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## Revision of African Parandrinae (Coleoptera, Cerambycidae)

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# **INSECTA Markov A Journal of World Insect Systematics**

## 0241

## Revision of African Parandrinae (Coleoptera, Cerambycidae)

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Abstract. A comprehensive revision of the Subfamily Parandrinae (Coleoptera, Cerambycidae) from the Afrotropical Region is presented. Two **new genera** are described: *Adlbauerandra* and *Meridiandra*. The known species from the Afrotropical Region are excluded from *Parandra* Latreille, 1802, which resulted in the following **new combinations**: *Acutandra beninensis* (Murray, 1862), *A. comoriana* (Fairmaire, 1895), *A. gabonica* (Thomson, 1858), *Adlbauerandra morettoi* (Adlbauer, 2004) and *Meridiandra capicola* (Thomson, 1861). Eighteen **new species** are described: *Acutandra amieti, A. barclayi, A. camiadei, A. dasilvai, A. delahayei, A. gaetani, A. garnieri, A. grobbelaarae, A. hugoi, A. jolyi, A. leduci, A. leonardi, A. lucasi, A. noellae, A. oremansi, A. plenevauxae, A. quentini, and <i>A. vingerhoedti*. The species *Parandra comoriana* Fairmaire, 1895 is revalidated and a **lectotype** is designated. *Parandra beninensis* Murray, 1862 and *Parandra conradti* Kolbe, 1893 are revalidated. A **lectotype** is designated for *Parandra gabonica* Thomson, 1858 as the designation by Quentin and Villiers (1975) was considered as invalid. Keys are presented to separate genera and all species of African Parandrinae from each other. Illustrations are provided for all the species including many special characters used in the keys.

**Keywords**. *Acutandra*; *Adlbauerandra*; Afrotropic Region; lectotype; *Meridiandra*; *Neandra*; new genera; new species; *Parandra*; Parandrini; *Stenandra*.

#### Introduction

Thomson (1858) described the first species of Parandrinae (Coleoptera, Cerambycidae) from the African Continent: *Parandra gabonica*. The species was described from Gabon, Ivory Coast ("Grand Bassan"), and Angola ("Benguela"), three countries located on the Atlantic coast. Three years later, Thomson (1861), in his "Monographie de la famille des Parandrides", recorded the species only from Gabon. In the same work, Thomson (1861) described *Parandra capicola* from South Africa.

Murray (1862), who did not know the species described by Thomson (1858, 1861), described *Parandra beninensis* from Nigeria ("Old Calabar"), and wrote: "For the first time a *Parandra* has been found in the Old World, at Old Calabar".

Later, the following species were described from Africa: *Parandra thunbergii* Thomson, 1867 (from South Africa–"Cap."); *Parandra conradti* Kolbe, 1893 (from Tanzania–"Usambara"); *P. aterrima* Quedenfeldt, 1882 (from Democratic Republic of the Congo); *P. comoriana* Fairmaire, 1895 (from Comoros –"Comores"); and *Parandra kolbei* Lameere, 1903 (from Central African Republic–"Pays des Niam-Niam").

Lameere (1902) synonymized *P. beninensis*, *P. aterrima*, *P. conradti*, *P. comoriana*, and *P. capicola* with *P. gabonica*. However, he did not examine the types of *P. aterrima* and *P. capicola*.

Lameere (1912) divided *Parandra* in four subgenera: *Parandra* s. str.; *P.* (*Neandra*); *P.* (*Archandra*); and *P.* (*Stenandra*). According to him, of these subgenera, only *P.* (*Parandra*) and *P.* (*Stenandra*) occur in Africa: the species *P.* (*P.*) gabonica, *P.* (*P.*) thumbergi [sic], and *P.* (*Stenandra*) kolbei.

Quentin and Villiers (1972) considered *Stenandra* as different from *Parandra*, and described *S. vadoni* from Madagascar. Finally, the latest species described from Africa was *Parandra morettoi* Adlbauer, 2004 from the Central African Republic.

Quentin and Villiers (1977) revalidated *P. capicola* and considered *P. thunbergii* as its synonym. In the same work, the authors recorded (translation): "the various synonyms of *gabonica* correspond only to individual variations, or differences between populations due to the wide distribution of the species throughout the Ethiopian region".

Arigony (1984) studied the species of the subgenus *Parandra* Latreille, 1802 with mandibles of males not falciform. Currently, the species studied by Arigony (1984) belong to several genera, and none of them is the true *Parandra*: *Acutandra* Santos-Silva, 2002; *Birandra* Santos-Silva, 2002; *Caledonandra* Santos-Silva et al., 2010; *Komiyandra* Santos-Silva et al., 2010, *Malukandra* Santos-Silva et al., 2010; *Melanesiandra* Santos-Silva et al., 2010; *Papuandra* Santos-Silva et al., 2010; and *Storeyandra* Santos-Silva et al., 2010. The African species included in Arigony (1984) were: *Parandra* (*Parandra*) gabonica Thomson, 1858 and *P.* (*P.*) capicola Thomson, 1861. *Parandra* (*P.*) gabonica was allocated in the Group "A", characterized by the presence of gibbosities at the frons and absence of central V-shaped depression, by "clypeus-labrum" without tubercles and with the central region of anterior edge (apex) in rounded projection, and by the tibiae with dorsal face furrowed. *Parandra* (*P.*) capicola was put in the Group "B", defined by the flat front, without V-shaped depression, by the "clypeus-labrum" without tubercles and with the central region of anterior edge (apex) with rounded projection, and by the tibiae with dorsal face flat.

The Group "A" by Arigony (1984) was defined in her cladistic study, by the character 44(1): tibiae with dorsal face furrowed. However, although *Parandra gabonica sensu auctorum* usually has the tibia with dorsal furrow, the occurrence of specimens without it is not rare. The Group "B" was defined by two characters: 44(2), tibiae with dorsal face flat; 4(1), flat frons. The second group also includes problems, because *Parandra murrayi* Lameere, 1912 (currently, *Acutandra murrayi*) has distinct gibbosities on dorsal face of the head, although Arigony (1984) recorded that it did not have them.

Despite the problems with the definition of the two groups in Arigony (1984), we agree that *Parandra* gabonica and *P. capicola* (up to now placed in *Birandra*) belong to different genera.

Santos-Silva and Shute (2009) provisionally transferred the African species that were allocated in *Parandra (Parandra)* to *Birandra* Santos-Silva, 2002. This transfer was necessary because the true *Parandra* are the species put by Lameere (1912) in *Parandra (Archandra)*, and not in *Parandra (Parandra)*.

The species of Parandrinae of Africa are distributed in the Afrotropical Region (sensu Olson et al. 2001), not occurring over the parallel 15°N.

#### **Material and Methods**

Images were captured with a Nikon Coolpix 4500 under natural light. Measurements were taken in "mm" using a micrometer ocular Hensoldt/Wetzlar - Mess 10 in the Leica MZ6 stereomicroscope. The nomenclature used for wing venation follows Kukalová-Peck and Lawrence (1993). Only data from specimens examined or, when possible, type localities were plotted on the maps. As numerous translations are included in the text, these are preceded with the statement "(translation)" and the translated text is enclosed in quotes to clarify where it begins and ends.

The collection acronyms used in the text are as follows:

- AKCO Arnost Kudrna Jr. Collection, Ceske Budejovice, Czech Republic
- BMNH The Natural History Museum, London, United Kingdom
- DCPC- Didier Camiade Private Collection, Sallespisse, France
- FLPC Frédéric Leduc Private Collection, Herstal, Belgium

FVPC -	Francesco Vitali Private Collection, Italy
IRSNB -	Institut Royal des Sciences Naturelles de Belgique, Bruxelles, Belgium
KAG -	Karl Adlbauer Private Collection, Graz, Austria
MNHN -	Muséum National d'Histoire Naturelle, Paris, France
MNHNL -	Musée national d'histoire naturelle du Luxembourg, Luxembourg
MZSP -	Museu de Zoologia, Universidade de São Paulo, São Paulo, Brazil
NDPC -	Norbert Delahaye Private Collection, Plaisir, France
NMPC -	National Museum (Natural History), Prague, Czech Republic
PJPC -	Pierre Juhel Private Collection, Trans la forêt, France
PMPC -	Philippe Moretto Private Collection, Toulon, France
POPC -	Philippe Oremans Private Collection, Montigny-le-Tilleul, Belgium
RMCA -	Royal Museum for Central Africa, Tervuren, Belgium
SACI -	South African National Collection of Insects, Biosystematics Division. ARC-Plant
	Protection Research Institute, Pretoria, South Africa
TBPC -	Thierry Bouyer Private Collection, Chênée, Belgium
TGPC -	Thierry Garnier Private Collection, Montpellier, France
USNM-	National Museum of Natural History, Washington, D.C., USA
ZMHB -	Museum für Naturkunde der Humboldt-Universitat, Berlin, Germany

#### Key to African Parandrinae genera

1.	Ventral sensorial area of antennomeres III-XI divided by carina	
	Ventral sensorial area of antennomeres III-XI not divided by carir	
	A	cutandra Santos-Silva, 2002
	Procoxal cavities opened behind	
	Procoxal cavities closed behind	Stenandra Lameere, 1912
	Elytra with microscopic setae, mainly in apical third Elytra glabrous	

#### Acutandra Santos-Silva, 2002

Acutandra Santos-Silva, 2002: 49; Monné and Hovore 2005: 5 (checklist); 2006: 4 (checklist); Monné 2006: 8 (cat.); Santos-Silva and Martins 2010: 64; Santos-Silva et al. 2010: 7 (key).

#### Type species. Parandra punctatissima Thomson, 1861.

**Original description** (translation). "Integument from brown to dark-brown. Body short, slightly convex. Head wide. Apex of the labrum of males and females narrows and acute. Mandibles of males not falciform, similar to that of females; apex with three teeth (outer apical tooth not visible dorsally). Eyes large or small; posterior edge of eyes projecting or not. Ventral sensorial area of antennomeres III-XI divided or not by carina. Prothorax transversal; anterior edge, in general, strongly sinuous. Elytra punctate (punctures fine or coarse). Procoxal cavities open behind. Paronychium with one or two setae (variable, at least, in *A. ubitiara*)".

**Redescription**. Dorsal area of head, between eyes, with or without gibbosities well marked; when present separated by furrow deep or barely deep, in some species forming a central V-shaped depression (but not reaching or surpassing posterior ocular edge as in *Caledonandra* Santos-Silva et al., 2010). Ocular carina distinctly elevated from middle of eye to clypeus (sometimes from posterior ocular edge); not or bifurcated in "Y" near posterior edge of eyes (when bifurcated, the bifurcation can be barely indicated). Eyes from

narrow (Fig. 137) (maximum width equal to 0.4 times the total length in males, and about 0.5 times in females) to wide [as in A. punctatissima (Thomson, 1861)] (maximum width equal to 0.6 times the total length in both sexes); posterior ocular edge prominent (as in A. punctatissima), slightly prominent (Fig. 147), or not prominent (Fig. 151); anterior ocular edge with concavity well marked. Epistomal suture absent (sometimes just visible laterally or distinct throughout). Clypeal base variable intraspecifically: vertical, laterally or throughout; oblique, laterally or throughout. Clypeolabral suture visible in full extension or only laterally (sometimes absent throughout). Median projection of male labrum varying from wide and truncate at apex to narrow and almost sharpened apically; median projection of female usually as in male, but when truncate, frequently narrower. Mandibles of major males (Fig. 165, 168) distinctly not falciform or, at most, sub-falciform (almost identical to female in *minor* males), shorter than head or subequal in length, wide at base of latero-outer face (Fig. 168); dorsal carina elevated, well marked from base to apical third in *major* males, slightly elevated at basal half in *minor* males; inner margin with two teeth, together protracted, located about middle (more salient in *major* males) (sometimes entirely fused forming a plate in one or both mandibles); apex with two large teeth, visible dorsally, and a third, small one, not visible dorsally; infero-outer face without large tooth around middle (Fig. 183). Mandibles of females (Fig. 177, 188) Birandra-like, more or less distinctly shorter than head (from 0.5 to 0.7 times length of head), wide at base of latero-outer face; dorsal carina elevated only at basal third, ending approximately in middle; inner margin with two teeth together protracted (usually slightly separated), located in middle; apex as in males. Submentum with short setae (sometimes microscopic or somewhat long) and sparse (usually more concentrated on anterior margin). Galea long (reaching, at least, middle of third segment of maxillary palp). Ventral sensorial area of antennae not or slightly visible from side (mainly in antennomeres X-XI), divided (only in American species) or not by carina; ventral sensorial area of antennomere XI not extending into dorsal area (except in A. araucana (Bosq, 1951)); dorsal sensorial area of antennomere XI from very small and indistinct to large (about 0.5 times antennomere length) and well delimited, not divided by carina.

Pronotum strongly convex in anterior half close to head, except in *A. punctatissima* (distinctly flatter); apical edge and anterolateral angles variable (sometimes intraspecifically); lateral margins from subparallel to divergent towards apex in males, usually rounded or subrounded in females; lateral angles from absent to distinct; posterolateral angles from obtuse or rounded (in both cases, projecting or not) to distinctly projecting backwards; basal edge from straight to slightly curved. Elytra glabrous, punctate, usually densely. Veins MP3 and MP4 not fused at their apex (Fig. 54). Apex of prosternal process barely enlarged. Dorsal face of tibiae usually distinctly furrowed (sometimes almost flat or more or less rounded). Procoxal cavities clearly open behind. Tarsomeres I-III slender and elongated (mainly tarsomere I) (I-III proportionally short and wide in *P. punctatissima*); tarsomere III bilobed or not (Fig. 62). Paronychium, exposed or not beyond the apex of the onychium; with one long seta (sometimes with two setae).

Included species. Acutandra araucana (Bosq, 1951) in Chile and Argentina; A. degeerii (Thomson, 1867) in Brazil; A. murrayi (Lameere, 1912) in Brazil; A. punctatissima (Thomson, 1861) in Brazil and French Guiana; A. ubitiara (Santos-Silva and Martins, 2000) in Colombia; A. amieti sp. nov., in the Democratic Republic of the Congo; A. barclayi sp. nov., in São Tomé and Principe; A. beninensis (Murray, 1862), comb. nov., in Nigeria; A. camiadei sp. nov., in Equatorial Guinea; A. comoriana (Fairmaire, 1895), comb. nov., in Comoros; A. conradti (Kolbe, 1893), comb. nov., in Tanzania; A. dasilvai sp. nov., in São Tomé and Principe; A. gabonica (Thomson, 1858), comb. nov., in Gabon, Central African Republic, Equatorial Guinea, the Democratic Republic of the Congo, Ivory Coast, Cameroon, Burundi, and Rwanda; A. gaetani sp. nov., in Gabana and Ivory Coast; A. hugoi sp. nov., in Tanzania; A. leonardi sp. nov., in Kenya; A. lucasi sp. nov., in São Tomé and Principe; A. genoratic Republic of the Congo; A. jolyi sp. nov., in Gabana and Ivory Coast; A. hugoi sp. nov., in Tanzania; A. leonardi sp. nov., in Kenya; A. lucasi sp. nov., in São Tomé and Principe; A. genoratic Republic of the Congo; A. noellae sp. nov., in Gabon; A. oremansi sp. nov., in Gabana and Ivory Coast; A. leduci sp. nov., in the Democratic Republic of the Congo; A. noellae sp. nov., in Gabon; A. oremansi sp. nov., in São Tomé and Principe; A. genoratic Republic of the Congo, the Central African Republic and Principe; A. genoratic Republic of the Congo, the Central African Republic and Principe; A. genoratic Republic of the Congo, the Central African Republic and Principe; A. genoratic Republic of the Congo, the Central African Republic and Uganda; A. quentini sp. nov., in Kenya; A. vingerhoedti sp. nov., in Burundi and Rwanda.

**Geographical distribution**. South America (Argentina, Brazil, Chile, Colombia, French Guiana), and Africa (Burundi, Cameroon, Central African Republic, Comoros, the Democratic Republic of the Congo,

Equatorial Guinea, Gabon, Ghana, Ivory Coast, Kenya, Nigeria, São Tomé and Principe, Rwanda, Tanzania, Uganda) (Fig. 104).

**Comments**. *Acutandra* is similar to *Komiyandra* Santos-Silva et al., 2010, but differs as follows: paraglossae less setaceous; veins MP3 and MP4 not fused at their apex. In *Komiyandra* the paraglossae are very hairy, and the veins MP3 and MP4 are fused at their apex. The mandible in males is also more tumid at latero-outer face than in *Komiyandra*.

Acutandra punctatissima, type species, shows some aberrant characters when compared to the other species of the genus (including South American species): pronotum flatter (distinctly more convex in the other species, but more or less intermediate in *A. degeerii* and *A. ubitiara*), eyes wide and prominent (wide, but not prominent in *A. degeerii*; slender and prominent or not in the other species); tarsomeres I-III short and wide; tarsomeres III bilobed (also bilobed in *A. araucana*); lateral angles of the prothorax well marked (absent or barely marked in the other species, except *A. murrayi*); dorsal sensorial area of antennomere III almost absent (large and well marked in all other species). This amalgam of characters, present or absent in the other species, makes difficult to understand the real position of the other species in relation to *A. punctatissima*. Only the shape of the tarsomeres I-III and dorsal sensorial area of antennomere XI are found exclusively in *A. punctatissima*. These characters together with the pronotal shape, suggest that all other species do not belong to the genus. However, we prefer to avoid a proposal of a new genus based only on these characters.

*Acutandra* differs from *Birandra* Santos-Silva, 2002, mainly by the mandibles of *major* males not falciform or, at most, sub-falciform (Fig. 143) (distinctly falciform in *Birandra*).

#### Key to the species of African Acutandra

1. —	Apex of outer side of metatibiae with small denticles (sometimes only one tooth) between the upper and middle teeth (Fig. 58). Comoros
2(1).	Outer side of mandibles tumid near base (basal portion of outer side not moderately straight) (Fig. 165, 168)
3(2). —	Dorsal surface of head punctate-striate between the middle and apex of ocular carina. Tanzania <i>A. leduci</i> sp. nov. Dorsal surface of head only punctate between the middle and apex of ocular carina. Ghana and Ivory Coast
4(2).	Elytral punctation moderately fine, not very distinct (Fig. 143, 181)5Elytral punctation coarse, distinct (Fig. 142, 185)6
5(4). —	Ocular carina, usually, bifurcated in "Y" near posterior edge of eyes; pronotum not strongly elevated from base to apex (Fig. 145). Equatorial Guinea (Annobón Island)
6(4). —	Antennomere XI relatively short (Fig. 48, 114)7Antennomere XI relatively long (Fig. 35, 37)8
7(6).	Head elongate behind eyes. The Democratic Republic of the Congo A. hugoi sp. nov. Head not distinctly elongated behind eyes. Nigeria A. beninensis (Murray)

	area between gibbosities and clypeus with large V-shaped (longitudinal sulcus not marked after the ase of the "V")
— A	area between gibbosities and clypeus without large depression, smooth and shiny (longitudinal ulcus marked between the gibbosities, even when there is an area moderately triangular near lypeus)
	Body flattened dorso-ventrally (Fig. 195). Burundi and Rwanda <i>A. vingerhoedti</i> sp. nov. Body not flattened dorso-ventrally (Fig. 137). The Democratic Republic of the Congo
	A. amieti sp. nov.
	11         12         13         14         15         16         17
— Ľ	nytrar carmae distinct (Fig. 159)
11(10). —	Metatarsi not distinctly slender and elongated (Fig. 80)
12(11).	Head distinctly elongated behind eyes (Fig. 174). The Democratic Republic of the Congo
—	Head not distinctly elongated behind eyes (Fig. 110). Tanzania A. conradti (Kolbe)
13(11).	Apex of lateroanterior angles of prothorax very proximate to the posterior edge of eyes (Fig. 151)
	14
_	Apex of lateroanterior angles of prothorax not proximate to the posterior edge of eyes (Fig. 154) 15
14(13). —	Body moderately slender (Fig. 171); longitudinal sulcus between gibbosities of dorsal surface of head well marked. Kenya
15(13).	Punctation on gibbosities of dorsal surface of head very abundant (Fig. 178). Gabon
	Punctation on gibbosities of dorsal surface of head not very abundant (Fig. 154) 16
16(15). 	Punctation on gibbosities of dorsal surface of head rather sparse (Fig. 154); tibiae slender (Fig. 60). Cameroon, Burundi, and Equatorial Guinea
17(10).	Punctation on dorsal surface of head fine, including area near apex of ocular carina. São Tomé and Principe (Principe Island)
18(17)	Antennomere III relatively short (Fig. 47). São Tomé and Principe (São Tomé Island)
10(11)	
—	Antennomere III relatively long (Fig. 50) 19
19(18). —	Body distinctly flattened dorso-ventrally (Fig. 187)20Body not or slightly flattened dorso-ventrally (Fig. 127)21
20(19). —	Elytral sutural apex projected. Ivory Coast

- - more distinctly shagreened, mainly due to the darker color. Cameroon .... A. garnieri sp. nov.

#### Acutandra comoriana (Fairmaire, 1895), revalidated, comb. nov.

(Fig. 58, 130-134)

Parandra comoriana Fairmaire, 1895: ccv; Lameere 1902: 97 (syn.); Marie 1917: 92; Quentin and Villiers 1975: 18 (types), fig. 1, 2; 1977: 129 (holotype).

Parandra gabonica; Quentin and Villiers 1979: 111 (distribution).

**Material examined**. COMOROS, 2 females, [no date and collector indicated], ex collection Humblet, (IRSNB); female, [no date and collector indicated], ex collection R. Oberthür), ex IRSNB, (MZSP).

**Original description** (translation). "**Parandra comoriana**, n. sp. – 21 mm length – Elongate, parallel, slightly convex, upper side flat, dark-brown, shiny, underside and legs brown; head densely, coarsely punctate, sulcate at middle, frons anteriorly less punctate, strongly curved near eyes, clypeus smooth, centrally shortly and obtusely projected, mandibles thick and stout, inner margin coarsely toothed; antennae slightly surpassing prothoracic base, thick at base, narrower from middle to apex; prothorax transversely subquadrate, very densely punctate, laterally more strongly sculptured, posterolateral angles almost rounded, anterolateral angles slightly projected; scutellum obtuse, triangularly truncate, smooth; elytra very densely punctate, obsolete bi-carinate; underside almost smooth, sometimes brownish, laterally punctate, ventrite V slightly punctate. – Comoros (Collection Oberthür and mine).

It resembles *P. beninensis* Murr., but it is larger, narrower, with ocular carina less wide, more projected, the central projection of labrum more truncate, the pronotum narrower and more rounded at posterolateral angles, the anterolateral angles less projected, emarginate at each side."

**Redescription**. General coloration of integument brown; dorsal surface dark-brown. Based on females: parts of head, mandibles, distal portion of scape and antennomeres, margins of prothorax, margins of elytra (suture and epipleura), margins meso- and metasternum, and parts of legs blackish; margins of the scutellum and extreme distal area of ventrites darker than remaining surface.

Male (Fig. 130) (based on original description and photos of the lectotype). Body not flattened dorsoventrally. Head somewhat elongate behind eyes. Mandibles not falciform, moderately coarsely, abundantly punctate on outer surface; mandibular dorsal carina distinct. Dorsal surface of head moderately coarsely, abundantly punctate. Median projection of labrum wide, truncated at apex. Ocular carina not bifurcated in "Y" near posterior edge of eyes. Eyes moderately narrow; posterior edge of lower ocular lobes of eyes not elevated above area behind it; posterior edge of upper ocular lobes slightly elevated above area behind it. Area behind upper ocular lobes of eyes coarsely, moderately sparsely punctate; area behind lower ocular lobes finely, sparsely punctate. Submentum distinctly separated from gula and genae, depressed towards anterior edge; surface coarsely, abundantly striate-punctate; anterior edge slightly elevated. Antennae reaching apex of prothorax; ventral sensorial area of antennomeres III-XI not divided by carinae; apical third of antennomere XI abruptly inclined towards apex.

Sides of prothorax (Fig. 130) divergent from area of lateral angles to anterolateral angles, largely emarginated in this region, convergent from the former towards posterolateral angles; anterolateral angles slightly projecting forward, rounded; posterolateral angles obtuse, not projecting; lateral angles slightly marked. Disc of pronotum convex, mainly anteriorly, not strongly elevated from base to apex (Fig. 132); shiny, abundantly, moderately finely punctate from base to apex, gradually coarser, more abundantly punctate laterally; latero-apical half with abundant small plates, as small scales (this area is gradually wider from base to apex of pronotum); anterior edge strongly sinuous. Metasternum laterally moderately coarsely, distinctly punctate, gradually finer, sparser punctate towards central area. Metepisterna punctate. Elytra abundantly, coarsely punctate; dorsal carinae indistinct. Ventrites I-IV moderately finely, abundantly punctate; ventrite V more distinctly punctate. Tibiae distinctly dilated towards apex; apex of outer side of metatibiae, with small denticles between upper and middle teeth. Tarsi not notably slender; tarsomeres III not bilobed.

Female (Fig. 134). Head less robust, width plus eyes equal to 0.9 to that of pronotum at anterolateral angles. Mandible subtriangular, length equal to about 0.6 times that of head, outer surface moderately coarsely punctate throughout; inner surface moderately finely, sparsely punctate; inner face with moderately long, abundant setae; outer face with moderately long, sparse setae on upper basal third, and short, moderately sparse setae in the remaining; dorsal carina present but less well defined and shorter than in male; inner edge with teeth similar to those in male, but less projected. Dorsal surface of head moderately coarsely punctate on gibbosities, coarser punctate on area between gibbosities and prothorax (mainly laterally), confluent near apex of ocular carina; sulcus between gibbosities ending before the clypeus, shagreened, coarsely, confluently punctate. Area between gibbosities and ocular carina with well marked, elongate depression. Epistomal suture distinct only laterally. Clypeus not distinctly separated from gibbosities of dorsal surface (this region, between gibbosities and clypeus, uniformly and gradually slanted), coarsely, shallowly, confluently punctate on area closer to the gibbosities, shinning, almost impunctate on area closer to labrum; setae very short, sparse. Clypeolabral suture distinct only laterally. Median projection of labrum distinctly narrower than in male, truncated at apex. Eyes broader than in males (larger width about 0.5 times length). Submentum distinctly separated from genae, less so from gula; surface shagreened, coarsely, shallowly, confluently punctate (mainly near anterior edge); setae long, sparse; anterior edge slightly elevated. Antennae reaching about the posterolateral angles of prothorax; antennomere XI 1.6 times longer than X; ventral sensorial area of antennomeres III-XI not divided by carinae; dorsal sensorial area of antennomere XI, elliptical, wide, well marked, moderately long (about 0.3 times length of antennomere); apical third of antennomere XI distinctly inclined towards apex.

