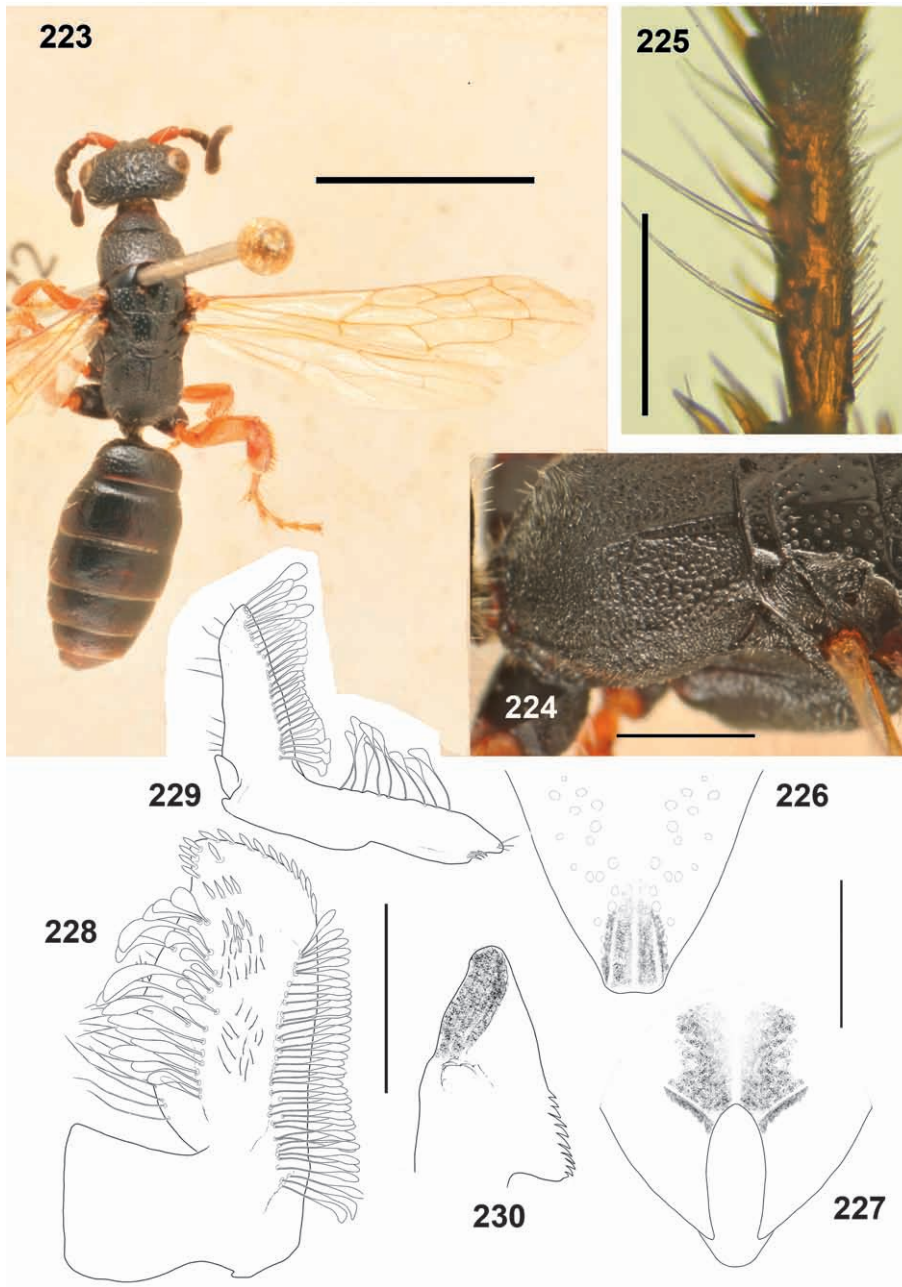

Figs 223-225: *Mesa pentatyla* ♀: **(223)** habitus; **(224)** propodeum, dorsal aspect; **(225)** basal hindtarsomerus; **Figs 226-230**: *Mesa pentatyla* ♂: **(226)** epipygium, dorsal aspect; **(227)** 7th tergum, back aspect; **(228)** gonosquama; **(229)** volsella; **(230)** aedeagus; (223: scale bar: 5mm; 224: scale bar: 1mm; 225: scale bar: 0.5mm; 226-227: scale bar "a": 0.5mm; 228-230: scale bar "b": 0.5mm).

