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Revisonal study on African *Apophylia*. Part 3. (Coleoptera: Chrysomelidae: Galerucinae)

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ABSTRACT. The third contribution to the knowledge of African *Apophylia* based on the study of type materials is presented. *Apophylia hanka* (from Namibia) and *A. zoiae* (from Kenya) spp. nov., both closely related to *A. semiobscura* FAIRMAIRE, 1887, are described. *Apophylia quadristigmatica* LABOISSIÈRE, 1922 is considered to be a synonym of *Apophylia maynei* LABOISSIÈRE, 1922. The lectotypes are designated for the following taxa: *Apophylia angolensis* LABOISSIÈRE, 1921, *A. curvipes* LABOISSIÈRE, 1920, *A. keniensis* LABOISSIÈRE, 1920, *A. pulchella* BRYANT, 1952, *Apophylia quadristigmatica* LABOISSIÈRE, 1922, and *Malaxia angustata* ALLARD, 1889. Male genitalia of all studied species are figured.

Key words: taxonomy, new species, lectotype designation, synonymy, Coleoptera, Chrysomelidae, Galerucinae, *Apophylia*, Afrotropical Region.

This paper presents the continuation of my previous works (BEZDĚK 2004, 2005). Additionally examined primary types are commented on. Two new species, *Apophylia hanka* from Namibia and *A. zoiae* from Kenya (both closely related to *A. semiobscura*) are described below. The lectotypes are designated for 4 species. Interesting sexual dimorphism (males with black, females with bicolorous pronotum) has been found in *A. pulchella*, *A. maynei*, *A. hanka* n. sp. and *A. zoiae* n. sp.

The following abbreviations identify the collections housing the examined material:

BMNH - United Kingdom, London, The Natural History Museum (Sharon SHUTE);

ISNB - Belgium, Brussels, Institut Royal des Sciences Naturelles de Belgique (Didier DRUGMAND, Marcel CLUDTS);

JBCB - Czech Republic, Brno, Jan BEZDĚK collection;

MNHN - France, Paris, Muséum National d'Histoire naturelle (Nicole BERTI);

MRAC - Belgium, Tervuren, Musée Royal de l'Afrique Centrale (Mark DE MEYER);

RBCN - Netherlands, Nieuwegein, Ron BEENEN collection;

SANC - South Africa, Pretoria, South African National Collection of Insects (Elizabeth GROBBELAAR);

SMNS - Germany, Stuttgart, Staatliches Museum für Naturkunde (Wolfgang SCHAWALLER);

SZIM - Italy, Milano, Stefano ZOIA collection;

TMSA - South Africa, Gauteng, Pretoria, Transvaal Museum (Ruth MULLER);

USNM - USA, Washington D.C., National Museum of Natural History (Alexander KONSTANTINOV);

ZMHB - Germany, Berlin, Museum für Naturkunde der Humboldt-Universität (Johannes FRISCH).

When recording the label data of the type material examined, a double slash (//) divides the data on different labels. The exact label data are cited for the type specimens. The type localities are cited in the original spelling. The other comments and complementations by the author are found in square brackets: [p] – preceding data are printed; [h] – the same, but handwritten; [w] - white label; x/y - number of males/number of females. The lectotypes and paralectotypes are designated in order to preserve stability of nomenclature in this group, according to the Article 74.7.3 of the Code (ICZN 1999).

Apophylia angolensis LABOSSIÈRE, 1921

Apophylia angolensis LABOSSIÈRE, 1921: Bull. Mus. Hist. Nat. Paris, 1921: 285 (Type locality: Benguela: Capelongo-Dongo); LABOSSIÈRE 1922: 245 (key) (sep. 157); LABOSSIÈRE 1925: 57; LABOSSIÈRE 1940: 14 (key); WILCOX 1971: 142.

TYPE MATERIAL EXAMINED

Lectotype (male), designated here, labelled: "Museum Paris Angola Benguela Capelongo-Dongo Mission Rohan-Chabot 1914 [grey label, p] // DÉCEMBRE [w, p] // m. [w, red letters, h] // Type [w, red letters, h] // Apophylia angolensis m [h] V. Laboissière — Dét. [w, p] // AfriGa specimen ID: [p] 168 [h] specimen data documented [p] 20. IX [h] 2004 [grey label, p]" (in MNHN); 1 paralectotype (female), labelled: "Museum Paris Angola Benguela Capelongo-Dongo Mission Rohan-Chabot 1914 [grey label, p] // f. [w, red letters, h] // Type [w, red letters, h] // Apophylia angolensis m [h] V. Laboissière — Dét. [w, p]" (in MNHN). The specimens are provided with one red label: „LECTOTYPUS [or PARALECTOTYPUS], *Apophylia angolensis* Laboissière, 1921, des. J. Bezděk 2004".

ADDITIONAL MATERIAL EXAMINED

ANGOLA: Ebanga, Miss. Sc. Suisse 1932-1933 (0/2 in MNHN; 1/0 in ISNB); Elende, Miss. Sc. Suisse 1932-1933 (6/0 in ISNB); Ganda, Miss. Sc. Suisse 1932-1933 (1/1 in ISNB); Angola, 1908, C. Wellman leg. (1/3 in BMNH). Aedeagus as in Fig. 1.

DISTRIBUTION

Angola.

COMMENTS

Described based on two specimens (male and female) from Angola. The male is designated here as the lectotype. Due the black basal half of femora, *A. angolensis* is similar to *A. femorata* (JACOBY, 1895) but differs in the more robust legs and tarsi and in the structure of aedeagus (Figs 1-2).

Apophylia angustata (ALLARD, 1889)

Malaxia angustata ALLARD, 1889: C. R. Soc. Ent. Belg., 33: LXXXI-LXXXII (sep. 16-17) (Type locality: Sénégal).

