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New distributional data, new species and two new genera of Aleocharinae from Tropical Africa [1] (Coleoptera, Staphylinidae)

With 67 figures

Roberto Pace [2]

[1] 276th "Contribution to the knowledge of Aleocharinae".
[2] Via Vittorio Veneto, 13, 37032 Monteforte d'Alpone (Verona), Italia. - pace.ent@tiscali.it
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Summary

Nine tribes (Pronomaeini, Pygostenini, Gyrophaenini, Diestotini, Falagriini, Athetini, Lomechusini, Thamiaraeini, Aleocharini), 15 genera (*Nopromaea*, *Typhloponemys*, *Brachida*, *Diestota*, *Falagria*, *Ischnopoda*, *Atheta*, *Brachycraspedusa*, *Catarractodes*, *Brachysipalia*, *Diplopleurus*, *Zyras*, *Paramyrmoecia*, *Spaniodmoinusa*, *Aleochara*) and 26 species are recognized in the material studied. Nineteen species, two genera, *Brachycraspedusa* n. gen. of the tribe Athetini and *Spaniodmoinusa* n. gen. of the tribe Thamiaraeini, are described as new to science: *Nopromaea nakuruensis* n. sp., *Nopromaea cornelli* n. sp., *Brachida burkinensis* n. sp., *Diestota doulaensis* n. sp., *Falagria bartolozzii* n. sp., *Ischnopoda riftensis* n. sp., *Atheta senecicola* n. sp., *Atheta willersi* n. sp., *Brachycraspedusa naivashaensis* n. sp., *Catarractodes cristatus* n. sp., *Brachysipalia melanica* n. sp., *Diplopleurus maculipennis* n. sp., *Diplopleurus intermedius* n. sp., *Zyras paraopticus* n. sp., *Zyras taitaorum* n. sp., *Zyras trinus* n. sp., *Zyras digorum* n. sp., *Zyras triumbonatus* n. sp., and *Spaniodmoinusa cornelli* n. sp. All new species and the new genera are illustrated and compared with similar described species or genera.

Keywords

Insecta, Coleoptera, Staphylinidae, Aleocharinae, taxonomy, new genera, new species, Kenya, Burkina Faso, Cameroon, Zambia.

Zusammenfassung

Im bearbeiteten Material aus dem tropischen Afrika werden 9 Tribus (Pronomaeini, Pygostenini, Gyrophaenini, Diestotini, Falagriini, Athetini, Lomechusini, Thamiaraeini, Aleocharini), 15 Gattungen (*Nopromaea*, *Typhloponemys*, *Brachida*, *Diestota*, *Falagria*, *Ischnopoda*, *Atheta*, *Brachycraspedusa*, *Catarractodes*, *Brachysipalia*, *Diplopleurus*, *Zyras*, *Paramyrmoecia*, *Spaniodmoinusa*, *Aleochara*) und 26 Arten determiniert. In zwei neuen Gattungen, *Brachycraspedusa* n. gen. der Tribus Athetini und *Spaniodmoinusa* n. gen. der Tribus Thamiaraeini werden 19 Arten neu beschrieben: *Nopromaea nakuruensis* n. sp., *Nopromaea cornelli* n. sp., *Brachida burkinensis* n. sp., *Diestota doulaensis* n. sp., *Falagria bartolozzii* n. sp., *Ischnopoda riftensis* n. sp., *Atheta senecicola* n. sp., *Atheta willersi* n. sp., *Brachycraspedusa naivashaensis* n. sp., *Catarractodes cristatus* n. sp., *Brachysipalia melanica* n. sp., *Diplopleurus maculipennis* n. sp., *Diplopleurus intermedius* n. sp., *Zyras paraopticus* n. sp., *Zyras taitaorum* n. sp., *Zyras trinus* n. sp., *Zyras digorum* n. sp., *Zyras triumbonatus* n. sp., und *Spaniodmoinusa cornelli* n. sp. Sämtliche neue Arten und Gattungen werden mit verwandten Arten oder Gattungen verglichen und sind illustriert.

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Introduction

In the family Staphylinidae, the subfamily Aleocharinae is its largest and taxonomically most complex lineage. Many species and numerous higher taxa remain to be described from throughout the world, especially in tropical regions. This is particularly the case in tropical Africa and with species of small size. The few Aleocharinae of small size that have been described, are often incomplete because of the omission of the examination of genital and mouth structures, useful in the recognition of tribes and genera as well as for establishing phylogenetic relationships, (Fauvel, 1898, 1899, 1900, 1907; Eichelbaum, 1913; Bernhauer, 1915a, 1915b, 1927a, 1927b, 1927c, 1927d, 1928, 1931, 1932, 1934a, 1934b, 1938; Cameron, 1930, 1932, 1938a, 1938b, 1950; Jeannel, R. & Paulian, 1945; Tottenham, 1957). More recent authors have described species with clear illustrations of habitus, aedeagus, spermatheca and other organs (Williams, 1979; Kistner, 1958, 1963, 1968; Jacobson & Kistner, 1975; Pace, 1984a, 1985, 1986, 1994, 1995, 1996, 1999, 2004, 2005, 2008). Therefore the recognition of the species described by these authors is much less difficult. I have been fortunate to examine type material of earlier authors who did not provide illustrations of aedeagus and spermatheca that were not regarded as significant at that time.

Material and Methods

The specimens examined were submitted to me for study by Dr. Luca Bartolozzi of the Natural History Museum of "La Specola", Florence University (Italy), by Dr. James F. Cornell of Charlotte, N.C., U.S.A., by Guillaume de Rougemont, London and Joachim Williers, Göttingen (Germany). The taxonomic studies of the species from Tropical Africa, involves difficulties that are best resolved through examination of the characters of the aedeagus, spermatheca and the shape of the ligula and the maxillae. Both male and female specimens were dissected and the genital and mouth structures mounted in Canada balsam (on small transparent plastic slides below the specimen). The genital and mouth structures were studied using a compound microscope and drawn with help of eyepiece grid. The species described here are clearly recognizable from the drawings of habitus, aedeagus and spermatheca. For this reason the descriptions are brief and limited; and graphically ambiguous characters or ones that cannot be illustrated, such as the reticulate microsculpture and the granulation, are described. Details on proportions of head and pronotum are omitted from the description when illustrations are provided. The habitus illustrations of the new species were drawn and arranged in plates using Adobe Photoshop software.

Acronyms

Acronyms for Museum and private collections are used as follows:

NHMW	Naturhistorisches Museum, Wien
NHML	Natural History Museum in London
MZUF	Museo Zoologico de "La Specola", Università di Firenze
MNHUB	Museum für Naturkunde der Humboldt-Universität, Berlin
IRSNB	Institut Royal des Sciences Naturelles de Belgique, Bruxelles
FMNHC	Field Museum of Natural History, Chicago
CROU	private collection Guillaume de Rougemont, London
CPA	private collection Roberto Pace, Monteforte d'Alpone, Italy
CCOR	private collection Dr. James F. Cornell of Charlotte, N.C., U.S.A.

List of the species in tribes, with descriptions and distribution

Pronomaeini Mulsant & Rey, 1873

Nopromaea nakuruensis n. sp.
Figs 1 -3

Type material:
Holotype male, Kenya, Lake Nakuru, 25.VI.1990, grass trimmings, leg. J. F. Cornell (IRSNB). Paratype: 1 male, same origin (CCOR).

Description:
Length 2.4 mm. Body glossy and blackish-brown, pygidium reddish-brown, antennae blackish-brown with the two basal antennomeres reddish-brown, legs reddish-brown. Reticulate microsculpture of the head strong, that of pronotum and elytra weak, abdomen without reticulate microsculpture. Puncturation of the head strong, but weak in front, that of the pronotum clearly visible, that of the abdomen strong. Granularity of the elytra fine and well visible. Pronotum with weak anterior median sulcus, with median posterior depression and weak postero-lateral fossa. Aedeagus Figs 2-3.

Comparative notes:
The aedeagus of the new species is similar to that of *N. africana* (Eppelsheim, 1895) (olim Pronomaea) from Oriental Africa, of which I have examined the male holotype from Togo Cuno (NHMW). The median lobe of the aedeagus of the new species is strongly arched, and that of *N. africana* is broadly arched laterally. The eyes of the new species are longer than the post-ocular region,

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in dorsal view, those of *N. africana* are shorter than the post- ocular region. The antennomeres fourth to tenth are transverse in the new species, in *N. africana* the fourth antennomere is longer than broad and the antennomeres fifth to ninth subquadrate.

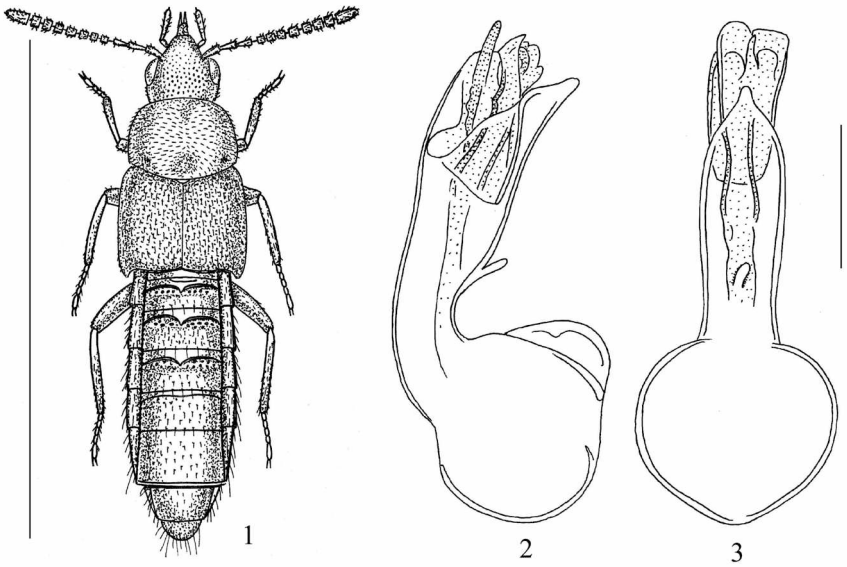
Etymology:
The name of the new species derives from the name of Lake Nakuru.