Sides of prothorax subparallel from area of lateral angles to anterolateral angles, slightly emarginate in this area, convergent from area of lateral angles to posterolateral angles; anterolateral angles projected forward, acute; posterolateral angles obtuse, not projected backward; lateral angles absent. Disc of pronotum moderately finely, abundantly punctate centrally, gradually coarser laterally, confluent near margin; anterior edge slightly sinuate. Metasternum laterally coarsely, distinctly punctate, gradually finely, sparsely punctate towards middle. Metepisterna coarsely, abundantly, confluently punctate, mainly towards elytra. Sculpture of elytra and ventrites as in male. Tibiae (Fig. 58) strongly dilated towards apex; apex of outer side of mesotibiae with small tooth between upper and middle teeth; apex of outer side of metatibiae with small teeth between upper and middle teeth; dorsal surface sulcated. Tarsi not notably slender; mesotarsomere I about as long as II-III together; tarsomeres III not bilobed; meso- and metatarsomere V (without claws) about 1.3 times longer than I-III together; paronychium very distinctly exposed, with one seta.

**Variation**. Female: punctation of outer side of mandibles moderately fine; setae of inner surface of mandibles sparse; setae of outer side of mandibles very sparse; median projection of labrum slightly rounded at apex; sulcus between the gibbosities of dorsal surface of head, slightly shagreened and just moderately coarse punctate; clypeolabral suture distinct throughout; posterolateral angles slightly projected backward; tooth of apex of outer side of metatibiae, between the upper and middle teeth, not well marked.

**Dimensions in mm (female)**. Total length (from apex of mandibles to apex of elytra), 18.5-18-8; prothorax: length, 3.9-4.1; anterior width, 4.4-4.7; posterior width, 4.3-4.5; humeral width, 5.1-5.7; elytral length, 11.5-12.2.

#### Geographical distribution. Comoros.

**Comments** / **types** / **type locality**. Lameere (1902) wrote on *Parandra comoriana* (translation): "Regarding the type of *P. comoriana*, it does not exhibit the differences mentioned by M. Fairmaire in his description, as the other two specimens loaned by Argod-Vallon and Villard: even so, if those differences existed, they are not sufficient to constitute a distinct species". However, the original description of Fairmaire

(1895) agrees very well with the type deposited in Paris. Lameere (1902) examined one of the syntypes of P. comoriana (translation): "My research was focused on thirty-eight specimens, including...one type of Conradti from Usambara sent by M. Kolbe". Fairmaire (1895) compared his species with P. beninensis Murray, 1862 that also was synonymized with P. gabonica by Lameere (1902) (translation): "It resembles P. beninensis Murr., but it is larger, narrower, with the ocular carina thicker, more distinct, the median clypeal [sic; labral] projection more truncated, the pronotum more narrowed and more rounded at posterolateral angles, the anterolateral angles less projecting, emarginate on each side". The length of P. comoriana, according to Fairmaire (1895) is "21 mill.", and that of P. beninensis according to Murray (1862) is "9 lin." [About 19 mill]. Thus, in this point, Lameere (1902) was right, because the difference is negligible. Comparing the syntype deposited in Paris with the holotype of *P. beninensis*, at least two of the other differences pointed out by Fairmaire are true: the specimen is slender, and the prothorax is narrower at base. Unfortunately, we cannot see the shape of the median projection of the labrum, and the angle of the photos of the syntype does not allow seeing clearly the shape of the ocular carina. Regarding the anterolateral angles of the prothorax they are not different from those in P. beninensis, and the emargination on each side ("impressionné de chaque côté") is not part of the anterolateral angles, because they are placed between these angles and the lateral angles, that are slightly marked.

Acutandra comoriana (Fig. 130, 134) differs from A. gabonica (Fig. 125, 128): elytral carinae absent; apex of outer side of metatibiae with small teeth between the upper and middle teeth. In A. gabonica the elytral carinae are distinct and the apex of outer side of metatibiae has no denticles. From A. beninensis (Fig. 114) it differs as follows: body not flattened dorso-ventrally; anterior margin of the pronotum distinctly sinuate; lateral margins of the prothorax more divergent from base to apex. In A. beninensis the body is flattened dorso-ventrally, the anterior margin of the pronotum is distinctly less sinuate, and the lateral margins of the prothorax are slightly divergent from base to apex.

Quentin and Villiers (1975) wrote the following note concerning *Parandra gabonica* (translation): "*P. comoriana* FAIRMAIRE. The unique specimen with label handwritten by FAIRMAIRE is a male with 21 mm in length (holotype). We designate as **allotype** female a specimen with the same size and same precedence, from Oberthür Collection also mentioned by FAIRMAIRE himself". It is true that Fairmaire (1895) based his description on, at least, two specimens: "Comores (coll. Oberthür et la mienne)". Evidently, the specimens mentioned by Quentin and Villiers (1975) are syntypes, and thus, there is no holotype. Furthermore, the designation of allotype has no nomenclatural value. According to ICZN (1999: Article 73.2): "Syntypes... all the specimens of the type series are automatically syntypes if neither a holotype [Art. 72.1] nor a lectotype [Art. 74] has been fixed. When a nominal species-group taxon has syntypes, all have equal status in nomenclature as components of the name-bearing type". Regarding allotype the ICZN (1999: Glossary) records: "term, not regulated by the Code, for a designated specimen of opposite sex to the holotype [Recommendation 72A]".

Cambefort (2007) confirmed that the Collection Fairmaire is deposited in MNHN (translation): "Finally, the collection was recovered to the Museum, where it entered in five lots: beetles of Madagascar, acquired from E. Boullet on August 30, 1906; Paleartic beetles, acquired from madam Fontaine, born Fairmaire, on September 3, 1906; lamellicorn beetles, acquired from E. Boullet on December 30, 1906; heteromerous beetles (200 boxes), acquired from E. Boullet on June 15, 1907; finally, the remaining, acquired from E. Boullet on June 12, 1908". The Collection Oberthür also is deposited in MNHN.

To keep the stability of the species, we are designating as **LECTOTYPE** (Fig. 130-132) the male (examined by photos) deposited at MNHN that has the following labels (Fig. 133):

- 1. Yellowish [handwritten]: Parandra comoriana / Fair. 1895 / I Comore;
- 2. Yellowish [handwritten / printed]: Parandra gabonica Th / A. Lameere det. [year printed, overwrite]; 3. Yellowish [handwritten]: Comore;
- 4. Greenish [printed]: Museum Paris / Collection Leon Fairmaire / 1906;
- 5. Red [printed / handwritten]: Holotype [male symbol].
- 6. Red [printed]: Lectotype / Parandra comoriana added by us.

Quentin and Villiers (1979) reported the species from "Grande Comore (ex. Coll. Fairmaire, Oberthür, Argod et Sicard)". The species was not plotted on map because there is no precise locality in the island.

#### Acutandra leduci sp. nov.

(Fig. 13, 40, 69, 100, 168-170)

**Etymology**. This species is cordially dedicated to Frederic Leduc, enthusiastic collector with a special interest in Cerambycidae.

**Type material**. Holotype male from TANZANIA (Fig. 100), *Tanga*: Bulwa (Usambara Mountains), [no date indicated], A. Rolle col. (IRSNB).

**Description**. General coloration of integument dark-brown; mandibles, parts of head, margins of prothorax, margins of epipleura, margins of mesosternum and metasternum around coxal cavities, and parts of legs blackish; margins of the scutellum darker than central area; legs lighter (except small blackish areas).

Male (Fig. 168). Body not flattened dorso-ventrally. Width of head plus eyes almost equal to that of pronotum at anterolateral angles. Mandibles distinctly not falciform or sub-falciform; length of mandible equal to 0.7 times that of head; outer surface moderately coarsely punctate on basal third near inferior edge, slightly finer and sparser towards superior edge (mainly on the gibbosity), finer towards apex, and coarse, confluent on the longitudinal sulcus starting in the gibbosity and ending in the apex of the dorsal carina; inner surface finely, sparsely punctate; inner edge with the more basal tooth larger than more apical one; inner face with short, somewhat abundant setae; outer face with very short setae on base, becoming microscopic towards apex; outer surface distinctly tumid near base; mandibular dorsal carina distinct, elevated, ending abruptly near apex. Dorsal surface of head (Fig. 168) finely, abundantly punctate on gibbosities (sparser towards clypeus), moderately coarsely, abundantly punctate on central area between gibbosities and prothorax, coarsely, confluently punctate laterally behind gibbosities, punctate-striate between middle and apex of ocular carina; gibbosities well marked; area between gibbosities and ocular carinae with longitudinal sulcus. Epistomal suture distinct only laterally. Clypeus medially in the same plane with the furrow between gibbosities of head; laterally more distinctly lower than the surface of head; setae microscopic, sparse. Clypeolabral suture distinct only laterally. Labrum centrally tumid; median projection (Fig. 13) wide, rounded at apex; setae short, sparse, centrally with some longer setae. Ocular carina not bifurcated in "Y" near posterior edge of eyes. Eyes moderately narrow (larger width about 0.5 times length); upper ocular lobe slightly wider than length of the scape; posterior edge of lower ocular edge not strongly elevated above area behind it. Area behind eyes coarsely, abundantly, deeply punctate between apex of upper ocular lobe and beginning of lower ocular lobe, sparser, slightly shallower in the beginning of lower ocular lobe, shallower, confluently punctate towards the apex of the lobe; area between lower ocular lobes and gena, finely, sparsely punctate, transversely striated; area between tentorial pits and submentum impunctate, finely, transversely striated. Submentum well separated from gula and genae; surface with sparse, coarse, somewhat deep punctures, transversely striated; anterior edge strongly elevated; setae moderately long, sparse. Mentum not produced laterally into paraglossae. Antennae (Fig. 40) reaching humeral angle; length of antennomere XI equal to 1.5 times that of X; ventral sensorial area of antennomeres III-XI not divided by carinae; dorsal sensorial area of antennomere XI wide, well marked, moderately long (about 0.3 times length of antennomere); apical third of antennomere XI abruptly inclined towards apex.

Sides of prothorax (Fig. 168) divergent from base to apex; anterolateral angles projecting forward, acute; posterolateral angles almost rectangular; lateral angles absent. Anterior half of pronotum transversally convex; disc somewhat elevated from base to apex (Fig. 170); disc shiny, finely punctate from base to apex, impunctate centrally between base and middle; punctures becoming laterally coarser, striate in middle third, without reaching margin; area close to the margin asperate in apical half and confluently punctate in basal half; anterior edge slightly sinuate. Metasternum not shagreened, moderately coarsely punctate laterally, moderately abundantly, shallowly punctate near mesocoxal cavities (punctures shagreened); punctures gradually becoming finer, sparser towards middle. Metepisterna (Fig. 169) rugose on basal two thirds along epipleura (throughout on base); remaining areas coarsely, sparsely punctate (mainly in basal half). Elytra abundantly, moderately coarsely punctate (coarser laterally), almost entirely rugose; circum-scutellar area more sparsely punctate; elytral carinae distinct. Ventrites I-IV punctate, mainly laterally; ventrite V more distinctly punctate, with asperities and moderately abundant setae in centro-apical half; setae of ventrites I-IV short and sparse (more conspicuous from ventrite I to IV).

Profemur as long as mesofemur; metafemur about 1.2 times longer than mesofemur. Tibiae dilated towards apex; dorsal surface longitudinally, slightly sulcated. Tarsi not notably slender; tarsomeres III not bilobed; mesotarsomere I slightly shorter than II-III together; meso- and metatarsomere V (Fig. 69) (without claws) about 1.2 times longer than I-III together; paronychium very distinctly exposed, with one seta.

**Dimensions in mm (male)**. Total length (including mandibles), 24.0; prothorax: length, 5.6; anterior width, 6.1; posterior width, 5.5; humeral width, 6.2; elytral length, 13.7.

**Diagnosis**. Acutandra leduci **sp. nov.** (Fig. 168-170) differs from *A. gabonica* (Fig. 128): gibbosities finely punctate; mandible tumid on basal outer surface; elytra distinctly rugose. In *A. gabonica* the punctures on the gibbosities, are usually coarser, the mandibles are not tumid on outer surface, and the elytra is not rugose. It differs from *A. conradti* (Fig. 105-107) by mandible tumid on basal outer surface, by the elytra distinctly rugose, and by the tibiae less dilated towards apex. In *A. conradti* the mandible and elytra are as in *A. gabonica*, and the tibiae are strongly dilated towards apex.

#### Acutandra jolyi sp. nov.

(Fig. 26, 49, 78, 90, 91, 165-167)

Etymology. The species is dedicated to Claude Joly who collected the holotype of the new species.

**Type material**. Holotype male from GHANA (Fig. 90), *Western*: Daboase, XI.1999, C. Joly col. (IRSNB). Paratype - IVORY COAST, *Dix-Huit Montagnes*: Man, male, V.1977, [no collector indicated], (PJPC).

Male (Fig. 165). Body not flattened dorso-ventrally. Width of head plus eves equal to 0.9 times that of pronotum at anterolateral angles. Mandibles not falciform or sub-falciform; length of mandible equal to 0.9 times that of head, coarsely and abundantly punctate on outer surface (finer towards apex); inner surface coarsely, abundantly punctate; teeth of inner edge together protracted, more basal tooth larger than more apical one; inner face with moderately long and abundant setae; outer face with short, sparse setae, becoming microscopic towards apex; mandibular dorsal carina distinct, not ending abruptly. Dorsal surface of head moderately finely, abundantly punctate on anterior third of the gibbosities, gradually coarser towards apex of gibbosities, coarse, abundantly punctate between gibbosities and prothorax, deeper laterally; sulcus between gibbosities coarsely, confluently punctate; gibbosities gradually inclined anteriorly. Epistomal suture distinct throughout. Clypeus medially slightly lower than plane of the furrow between the gibbosities of head; setae very short, sparse, present only laterally. Clypeolabral suture almost indistinct, limit between clypeus and labrum is distinct. Labrum shiny, impunctate laterally and basally, finely, sparsely punctate on centro-apical region; median projection (Fig. 26) of labrum moderately narrow, rounded at apex; setae short, sparse on punctate region, longer on median projection. Ocular carina not bifurcated in "Y" near posterior edge of eyes. Eyes moderately narrow (larger width about 0.4 times length); upper ocular lobe about as wide as length of scape; posterior edge of lower ocular edge not elevated above area behind it. Area behind eyes shagreened from apex of upper ocular lobe to basal third of lower ocular lobe, coarsely, abundantly punctate on shagreened area (anastomosed at middle of this area); region behind middle third of lower ocular lobe longitudinally punctate; area between latter and gula coarsely, sparsely punctate. Area between tentorial pits and submentum shiny, smooth. Submentum not distinctly separated from gula, moderately separated from genae; surface coarsely, shallowly, sparsely punctate; anterior edge elevated, coarsely, confluently punctate; setae short, sparse. Mentum not produced laterally into paraglossae. Antennae (Fig. 49) not reaching base of prothorax; length of antennomere XI equal to 1.5 times that of X; ventral sensorial area of antennomeres III-XI not divided by carinae; dorsal sensorial area of antennomere XI wide, well delimited, moderately elongate (about 0.3 times length of antennomere); apical third of antennomere XI abruptly inclined towards apex.

Sides of prothorax (Fig. 165) slightly divergent from posterolateral angles to anterior third, then slightly convergent towards anterolateral angles; anterolateral angles projected forward, acute; posterolateral angles obtuse, slightly projecting; lateral angles slightly absent. Anterior half of pronotum transversally convex; disc not strongly elevated from base to apex (Fig. 167); disc shiny, finely punctate

from base to apex; punctures becoming coarser laterally (not reaching the edge); area closer to the margin shagreened, punctate-rugose, with abundant small plates, as small scales, on apical half (this area is gradually wider from base to apex of pronotum); anterior edge sinuate. Metasternum (Fig. 166) laterally shagreened, coarsely, abundantly punctate; finely, sparsely punctate on the remaining surface. Metepisterna shagreened, coarsely, abundantly punctate near elytron, shiny, impunctate near metasternum. Elytra abundantly, moderately coarsely punctate (laterally coarser and closer); circum-scutellar area more finely punctate; elytral carinae distinct. Ventrites I-IV shagreened, moderately coarsely, abundantly punctate, somewhat rough laterally; ventrite V with asperities on centro-apical half; ventrites I-IV almost glabrous; ventrite V with moderately long, abundant setae on centro-apical region. Profemur about as long as mesofemur; metafemur about 1.1 times longer than mesofemur. Tibiae not strongly dilated towards apex; dorsal surface longitudinally sulcated. Tarsi not strongly slender; tarsomeres III not bilobed; length of mesotarsomere I equal to 0.75 times that of II-III together; meso- and metatarsomere V (Fig. 78) (without claws) about 1.25 times longer than I-III together; paronychium very distinctly exposed, with one seta.

**Dimensions in mm (male)**. Total length (including mandibles), 15.5-16.3; prothorax: length, 3.5-3.8; anterior width, 4.3-4.7; posterior width, 3.8-4.0; humeral width, 4.3-4.7; elytral length, 9.1-9.3. The largest dimensions are those of the holotype.

**Diagnosis**. *Acutandra jolyi* **sp. nov.** (Fig. 165-167) differs from *A. gabonica* (Fig. 125-128), mainly as follows: body wider; antennomere XI proportionally shorter.

#### Acutandra camiadei sp. nov.

(Fig. 15, 16, 42, 71, 88, 143-146)

**Etymology**. This species is dedicated to Didier Camiade who provided study material for the revision, including specimens of the new species.

**Type material**. Holotype male from EQUATORIAL GUINEA (Fig. 88), *Annobón Province*: Annobón Island, 1-2.VIII.1959, Cambridge University Expedition col. (BMNH). Paratypes - EQUATORIAL GUINEA, *Annobón Province*: Annobón Island, male, 5-17.IX.1911, Arnold Schultze col. (IRSNB); 4 males, 2 females, 1-2.VIII.1959, Cambridge University Expedition col. (BMNH); male, 1-2.VIII.1959, Cambridge University Expedition col., ex BMNH, (MZSP); male, [no date and collector indicated], (USNM, ex Collection Tippmann); 2 males, 2 females, 1I.2004, D. Camiade (DCPC).

**Description**. General coloration of integument brown; dorsal surface darker than ventral; mandibles, parts of head (mainly dorsally), dorsal surface of scape, margins of prothorax, margins of elytra (suture and epipleura), margins of mesosternum and metasternum around coxal cavities, extreme distal area of ventrite V, and parts of legs blackish; margins of the scutellum darker than central area.

Male (Fig. 143). Body flattened dorso-ventrally. Width of head plus eyes equal to 0.95 times that of pronotum at anterolateral angles. Mandibles sub-falciform; length of mandible equal to 0.7 times that of head, finely, moderately abundantly punctate, mainly on outer surface; inner surface finely shagreened throughout, and outer surface on irregular areas; inner edge with two teeth together protracted and with the same size; inner face with very short and sparse setae; outer face with microscopic, sparse setae; mandibular dorsal carina distinct, but not well delimited at outer face. Dorsal surface of head finely, abundantly punctate on gibbosities (mainly on anterior two-thirds), coarser, distinctly sparser on sulcus between gibbosities and at area between gibbosities and prothorax; gibbosities well marked; area between gibbosities and ocular carinae with somewhat elliptical depression. Epistomal suture distinct only laterally. Clypeus medially lower than area of sulcus between gibbosities of the head; laterally slightly lower than centrally; setae absent. Clypeolabral suture marked throughout. Median projection of labrum (Fig. 15) wide, truncated at apex, medially tumid; setae microscopic, sparse. Ocular carina bifurcated in "Y" near posterior edge of eyes (bifurcation wide). Eyes moderately narrow (larger width about 0.5 times length); posterior edge of lower ocular edge distinctly elevated above area behind it. Area behind eyes shagreened from apex of upper lobe of eyes to basal third of lower lobe of eyes; punctation coarse, sparse near bifurcation

in "Y", gradually finer and more abundant towards apex of shagreened area; area not shagreened moderately finely punctate and striated; area closer to the eyes impunctate. Submentum distinctly separated from gula and genae; surface very finely shagreened, coarsely punctate and striated; anterior edge elevated; setae short, sparse. Mentum not produced laterally into paraglossae. Antennae (Fig. 42) reaching apex of prothorax (paratype); antennomere XI 1.4 times longer than X; ventral sensorial area of antennomeres III-XI not divided by carinae; dorsal sensorial area of antennomere XI, wide, well marked, moderately short (about 0.25 times length of antennomere); apical third of antennomere XI not abruptly inclined towards apex.

Sides of prothorax (Fig. 143) divergent from base to apex, slightly curved; anterolateral angles projecting forward, somewhat rounded; posterolateral angles rounded, not projecting; lateral angles absent. Anterior half of pronotum transversally convex; disc not strongly elevated from base to apex (Fig. 145); disc shiny, abundantly finely punctate from base to apex, gradually coarser, more abundantly punctate laterally on basal half; latero-apical half with small and abundant plates (as isolated scales); anterior edge sinuate. Metasternum (Fig. 144) laterally shagreened near mesocoxae, sparsely punctate laterally, gradually finer, more sparsely punctate towards central area. Metepisterna finely sparsely punctate. Elytra abundantly, finely punctate; circum-scutellar area more sparsely punctate. Ventrites I-IV finely, sparsely punctate centrally, gradually punctate-asperate laterally; ventrite V more distinctly asperate; setae from microscopic to absent (mainly centrally) on ventrites I-IV, moderately longer and abundant on ventrite V (mainly on centro-apical area). Profemur as long as mesofemur; metafemur about 1.1 times longer than mesofemur. Tibiae dilated towards apex; dorsal surface slightly longitudinally sulcated on pro- and mesotibiae, almost flat on metatibiae. Tarsi slender; mesotarsomere I slightly longer than II-III together; paronychium very distinctly exposed, with one seta.

Female (Fig. 146). Head less robust, width plus eyes 0.85 times narrower than that of pronotum at anterolateral angles. Eyes slightly broader than in male. Mandible subtriangular, length equal to about 0.6 times that of head, slightly more coarsely punctured than in male; dorsal carina present but less well defined and shorter than in male; inner edge with teeth similar to those in male. Median projection of labrum (Fig. 16) distinctly narrower and more rounded at apex than in male. Sides of prothorax rounded. Anterior edge of pronotum not sinuate; latero-apical areas neither shagreened nor rugose or with small plates, but coarsely punctate than center of disc.

**Variation**. Margins of mesosternum and metasternum around coxal cavities, and extreme distal of ventrite V dark-brown; dorsal surface of the scape from brown to blackish; head blackish only on distal portion. Males: mandibles not falciform or sub-falciform (*minor* males); length of mandible from 0.7 to 0.8 times that of head; distal teeth of the inner margin of the mandibles from smaller to larger than basal one; inner face of the mandibles from almost glabrous (*major* males) to distinctly pilose (*minor* males); outer face with short, conspicuous setae; clypeus with microscopic, sparse pubescence (mainly laterally); median projection of labrum wide slightly rounded at apex; setae of clypeus from microscopic and sparse, intermixed or not with rare short setae (*major* males) or with short setae basally and distinctly longer ones apically (*minor* and *medium* males); ocular carina slightly bifurcated in "Y" (*minor* males); submentum not striated; antennae reaching the base of the elytra; antennomere XI 1.6 times longer than X; dorsal sensorial area of antennomere XI, moderately narrow, shorter than 0.2 times length of antennomere; metatibiae slightly longitudinally sulcated. Female: median projection of labrum truncate at apex.

**Dimensions in mm (male/female)**. Total length (including mandibles), 18.1-24.7 (holotype)/16.0-20.6; prothorax: length, 4.0-5.6 (holotype)/3.0-4.3; anterior width, 4.8-6.9 (holotype)/3.5-5.3; posterior width, 4.2-5.8 (holotype)/3.6-4.8; humeral width, 5.0-7.1 (holotype)/4.4-5.9; elytral length, 10.7-14.5 (holotype)/ 9.5-13.0.

**Comments**. The holotype is lacking antennomeres IX-XI of left antenna and antennomeres VII-XI of right antenna.

**Diagnosis**. *Acutandra camiadei* **sp. nov.** (Fig. 143-146) differs from *A. oremansi* **sp. nov.** (Fig. 181-184) as follows: body wider; punctation on gibbosities of the head coarser; ocular carina, usually, bifurcated

in "Y" near posterior edge of eyes; pronotum less distinctly elevated from base to apex; anterior edge of pronotum less distinctly sinuate. In *A. oremansi* the body is slender, the punctation on the gibbosities of the head are finer, the ocular carina is not bifurcated in "Y", the pronotum is strongly elevated from base to apex, and the anterior edge of pronotum is distinctly sinuate. From *A. dasilvai* **sp. nov.** (Fig. 147-150) and *A. gabonica* (Fig. 125-128) it differs, mainly, by the elytra finer punctate.

#### Acutandra oremansi sp. nov.

(Fig. 3, 4, 35, 54, 64, 97, 181-184)

**Etymology**. Dedicated to Philippe Oremans, who collected part of the type series, and provided other specimens for this study.

**Type material**. Holotype male from SÃO TOMÉ AND PRINCIPE (Fig. 97), *São Tomé Island*: Calvario (1500 m), VIII.1973, G. Schmitz col. (RMCA). Paratypes - SÃO TOMÉ AND PRINCIPE, *São Tomé Island*: female, 2.XI.1932, W. H. T. Tams. col. (BMNH); female, 3.XI.1932, W. H. T. Tams. col. (BMNH); 2 males, 1 female, 8.XI.1932, W. H. T. Tams. col. (BMNH); female, [Data unreliable] (BMNH); Esta San Soja, female, 27.II.2002, P. Oremans col. (POPC); near to Macambrará, female, X.2000, P. Oremans col. (POPC); female, XII.2005, P. Oremans col. (POPC); Pico Carvalho (1566 m), 2 males, 1 female, 26.II.2003, P. Oremans col., ex POPC, (MZSP); Mont Café, 1 male, 1 female, II.1999, Moretto col. (TBPC).

**Description**. General coloration of integument brown; head and pronotum darker than rest of body; mandibles, parts of head, dorsal surface of scape, margins of prothorax, margins of elytra (suture and epipleura), margins of mesosternum and metasternum around coxal cavities, extreme distal of ventrite V, and parts of legs blackish; margins of the scutellum darker than central area; elytra darker than ventral surface.