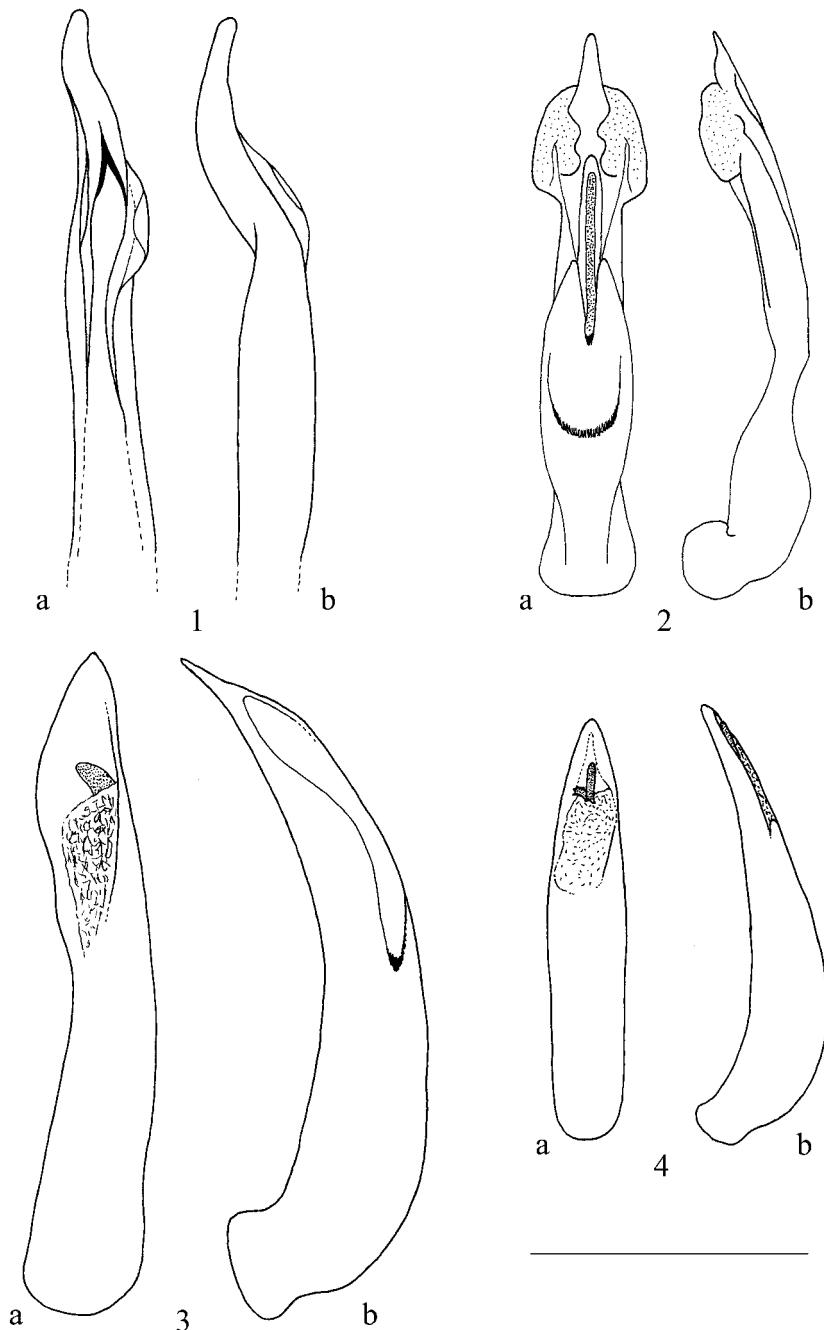
Apophylia angustata: LABOISSIÈRE 1922: 244 (key) (sep. 156); WEISE 1924: 183; LABOISSIÈRE 1940: 13 (key); WILCOX 1971: 142.

TYPE MATERIAL EXAMINED

Lectotype (male), designated here, and 2 paralectotypes (females), labelled: "Ex-Musæo E. ALLARD 1899 [w, p]" (in MNHN). The specimens are provided with one red label: „LECTOTYPUS [or PARALECTOTYPUS], *Malaxia angustata* Allard, 1889, des. J. Bezděk 2004".

ADDITIONAL MATERIAL EXAMINED

BURKINA FASO: Haute Volta (0/2 in SMNS); CAMEROON: Sidderi Mt., 19.-25.vii.1909, S. G. Riggenbach leg. (0/1 in ZMHB); Benue, near Kokumi Mt., 26.-29.vii.1909, S. G. Riggenbach leg. (0/3 in ZMHB); CHAD: Mondou, Bebedjia, 21.i.1978, G. Ruella leg. (0/2 in MRAC); CONGO: Ndelele, 5.vi.1952, H. de Saeger leg. (0/9 in ISNB); same data, 6.vi.1952 (0/4 in ISNB); same data, 18.vi.1952 (0/2 in ISNB); Mabanga, 23.v.1952, H. de Saeger leg. (3/2 in ISNB); Iso, 16.vi.1952, H. de Saeger leg. (2/7 in ISNB); GHANA: Accra, 25.x.1943, J. Phillips leg. (1/0 in USNM); IVORY COAST: Adiopodoumé (2/2 in MRAC); MALI: M'Pesoba, 22.viii.1970, G. Pierrard leg. (1/1 in MRAC); NIGER: Parc du W., 6.ix.1962 (0/1 in RBCN); Haut Niger (1/1 in ISNB); NIGERIA: Azare, 1925, L. Lloyd leg. (1/1 in ISNB, 1/0 in USNM); same data, 1924 (4/4 in BMNH); Samaru, 15.-22.vi.1970, P. H. Ward leg. (1/1 in BMNH); same data, 29.vii.-6.viii.1970 (1/3 in BMNH); Zaria-Kaduna region, E. C. Bay leg. (1/0 in USNM); Katsina, 5.ix.1970, J. T. Medler leg. (1/2 in USNM); SUDAN: Rejaf, 1923, L. Burgeon leg. (1/0 in ISNB); TOGO: Nanpandur, 28.ii.1902, S. Graf Zech leg. (0/



1-4. Aedeagus (a - dorsal view, b - lateral view): 1 - *Apophylia angolensis*, 2 - *A. femorata*, 3 - *A. angustata*, 4 - *A. crassicornis*. Scale 1 mm

1 in ZMHB); UGANDA: Patiko env., 20 km NE of Gulu, 5.xii.2001, M. Snížek leg. (1/0 in JBCB).

Aedeagus as in Fig. 3.