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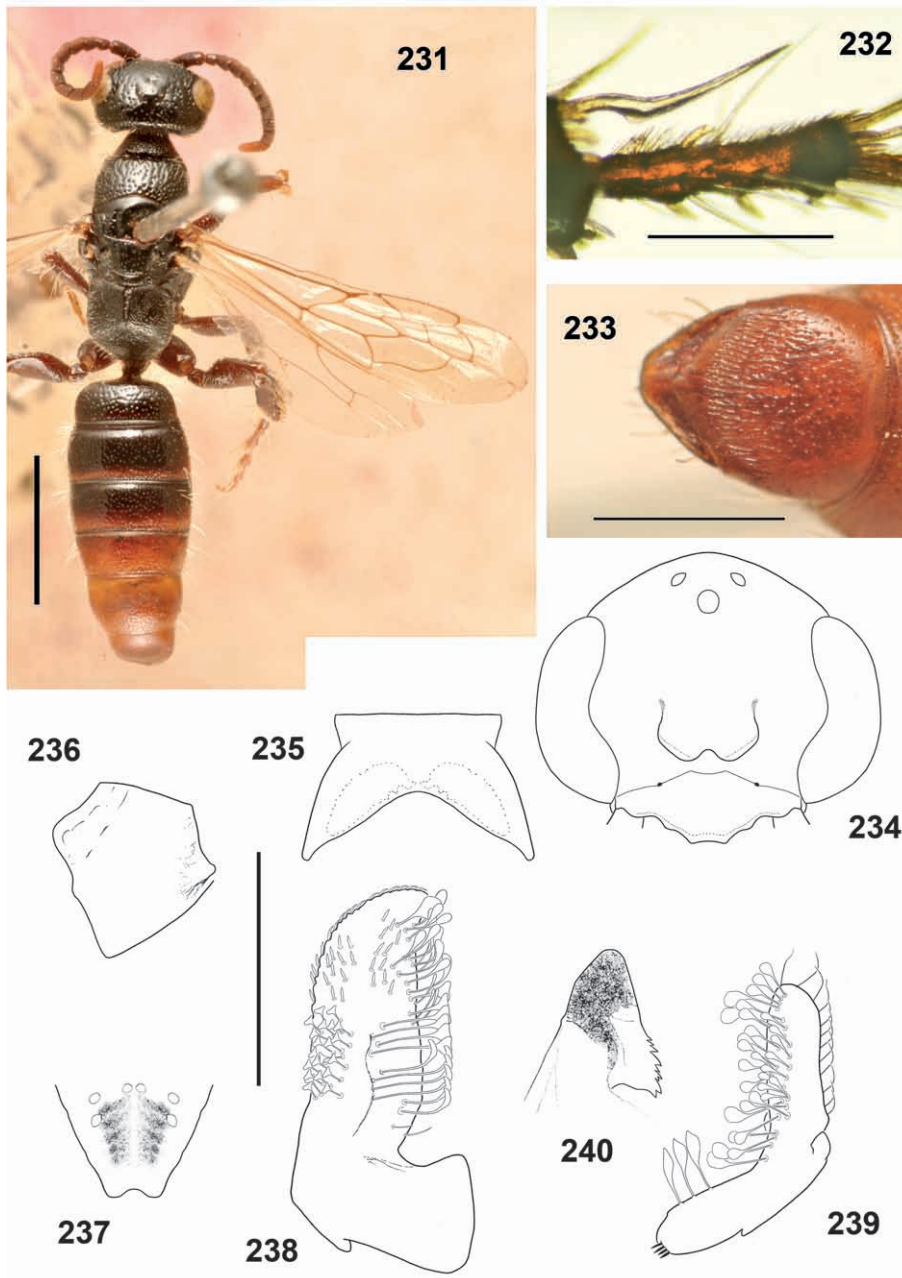

Figs 231-233: *Mesa pyrrhoprocta* ♀: **(231)** habitus; **(232)**basal hindtarsomerus; **(233)** epipygium. **Figs 234-240**: *Mesa pyrrhoprocta* ♂: **(234)** head, frontal aspect; **(235)** pronotum, dorsal aspect; **(236)** pronotum, lateral aspect; **(237)** epipygium, dorsal aspect; **(238)** gonosquama; **(239)** volsella; **(240)** aedeagus; (231: scale bar: 2.5mm; 232-233: scale bar: 1mm; 234-236: scale bar: 1 mm; 237-240: scale bar : 0.5mm).