Male (Fig. 181). Body flattened dorso-ventrally. Width of head plus eyes equal to 0.8 times that of pronotum at anterolateral angles. Mandibles distinctly not falciform or sub-falciform; length of mandible equal to that of head, finely and sparsely punctate, mainly on outer surface; inner surface finely shagreened throughout, and outer surface on irregular and large areas; inner edge with more basal tooth larger than more apical one; inner face with short, sparse setae; outer face with very short setae on base, becoming microscopic towards apex; mandibular dorsal carina distinct, but not well delimited, mainly on outer face. Dorsal surface of head very finely punctate, becoming slightly coarser towards latero-basal areas, very finely shagreened on nearly all surface, more distinctly laterally and basally; gibbosities well marked; area between gibbosities and ocular carinae with slight, somewhat elliptical depression. Epistomal suture distinct throughout. Clypeus medially almost in the same plane as the furrow between gibbosities of head; laterally more distinctly lower than surface of head; setae microscopic, sparse. Clypeolabral suture marked throughout. Median projection of labrum (Fig. 3) wide, truncate at apex, medially elevated; setae short, sparse. Ocular carina not bifurcated in "Y" near posterior edge of eyes. Eyes narrow (larger width about 0.4 times length); posterior edge of lower ocular edge not strongly elevated above the area behind it. Area behind eyes shagreened, finely, sparsely punctate. Submentum weakly separated from gula and genae; surface very finely shagreened, with sparse, moderately coarse, shallow punctures (these more distinctly shagreened); anterior edge elevated; setae short, sparse. Mentum distinctly produced laterally into paraglossae Antennae (Fig. 35) reaching basal extreme of elytra; antennomere XI almost twice length of X; ventral sensorial area of antennomeres III-XI not divided by carinae; dorsal sensorial area of antennomere XI, very narrow, well marked, moderately long (about 0.3 times length of antennomere); apical third of antennomere XI not abruptly inclined towards apex.

Sides of prothorax (Fig. 181) divergent from base to apex, slightly sinuate; anterolateral angles projecting forward, acute; posterolateral angles obtuse, not projecting; lateral angles absent. Anterior half of pronotum transversally strongly convex; disc strongly elevated from base to apex (Fig. 183); disc shiny, very sparsely, finely punctate from base to about anterior fourth; punctures becoming coarser laterally on middle third, without reaching the margin; lateral areas shagreened (more distinctly so in anterior half); basal third of latero-basal area punctate (punctures just coarser than on disc); middle third of latero-basal area somewhat

rugose; latero-basal third, and anterior fourth of disc (except central region and area of anterolateral angles) with small and abundant plates (as isolated scales); anterior edge strongly sinuate. Metasternum (Fig. 182) finely shagreened, finely and very sparsely punctate laterally. Metepisterna with punctures just coarser and more abundant than lateral area of metasternum. Elytra abundantly, moderately finely punctate, mainly laterally; circum-scutellar area very finely and sparsely punctate. Ventrites I-IV very finely shagreened; ventrite V more distinctly shagreened, with asperities and moderately abundant setae in centro-apical half. Profemur as long as mesofemur; metafemur about 1.2 times longer than mesofemur. Tibiae strongly dilated towards apex; dorsal surface slightly longitudinally sulcated, more elevated on inner side. Tarsi slender; metatarsomere I longer than II-III together; meso- and metatarsomere V (Fig. 64) (without claws) about 1.3 times longer than I-III together; paronychium very distinctly exposed, with one seta.

Female (Fig. 184). Head slightly less robust, width plus eyes slightly narrower than that of pronotum at anterolateral angles. Eyes slightly broader than in male. Mandible subtriangular, length equal to about 0.7 times that of head, slightly more coarsely punctured than in male; dorsal carina present but less well defined and shorter than in male; inner edge with teeth similar to those in male, but each tooth usually with similar size. Median projection of labrum (Fig. 4) distinctly narrower and more rounded at apex than in male. Sides of prothorax more rounded than in males. Pronotum less inclined from base to apex; anterior edge not sinuate; lateral areas neither shagreened nor rugose, but slightly more coarsely punctate than center of disc.

**Variation**. Elytra from brown to dark-brown, as darker as pronotum to lighter. Male: length of mandible 1.1 times that of head; outer surface of mandible with slightly coarser punctures on middle area; inner and outer surface of mandibles not shagreened; setae of the inner face of mandibles more abundant; area between the gibbosities and ocular carinae with well marked depression; epistomal and clypeolabral sutures not well marked throughout; clypeus medially lower than the plane of the furrow between the gibbosities of the head; width of eyes about 0.5 times the length; mentum not distinctly produced laterally into paraglossae; antennae reaching from the posterolateral angles of the prothorax to the basal extreme of elytra; dorsal sensorial area of antennomere XI somewhat wide, moderately short (about 0.2 times length of antennomere); metasternum and ventrites not shagreened; meso- and metatarsomere V (without claws) about 1.4 times longer than I-III together.

**Dimensions in mm (male/female)**. Total length (including mandibles), 21.0-26.0/19.0-25.8; prothorax: length, 4.6-6.0/3.5-5.4; anterior width, 6.1-7.4/4.1-6.3; posterior width, 4.6-5.7/3.7-6.2; humeral width, 5.7-7.2/4.9-7.5; elytral length, 12.5-15.1/11.7-15.4. Total length of the holotype, 21.2.

**Comments**. The holotype is missing the following parts: antennomeres VIII-XI of right antenna; tarsomeres IV-V of left foreleg and hind legs; right hind leg.

**Diagnosis**. Acutandra oremansi **sp. nov.** (Fig. 181-184) differs from *A. gabonica* (Fig. 125-128): dorsal surface of head, mainly on gibbosities, distinctly finely, sparsely punctate; antennomere XI long, not abruptly inclined towards apex at apical third; anterior edge of pronotum distinctly sinuate; basal edge of pronotum rounded; elytra moderately finely and sparsely punctate, mainly on circum-scutellar area; meso- and metatarsus fine; meso- and metatarsomeres V long. In *A. gabonica* the dorsal surface of head is coarsely and abundantly punctate, the antennomere XI is shorter and abruptly inclined towards apex at apical third, the anterior edge of pronotum is not sinuate (at most, slightly sinuate), the basal edge of pronotum is almost straight (rarely more rounded), the elytra is distinctly coarsely punctate throughout, the meso- and metatarsus are wider, and the meso- and metatarsomeres V are shorter.

*Acutandra hugoi* sp. nov. (Fig. 25, 48, 77, 84, 162-164)

Etymology. This new species is dedicated to the first son of the second author for his interest in entomology.

**Type material**. Holotype male from DEMOCRATIC REPUBLIC OF THE CONGO (Fig. 84), *Tshopo*: Kisangani (ex Stanleyville), [no date and collector indicated], (ex Collection J. Muller) (IRSNB). Paratypes - DEMOCRATIC REPUBLIC OF THE CONGO, *Bas-Uele*: Bambesa, male, 6.IV.1937, J. Vrydagh col. (RMCA). *Tshopo*: Kisangani (ex Stanleyville), male, [no date and collector indicated], (ex Collection J. Muller), ex IRSNB, (MZSP). *Kinshasa*: near Kingantoko, male, XII.1997, P. Oremans col. (POPC); male, XII.1997, P. Oremans col., ex POPC, (MZSP).

**Description**. General coloration of integument dark-brown; parts of head, nearly all mandibles, margins of prothorax and elytra, margins of mesosternum and metasternum around coxal cavities, and parts of legs blackish; margins of the scutellum darker than central area.

Male (Fig. 162). Body slightly flattened dorso-ventrally. Width of head plus eyes equal to 0.95 times that of pronotum at anterolateral angles. Mandibles not falciform or sub-falciform; length of mandible equal to 0.7 times that of head, coarsely and abundantly punctate on outer surface (finer towards apex); inner surface coarsely, abundantly punctate; teeth of the inner edge together protracted, the more basal tooth larger than the more apical one; inner face with moderately long and abundant setae; outer face with short, moderately abundant setae, becoming microscopic towards apex; mandibular dorsal carina distinct, not ending abruptly. Dorsal surface of the head moderately finely, abundantly punctate on anterior third of the gibbosities, gradually coarser towards apex of the gibbosities, coarse, moderately sparsely punctate between the gibbosities and prothorax; area between the gibbosities and ocular carina, and between the gibbosities coarsely striate-punctate (punctures more distinct near apex of ocular carina and posterior half of the sulcus between the gibbosities). Epistomal suture distinct throughout. Clypeus medially lower than the plane of the furrow between the gibbosities of the head, but not abruptly inclined; setae very short, sparse. Clypeolabral suture almost indistinct. Median projection of labrum (Fig. 25) wide, truncate at apex, medially slightly elevated; setae short basally and laterally, moderately long on centroapical area. Ocular carina not bifurcated in "Y" near posterior edge of eyes. Eyes moderately wide (larger width about 0.5 times length); upper ocular lobe about as wide as length of the scape; posterior edge of lower ocular edge not elevated above the area behind it. Area behind eyes shagreened on region between the lobes, coarsely, moderately abundantly punctate from apex of lower lobe of eyes to apical third of lower lobe of eyes, gradually sparser towards gula. Area between tentorial pits and submentum shiny, finely transversely striated, with some coarse, shallow punctures. Submentum not distinct separated from gula, moderately separated from genae; surface punctate-striate (punctures coarse, shallow, and confluent); anterior edge elevated; setae short, sparse. Mentum not produced laterally into paraglossae. Antennae (Fig. 48) reaching the base of prothorax; length of the antennomere XI equal to 1.1 times that of X; ventral sensorial area of antennomeres III-XI not divided by carinae; dorsal sensorial area of antennomere XI wide, well delimited, slightly elongate (about 0.2 times length of antennomere); apical third of antennomere XI abruptly inclined towards apex.

Sides of prothorax (Fig. 162) slightly divergent from lateral angles to anterolateral angles, convergent from lateral angles towards posterolateral angles; anterolateral angles projected forward, somewhat rounded; posterolateral angles obtuse, not projecting; lateral angles slightly marked. Anterior half of pronotum transversally convex; disc not strongly elevated from base to apex (Fig. 164); disc shiny, finely punctate from base to apex (sparser on base and apex); punctures becoming coarser laterally, anastomosed on central region; area closer to the margin shagreened, with abundant small plates, as small scales, on apical half (this area is gradually wider from base to apex of pronotum); anterior edge slightly sinuate. Metasternum (Fig. 163) laterally slightly shagreened, moderately coarsely, sparsely punctate (punctures becoming finer towards central area). Metepisterna shagreened, coarsely, abundantly punctate. Elytra abundantly, moderately coarsely punctate (laterally coarser and closer); circum-scutellar area more finely punctate; elytral carinae distinct. Ventrites I-IV shagreened, moderately coarsely, abundantly punctate, more so laterally; ventrite V more distinctly punctate, with asperities on centro-apical half; ventrites I-IV with short, sparse setae; ventrite V with short setae basally and laterally, longer, more abundant centroapically. Profemur about as long as mesofemur; metafemur about 1.05 times longer than mesofemur. Tibiae not strongly dilated towards apex; dorsal surface longitudinally sulcated. Tarsi not strongly slender; tarsomeres III not bilobed; length of mesotarsomere I equal to 0.8 times that of II-III together; meso- and metatarsomere V (Fig. 77) (without claws) about 1.3 times longer than I-III together; paronychium very distinctly exposed, with one seta.

**Dimensions in mm (male)**. Total length (including mandibles), 15.4-18.1; prothorax: length, 3.4-3.9; anterior width, 4.2-5.0; posterior width, 3.6-4.1; humeral width, 4.3-5.1; elytral length, 9.4-10.2. The smallest measurements belong to the holotype.

**Diagnosis**. Acutandra hugoi **sp. nov.** (Fig. 162-164) differs from A. beninensis (Fig. 114-117) as follows: head more elongate behind eyes; metatarsomere V, in dorsal view, slender in basal half. In A. beninensis the head is shorter behind eyes and the metatarsomere V is thicker in dorsal view. From A. gabonica it differs by the punctation on the gibbosities of the head finer (coarser in A. gabonica) and by the antennomere XI shorter (longer in A. gabonica).

#### Acutandra beninensis (Murray, 1862), revalidated, comb. nov.

(Fig. 95, 114-118)

Parandra beninensis Murray, 1862: 452; Thomson 1867: 118; Murray 1870: 432; Lameere 1902: 97 (syn.); Quentin and Villiers 1977: 129 (type).

**Material examined**. NIGERIA (Fig. 95), *Cross River*: Old Calabar, holotype male, [no date and collector indicated] (BMNH).

**Redescription**. General coloration of integument dark-brown; dorsal surface slightly darker than ventral surface; parts of head, mandibles, scape and antennomeres, margins of prothorax, margins of elytra (suture and epipleura), margins meso- and metasternum, and parts of legs blackish; margins of the scutellum and extreme distal areas of ventrites darker than remaining surface.

Male (Fig. 114). Body flattened dorso-ventrally. Head slightly elongate behind eyes. Width of head (Fig. 117) plus eyes equal to 0.85 times that of pronotum at anterolateral angles. Mandibles sub-triangular; length of mandible equal to 0.7 times that of head, moderately coarsely, abundantly punctate on outer surface, slightly finer and closer towards apex; punctation of inner surface slightly sparser than that on basal half of outer surface, mainly towards inner edge; inner edge with more basal tooth larger than more apical one; inner face with moderately short and sparse setae; outer face with short, decumbent setae (shorter towards apex); mandibular dorsal carina distinct. Dorsal surface of head (Fig. 117) moderately coarsely, abundantly punctate on gibbosities, gradually coarsely punctate towards apex of gibbosities, distinctly coarse, confluent on area between ocular carina and apex of gibbosities, coarse, moderately abundantly punctate on central area between gibbosities and prothorax, coarser and more abundant laterally; sulcus between gibbosities not V-shaped, with coarse, confluent punctures; area between gibbosities and ocular carinae depressed, punctate towards eyes and impunctate towards clypeus. Epistomal suture distinct only laterally. Clypeus medially lower than level of area of sulcus between gibbosities of head; laterally slightly lower than centrally; moderately coarsely, sparsely punctate (mainly centrally); setae microscopic, sparse, present only laterally. Clypeolabral suture indistinct throughout. Median projection of labrum wide, truncate at apex, medially slightly tumid; setae short, sparse, just longer and more abundant centrally, mainly apically, absent laterally. Ocular carina not bifurcated in "Y" near posterior edge of eyes. Eyes moderately narrow (larger width about 0.45 times length); posterior edge of eyes slightly elevated above area behind it (slightly more distinctly behind upper ocular lobes). Area behind eyes shagreened from apex of upper lobe of eyes to basal half of lower lobe of eyes; punctation coarse, moderately abundant; area not shagreened moderately finely, sparsely punctate; area closer to the eyes impunctate (more distinctly on middle). Submentum distinctly separated from genae, less so from gula, slightly depressed towards anterior edge; surface coarsely, sparsely, shallowly punctate (more abundantly near anterior edge; anterior edge elevated; setae short, sparse. Antennae reaching posterolateral angles of prothorax; antennomere XI 1.5 times longer than X; ventral sensorial area of antennomeres III-XI not divided by carinae; dorsal sensorial area of antennomere XI wide, well marked, long (about 0.35 times length of antennomere); apical third of antennomere XI abruptly inclined towards apex.

Sides of prothorax (Fig. 114) divergent from posterolateral angles to basal third, and then subparallel towards anterolateral angles; anterolateral angles projecting forward in acute angle, rounded at apex; posterolateral angles obtuse, not projecting; lateral angles absent. Disc of pronotum convex, mainly anteriorly,

not strongly elevated from base to apex (Fig. 116); with a depression on each side of centro-lateral region; shiny, abundantly, finely punctate from base to apex, gradually coarser, more abundantly punctate laterally; latero-basal half striate-punctate; latero-apical half with abundant small plates, as small scales; anterior edge slightly sinuate. Metasternum (Fig. 115) laterally shagreened near mesocoxae, coarsely, shallowly punctate on this area (the punctures slightly distinct), with gradually finer, sparser punctures towards central area. Sculpture of metepisterna as on the lateral of metasternum. Elytra very abundantly, coarsely punctate; dorsal carinae distinct. Ventrites I-IV shagreened, moderately finely punctate, mainly laterally; ventrite V with asperities on centro-apical half; setae very short (mainly centrally) on ventrites I-IV, moderately longer and abundant on ventrite V (mainly on centro-apical area). Profemur slightly longer than mesofemur; metafemur about 1.1 times longer than mesofemur. Tibiae not strongly dilated towards apex; dorsal surface distinctly longitudinally sulcated, mainly in apical two-thirds. Tarsi not notably slender; tarsomeres III not bilobed; mesotarsomere I about as long as II-III together; meso- and metatarsomere V (without claws) about 1.3 times longer than I-III together; paronychium very distinctly exposed, with one seta.

**Dimensions in mm (holotype)**. Total length (including mandibles), 17.9; prothorax: length, 4.0; anterior width, 4.9; posterior width, 4.4; humeral width, 5.1; elytral length, 10.3.

Geographical distribution. Described and known only from Nigeria.

**Comments / type / type locality**. Murray (1862) wrote on *Parandra beninensis* (translation): "Rust colored opaque, punctate, punctures rugose, oblong or square if angulated: female head..." It is possible to infer that Murray had a single specimen, because he recorded only a measure: "Long. 9 lin., lat. 3 lin." Lameere (1902) synonymized P. beninensis under P. gabonica, but did not comment about the sex of the specimen of Murray (translation): "...he could not, indeed, in the following, find more than one difference between his species and P. gabonica: the latter would have the anterolateral angles of pronotum acute, while they would be rounded in *P. beninensis*. However, there are many gradations between the two forms and I have a specimen that is gabonica on left side and beninensis on right one." However, Thomson (1858) did not comment anything on the anterolateral angles of prothorax in the original description (translation): "Prothorax strongly surpassing the head at its base, rounded on posterior lateral margins; wider in front". It was only in 1861 that Thomson said that the anterolateral angles of the prothorax are sub-acute. Moreover, Murray (1862) wrote (translation): "thorax transversally sub-square, margined, posteriorly narrowed, anteriorly strongly and rugosely punctate on both sides; on each side with two foveae, one at middle, the second deltashaped at base; anterolateral angles projecting and acute, the posterolateral obtuse..." Thus, the affirmation of Lameere (1902) makes no sense, because Murray (1862) did not say that the anterolateral angles of prothorax are rounded in *P. beninensis*. Then, the anterolateral angles of both species, based on the original description (P. beninensis) and Thomson (1861) (P. gabonica) are, respectively, acute and sub-acute. Actually, the anterolateral angles of prothorax of the holotype of P. beninensis are distinctly rather rounded than acute, and in P. gabonica, as recorded by Lameere (1902), they are very variable. Apparently, Murray (1862) did not tell that the anterolateral angles of prothorax were sharpened, but that the angle has less than 90 degrees, in contrast to the posterolateral angles that have more than 90 degrees.

Lameere (1902) also did not present any note on the sex of the holotype. Quentin and Villiers (1977) wrote (translation): "*beninensis*. The holotype is a dark male with 18 mm in length, with six labels: "Old Cal.", "9341", "O. Calabar. 78-19", "Beninensis Murr., Linn. Soc. Trans. Old Calabar ", "Type", and "Parandra Latr. Gen. Crust. et Ins., III, 28". Based on the original description, it is possible to infer that the holotype is really a male, mainly because Murray (1862) mentioned that the prothorax is rugosely punctate on both sides, which does not occur in females.

As recorded by Quentin and Villiers (1977) the holotype male of *Parandra beninensis* (Fig. 114-118) is deposited at BMNH.

*Acutandra beninensis* (Fig. 114-117) differs from *A. gabonica* (Fig. 125-128) mainly by the body distinctly flattened dorso-ventrally and antennomere III shorter, while in the latter is notably wide and the antennomere III is longer.

#### Acutandra vingerhoedti sp. nov.

(Fig. 9, 10, 38, 67, 85, 98, 193-196)

**Etymology**. Dedicated to our friend Eric Vingerhoedt who collected important study material for the revision and provided type specimens of the new species.

**Type material**. Holotype male from BURUNDI (Fig. 85), *Muramvya*: Teza, V.2008-I.2009, Leonard-Vingerhoedt col. (IRSNB). Paratypes - BURUNDI, *Cibitoke*: Kibira National Park (2000), female, E. Vingerhoedt col. (TBPC). RWANDA (Fig. 98), Nyungwe Forest National Park (1650-2200 m), male, II.2007, E. Vingerhoedt and G. Vande Weghe col., ex PBPC, (MZSP); (Pindura), 2 males, XII.2008-I.2009, E. Vingerhoedt and G. Vande Weghe col. (TBPC).

**Description**. General coloration of integument dark-brown on ventral surface with some areas blackish, and blackish on dorsal surface, legs (except the tarsi that are dark-brown); pronotum slightly lighter in central area.

Male (Fig. 193). Body distinctly flattened dorso-ventrally. Width of head plus eyes equal to 0.85 times that of pronotum at anterolateral angles. Mandibles sub-falciform; length of mandible equal to that of head (including median projection of the labrum); outer surface moderately coarsely punctate on basal and apical thirds, finer and sparser on middle third, except on area near top of dorsal carina; inner surface finely, sparsely punctate; inner edge with two large teeth, more basal one slightly larger; inner face with moderately short, sparse setae; outer face with short setae at base, becoming microscopic towards apex; mandibular dorsal carina distinct. Dorsal surface of head finely punctate on gibbosities, distinctly coarser, confluently punctate on area between apex of ocular carina and prothorax, and slightly finer towards middle (between gibbosities and prothorax). Area between gibbosities and clypeus with large Vshaped depression, smooth and shiny; wide area of depression in the same level with middle area of clypeus. Area between gibbosities and ocular carina with well marked, subelliptic, smooth and shiny depression. Epistomal suture distinct only on area near ocular carina. Clypeus with one fovea on each side, very sparsely punctate, with some moderately long setae. Median projection of labrum (Fig. 9) wide, rounded at apex, slightly medially elevated; setae moderately long and sparse. Ocular carina slightly bifurcated in "Y" near posterior edge of eyes. Eyes narrow (larger width about 0.4 times length); posterior edge of lower ocular edge not strongly elevated above area behind upper ocular lobes. Area behind eyes coarse, moderately abundantly punctate behind upper ocular lobes, gradually finer and sparser towards apex of lower ocular lobe. Submentum distinctly separated from gula and genae; surface coarsely, sparsely punctate; setae long, sparse, just more concentrated close to the anterior edge; anterior edge elevated, coarsely, anastomosedly punctate. Mentum not produced laterally into paraglossae. Antennae (Fig. 38) reaching apex of prothorax; antennomere XI 1.4 times longer than X; ventral sensorial area of antennomeres III-XI not divided by carinae; dorsal sensorial area of antennomere XI, elliptical, well marked, moderately long (about 0.3 times length of antennomere); apical third of antennomere XI distinctly inclined towards apex.

Sides of prothorax (Fig. 193) divergent from area of lateral angles to apex and convergent towards base; anterolateral angles projecting forward, acute; posterolateral angles obtuse, distinctly projecting backwards; lateral angles slightly marked. Anterior half of pronotum transversally convex; disc not strongly elevated from base to apex (Fig. 195); disc finely, abundantly punctate medially; punctures becoming coarser laterally on basal 3/4, without reaching the margin; area closer to margin punctaterugose on basal half, and with abundant small plates, as small scales, on apical half (this area is gradually wider from base to apex of pronotum); anterior edge strongly sinuate. Metasternum (Fig. 194) laterally very finely shagreened, coarsely, sparsely punctate. Sculpture of metepisterna as that of lateral area of metasternum. Elytra abundantly, coarsely punctate, mainly laterally; circum-scutellar area more finely, sparsely punctate. Ventrites shagreened, finely, abundantly punctate towards middle and distinctly coarsely, abundantly punctate laterally; ventrite V with asperities in centro-apical half; setae short and sparse on ventrites I-IV, distinctly longer and more abundant medially on ventrite V. Profemur as long as mesofemur; metafemur about 1.1 times longer than mesofemur. Tibiae strongly dilated towards apex; dorsal surface slightly sulcated, more elevated on inner side. Tarsi slender; mesotarsomere I as long as II-III together; tarsomeres III not bilobed; meso- and metatarsomere V (Fig. 67) (without claws) about 1.2 times longer than I-III together; paronychium very distinctly exposed, with one seta.

Female (Fig. 196). Head less robust, width plus eyes equal to 0.9 times that of pronotum at anterolateral angles. Eyes slightly broader than in male. Mandible subtriangular, length equal to about 0.6 times that of head; dorsal carina present, as well as defined as in male, but slender; teeth of inner edge of mandibles together protracted, somewhat as a plate (each tooth not well defined at apex). Median projection (Fig. 10) as in male, but slightly shorter. Sides of prothorax convergent from lateral angles to anterolateral angles and from lateral angles to posterolateral angles (mainly in the latter). Anterolateral angles of prothorax slightly less projected forward than in males; lateral angles well marked; posterolateral angles obtuse, not projecting backwards. Anterior edge of pronotum distinctly sinuate; lateral areas as in males.

**Variation**. Integument totally dark-brown, with some areas blackish, mainly mandibles. Males: anterolateral angles of prothorax slightly rounded; posterolateral angles of prothorax not or slightly projecting backwards.

**Dimensions in mm (male/female)**. Total length (from apex of mandibles to apex of elytra), 18.6-23.8/ 21.3; prothorax: length, 4.0-5.5/4.8; anterior width, 4.8-6.4/4.9; posterior width, 4.2-5.2/4.9; humeral width, 4.9-6.3/6.2; elytral length, 10.3-12.9/13.5. Total length of the holotype, 21.2.

**Diagnosis**. Acutandra vingerhoedti **sp. nov.** (Fig. 193-196) differs from A. gabonica (Fig. 125-128) as follows: body distinctly flattened dorso-ventrally, mainly in males; posterolateral angles of prothorax of male usually projecting backwards; metatarsomere V longer. In A. gabonica the body is not distinctly flattened dorso-ventrally in both sexes, the posterolateral angles of prothorax of male are not projecting backwards, and the metatarsomere V is shorter. It differs from A. amieti **sp. nov.** (Fig. 135-138) by the body flatter and by the punctation of the lateral of the metasternum finer. From A. gaetani **sp. nov.** (Fig. 154-157) and A. beninensis (Fig. 114-117) it differs by the median projection of labrum wide in males, rounded at apex (truncate in both species).

#### Acutandra amieti sp. nov.

(Fig. 5, 6, 36, 65, 84, 135-138)

**Etymology**. This species is cordially dedicated to Professor Jean-Louis Amiet, well-known herpetologist and entomologist of the African fauna, with appreciation for his assistance during the first author's visit in Cameroon.