DISTRIBUTION

Burkina Faso, Cameroon, Chad, Congo, Ghana, Ivory Coast, Mali, Niger, Nigeria, Senegal, Sudan, Togo, Uganda.

COMMENTS

Described based on three specimens (male and two females) from Angola. The male is designated here as the lectotype. *A. angustata* can be distinguished from its congeners by the combination of the following characters: head and pronotum completely black, legs yellow, antennae distinctly flattened and structure of aedeagus.

Apophylia crassicornis LABOISSIÈRE, 1920

Apophylia crassicornis LABOISSIÈRE, 1920: Bull. Soc. Ent. Fr., 1919: 367 (Type locality: Afrique Orientale: Kikuyu Escarpment); LABOISSIÈRE 1922: 243 (key) (sep. 155); WEISE 1924: 183; LABOISSIÈRE 1925: 57; WILCOX 1971: 143.

TYPE MATERIAL EXAMINED

Holotype (male), labelled: "Museum Paris Afrique orient. angl. Escarpment (Wa-Kikouyou) Ch. Alluaud 1904 [grey label, p] // Août [w, h] // Type [w, red letters, h] // *Apophylia crassicornis* Lab [h] V. Laboissière - DÉT. [w, p] // AfriGa specimen ID: [p] 177 [h] specimen data documented [p] 20. IX [h] 2004 [grey label, p]" (in MNHN). The holotype is provided with one red label: „HOLOTYPE, *Apophylia crassicornis* Laboissière, 1920, des. J. Bezděk 2004".

ADDITIONAL MATERIAL EXAMINED

KENYA: Voi, 13.-17.xii.1997, M. Snížek leg. (1/0 in RBCN); Voi, xi.1997, M. Snížek leg. (3/0 in JBCB).

Aedeagus as in Fig. 4.

DISTRIBUTION

Kenya.

COMMENTS

Described based on one specimen (male) from Kenya. The aedeagus of the holotype is extremely weakly sclerotized, the drawing of aedeagus is based on non-type material. The pronotal black pattern consists of three black spots (one central and two lateral). The spots in the holotype are extended and connected, additional specimens have smaller and well separated spots.

Due to the distinctly enlarged and flattened antennomeres 4 to 7, *A. crassicornis* is closely related to *A. laticollis* LABOISSIÈRE, 1922. Both species differ in the colour of the head and the ratio of antennomeres 2 and 3. Head is yellow with black vertex in *A. crassicornis* and black with yellow mouthparts and anterior part in *A. laticollis*. Antennomere 3 is twice as long as antennomere 2 in *A. crassicornis* (1.5 times in *A. laticollis*).

Apophylia curvipes LABOISSIÈRE, 1920

Apophylia curvipes LABOISSIÈRE, 1920: Bull. Soc. Ent. Fr., 1919: 366 (Type locality: Afrique Orientale: monts Ruwenzori, Ibanda); LABOISSIÈRE 1922: 244 (key) (sep. 156); WEISE 1924: 183; LABOISSIÈRE 1925: 57; WILCOX 1971: 143.

Type material examined

Lectotype (male), designated here, labelled: "Museum Paris Monts Rouwenzori Zone inférieure Ibanda 1400 m. Ch. Alluaud 1909 [grey label, p] // Type [w, red letters, h] // Apophylia curvipes Lab. [h] V. Laboissière - DÉT. [w, p] // AfriGa specimen ID: [p] 178 [h] specimen data documented [p] 20. IX [h] 2004 [grey label, p]" (in MNHN); 1 paralectotype (female), labelled: "f [w, p] // Coll. R. I. Sc. N. B. Congo belge [grey label on which two following labels are stuck, p] // Museum Paris Monts Rouwenzori Zone inférieure Ibanda 1400 m. Ch. Alluaud 1909 [grey label, p] // JANVIER [w, p] // Muséum Paris Coll. Générale [light blue label, p] // TYPE [red label, p] // Apophylia curvipes m f 1919 [h] V. Laboissière — Dét. [w, p]" (in MNHN). The specimens are provided with one red label: „LECTOTYPUS [or PARALECTOTYPUS], *Apophylia curvipes* Laboissière, 1920, des. J. Bezděk 2004".

ADDITIONAL MATERIAL EXAMINED

KENYA: Muguga, 13.iv.1979, R. T. Cooker leg. (1/0 in BMNH).
Aedeagus as in Fig. 5.

DISTRIBUTION

Kenya, Uganda.

COMMENTS

Except the type specimens I had the possibility to examine only one additional specimen from BMNH. *A. curvipes* can be distinguished from its congeners by distinctly curved hind tibiae before apex, by the black spots on apical part of mid and hind femora and by the structure of aedeagus (Fig. 5).

Apophylia keniaensis LABOISSIÈRE, 1920

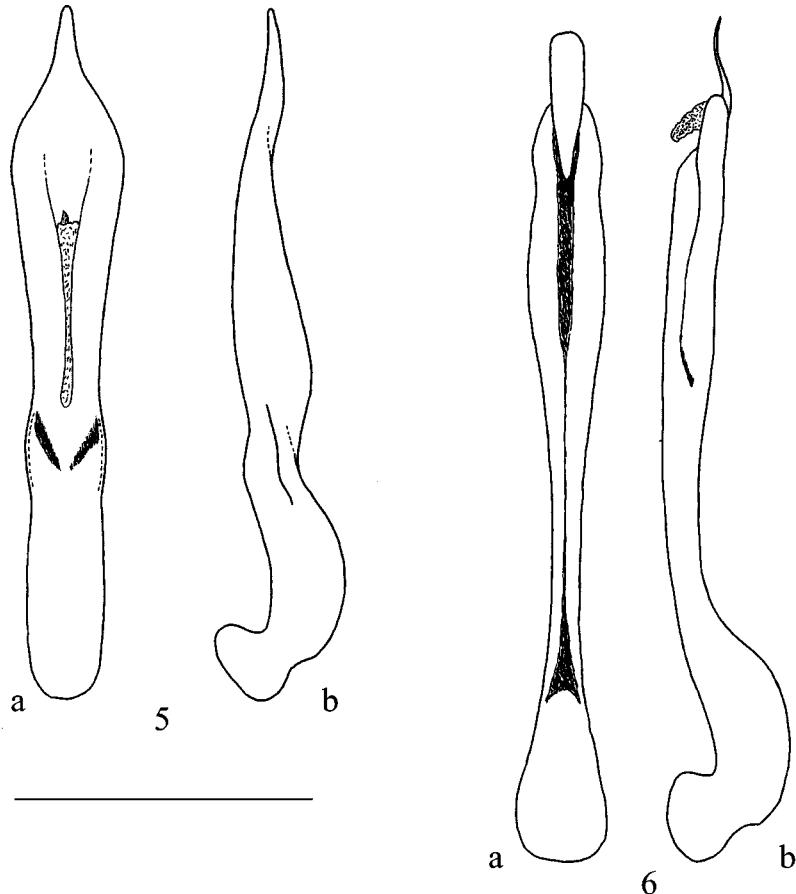
Apophylia keniaensis LABOISSIÈRE, 1920: Bull. Soc. Ent. Fr., 1919: 367 (Type locality: Afrique Orientale: sur le versant ouest du mont Menia, dans la zone inférieure: Ngaré Rungai, rivière en prairie); LABOISSIÈRE 1922: 243 (key) (sep. 155).

