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Revisional study of African *Apophylia*. Part 2: *Bequaertinia* LABOISSIÈRE, 1922, a new synonym of *Apophylia* THOMSON, 1858 (Coleoptera: Chrysomelidae: Galerucinae)

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ABSTRACT. The second contribution to the knowledge of African *Apophylia* based on the study of relevant primary types is presented. *Apophylia demeyeri* n. sp. from Congo is described. Following new synonyms are proposed: *Bequaertinia* LABOISSIÈRE, 1922 = *Apophylia* THOMSON, 1858; *A. ivoirensis* PIC, 1945 = *A. major* LABOISSIÈRE, 1922 = *A. schoutedeni* LABOISSIÈRE, 1922 = *A. incisitarsis* (LABOISSIÈRE, 1922); *A. theresae* PIC, 1944 = *A. chloroptera* THOMSON, 1858. The lectotypes are designated for *Apophylia theresae* PIC, 1944, *A. major* LABOISSIÈRE, 1922 and *A. schoutedeni* LABOISSIÈRE, 1922. Three species described in the genus *Bequaertinia* are transferred to the genus *Apophylia*: *A. nodicornis* (LABOISSIÈRE, 1922) comb. nov.; *A. incisitarsis* (LABOISSIÈRE, 1922) comb. nov., and *A. leontovitchi* (LABOISSIÈRE, 1940) comb. nov. Male genitalia of all the species studied are figured.

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

Genus *Bequaertinia* was erected by LABOISSIÈRE (1922) for two new species, *Bequaertinia nodicornis* and *B. incisitarsis* (with *B. nodicornis* as the type species). The third species, *B. leontovitchi*, was described by LABOISSIÈRE (1940). All three species were described according to male holotypes only.

The extended fifth male antennomere was the main character separating the genus *Bequaertinia* from *Apophylia*. However, the modified antennal segments frequently occur in the genus *Apophylia* (see, for example, Asiatic species *A. kantneri* BEZDĚK, 2003, *A. dilaticornis* (JACOBY, 1894), *A. pallipes* (JACOBY, 1892) or African species *A. crassicornis* LABOISSIÈRE, 1920), as well as in many

other genera in the subfamily Galerucinae. According to MOHAMEDSAID (2004), the modified antennae in the males of Galerucinae seem to have taxonomic significance at the subfamily, generic, and species levels. Although modified antennae are not an exclusive characteristic of any genus, in some cases, their characteristic appearance is significant enough to separate the genera. On the other hand, based on the fact that antennal modifications are nothing but a male secondary sexual character without generic importance, REID (1999) synonymized the genera *Taumacera* THUNBERG, 1814 and *Platyxantha* BALY, 1864. Because I am not able to find any other character distinguishing between the two genera, I decided to synonymize *Bequaertinia* with *Apophylia*.

The females of *Bequaertinia incisitarsis* were described as separate species three times and originally placed in *Apophylia* by LABOISSIÈRE himself (*A. major* and *A. schoutedeni*) and by PIC (*A. ivoirensis*). I had the possibility to study the large series of *A. incisitarsis* and *A. nodicornis* deposited in USNM and MRAC, respectively. The comparison of these series with the primary types of *A. major*, *A. schoutedeni* and *A. ivoirensis*, allows me to propose the following synonymies: *A. ivoirensis* PIC, 1945 = *A. major* LABOISSIÈREE, 1922 = *A. schoutedeni* LABOISSIÈRE, 1922 = *A. incisitarsis* (LABOISSIÈRE, 1922).

The females of *A. demeyeri* sp. nov., *A. incisitarsis* and *A. nodicornis* could be distinguished by the coloration of pronotum and the shape of antennae (see the identification key). On the other hand, it is very difficult to distinguish between the females of *A. incisitarsis* and *A. leontovitchi* (both with not enlarged antennomeres). The only known female of *A. leontovitchi* is assigned to this species only by the same label data as in male holotype (see the comments below *A. leontovitchi*).

The five species presented in this paper seem to form a natural group of relative species. The main common character is the similar structure of aedeagus (all five species), followed by the modified fifth antennomere and very large frontal tubercles (in *A. nodicornis*, *A. incisitarsis*, *A. leontovitchi* and *A. demeyeri* sp. nov.) and deep incision in male basimesotarsomere (in *A. incisitarsis* and *A. chloroptera*). From these five species, *A. chloroptera* posseses a transional position between this group and other *Apophylia*, mainly due to small frontal tubercles and filiform male antennae.

The following abbreviations identify the collections housing the material examined (curators names are in parentheses):

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

MNHN - France, Paris, Muséum National d´Historie naturelle (Nicole BERTI);

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

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

In recording the label data of the type material examined, a double slash (//) divides 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 remarks and complementations of the author are given 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 the stability of nomenclature in this group, according to the Article 74.7.3 of the Code (ICZN 1999).

Genus *Apophylia* THOMSON, 1858

Apophylia THOMSON, 1858 (Arch. Ent.) 2: 221 (Type species: *Apophylia chloroptera* THOMSON 1858; designated by LABOISSIÈRE 1922, Rev. Zool. Afr. 10: 237).