**Type material**. Holotype male from DEMOCRATIC REPUBLIC OF THE CONGO (Fig. 84), *Nord-Kivu:* Virunga National Park (ex. Albert National Park), Massif Ruwenzori, Kalonge (Kandiko River, affluent of Butahu; 2120 m), 12.VIII.1952, P. Vanschuytbroeck and J. Kekenbosch col. (RMCA). Paratypes -DEMOCRATIC REPUBLIC OF THE CONGO, *Nord-Kivu:* Lubero, male, IV.2010, [no collector indicated] (TBPC); Mutsora (1200 m), female, VIII-IX.1945, J. de Wilde col. (RMCA); Virunga National Park (ex. Albert National Park), Massif Ruwenzori, Kalonge (Kiondo River, affluent of Butahu; 2130 m), 2 males, 1 female, 5.VIII.1952, P. Vanschuytbroeck and J. Kekenbosch col. (RMCA); (Kandiko River, affluent of Butahu; 2120 m), 7 males, 5 females, 2.VIII.1952, P. Vanschuytbroeck and J. Kekenbosch col. (RMCA); 1 male, 1 female, 2.VIII.1952, P. Vanschuytbroeck and J. Kekenbosch col., ex RMCA, (MZSP); (2100m), male, [no date and collector indicated] (FLPC); (Nyamwamba River; affluent of Butahu; 2100 m), female, 26.VIII.1952, P. Vanschuytbroeck and J. Kekenbosch col., ex RMCA, (MZSP); (2100m), male, [no date and collector indicated] (FLPC); (Nyamwamba River; affluent of Butahu; 2100 m), female, 26.VIII.1952, P. Vanschuytbroeck and J. Kekenbosch col. (RMCA). *Kasai Occidental*: Dekese, female, 1959, Coussement col. (RMCA). *Sud-Kivu*: environ Bukavu (2000 m), female, III.2000, M. Hasson col. (TBPC).

**Description**. General coloration of integument dark-brown; mandibles, parts of head, scape, margins of prothorax, margins of elytra (suture and epipleura), margins of mesosternum and metasternum around coxal cavities, apex of the ventrite, and parts of legs blackish; centro-basal area of the scutellum lighter than the remaining surface; dorsal surface slightly darker than ventral.

Male (Fig. 135). Body not distinctly flattened dorso-ventrally. Width of head plus eyes equal to 0.9 times that of pronotum at anterolateral angles. Mandibles distinctly not falciform or sub-falciform; length of mandible equal to 0.7 times that of head (including median projection of labrum), finely and sparsely punctate on apical two thirds of outer surface, coarser and sparser on basal third; inner surface more finely and sparsely punctate than apical two thirds of outer surface; inner edge with more basal tooth larger than more apical one; inner face with moderately long, sparse setae; outer face with moderately short setae on basal third, becoming microscopic towards apex; mandibular dorsal carina distinct, but not well delimited on outer face. Dorsal surface of head coarse, abundantly punctate: punctures gradually coarser from apex of the gibbosities (close to the clypeus) towards occiput; coarser and sparser laterally between posterior edge of eyes and prothorax; distinctly elongate and confluent around area of apex of ocular carinae (appearance of grooves); surface of furrow between gibbosities almost impunctate; surface of elliptical depression impunctate. Gibbosities well marked; area between gibbosities and ocular carinae with deep, well marked elliptical depression. Epistomal suture not distinct throughout. Clypeus medially almost in the same plane with furrow between gibbosities of the head; laterally more distinctly lower than surface of head; setae microscopic, sparse. Clypeolabral suture marked throughout. Median projection of labrum (Fig. 5) distinctly narrowed towards apex; medially elevated; apex rounded; surface moderately finely, abundantly punctate; setae long, moderately abundant. Ocular carina slightly bifurcated in "Y" near posterior edge of eyes. Eyes narrow (larger width about 0.4 times length); posterior edge of lower ocular edge not strongly elevated above area behind it. Area behind eyes coarsely, sparsely punctate, gradually finer and sparser towards apex of lower ocular lobes. Submentum distinctly separated from gula and genae; surface very coarse, deep, moderately abundant punctate (punctures confluent near the anterior edge); anterior edge elevated; setae short, sparse, just longer and distinctly more abundant on central area close to the anterior edge. Mentum not produced laterally into paraglossae. Antennae (Fig. 36) reaching base of prothorax; length of antennomere XI equal to 1.6 times that of X; ventral sensorial area of antennomeres III-XI not divided by carinae; dorsal sensorial area of antennomere XI, wide, well marked, elongated (about 0.3 times length of antennomere); apical third of antennomere XI moderately abruptly inclined towards apex.

Sides of prothorax (Fig. 135) sub-parallel from area of lateral angles to apex; anterolateral angles projecting forward, acute; posterolateral angles obtuse, not projecting; lateral angles absent. Anterior half of pronotum transversally convex; disc not strongly elevated from base to apex (Fig. 137); disc shiny, moderately abundantly, finely punctate, more abundant on anterior third; punctures becoming coarser laterally in basal half, without reaching the margin; basal half of lateral near margin coarse, confluent punctate; distal half of lateral area and anterior fourth of disc (except central region and area of anterolateral angles) with small and abundant plates (as isolated scales); anterior edge strongly sinuate. Metasternum (Fig. 136) finely shagreened, coarsely, moderately abundantly, deeply punctate laterally. Metepisterna coarsely, abundantly punctate on basal third, gradually finer towards apex. Elytra abundantly, coarsely punctate, mainly laterally; circum-scutellar area slightly finely and sparsely punctate; dorsal carinae well marked. Ventrites I-IV moderately finely, abundantly punctate, mainly laterally; ventrite V centrally with asperities. Profemur as long as mesofemur; metafemur about 1.2 times longer than mesofemur. Tibiae strongly dilated towards apex; dorsal surface flat, not sulcated. Tarsi not distinctly slender; tarsomeres III not bilobed; mesotarsomere I as long as II-III together; meso- and metatarsomere V (Fig. 65) (without claws) about 1.2 times longer than I-III together; paronychium very distinctly exposed, with one seta.

Female (Fig. 138). Head slightly less robust, width plus eyes as in males. Eyes slightly broader than in male. Mandible subtriangular, length equal to about 0.6 times that of head; dorsal carina present but less well defined and shorter than in male; inner edge of mandibles with teeth similar to those in male, but each tooth usually with similar size. Median projection of labrum (Fig. 6) similar to that in males, but with the apex almost acute. Sides of prothorax rounded. Posterolateral angles of prothorax as in males. Anterior edge of the pronotum less sinuate than in males; lateral areas of the pronotum coarsely punctate, without small plates.

**Variation**. Male: clypeus laterally with some setae moderately long; clypeolabral suture only marked laterally; apex of the median projection of labrum almost acute; sides of prothorax slightly divergent from the area of the lateral angles to apex; anterolateral angles of prothorax slightly rounded; posterolateral

angles of prothorax rounded; lateral angles of prothorax slightly marked; paronychium with two setae in some tarsi. Female: lateral areas of the pronotum strongly granulate and, at least near anterolateral angles, with small plates as in males; posterolateral angles of the prothorax projecting and almost at a right angle.

**Dimensions in mm (male/female)**. Total length (including mandibles), 17.5-20.9/18.0-25.5; prothorax: length, 4.1-5.3/3.7-5.8; anterior width, 4.8-6.0/3.9-6.0; posterior width, 4.2-5.2/3.8-5.9; humeral width, 4.8-5.9/4.7-7.0; elytral length, 10.3-12.4/11.5-16.0. Total length of the holotype, 20.5.

**Diagnosis**. Acutandra amieti **sp. nov.** (Fig. 135-138) differs from A. gabonica (Fig. 125-128): median projection of the labrum of males distinctly narrowed towards apex, not truncate; sculpture of the pronotum stronger in both sexes; punctation of the metasternum and metepisterna deep and well marked in both sexes. In A. gabonica the median projection of the labrum of males is not distinctly narrowed towards apex, that is clearly truncated, the sculpture of the pronotum is less strong (mainly in females), and the punctation of the metasternum and metepisterna is shallower and frequently slightly distinct. Additionally, all specimens of A. amieti **sp. nov.** have the punctation of the area around apex of the ocular carinae with appearance of grooves, which is very uncommon in A. gabonica; and the apex of the labrum in females is almost acute, while in females of A. gabonica it is narrow, but truncate (sometimes rounded). Differs from A. beninensis (Fig. 114-117) mainly by the apex of the labrum of males not truncate.

#### Acutandra lucasi sp. nov.

(Fig. 29, 30, 51, 80, 84, 174-177)

**Etymology**. This new species is dedicated to the second son of the second author who just started discovering world of entomology.

**Type material**. Holotype male from DEMOCRATIC REPUBLIC OF THE CONGO (Fig. 84), *Nord-Kivu*: Kasuo, I.2011, [no collector indicated], ex TBPC, (IRSNB). Paratypes – Same data of the holotype, 1 male, 1 female, ex TBPC, (MZSP); 6 males, 6 females (TBPC); 2 males, II.2011, [no collector indicated] (TBPC).

**Description**. General coloration of integument blackish; ventral area of head partially dark-brown; basal two-thirds of tarsomere I brown.

Male (Fig. 174). Body slightly flattened dorso-ventrally. Width of head plus eyes equal to 0.95 times that of pronotum at anterolateral angles; length of mandible equal to 0.80 times that of head, coarsely, abundantly punctate on outer surface, punctures being finer towards apex; inner surface finely, sparsely, shallowly punctate, somewhat more coarsely punctate in a longitudinal line near inner edge; mandibles sub-falciform; inner edge with more basal tooth larger than more apical one; inner face with moderately long, abundant setae; outer face with short setae at base, becoming very short towards apex; mandibular dorsal carina distinct, slightly projected inward at middle. Dorsal surface of head moderately finely, abundantly punctate on gibbosities, gradually more coarsely, more abundantly punctate towards occiput (anastomosed on left side of basal portion of gibbosities), with coarse, moderately abundant punctures between gibbosities and prothorax (more abundant and confluent laterally), distinctly anastomosed near apex of ocular carina; gibbosities well marked; area between gibbosities and ocular carinae with somewhat elliptical depression, finely shagreened, more distinctly punctate towards apex of ocular carina (punctures anastomosed, shallow); sulcus between the gibbosities deep, wide, frontally smooth and wider; punctation coarse, confluent, abundant. Epistomal suture distinct only laterally. Clypeus medially lower than plane of the furrow between the gibbosities of the head, laterally shagreened, centrally coarsely, sparsely punctate; laterally with a slight depression; setae microscopic, sparse. Clypeolabral suture slightly marked laterally. Median projection of labrum (Fig. 29) wide, truncate at apex, medially slightly tumid; setae short on basal third, longer on apical two-thirds (laterally glabrous). Ocular carina not bifurcated in "Y" near posterior edge of eyes, but this area is tumid. Eyes narrow (larger width about 0.4 times length); upper ocular lobe 1.4 times wider than length of scape; posterior edge of eyes not strongly elevated above the area behind it. Area behind eyes shagreened from apex of upper ocular lobe to basal third of lower ocular lobe, coarse, confluently punctate behind basal third of upper ocular lobe, gradually more sparsely and finely punctate towards apex of shagreened area; area not shagreened, moderately finely, sparsely punctate. Submentum distinctly separated from gula and genae; surface shagreened (more distinctly on anterior half), coarsely, shallowly, confluently punctate (punctures less distinct on anterior half); anterior edge elevated; setae moderately long and sparse. Mentum not produced laterally into paraglossae. Antennae (Fig. 51) reaching base of elytra; length of antennomere XI equal to 1.6 times that of X; ventral sensorial area of antennomeres III-XI not divided by carinae; dorsal sensorial area of antennomere XI, moderately wide, well marked, short (about 0.15 times length of antennomere); apical third of antennomere XI abruptly inclined towards apex.

Sides of prothorax (Fig. 174) subparallel from middle to anterolateral angle, convergent from middle to posterolateral angle; anterolateral angles rounded, slightly projecting forward, laterally preceded by emargination; posterolateral angles obtuse, slightly projecting; lateral angles absent. Anterior half of pronotum transversally convex; disc not strongly elevated from base to apex (Fig. 176); disc shiny, finely punctate from base to apex (centro-longitudinally with some impunctate areas); punctures becoming coarser laterally, without reaching margin; lateral areas shagreened (more distinctly so in anterior half); basal half of lateral area rugose-punctate; apical half of lateral area with small and abundant plates (as isolated scales); anterior edge slightly sinuate. Metasternum (Fig. 175) distinctly shagreened laterally, more widely near mesocoxae, moderately coarsely, deeply punctate in this area, more finely punctate in remaining parts. Metepisterna distinctly shagreened (mainly towards elytra), punctures distinct. Elytra abundantly, moderately finely punctate (punctures slightly coarser laterally); circum-scutellar area sparsely, finely punctate; elytral carinae not marked. Ventrites I-IV distinctly shagreened (mainly laterally), moderately coarsely punctate (punctures more distinct centrally); ventrite V with asperities on centroapical area; setae short and sparse (somewhat longer on IV). Profemur slightly longer than mesofemur; metafemur about 1.2 times longer than mesofemur. Tibiae not strongly dilated towards apex; dorsal surface longitudinally sulcated, more elevated on inner side. Tarsi not strongly slender; tarsomeres III not bilobed; mesotarsomere I slim in dorsal view, slightly shorter than II-III together; meso- and metatarsomere V (Fig. 80) (without claws) about 1.25 times longer than I-III together; paronychium very distinctly exposed, with one seta.

Female (Fig. 177). Head less robust, width plus eyes equal to 0.9 to that of pronotum at anterolateral angles. Eyes broader than in male (larger width about 0.5 times length). Mandible subtriangular, length equal to about 0.7 times that of head, with same type of punctures of males, more abundant on inner surface; setae of inner surface as in male; dorsal carina present but less well defined and shorter than in male; inner edge with teeth similar to those in male, but less projected. Median projection of labrum (Fig. 30) narrower than in male, but also truncate at apex. Sides of prothorax slightly rounded; lateral angles as in males. Sculpture of pronotum similar to that of males, without plates near anterolateral angles; anterior edge less sinuous than in males.

**Variation**. General coloration of integument dark-brown; parts of head and legs blackish; elytra brown with some areas darker. Male: length of mandible equal to 0.85 times that of head; clypeus shagreened throughout; punctures of the clypeus indistinct; clypeus with very short, sparse setae on throughout central area; surface of the submentum uniformly shagreened throughout; dorsal sensorial area of antennomere XI, wide, about 0.25 times length of antennomere; anterolateral angles laterally not preceded by emargination; posterolateral angles not projected; anterior edge of prothorax distinctly sinuate. Female: setae of the inner surface of mandibles restricted to the basal half; median projection of labrum slightly rounded at apex.

**Dimensions in mm (male/female)**. Total length (including mandibles), 21.8-30.2/26.0-29.5; prothorax: length, 4.4-6.2/5.5-6.0; anterior width, 5.2-8.3/6.2-6.8; posterior width, 4.7-7.0/5.9-7.0; humeral width, 5.8-8.5/7.4-8.9; elytral length, 12.1-16.4/15.4-17.8. Total length of the holotype, 29.0.

**Diagnosis**. *Acutandra lucasi* **sp. nov.** (Fig. 174-177) differs from *A. gabonica* (Fig. 125-128) as follows: Body flatter dorso-ventrally; elytral carinae not marked. It differs from *Acutandra gaetani* **sp. nov.** (Fig. 154-157), mainly by the head distinctly more strongly punctate. From *Acutandra hugoi* **sp. nov.** (Fig. 162-164), it differs by the punctures of the dorsal surface of head coarser and more abundant, by the elytral carinae not marked, and by the elytral punctation finer.

#### Acutandra conradti (Kolbe, 1893), revalidated, comb. nov.

(Fig. 1, 2, 100, 105-113)

Parandra conradti Kolbe, 1893: 245; 1898: 292; Lameere 1902: 97 (syn.); Quentin and Villiers 1977: 129 (types).

**Material examined**. TANZANIA (Fig. 100), *Tanga*: Ngwelo (Usambara Mountains), [no date indicated], H. Rolle col., ex IRSNB (MZSP); 4 males, 2 females, [no date and collector indicated], (IRSNB); female, [no date indicated], H. Rolle col. (IRSNB); Usambara Mountains, male, [no date and collector indicated] (USNM, ex Collection Tippmann); Amani Nature Reserve (Derema, Usambara Mountains), Lectotype and Paralectotype males, [no date indicated], S. Conradt col. (ZMHB).

**Redescription**. General coloration of integument brown; dorsal surface slight darker than ventral surface; parts of the head, of mandibles, dorsal surface of scape, margins of prothorax, margins of elytra (suture and epipleura), margins of meso- and metasternum, and parts of legs blackish; margins of the scutellum and extreme distal area of ventrites darker than remaining surface.

Male (Fig. 105). Body not flattened dorso-ventrally. Head elongate behind eyes. Width of head (Fig. 110) plus eyes equal to 0.9 times that of pronotum at anterolateral angles. Mandibles sub-falciform; length of mandible equal to 0.7 times that of head, moderately coarsely, abundantly punctate on outer surface, the punctures being slightly finer and closer towards apex; punctation of inner surface slightly finer and sparser than that on basal half of outer surface, mainly towards inner edge; inner edge with the more basal tooth larger than more apical one; inner face with moderately long and sparse setae; outer face with short, decumbent setae (shorter towards apex); mandibular dorsal carina distinct. Dorsal surface of the head (Fig. 110) moderately finely, abundantly punctate on gibbosities (mainly on anterior third). gradually more coarsely punctate towards apex of gibbosities, punctures distinctly coarse, partially confluent on area between ocular carina and apex of gibbosities, coarsely, moderately sparsely punctate on central area between gibbosities and prothorax, punctures being coarser laterally; sulcus between gibbosities Vshaped, almost impunctate near clypeus; area between gibbosities and ocular carinae depressed, punctate towards eyes and impunctate towards clypeus. Epistomal suture distinct only laterally. Clypeus medially at the same level with sulcus between gibbosities of head; laterally slightly lower than centrally; impunctate; setae very short, sparse, present only laterally. Clypeolabral suture distinct throughout. Median projection of labrum wide, truncate at apex, medially not tumid; setae moderately long and abundant centrally, mainly apically, absent laterally. Ocular carina not bifurcated in "Y" near posterior edge of eyes. Eyes narrow (larger width about 0.4 times length); posterior edge of eyes slightly elevated above area behind it. Area behind eyes shagreened from apex of upper lobe of eyes to basal half of lower lobe of eyes; punctation coarse, confluent near apex of upper ocular lobe, gradually sparser towards apex of shagreened area; area not shagreened moderately finely, sparsely punctate; area closer to eyes impunctate (more distinctly at middle). Submentum distinctly separated from genae, less so from gula, slightly depressed towards anterior edge; surface coarsely, abundantly striate-punctate; anterior edge slightly elevated; setae short, sparse. Antennae (Fig. 109) reaching apex of prothorax; antennomere XI 1.6 times longer than X; ventral sensorial area of antennomeres III-XI not divided by carinae; dorsal sensorial area of antennomere XI narrow, not well marked, short (about 0.15 times length of antennomere); apical third of antennomere XI abruptly inclined towards apex.

Sides of prothorax (Fig. 105) subparallel from area of lateral angles to anterolateral angles, convergent from former towards posterolateral angles; anterolateral angles projecting forward, acute; posterolateral angles obtuse, not projecting; lateral angles absent. Disc of pronotum convex, mainly anteriorly, not strongly elevated from base to apex (Fig. 107); usually with a depression on each side of centro-lateral region; shiny, abundantly, finely punctate from base to apex, punctures gradually coarser, more abundantly punctate laterally; latero-apical half confluently punctate (without plates); centro-longitudinal area almost impunctate; anterior edge distinctly sinuate. Metasternum (Fig. 106) laterally slightly shagreened near

mesocoxae, moderately coarsely, distinctly punctate on this area, punctures gradually finer and sparser towards central area. Metepisterna shagreened-punctate. Elytra abundantly, coarsely punctate; dorsal carinae distinct. Ventrites I-IV laterally punctate-rugose, centrally almost smooth; ventrite V more distinctly punctate-rugose throughout; setae very short (mainly centrally) on ventrites I-IV, moderately longer and abundant on ventrite V (mainly on centro-apical area). Profemur slightly longer than mesofemur; metafemur about 1.2 times longer than mesofemur. Tibiae (Fig. 111) distinctly enlarged towards apex; dorsal surface distinctly longitudinally sulcated, mainly in apical two-thirds. Tarsi not notably slender; tarsomeres III not bilobed; mesotarsomere I about as long as II-III together; meso- and metatarsomere V (Fig. 108, 111) (without claws) about 1.2 times longer than I-III together; paronychium very distinctly exposed, with one seta.

Female. Head less robust, width plus eyes equal to 0.9 to that of pronotum at anterolateral angles. Eyes broader than in males (larger width about 0.5 times length). Mandible subtriangular, length equal to about 0.65 times that of head, with the same type of punctures as in males; dorsal carina present but less distinctly defined and shorter than in male; inner edge with teeth similar to those in male, but less projected. Median projection of labrum distinctly narrower than in male, but also truncate. Sides of prothorax rounded; anterolateral angles as in males. Sculpture of pronotum similar to that of males, never with plates near anterolateral angles; anterior edge more emarginate centrally.

**Variation**. General coloration of integument from reddish-brown to brown. Male: width of head plus eyes from 0.90 to 0.95 times that of pronotum at anterolateral angles; length of mandible equal to 0.70 to 0.85 times that of head; epistomal suture distinct throughout; clypeus laterally with some punctures; clypeolabral suture indistinct only centrally; submentum distinctly separated from genae and gula; antennae reaching base of elytra; antennomere XI from 1.4 to 1.6 times longer than X; dorsal sensorial area of antennomere XI moderately wide, well marked; dorsal sensorial area of antennomere XI elongate (about 0.25 times length of antennomere); anterior half of the sides of prothorax with emargination between the area of the lateral and anterolateral angles; anterolateral angles slightly projecting forward; anterolateral angles of prothorax rounded; posterolateral angles of prothorax rounded; posterolateral angles of prothorax rounded; angles of prothorax projected backwards; latero-apical half of pronotum rugose-punctate; latero-apical half of pronotum with abundant small plates, as small scales. Female: width of head plus eyes from 0.85 to 0.95 that of pronotum at anterolateral angles; median projection of labrum from somewhat rounded to truncate at apex; sides of prothorax as in males.

**Dimensions in mm (male/female)**. Total length (including mandibles), 20.1-22.3/22.1-23.0; prothorax: length, 4.4-5.2/4.5-4.7; anterior width, 5.3-6.5/4.8-5.5; posterior width, 4.8-5.5/4.9-5.7; humeral width, 5.5-6.1/6.0-6.7; elytral length, 11.7-12.8/13.2-13.5.

Geographical distribution. Described and known only from Tanzania.

**Comments / types / type locality**. Lameere (1902) synonymized *P. conradti* under *P. gabonica* and wrote (translation): "The type of *P. Conradti*, from East Africa, that M. Kolbe was kind enough to send me, shows at posterior edge of pronotum, near each angle, a particular sinuosity that is accidental, because I found the same in a specimen from Cameroon and only at one side. It has, moreover, the sensorial area of the antennae relatively small, but the size of that sensorial area is a very variable character. I did not find another difference from *P. gabonica*". Apparently, Lameere examined the specimen designated by Quentin and Villiers (1977) as paralectotype, because the lectotype lacks this sinuosity at posterior edge of the prothorax (the posterolateral angles are projected backward). In this way, Lameere (1902) was right about the variability of that character. Besides, we also found this variation in other species of the genus. In terms of the size of the ventral sensorial area of the antennomeres, although usually it can be somewhat variable, the lectotype and paralectotype, and the specimens examined by us have this feature very similar in size and shape, mainly at antennomere IV (narrow and proportionally small). This allows us to conclude Lameere (1902) was wrong about the character: it is not a variation, but a character of the species.

Quentin and Villiers (1977) wrote the following opinion concerning the *Parandra conradti* (translation): "Contrary to the indication of KOLBE, the two syntypes are males. We designate as LECTOTYPE the

specimen with 21 mm, with the following labels[Fig. 112]: « [male symbol] », « 1110 », « Usambara, Derema, Conradt S. », « Type », « 70735 », « 28 »"; and (translation): "Remarks: the different synonyms of *gabonica* correspond only to individual variation due to the wide distribution of the species throughout Ethiopian Region itself."

Regarding the sex of the specimens, Quentin and Villiers (1977) were correct. Kolbe (1893) wrongly indicated the sex of one of the specimens: "**Parandra conradti** n. sp. [male and female symbols]". The photos of the lectotype (Fig. 105, 106) and paralectotype (107) leave no doubt: both are males.

However, Quentin and Villiers (1977) were wrong regarding the synonymy between *P. conradti* and *P. gabonica* (without mentioning other species listed by them). The differences are not just variations of *P. gabonica* (= *Acutandra gabonica*). *Parandra gabonica sensu auctorum* is not a single species, which can be demonstrated by the fact that we found more than one form in the same region. Each of those "forms" shows constant characters, which makes the opinion of these authors unsustainable.

Both, the lectotype and the paralectotype males are from Tanzania (Fig. 112, 113) ("Usambara, Derema") and are deposited at ZMHB.

Acutandra conradti (Fig. 105-111) differs from A. gabonica (Fig. 125-128) as follows: clypeus impunctate, mainly centrally; ventral sensorial area of antennomeres III-IV smaller and slender; apex of the sulcus between the gibbosities of head in the same level with central region of clypeus; anterior edge of pronotum in males more sinuate. In A. gabonica the clypeus is distinctly punctate, the ventral sensorial areas of antennomeres III-IV are larger and wider, the apex of the sulcus between the gibbosities of head is higher than central region of clypeus, and the anterior edge of pronotum in males is less sinuate. It differs from A. beninensis (Fig. 114-117) by the body not flattened dorso-ventrally, by the head more distinctly elongate behind eyes, and by ventral sensorial area of antennomeres III-IV smaller and slender. In A. beninensis the body is flattened dorso-ventrally, the head is less elongate behind eyes, and the ventral sensorial area of antennomeres III-IV smaller and slender. In A. beninensis the body is flattened dorso-ventrally, the head is less elongate behind eyes, and the ventral sensorial area of antennomeres III-IV smaller and slender. In A. beninensis the body is flattened dorso-ventrally, the head is less elongate behind eyes, and the ventral sensorial area of antennomeres III-IV smaller and slender. In A. beninensis the body is flattened dorso-ventrally.

Acutandra leonardi sp. nov.

(Fig. 22, 46, 75, 92, 171-173)

**Etymology**. Dedicated to our friend Philippe Leonard, passionate collector of buprestids and cetoniids who provided material for study.

**Type material**. Holotype male from KENYA (Fig. 92), *Rift Valley*: Tinderet (Kipsigis farm; 2300 m), 20-24.VIII.1977, G. Coulon col. (RMCA). Paratype male, same data, ex RMCA, (MZSP).