Apophylia Keniensis: LABOISSIÈRE 1924: 22.

Apophylia keniensis: WEISE 1924: 183; LABOISSIÈRE 1925: 57; WILCOX 1971: 145.

TYPE MATERIAL EXAMINED

Lectotype (female), designated here, labelled: "Afrique or. anglaise M'Kenya vers^t ouest Zone inférieure Alluaud & Jeannel [w, p] // Ngaré Rungai rivière en prairie 2000m Janv 1912 St. 37 [w, p] // type [w, red letters, h] // Apophylia Keniensis m. Type [h] V. Laboissière - DÉT. [w, p] // AfriGa specimen ID: [p] 189 [h] specimen data documented [p] 20. IX [h] 2004 [grey label, p]" (in MNHN). The lectotype is provided with one red label: „LECTOTYPUS, *Apophylia keniensis* Laboissière, 1920, des. J. Bezdek 2004".



5-6. Aedeagus (a - dorsal view, b - lateral view): 5 - *Apophylia curvipes*, 6 - *A. maynei*. Scale 1 mm

ADDITIONAL MATERIAL EXAMINED

KENYA: Ngong Forestry Station pond, 1.xii.1968, P. J. Spangler (0/1 in USNM); Kabete, iii.1922, H. E. Box leg. (0/1 in BMNH); Kabete, i.1939, MacInnes leg. (0/1 in USNM); Voi, 1.-9.vi.1997, A. Kudrna jr. leg. (0/1 in JBCB); Rift Valley Matthews Range, 35 km N of Wamba, 1300-1400 m, $1^{\circ}10'707''N$ $37^{\circ}18'962''E$, 7.-12.xii.2002, C. Hauser, D. Vartsch & A. Zahm leg. (0/1 in SMNS); TANZANIA: Baobab valley, SE of Mbuyuni, 9.iii.2002, M. Snížek leg. (0/1 in JBCB); Ndala, $39^{\circ}15'E$ $4^{\circ}45'S$, G. H. D. Carpenter leg. (0/1 in BMNH).

DISTRIBUTION

Kenya, Tanzania.

COMMENTS

A. keniensis was described based on several (at least two) specimens of unspecified sex. I have found only one female deposited in MNHN, which is designated here as the lectotype. The male is not known but possibly the males have black pronotum as in similar species *A. maynei*, *A. pulchella*, *A. zoiae* n. sp. and *A. hanka* n. sp.

Apophylia laticollis LABOISSIÈRE, 1922

Apophylia laticollis LABOISSIÈRE, 1922b: Rev. Zool. Afr., 10: 243 (key), 252-253 (sep. 155, 164-165) (Type locality: Mufungwa Sampwe); LABOISSIÈRE 1925: 57; WILCOX 1971: 145.

TYPE MATERIAL EXAMINED

Holotype (female), labelled: "TYPE [red label, p] // Type [w, h, red letters] / / MUSÉE DU CONGO Mufungwa Sampwe I/16-XII-1911 Dr. Bequaert [w, p] // R. DÉT. [p] P [h] 727 [w, p] // Apophylia laticollis m [h] V. Laboissière – Dét. [w, p]" (in MRAC). The holotype is provided with one red label: „HOLOTYPE, *Apophylia laticollis* Laboissière, 1922, J. Bezděk det. 2003”.

DISTRIBUTION

Congo.

COMMENTS

Described based on one female from Congo. Due to the enlarged and flattened antennomeres 4 to 7, *A. laticollis* is similar to *A. crassicornis*. Both species can be distinguished by the coloration of head (yellow with black vertex in *A. crassicornis*; black with yellow mouthparts and anterior part in *A. laticollis*) and by the ratio of antennomeres 2 and 3 (antennomere 3 is twice as long as antennomere 2 in *A. crassicornis*; 1.5 times in *A. laticollis*).

***Apophylia maynei* LABOISSIÈRE, 1922**

Apophylia Maynéi LABOISSIÈRE, 1922: Rev. Zool. Afr., 10: 244 (key), 255-256 (sep. 156 (key), 167-168) (Type locality: Albertville).

Apophylia Maynei: LABOISSIÈRE 1925: 58.

Apophylia maynei: WILCOX 1971: 146; BEZDĚK 2004: 104.