Malaxia FAIRMAIRE in DEYROLLE & FAIRMAIRE, 1878 (Ann. Soc. Ent. Fr.) (5)8: 139 (Type species: *Malaxia flavovirens* FAIRMAIRE in DEYROLLE & FAIRMAIRE, 1878, by monotypy); LABOISSIÈRE, 1922: 236 (= *Apophylia*).

Glyptolus JACOBY, 1884 (Notes Leyd. Mus.) 6: 62 (Type species: *Glyptolus viridis* JACOBY, 1884, by monotypy); LABOISSIÈRE 1922: 236 (= *Apophylia*).

Galerucesthis WEISE 1897 (Dtsch. Ent. Z.) 1896(1897): 296 (Type species: *Auchenia (?) thalassina* FALDERMANN, 1835, by monotypy); Weise, 1924:183 (= *Apophylia*).

Malaxioides FAIRMAIRE 1888 (Rev. Ent.) 7: 155 (Type species: *Malaxioides grandicornis* FAIRMAIRE, 1888, by monotypy); BEZDĚK, 2003: 71 (= *Apophylia*).

Bequaertinia LABOISSIÈRE, 1922 (Rev. Zool. Afr.) 10: 235 (key), 263 (sep. 147, 175) (Type species: *Bequaertinia nodicornis* LABOISSIÈRE, 1922; by original designation); LABOISSIÈRE, 1925: 58; WILCOX, 1971: 150, **syn. nov.**

Apophylia incisitarsis (LABOISSIÈRE, 1922), comb. nov.

Bequaertinia incisitarsis LABOISSIÈRE, 1922: Rev. Zool. Afr., 10: 263-264 (sep. 175-176) (Type locality: Maniema: Kindu); LABOISSIÈRE, 1925: 58; LABOISSIÈRE, 1940: 21; WILCOX, 1971: 150.

Apophylia ivoirensis PIC, 1945: Échange, 61: 3 (Type locality: Côte-d´Ivoire); WILCOX, 1971: 145, **syn. nov.**

Apophylia major LABOISSIÈRE, 1922: Rev. Zool. Afr., 10: 242 (key), 247-248 (sep. 154, 159-160) (Type locality: Beni; Congo da Lemba; Haut-Uelé: Moto); LABOISSIÈRE, 1925: 57; WILCOX, 1971: 145, **syn. nov.**

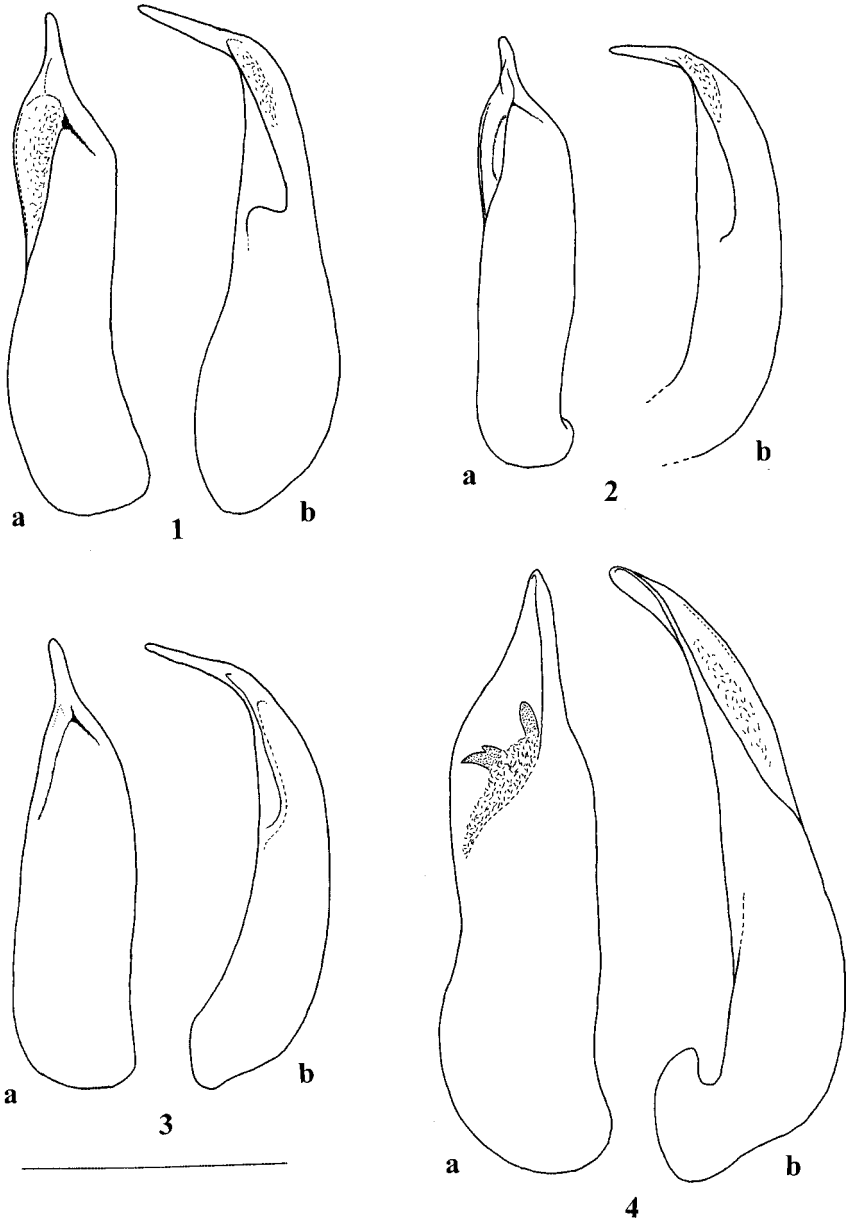
Apophylia Schoutedeni LABOISSIÈRE, 1922: Rev. Zool. Afr., 10: 243 (key), 251-252 (sep. 155, 163-164) (Type locality: Mayumbe; Makaia N´Tete); LABOISSIÈRE, 1925: 58, **syn. nov.**