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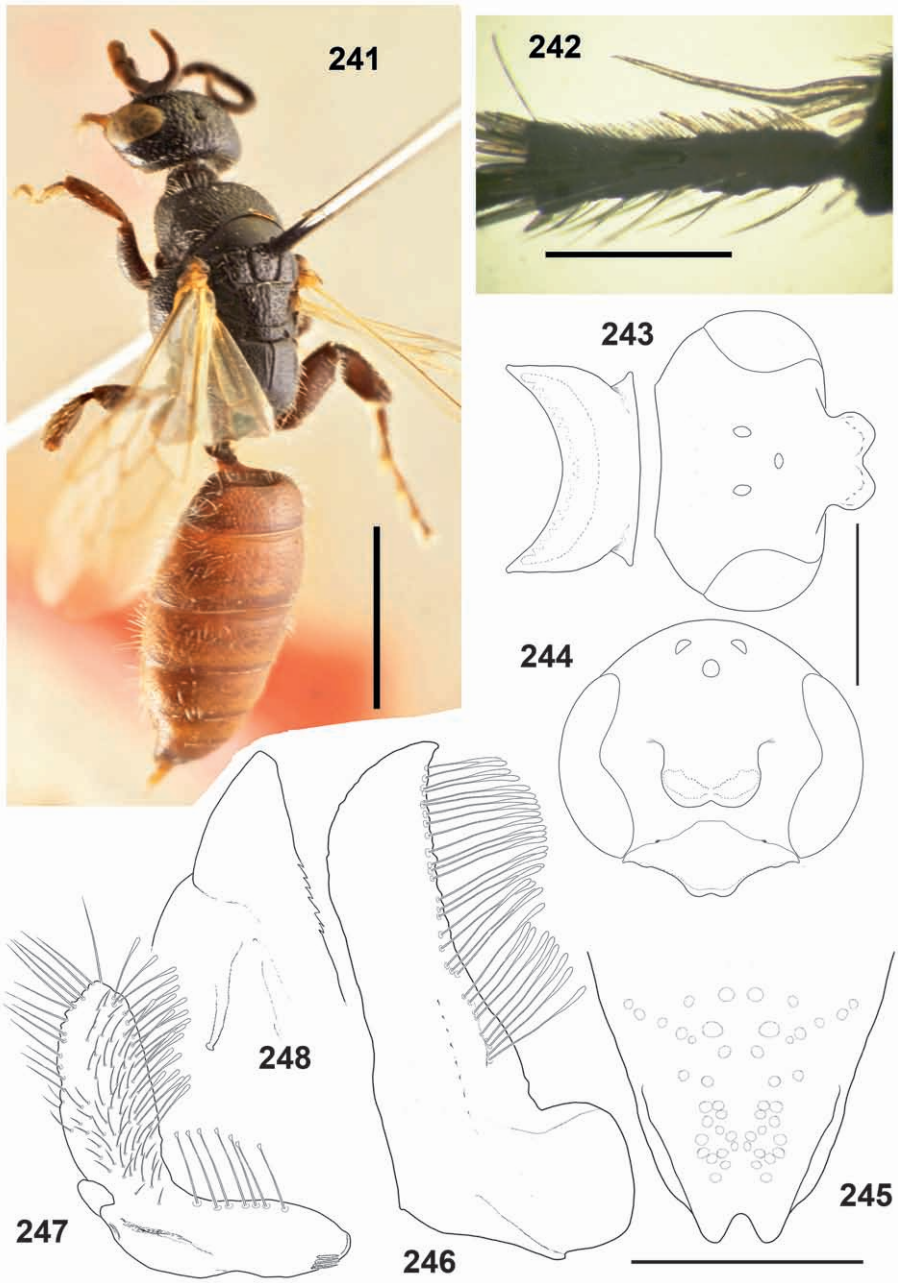

Figs 241-242: *Mesa sahariana* ♀: **(241)** habitus; **(242)** basal hindtarsomerus; **Figs 243-248**: *Mesa sahariana* ♂: **(243)** head and pronotum, dorsal aspect; **(244)** head, frontal aspect; **(245)** epipygium, dorsal aspect; **(246)** gonosquama;**(247)** volsella; **(248)** aedeagus; (241: scale bar: 2.5mm; 242: scale bar: 0.5 mm; 243-244: scale bar: 1mm; 245-248: scale bar : 0.5mm).