Apophylia quadrastigmatica LABOISSIÈRE, 1922: Rev. Zool. Afr., 10: 241 (key), 250-251 (sep. 153, 162-163) (Type locality: Albertville); LABOISSIÈRE 1925: 58; LABOISSIÈRE 1940: 11 (key); WILCOX 1971: 147; **syn. nov.**

TYPE MATERIAL EXAMINED

Apophylia maynei

Lectotype (male), designated by Bezděk (2004), and 2 paralectotypes (males), labelled: "LECTOTYPUS [or PARALECTOTYPUS, resp., red label, p] // Type [w, h, red letters] // MUSÉE DU CONGO Albertville XII-1918 R. Mayné [w, p] // R. DÉT. [p] D [h] 728 [w, p] // Apophylia Maynei m [h] V. Laboissière – Dét. [w, p]" (in MRAC); 2 paralectotypes (males), labelled: "PARA-LECTOTYPUS [red label, p] // MUSÉE DU CONGO Albertville XII-1918 R. Mayné [w, p] // R. DÉT. [p] D [h] 728 [w, p] // Apophylia Maynei m [h] V. Laboissière – Dét. [w, p]" (in MRAC); paralectotype (male), labelled: "m [w, p] // Coll. R. I. Sc. N. B. Congo belge [blue label on which three following labels are stuck, p] // Albertville [w, p] // XII-1918 [w, p] // R. Mayné [w, p] // Apophylia Maynei m 1922 [h] V. Laboissière – Dét. [w, p] // Para-type [red label, p]" (in ISNB). The specimens are provided with one red label: „LECTOTYPUS [or PARALECTOTYPUS], *Apophylia Maynéi* Laboissière, 1922, des. J. Bezděk 2003".

Apophylia quadrastigmatica

Lectotype (female), designated here, and 2 paralectotypes (females), labelled: "LECTOTYPUS [or PARALECTOTYPUS, resp., red label, p] // Type [w, h, red letters] // MUSÉE DU CONGO Albertville XII-1918 R. Mayné [w, p] // R. DÉT. [p] C [h] 728 [w, p] // Apophylia quadrastigmatica m [h] V. Laboissière – Dét. [w, p]" (in MRAC); 3 paralectotypes (females), labelled: "PARA-LECTOTYPUS [red label, p] // MUSÉE DU CONGO Albertville XII-1918 R. Mayné [w, p] // R. DÉT. [p] D [h] 728 [w, p]" (in MRAC); paralectotype (female), labelled: "f [w, p] // Coll. R.I.Sc.N.B. Congo belge [blue label on which three following labels are stuck, p] // Albertville [w, p] // XII-1918 [w, p] // R. Mayné [w, p] // Apophylia quadrastigmatica m 1922 [h] V. Laboissière – Dét. [w, p] // Para-type [red label, p]" (in ISNB). The specimens are provided with one red label: „LECTOTYPUS [or PARALECTOTYPUS], *Apophylia quadrastigmatica* Laboissière, 1922, des. J. Bezděk 2003".

Aedeagus as in Fig. 6.

DISTRIBUTION

Congo.

COMMENTS

A. maynei was described from the same locality and the type specimens bear the same labels as the type series of *A. quadrastigmatica*, which is nothing but a female of *A. maynei*. Similar sexual dimorphism (males with black pronotum, females with yellow pronotum with central black spot) is known also in other *Apophylia* species – such as *A. pulchella*, *A. zoiae* n. sp. and *A. hanka* n. sp. Due to this fact, *A. quadrastigmatica* is considered to be a synonym of *A. maynei*.

A. maynei is similar to *A. semiobscura*, *A. zoiae* n. sp. and *A. hanka* n. sp. but can be distinguished by the different structure (Figs 6, 8-10) of aedeagus and by distinctly curved tibiae before apex in male.

***Apophylia porraceipennis* (ALLARD, 1889)**

Malaxia porraceipennis ALLARD, 1889: C. R. Soc. Ent. Belg., 33: LXXXI (sep. 16) (Type locality: Sénégal).

Apophylia porraceipennis: LABOISSIÈRE 1922: 240 (key) (sep. 152); WEISE 1924: 183; WILCOX 1971: 147.

TYPE MATERIAL EXAMINED

Holotype (female), labelled: “Ex-Musæo E. ALLARD 1899 [w, p]“ (in MNHN). The holotype is provided with one red label: „HOLOTYPE, *Malaxia porraceipennis* Allard, 1889, des. J. Bezděk 2004”.

ADDITIONAL MATERIAL EXAMINED

CAMEROON: Sidderi Mt., 19.-25.vii.1909, S. G. Riggenbach leg. (0/1 in ZMHB); Benue, near Kokumi Mt., 26.-29.vii.1909, S. G. Riggenbach leg. (0/1 in ZMHB); NIGER: Nord de la Boucle du Niger, viii. 1910, J. Vuillet leg. (0/2 in MNHN); NIGERIA: Azare, 1925, L. Lloyd leg. (0/1 in USNM); SENEGAL: Khayes, 6.viii.1882, Nodier leg. (0/1 in SMNS, 0/1 in ISNB).

DISTRIBUTION

Cameroon, Niger, Nigeria, Senegal.

COMMENTS

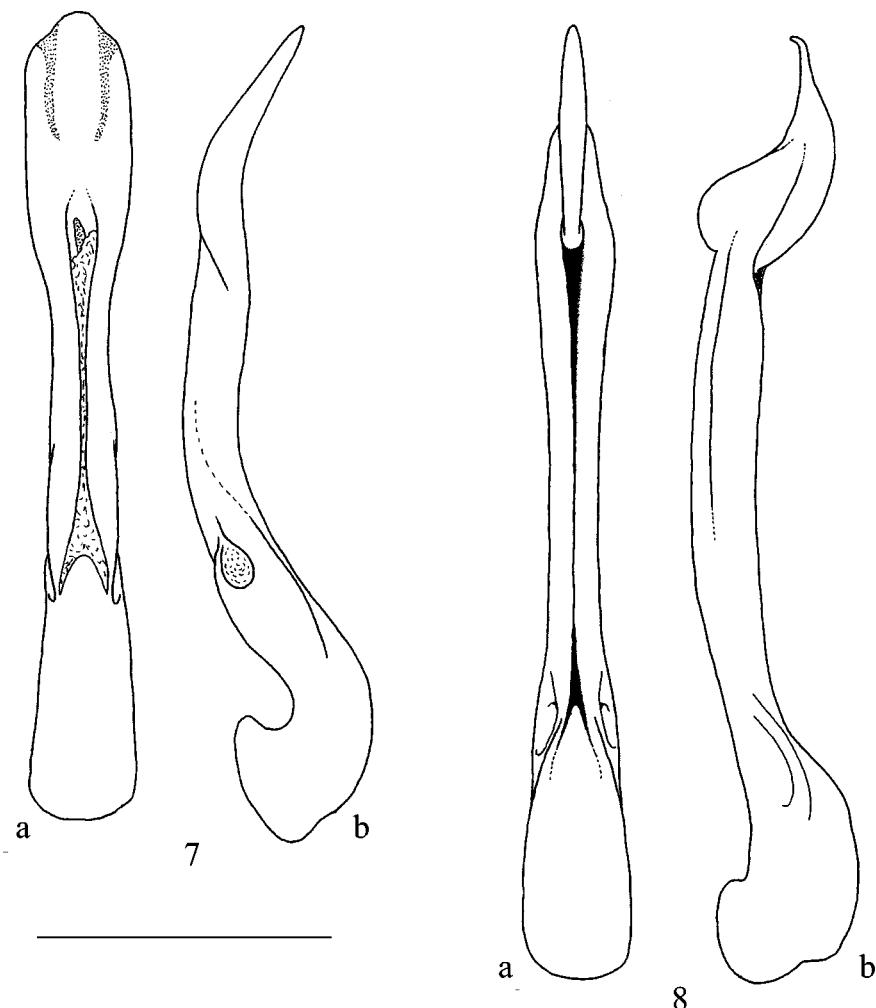
Described based on one specimen from Senegal deposited in MNHN. Within the material from ISNB I have found one specimen bearing the label “Type“, this specimen cannot be treated as the type specimen. All specimens known to me are females, the male remains unknown. *A. porraceipennis* can be easily distinguished from its congeners by the combination of unicolorous black head and yellow pronotum and legs.