Apophylia schoutedeni: WILCOX, 1971: 147.

TYPE MATERIAL EXAMINED

Bequaertinia incisitarsis LABOISSIÈRE, 1922

Holotype (male), labelled: "Museum Paris Congo Belge Central Prov de Maniéma Kindu L. Burgeon 1917 [grey label, p] // Type [w, red letters, h] // *Bequaertinia incisitarsis* ♂ m [h] V. Laboissière — Dét. [w, p] // HOLOTYPE [red label, p] // AfriGa specimen ID: [p] 220 [h] specimen data documented [p] 20. IX [h] 2004 [grey label, p]" (in MNHN).



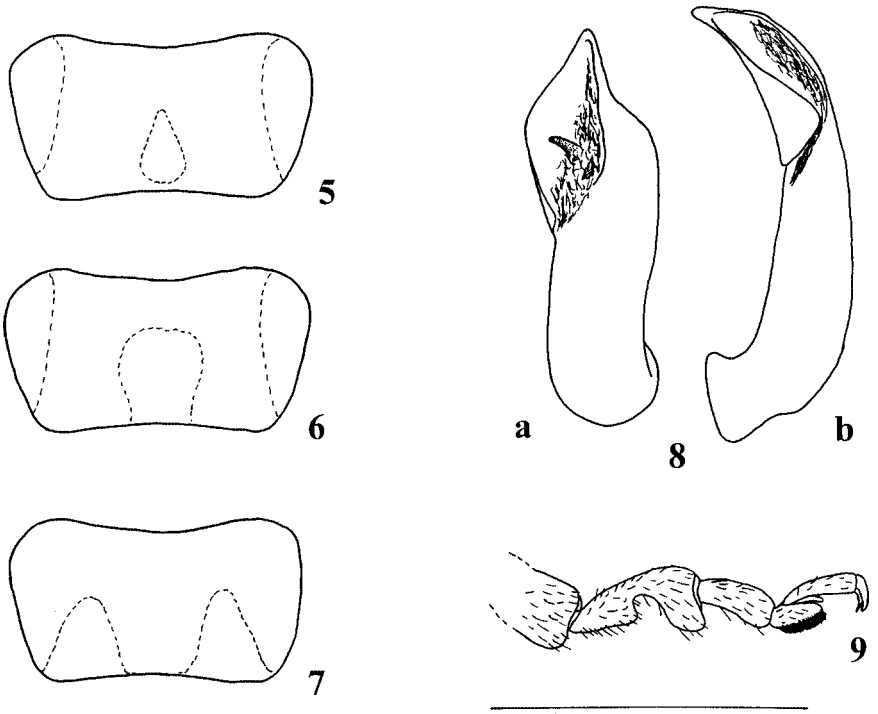
1-4. Aedeagus (a - dorsal view, b - lateral view): 1 - *Apophylia incisitarsis*, 2 - *A. leontovitchi*, 3 - *A. nodicornis*, 4 - *A. demeyeri* n. sp. Scale 1 mm

Apophylia ivoirensis PIC, 1945

Holotype (female), labelled: "Cote d´Ivoire Dimbroko [w, p] // type [w, h] // ivoirensis n sp [w, h] // TYPE [red label, p] // AfriGa specimen ID: [p] 187 [h] specimen data documented [p] 20. IX [h] 2004 [grey label, p]" (in MNHN).

Apophylia major LABOISSIÈRE, 1922

Lectotype (female), designated here, labelled: "LECTOTYPUS [red label, p] // Type [w, h, red letters] // MUSÉE DU CONGO Congo da Lemba V-1911 R. Mayné [w, p] // R. DÉT [p] M [h] 727 [w, p] // Apophylia major m. [h] V. Laboissière – Dét. [w, p]" (in MRAC); 1 paralectotype (female), labelled: "PARA-LECTOTYPUS [red label, p] // MUSÉE DU CONGO Congo da Lemba X-XII-1911 R. Mayné [w, p] // R. DÉT [p] M [h] 727 [w, p]" (in MRAC); 1 paralectotype (female), labelled: "PARA-LECTOTYPUS [red label, p] // Type [w, h, red letters] // Musée du Congo Belge Beni Lt. Borgerhoff [w, p] // R. DÉT [p] M [h] 727 [w, p] // Apophylia major m. [h] V. Laboissière – Dét. [w, p]" (in MRAC); 1 paralectotype (female), labelled: "PARA-LECTOTYPUS [red label, p] // MUSÉE DU CONGO Haut Uelé: Moto 1920 L. Burgeon [w, p] // R. DÉT [p] M [h] 727 [w, p]" (in MRAC); 1 paralectotype (female), labelled: " f [w, p] // Coll. R.I.Sc.N.B.