Nopromaea cornelli n. sp.
Figs 4-7

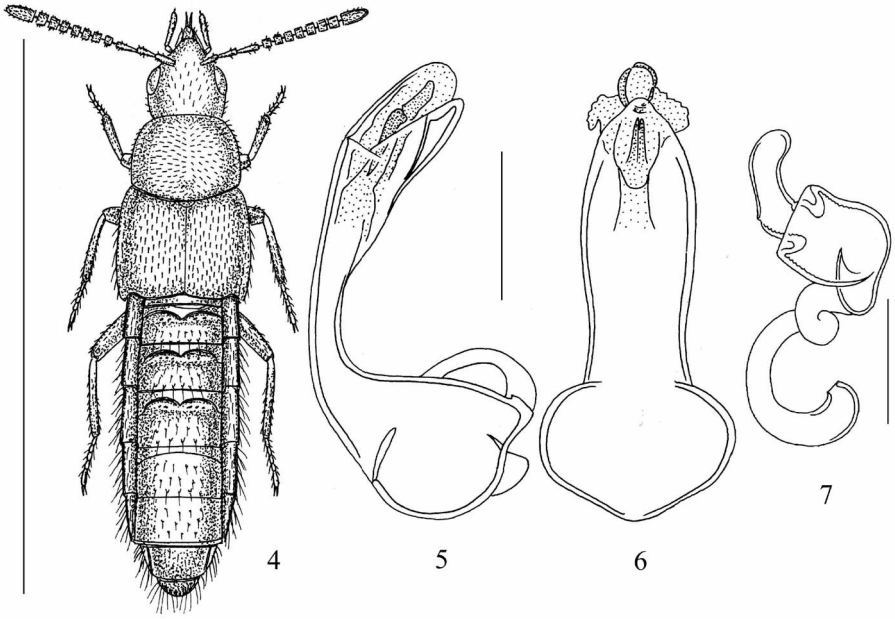
Type material:
Holotype male, Kenya, Naivasha, Safariland Bote, 26.VII.1990, grounds litter, leg. J. F. Cornell (IRSNB).
Paratypes: 11 specimens, same origin (CPA, CCOR).

Description:
Length 2.5 mm. Body glossy and brown, the three basal tergites reddish-brown, antennae brown with the two basal antennomeres and apex of the eleventh reddish, legs reddish- brown, tarsi yellowish-red. Body without microsculpture. Puncturation of the head very weak, that of pronotum and elytra weak, that of the abdomen fine. Pronotum with weakly transverse posterior median impression. Aedeagus Figs 5-6, spermatheca Fig. 7.

Comparative notes:
The spermatheca of the new species is similar to that of *N. uhligi* Pace, 1999 from Namibia but the proximal portion is thin and broadly arched in the new species, while in *N. uhligi* the proximal portion of the spermatheca is broad and strongly arched. The aedeagus of the new species is broadly arched laterally, that of *N. uhligi* strongly and a more deeply arched.



Figs 1-3: *Nopromaea nakuruensis* n. sp. Habitus, aedeagus in lateral and ventral views (Habitus scale bar: 2.4 mm; other scale bars: 0.1 mm).



Figs 4-7: *Nopromaea cornelli* n. sp. Habitus, aedeagus in lateral and ventral views, spermatheca (Habitus scale bar: 2.5 mm, other scale bars: 0.1 mm).

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Etymology:
The new species is dedicated to its collector Dr. J. F. Cornell of Charlotte, N.C., USA.

PYGOSTENINI FAUVEL, 1899

Typhloponemys rufotestacea (BERNHAUER, 1927)
Pygostenus rufotestaceus BERNHAUER, 1927: 237
Typhloponemys rufotestacea; KISTNER, 1975: 242

Type material:
1 female, Kenya, Kilifi distr., surroundings of Malindi, at light, 21.V-7.VI.1994, leg. L. Bartolozzi, B. Cecchi, A. Sforzi, num. mag. 1561 (MZUF).

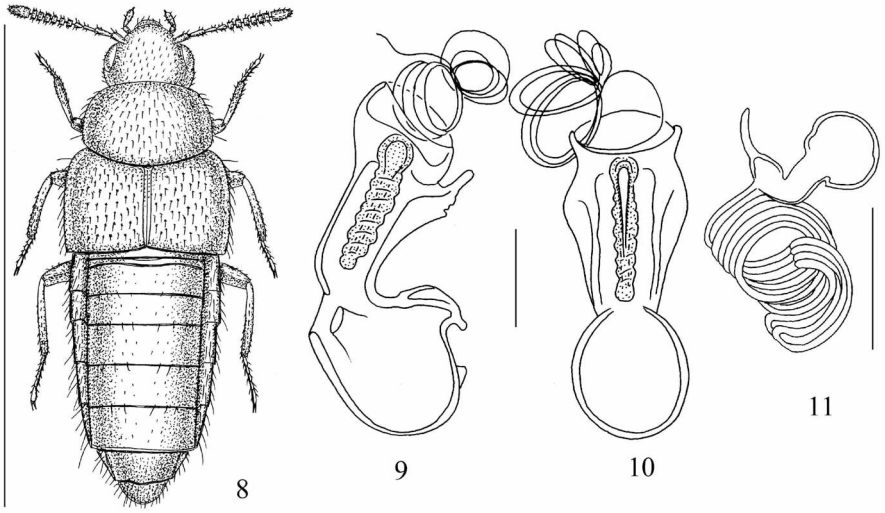
Distribution:
Zaire, Ruanda.

GYROPHAENINI KRAATZ, 1856

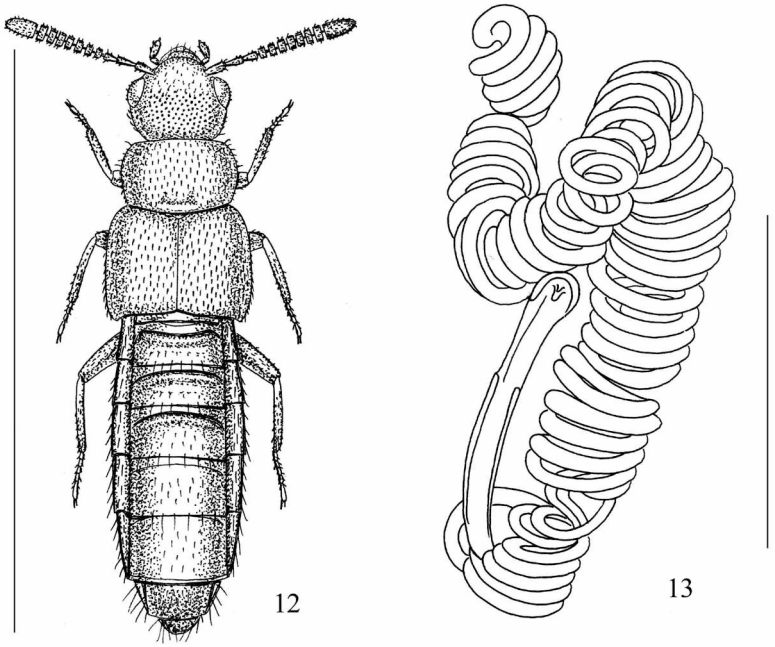
Brachida burkinensis n. sp.
Figs 8-11

Type material:
Holotype male, Burkina Faso, Ouagadougou, 12-15.X.1994, fluor. light, leg. C. Showalter (IRSNB).
Paratypes: 1 male and 1 female, same origin (CCOR).

Description:
Length 1.9 mm. Body glossy and yellowish-brown, head and free second to fifth tergites blackish-brown, antennae yellowish-red with the two basal antennomeres yellow and the eighth to tenth reddish-brown, legs yellow. Head and pronotum without microsculpture, elytra with very weak microsculpture, and abdomen with strong. Punctuation of the head well visible, that of the pronotum weak, that of the elytra composed of large, dense and with weak punctures. Aedeagus Figs 9-10, spermatheca Fig. 11.



Figs 8-11: *Brachida burkinensis* n. sp. Habitus, aedeagus in lateral and ventral views, spermatheca (Habitus scale bar: 1.9 mm, other scale bars: 0.1 mm).



Figs 12-13: *Diestota doulaensis* n. sp. Habitus, spermatheca (Habitus scale bar: 1.7 mm, other scale bars: 0.1 mm).

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Comparative notes:
The new species, considering the form of the aedeagus, is taxonomically set in intermediary position to *B. africana* (Bernhauer & Scheerpeltz, 1926, olim *Gyrophaena convexicollis* Bernhauer, of which I have examined the male holotypus from Pangani [FMNHC]) and *B. nairobiensis* Pace, 1985. The new species is distinguished from both by the absence of a fold at posterior angle of the elytra of the male, by the absence of secondary sexual characters on the fifth free tergite of the male and by the narrow ventral concavity of the median lobe of the aedeagus.

Etymology:
The name of the new species derives from the Burkina Faso.

Diestotini Mulsant & Rey, 1871

Diestota doulaensis n. sp.
Figs 12-13

Type material:
Holotype male, Cameroon, SW Province Douala, 9-15. VHI.1994, ex lights, leg. Asong L. Nkeng & J. F. Cornell (IRSNB).

Description:
Length 1.7 mm. Body glossy and yellowish-red, head brown, elytra brown with base yellowish-red, free fourth and fifth tergites blackish-brown, antennae blackish-brown with two basal antennomeres yellowish-red, legs yellow. Reticulate microsculpture of head, pronotum and abdomen weak and that of the elytra clearly visible. Puncturation of the head umbilicate and clearly visible, that of the pronotum indistinct. Granularity of elytra and abdomen weak. Spermatheca Fig. 13.

Comparative notes:
The new species has similar habitus and aedeagus to *D. namibiensis* Pace, 1999 from Namibia. The pronotum of the two species, has a transverse posterior median impression. The reticulate microsculpture of the elytra of the new species is weak, that of *D. namibiensis* strong. The coils of the spermatheca of the new species are narrower than those of *D. namibiensis*.