***Apophylia pulchella* BRYANT, 1952**

Apophylia pulchella BRYANT, 1952: Ann. Mag. Nat. Hist., 5(12): 246-247 (Type locality: Kenya: Stony Athi); WILCOX 1971: 147.

TYPE MATERIAL EXAMINED

Lectotype (male), designated here, labelled: „Type [round white label with red margin, p] // STONY ATHI. E. A. U. Nta: Hist: Soc: Biol: Survey. 5-40 [w, p] // IMP. INST. ENT. COLL. NO. 10606 [w, p] // Apophylia pulchella Bryant [h] G.E.Bryant det. [w, p] // Pres by Com Inst Ent B M 195[p]1-588[w, h]” (in BMNH); 1 paralectotype (female), labelled: „STONY ATHI. E. A. U. Nta: Hist: Soc: Biol: Survey. 4-40 [w, p] // IMP. INST. ENT. COLL. NO. 10606 [w, p] // Apophylia pulchella Bryant [h] G.E.Bryant det. [w, p] // Pres by Com Inst Ent B M 195 [p] 1-588 [w, h]” (in BMNH). The specimens are provided with one red



7-8. Aedeagus (a - dorsal view, b - lateral view): 5 - *Apophylia pulchella*, 6 - *A. semiobscura*.
Scale 1 mm

label: „LECTOTYPUS [or PARALECTOTYPUS], *Apophylia pulchella* Bryant, 1952, des. J. Bezděk 2002”.

ADDITIONAL MATERIAL EXAMINED

ETHIOPIA: Sidamo prov., 32 km E of Neghelli, 1600 m, R. O. S. Clarke leg. (2/0 in MRAC); KENYA: Nairobi Park, 10.vi.1980, D. G. Furth leg. (2/3 in USNM).
Aedeagus as in Fig. 7.

DISTRIBUTION

Ethiopia, Kenya.

COMMENTS

A. pulchella was described based on four specimens deposited in BMNH. I had the possibility to study two specimens (male and female) and the male is designated here as the lectotype.

A. pulchella is characterised by its very peculiar structure of aedeagus (Fig. 7) and by very short antennal segments (all segments twice as long as wide). Body length of males 6.05-6.55 mm (lectotype 6.45 mm), of females 6.85-7.25 mm. Most of specimens examined (both males and females) have black pronotum, but two females from USNM have pronotum bicolorous, brown with three large confusing black spots. Such sexual dimorphism is known also in related *Apophylia* species: *A. maynei*, *A. hanka* n. sp. and *A. zoiai* n. sp.

The coloration of the legs and antennae is variable. The lectotype and the paralectotype have basal half of all femora black, tibiae infuscate and antennae yellow with darker apical part of each antennomere. Non-type specimens from Kenya are generally dark, with almost black legs (only the knees are paler) and with darker antennae. Additional two males from Ethiopia are paler, with the legs and antennae yellow. Also, Ethiopian specimens do not have such robust legs and antennae as the specimens from Kenya, but the structure of aedeagus is identical in both populations.

Apophylia semiobscura FAIRMAIRE, 1887

Apophylia semiobscura FAIRMAIRE, 1887: Ann. Soc. Ent. Fr. 6(7): 365-366 (Type locality: Zanguebar); LABOISSIÈRE 1922: 244 (key) (sep. 156); WEISE 1924: 183; LABOISSIÈRE 1940: 14 (key); WILCOX 1971: 147.

TYPE MATERIAL EXAMINED

Holotype (male), labelled: “*Apophylia semiobscura* Fairm. [w, h] // 24 II 86 [w, round label, h] // Museum Paris Zanguebar Tabora Révoil 1886 [grey label, p] // HOLOTYPE [red label, p] // AfriGa specimen ID: [p] 211 [h] specimen data documented [p] 20. IX [h] 2004 [grey label, p]“ (in MNHN).

ADDITIONAL MATERIAL EXAMINED

MALAWI: Liwonde N. P., 15°02'S 35°15'E, 400 m, 19.i.1985, Bellamy & Scholtz leg. (1/0 in TMSA).

Aedeagus as in Fig. 8.

DISTRIBUTION

Malawi, Tanzania.

COMMENTS

Both males known to me have completely yellow legs. The pronotum is black with slightly paler extreme anterior margin and with very small paler spot in posterior angles. The female is not known, but very probably the pronotum is bicolorous. By the structure of aedeagus, *A. semiobscura* is closely related to *A. hanka* n. sp. and *A. zoiai* n. sp. All three species can be distinguished by the shape of basimeso- and basimetatarsomere (Figs 11-13) and by the structure of aedeagus (Figs 8-10). *A. zoiai* n. sp. differs also in darkened bases of femora.