5-9. 5-7 Black pattern on pronotum of *Apophylia nodicornis*, 8 - Aedeagus (a - dorsal view, b - lateral view) of *A. chloroptera*, 9 - male mesotarsus of *A. chloroptera*. Scales: 1 mm for Figs 8-9; 2 mm for Figs 5-7

Congo belge [blue label on which one following label is stuck, p] // Congo da Lemba [p] X- [h] VII-1911 R. Mayné [w, p] // Apophylia major m 1922 [h] V. Laboissière – Dét. [w, p] // Para-type [red label, p]“ (in ISNB); 1 paralectotype (female), labelled: “Fort-Crampel Congo-Francais [w, p] // COLL^{on} LE MOULT Naturaliste Paris [w, p] // Coll. K [w, p] // No 52 [w, h] // Type [w, red letters, h] // TYPE [red label, p] // Apophylia major m [h] V. Laboissière — Dét. [w, p]“ (in MNHN); 1 paralectotype (female), labelled: “Museum Paris Cote d´Ivoire Haut Sassandra Pays Dyola Entre Zoanlé et Sanrou (F. Fleury A. Chevalier 1910 [grey label, p] // MAI [w, p] // Type [w, red letters, h] // Apophylia major m [h] V. Laboissière — Dét. [w, p]“ (in MNHN); 1 paralectotype (female), labelled: “Museum Paris Cote d´Ivoire Haut Sassandra Pays Dyola Entre Zoanlé et Sanrou (F. Fleury A. Chevalier 1910 [grey label, p]“ (in MNHN); 1 paralectotype (female), labelled: “Museum Paris Cote d´Ivoire Haut Sassandra Pays Toura Entre Sanrou et Kdualé (F. Fleury A. Chevalier 1910 [grey label, p] // Type [w, red letters, h] // Apophylia major m [h] V. Laboissière — Dét. [w, p]“ (in MNHN). The specimens are provided with one red label: „LECTOTYPUS [or PARALECTOTYPUS], *Apophylia major* LABOISSIÈRE, 1922, des. J. Bezděk 2003”.

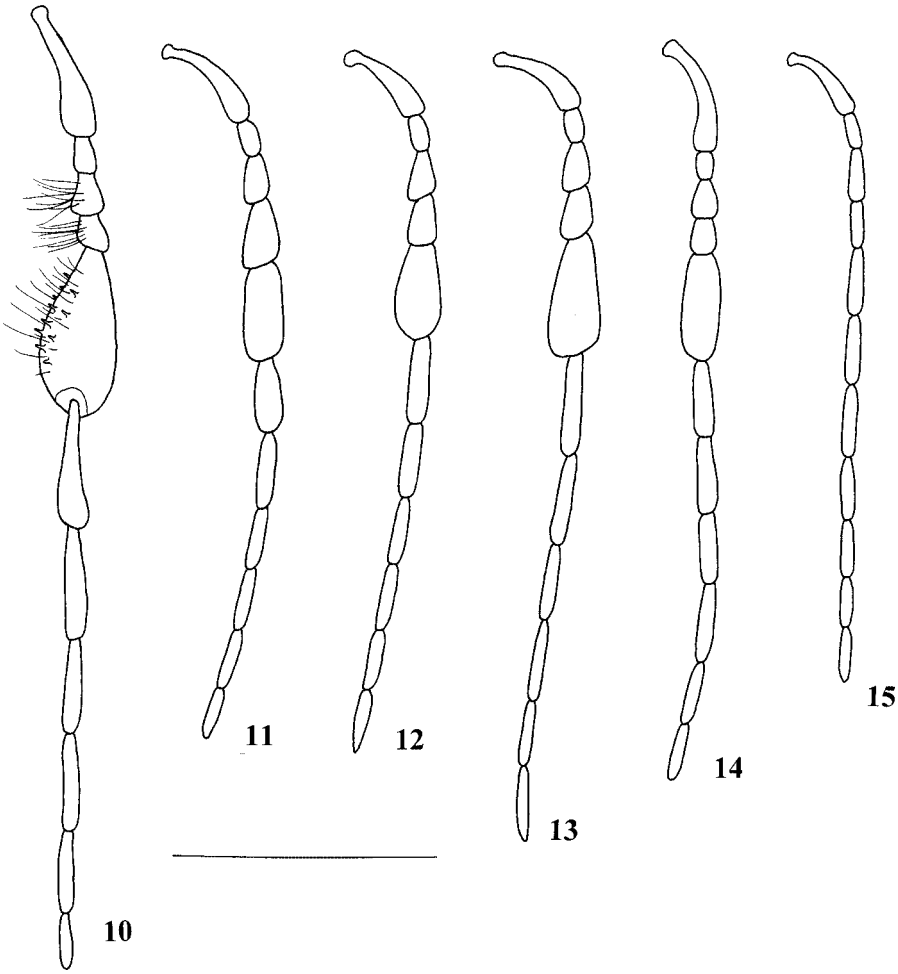
Apophylia schoutedeni LABOISSIÈRE, 1922

Lectotype (female), designated here, labelled: “LECTOTYPUS [red label, p] // Type [w, h, red letters] // MUSÉE DU CONGO Mayumbe [p] 21/30 [h] –III-22 Makaia Ntete Dr. H. Schouteden [w, p] // R. DÉT. [p] O [h] 727 [w, p] // Apophylia Schoutedeni m [h] V. Laboissière – Dét. [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] // Mayumbe [w, p] // 1917 [w, p] // R. Mayné [w, p] // Apophylia Schoutedeni 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 Schoutedeni* Laboissière, 1922, des. J. Bezděk 2003”.