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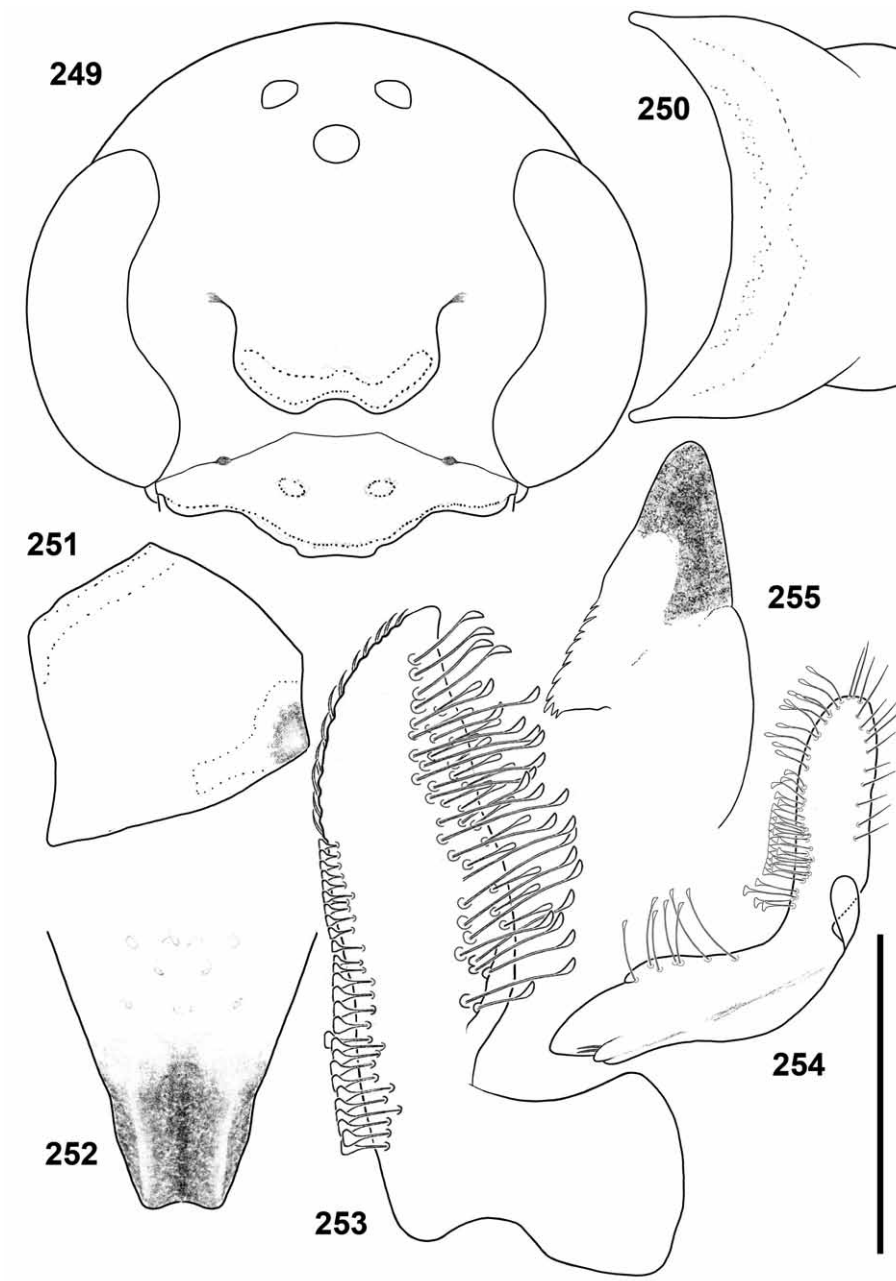

Figs 249-255: *Mesa silvana* ♂: **(249)** head, frontal aspect; **(250)** pronotum, dorsal aspect; **(251)** pronotum, lateral aspect; **(252)** epipygium, dorsal aspect; **(253)** gonosquama; **(254)** volsella; **(255)** aedeagus; (249-251: scale bar: 1 mm; 252-255: scale bar : 0.5mm).