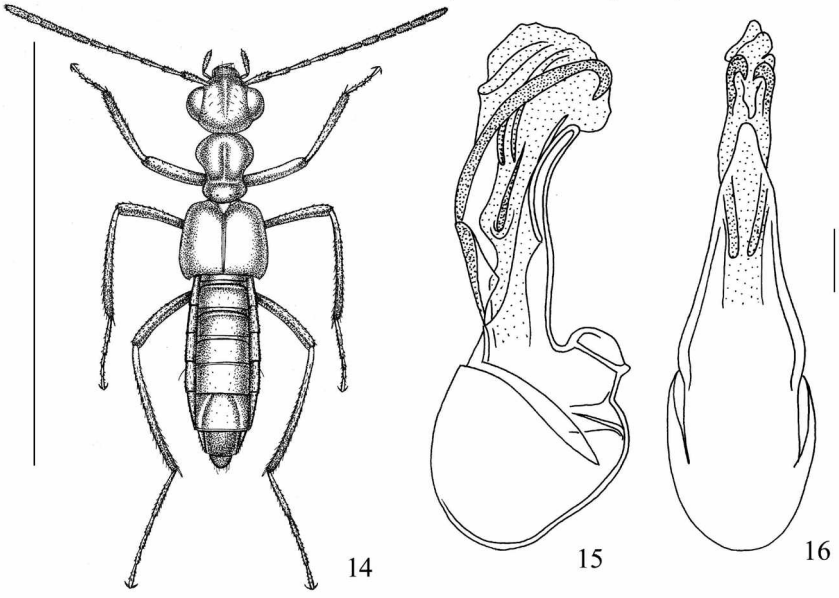
Etymology:
The name of the new species derives from the toponym Douala.

Falagriini Mulsant & Rey, 1873

Falagria (*Leptagria*) *bartolozzii* n. sp.
Figs 14-16

Type material:
Holotype male, Kenya, 19 km N of Malindi, Tsavo, at light, 27.IX-14.X.1992, leg. L. Bartolozzi, num. mag. 1381 (MZUF).

Description:
Length 4.6 mm. Body glossy, pronotum weakly opaque. Body yellowish-red, head, elytra and free third and fourth tergites reddish, antennae and legs yellowish-red. Reticulate microsculpture of head and elytra strong, that of the pronotum moderately strong, that of the abdomen very weak, except for free fifth and sixth tergites. Puncturation of head clearly visible, that of pronotum indistinct, and that of elytra scarcely visible. Granularity of the abdomen fine but clearly visible. Head with deep and broad median sulcus that becomes narrow posteriorly. Pronotum with deep median sulcus in anterior half, posteriorly with deep and transverse sulcus, and with four weak punctures near the posterior border of disc. Fifth free tergite of the male with two oblique sulci. Aedeagus Figs 15-16.



Figs 14-16: *Falagria* (*Leptagria*) *bartolozzii* n. sp. Habitus, aedeagus in lateral and ventral views (Habitus scale bar: 4.6 mm, other scale bars: 0.1 mm).

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Comparative notes:
The aedeagus of the new species is similar ventrally to that of *F. alluaudi* FAUVEL, 1907 from Oriental Africa, of which I have examined the male holotype from Nairobi (IRSNB). The new species is distinguished by the longer aedeagus, 0.6 mm long, while that of *F. alluaudi*, is shorter and 0.48 mm long. The apex of the median lobe of the aedeagus of the new species is very narrow, that of *F. alluaudi* very broad. The eyes of the new species are large, those of *F. alluaudi* reduced and small. The pronotum of the new species is deeply sinuate laterally in the posterior half, while that of *F. alluaudi* is very weakly sinuate in front of the posterior angles.

Etymology:
The new species is dedicated to its collector Dr. Luca Bartolozzi of the Zoological Museum of "La Specola" of the University in Florence (Italy), known researcher of Lucanidae.

ATHETINI CASEY, 1910

Ischnopoda riftensis n. sp.
Figs 17-19

Type material:
Holotype male, Nakuru, Rift Valley, syntype of *Tachyusa leptothorax* FAUVEL (IRSNB).

Description:
Length 2.7 mm. Body glossy, head reddish-brown, pronotum yellowish-red, elytra reddish-brown with base reddish, abdomen reddish, antennae reddish-brown with first basal antennomere pale yellow, and legs yellowish-red. Body without reticulate microsculpture. Granularity of the head fine, close and strong, that of the pronotum very strong, and that of the elytra fine and dense. Aedeagus Figs 18-19.

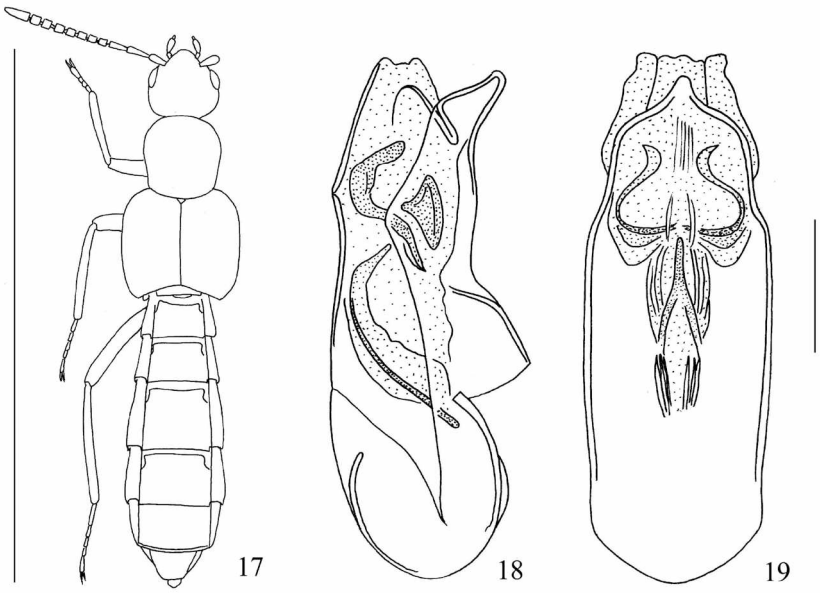
Comparative notes:
Colour and form of the body of the new species are very similar to those of *I. leptothorax* (FAUVEL, 1907) (olim *Tachyusa*, of which I have examined the typical series [IRSNB]). The median lobe of the aedeagus of the new species differs from that of *I. leptothorax* by greater length, 0.37 mm, while that of *I. leptothorax* is 0.21 mm long. The ventral profile of the median lobe of the aedeagus of the new species is bisinuate, that of *I. leptothorax* weakly arched. The lateral preapical border of the median lobe of aedeagus of the new species, in ventral view, is bisinuate, that of *I. leptothorax* rectilined.

Etymology:
The name of the new species derives from the Rift Valley.

Atheta (*Oxypodera*) *senecicola* n. sp.
Figs 20-22

Type material:
Holotype male, East. Mt. Meru, Arusha, untern. Saddle, 22.XII.1992, 3100-3200 m, Gesiebe aus Laub von *Senecio* sp., leg. C. Geginat (CPA).

Description:
Length 3.5 mm. Body glossy, antennae, head and pronotum black, elytra yellowish- brown with periscutellar area and external posterior angles brown, abdomen blackish-brown, legs yellowish-red. Reticulate microsculpture of head strong, that of pronotum and elytra weak, that of abdomen transverse and clearly visible. Granularity of head and pronotum strong, that of the abdomen densest on the basal free tergites that on the distal ones. Punctuation of the elytra dense and weak. Aedeagus Figs 21-22.



Figs 17-19: *Ischnopoda riftensis* n. sp. Habitus, aedeagus in lateral and ventral views (Habitus scale bar: 2.7 mm, other scale bars: 0.1 mm).

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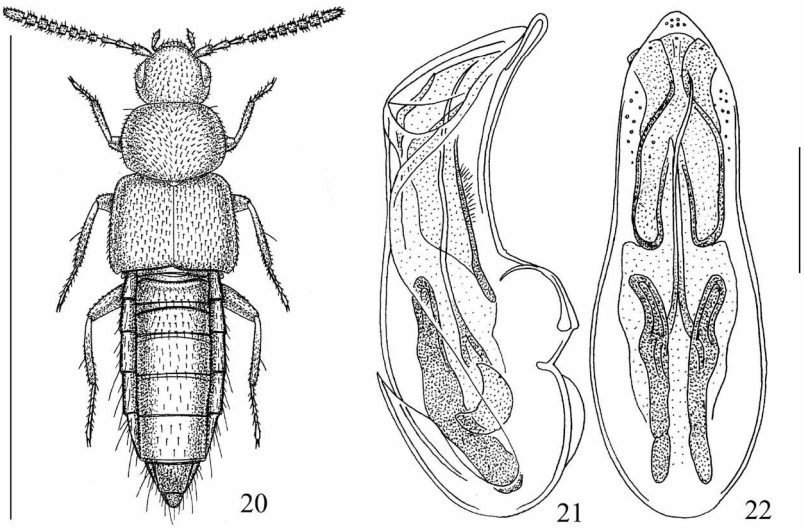
Comparative notes:
The new species has similar internal tubule of the median lobe of the aedeagus to that of *A. burgeoniana* BERNHAUER, 1934 from the Ruwenzori, of which I have examined the male holotype from Mesakya (FMNHC). The median lobe of the aedeagus of the new species is short, 0.39 mm, and that of *A. burgeoniana* long, 0.72 mm long. The two long internal basal plates of the median lobe of the aedeagus of the new species are absent in *A. burgeoniana*. The internal tubule of the aedeagus is long and narrow in the new species, short and broad in *A. burgeoniana*. The elytra of the new species are longer than the pronotum, and that of *A. burgeoniana* is shorter (micropterous species).

Etymology:
The name of the new species derives from the name of its habitat, under plant of *Senecio* sp.

Comparative notes:
The spermatheca of the new species has distal bulb transverse and very narrow as that of *A. distorta* PACE, 1985 from Tanzania, but the new species has elytra as long as the pronotum and shorter in *A. distorta*. The distal bulb of the spermatheca of the new species is shorter than that of *A. distorta* and the proximal coil of the spermatheca of the new species is clearly larger than that of *A. distorta*.

Etymology:
The new species is dedicated to the colleague JOACHIM WILLERS, Göttingen (Germany), known specialist of *Paederus* species, who provided material for this study.