ADDITIONAL MATERIAL EXAMINED

CAMEROON: Nanga Eboko, 1960, Dr. Lenczy leg. (1/2 in USNM); same data, 1959 (0/2 in USNM); 30 km E Nanga-Eboko, at black light, 16.-19.ii.1972, J. A. Gruwell leg. (0/4 in USNM); 25 km N Bertoua, at black light, 1.iii.1972, J. A. Gruwell leg. (1/1 in USNM); 10 km S of Tongo, filtered black light, 2.-4.iii.1972, J. A. Gruwell leg. (1/2 in USNM); 20 km E Minta, at black light, 20.ii.1972, J. A. Gruwell leg. (5/5 in USNM); CENTRAL AFRICAN REPUBLIC: Bambari, iii.1964, G. Pierrard leg. (0/1 in MRAC); CONGO: Ruwenzori Mts., grotte Ibatama, 1 690 m, 5.v.1958, P. Vanschuytbroeck leg. (1/0 in MRAC); Ruwenzori Mts., Mukandwe riv., affl. Talya, 1 580 m, 26.iv.1957, P. Vanschuytbroeck leg. (1/1 in MRAC); Ruwenzori Mts., Kakalari riv., affl. Bombi, 1 725 m, 12.vi.1954, P. Vanschuytbroeck & H. Synave leg. (0/1 in MRAC); Ruwenzori Mts., Kakalari riv., affl. Bombi, 1 800 m, 28.xi.1957, P.

Vanschuytbroeck leg. (0/1 in MRAC); Ruwenzori Mts., Talya riv., affl. Lume, 1 870 m, 4.ix.1956, P. Vanschuytbroeck leg. (0/1 in MRAC); Secteur Nord, Lume riv., 10.ix.1956, P. Vanschuytbroeck leg. (10/1 in MRAC); Secteur Nord, Mutsora, 1 250 m, 6.viii.1957, P. Vanschuytbroeck leg. (0/1 in MRAC); Secteur Nord, Kilia, Kaparata, 920 m, 10.i.1957, P. Vanschuytbroeck leg. (0/1 in MRAC); SL Edouard, Bitshumbi, 925 m, 15.iv.1936, L. Lippens leg. (3/0 in MRAC); SL Edouard, Rwindi riv., 1 000 m, 24.-25.iv.1936, L. Lippens leg. (0/7 in MRAC); Baudouinville, i.1933, L. Burgeon leg. (0/1 in MRAC); Uelé, Dilinga, 20.viii.1933, J. Lorey leg. (0/1 in MRAC); Uele, 21.x.1932, J. Vrydagh leg. (0/1 in MRAC); Rutshuru, vi.1937, J. Ghesquiére leg. (0/1 in MRAC); Bambesa, viii.1933, J.



10-15. Antenna: 10 - *Apophylia nodicornis* (male), 11 - *A. nodicornis* (female), 12 - *A. leontovitchi* (male), 13 - *A. incisitarsis* (male), 14 - *A. demeyeri* n. sp. (male), 15 - *A. demeyeri* n. sp. (female). Scale 2 mm

Lorey leg. (0/1 in MRAC); Bambesa, vi.1937, J. Vrydagh leg. (0/3 in MRAC); Kasai, Gandalika, iv.1959, J. Dubois leg. (0/1 in MRAC); Lulua, Kapanga, 19.xi.1932, F. G. Overlaet leg. (0/4 in MRAC); Lomami, Kamina, 1930, R. Massart leg. (0/1 in MRAC); Kibali-Ituri, Beni, x-xi.1930, L. Lebrun leg. (0/1 in MRAC); Mahagi-Niarembe, 1935, Ch. Scops leg. (0/2 in MRAC); Ubangi, Tongu, 4.ii.1932, H. J. Brédo leg. (0/1 in MRAC); Ubangi, Karawa, 1937, Rév. Wallin leg. (0/1 in MRAC); Ubangi, Gemena, 22.v.1937, C. Leontovitch leg. (0/1 in MRAC); Kabambare, Lt. Delhaise leg. (0/1 in MRAC); Banzyville, 24-29.i.1932, H.J.Brédo leg. (0/1 in MRAC); Mutwanga, 1932, Van Hoof leg. (0/1 in MRAC); Tanganyika-Moero, Nyunz, i-ii.1934, De Saeger leg. (0/1 in MRAC); Sankuru, M´Pemba Zeo (Gandajika), 1.xii.1959, R. Maréchal leg. (1/0 in MRAC); Kaniama, 1931, R. Massard leg. (0/1 in MRAC); UGANDA: Bugiri, 1 400 m, 5.-8.viii.1957, P. Basilewsky & N. Leleup leg. (1/0 in MRAC).