DESCRIPTION OF NEW SPECIES

Apophylia hanka n. sp.

TYPE MATERIAL

Holotype (male) and 4 paratypes (1 male, 3 females), labelled: "NAMIBIA: Windhoek p. III.-n.IV.1989 leg. J. IRISH (UG) [blue label, p]" (in ZMHB); 1 paratype (male), labelled: "S. W. AFRICA/NAMIBIA "Tiger Valley" Farm Harasib 648, Otavi Mts. 19.33S 17.44E 14.iii.1987 R. Oberprieler [w, p] // National coll. of insects Pretoria, S. Afr. [w, p]" (in SANC). The types of a newly described species are provided with one red label: „HOLOTYPE [or PARATYPE], *Apophylia hanka* sp. nov., det. J. Bezděk 2005".

DESCRIPTION

Male. Body flattened, parallel, densely pubescent, semiopaque. Head black, with anterior part and mouthparts yellow, mandibles at apices and last palpomere darkened. Pronotum, scutellum and underside black. Extreme margin of semicircular incision on last visible sternite paler. Legs and antennae yellow, last two tarsal segments infuscate. Elytra metallic green.

Labrum transverse, covered with several pale setae, anterior margin slightly sinuate. Anterior part of head semiopaque, sparsely covered with long pale setae. Frontal tubercles small, subtriangular, semiopaque. Vertex dull, densely covered with small confused punctures and short pale hairs. Antennae 0.65 times as long as the body, length ratio of antennomeres 1 to 11: 22-9-12-25-17-17-16-15-11-10-13.

Pronotum transverse, twice as wide as it is long, widest in the middle, slightly narrowed anteriad and posteriad, dull, densely covered with small punctures and

pale hairs. Surface with two feeble depressions laterally. Anterior margin slightly concave, posterior margin straight, lateral margins slightly rounded. Anterior and posterior margins thinly bordered, lateral margins indistinctly bordered. Anterior angles nearly rectangular, posterior angles obtusely angulate, all angles bear long pale seta.

Scutellum short, semicircular, with small dense punctures and short pale hairs, semiopaque.

Elytra parallel, dull. Humeral calli well developed. Elytral surface very densely covered with small confused punctures and short pale hairs. Epipleura distinct, gradually narrowed to apex.

Macropterous.

Ventral surface lustrous, finely punctured and covered with pale hairs. Last visible sternite with deep semicircular incision.

Basimeso- and basimetatarsomere robust (Fig. 12), basimetatarsomere 1.55 times as long as two following metatarsomeres combined.

Female: Pronotum bicolorous, yellow, with large central black spot and very small spots in all angles around setigerous pores. Abdomen dark, gradually paler posteriorly. First tarsomeres not enlarged. Last visible sternite complete. Claws appendiculate.

Body length of males 5.50-6.35 mm (holotype 6.35 mm); of females 6.85-7.05 mm.

The shape of aedeagus as in Fig. 9.

DISTRIBUTION

Namibia.

DIAGNOSIS

A. hanka n. sp. is similar to *A. semiobscura* and *A. zoiai* n. sp. All three species can be distinguished by the structure of aedeagus (Figs 8-10) and by the shape of basimeso- and basimetatarsomere (Figs 11-13). *A. zoiai* n. sp. differs also in darkened bases of femora.

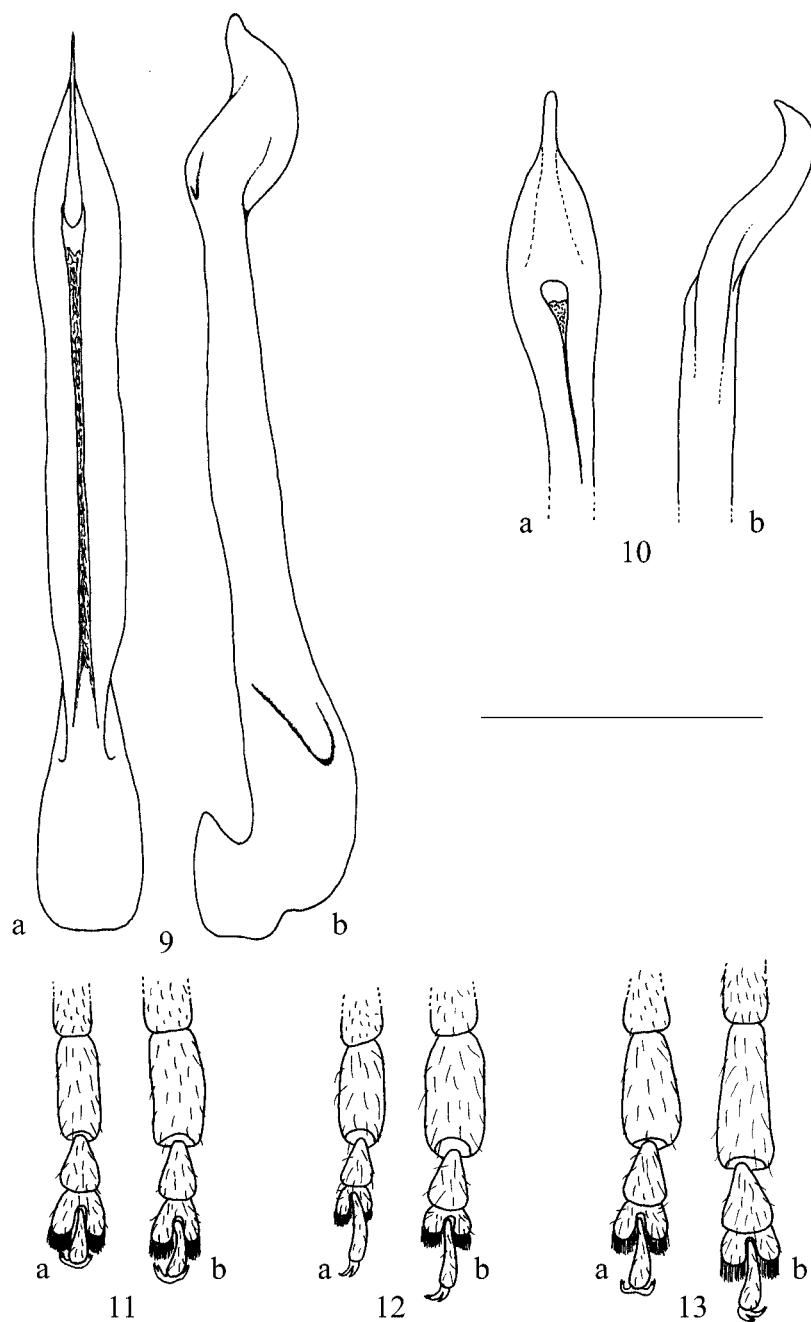
ETYMOLOGY

Dedicated to Hanka POKLADNÍKOVÁ (Brno, Czech Republic), my dear longlife friend.