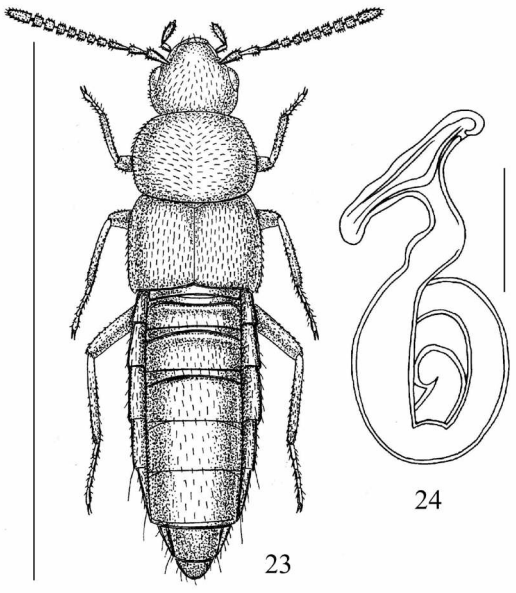


Figs 20-22: *Atheta* (*Oxypodera*) *senecicola* n. sp. Habitus, aedeagus in lateral and ventral views (Habitus scale bar: 3.5 mm, other scale bars: 0.1 mm).

Atheta (*Oxypodera*) *willersi* n. sp.
Figs 23-24

Type material:
Holotype male, Kilimanjaro, Moshi Marangu, 27.XII. 1992, 2100 m, Gesiebe aus Laub Nebelwald, leg. Geginat (CPA).
Paratype: 2 female, same origin (CPA).

Description:
Length 2.7 mm. Body glossy and brown, elytra, the two basal free tergites and pygidium reddish-brown, antennae brown with four basal antennomeres and legs yellowish-red. Reticulate microsculpture of the fore-body strong, that of the abdomen transverse and weak. Punctuation of head and pronotum dense and weak. Granularity of the elytra weak, that of abdomen fine but clearly visible. Pronotum with weak median sulcus. Spermatheca Fig. 24.



Figs 23-24: *Atheta* (*Oxypodera*) *willersi* n. sp.: Habitus, spermatheca (Habitus scale bar: 2.7 mm, other scale bars: 0.1 mm).

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Brachycraspedusa n. gen.
Figs 25-31

Diagnosis:
Ligula, Fig. 29, similar to that of the genus *Schistoglossa* Kraatz, 1856, Fig. 32, but the lobes clearly shorter. Maxillary palpi and maxillae very short. The habitus of the new genus is robust, Fig. 25, that of *Schistoglossa* slender. The form of the spermatheca of the new genus is not similar to that of the species of *Schistoglossa*. It is more similar to the species of the subgenus *Dimetrota* Mulsant & Rey, 1873 of the genus *Atheta* Thomson, 1858, but *Dimetrota* has Y-shaped ligula which is different in *Brachycraspedusa*.

Description:
In facies resembling *Brachida* Mulsant & Rey, 1871; and abdomen not fusiform (Fig. 25). Head narrower than thorax, slightly transverse, neck moderate in width, about fourth as broad as the head; eyes reduced, shorter than the post-ocular region of head. Antennae moderate in length, the penultimate antennomeres transverse. Labrum transverse, slightly arcuate and emarginate in front, the angles rounded. Mandibles moderate in size, acutely pointed, the right with a small sharp tooth at the middle of the inner edge. Outer lobe of maxilla, Fig. 30, as broad as the inner and extending beyond it, membranous at apex and covered with very short hairs; inner lobe broad, with 20 slender spines, and behind these not densely ciliate. Maxillary palpi with the 1st joint very small, 2nd thickened towards the apex, 3rd a little longer and much thicker, and 4th subulate. Mentum transverse, trapezoidal, the anterior margin arcuate. Labial palpi rather long, Fig. 29, the 1st joint long, 2nd much shorter than the 1st, 3 rd much narrower than the 2nd. Ligula broad, divided in two short lobes, Fig. 29. Paraglossae short, Fig. 29. Pronotum transverse, convex, the pronotal epipleura visible in lateral view. Mesosternum not keeled throughout, its process acute and extending to the middle length of the mesocoxae, the mesocoxae slightly separated. Elytra emarginate posteriorly. The first three visible tergites transversely impressed. Legs moderate, tibiae not spiny. Tarsal formula 4-5-5; metatarsi with the first joint short. Claws slightly curved. Aedeagus as in Figs 26-27, and spermatheca as in Fig. 28.

Type Species: *Brachycraspedusa naivashaensis* n. sp.

Etymology:
The name of the new genus means "That has the short lobes", from the Greek «βραχύς» = «short», «κράσπεδον» = «lobes» and «ούσα» = «what it is», alluding to the form of the ligula.

Brachycraspedusa naivashaensis n. sp.
Figs 25-31

Type material:
Holotype male, Kenya, L. Naivasha, Safariland Boti, 26.VII.1990, groundslitter, leg. J. F. Cornell Paratypes: 8 specimens, same origin (CCOR).

Description:
Length 1.7 mm. Body glossy and black, pronotum and pygidium brown, antennae black with the two basal antennomeres reddish-brown, legs reddish-brown with tarsi yellow. Reticulate microsculpture of the head very weak, that of the pronotum clearly visible, that of the elytra strong, that of the abdomen clearly visible, present also in the bottom of the basal transverse sulci. Punctuation of the head very weak. Granularity of the pronotum almost invisible, that of the elytra weak, that of the abdomen fine but well visible. Head with median sulcus. Pronotum with isolated weak punctures near the posterior border. Aedeagus Figs 26-27, spermatheca Fig. 28.

Etymology:
The name of the new species derives from the Lake Naivasha.

Lomechusini Fleming, 1821

Catarractodes cristatus n. sp.
Figs 33-35

Type material:
Holotype male, Kenya, Taita distr., Surrounding of Voi, at light, 30.V-2.VI.1994, leg. L. Bartolozzi, B. Cecchi, A. Sforza, num. mag. 1561 (MZUF).

Description:
Length 5.9 mm. Body glossy, head pronotum and abdomen black, elytra and posterior border of the free first and second tergites with their paratergites reddish, antennae and legs yellowish-red. Reticulate microsculpture of head and pronotum clearly visible, that of the elytra weak, that of the three basal free tergites transverse, and remainding free tergites without reticulate microsculpture. Punctuation of head and pronotum umbilicate and clearly visible, those of the elytra weak. Pronotum with two strong discal punctures in transverse ranging, not in longitudinal ranging. Third free tergite of the male with broad indented marginal median lobe, fourth free tergite with posterior median spine. Aedeagus Figs 34-35.

Comparative notes:
The aedeagus of the new species is similar to that of *C. methnerianus* (Bernhauer, 1915) of which I have examined the male holotype (FMNHC). The eyes of the new species are more developed than those of *C. methnerianus*. The secondary sexual characters of the free third and fourth tergite of the male are not present in *C. methnerianus*. The apex of the aedeagus, in ventral

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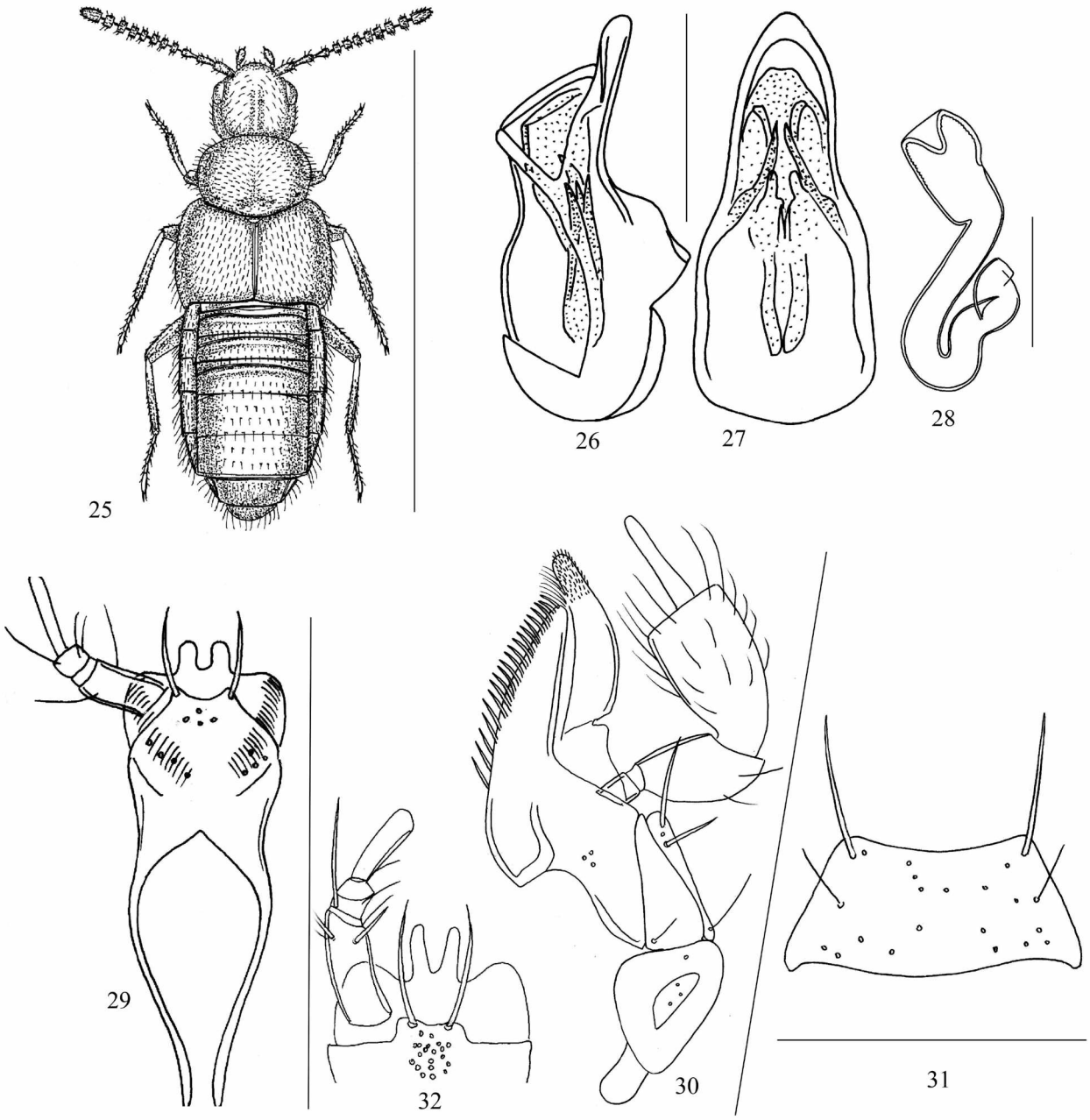
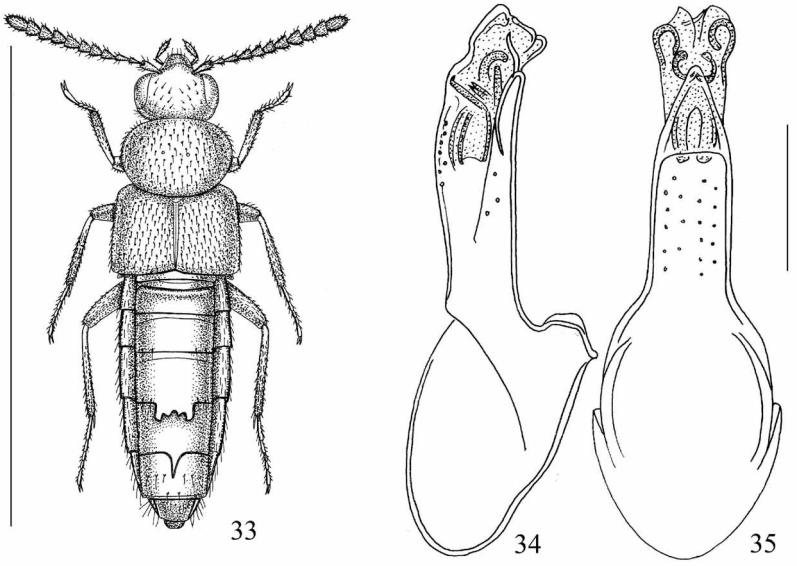