Aedeagus as in Fig. 1.

DISTRIBUTION

Cameroon, Central African Republic, Congo, Uganda.

COMMENTS

A. incisitarsis was described based on one male. In the depository of MRAC I have found one female identified by LABOISSIÈRE as *Bequaertinia incisitarsis* bearing following labels: "PARATYPUS [red label, p] // MUSÉE DU CONGO Haut-Congo [p] 1897 [h] Dr Védy [w, p] // R. DÉT. [p] BB [h] 4091 [w, p] // Bequaertinia incisitarsis m ♀ [h] V. Laboissière dét. 1939 [w, p]". This specimen had never been published and is not consequently treated as paratype. Moreover, due to the enlarged fifth antennomere I identified it as a female of *A. nodicornis*.

A. ivoirensis, *A. major* and *A. schoutedeni* (all described according to females only) are nothing more than females of *A. incisitarsis*. LABOISSIÈRE (1922) distinguished *A. major* and *A. schoutedeni* by the length of the second and third antennomeres (second slightly longer than third in *A. major*; second twice as long as third in *A. schoutedeni*). I have studied all material available also to LABOISSIÈRE but I have not found any difference in the length of antennal segments. Therefore I conclude that *A. major* and *A. schoutedeni* are identical and all treat three species (*A. ivoirensis*, *A. major* and *A. schoutedeni*) as new synonyms of *A. incisitarsis*.

Apophylia leontovitchi (LABOISSIÈRE, 1940), comb. nov.

Bequaertinia Leontovitchi LABOISSIÈRE, 1940: Rev. Zool. Bot. Afr., 34(1): 22-23 (Type locality: Libenge).
Bequaertinia leontovitchi: WILCOX, 1971: 150.

TYPE MATERIAL EXAMINED

Holotype (male), labelled: "TYPE [p] B. Leontovitchi ♂ [red label, h] // MUSÉE DU CONGO Libenge -IV-1937 Leontovitch [w, p] // R. DET [p] CC [h]

4091 [w, p] // V. Laboissière vid., 1940: [p] *Bequaertinia Leontovitchi* type m m. [w, h]" (in MRAC).

ADDITIONAL MATERIAL EXAMINED

CONGO: Libenge, iv.1937, Leontovitch leg. (0/1 in MRAC).

Aedeagus as in Fig. 2.

DISTRIBUTION

Congo.

COMMENTS

A. leontovitchi was described based on one male and this specimen is still the only known male of this species. *A. leontovitchi* is very similar to *A. incisitarsis* but differs in not incised mesotarsomere (deeply incised in *A. incisitarsis*) and also in the shape of antennal segments (Figs 12-13). Within the numerous unidentified material deposited in MRAC I have found one female with an identical locality label as in holotype. In my opinion, it is a female of *A. leontovitchi*. It seems to be very difficult to distinguish between the females *A. leontovitchi* and *A. incisitarsis*. The female from MRAC has somewhat paler frontal tubercles (yellowish brown) than the females of *A. incisitarsis* (frontal tubercles brown to brownish black). However, additional material is necessary to confirm this differential character.

Apophylia nodicornis (LABOISSIÈRE, 1922), comb. nov.

Bequaertinia nodicornis LABOISSIÈRE, 1922: Rev. Zool. Afr., 10: 263 (key), 264-266 (sep. 175, 176-178) (Type locality: Mufungwa Sampwe); LABOISSIÈRE, 1925: 58; LABOISSIÈRE, 1940: 20; WILCOX, 1971: 150.

TYPE MATERIAL EXAMINED

Holotype (male), labelled: "TYPE [red label, p] // MUSÉE DU CONGO Mufungwa Sampwe 1/16 XII-1911 Dr. Bequaert [w, p] // R. DÉT [p] n [h] 728 [w, p] // *Bequaertinia nodicornis* m. [h] V. Laboissière – Dét. [w, p]" (in MRAC).

ADDITIONAL MATERIAL EXAMINED

CONGO: Katanga, Jadotsville, xi.1946, Gravez leg. (6/22 in MRAC); Katanga, Kakanda (Mutaka), 15.xii.1953-4.i.1954, R. P. T. de Caters leg. (0/1 in MRAC); Haut Congo, 1897, Dr. Védy leg. (0/1 in MRAC); Elisabethville, 10.i.1939, H. J. Brédo leg. (in MRAC); Lulua, Sandoa, ii.1932, G. F. Overlaet leg. (0/1 in MRAC); Lulua, Kapanga, ii.1932, G. F. Overlaet leg. (0/1 in MRAC).

Aedeagus as in Fig. 3.

DISTRIBUTION

Congo.

COMMENTS

A. nodicornis was described based on one male. In the depository of MRAC I have found one female with following labels: "ALLOTYPE [p] nodicornis [red label, h] // COLL. MUS. CONGO Elisabethville [p] 10-I [h] 1939 H. Brédo [w, p] // R. DÉT. [p] AA [h] 4091 [w, p]". This female does not bear the original LABOISSIÈRE identifying label and has never been published. It cannot be treated as type specimen.