**Description**. General coloration of integument brown; nearly all head, prothorax and elytra dark-brown (mainly the first two parts); parts of head, of mandibles, margins of prothorax, margins of epipleura, elytral suture, margins of mesosternum and metasternum around coxal cavities, and parts of legs blackish; margins of scutellum and distal edge of ventrites darker than central area.

Male (Fig. 171). Body slightly flattened dorso-ventrally. Width of head plus eyes equal to 0.9 times that of pronotum at anterolateral angles. Mandibles distinctly sub-falciform; length of mandible equal to 0.8 times that of head, moderately coarsely and abundantly punctate on outer surface (finer and closer towards apex); inner surface moderately coarsely, abundantly punctate on lateral area of dorsal carina, distinctly sparser towards inner edge; teeth of inner edge together protracted, more basal tooth larger than more apical one; inner face with moderately long and abundant setae; outer face with short, moderately abundant setae on base, gradually shorter towards apex; mandibular dorsal carina distinct, but not well delimited, mainly on outer face, not ending abruptly. Dorsal surface of head finely, moderately abundantly punctate on gibbosities, coarser on central area between gibbosities and prothorax, distinct laterally. Clypeus glabrous, medially lower than plane of furrow between gibbosities of head. Clypeolabral suture marked, except centrally. Median projection of labrum (Fig. 22) moderately wide, truncate at apex, medially not distinctly elevated; setae moderately short, sparse, intermixed with some longer setae. Ocular carina slightly bifurcated in "Y" near posterior edge of eyes. Eyes moderately narrow (larger width about 0.45 times length); upper ocular lobe about 1.4 times wider than the length of scape; posterior edge of lower

ocular edge not strongly elevated above the area behind it. Area behind eyes shagreened from apex of upper lobe of eye to basal third of lower lobe of eye; punctation coarse, confluent near apex of upper ocular lobe, gradually sparser towards apex of the shagreened area; area not shagreened moderately finely, sparsely punctate; area closer to the eyes impunctate (more distinctly on middle). Area between tentorial pits and submentum shiny, smooth. Submentum well separated from genae, but not from gula; surface coarsely, shallowly punctate (punctures anastomosed laterally); anterior edge slightly elevated; setae long, sparse. Mentum not produced laterally into paraglossae. Antennae (Fig. 46) reaching humeral angles; length of antennomere XI equal to 1.6 times that of X; ventral sensorial area of antennomeres III-XI not divided by carinae; dorsal sensorial area of antennomere XI wide, well marked, short (about 0.2 times length of antennomere); apical third of antennomere XI abruptly inclined towards apex.

Sides of prothorax (Fig. 171) subparallel from middle to anterolateral angles, convergent from middle to posterolateral angles; anterolateral angles projecting forward, somewhat rounded; posterolateral angles obtuse, not projecting; lateral angles absent. Anterior half of pronotum transversally convex; disc elevated from base to apex (Fig. 172); disc shiny, finely punctate from base to apex; punctures becoming coarser laterally, anastomosed near edge, rougher towards anterolateral angles; anterior edge slightly sinuate. Metasternum (Fig. 172) laterally shagreened (more so near mesocoxae), shallowly, sparsely punctate (punctures slightly distinct). Metepisterna shagreened, moderately coarsely, abundantly punctate on basal half, almost impunctate on apical half. Elytra abundantly, moderately finely punctate (laterally coarser and closer); circum-scutellar area somewhat sparser punctate; elytral carinae slightly distinct. Ventrites I-IV finely punctate, more abundantly laterally; ventrite V more distinctly punctate, without asperities on centro-apical half; ventrites I-IV almost glabrous centrally, with very small setae laterally (longer near lateral edges). Profemur slightly longer than mesofemur; metafemur about 1.1 times longer than mesofemur. Tibiae not strongly dilated towards apex; dorsal surface longitudinally sulcated. Tarsi not strongly slender; tarsomeres III not bilobed; mesotarsomere I about as long as II-III together; meso- and metatarsomere V (Fig. 75) (without claws) about 1.3 times longer than I-III together; paronychium very distinctly exposed, with one seta.

**Variation**. General coloration of integument reddish-brown; mandibles mainly dark-brown; mandibles not falciform or sub-falciform; upper ocular lobe about as wide as length of scape; antennae slightly surpassing humeral angles; length of antennomere XI equal to 1.5 times that of X; ventrite V with small asperities on centro-apical half.

**Dimensions in mm (male)**. Total length (including mandibles), 16.0-18.9; prothorax: length, 3.3-3.9; anterior width, 3.8-4.5; posterior width, 3.5-4.1; humeral width, 4.4-5.0; elytral length, 9.8-11.0. The largest measures belong to the holotype.

**Diagnosis**. Acutandra leonardi **sp. nov.** (Fig. 171-173) differs from A. quentini **sp. nov.** (Fig. 189-192): body slender; median projection of labrum narrower, more distinctly truncate at apex; posterior edge of upper ocular lobe more distinctly elevated in relation to the area behind it; eyes more inclined relative to the axis of the head; punctation on the gibbosities of the dorsal surface of the head finer; tibiae more distinctly sulcated laterally. It differs from A. gabonica (Fig. 125-128), mainly by the body slender.

Acutandra delahayei sp. nov.

(Fig. 14, 41, 70, 97, 151-153)

**Etymology**. Dedicated to our colleague, Norbert Delahaye, for his contribution to knowledge of Cerambycidae, and important contribution to this study.

**Type material**. Holotype male from SÃO TOMÉ AND PRINCIPE (Fig. 97), *São Tomé Island*: Mont Café (25 km São Tomé, 800 m), 10.XI.1973, G. Schmitz col. (RMCA). Paratype male, same place and collector as with the holotype, X.1973, ex RMCA, (MZSP). Café Route, male, III.2004, Le Gall col. (TBPC).

**Description**. General coloration of integument reddish-brown; dorsal surface darker than ventral; parts of head, of mandibles, dorsal surface of scape, margins of prothorax, margins of epipleura, elytral suture, margins of mesosternum and metasternum around coxal cavities, and parts of legs blackish; margins of the scutellum darker than central area.

Male (Fig. 151). Body not flattened dorso-ventrally. Width of head plus eyes equal to 0.9 times that of pronotum at anterolateral angles. Mandibles distinctly not falciform or sub-falciform; length of mandible equal to 0.85 times that of head, finely and moderately sparsely punctate on outer surface, mainly towards apex of dorsal carina; inner surface finely, sparsely punctate; teeth of inner edge together protracted, more basal tooth larger than more apical one; inner face with very short, sparse setae; outer face with microscopic setae on base; mandibular dorsal carina distinct, but not well delimited, mainly at outer face, not ending abruptly. Dorsal surface of head finely, moderately abundant punctate on gibbosities, coarser, more coarsely punctate on central area between gibbosities and prothorax, coarser and deeper laterally, including area near apex of ocular carina (punctures not confluent). Epistomal suture distinct throughout. Clypeus medially in the same plane with furrow between gibbosities of head; laterally more distinctly lower than surface of head; setae very short, sparse. Clypeolabral suture marked throughout. Median projection of labrum (Fig. 14) wide, truncate at apex, medially elevated; setae short, sparse. Ocular carina not bifurcated in "Y" near posterior edge of eyes. Eyes moderately narrow (larger width about 0.4 times length); upper ocular lobe about as wide as length of the scape; posterior edge of lower ocular edge not strongly elevated above area behind it. Area behind eyes shagreened, moderately coarse, sparse punctate. Area between tentorial pits and submentum finely, transversely striate. Submentum well separated from gula and genae; surface sparsely, coarsely, shallowly punctate (punctures closer on central area near mentum); anterior edge slightly elevated; setae short, very sparse, slightly longer and more abundant on central area near mentum. Mentum not produced laterally into paraglossae. Antennae (paratype) (Fig. 41) reaching humeral angles; length of antennomere XI equal to 1.5 times that of X; ventral sensorial area of antennomeres III-XI not divided by carinae; dorsal sensorial area of antennomere XI very wide, well marked, short (about 0.3 times length of antennomere); apical third of antennomere XI abruptly inclined towards apex.

Sides of prothorax (Fig. 151) slightly divergent from base to apex; anterolateral angles projecting forward, acute; posterolateral angles rounded, not projecting; lateral angles absent. Anterior half of pronotum transversally convex; disc elevated from base to apex (Fig. 153); disc shiny, finely punctate from base to apex (centro-basal area almost impunctate); punctures becoming coarser laterally in middle third, without reaching the margin; lateral areas shagreened (more distinctly so on anterior half); basal third of latero-basal area punctate (punctures just coarser than on disc); middle third of latero-basal area confluently punctate; latero-apical third with small and abundant plates (as isolated scales); anterior edge sinuate. Metasternum (Fig. 152) laterally shagreened, shallowly, sparsely punctate (punctures slightly distinct). Metepisterna coarsely, sparsely, punctate. Elytra abundantly, moderately finely punctate (laterally coarser and closer); circum-scutellar area more sparsely punctate; elytral carinae absent. Ventrites I-IV shallowly punctate; ventrite V more distinctly punctate, with asperities and moderately abundant setae on centro-apical half; setae of ventrites I-IV short, sparse. Profemur slightly longer than mesofemur; metafemur about 1.1 times longer than mesofemur. Tibiae dilated towards apex; dorsal surface longitudinally sulcated. Tarsi slender; tarsomeres III not bilobed; mesotarsomere I about as long as II-III together; meso- and metatarsomere V (Fig. 41) (without claws) about 1.5 times longer than I-III together; paronychium very distinctly exposed, with one seta.

**Variation**. General coloration of dorsal integument dark-brown; length of mandible equal to 0.7 times that of head; inner face of mandibles with long, moderately abundant setae; outer face of mandibles with short, moderately abundant setae throughout; punctures around apex of ocular carina partially confluent; elytral punctures slightly coarser than in holotype; elytral carinae slightly distinct; setae of ventrite IV somewhat long on centro-apical area.

**Dimensions in mm (male)**. Total length (including mandibles), 14.5-19.1; prothorax: length, 3.6-4.6; anterior width, 4.3-5.9; posterior width, 3.4-4.5; humeral width, 4.2-5.4; elytral length, 9.0-11.9.

**Diagnosis**. Acutandra delahayei **sp. nov.** (Fig. 151-153) differs from A. gabonica (Fig. 125-128): punctures on gibbosities of dorsal surface of head finer; pronotum more distinctly convex in apical half; anterior edge of pronotum distinctly sinuate; elytral punctures sparser; elytral carinae absent or slightly distinct. In A. gabonica the punctures on gibbosities of dorsal surface of head are coarser, the pronotum is flatter on apical half, the anterior edge of pronotum is less sinuate, the elytral punctures are more abundant, and the elytral carinae, are usually very distinct. It differs from A. oremansi **sp. nov.** (Fig. 181-184) mainly by the punctation of dorsal surface of head coarser and denser, by the antennomere XI smaller and abruptly inclined towards apex on apical third, by the elytral punctation somewhat denser and distinct. In A. oremansi the punctation of dorsal surface of head is finer and sparser, the antennomere XI is distinctly longer and not abruptly inclined towards apex on apical third, by the elytral punctation sparser and slightly distinct. From A. dasilvai **sp. nov.** (Fig. 147-149) it differs mainly by the elytral punctation sparser and somewhat finer, and by the tarsi slender.

#### Acutandra noellae sp. nov.

(Fig. 21, 45, 74, 89, 178-180)

**Etymology**. The species is dedicated to Noëlle Van Aerschodt, for her help and interest in collecting insects in Africa.

**Type material**. Holotype female from GABON (Fig. 89), *Estuaire Province*: Valley of Mbei River, Mount Cristal, Kinguélé waterfall, XII.2004, P. Limbourg and P. Oremans col., ex TBPC, (IRSNB). Paratype female, same data as with holotype (TBPC).

**Description**. General coloration of integument dark-brown; dorsal surface slightly darker; parts of the head, mandibles, margins of prothorax, margins of the scutellum, margins of elytra (suture and epipleura), margins meso- and metasternum, extreme distal area of ventrite V, and parts of legs blackish.

Female (Fig. 178). Body not flattened dorso-ventrally. Width of head plus eyes equal to 0.9 times that of pronotum at anterolateral angles. Length of mandible equal to 0.75 times that of head, coarsely, abundantly punctate on outer surface, slightly finer towards apex; punctation of inner surface as that of outer surface; inner edge with the more basal tooth larger than more apical one; inner face with short, abundant setae, gradually longer towards inner edge; outer face with short, decumbent setae; mandibular dorsal carina distinct only at base. Dorsal surface of the head moderately coarsely, abundantly punctate on gibbosities (mainly on anterior two-thirds), coarser, partially confluent on sulcus between gibbosities, coarse, not confluent on central area between gibbosities and prothorax, coarse, confluent laterally and at area close to the apex of ocular carina; area between gibbosities and ocular carinae slightly depressed. Epistomal suture distinct throughout. Clypeus medially in the same level with area of sulcus between gibbosities of head; laterally slightly depressed; setae very short, sparse. Clypeolabral suture distinct throughout. Median projection of labrum (Fig. 21) moderately wide and rounded at apex, medially slightly tumid; setae moderately long and abundant centrally, mainly apically, absent laterally. Ocular carina not bifurcated in "Y" near posterior edge of eyes. Eyes moderately wide (larger width about 0.5 times length); posterior edge ocular edge slightly elevated in relation to the area behind it. Area behind eyes shagreened from apex of upper lobe of eyes to basal third of lower lobe of eyes; punctation coarse, confluent near apex of upper ocular lobe, gradually sparser towards apex of shagreened area; area not shagreened moderately finely punctate; area closer to eyes impunctate (more distinctly on middle). Submentum distinctly separated from genae, less so from gula, not depressed towards anterior edge; surface coarsely, moderately sparsely punctate; anterior edge elevated, punctation abundant, anastomosed (all punctures shagreened); setae very short, sparse. Mentum not produced laterally into paraglossae. Antennae (Fig. 45) reaching base of elytra; antennomere XI 1.6 times longer than X; ventral sensorial area of antennomeres III-XI not divided by carinae; dorsal sensorial area of antennomere XI wide, well marked, short (about 0.2 times length of antennomere); apical third of antennomere XI abruptly inclined towards apex.

Sides of prothorax (Fig. 178) subparallel from middle to anterolateral angles, convergent from middle towards posterolateral angles; anterolateral angles slightly projecting forward, acute, but not narrow (moderately rounded); posterolateral angles obtuse, not projecting; lateral angles absent. Disc of pronotum

slightly convex, not strongly elevated from base to apex (Fig. 180); shiny, abundantly, finely punctate from base to apex (slightly coarsely on centro-basal area), gradually coarser, more abundantly punctate laterally, becoming anastomosed near edge and area closer to anterolateral angles; anterior edge slightly sinuous. Metasternum (Fig. 179) laterally shagreened, moderately coarsely punctate on this area, gradually more sparsely and finely punctate towards central area. Metepisterna shagreened-punctate. Elytra abundantly, moderately coarsely punctate; dorsal carinae slightly distinct. Ventrites I-IV finely, sparsely punctate centrally, shagreened-punctate laterally; ventrite V more distinctly shagreened-punctate throughout; setae very short on ventrites I-IV, longer and more abundant on ventrite V (mainly on centro-apical area). Profemur as long as mesofemur; metafemur about 1.1 times longer than mesofemur. Tibiae not strongly enlarged towards apex; dorsal surface distinctly longitudinally sulcated. Tarsi not notably slender; tarsomeres III not bilobed; mesotarsomere I slightly longer than II-III together; meso- and metatarsomere V (Fig. 74) (without claws) about 1.3 times longer than I-III together; paronychium very distinctly exposed, with one seta.

**Variation**. Length of mandible equal to 0.65 times that of head; epistomal suture distinct only laterally; clypeus medially slightly lower than the area of the sulcus between the gibbosities of the head; clypeolabral suture distinct laterally; antennae reaching the apex of prothorax; sides of prothorax rounded; disc of pronotum almost flat.

**Dimensions in mm (female)**. Total length (including mandibles), 19.7-22.0; prothorax: length, 4.1-4.8; anterior width, 4.7-5.4; posterior width, 4.3-4.8; humeral width, 5.3-6.1; elytral length, 11.9-12.7. The largest measures belong to the holotype.

**Diagnosis**. Acutandra noellae **sp. nov.** (Fig. 178-180) differs from A. gabonica (Fig. 125-127), mainly as follows: body slightly more depressed; elytral carinae less distinct. It differs from A. gaetani **sp. nov.** (Fig. 157) by the punctation of dorsal surface of head distinctly more abundant; from Acutandra plenevauxae **sp. nov.** (Fig. 188) by punctation of dorsal surface of head more abundant, by the elytral punctation finer, and by the elytral carinae less conspicuous; from Acutandra amieti **sp. nov.** (Fig. 138) by the elytral carinae less marked and by the elytral punctation finer; from A. vingerhoedti **sp. nov.** (Fig. 196) by the punctation of dorsal surface of head more abundant, and by the elytral carinae less conspicuous.

#### Acutandra gaetani sp. nov.

(Fig. 7, 8, 37, 60, 66, 85, 86, 88, 154-157)

Etymology. This new species is dedicated to Gaëtan, first author's son, for his interest in entomology.

**Type material**. Holotype male from CAMEROON (Fig. 86), *Southwest*: Musake (Mount Cameroon; 1800 m), 19.I-03.II.1997, E. Vingerhoedt col., ex TBPC, (IRSNB). Paratypes - CAMEROON, *Southwest*: Buea, 2 males, XII.1910, E. Hintz col. (IRSNB); Musake, 2 males, 2 females, 05.X.1910, E. Hintz col. (IRSNB); male, 07.X.1910, E. Hintz col., ex IRSNB, (MZSP); (Mount Cameroon; 1800 m), 6 male, 5 females, 19.I-03.II.1997, E. Vingerhoedt col. (TBPC); 1 male, 1 female, 19.I-03.II.1997, E. Vingerhoedt col. (TBPC); 1 male, 1 female, 19.I-03.II.1997, E. Vingerhoedt col. (TBPC), BURUNDI (Fig. 85), *Bujumbura Rural*: Bugarama, male, IX-X.2005, E. Vingerhoedt col. (TBPC). *Bujumbura Mairie*: Bujumbura, 2 males, X.1994, Moretto col. (TBPC). EQUATORIAL GUINEA (Fig. 88), *Bioko North*: Mount Pico Santa Isabel (2000 m), 2 males, 1-12.IV.1997, E. Vingerhoedt col. (TBPC). *Bioko South*: Mioko (near Moka), male, 1.II.1933, W. H. T. Tams col. (BMNH).

**Description**. General coloration of integument dark-brown; dorsal surface of nearly all head and pronotum darker; mandibles, parts of the head, margins of pronotum, margins of the scutellum, elytral suture, margins of epipleura, margins of coxal cavities, margins of metepisterna, and part of the legs black; elytra darker than ventral surface and lighter than pronotum.

Male (Fig. 154). Body flattened dorso-ventrally. Width of head plus eyes equal 0.9 times that of pronotum at anterolateral angles. Mandibles sub-falciform; length of mandible equal to that of head (including the

median projection of the labrum); outer surface finely, moderately abundantly punctate, slightly coarser towards apex of dorsal carina; inner surface finely, sparsely punctate, mainly towards inner edge; inner edge with two large teeth, more basal larger; inner face with moderately short, sparse setae; outer face with very short setae on base, becoming microscopic towards apex; mandibular dorsal carina distinct. Dorsal surface of head finely punctate, gradually becoming coarser towards occiput and lateral areas after eyes (mainly laterally in this later); gibbosities well marked, elevated; furrow between gibbosities wide, not distinctly narrowed apically; depression between gibbosities and ocular carinae not distinct. Epistomal suture slightly distinct laterally. Clypeus more elevated than the plane of furrow between gibbosities of head throughout; setae microscopic, sparse. Clypeolabral suture laterally distinct. Median projection of labrum (Fig. 7) wide, truncate at apex, medially elevated; setae moderately short and sparse, just longer and more abundant towards apex. Ocular carina slightly bifurcated in "Y" near posterior edge of eyes. Eyes narrow (larger width about 0.4 times length); posterior edge of lower ocular edge not strongly elevated above area behind it; strongly elevated behind upper ocular lobes. Area behind eyes shagreened, coarsely and sparsely punctate, punctures being gradually finer and towards apex of lower ocular lobe. Submentum distinctly separated from gula and genae; surface shagreened, with moderately abundant, coarse, shallow punctures, confluent near anterior edge; anterior edge elevated; setae very short and sparse. Mentum not produced laterally into paragalossae. Antennae (Fig. 37) reaching posterolateral angles of prothorax; antennomere XI 1.5 times longer than X; ventral sensorial area of antennomeres III-XI not divided by carinae; dorsal sensorial area of antennomere XI, elliptical, well marked, moderately long (about 0.3 times length of antennomere); apical third of antennomere XI moderately abruptly inclined towards apex.

Sides of prothorax (Fig. 154) sub-parallel from about middle to apex and convergent towards base; anterolateral angles projecting forward, acute; posterolateral angles obtuse, slightly projecting backward; lateral angles absent. Anterior half of pronotum transversally convex; disc not strongly elevated from base to apex (Fig. 156); disc shiny, sparsely, finely punctate from base to apex medially; punctures becoming coarser laterally on basal 3/4, without reaching margin; area closer to the margin punctate-rugose in basal half, and with abundant small plates, as small scales, in apical half (this area is gradually wider from base to apex of pronotum); anterior edge slightly sinuate. Metasternum (Fig. 155) laterally shagreened, moderately finely, sparsely punctate (punctures slightly distinctly). Metepisterna with punctures just coarser and more abundant than those on lateral area of metasternum. Elytra abundantly, moderately coarsely punctate, mainly laterally; circum-scutellar area distinctly finely, sparsely punctate. Ventrites shagreened, finely, abundantly punctate (more distinctly and coarsely laterally); ventrite V with asperities in centro-apical half; setae microscopic on ventrites I-IV (mainly centrally). Profemur as long as mesofemur; metafemur about 1.1 times longer than mesofemur. Tibiae (Fig. 60) strongly dilated towards apex; dorsal surface almost flat, more elevated on inner side. Tarsi notably slender; mesotarsomere I slightly longer than II-III together; tarsomeres III not bilobed; meso- and metatarsomere V (Fig. 66) (without claws) about 1.3 times longer than I-III together; paronychium very distinctly exposed, with one seta.

Female (Fig. 157). Head slightly less robust, width plus eyes equal to 0.8 times that of pronotum at anterolateral angles. Eyes slightly broader than in male. Mandible subtriangular, length equal to about 0.6 times that of head; dorsal carina present but less well defined and shorter than in male; inner edge of mandibles with teeth similar to those in male, but each tooth with similar size. Median projection of labrum (Fig. 8) truncate, narrower than in male. Sides of prothorax convergent from middle to apex, and distinctly convergent from middle to base. Anterolateral angles of prothorax less projecting forward and more rounded. Anterior edge of pronotum as in males; lateral areas neither shagreened nor rugose, but confluently punctate near antero- and posterolateral angles (mainly in the former ones).

**Variation**. Integument from reddish-brown to dark-brown; nearly all head and pronotum have almost the same color (from reddish-brown to dark-brown); scutellum as dark as pronotum; mandibles from black to slightly lighter; elytral suture, margins of epipleura from brown to black; legs from brown to dark-brown with some parts blackish. Male: Body almost not flattened dorso-ventrally; width of head plus eyes from 0.8 to 1.0 times that of pronotum at anterolateral angles; length of mandible equal to 0.8 - 1.0 times that of head; punctation on basal third of outer surface of mandibles coarser throughout or only to superior edge; mandibles of *minor* males subtriangular; clypeolabral suture almost absent throughout; redian projection of labrum from wide (distinctly wide than long) to somewhat narrow (about as wide as long);

ocular carina not bifurcated in "Y" near posterior edge of eyes in *minor* male; surface of submentum rugose or shagreened at base; setae of submentum not notably short, frequently slightly more abundant on central area close to anterior edge; antennae reaching level of apex of scutellum; sides of prothorax slightly divergent from base to apex; anterolateral angles of prothorax slightly projecting forward and not acute; posterolateral angles of prothorax not projecting; lateral angles of prothorax slightly distinct; area of pronotum closer to lateral margin, rugose throughout and without small plates; setae of ventrites short and sparse, mainly centrally on ventrites II-IV; dorsal surface of tibiae (mainly meso-and metatibiae) longitudinally sulcated. Female: width of head plus eyes from 0.8 to 0.9 times that of pronotum at anterolateral angles; median projection of labrum slightly rounded at apex; length of mandibles from 0.6 to 0.7 times that of head; anterolateral angles of prothorax as projecting forward as in males.

**Dimensions in mm (male/female)**. Total length (from apex of mandibles to apex of elytra), 16.5-29.7/20.2-27-5; prothorax: length, 3.7-6.5/4.1-6.3; anterior width, 4.3-7.6/4.7-7.0; posterior width, 3.8-6.5/4.7-7.3; humeral width, 4.7-8.5/5.5-8.8; elytral length, 9.7-16.2/13.0-16.7. Total length of the holotype, 23.0.

**Comments**. The holotype is lacking: antennomeres IV-XI of left antenna and XI of right antennae. Curiously eight specimens of the type series are with the abdomen more extended than usually occurs in species of Parandrinae, and somewhat deformed, and are lighter. Evidently, this suggests that the specimens were newly hatched when killed.

**Diagnosis**. Acutandra gaetani **sp. nov.** (Fig. 154-157) differs from *A. gabonica* (Fig. 125-128) mainly by the upper ocular lobes much more outstanding when compared with the area behind the eyes (almost in the same level in *A. gabonica*), punctation on the gibbosities of dorsal surface of head finer and sparser, and the tarsomeres slender and longer (mainly meso- and metatarsomeres V).

#### Acutandra quentini sp. nov.

(Fig. 17, 18, 43, 61, 72, 92, 189-192)

Etymology. The new species is dedicated to Quentin, the first author's son.

**Type material**. Holotype male from KENYA (Fig. 92), *Western Province*: Kakamega (1650 m), 5-6.V.1997, T. Bouyer col., ex TBPC, (IRSNB). Paratype – KENYA, *Eastern Province*: Meru region (Mount Kenya), female, XII.2004, [no collector indicated] (TGPC).

**Description**. General coloration of integument reddish-brown; dorsal surface of head and pronotum dark-brown with parts of the former and margins of the later blackish; mandibles, dorsal surface of scape, margins of elytra (suture and epipleura), margins of pro-, meso- and metasternum, extreme distal area of ventrite V, and parts of legs blackish; margins of scutellum darker than central area.