Figs 25-31: *Brachycraspedusa naivashaensis* n. gen., n. sp. *Habitus,* Aedeagus in lateral and ventral views, spermatheca, labium with labial palpus, maxilla with maxillary palpus, mentum (Habitus scale bar: 1.7 mm, other scale bars: 0.1 mm).

Fig. 32: *Schistoglossa aubei* Bris. (Scale bar: 0.1 mm).

Figs 33-35: *Catarractodes cristatus* n. sp. Habitus, aedeagus in lateral and ventral views. (Habitus scale bar: 5.9 mm, other scale bars: 0.1 mm).



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view, is very acute in *C. methnerianus*, and not acute in the new species.

Etymology:
The name of the new species derives from the name of the marginal crest of the third free tergite of the male.

Brachysipalia melanica n. sp.
Figs 36-38

Type material:
Holotype male, East Mt. Kenya, Chogona, Hausberg Val., 30.XII.1990, 4000 m, Hausberg Tarn, Unter Steinen, leg. Geginat (CPA).

Description:
Length 1.6 mm. Body glossy and black, including antennae and legs, tarsi blackish-brown. Reticulate microsculpture of head and pronotum clearly visible, that of elytra and abdomen weak, and transverse on abdomen. Puncturation of the head clearly visible, but absent on the longitudinal median band, that of the pronotum weak. Granularity of elytra and abdomen strong. Pronotum with weak posterior median fossa. Aedeagus Figs 37-38.

Comparative notes:
The colour of the body and shorter than pronotum elytra are similar in *B. nigrescens* PACE, 2005 also from Kenya. The new species is separated by the longer median lobe of the aedeagus, 0.5 mm, which is 0.36 mm in *B. nigrescens*, and by strong internal thin plate and not slender as in *B. nigrescens*. The pronotum of the new species is as long as broad (width/length ratio = 1), while that of *B. nigrescens* is slightly transverse (width/length ratio = 1.12).

Etymology:
The name of the new species derives from the black colour of the body, from the ancient Greek «μέλας» = «black».

Diplopleurus namibiorum PACE, 1999
Diplopleurus namibiorum PACE, 1999: 187

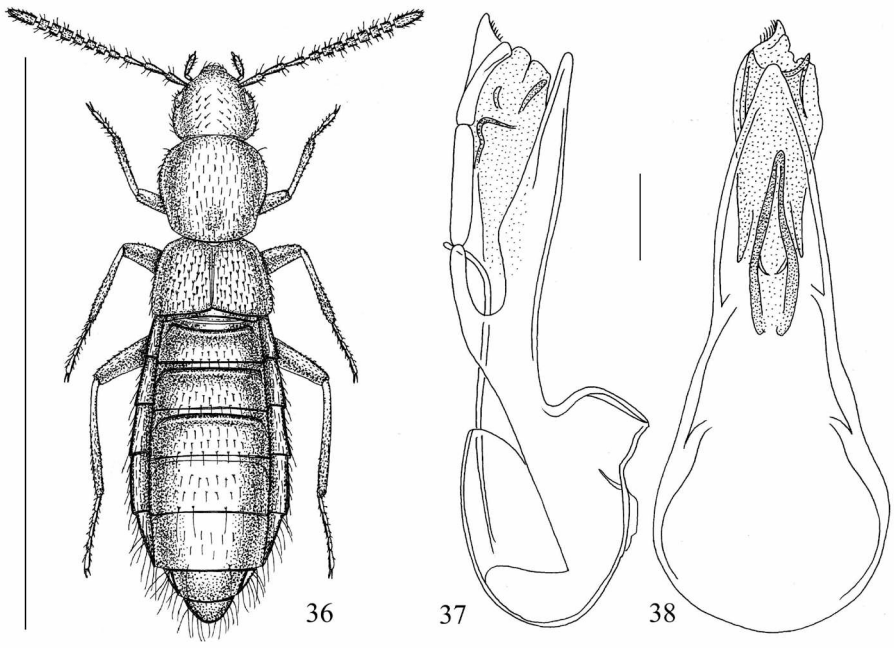
Type material:
2 females, Zambia NE, 249 km SE Mukuku, 29.XI.2004, leg. Snizek, Tichy (CROU).

Distribution:
Namibia.

Diplopleurus ulittera PACE, 1999
Diplopleurus ulittera PACE, 1999: 187

Type material:
1 male and 3 females, Kenya, Kilifi distr. Arabuko Sokoke, Forest Reserve, 20 km S of Malindi, 21.V-7.VI.1994, leg. L. Bartolozzi, B. Cecchi, A. Sforzi, num. mag. 1561 (MZUF).

Distribution:
Namibia.



Figs 36-38: *Brachysipalia melanica* n. sp. Habitus, aedeagus in lateral and ventral views (Habitus scale bar: 4 mm, other scale bars: 0.1 mm).

DOI: 10.21248/contrib.entomol.63.1.129-147

Diplopleurus maculipennis n. sp.
Figs 39-42

Type material:
Holotype male, Kenya, Meru distr., Maten Mitunguu, 8.IV.1987, leg. R. Mourglia, num. mag. 1500 (MZUF).
Paratypes: 3 females, same origin (MZUF); 1 male, Brit. O. Afrika, Kibwezi, 1915, leg. G. Scheffer (MNHUB).

Description:
Length 5.7 mm. Body glossy, head black, pronotum black with central disk blackish-brown, elytra black with broad sutural reddish spot, abdomen brown with posterior border of the free tergites reddish, antennae black with three basal antennomeres yellowish-red, legs yellow with tibiae reddish. Body without reticulate microsculpture. Puncturation of the head strong and umbilicate, that of the elytra dense and deep, that of the abdomen evident. Granularity of the pronotum dense and strong, and strong on the longitudinal median band, that on the rest of the surface fine and sometimes strong, lacking on the posterior marginal fold. Head with a strong carina between antennae of male, on the median line concave and without punctuation. On every elytron posterior transverse area without punctuation. Fifth free tergite of male with very strong lateral carinae and six strong granules on the posterior border. Aedeagus Figs 40-41, spermatheca Fig. 42.

Comparative notes:
The aedeagus of the new species is similar to that of *D. excavatus* Bernhauer, 1915 from Oriental Africa, of which I have examined the typical series of 6 specimens (FMNHC). In ventral view, the apex of the median lobe of the aedeagus of the new species is broad, that of *D. excavatus* is very narrow. The carina between antennae of the male in the new species is absent in *D. excavatus*. The pronotum of the new species is without posterior median fossa, which is present in *D. excavatus*. The elytra of the new species are punctated, that of *D. excavatus* with strong granularity near the suture in the male.

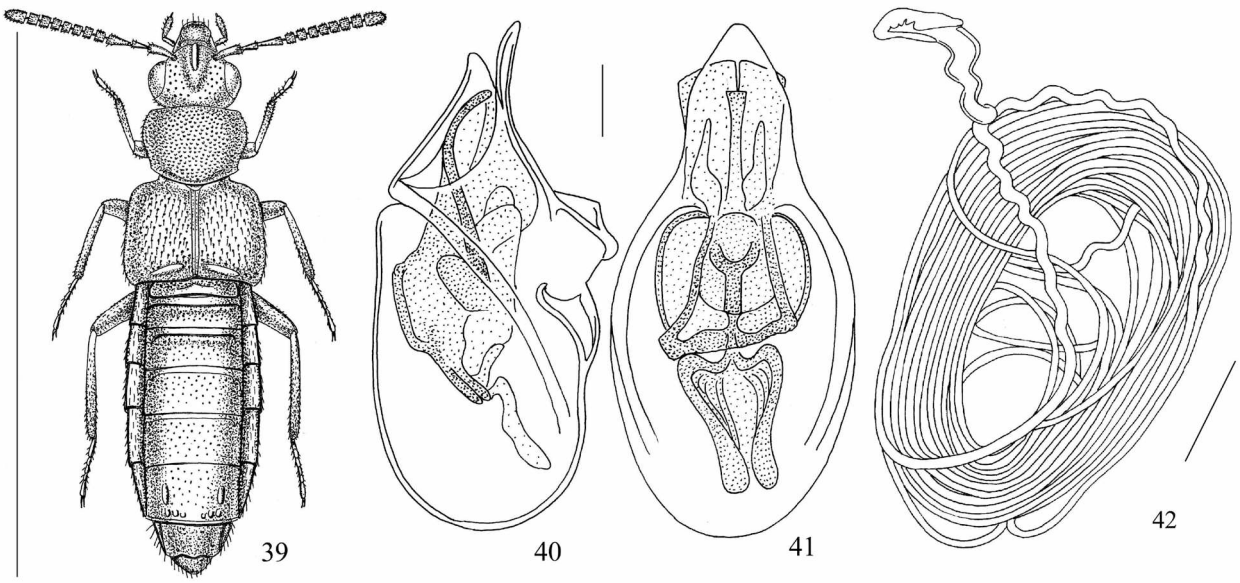
Etymology:
The name of the new species means «With stained elytra».