In undetermined material deposited in MRAC I have found large series of this species, which has enabled me to comment on the sexual dimorphism. The females have pronotum with two large lateral and one central black spots. In some females, the spots are widened and connected (Figs 5-7). The fifth antennal segment in the female is slightly but distinctly enlarged (Fig. 11).

The males can be distinguished from their congeners by the structure of the fifth antennal segment (Fig. 10), by the structure of aedeagus (Fig. 3) and by the completely black pronotum. The development of the fifth antennomere varies in accordance with the body length (it is not so developed in smaller specimens).

Body length of males 5.45-6.70 mm (holotype 6.60 mm); of females 7.25-8.60 mm.

Apophylia demeyeri n. sp.

TYPE MATERIAL

Holotype (male) and 3 paratypes (2 males and 1 females), labelled: „MUS. ROY. AFR. CENTR. [p] Katanga: Musonoie 9-XII-1922 [h] Dr. V. Allard [w, p]" (in MRAC). The specimens of the newly described species are provided with one red label: „HOLOTYPUS [or PARATYPUS] *Apophylia demeyeri* sp. nov. J. Bezděk det. 2005".

DESCRIPTION

Male: Body flattened, parallel, densely pubescent, dull. Head yellow, vertex anf frontal tubercles black, mandibles brownish. Pronotum and scutellum black. Prosternum black with large yellow spots laterally. Meso-, metasternum and abdomen black. Legs yellow, last two tarsal segments infuscate. Elytra metallic green. The first 6 antennomeres yellow, antennomeres 3 to 6 blackish dorsally, antennomeres 7 and 8 black with paler base, antennomeres 9 to 11 completely black.

Labrum transverse, laterally covered by several pale setae, anterior margin slightly sinuate. Anterior part of head lustrous, sparsely covered with pale setae. Interantennal space wide, 0.63 times as wide as antennal insertion. Frontal tubercles very large, subtriangular, lustrous. Vertex dull, coarsely and densely punctured and covered with short pale hairs. Antennae 0.80 times as long as the body, length ratio of antennomeres 1 to 11: 30-10-13-11-32-22-26-22-23-19-19. Antennomere 1 distinctly curved, antennomeres 2 to 4 very short, antennomere 5 enlarged (Fig. 14).

Pronotum tranverse, 1.90 times as broad as long, widest at the first third, narrowed anteriad and posteriad, dull, densely covered with coarse punctures and pale hairs. Surface with three indistinct feeble depressions in median line (one near the middle of anterior margin and two near posterior margins), laterally with two large distinct depressions. Anterior margin slightly sinuate, posterior margin almost straight. Anterior and posterior margins thinly bordered, lateral margins indistinctly bordered. Anterior angles widely rounded, posterior angles obtusely angulate, rounded, all angles bear long pale setae.

Scutellum short, subtriangular, distinctly impressed in the middle, apex widely rounded, 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.

Basimetatarsomere 1.7 times as long as two following metatarsomeres combined. Claws bifid.

Body length of males 6.10-6.65 mm (holotype 6.65 mm); of female 7.90 mm.

The shape of aedeagus as in Fig. 4.

Female: Pygidium and posterior margin of last sternite yellow. Frontal tubercles small. Antennae filiform, length ratio of antennomeres 1 to 11: 27-10-13-15-24-21-21-19-16-15-16. Last visible sternite complete. Claws appendiculate.

DISTRIBUTION

Congo.

DIAGNOSIS

A. demeyeri n. sp. is closely related to *A. nodicornis*. The two species differ in the colour of the underside of the head and pronotum. The head of *A. demeyeri* is yellow with black vertex and frontal tubercles, but the head of *A. nodicornis* is black with yellow anterior part. The underside of pronotum is largely yellow laterally in *A. demeyeri* and completely black in *A. nodicornis*. In females, pronotum is black in *A. demeyeri* and brown with two large lateral and one central black spots which are sometimes widened and connected in *A. nodicornis* (Figs 5-7). The males of both species can be distinguished by the structure of aedeagus (Figs 3-4) and of the fifth antennomere (Figs 10 and 14), and by the width of interantennal space (0.60 times as wide as antennal insertion in *A. demeyeri*; 0.30 times in *A. nodicornis*). The fifth antennal segment in the female is slightly, but distinctly enlarged in *A. nodicornis*, but antennae are filiform in the females of *A. demeyeri* (Figs 11 and 15).

ETYMOLOGY

Dedicated to Dr. Marc DE MEYER, the curator of Musée Royal de l'Afrique Centrale (Tervuren, Belgium), who kindly enabled me the study of extensive Galerucinae collection, including many types of African *Apophylia*.