Male (Fig. 189). Body flattened dorso-ventrally. Width of head plus eyes equal to 0.9 times that of pronotum at anterolateral angles. Mandibles sub-falciform; length of mandible equal to 0.9 times that of head, moderately coarsely abundantly punctate on outer surface; inner surface more finely, sparsely punctate; inner edge with the more basal tooth larger than more apical one; inner face with moderately long, abundant setae; outer face with short, decumbent setae (shorter towards apex); mandibular dorsal carina distinct, but not well delimited at outer face. Dorsal surface of head moderately finely, abundantly punctate on gibbosities (mainly in anterior two-thirds), coarser, partially confluent on sulcus between gibbosities and transversal region immediately behind them, moderately finely, sparsely punctate on central area closer to the prothorax, gradually coarsely, confluently punctate laterally and at area close to apex of ocular carina; area between gibbosities and ocular carinae slightly depressed (area not well defined). Epistomal suture distinct only laterally. Clypeus medially lower than area of sulcus between gibbosities of head; laterally slightly lower than centrally; setae microscopic, sparse centrally, longer, more abundant laterally. Clypeolabral suture slightly distinct even laterally. Median projection of labrum (Fig. 17) wide, rounded at apex, medially slightly tumid; setae moderately long and abundant centrally, absent laterally.

Ocular carina not bifurcated in "Y" near posterior edge of eyes. Eyes narrow (larger width about 0.4 times length); posterior edge of lower ocular edge slightly elevated above area behind it; posterior edge of upper ocular lobe more distinctly elevated. Area behind eyes shagreened from apex of upper lobe of eyes to basal half of lower lobe of eyes; punctation coarse, anastomosed near apex of upper ocular lobe, gradually sparser towards apex of shagreened area; not shagreened area is moderately finely punctate; area closer to eyes impunctate (more distinctly at middle). Submentum distinctly separated from genae, less so from gula, distinctly depressed towards anterior edge; surface coarsely punctate, anastomosed close to anterior edge (all punctures shagreened); anterior edge elevated; setae moderately long, sparse, more concentrated on small area at antero-median region. Mentum not produced laterally into paraglassae. Antennae (Fig. 43) reaching elytral base; antennomere XI 1.5 times longer than X; ventral sensorial area of antennomeres III-XI not divided by carinae; dorsal sensorial area of antennomere XI wide, well marked, moderately long (about 0.3 times length of antennomere); apical third of antennomere XI moderately abruptly inclined towards apex.

Sides of prothorax (Fig. 189) slightly divergent from base to apex; anterolateral angles projecting forward, acute; posterolateral angles obtuse, not projecting; lateral angles absent. Disc of pronotum almost flat, not strongly elevated from base to apex (Fig. 191); shiny, abundantly, moderately finely punctate from base to apex, gradually coarser, more abundantly punctate laterally; latero-apical half with small and abundant plates (as isolated scales); centro-longitudinal area almost impunctate; anterior edge sinuate. Metasternum (Fig. 190) laterally shagreened near mesocoxae, moderately finely punctate on this area, gradually more finely and sparsely punctate towards central area. Metepisterna finely sparsely punctate. Elytra abundantly, moderately finely punctate. Ventrites I-IV finely, sparsely punctate centrally, gradually punctate-shagreened laterally; ventrite V more distinctly punctate-shagreened; setae very short (mainly centrally) on ventrites I-IV, moderately longer and abundant on ventrite V (mainly on centro-apical area). Profemur as long as mesofemur; metafemur about 1.1 times longer than mesofemur. Tibiae (Fig. 61) distinctly dilated towards apex; dorsal surface distinctly longitudinally sulcated, mainly at apical two-thirds. Tarsi not notably slender; tarsomeres III not bilobed; mesotarsomere I as long as II-III together; meso- and metatarsomere V (Fig. 72) (without claws) about 1.1 times longer than I-III together; paronychium very distinctly exposed, with one seta.

Female (Fig. 192). Head less robust, width plus eyes 0.9 times narrower than that of pronotum at anterolateral angles. Eyes slightly broader than in male. Mandible subtriangular, length equal to about 0.7 times that of head; punctation similar to that in male; dorsal carina present but less well defined and shorter than in male; inner edge with teeth similar in size, distinctly less projected. Median projection of labrum (Fig. 18) distinctly narrower at apex compared to male. Sides of prothorax slightly rounded; lateral angles slightly marked; anterolateral angles less projected forward and more rounded. Anterior edge of pronotum not sinuate; latero-apical areas shagreened near anterolateral angles.

Variation. Paratype female with nearly all of body darker than that of holotype male.

**Dimensions in mm (male/female)**. Total length (including mandibles), 19.8/21.3; prothorax: length, 4.2/4.5; anterior width, 5.2/4.8; posterior width, 4.7/4.8; humeral width, 5.3/6.1; elytral length, 11.2/13.4.

Comments. The holotype is with part of left metafemur and right lateral of ventrites 1-III eaten.

**Diagnosis**. Acutandra quentini **sp. nov.** (Fig. 189-192) differs from A. gaetani **sp. nov.** (Fig. 154-157): punctation of the gibbosities on dorsal surface of the head coarser and more abundant; tibiae more distinctly enlarged. From A. gabonica (Fig. 125-128) it differs, mainly, by the elytra sparsely punctate.

### Acutandra dasilvai sp. nov.

(Fig. 11, 12, 39, 68, 96, 147-150)

**Etymology**. Dedicated to Carlos da Silva, personal friend of the first author, who collected the holotype and some paratypes.

**Type material**. Holotype male from SÃO TOMÉ AND PRINCIPE (Fig. 96), *Principe Island*: near Terreiro Velho, XI-XII.2010, C. da Silva col., ex TBPC, (IRSNB). Paratypes - SÃO TOMÉ AND PRINCIPE, *Principe Island*: male, 1.I.1933, W. H. T. Tams. col. (BMNH); 8 males, 2 females, II.1999, D. Camiade col. (TBPC and DCPC); Terreiro Velho, 11 males, 4 females, XII.2004. P. Oremans col. (POPC); 2 males, 20-21.I.2006, P. Oremans col. (POPC); near Terreiro Velho, 2 males, 4-10.III.2003, P. Oremans col. (POPC); female, I.2006, [no collector indicated] (FLPC); female, III.2006, [no collector indicated] (FLPC); 2 males, III.2006, P. Oremans col. (POPC); male, I.2006, P. Oremans col. (POPC); male, I.2006, In collector indicated] (FLPC); 1 males, 3 females, XII.2010, C. da Silva col. (TBPC).

**Description**. General coloration of integument reddish-brown; dorsal surface darker than ventral one; mandibles, parts of head, dorsal surface of scape, margins of prothorax, margins of epipleura, margins of mesosternum and metasternum around coxal cavities, extreme distal part of ventrite V, and parts of legs blackish; margins of scutellum darker than central area.

Male (Fig. 147). Body slightly flattened dorso-ventrally. Width of head plus eyes equal to 0.85 times that of pronotum at anterolateral angles. Mandibles distinctly not falciform or sub-falciform; length of mandible equal to that of head, finely and moderately sparsely punctate on outer surface; inner surface finely, sparsely punctate in basal half, punctures more abundant and coarser in apical half; inner edge with more basal tooth larger than more apical one; inner face with short, sparse setae; outer face with very short setae on base, becoming microscopic towards apex; mandibular dorsal carina distinct, but not well delimited, mainly at outer face. Dorsal surface of head finely, moderately abundantly punctate, becoming slightly coarser and sparser towards occiput and apex of ocular carina; gibbosities well marked; area between gibbosities and ocular carinae with slight, somewhat elliptical depression, finely shagreened. Epistomal suture distinct only laterally. Clypeus medially lower than the plane of the furrow between gibbosities of head; laterally more distinctly lower than surface of head; setae microscopic, sparse. Clypeolabral suture marked throughout. Median projection of labrum (Fig. 11) wide, truncate at apex, medially elevated; setae short, sparse, centrally with some longer setae. Ocular carina not bifurcated in "Y" near posterior edge of eyes. Eyes moderately narrow (larger width about 0.5 times length); upper ocular lobe distinctly wider than length of scape; posterior edge of lower ocular edge not strongly elevated above area behind it. Area behind eyes shagreened, moderately coarse and abundantly punctate. Submentum well separated from gula and genae; surface with sparse, moderately coarse, shallow punctures; anterior edge elevated; setae not notably short, sparse. Mentum not produced laterally into paraglossae. Antennae (Fig. 39) reaching level of posterolateral angles of prothorax; length of antennomere XI equal to 1.6 times that of X; ventral sensorial area of antennomeres III-XI not divided by carinae; dorsal sensorial area of antennomere XI very wide, well marked, short (about 0.2 times length of antennomere); apical third of antennomere XI abruptly inclined towards apex.

Sides of prothorax (Fig. 147) slightly divergent from base to apex; anterolateral angles projecting forward, moderately rounded; posterolateral angles rounded, not projecting; lateral angles absent. Anterior half of pronotum transversally convex; disc elevated from base to apex; disc shiny, finely punctate from base to about anterior fourth (usually almost impunctate centrally after middle); punctures becoming coarser laterally on middle third, without reaching the margin; lateral areas shagreened (more distinctly so on anterior half); basal third of latero-basal area punctate (punctures just coarser than on disc); middle third of latero-basal area somewhat rugose; latero-basal third, and anterior fourth of the disc (except the central region and area of anterolateral angles) with small and abundant plates (as isolated scales); anterior edge sinuous. Metasternum (Fig. 148) moderately finely punctate laterally (punctures well marked). Metepisterna with punctures as in lateral of metasternum. Elytra abundantly, moderately finely punctate (punctures coarser laterally); circum-scutellar area more sparsely punctate. Ventrites I-IV punctate, mainly laterally; ventrite V more distinctly punctate, with asperities and moderately abundant setae on centro-apical half. Profemur slightly longer than mesofemur; metafemur about 1.2 times longer than mesofemur. Tibiae strongly dilated towards apex; dorsal surface longitudinally sulcated, more elevated on inner side. Tarsi slender; tarsomeres III not bilobed; mesotarsomere I as long as II-III together; meso- and metatarsomere V (Fig. 68) (without claws) about 1.3 times longer than I-III together; paronychium very distinctly exposed, with one seta.

Female (Fig. 150). Head slightly less robust, width plus eyes slightly narrower than that of pronotum at anterolateral angles. Eyes as broad as in male. Mandible subtriangular, length equal to about 0.7 times

that of head, slightly more coarsely punctured than in male (mainly on inner surface); dorsal carina present but less well defined and shorter than in male; inner edge of mandibles with teeth similar to those in male. Median projection of labrum (Fig. 12) distinctly narrower than in male, but also truncate. Sides of prothorax more rounded than in males. Pronotum (Fig. 149) less inclined from base to apex; anterior edge not sinuate; lateral areas neither shagreened nor rugose, but little coarsely punctate than center of disc.

**Variation**. Elytra from reddish-brown to dark-brown. Male: body flattened dorso-ventrally; setae of inner face of mandibles more abundant; outer surface of mandibles glabrous; setae of clypeus absent or very sparse and present only laterally; clypeolabral suture distinct only laterally; punctures of submentum moderately deep; antennae reaching from level of posterolateral angles of prothorax to base of prothorax; length of antennomere XI from 0.7 to 0.8 times that of X; sides of prothorax almost parallel at apical two thirds, or moderately rounded; anterolateral angles of prothorax from rounded to almost acute; posterolateral angles of prothorax from rounded to obtuse; punctures of elytra somewhat variable in concentration and size, but always well marked. Female: anterior edge of pronotum slightly sinuate.

**Dimensions in mm (male/female)**. Total length (including mandibles), 21.0-26.0/19.0-25.8; prothorax: length, 4.6-6.0/3.5-5.4; anterior width, 6.1-7.4/4.1-6.3; posterior width, 4.6-5.7/3.7-6.2; humeral width, 5.7-7.2/4.9-7.5; elytral length, 12.5-15.1/11.7-15.4. Total length of the holotype, 18.8.

**Diagnosis**. Acutandra dasilvai **sp. nov.** (Fig. 147-150) differs from *A. gabonica* (Fig. 125-128): head proportionally shorter; dorsal surface of head finely punctate; upper ocular lobes distinctly wider than length of the scape; tarsomere V, usually finer and longer; basal edge of pronotum usually more rounded; metasternum and metepisterna more distinctly punctate. In *A. gabonica* the head is proportionally more elongate, the dorsal surface of head usually coarsely punctate, the upper ocular lobes narrower (about as wide as length of scape), the tarsomere V usually wider and shorter, the basal edge of pronotum frequently more straight, and punctation of metasternum and metepisterna less distinct. From *A. oremansi* **sp. nov.** (Fig. 181-184) it differs by antennomere XI smaller and abruptly inclined towards apex in apical third (longer and gradually inclined in *A. oremansi*), by the elytral punctation coarser and more distinct on circum-scutellar area, and by the metasternum and metepisterna more distinctly punctate.

# Acutandra barclayi sp. nov.

(Fig. 23, 14, 47, 76, 19-142)

**Etymology**. Dedicated to Maxwell V. L. Barclay (BMNH), who provided important specimens for this study.

**Type material**. Holotype male from SÃO TOMÉ AND PRINCIPE, *São Tomé Island*: [no date indicated], De Saeger col. (ex. Collection Prince Léopold) (RMCA). Paratypes - SÃO TOMÉ AND PRINCIPE, *São Tomé Island*: female, same data of the holotype, ex RMCA, (MZSP); male, 1919-1921, H. J. Snell col. (BMNH).

**Description**. General coloration of integument dark-brown; parts of head, of mandibles, margins of prothorax and elytra, margins of mesosternum and metasternum around coxal cavities, and parts of legs blackish; margins of scutellum and distal edge of ventrites slightly darker than central area.

Male (Fig. 139). Body not flattened dorso-ventrally. Width of head plus eyes equal to 0.9 times that of pronotum at anterolateral angles. Mandibles not falciform or sub-falciform; length of mandible equal to 0.9 times that of head, moderately coarsely and abundantly punctate on outer surface (closer towards apex); inner surface moderately finely, sparsely punctate in basal half, coarsely, abundantly punctate in apical half; teeth of inner edge together protracted, more basal tooth larger than more apical one; inner face with moderately long and abundant setae; outer face with short, moderately abundant setae; mandibular dorsal carina distinct, not ending abruptly. Dorsal surface of head finely, abundantly punctate in anterior half of gibbosities, coarser, punctures sparser in posterior half of gibbosities, coarse, moderately abundant

between gibbosities and prothorax, coarse and confluent laterally (mainly close to the apex of ocular carinae). Epistomal suture distinct laterally. Clypeus medially lower than the plane of furrow between gibbosities of head; setae very short, sparse. Clypeolabral suture marked throughout. Median projection of labrum (Fig. 23) wide, truncate at apex, medially elevated; setae short, sparse. Ocular carina not bifurcate in "Y" near posterior edge of eyes. Eyes moderately wide (larger width about 0.5 times length); upper ocular lobe about as wide as length of scape; posterior edge of lower ocular edge not elevated above area behind it. Area behind eyes shagreened from apex of upper lobe of eyes to basal third of lower lobe of eyes; punctation coarse near apex of upper ocular lobe, gradually sparser towards apex of shagreened area; area not shagreened moderately finely, sparsely punctate; area closer to the eyes impunctate. Area between tentorial pits and submentum shiny, smooth. Submentum not well separated from genae and gula; surface transversally striated, coarsely, shallowly punctate; anterior edge elevated; setae moderately long, sparse. Mentum not produced laterally into paraglossae. Antennae (Fig. 47) reaching base of prothorax; length of antennomere XI equal to 1.3 times that of X; ventral sensorial area of antennomeres III-XI not divided by carinae; dorsal sensorial area of antennomere XI wide, not well delimited; apical third of antennomere XI abruptly inclined towards apex.

Sides of prothorax (Fig. 139) subparallel in apical two-thirds, slightly convergent towards posterolateral angles in basal third; anterolateral angles slightly projected forward, somewhat rounded; posterolateral angles subrounded, not projecting; lateral angles absent. Anterior half of pronotum transversally convex; disc elevated from base to apex (Fig. 141); disc shiny, finely punctate from base to apex (punctures closer, slightly coarser in distal third); punctures becoming coarser laterally, anastomosed on central region; area closer to the margin punctate-rugose in basal half, and with abundant small plates, as small scales, on apical half (this area is gradually wider from base to apex of pronotum); anterior edge slightly sinuate. Metasternum (Fig. 140) laterally slightly shagreened, shallowly, sparsely punctate (punctures somewhat coarse basally). Metepisterna slightly shagreened, coarsely, abundantly punctate. Elytra abundantly, moderately coarsely punctate (laterally coarser and closer); circum-scutellar area finely punctate; elytral carinae distinct. Ventrites I-IV punctate, more abundantly laterally; ventrite V more distinctly punctate, with asperities in centro-apical half; ventrites I-III with short, sparse setae; ventrite IV with short, sparse setae basally and laterally, longer, more abundant centro-apically. Profemur about as long as mesofemur; metafemur about 1.2 times longer than mesofemur. Tibiae not strongly dilated towards apex; dorsal surface longitudinally sulcated. Tarsi not strongly slender; tarsomeres III not bilobed; mesotarsomere I about as long as II-III together; meso- and metatarsomere V (Fig. 76) (without claws) about 1.4 times longer than I-III together; paronychium very distinctly exposed, with one seta.

Female (Fig. 142). Head less robust, width plus eyes equal to 0.9 times that of pronotum at anterolateral angles. Eyes as wide as in male. Mandible subtriangular, length equal to about 0.7 times that of head; dorsal carina present, not well defined; teeth of inner edge of mandibles together protracted, somewhat as a plate. Median projection of labrum (Fig. 24) moderately narrow, slightly rounded at apex. Sides of prothorax rounded; anterolateral angles acute, distinctly projected forwards; posterolateral angles obtuse. Anterior edge of pronotum slightly sinuate; area closer to latero-basal half without small plates.

**Dimensions in mm (male/female)**. Total length (including mandibles), 18.3-22.0/17.3; prothorax: length, 4.3-5.1/3.7; anterior width, 5.4-6.4/4.1; posterior width, 4.6-5.0/4.1; humeral width, 5.3-6.3/5.1; elytral length, 10.7-12.9/11.1.

**Comments**. The holotype is missing antennomeres III-XI of right antenna, tarsomeres II-V of left protarsus, tarsomeres IV-V of right mesotarsus.

The species was not plotted on the map because there is no precise locality in the Island.

**Diagnosis**. *Acutandra barclayi* **sp. nov.** (Fig. 139-142) differs from *A. oremansi* **sp. nov.** (Fig. 181-184) as follows: body not flattened dorso-ventrally; antennomere XI shorter; pronotum of males less sinuate at anterior edge; elytral punctation coarser. From *A. dasilvai* **sp. nov.** (Fig. 147-150) it differs by the body not flattened dorso-ventrally, by the elytral punctation coarser, and by the setae of mandibles more conspicuous. From *A. gabonica* (Fig. 125-128) can be separated by the antennomere XI shorter and by the elytral punctation coarser.

### Acutandra grobbelaarae sp. nov.

(Fig. 91, 219-222)

**Etymology**. The new species is dedicated to Elizabeth Grobbelaar (SACI), for her help with the loan of specimens for this study.

**Type material**. Holotype male from IVORY COAST (Fig. 91), *Bas-Sassandra*: Sassandra, IV.1998, Moretto col., ex TBPC, (IRSNB). Paratypes - IVORY COAST, *Bas-Sassandra*: Sassandra, female, IV.1998, Moretto col. (TBPC); male, V.1998, Moretto col., (TBPC). *Dix-Huit Montagnes* (Ouest): female, V.2000, Moretto col. (TBPC); Mont Dan, female, IV.1998, Moretto col., ex TBPC, (MZSP).

**Description**. General coloration of integument dark-brown on ventral surface, with some areas blackish, and blackish on dorsal surface.

Male (Fig. 219). Body flattened dorso-ventrally. Head not elongate behind eves. Width of head (Fig. 219, 220) plus eyes about 0.9 times that of pronotum at anterolateral angles. Mandibles sub-triangular; length of mandible equal to 0.75 times that of head, moderately coarsely, abundantly punctate on outer surface, punctures slightly finer and closer towards apex; punctation of inner surface slightly sparser towards inner edge; inner edge with more basal tooth larger than more apical one; inner face with moderately long and abundant setae; outer face with short setae, becoming microscopic towards apex; mandibular dorsal carina distinct. Dorsal surface of head (Fig. 219) moderately coarsely, abundantly punctate on gibbosities (slightly coarser basally), distinctly coarse, confluent on area between ocular carina and apex of gibbosities, coarsely, moderately abundantly punctate on area between gibbosities and prothorax; sulcus between gibbosities not V-shaped, coarsely, confluently punctate; area between gibbosities and ocular carinae depressed, punctate towards eyes and impunctate towards clypeus. Epistomal suture distinct throughout. Clypeus medially lower than level of area of sulcus between gibbosities of head; laterally slightly lower than centrally; moderately finely, sparsely punctate (mainly centrally); setae microscopic. Clypeolabral suture distinct almost throughout. Median projection of labrum wide, truncate at apex, medially slightly tumid; setae short, moderately sparse, just longer and more abundant centrally, mainly apically, absent laterally. Ocular carina not bifurcated in "Y" near posterior edge of eyes. Eyes moderately narrow (larger width about 0.45 times length); posterior edge of eyes slightly elevated above area behind it (slightly more distinctly behind upper ocular lobes). Area behind eyes moderately coarsely and sparsely punctate from apex of upper lobe of eyes to basal half of lower lobe of eyes, striate-punctate behind apical half of lower ocular lobes. Submentum distinctly separated from genae, less so from gula, slightly depressed towards anterior edge; surface coarsely, sparsely, shallowly punctate (more abundantly near anterior edge; anterior edge elevated; setae moderately short, sparse. Antennae reaching base of prothorax; antennomere XI 1.4 times longer than X; ventral sensorial area of antennomeres III-XI not divided by carinae; dorsal sensorial area of antennomere XI wide, well marked, long (about 0.2 times length of antennomere); apical third of antennomere XI abruptly inclined towards apex.

Sides of prothorax (Fig. 219) divergent from posterolateral angles to basal third, and then subparallel towards anterolateral angles; anterolateral angles projecting forward, acute; posterolateral angles rounded; lateral angles absent. Disc of pronotum convex, mainly anteriorly, not strongly elevated from base to apex (Fig. 221); shiny, abundantly, finely punctate from base to apex, gradually coarser, more abundantly punctate laterally; lateral areas shagreened, with abundant small plates, as small scales; anterior edge slightly sinuate. Metasternum (Fig. 220) laterally shagreened near mesocoxae, shallowly sparsely and moderately finely laterally from middle towards metacoxae, gradually finer, sparser punctate towards central area (almost microscopic on this area). Metepisterna shagreened in basal third, coarsely, confluently punctate in apical two-thirds. Elytra very abundantly, moderately coarsely punctate (mainly laterally); dorsal carinae moderately distinct; sutural angle slightly projected. Ventrites I-IV shagreened, slightly less so centrally; ventrite V with asperities in centro-apical half; setae very short on ventrites I-IV, moderately longer and abundant on ventrite V (mainly on centro-apical area). Profemur slightly longer than mesofemur; metafemur about 1.1 times longer than mesofemur. Tibiae not strongly enlarged towards apex; dorsal surface distinctly longitudinally sulcated, mainly in apical two-thirds. Tarsi not notably slender; tarsomeres III not bilobed; mesotarsomere I about as long as II-III together; meso- and metatarsomere V (without claws) about 1.3 times longer than I-III together; paronychium very distinctly exposed, with one seta.

Female (Fig. 222). Head less robust, width plus eyes equal to 0.9 to that of pronotum at anterolateral angles. Eyes slightly broader than in males (larger width about 0.5 times length). Mandible subtriangular, length equal to about 0.7 times that of head, with same kind of punctures of males; dorsal carina present but less well defined and shorter than in male; inner edge with teeth similar to those in male, but less projected. Median projection of labrum distinctly narrower than in male, rounded at apex. Sides of prothorax as in males; anterolateral angles as in males. Sculpture of pronotum similar to that of males, never with plates near anterolateral angles; anterior edge as in males.

**Variation**. General coloration of integument brown on ventral surface, and dark-brown on dorsal surface. Male - basal tooth of inner edge of mandibles almost of same size as more apical one; depression between gibbosities and ocular carinae sparsely punctate on area near clypeus; median projection of labrum subrounded at apex; median projection of labrum medially not tumid; setae of labrum absent only on lateral extreme; area behind apical half of lower ocular lobes slightly striated. Females - sides of prothorax somewhat rounded from base to apex.

**Dimensions in mm (male/female)**. Total length (including mandibles), 13.9-16.0/14.6-14.7; prothorax: length, 3.0-3.5/3.1-3.2; anterior width, 3.8-4.5/3.6-3.7; posterior width, 3.9-4.1/3.4-3.5; humeral width, 3.9-4.5/4.2-4.3; elytral length, 8.0-9.0/8.9-9.1.

**Diagnosis**. Acutandra grobbelaarae **sp. nov.** (Fig. 219-222) differs from A. gabonica (Fig. 125-128) by the body flatter dorso-ventrally; from A. beninensis (Fig. 114-117) by tarsomere V slender (mainly at basal half); from A. hugoi **sp. nov.** (Fig. 162-164) by the head not elongate behind eyes; from A. gaetani **sp. nov.** (Fig. 154-157), A. plenevauxae **sp. nov.** (Fig. 185-188), and A. garnieri **sp. nov.** (Fig. 158-161) by the elytral apex slightly projected at sutural angle (rounded in these species).

### Acutandra plenevauxae sp. nov.

(Fig. 19, 20, 44, 73, 84, 101, 185-188)

**Etymology**. The new species is dedicated to Renée Plenevaux, passionate about using insects in art, for her help and support in insect collecting.

**Type material**. Holotype male from DEMOCRATIC REPUBLIC OF THE CONGO (Fig. 84), *Sud-Ubangi*: Libenge, 16.X.1947, R. Cremer and M. Neuman col. (IRSNB). Paratypes - DEMOCRATIC REPUBLIC OF THE CONGO, *Tanganyika*: Muleke, male, XI.2009, T. Bouyer col. (TBPC). *Nord-Kivu*: Kasuo, 3 males, 8 females, XII.2009, T. Bouyer col. (TBPC); 1 male, 1 female, XII.2009, T. Bouyer col., ex TBPC, (MZSP); female, VI.2010, T. Bouyer col. (TBPC); 3 females, VII.2010, T. Bouyer col. (TBPC); 2 males, I.2011, T. Bouyer col. (TBPC). *Sud-Kivu*: Kahuzi-Biéga National Park (km 27), 1 male, 2 females, 28.III.1953, P. Basilewsky col. (RMCA). *Haut-Lomani*: near Lusinga (Upemba National Park), male, 13.VIII-13.IX.2003, Hasson and Bouyer col. (TBPC). UGANDA (Fig. 101), *Western Region*: Ankole (25 mi. S Kichwamba), male, 28.IV.1968, Paul J. Spangler col. (USNM); Bwamba Forest (2500 ft), 2 males, III.1948, J. G. Williams col. (USNM). *Ituri*: 1 male, 1 female, V.2011, [no collector indicated] (TBPC). CENTRAL AFRICAN REPUBLIC, *Sangha-Mbaéré*: Lidjombo, male, IV.1996, Moretto col. (TBPC).