Diplopleurus intermedius n. sp.
Figs 43-45

Type material:
Holotype male, Kenya, Taita distr., surroundings of Voi, at light, 30.V-2.VI.1994, leg. L. Bartolozzi, B. Cecchi, A. Sforzi, num. mag. 1561 (MZUF).
Paratypes: 1 male, same origin (MZUF).

Description:
Length 4.1 mm. Body glossy, head and abdomen blackish-brown, pronotum reddish-brown with lateral borders yellowish-red, elytra reddish-brown with posterior border yellow, first posterior border of the free first and second tergites reddish, antennae yellowish-brown with three basal antennomeres yellowish-red, legs reddish. Body without reticulate microsculpture. Puncturation of head and elytra deep, absent on the longitudinal median band, that of the abdomen fine and absent on posterior border of every free tergite. Granularity of the pronotum strong. A bump structure present between antennae. Pronotum with wide lateral depression and broad posteromedian elevated area. Aedeagus Figs 44-45.

Comparative notes:
With the eyes very developed, the new species is similar to *D. notatipennis* Pace, 1986 and *D. puella* Pace, 1986 both from Tanzania. The pronotum of the new species



Figs 39-42: *Diplopleurus maculipennis* n. sp. Habitus, aedeagus in lateral and ventral views, spermatheca (Habitus scale bar: 5.7 mm, other scale bars: 0.1 mm).

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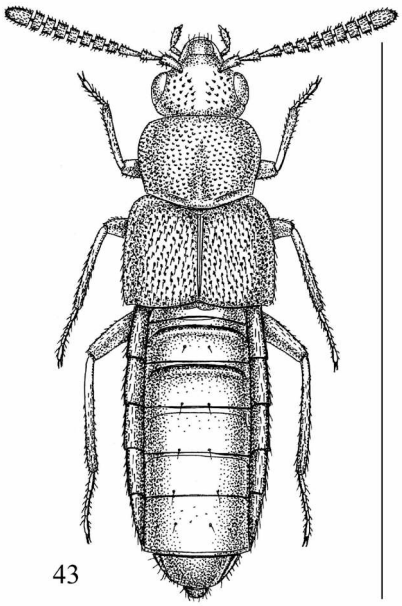
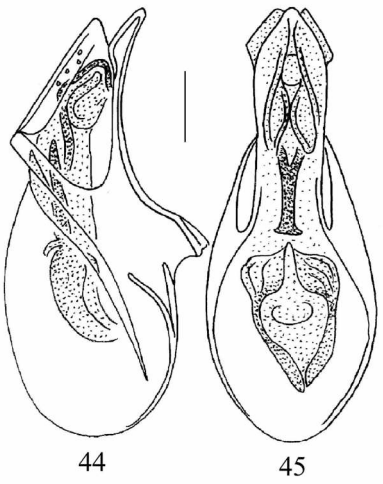




Figs 43-45: *Diplopleurus maculipennis* n. sp. Habitus, aedeagus in lateral and ventral views (Habitus scale bar: 4.1 mm, other scale bars: 0.1 mm).

has a posterior median elevated area, and not elevated in *D. puella*. The elytra of the new species are uniformly punctatueted, that of *D. notatipennis* has an area without punctuation. The eyes of the new species are less developed than those of *D. notatipennis*.

Etymology:
The new species name, *intermedius*, derives from the word intermediary, in allusion to intermediate taxonomic position of this species (between *D. puella* and *D. notatipennis*).

Zyras (*Camonia*) *puncticollis* PÉRINGUEY, 1904

Zyras puncticollis PÉRINGUEY, 1904: 211
Zyras (*Camonia*) *puncticollis*; LAST, 1963: 283

Type material:
1 male, Kenya, Taita distr., surrounding of Voi, at light, 30.V-2.VI.1994, leg. L. Bartolozzi, B. Cecchi, A. Sforzi, num. mag. 1561 (MZUF).

Distribution:
Rhodesia, Congo.

Zyras (*Camonia*) *paraopticus* n. sp.

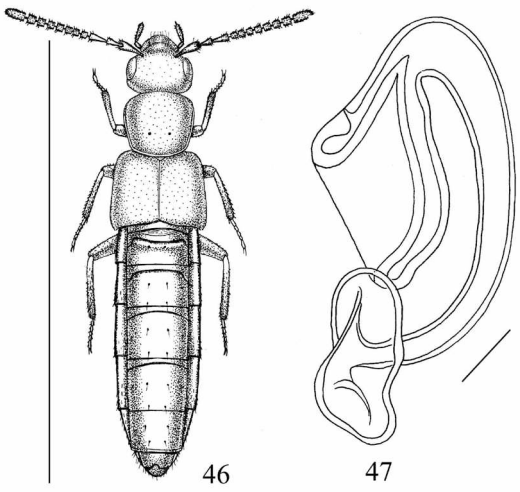
Figs 46-47

Type material:
Holotype female, Kenya, 5 km N of Malindi, 27.IX-14.X.1992, leg. L. Bartolozzi, num. mag. 1381 (MZUF).

Description:
Length 6 mm. Body glossy and yellowish-red, head with reddish-brown longitudinal median band, between the eyes, elytra and fourth free tergite reddish, antennae with the two basal antennomeres reddish-brown, base of the third and apex of the eleventh yellowish-red, legs yellowish-red. Reticulate microsculpture of the fore-body strong, that of the abdomen clearly visible and transverse. Puncturation of head and pronotum fine and clearly visible, that of the elytra weak, that of the abdomen very weak in some areas. Antennae not compressed laterally. Pronotum with two strong discal punctures. Sixth free tergite of female emarginated at posterior border. Spermatheca Fig. 47.

Comparative notes:
The spermatheca of the new species is similar to that of *Z. opticus* CAMERON, 1947 from Abyssinia. In the new species spermatheca is well developed, with umbilicus of the distal bulb acute, while that of *Z. opticus* is hemispherical. The sixth free tergite of the female of the new species is triangularly emarginate at posterior border, that of *Z. opticus* is not emarginate.

Etymology:
The new species has name that show its affinity with *Z. opticus*.



Figs 46-47: *Zyras* (*Camonia*) *paraopticus* n. sp. Habitus and spermatheca (Habitus scale bar: 6 mm, other scale bars: 0.1 mm).

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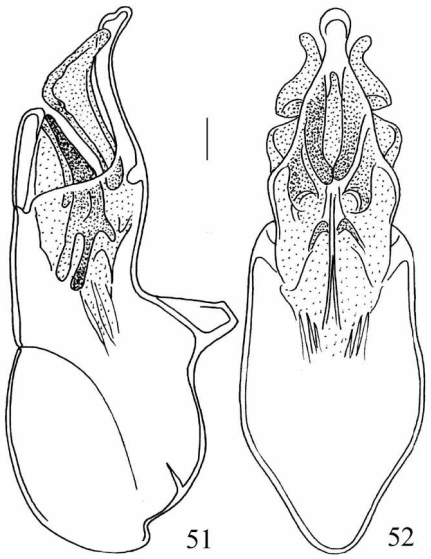
Zyras (*Camonia*) *taitaorum* n. sp.
Figs 48-52

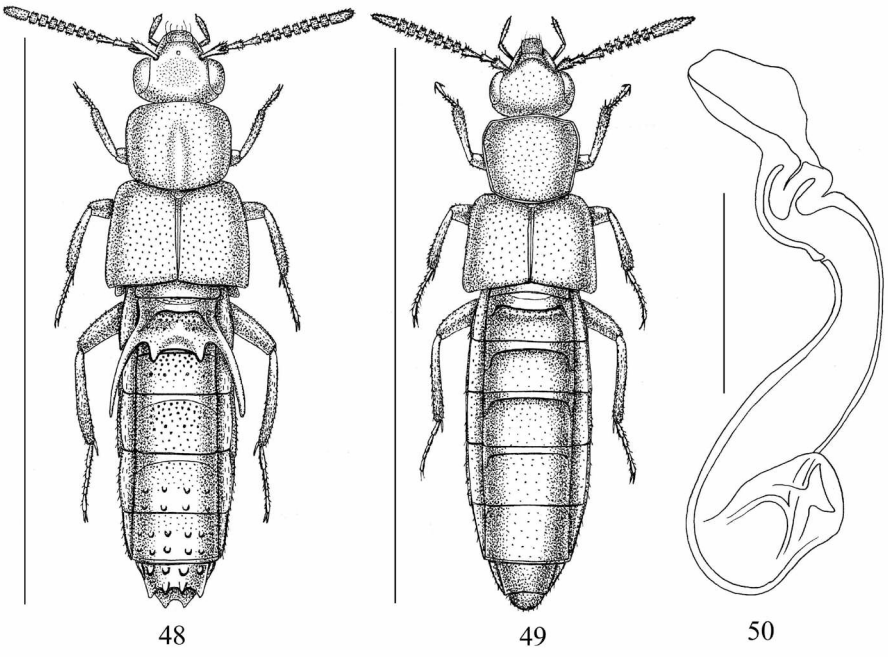
Type material:
Holotype male, Kenya, Kilifidistr., Malindi, at light, 21.V-7.VI.1994, leg. L. Bartolozzi, B. Cecchi, A. Sforzi, num. mag. 1561 (MZUF).
Paratypes: 9 males and 3 females, same origin; 1 female, Kenya, dintorni di Malindi, 30.IX.1992, leg. L. Bartolozzi, num. mag. 1381 (MZUF).

Description:
Length 6.9 mm. Body glossy, disk of the head of male opaque. Body yellowish-red, head brown and third, fourth and base of the fifth free tergites reddish-brown, antennae brown with the three basal antennomeres and the eleventh reddish, legs yellowish-red. Reticulate microsculpture of male head strong, on head of female is absent. Reticulate microsculpture of the pronotum of the male on the anterior half very weak, pronotum of the female without reticulate microsculpture. Reticulate microsculpture of the elytra and the abdomen of the male and the female lacking. Head of male without puncturation, head of female with clearly visible puncturation. A pore is present between male antennae. Pronotum of male with broad median elevation in posterior fourth, while the female's pronotum is evenly convex. First free tergite of male with two long divergent lateral processess, Fig. 48, and two internal lobes, and free tergites fourth to sixth with strong granules, absent on the abdomen of the female. Aedeagus Figs 51-52, spermatheca Fig. 50.