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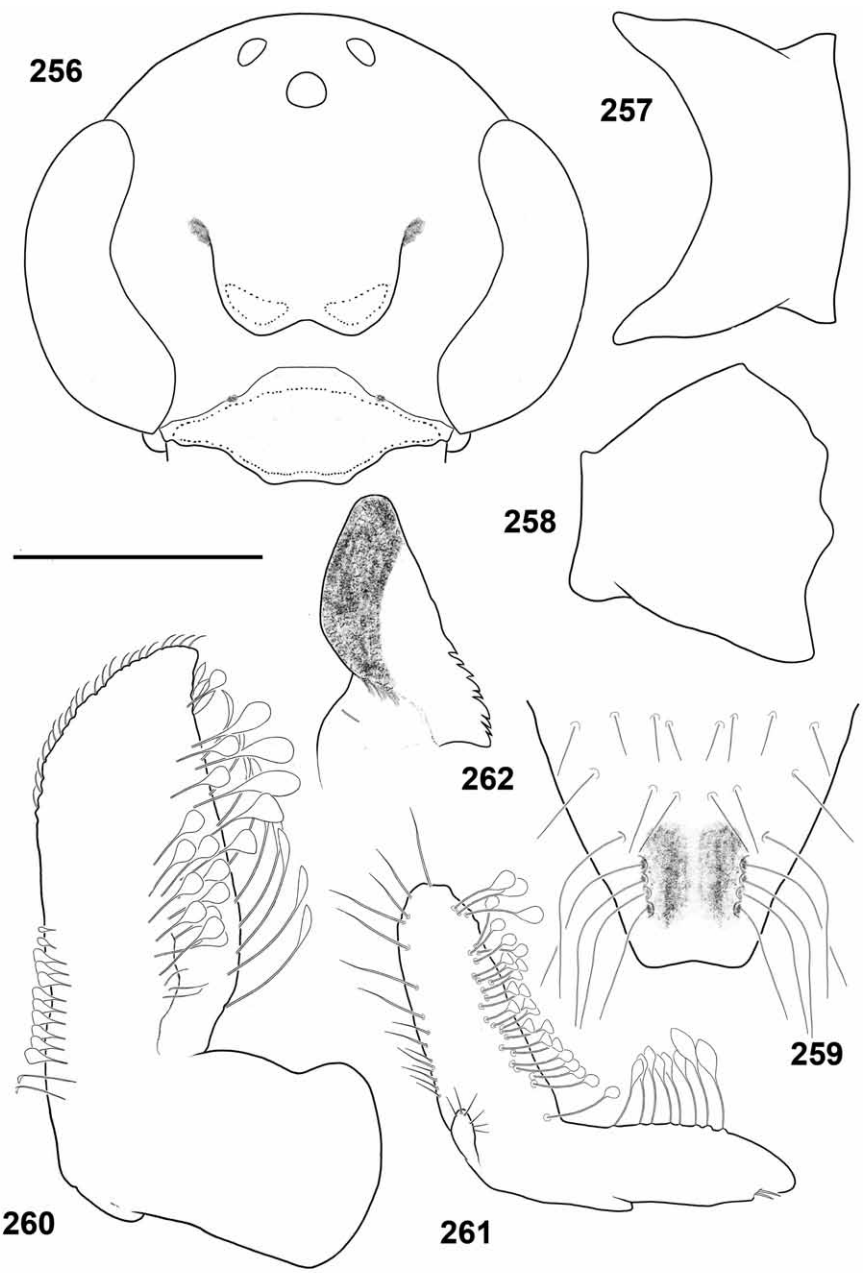

Figs 256-262: *Mesa tylocera* ♂: **(256)** head, frontal aspect;**(257)** pronotum, dorsal aspect; **(258)** pronotum, lateral aspect; **(259)** epipygium dorsal aspect; **(260)** gonosquama; **(261)** volsella; **(262)** aedeagus; (256-258: scale bar: 1 mm; 259-262: scale bar : 0.5mm).