Apophylia zoiai n. sp.

TYPE MATERIAL

Holotype (male), labelled: "Brit. E. Afr. Narok Masai reserve [p] 17.ii.1914 [h] capt. A. O. Luckman. [w, p] // Apophylia sp. [w, h] // 1916-259 [w, p]" (in BMNH); 3 paratypes (females), labelled: "Brit. E. Afr. Narok Masai reserve [p] 17.ii.1914 [h] capt. A. O. Luckman. [w, p] // 1916-259 [w, p]" (in BMNH); 2 paratypes (females), labelled: "Brit. E. Afr. Narok Masai reserve [p] 26.ii.1914 [h] capt. A. O. Luckman. [w, p] // 1916-259 [w, p]" (in BMNH); 1 paratype



9-10. Aedeagus (a - dorsal view, b - lateral view): 9 - *Apophylia hanka* n. sp., 10 - *A. zoiae* n. sp.; 11-13. Male tarsus (a - mid tarsus, b - hind tarsus): 11 - *A. semiobscura*, 12 - *A. hanka* n. sp., 13 - *A. zoiae* n. sp. Scale 1 mm

(female), labelled: "Brit. E. Afr. Narok Masai reserve [p] 27.i.1914 [h] capt. A. O. Luckman. [w, p] // 1916-259 [w, p]" (in BMNH); 2 paratypes (females), labelled: "Brit. E. Afr. [p] Mara R. [h] Masai reserve [p] 11.ii.1914 [h] capt. A. O. Luckman. [w, p] // 1916-259 [w, p]" (in BMNH); 1 paratype (female), labelled: "Brit. E. Afr. [p] Mara R. [h] Masai reserve [p] 9.ii.1914 [h] capt. A. O. Luckman. [w, p] // 1916-259 [w, p]" (in BMNH); 1 paratype (female), labelled: "Brit. E. Afr. Masai reserve 4.iii.1914 Cap. A. O. Luckman. [w, p] // 1916-259 [w, p]" Apophylia sp. [w, h]" (in BMNH); 4 paratypes (1 male, 3 females), labelled: "KENYA – m 1800/1900 Lake Nakuru (west side) 4.VII.1991 S. Zoia leg. [w, p]" (in SZIM); 1 paratype (female), labelled: "KENYA Lake El-Menteita 211290 leg. Mauser [w, p] // Apophylia spec. [h] R. Beenen, det. 19 [p] 92 [w, h]" (in RBCN). The types of the newly described species are provided with one red label: „HOLOTYPE [or PARATYPE], *Apophylia zoiae* sp. nov., det. J. Bezděk 2005".

DESCRIPTION

Male. Body flattened, parallel, densely pubescent, semiopaque. Head black, with anterior part and mouthparts yellow, mandibles at apices and last palpalomere darkened. Pronotum, scutellum and underside black (one male has paler extreme anterior and posterior pronotal margins). Elytra metallic green. Legs yellow, with darkened basal third, last two tarsal segments infuscate. Antennomeres 1 to 3 yellow, antennomeres 4 and 5 gradually darkened, rest of antennomeres black.

Labrum transverse, covered with several pale setae, anterior margin sinuate. Anterior part of head lustrous, sparsely covered with pale setae. Frontal tubercles small, subtriangular, covered with microsculpture, semiopaque. Frons with feeble depression behind the frontal tubercles. Vertex dull, densely covered with small confused punctures and short pale hairs. Antennae 0.75 times as long as the body, length ratio of antennomeres 1 to 11: 21-9-16-27-22-19-16-14-16-14-15.

Pronotum transverse, 1.80-1.90 times broader than it is long, widest at the first third, slightly narrowed anteriad and posteriad, dull, densely covered with small punctures and pale hairs. Surface with two feeble depressions laterally and feebly impressed median line. Anterior margin slightly concave, posterior margin straight, lateral margins slightly rounded. Anterior and posterior margins thinly bordered, lateral margins indistinctly bordered. Anterior angles nearly rectangular, posterior angles obtusely angulate, all angles bear long pale seta.

Scutellum short, semicircular, with small dense punctures and short pale hairs, semiopaque.

Elytra parallel, dull. Humeral calli well developed. Elytral surface very densely covered with small confused punctures and short pale hairs. Epipleura distinct, gradually narrowed to apex.

Macropterous.

Ventral surface lustrous, finely punctured and covered with pale hairs. Last visible sternite with deep semicircular incision.

Basimeso- and basimetatarsomere robust (Fig. 13), basimetatarsomere 1.3 times as long as two following metatarsomeres combined.

Female: Pronotum bicolorous, yellow, with large central black spot and very small spots in all angles around setigerous pores. Abdomen black, posterior margin of last sternite widely yellow. First tarsomeres not enlarged. Last visible sternite with small sharp incision. Claws appendiculate.

Body length of males 5.90-6.35 mm (holotype 5.90 mm); of females 6.30-6.90 mm.

The shape of aedeagus as in Fig. 10.

DISTRIBUTION

Kenya.

DIAGNOSIS

A. zoiiae n. sp. is closely related to *A. semiobscura* and *A. hanka* n. sp. but differs in the different structure of aedeagus (Figs 8-10), in the shape of basimeso- and basimetatarsomere (Figs 11-13) and in darkened bases of femora (legs completely yellow in *A. semiobscura* and *A. hanka* n. sp.).

ETYMOLOGY

Dedicated to Stefano ZOIA, an excellent specialist in Chrysomelidae, who collected part of the type series.

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