Comparative notes:
The secondary sexual characters of the first free tergite of male and the form of the spermatheca of the new species are similar to *Z. namibiensis* Pace, 1999 from Namibia. The median lobe of the aedeagus of the new species is bisinuate ventrally, and that of *Z. namibiensis* is not bisinuate. The proximal portion of spermatheca of the new species is short, that of *Z. namibiensis* long. The postocular region of the new species is short, that of *Z. namibiensis* present, and longer.

Etymology:
The new species is dedicated to the Taita, ethnic group of the coast of the Kenya.





Figs 48-52: *Zyras* (*Camonia*) *taitaorum* n. sp. Habitus, spermatheca, aedeagus in lateral and ventral views (Habitus scale bar male: 6.9 mm, female: 7 mm, other scale bars: 0.1 mm).

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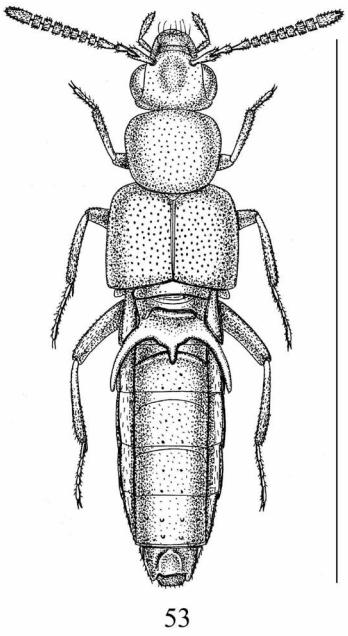
Zyras (*Camonia*) *trinus* n. sp.
Figs 53-56

Type material:
Holotype male, Kenya, Taita distr., surrounding of Voi, at light, 30.V-2.VI.1994, leg. L. Bartolozzi, B. Cecchi, A. Sforzi, num. mag. 1561 (MZUF).
Paratypes: 15 males and 12 females, same origin; 1 female, Kenya, Meru distr., Materi Mitunguu, 8.IV.1987, leg. R. Mourglia, num. mag. 1500 (MZUF).

Description:
Length 6.8 mm. Body glossy, the head disk in male opaque. Body yellowish-red, head black, elytra brown with an upside-down triangular spot yellowish-red, free third to sixth tergites reddish-brown with posterior border reddish, antennae brown with the two basal antennomeres yellowish-red and third reddish, legs yellowish-red. Reticulate microsculpture of the head disk of the male strong, on female head absent. Reticulate microsculpture of male pronotum clearly visible in anterior half, weak posteriorly, female's pronotum without reticulate microsculpture. Reticulate microsculpture on male and female elytra and abdomen lacking. Punctuation on head of male clearly visible in area without microsculpture, and in female clearly visible. Antennae not compressed laterally. Head of male largely concave medially, that of the female evenly convex. Pronotum without lateral depression. First free tergite of male with two long divergent lateral processess, Fig. 53 and an internal lobe, and fifth free tergite with strong granules, absent in female. Aedeagus Figs 54-55, spermatheca Fig. 56.

Comparative notes:
The form of the spermatheca and of the aedeagus of new species is similar to *Z. ngaoensis* PACE, 1996 from the Kenya. The new species is distinguished by the presence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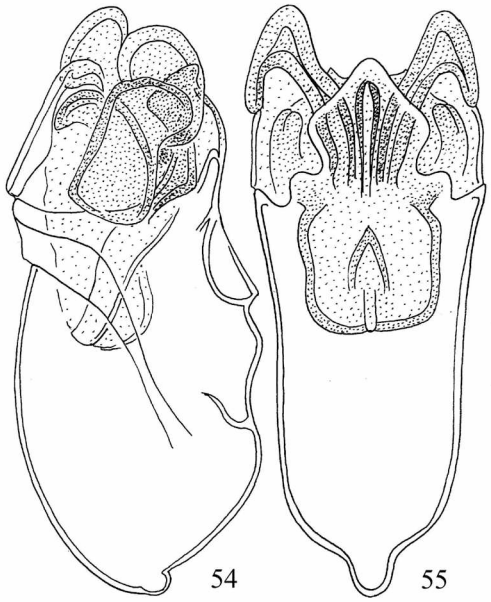
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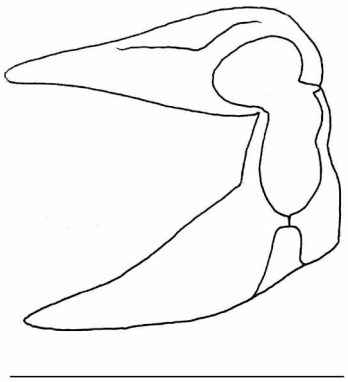
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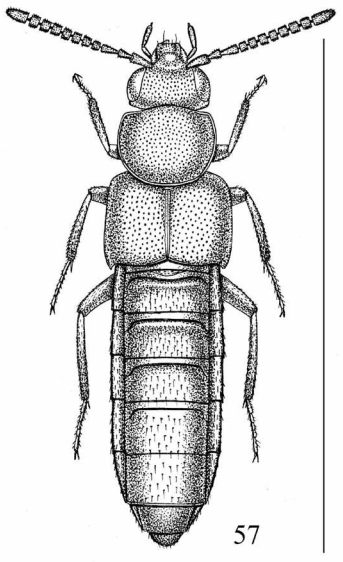
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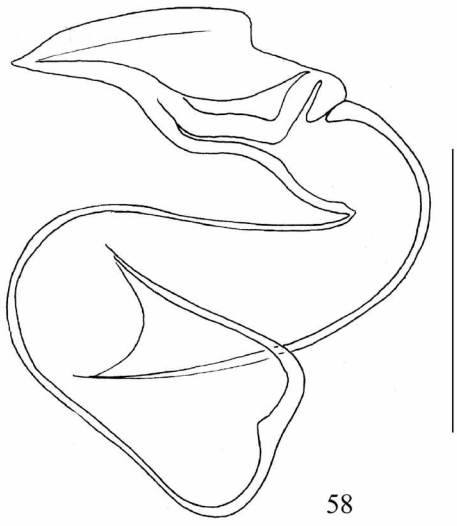
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Figs 53-56: *Zyras* (*Camonia*) *trinus* n. sp. Habitus, Aedeagus in lateral and ventral views, spermatheca (Habitus scale bar: 6.8 mm, other scale bars: 0.1 mm).

Figs 57-58: *Zyras* (*Camonia*) *digorum* n. sp. Habitus, spermatheca. (Habitus scale bar: 6.2 mm, other scale bars: 0.1 mm).

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of three marginal processess on the first free tergite in male, in *Z. ngaoensis* two marginal processess. The apical portion of the median lobe of the aedeagus of the new species is strongly narrow in ventral view, while it is narrow in *Z. ngaoensis*. The proximal portion of the spermatheca of the new species is long, and short in *Z. ngaoensis*.

Etymology:
The name of the new species derives from the male marginal processess of the first free tergite composed of three elements: two spinae and a median lobe.

Zyras (*Camonia*) *digorum* n. sp.
Figs 57-58

Type material:
Holotype male, Kenya, 19 km W of Malindi, rd. Malindi Tsavoli, at Light, 27.IX-14.X.1992, leg. L. Bartolozzi, num. mag. 1381 (MZUF).

Description:
Length 6.2 mm. Body glossy, head blackish-brown, pronotum brown with anterior angles reddish-brown, elytra blackish-brown with yellowish-red spot ranging from central part laterally, abdomen yellowish-red with fourth and fifth free tergites reddish-brown, antennae reddish-brown with basal antennomere yellowish-red and eleventh reddish, legs yellowish-red. Reticulate microsculpture of head and pronotum weak, rest of the body without reticulate microsculpture. Puncturation of the fore-body dense and clearly visible. Granularity of the abdomen strong. Antennae not strongly compressed laterally. Pronotum without lateral depression. Spermatheca Fig. 58.

Comparative notes:
The form of the spermatheca of the new species is similar to that of *Z. silus* Pace, 1999 from Namibia. The distal bulb of the spermatheca of the new species is more transverse than that of *Z. silus* and the proximal portion of the spermatheca of the new species is long, and that of *Z. silus* short. The abdominal pubescence of the new species is dense, that of the abdomen of *Z. silus* absent.

Etymology:
The new species derives his name from the Digos, ethnic group of the coast of the Kenya.

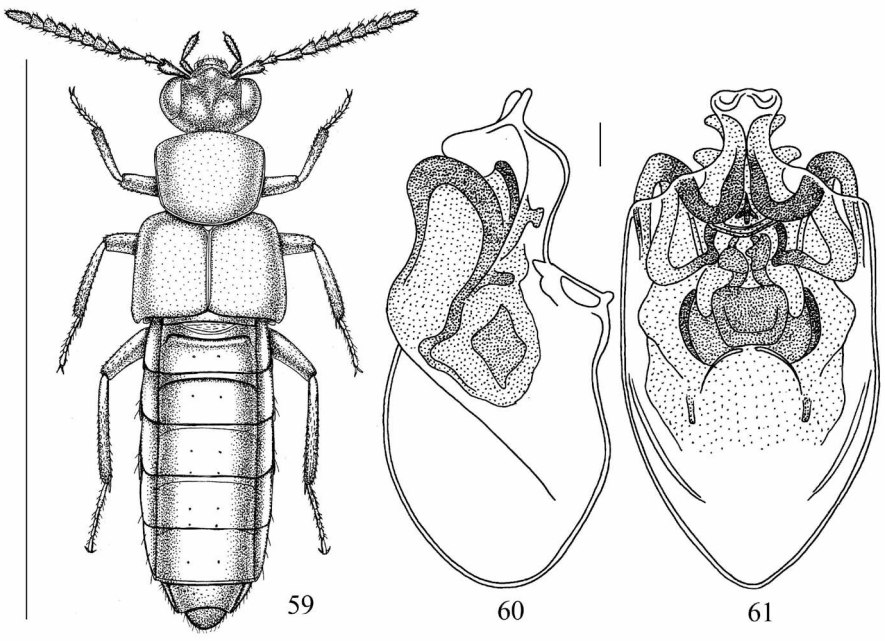
Zyras (*Androdonia*) *masai* Pace, 1996
Zyras (*Androdonia*) *masai* Pace, 1996: 226

Type material:
1 male and 1 female, Kenya, Aberdare Nat. Park, Treetops Lodge, at light, 6200 ft, 14.VI.1994, leg. L. Bartolozzi (MZUF).