**Description**. General coloration of integument brown; dorsal surface dark-brown; parts of the head, mandibles, dorsal surface of scape, pedicel and antennomere III, margins of prothorax, margins of elytra (suture and epipleura), margins meso- and metasternum, extreme distal of ventrite V, and parts of legs blackish; margins of the scutellum darker than central area.

Male (Fig. 185). Body flattened dorso-ventrally. Width of head plus eyes equal to 0.9 times that of pronotum at anterolateral angles. Mandibles sub-falciform; length of mandible equal to 0.85 times that of head, coarsely, abundantly punctate on outer surface, punctures slightly finer and closer towards apex; punctation of the inner surface as outer surface, slightly sparser, mainly towards inner edge; inner edge with more basal tooth larger than more apical; inner face with moderately long, abundant setae; outer face with short, decumbent setae (shorter towards apex); mandibular dorsal carina distinct, but not well

delimited at outer face. Dorsal surface of head moderately coarsely, abundantly punctate on gibbosities (mainly on anterior two-thirds), coarser, partially confluent on apical half of sulcus between gibbosities and region behind them, gradually coarsely, confluently punctate laterally and at area close to the apex of ocular carina; area between gibbosities and ocular carinae slightly depressed (area not well defined). Epistomal suture distinct only laterally. Clypeus medially lower than area of sulcus between gibbosities of head; laterally slightly lower than centrally; setae microscopic, sparse. Clypeolabral suture slightly distinct even laterally. Median projection of labrum (Fig. 19) wide, truncate at apex, medially slightly tumid; setae moderately long and abundant centrally, mainly apically, absent laterally. Ocular carina not bifurcated in "Y" near posterior edge of eyes. Eyes narrow (larger width about 0.4 times length); posterior edge of lower ocular edge slightly elevated above area behind it; posterior edge of upper ocular lobe more distinctly elevated. Area behind eyes shagreened from apex of upper ocular lobes to basal half of lower ocular lobes; punctation coarse, confluent near apex of upper ocular lobe, gradually sparser towards apex of shagreened area; area not shagreened moderately finely punctate; area closer to the eyes impunctate (more distinctly on middle). Submentum distinctly separated from genae, less so from gula, slightly depressed towards anterior edge; surface coarsely punctate, anastomosed close to the anterior edge (all punctures shagreened); anterior edge slightly elevated; setae moderately short, sparse. Mentum not produced laterally into paraglossae. Antennae (Fig. 44) reaching apex of prothorax; antennomere XI 1.5 times longer than X; ventral sensorial area of antennomeres III-XI not divided by carinae; dorsal sensorial area of antennomere XI wide, well marked, moderately short (about 0.25 times length of antennomere); apical third of antennomere XI abruptly inclined towards apex.

Sides of prothorax (Fig. 185) subparallel from area of lateral angles to anterolateral angles, convergent from former towards posterolateral angles; anterolateral angles slightly projecting forward, acute; posterolateral angles obtuse, not projecting; lateral angles absent. Disc of pronotum almost flat, not strongly elevated from base to apex (Fig. 187); shiny, abundantly, moderately finely punctate from base to apex, gradually coarser, more abundantly punctate laterally; latero-apical half with small and abundant plates (as isolated scales); centro-longitudinal area almost impunctate; anterior edge slightly sinuate. Metasternum (Fig. 186) laterally shagreened near mesocoxae, moderately coarsely punctate on this area, gradually finer, sparser punctate towards central area. Metepisterna shagreened-punctate, except on a narrow band near metasternum. Elytra abundantly, moderately coarsely punctate; dorsal carinae distinct. Ventrites I-IV punctate-rugose, mainly laterally; ventrite V more distinctly punctate-rugose throughout; setae very short (mainly centrally) on ventrites I-IV, moderately longer and abundant on ventrite V (mainly on centro-apical area). Profemur as long as mesofemur; metafemur about 1.1 times longer than mesofemur. Tibiae not strongly enlarged towards apex; dorsal surface distinctly longitudinally sulcated, mainly at apical two-thirds. Tarsi not notably slender; tarsomeres III not bilobed; mesotarsomere I as long as II-III together; meso- and metatarsomere V (Fig. 73) (without claws) about 1.2 times longer than I-III together; paronychium very distinctly exposed, with one seta.

Female (Fig. 188). Head less robust, width plus eyes 0.85 times narrower than that of pronotum at anterolateral angles. Eyes slightly broader than in male. Mandible subtriangular, length equal to about 0.7 times that of head; punctation similar to that in male; dorsal carina present but less well defined and shorter than in male; inner edge with teeth as in male, distinctly less projected. Median projection of labrum (Fig. 20) distinctly narrower at apex than in male. Sides of prothorax slightly rounded; lateral angles absent; anterolateral angles as in males, with the same kind of variation. Anterior edge of pronotum not sinuate; latero-apical areas coarsely confluently punctate near anterolateral angles.

**Variation**. Body from almost entirely black, mainly dorsally, to almost entirely reddish-brown. Male: punctation on gibbosities of dorsal surface of head moderately sparse; central area behind gibbosities of head moderately finely, sparsely punctate; median projection of labrum medially tumid; setae of labrum sparser throughout central region; sides of prothorax slightly divergent from posterolateral angles to anterolateral angles; anterolateral angles projecting forward, from distinctly acute to almost rounded; posterolateral angles almost rounded, slightly projecting; disc of pronotum sparsely finely punctate from base to apex. Female: width of head plus eyes 0.8 times narrower than that of pronotum at anterolateral angles; length of mandible equal to about 0.8 times that of head; sides of prothorax from slightly rounded to divergent from posterolateral angles to anterolateral angles; lateral angles of prothorax slightly marked; anterior edge of pronotum slightly sinuous.

**Dimensions in mm (male/female)**. Total length (including mandibles), 15.2-22.5/15.4-24.8; prothorax: length, 3.5-5.1/3.3-5.5; anterior width, 4.3-6.0/3.8-6.1; posterior width, 3.6-4.9/3.5-5.6; humeral width, 4.0-6.1/4.1-6.9; elytral length, 8.8-13.0/9.5-15.3. Total length of the holotype, 20.2.

**Comments**. The holotype is missing the following parts: antennomeres VIII-XI of right antenna; protarsomere V of right leg.

**Diagnosis**. Acutandra plenevauxae **sp. nov.** (Fig. 185-188) differs from A. beninensis (Fig. 114-117) as follows: elytral punctation coarser and slightly sparser; metatarsomere V slender, mainly at basal half. It differs from A. gabonica (Fig. 125-128) mainly by the body more flattened dorso-ventrally and by the antennomere XI shorter. From A. gaetani **sp. nov.** (Fig. 154-157) it can be separated by the elytral carinae conspicuous and by the metatarsomere I thicker towards apex. It is distinct from A. amieti **sp. nov.** (Fig. 135-138) by the median projection of labrum truncate in males, by the elytral punctation finer, mainly laterally, and by the anterior edge of prothorax less sinuate. From A. vingerhoedti **sp. nov.** (Fig. 193-196) by the median projection of labrum truncate in males, by the anterior edge of prothorax less sinuate, and by the sulcus between gibbosities of head not V-shaped. Finally, it differs from A. quentini **sp. nov.** (Fig. 189-192) by the elytral punctation coarser and by the apex of median projection of labrum truncate in males.

#### Acutandra gabonica (Thomson, 1858), comb. nov.

(Fig. 59, 62, 83, 85, 86, 87, 88, 89, 91, 98, 119-129)

Parandra gabonica Thomson, 1858: 145; 1861: 80; 1867: 107, 112; Lacordaire 1868: 23 (note); Thomson 1878:
4 (types); Lameere 1902: 97 (partim; syn.); 1903: 7 (partim); 1913: 6 (cat.; partim); 1919: 18 (partim);
Gilmour 1954: 4; Quentin and Villiers 1975: 18 (types; partim); 1977: 128 (partim); Arigony 1984: 101 (partim); Santos-Silva 2002: 32 (note); Santos-Silva et al. 2010: 52 (lectotype).

Birandra (Yvesandra) gabonica; Santos-Silva and Shute 2009: 32.

Parandra aterrima Quedenfeltdt, 1882: 320; Lameere 1902: 97 (syn.); Quentin and Villiers 1977: 128, 129 (type); Wendt 1984: 328 (type).

Material examined. GABON (Fig. 89), male, [no date and collector indicated], ex Collection Le Moult, ex IRSNB, (MZSP); Bas Ogooué, 6 males, 4 female, [no date and collector indicated], ex Collection Favarel, (IRSNB); 6 males, 3 females, [no date and collector indicated], ex Collection Le Moult, (IRSNB). Estuaire: Libreville, 1male, 1 female, [no date and collector indicated], Don M. Babault col., ex RMCA, (MZSP); male, [no date and collector indicated], ex Collection Breuning, (RMCA). Ogouué-Maritime: Loango, male, [no date and collector indicated], ex Collection Le Moult, (IRSNB). Haut-Ogouué: Curial (place not found), male, 1883, [no collector indicated], (IRSNB). CENTRAL AFRICAN REPUBLIC (Fig. 87), Lobaye: Mongoumba, 5 males, 9 female, [no date and collector indicated], ex Collection Le Moult, (IRSNB). EQUATORIAL GUINEA (Fig. 88), Centro Sur Province: Benito, 1 male, 1 female, [no date and collector indicated], ex Collection Le Moult, (IRSNB); Mongo, 2 females, 1946-1948, J. Palau col. (RMCA). DEMOCRATIC REPUBLIC OF THE CONGO (Fig. 83), male, [no date and collector indicated], ex Collection Nonfried, (IRSNB); Chabara (place not found), male, 8.VI.1959, J. Pochet col. (IRSNB); 5 females, 9.VI.1959, J. Pochet col. (IRSNB); Kivu (could be Nord or Sud-Kivu), male, XI.2005, Mamfe col. (TGPC); Kuimba to Diambo, female, 10.XI.1925, A. Collart col. (IRSNB); male, 12.XI.1925, A. Collart col. (IRSNB); Lulua to Muteba, 1 male, 2 females I.1932, F. G. Overlaet col. (RMCA); male, III.1932, G. F. Overlaet col. (RMCA); Lulua to Kapanga, female, I.1932, G. F. Overlaet col. (RMCA); female, X.1932, G. F. Overlaet col. (RMCA); 2 females, XI.1932, G. F. Overlaet col. (RMCA); female, XI.1933, G. F. Overlaet col. (RMCA); female, 1959-1960, J. Hecq col. (RMCA); Buku-Tembe (place not found), 1 male, 1 female, 11.XI.1925, A. Collart col. (IRSNB). Sud-Ubangi: Libenge, 3 males, 16.X.1947, R. Cremer and N. Neuman col. (IRSNB); female, 1948, R. Cremer and N. Neuman col. (IRSNB); Likimi-Mumbia, male, 29.X.1927, A. Collart col. (IRSNB). Nord-Kivu: Virunga National Park (ex Albert National Park), male, 3.IX.1952, P. Vanschuytbroeck and J. Kekenbosch col. (RMCA); female, 26.IV.1952, G. F. de Witte col. (RMCA); female, 26.IX.1952, G. F. de Witte col. (RMCA); female, 26.XI.1952, G. F. de Witte col. (RMCA); female, 6.V.1957, P. Vanschuytbroeck col. (RMCA); male, 13.V.1958, P. Vanschuytbroeck col. (RMCA); (Mutsora), 1 male, 3

females, 1939, Hackars col. (RMCA); (Mayumby Forest; 2100 m) (place not found), 1 male, 2 females, 14-26.VI.1935, de Witte col. (RMCA); (Kamatembe Mount), female, 1-15.IV.1934, G. F. de Witte col. (IRSNB); (Nyasheke Forest; Nyamuragira Mount), 5 females, 14-26.VI.1935, de Witte col. (IRSNB); (Tshambi), male, III.1934, G. F. de Witte col. (IRSNB). Kinshasa: Biabu, 1 male, 2 females, 28.XI.1923, [no date and collector indicated], ex Collection A. Collart, (IRSNB). Tshopo: Kisangani (Stanleyville), male, [no date and collector indicated], ex Collection J. Muller, (IRSNB); male, X.1970, J. Taverniers col. (RMCA); Yangambi, 2 females, II.1939, M. Brouwers col. (RMCA); 1 male, 1 female, 1951, C. Donis col. (IRSNB); 7 males, 4 females, 1952, C. Donis col. (RMCA); 2 males, 4 females, 1953, C. Donis col. (RMCA); 1 male, 1 female, 1954, C. Donis col. (RMCA). Sud-Kivu: Lukando, male, 1959-1960, J. Hecq col. (RMCA); Sawasawa (Buhunde), 1 male, 1 female, 15.IX.1929, A. Collart col. (IRSNB). Tshuapa: Etata (place not found), female, VIII-IX.1970, J. Hauwaerts col. (RMCA); male, 8.X.1970, J. Hauwaerts col. (RMCA); 1 male, 1 female, V.1971, J. Hauwaerts col. (RMCA); Ikela, female, 1955, R. P. Lootens col. (RMCA); Lingunda, male, [no date and collector indicated], (IRSNB). Bas-Uele: Bambesa, male, 28.V.1937, J. Vrydagh col. (IRSNB); male, V.1959, [no collector indicated] (IRSNB); 2 males, 1 female, VI.1959, [no collector indicated] (IRSNB); 3 males, X.1958, [no collector indicated] (IRSNB). Haut-Uele: female, 21.III.1925, H. Schouteden col. (RMCA); male, XI.1958, [no collector indicated], ex Collection J.-M. Warlet, (IRSNB); Moto, 4 males, 1923, L. Burgeon col. (RMCA); male, VI-VII.1923, L. Burgeon col. (IRSNB). Ituri: Aruwimi River [route from Mawambi to Awakubi (=Avakubi)], female, 28.04.1908, Expedition Herzog Adolf Friedrich col. (IRSNB); Mongbwalu, male, 30.III.1939, A.-Lepersonne col. (RMCA); 2 males, 29.IV.1939, A.-Lepersonne col. (RMCA); 1 male, 1 female, V.1939, A.-Lepersonne col. (RMCA); female, 4.VI.1939, A.-Lepersonne col. (RMCA); Plain Semliki (900-1100 m), male, IV-X.1937, Hackars col. (RMCA). Lomami: Gandajika, male, 1954, de Francquen col. (IRSNB); male, 1954, de Francquen col. (RMCA); katanga, 2 females, [no date and collector indicated], ex Collection Tippmann, (USNM); Mwene-Ditu, 2 females, [no date indicated], Doutrelepont col. (RMCA). Kongo-Central: Congo da Lemba, female, V.1911, R. Mayné col. (RMCA); Dingi, male, 06.XII.1925, [no collector indicated], (IRSNB); Fayala (place not found in the province), 1 male, 1female, [no date indicated], Skrceny col. (NMPC); Kangu to Mayombe, 1 male, 1 female, [no date indicated], Peregi col., ex Collection Tippmann, (USNM); Makaia n'tete mayumbe, female, 24.XI.1915, R. Mayné col. (RMCA); Mayidi, 3 males, 4 females, 1942, P. Van Eyen col. (RMCA); Mbanza-Ngungu (=Thysville), 3 males, 1959-1963, A. Allaer col. (RMCA); Pangala, female, [no date and collector indicated], ex Collection Le Moult, (IRSNB). Equateur: Eala, male, 6.XI.1939, G. Couteaux col. (RMCA); Wendji, female, IX.1930, P. Staner col. (RMCA). Lualaba: Kafakumba, male, XII.1931, G. F. Overlaet col. (RMCA); Sandoa, female, X.1930, F. G. Overlaet col. (RMCA). Sankuru: Kondué, 1 male, 1 female, [no date indicated], E. Luja col. (RMCA); 2 males, 3 females, [no date indicated], E. Luja col. (RMCA); 10 males, 4 females, [no date and collector indicated] (MNHNL). Kasai: Bulongo, 1 male, 2 female, I.1955, J. Lefrevre col. (RMCA). RWANDA (Fig. 98), Western: Shangugu, 18.I.1960, D. Bitasa col. (IRSNB). IVORY COAST (Fig. 91), Sud-Bandama: Divo, 1 male, 1 female, 16-18.X.1962, J. Decelle col. (RMCA). Lagunes: Bingerville, male, IV.1964, J. Decelle col. (RMCA). CAMEROON (Fig. 86), Southwest: Ekok, 1 male, 4 female, [no date and collector indicated] (IRSNB); Kamerun Station Johann-Albrechtshöhe (=Kumba), 1 male, 2 female, 1896, L. Conradt col., ex Collection Moffarts, (IRSNB). Centre: Joko, male, [no date indicated], A. Heyne col., ex Collection Tippmann, (USNM). BURUNDI (85), Muyinga: Kigwena, 2 males, 1 female, X-XI.1959, Y. Pochet col. (IRSNB).

Note: "Bas Ogooué" is placed west of Gabon, at the provinces of Ogooué-Maritime (Bendjé Department) and Moyen-Ogooué (Ogooué and Lacs Department and Abanga Bigné Department).

**Redescription**. General coloration of integument brown; dorsal surface slight darker than ventral surface; parts of head, of mandibles, dorsal surface of scape, margins of prothorax, margins of elytra (suture and epipleura), margins meso- and metasternum, and parts of legs blackish; margins of scutellum darker than remaining surface; distal portion of ventrites lighter than remaining surface.

Male (Fig. 128). Body (Fig. 129) not flattened dorso-ventrally. Head elongate behind eyes, space between posterior ocular edge and prothorax usually larger than width of upper ocular lobe. Width of head plus eyes equal to 0.9 times that of pronotum at anterolateral angles. Mandibles sub-falciform; length of mandible equal to 0.7 times that of head, moderately coarsely, abundantly punctate on outer surface, slightly finer towards apex; punctation of inner as that on outer surface, usually confluent on longitudinal area near base of teeth of inner margin; inner edge with more basal tooth larger than more apical; inner

face with moderately long and sparse setae; outer face with short, decumbent setae, becoming microscopic towards apex; mandibular dorsal carina distinct. Dorsal surface of head moderately finely, abundantly punctate on gibbosities (mainly on anterior third), gradually coarsely punctate towards apex of gibbosities, distinctly coarse, confluent on area between ocular carina and apex of gibbosities, coarse, moderately abundantly punctate on central area between gibbosities and prothorax, more abundant and frequently finer laterally; sulcus between gibbosities not V-shaped, deeper on central area, and impunctate on subtriangular area near clypeus; area between gibbosities and ocular carinae depressed, punctate towards eyes and impunctate towards clypeus. Epistomal suture distinct only laterally. Clypeus medially in the same level of area of sulcus between gibbosities of head, and declivity in this area vertical; laterally slightly lower than centrally; punctation shallow, partially confluent, mainly laterally; setae very short, sparse, usually slightly more distinct laterally. Clypeolabral suture almost indistinct throughout. Median projection of labrum (Fig. 128) wide, truncate at apex, medially slightly tumid; setae moderately long and sparse centrally, absent laterally. Ocular carina not bifurcated in "Y" near posterior edge of eyes. Eyes narrow (larger width about 0.45 times length); posterior edge of eyes slightly elevated above area behind it. Area behind eyes shagreened from anterior third of apex of upper lobe of eyes to base of lower lobe of eyes; punctation coarse, confluent near apex of upper ocular lobe, gradually sparser and finer towards gula. Submentum distinctly separated from genae, less so from gula, slightly depressed towards anterior edge; surface coarsely, vermiculate-punctate (punctures coarse and somewhat shallow); anterior edge slightly elevated; setae short, sparse, more concentrated in central area close to the anterior elevation. Antennae (Fig. 128) reaching humeral area; antennomere XI 1.7 times longer than X; ventral sensorial area of antennomeres III-XI not divided by carinae; dorsal sensorial area of antennomere XI wide, well marked, short (about 0.25 times length of antennomere); apical third of antennomere XI moderately abruptly inclined towards apex.

Sides of prothorax (Fig. 128) divergent from base to apex, more distinctly between posterolateral angles and area of lateral angles; anterolateral angles projecting forward, acute; posterolateral angles obtuse, not projecting; lateral angles absent. Disc of pronotum convex, mainly anteriorly, not strongly elevated from base to apex; without depression on each side of centro-lateral region; shiny, abundantly, finely punctate from base to apex, gradually coarser, more abundantly punctate laterally; latero-basal half confluently punctate; latero-apical half with small and abundant plates (as isolated scales); centrolongitudinal area almost impunctate; anterior edge sinuate. Metasternum laterally distinctly shagreened, punctures in this area almost indistinct, but moderately coarse and confluent, sparser and finer towards central area. Sculpture of metepisterna as on lateral area of metasternum, except on a moderately narrow region close to the metasternum, that is shiny and almost impunctate. Elytra abundantly, coarsely punctate; dorsal carinae distinct. Ventrites I-IV moderately coarsely, abundantly punctate centrally, laterally rough; ventrite V almost rough throughout; setae very short on ventrites I-IV (usually slightly longer and more abundant in centro-apical region of IV), moderately longer and abundant on ventrite V (mainly in centro-apical area). Profemur slightly longer than mesofemur; metafemur about 1.2 times longer than mesofemur. Tibiae not strongly enlarged towards apex [as in females (Fig. 59)]; dorsal surface distinctly longitudinally sulcated, mainly at apical two-thirds; apex of outer side of metatibiae without small teeth between upper and middle teeth. Tarsi not notably slender; tarsomeres III not bilobed; mesotarsomere I about as long as II-III together; meso- and metatarsomere V (Fig. 62) (without claws) about 1.2 times longer than I-III together; paronychium very distinctly exposed, with one seta.

Female (Fig. 125). Head less robust, width plus eyes equal to 0.9 to that of pronotum at anterolateral angles. Eyes broader than in males (larger width about 0.5 times length). Mandible subtriangular, length equal to about 0.55 times that of head, with same kind of punctures of males; dorsal carina present but less well defined and shorter than in male; inner edge with teeth similar in size. Median projection of labrum distinctly narrower than in male, truncated at apex. Sides of prothorax rounded. Antennae as in males. Anterolateral angles of prothorax projected forward, acute. Sculpture of pronotum similar to that of males, without plates near anterolateral angles; anterior edge as in males and with the same kind of variation.

**Variation**. General coloration of integument from brown to dark-brown (in both cases, always darker dorsally); dorsal surface of scape dark-brown; margins of prothorax just darker than the remaining surface; distal portion of ventrites lighter than the remaining surface when this latter is dark-brown, and darker when the remaining surface is brown. Male: width of head plus eyes from 0.90 to 0.95 times that of

pronotum at anterolateral angles; mandibles sub-falciform in major males and sub-triangular in minor males; length of mandible from 0.70 to 0.75 times that of head; teeth of inner edge of mandible with similar size in *minor* males; setae of inner face of mandible sparse (sometimes almost absent); punctation on the gibbosities of dorsal surface of the head, in *minor* males, moderately coarsely, not considerably abundant, slightly different from base to apex; punctation in the area between the posterior ocular edge and prothorax moderately sparse, and not more abundant and finer laterally (usually so in *minor* males); epistomal suture distinct almost throughout; declivity of the area between frons and central region of clypeus from slightly oblique to abrupt and vertical; surface of submentum not or slightly vermiculate, and punctures from somewhat deep to distinctly shallow; anterior edge of submentum distinctly elevated; antennae only reaching or almost reaching the posterolateral angles of prothorax; antennomere XI from 1.5 to 1.7 times longer than X; sides of prothorax parallel from the area of the lateral angles to anterolateral angles; sides of prothorax uniformly divergent from base to apex; anterolateral angles of prothorax rounded at apex; anterolateral angles of prothorax slightly projected forward; posterolateral angles of prothorax rounded; pronotum with a depression on each side of centro-lateral region, slightly or strongly marked; anterior edge of pronotum slightly or not sinuate. Female: length of mandible from 0.55 to about 0.70 times that of head; median projection of labrum from truncate to slightly rounded at apex; sides of prothorax as in males and with the same type of variation; anterolateral angles of prothorax slightly projected forward; anterolateral angles of prothorax rounded at apex.

**Dimensions in mm (male/female)**. Total length (including mandibles), 13.0-22.8/12.1-25.3; prothorax: length, 2.9-5.0/2.6-5.1; anterior width, 3.6-6.0/3.0-6.1; posterior width, 3.1-4.9/2.9-5.8; humeral width, 3.5-6.3/3.3-7.1; elytral length, 7.6-12.5/7.7-15.3.

**Geographical distribution**. Gabon, Central African Republic, Equatorial Guinea, Democratic Republic of the Congo, Ivory Coast, Cameroon, Burundi and Rwanda. Based on the material examined we cannot confirm the presence of *Acutandra gabonica* in some other countries or islands. We cannot even confirm Angola as place of occurrence of the species, because we did not examine specimens from there. Although Thomson had recorded in the original description that he examined specimens from there, we do not know if the specimen(s) really correspond to the same species of the lectotype designated here. For the time being, we can exclude Chad as a country where *A. gabonica* occurs. This place was added by Arigony (1984) based on two females. We examined those females and saw that they are from Equatorial Guinea.

**Comments / types / type locality**. As recorded above, *Parandra gabonica* was described from Gabon, Ivory Coast ("Grand Bassan"), and Angola ("Benguela"). According to Quentin and Villiers (1975), there are three syntypes from Gabon, some specimens from Ivory Coast (unspecified amount), and specimens from Angola (unspecified amount). Apparently the specimens from Angola were not found by the authors (translation): "in his description he also cites specimens from Benguella". According to Cambefort (2007) Mniszech's collection is now deposited at MNHN (translation): "with the death of Mniszech, his collection was dispersed; but René Oberthür [Oberthür's Collection was purchased by the MNHN] was able to reconstruct almost entirely". Although Thomson did not mention the collector of the specimens from Gabon, probably it was Deyrolle who collected them. According to Cambefort (2007) (translation): "In 1856-1857, Mniszech and Thomson – who had a fierce competition but always with the utmost courtesy – joined forces to send Deyrolle to the Gabon to collect insects for them".