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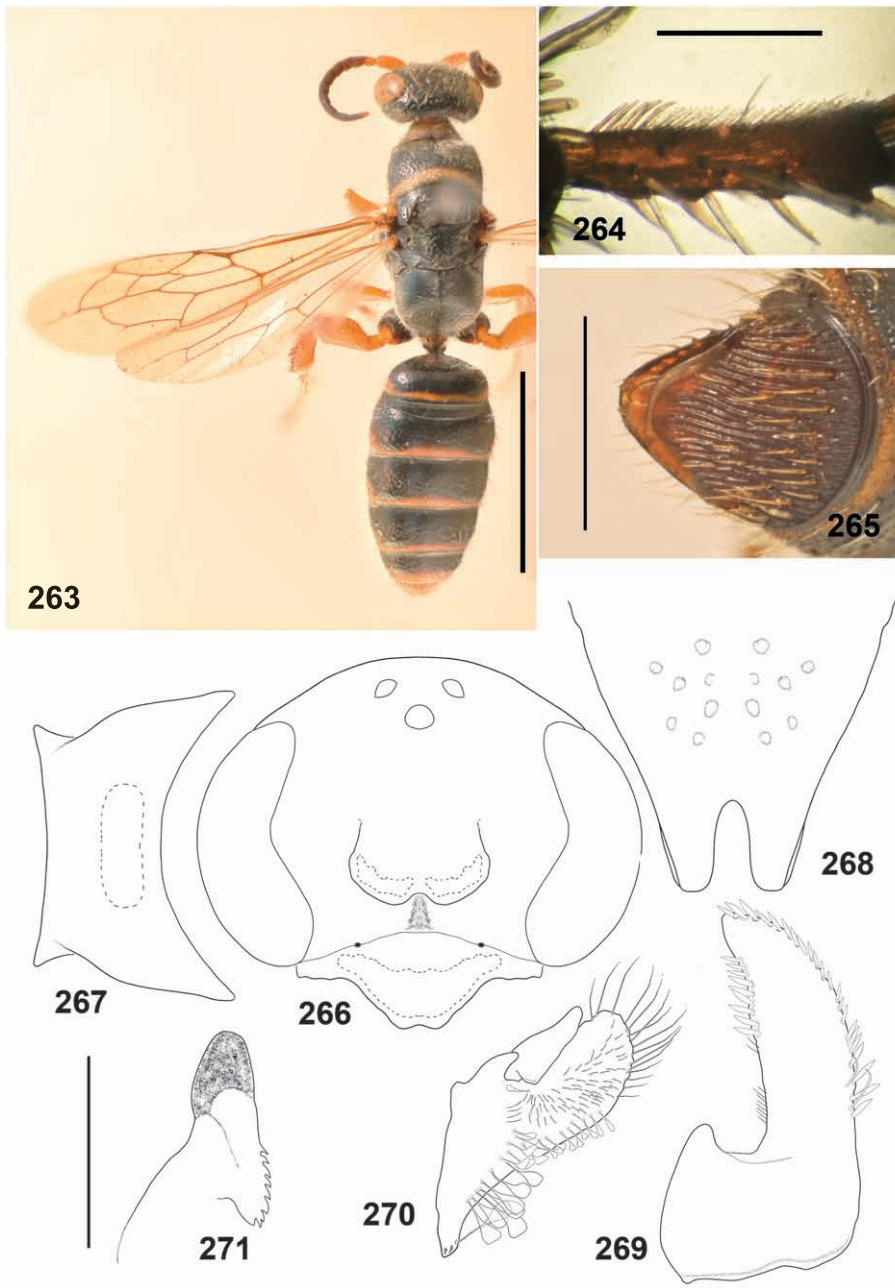

Figs 263-265: *Mesa xanthogramma* ♀: **(263)** habitus; **(264)** basal hind tarsomerus; **(265)** epipygium. **Figs 266-271**: *Mesa xanthogramma* ♂: **(266)** head, frontal aspect; **(267)** pronotum, dorsal aspect; **(268)** epipygium, dorsal aspect; **(269)** gonosquama; **(270)** volsella; **(271)** aedeagus; (263: scale bar: 5mm; 265-267: scale bar: 1mm; 264, 268-271: scale bar : 0.5mm).

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