Distribution:
Kenya.

Zyras (*Androdonia*) *triumbonatus* n. sp.
Figs 59-61

Type material:
Holotype male, Kenya, 19 km W of Malindi, rd. Malindi Tsava, at light, 27.IX-14.X.1992, leg. L. Bartolozzi, num. mag. 1381 (MZUF).



Figs 59-61: *Zyras* (*Androdonia*) *triumbonatus* n. sp. Habitus, aedeagus in lateral and ventral views (Habitus scale bar: 7 mm, other scale bar: 0.1 mm).

DOI: 10.21248/contrib.entomol.63.1.129-147

Description:
Length 7 mm. Body glossy, pronotum opaque. Body reddish-brown, head and second to sixth free tergites brown, antennae brown with the three basal antennomeres yellowish-red, legs yellowish-red. Reticulate microsculpture of fore-body strong, that of abdomen clearly visible. Puncturation of the head well visible, that of pronotum and elytra very weak. Abdomen without pubescence, except some areas, Fig. 59. Antennomeres third to eleventh laterally compressed. Disc of head concave, with a broad bump on each side and with one between the antennae. Aedeagus Figs 60-61.

Comparative notes:
The aedeagus of the new species in ventral view is very similar to that of *Z. caprivensis* Pace, 1999 from Namibia, but subapical part of the median lobe of the aedeagus is strongly sinuate in the new species, and that of *Z. caprivensis* is weakly so. The" crista apicalis" of the aedeagus of the new species is narrow, that of *Z. caprivensis* very broad. The head of the new species has three bumps, which are absent in *Z. caprivensis*. The first free tergite of the male of the new species is without secondary sexual characters, that of *Z. caprivensis* is with two long posterior lateral processess.

Etymology:
The new species derives its name from the three bumps of the head of the male.

Paramyrmoecia bipustulata (Bernhauer, 1915)

Zyras bipustulatus Bernhauer, 1915b: 164
Paramyrmoecia bipustulatus (sic!): Kistner & Elliot, 1985: 316

Type material:
2 males and 2 females, Kenya, Taita distr., surronding of Voi, at light, 30.V-2.VI.1994, leg. L. Bartolozzi, B. Cecchi, A. Sforzi, num. mag. 1561 (MZUF).

Distribution:
Tanzania, Ethiopia, Sudan, Angola, South Africa, Rhodesia, Gambia.

Thamiaraeini Fenyes, 1921

Spaniodmoinusa n. gen.
Figs 63-67

Diagnosis:
Habitus similar to that of *Tyloplatyola* Pace, 1984 from tropical Africa but the mesocoxae are separated (in contact in *Tyloplatyola*), ligula narrow, with two preapical bristles, while in *Tyloplatyolala* the ligula is entire as in the new species, but it has very broad base forming broad lobe, while in the new genus the ligula is narrowly elongate.

Description:
In facies resembling *Tyloplatyola* Pace, 1984; abdomen slightly conical (Fig. 62). Head narrower than the thorax, transversely sub-orbicular, neck indistinct; eyes longer than the basal antennomere. Antennae moderate in length. Labrum transverse, slightly arcuately emarginate in front, the angles rounded. Mandibles moderate, acutely pointed, the right with a small sharp tooth at the middle of the inner edge. Outer lobe of maxilla narrower than the inner lobe and extending beyond it, membranous at apex and covered with short hairs and a line of long bristles; inner lobe short, broad, acute, near the apex with six short spines, and behind these densely ciliate, as in Fig. 66. Maxillary palpi with the 1st joint very small, 2nd thickened towards the apex, 3rd much longer than the 3rd, 4th subulate, Fig. 66. Mentum transverse, trapezoidal, the anterior base a little arched (Fig. 144). Labial palpi rather short, the 1st joint a little narrowed towards the apex, which is obliquely truncate, 2nd shorter than the 1st, 3 rd narrower than the 2nd, 4th small (Fig. 142). Ligula narrow and elongate, with two lateral preapical bristles, Fig. 65. Paraglossae weakly developed, Fig. 65. Pronotum very transverse, convex, anterior margin narrower than the posterior. Mesosternum not keeled throughout, its process broad and extending to mid-length of the mesocoxae, its apex truncate, metasternal process truncate, the mesocoxae widely separated. Elytra slightly emarginate postero-laterally. Abdomen slightly narrowed from base to apex, the two visible basal tergites transversely impressed. Legs short. Tarsal formula 4-5-5. Claws slightly curved. Aedeagus, Figs 63-64.

Type species:
Spaniodmoinusa cornelli n. sp.

Etymology:
The name of the new genus means "rare and alike", from ancient Greek language «σπάνιος» = «Rare», «όμοιος» = «Alike» and «ούσα» = «what it is».

Spaniodmoinusa cornelli n. sp.
Figs 62-67

Type material:
Holotype male, Kenya, Kakamega For. Res., 18.VII.1990, forest litter, leg. J. F. Cornell (IRSNB).

Description:
Length 1.6 mm. Body glossy and reddish-brown, antennae brown with the two basal antennomeres reddish, legs reddish. Body without reticulate microsculpture. Granularity of the fore-body strong, that of the first and sec-

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ond free tergites clearly visible, that on the remaining free tergites fine and weak. Frees tergites fifth and sixth of the male with long median carina. Aedeagus Figs 63-64.

Etymology:
The new species is dedicated to its collector, my colleague Dr Jim F. Cornell of Charlotte, N.C., U.S.A.

Aleocharini Fleming, 1821

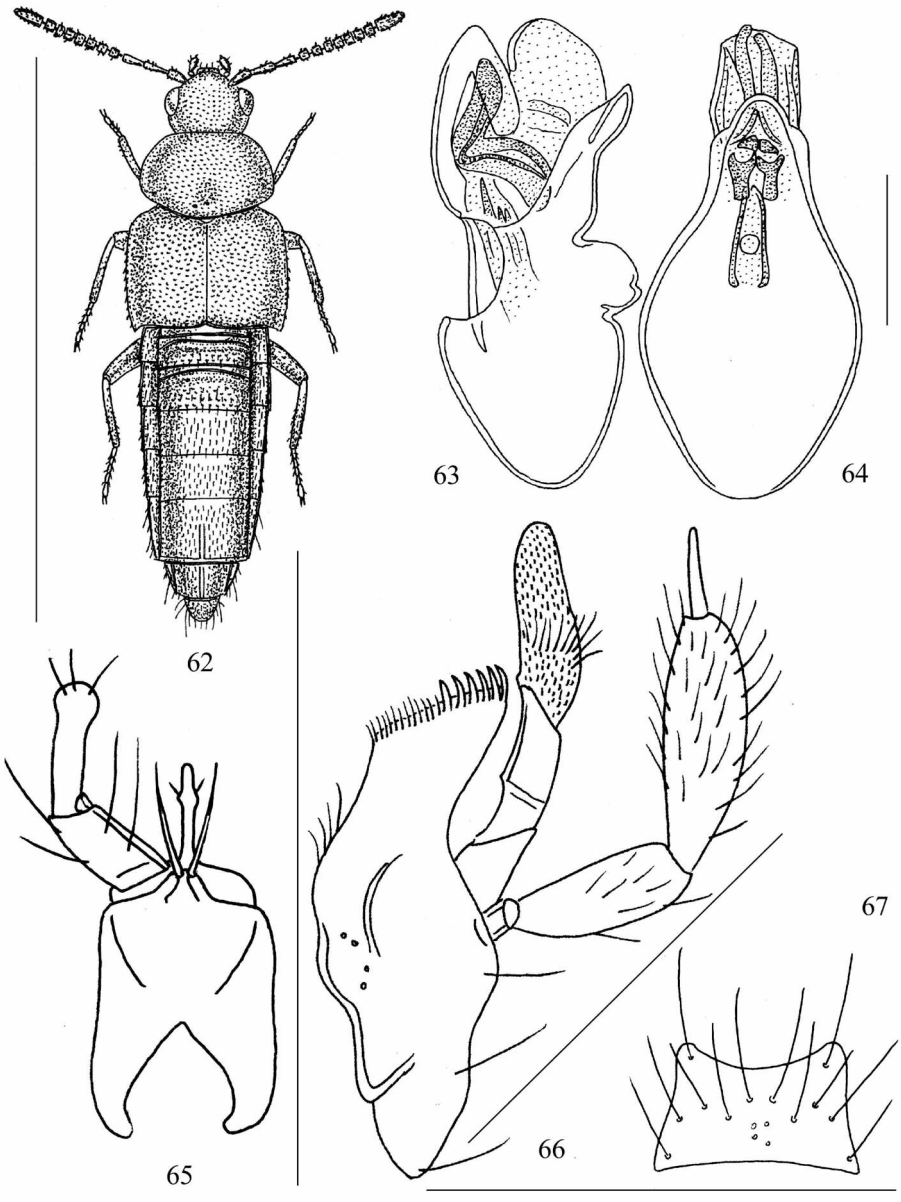
Aleochara (*Euryodma*) *aerea* Bernhauer, 1915

Aleochara aerea Bernhauer, 1915:189
Aleochara (*Euryodma*) *aerea*; Bernhauer & Scheerpeltz, 1926: 780

Type material:
5 females, Kenya, dintorni di Malindi, 30.IX.1992, leg. L. Bartolozzi, num. mag. 1381 (MZUF).

Distribution:
Abyssinia.

Note:
Holotype female examined by me (FMNHC).



Figs 62-67: *Spaniodmoinusa cornelli* n. gen., n. sp. Habitus, aedeagus in lateral and ventral views, labium with labial palpus, maxilla with maxillary palpus, mentum. (Habitus scale bar: 1.6 mm; other scale bars: 0.1 mm).

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