Apophylia chloroptera THOMSON, 1858

Apophylia chloroptera THOMSON, 1858: Arch. Ent. 2: 221-222 (Type locality: Gabon [by the title]); GEMMINGER & HAROLD, 1876: 3569; LABOISSIÈRE, 1922: 242 (key), 246 (sep. 154, 158); WEISE, 1924: 183; LABOISSIÈRE, 1940: 13 (key); BRYANT, 1958: 63; WILCOX, 1971: 143.
Apophylia Chloroptera: ALLARD, 1889: LXXII (key) (sep. 7).
Malaxia Alluaudi ALLARD, 1888: Ann. Soc. Ent. Fr. (6)8: 332 (Type locality: Assinie); ALLARD, 1891: 558; BEZDĚK, 2004: 93 (= *chloroptera*).
Apophylia Alluaudi: LABOISSIÈRE, 1922: 242 (key) (sep. 154); WEISE, 1924: 183 (as syn. of *A. chloroptera*); LABOISSIÈRE, 1940: 13 (key).
Apophylia alluaudi: WILCOX, 1971: 142.
Apophylia Kivuensis LABOISSIÈRE, 1940a: Expl. Parc Nat. Albert, Miss. de Witte (1933-35), 31: 23-24 (Type locality: Kivu: Rutshuru); LABOISSIÈRE, 1940: 13 (key), 18; BEZDĚK, 2004: 93 (= *chloroptera*).
Apophylia kivuensis: WILCOX, 1971: 145.
Apophylia Theresae PIC, 1944: L´Échange (Num. Spéc.) (Opusc. Mart. 12): 1 (type locality: Abyssinie); **syn. nov.**
Apophylia theresae: WILCOX, 1971: 149.

TYPE MATERIAL EXAMINED

Apophylia chloroptera THOMSON, 1858

Lectotype (female), labelled: "Coll. R. I. Sc. N. B. Gabon [blue label on which two following labels are sticked, p] // Gabón [w, h] // Le Moult vend.: [w, p] // Le Moult vend. [h] Apophylia chloroptera Thoms. [w, p]" (in ISNB).

Apophylia theresae PIC, 1944

Lectotype (male), designated here, and 2 paralectotypes (males), labelled: "Maraco Abyssinie avril 1914 [w, h]" (in MNHN); 8 paralectotypes (3 males, 5 females), labelled: "Maraco Abyssinie avril 1914 [w, h] // n sp. 4eme article des ant = 3eme [w, h]" (in MNHN); 5 paralectotypes (4 males, 1 female), labelled: "Maraco Abyssinie [w, h]" (in MNHN); 2 paralectotypes (females), labelled: "Maroco Abyssinie [w, h] // type [w, h] // theresae n sp [w, h] // TYPE [red label, h] // AfriGa specimen ID: [p] 216 [h] specimen data documented [p] 20. IX [h] 2004 [grey label, p]" (in MNHN). The specimens are provided with one red label: „LECTOTYPUS [or PARALECTOTYPUS], *Apophylia Theresae* Pic, 1944, des. J. Bezděk 2004".

Aedeagus as in Fig. 8.

DISTRIBUTION

Burundi, Cameroon, Congo, Ethiopia, Gabon, Ghana, Guinea, Guinea Equatorial, Ivory Coast, Nigeria, Uganda.

COMMENTS

A. chloroptera is largely distributed in central Africa. Due to the structure of aedeagus, it is related to the species with enlarged fifth antennomere presented in this study. Also the deep incision in mesotarsomere in male (Fig. 9) is a very rare character known only in *A. chloroptera* and *A. incisitarsis*. On the other hand, the filiform male antennae and small frontal tubercles connect *A. chloroptera* with other *Apophylia* species.

I had the possibility to examine the type series of *A. theresae* Pic, 1944 deposited now in MNHN. One male is designated here as lectotype. *A. theresae* is conspecific with *A. chloroptera* and I propose to synonymize both species.

KEY TO THE SPECIES

1. Males ..... 2.
–. Females ..... 6.
2. Frontal tubercles small. Antennae filiform. Mesotarsomere deeply incised. Pronotum yellow with three black spots (two lateral and one central). Aedeagus as in Fig. 8 ..... ***A. chloroptera* THOMSON 1858**
–. Frontal tubercles very large. Fifth antennomere enlarged ..... 3.
3. Pronotum bicolorous ..... 4.
–. Pronotum black ..... 5.
4. Mesotarsomere deeply incised. Pronotum yellow with lateral black spots, usually with indistinct central black spot. Aedeagus as in Fig. 1 .... ***A. incisitarsis* (LABOISSIÈRE, 1922)**
–. Mesotarsomere not incised. Pronotum yellow with lateral black spots. Aedeagus as in Fig. 2 ..... ***A. leontovitchi* (LABOISSIÈRE, 1940)**
5. Underside of head black. Fifth antennomere as in Fig. 10. Aedeagus as in Fig. 3 ..... ***A. nodicornis* (LABOISSIÈRE, 1922)**
–. Underside of head yellow. Fifth antennomere as in Fig. 14. Aedeagus as in Fig. 4 ..... ***A. demeyeri* n. sp.**
6. Pronotum bicolorous ..... 7.
–. Pronotum black ..... ***A. demeyeri* n. sp.**
7. Fifth antennal segment slightly enlarged (Fig. 11). Pronotum with two large lateral and one central black spots (sometimes the spots are widened and connected) ..... ***A. nodicornis* (LABOISSIÈRE, 1922)**
–. Antennae filiform ..... 8.
8. Pronotum with three well defined black spots .... ***A. chloroptera* THOMSON 1858**
–. Central spot indistinct or missing ..... 9.
9. Frontal tubercles dark brown or black ..... ***A. incisitarsis* (LABOISSIÈRE, 1922)**
–. Frontal tubercles yellow ..... ***A. leontovitchi* (LABOISSIÈRE, 1940)**

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