Quedenfeldt (1882) did not record how many species he had, but there were, at least, two specimens (male and female), because he commented about both sexes. Lameere (1902) synonymized *Parandra aterrima* under *P. gabonica* (translation): "I have not seen the type of *P. aterrima* Quedf. The description agrees point by point with *P. gabonica*. Quedenfeldt was especially impressed by the dark color of his specimens, and he said that he did not know a dark *Parandra*, but this is precisely the most common color of *P. gabonica*". It is curious that Lameere (1902) said "type of *P. aterrima*", and then write "exemplaires". Quentin and Villiers (1977) recorded (translation): "*aterrima*. The holotype is a dark male 22 mm long with the following labels: "Parandra aterrima Quedt. Q. n. sp.", "ex Museo Quedenfeldt", "Muséum Paris, 1952, coll. R. Oberthür"". However, as seen above, Quedenfeldt described the species based on more than one specimen. Thus, the specimen deposited at MNHN is a syntype and not holotype. Wendt (1984) also recorded on *P. aterrima* (translation): "1 Paratype / "Qaungo, v. Mechow; Parandra

aterrima Quedf.\*; Type; 73600" / Synonymous of *Parandra gabonica* THOMSON, 1857. QUENTIN and VILLIERS recorded in 1977 that Mus. Hist. Nat. Paris has the holotype male, while our specimen was not mentioned". As the specimen deposited at MNHN, the specimen from ZMHB is a syntype and not a paratype. Cambefort (2007: 275) confirmed that Quedenfeldt Collection is deposited at MNHN (translation): "His son Max, insect dealer in Berlin, died two months before him. Gustav Quedenfeldt added the collection of his son to his one, and all this set was bought in 1894 by René Oberthür". Horn and Kahle (1936: 217) also confirmed that this Collection is in MNHN: "Quedenfeldt, Gustav (sen., 1817-1891), Hinterlassene Coleop.-Sammlg. 1894 an R. Oberthür (Rennes)" [..., survivors of Coleoptera Collection, 1894 by R. Oberthür]. We do not know if the specimen deposited at ZMHB really is a syntype.

The exam of the photos of the syntype deposited at MNHN shows that the specimen, apparently, belongs to *Acutandra gabonica*. At least, it is not possible, through original description and photos, to affirm that the specimen does not belong to *A. gabonica*.

As to the type locality of *Parandra aterrima*, Quedenfeldt (1882) wrote (translation): "the species, in which the locality is not specified, were collected on upper Cuango". The Cuango (or Kwango) is a river that runs in Angola and Democratic Republic of the Congo. This is the case of *Parandra aterrima*: the locality was not mentioned. Thus, the type locality of *P. aterrima* is the upper Cuango river in the Democratic Republic of the Congo, and not Angola, as recorded by Ferreira (1980): "Angola: Benguela (THOMSON, 1857); Hinterland (QUEDENFELDT, 1882)".

As we are describing some new species from same area, it is possible that the type series of *P*. *gabonica* and *P*. *aterrima* comprises more than one species. Unfortunately, we could not examine all types personally.

Nearly all bibliographic citations for *Parandra gabonica* after Thomson (1858) could refer to different species. So, it becomes unviable to mention them in the bibliographical list or, at most, can be mention only as "*partim*".

Among those references to Acutandra gabonica (mentioned as Parandra gabonica) are:

- 1. Adlbauer and Mourglia 1995: 212 (recorded from Togo);
- 2. Aurivillius 1903: 259 (recorded from Cameroon);
- 3. Báguena-Corella 1941: 264 (recorded from Equatorial Guinea). *Parandra* was recorded as subgenus of *Isocerus* Illiger, 1801: "*Isocerus (Parandra) gabonicus*";
- 4. Báguena-Corella and Breuning 1962: 139 (recorded from Equatorial Guinea);
- 5. Basilewsky 1953: 84 (recorded from the Democratic Republic of the Congo);
- 6. Basilewsky 1955: 199 (recorded for the first time from Rwanda and Burundi). The author also mentions the species from Guinea, São Tomé Island, South Africa, eastern Africa, Comoros and the Democratic Republic of the Congo. We believe that the species does not occur in Comoros and São Tomé Island.
- 7. Burgeon 1928: 2 (recorded from Democratic Republic of the Congo);
- 8. Burgeon 1929: 57 (recorded from the Democratic Republic of the Congo);
- 9. Burgeon 1931: 71 (recorded from the Democratic Republic of the Congo). Arigony (1984) mentioned the three works of Burgeon (1928, 1929, 1931) as "*partim*", that is, for her, the species recorded by the author as *Parandra gabonica* comprises more than one species. We do not know why Arigony (1984) did this, because Burgeon (in the three works) did not mention the synonymous of the species, and recorded it only from the Democratic Republic of the Congo;
- 10. Coulibaly et al. 1989: 2 (recorded from Ivory Coast);
- 11. Decelle 1969: 335 (recorded from Ivory Coast). The author also recorded the species from throughout Africa at south of Sahara and Comoros;
- 12. Duffy 1957: 12, 36, 48-50 [recorded from Cameroon, Equatorial Guinea (Bioko), São Tomé and Principe (both Islands), Uganda, Ivory Coast, Ghana]. Arigony (1984) again recorded "*partim*" for the species recorded by the author as *Parandra gabonica*. We do not know why Arigony (1984) did this, because Duffy did not mention the synonymous of the species, and studied only specimens form São Tomé and Principe: "Material studied. 2L, São Tomé, 4.xi.1932, W. H. T. Tams, leg., in coll. B.M.";
- 13. Duffy 1980: 41(recorded from Uganda);
- 14. Ferreira 1980: 11 (recorded from several places in Africa; material examined from South Africa). We believe that the specimens examined by the author belong to *Meridiandra* **gen. nov.** Ferreira

(1980: 10) recorded on ventral sensorial area of antennomeres III-XI in *Parandra*: "not carinate medially". When he wrote on the two species mentioned by him from South Africa (*P. gabonica* and *P. thunbergii* [sic]) he did not discuss the presence or absence of the carinae. However, *Meridiandra capicola* (= *Parandra capicola*; = *Parandra thunbergii*) has the ventral sensorial area of the antennomeres I-III divided by carina. Ferreira (1980) did not record from where the specimens examined by him were.

- 15. Ferreira and Ferreira 1952: 29 (recorded from South Africa). It is very probable that the species recorded from South Africa by the authors belong to *Meridiandra* **gen. nov.** However, it is not possible to be sure, because the authors mentioned in the key to the species from South Africa characters that do not occur in *Meridiandra* (as the presence of gibbosities on dorsal surface of the head). But the specimens listed by them are from Cape Town (South Africa), where, apparently *Acutandra* gabonica does not occur;
- 16. Ferreira and Ferreira 1955: 178 (recorded from South Africa);
- 17. Ferreira and Ferreira 1959: 2 (recorded from South Africa, São Tomé and Principe, Equatorial Guinea, Senegal, Nigeria, Uganda, Angola, Ivory Coast, the Democratic Republic of the Congo, Cameroon, Gabon, Zambia, Tanzania);
- 18. Franz 1942: 47 (recorded from Equatorial Guinea). Recorded by Arigony (1984) as "*partim*". As regarding Burgeon (1928, 1929, 1931) we do not know why she did this;
- 19. Fuchs 1974: 222 (recorded from Republic of the Congo);
- 20. Gardner 1957: 11 (recorded from Kenya);
- 21. Gilmour 1956: 6 (recorded from South Africa). The species identified as *Parandra gabonica* by this author belongs to *Meridiandra* **gen. nov.**. Gilmour (1956: 4) wrote on the species of *Parandra* from Tropical and South Africa: "The antennae are almost glabrous, but bear a few scattered long setae. The segments are similar in both sexes; 11-segmented; short, not extending beyond the posterior border of the pronotum; the second segment is the smallest. The third to eleventh have two internal poriforous fossettes, separated by a carina, which may be very distinct, or almost obsolete". The species of *Acutandra* from Africa never have carina on the ventral sensorial area of antennomeres III-XI;
- 22. Hintz 1911: 425 (recorded from the Democratic Republic of the Congo);
- 23. Hintz 1919: 601 (recorded from Annobón Island). Probably the species involved is *A. camiadei* **sp. nov.**;
- 24. Jordan 1894: 142 (recorded from the Democratic Republic of the Congo);
- 25. Lameere 1902: 97 (*partim*) (recorded to whole Intertropical and Austral Africa). Observation: the citation of the author to Austral Africa corresponds to *Meridiandra capicola*, synonymized by him with *Acutandra gabonica*;
- 26. Lameere 1903: [recorded from Guinea, São Tomé and Principe (São Tomé Island), Cameroon, Gabon, Tanzania, Comoros, and South Africa]. We believe that *Acutandra gabonica* does not occur in Comoros, and that the species involved is *A. comoriana*. In the same way, we believe that *A. gabonica* also does not occur in Principe Island, where we only found *A. dasilvai* **sp. nov.**, and that it is not present in South Africa, where apparently only occurs *Meridiandra* **gen. nov.**;
- 27. Lameere 1912: 116 (recorded from the Democratic Republic of the Congo);
- 28. Lepesme and Breuning 1952: 49 (recorded from Ivory Coast to eastern and southern Africa);
- 29. Lepesme and Breuning 1953: 509 (recorded from Equatorial Guinea).
- 30. Lepesme 1953: 11 (recorded from Ivory Coast);
- 31. Mayne and Donis 1962: 156 (recorded from the Democratic Republic of the Congo);
- 32. Paulian and Villiers 1941: 205, fig. 17 (detail of the head of the larva);
- 33. Schouteden, 1920: 122 (recorded from the Democratic Republic of the Congo);
- 34. Villiers 1946: 13, fig. 48 (detail of the head of the larva);
- 35. Villiers 1957: 147 [recorded from São Tomé and Principe (São Tomé Island)]
- 36. Villiers 1966: 1220 (recorded from intertropical and austral Africa material examined from the Democratic Republic of the Congo). The specimens from South Africa belong to Meridiandra gen. nov.;
- 37. Wagner et al. 2008: 130 (recorded from Ghana); and,
- 38. Zuzarte and Serrano 1996: 174 (recorded from São Tomé and Principe).

1.

Curiously, Thomson (1861, 1867) recorded *Acutandra gabonica* only from Gabon, although he has described the species from three places in different countries.

Santos-Silva et al. (2010) wrote: "Quentin and Villiers (1975) designated two lectotypes for *Parandra* gabonica Thomson and thus, by the ICZN Code in force at that time and currently, both of those designations are invalid. Quentin and Villiers (1975) designated a lectotype for *Parandra gabonica*: "*P. gabonica* Thomson est représenté dans la collection de cet auteur par trois exemplaires du Gabon et quelques exemplaires de Côte d'Ivoire (Bassam); dans sa description il cite également des exemplaires de Benguella (coll. Mniszech). Nous désignons comme **lectotype** [male symbol] un exemplaire de 17 mm de longueur et comme **lectotype** [female symbol] un exemplaire de 20 mm de longueur". The designation actually has two problems. The first one is that Quentin and Villiers (1975) designated two lectotypes...That problem, by itself, makes the designations invalid, but there is another problem that permits the inclusion of that discussion here. The "lectotype" male of *Parandra gabonica* is a specimen of *C. austrocaledonica* (Montrouzier, 1861)".

There are three possibilities to explain why a specimen of *Parandra austrocaledonica* (currently *Caledonandra austrocaledonica*) was chosen as "lectotype" of *P. gabonica*:

- Quentin and Villiers (1975) wrongly chose a specimen that was not a member of the type series. This was possible for two reasons as follows:
  - a. Thomson did not put labels directly under the specimens. Thus, Oberthür could have put specimens among the types of Thomson, which could be not noted by Quentin and Villiers. Oberthür really did this in other boxes of Thomson's Collection (Martins, pers. comm. to Santos-Silva);
- b. The authors inadvertently, mistakenly labeled a specimen that was not a member of the type series.
- 2. Another person, after Quentin and Villiers (1975) changed the labels (for any reason);
- 3. Thomson mistakenly included in the type series a specimen from New Caledonia (from where *C. austrocaledonica* was described). This latter possibility is extremely improbable, mainly because the original description of *P. gabonica*, evidently does not agree with the features presented by *C. austrocaledonica*, mainly the some details of prothorax (translation): "Prothorax strongly surpassing the head at its base, rounded at the posterior lateral edges". In *C. austrocaledonica*, the posterolateral angles of prothorax are distinctly projected in an almost right angle.

The label (Fig. 122) accompanying the "lectotype male" of *P. gabonica* [sensu Quentin and Villiers (1975)] (Fig. 123), handwritten by Thomson with the name of the species, does not belong to it. Actually, it belongs to the type series.

Martins (1967) wrote (translation): "All type material of Thomson is labeled, only in the holotype, with small labels that have at the top "Th" (of Thomson) and at bottom the word "Type". The paratypes, when they exist, are devoid of any label. The other data concerning the species are placed in a box label left of the specimens with specification of: specific name, "Thoms.", the word "Type", the abbreviated title of publication and page number and, finally, abbreviation of precedence". The small label with the words "Th" and "Type" is not by Thomson, but by Oberthür (Tavakilian pers. comm. for Santos-Silva). The information, regarding the identification of type material in Thomson's Collection, could be confirmed in Dalens et al. (2010), who wrote the following words on the lectotype of *Anacanthus aquilus* Thomson, 1865 (translation): "To fix the identity of this species that was little cited after its description, we designated one lectotype from the type series of Thomson's Collection at National Museum of Natural History including three males and two females. This series included the handwritten label reproduced in Figure 7 and five specimens not individually labeled". We have a photo of the type series of this species, and we could see that the label is actually put left of the specimens, as affirmed by Martins (1967).

Thus, the specimens from the original type series does not have labels by Thomson, which can be seen in the photo of the labels (Fig. 124) of the "lectotype female" of *P. gabonica* [sensu Quentin and Villiers (1975)]: the three labels are not by Thomson. Other indication that the specimen chosen as "lectotype female" by Quentin and Villiers (1975) is really from the original type series (or, at least, from Thomson's Collection) is the form of the pin: narrowed at apex, near the apical button. This kind of pin is the same as used by Thomson in the holotype of *Parandra thunbergii* Thomson, 1867, and lectotype of *Parandra capicola* Thomson, 1861.

As we examined some specimens identified as *Parandra gabonica*, mentioned by Lameere (1903), Arigony (1984), and Gilmour (1954), we could conclude that some of them do not belong to this species, or that the identification is not conclusive:

- 1. Lameere (1903): IRSNB Collection: Central African Republic ["Pays des Niam-Niam (Musée de Bruxelles)"] corresponds to *A. gabonica* (?).
- 2. Gilmour (1954): IRSNB Collection: the Democratic Republic of the Congo ["Belgian Congo"] ["Sawasawa (Buhunde) (15-IX-29, A. COLLART)" (3 males)] – we found one male that corresponds to *A. gabonica*; ["Lubutu: Masua (27-IX-29, A COLLART)" (1 male)] – corresponds to *A. gabonica* (?).
- Arigony (1984): IRSNB Collection: Equatorial Guinea ["Ilhas Annobon" (3 males)] Not found. 3. Cameroon ["Buea" (3 females)] - Not found; ["Musake" (3 females)] - 2 correspond to A. gaetani **sp. nov.**; 1 corresponds to A. gabonica (?); ["Ekoko" (2 males, 6 females)] - 2 males and 4 females correspond to A. gabonica; 2 females correspond to A. gabonica (?). Central African Republic ["Niam" (1 male) – corresponds to A. gabonica (?). Gabon ["Ogoué" (9 males, 21 females)] – We found 6 males and 6 females that correspond to A. gabonica. Central African Republic ["Mongouba" (3 males, 13 females)] - We found 3 males and 6 females that correspond to A. gabonica; ["Ligunda" (1 female)] – Not found. Democratic Republic of the Congo ["Pangala" (1 female)] – Not found; ["Parc National Albert" (3 males, 1 female)] – Not found. Tanzania ["Niguelo" (5 males, 3 females)] - We found 3 females that correspond to A. conradti. MZSP Collection: Equatorial Guinea ["Chad" (sic)] ["Mongó" (2 females)] - correspond to A. gabonica (?). Gabon ["Ebebying" (1 female)] - Not found. BMNH Collection (only part of Parandrinae from Africa was sent to study): São Tomé and Principe [Equatorial Guinea (sic)] ["Ilha São Tomé" (1 male, 2 females)] - We found 1 male and 1 female that correspond to A. oremansi sp. **nov.**, and 1 male that corresponds to A. barclayi **sp. nov.** (thus, there are two males and one female with Arigony's label, and not the opposite; ["Ilha Principe" (1 female)] – Not found. USNM Collection: Cameroon ["Joko" (2 males)] – We found 1 male that corresponds to A. gabonica (?).

To maintain stability of the species, we are designating as **LECTOTYPE** of *Parandra gabonica* (Fig. 125-127) the female (examined by photos) deposited at MNHN that has the following labels (Fig. 124):

- 1. White [part printed, part handwritten] Parandra gabonica Thms. / Lectotype [female symbol] / Quentin & Villiers det. 1974
- 2. Red [part printed, part handwritten] Lectotype / [female symbol]
- 3. Ex-Musaeo James Thomson

Our friend Eugenio H. Nearns (Department of Biology, Museum of Southwestern Biology, University of New Mexico, Albuquerque, USA) tried to find the other true syntypes of *Parandra gabonica* in MNHN, without success.

We also designate as **LECOTYPE** of *Parandra aterrima* (Fig. 119, 120) the male (examined by photos) deposited at MNHN that has the following labels (Fig. 121):

- 1. Yellowish [handwritten] Parandra aterrima
- 2. Yellowish [handwritten] Ex-Musaeo Quedenfeldt
- 3. Red [printed] TYPE
- 4. White [part printed, part handwritten] = Parandra gabonica Thms. / CT / Quentin & Villiers det. 1974
- 5. White [printed] Muséum Paris / 1952 / Coll. R. Oberthür

Figures 1 and 2 in Quentin and Villiers (1975) correspond to *A. comoriana* (respectively male and female) and not to *A. gabonica*.

It is possible that *Acutandra gabonica* as defined in this work corresponds to more than one species. This could explain some of the variation found among the specimens. Unfortunately, at the moment it is not possible to resolve this doubt.

Acutandra garnieri sp. nov.

(Fig. 27, 28, 50, 79, 86, 158-161)

Etymology. Dedicated to Thierry Garnier, who provided specimens for this study.

**Type material**. Holotype male from CAMEROON (Fig. 86), *Southwest*: Ekok, IX.2010, [no collector indicated], ex TGPC (MZSP). Paratypes – CAMEROON, *Southwest*: Ekok, IX.2010, [no collector indicated], 3 males, 6 females (TGPC); Buea, female, X.2007, Moretto col. (TBPC); Kumba (Mokwalibe), female, XI.2010, J. Penancier col., (TBPC). *West*: female, VIII.1994, Moretto col. (TBPC).

**Description**. General coloration of integument dark-brown; dorsal surface almost black, mainly when seen without direct light; margins epipleura, margins of mesosternum and metasternum around coxal cavities, extreme distal of ventrites, and parts of legs blackish; margins of the scutellum darker than central area.

Male (Fig. 158). Body not or slightly flattened dorso-ventrally. Width of head plus eyes equal to 0.9 times that of pronotum at anterolateral angles; length of mandible equal to 0.9 times that of head, moderately coarsely, abundantly punctate on outer surface, slightly finer towards apex; inner surface with same kind of punctures of outer surface, sparser towards inner margin; mandibles sub-falciform; inner edge with the more basal tooth larger than more apical one; inner face with moderately long, sparse setae; outer face with very short setae on base, becoming microscopic towards apex; mandibular dorsal carina distinct, but not well delimited at outer face. Dorsal surface of head moderately finely, abundantly punctate on gibbosities, gradually sparser and coarser towards occiput, coarse, moderately sparser between gibbosities and prothorax (coarser and more abundant laterally), coarse, anastomosed near apex of ocular carinae; gibbosities well marked; area between gibbosities and ocular carinae with slight, somewhat elliptical depression, finely shagreened; sulcus between gibbosities deep, wide, frontally smooth and wider. Epistomal suture distinct only laterally. Clypeus medially slightly lower than plane of furrow between gibbosities of head; laterally with a slight depression; setae microscopic, sparse. Clypeolabral suture marked only laterally. Median projection of labrum (Fig. 27) wide, truncated at apex, medially slightly elevated; setae very short, sparse, centrally longer and more abundant. Ocular carina not bifurcated in "Y" near posterior edge of eyes. Eyes moderately narrow (larger width about 0.5 times length); upper ocular lobe 1.1 times wider than length of scape; posterior edge of lower ocular edge not strongly elevated in relation to the area behind it; posterior edge of upper ocular lobe elevated above the area behind it. Area behind eyes shagreened from apex of upper ocular lobe to basal third of lower ocular lobe, moderately coarse punctate behind basal third of upper ocular lobe, gradually sparser towards apex of the shagreened area; area not shagreened moderately finely, sparsely punctate and transversely striated. Submentum not distinctly separated from gula, distinctly separated from genae; surface shagreened, coarsely, shallowly, confluently punctate; anterior edge elevated; setae short, sparse. Mentum not produced laterally into paraglossae. Antennae (Fig. 50) reaching the apex of prothorax; length of antennomere XI equal to 1.5 times that of X; ventral sensorial area of antennomeres III-XI not divided by carinae; dorsal sensorial area of antennomere XI, very wide, well marked, short (about 0.3 times length of antennomere); apical third of antennomere XI abruptly inclined towards apex.

Sides of prothorax (Fig. 158) divergent from basal third to anterolateral angle, convergent from base of basal third to posterolateral angle; anterolateral angles projecting forward in acute angle, moderately rounded at apex; posterolateral angles obtuse, not projecting; lateral angles absent. Anterior half of pronotum transversally convex; disc not strongly elevated from base to apex (Fig. 160); disc shiny, finely punctate from base to apex; punctures becoming coarser laterally on basal half, without reaching the margin; lateral areas shagreened (more distinctly so on anterior half); basal half of lateral area rugose-punctate; apical half of lateral area with small and abundant plates (as isolated scales); anterior edge slightly sinuate. Metasternum (Fig. 159) distinctly shagreened laterally, more widely near mesocoxae, moderately coarsely, shallowly punctate in this area, more finely punctate in remaining area; on each side of basal third of metasternal sulcus one deep, rather large depression. Metepisterna distinctly shagreened, punctures slightly distinct. Elytra abundantly, moderately finely punctate (punctures coarser laterally); circumscutellar area slightly sparsely, finely punctate; elytral carinae marked. Ventrites I-IV distinctly shagreened (mainly laterally), moderately coarsely, shallowly punctate (punctures more distinct centrally); ventrite V with asperities in centro-apical area; setae very short and sparse (almost indistinct on ventrites I-III). Profemur as long as mesofemur; metafemur about 1.2 times longer than mesofemur. Tibiae not strongly dilated towards apex; dorsal surface longitudinally sulcated, more elevated on inner side. Tarsi not strongly slender; tarsomeres III not bilobed; mesotarsomere I slim in dorsal view, slightly shorter than II-III together; meso- and metatarsomere V (Fig. 79) (without claws) about 1.3 times longer than I-III together; paronychium very distinctly exposed, with one seta.

Female (Fig. 161). Head less robust, width plus eyes equal to 0.85 that of pronotum at anterolateral angles. Eyes as broad as in male. Mandible subtriangular, length equal to about 0.7 times that of head, with the same type of punctures as in males; dorsal carina present but less well defined and shorter than in male; inner edge with teeth similar to those in male, but less projected. Median projection of labrum (Fig. 28) distinctly narrower than in male, but also truncate. Sides of prothorax rounded; lateral angles as in males. Sculpture of pronotum similar to that of males, without plates near anterolateral angles; anterior edge as in males.

**Variation**. Parts of the head lighter. Male: length of mandible equal to 0.85 times that of head; epistomal suture almost indistinct; clypeus medially from in the same plane of the sulcus between the gibbosities to distinctly lower; clypeolabral suture marked throughout; antennae reaching the base of the elytra; length of the antennomere XI from 1.5 to 1.6 times that of X; sides of prothorax subparallel from middle to anterolateral angle, convergent from middle to posterolateral angle; anterolateral angle slightly projected backward; basal third of metasternal sulcus without depression on each side. Female: length of mandible from 0.6 to 0.7 times that of head; lateral margins of prothorax subparallel from middle to anterolateral angles, convergent from middle to anterolateral angles, anterolateral angles anterolateral angles and the margins of prothorax subparallel from middle to anterolateral angles, convergent from middle to posterolateral angles; anterolateral angles acute.

**Dimensions in mm (male/female)**. Total length (including mandibles), 16.4-21.0 (holotype)/17.5-21.2; prothorax: length, 3.7-4.7 (holotype)/4.0-4.8; anterior width, 4.7-6.0 (holotype)/4.7-5.6; posterior width, 4.1-4.8 (holotype)/4.7-5.4; humeral width, 4.9-6.0 (holotype)/5.3-6.4; elytral length, 9.7-12.0 (holotype)/ 11.7-14.0.

**Comments**. The holotype is missing the following parts: right antennomeres VIII-XI; left protarsus; left metatarsomeres III-V.

**Diagnosis**. Acutandra garnieri **sp. nov.** (Fig. 158-161) differs from A. gabonica (Fig. 125-128) as follows: Body more flattened dorso-ventrally; metatarsomere I slender at apex in dorsal view. It differs from A. gaetani **sp. nov.** (Fig. 154-157), by the head proportionally narrower in males, and by the elytral carinae more conspicuous. From Acutandra beninensis (Fig. 114-117) it differs by the antennomere XI longer, and by the metatarsomere I slender at apex in dorsal view.

# Stenandra Lameere, 1912

- Parandra (Stenandra) Lameere, 1912: 114; 1913: 13; 1919: 198; Gilmour 1956: 4, 8; Ferreira and Ferreira 1959: 3.
- *Stenandra*; Quentin and Villiers 1972: 208 (new status); 1975: 20; Ferreira 1980: 19; Santos-Silva 2002: 30 (key); Santos-Silva et al. 2010: 6, 72.

### Type species. Parandra kolbei Lameere, 1903, by monotypy.

**Redescription** [Adapted from Santos-Silva et al. (2010)]. Dorsal face of head, mandibles, genae, pronotum, elytra (mainly in apical third), pro-, meso- and metasternum, and femora with short to microscopic setae, relatively abundant. Dorsal face of head convex only near the prothorax or from anterior edge of eyes to the prothorax, without gibbosities between eyes. Ocular carina from absent to distinct; antennal tubercles large, placed almost dorsally on head. Clypeus moderately long, oblique, clearly separated from front by suture. Labrum wide, short, concave; median projection narrow and sub-acute or rounded. Mandibles

very similar in both sexes; as long as head in males, and as long as or shorter than head in females; triangular, with apex clearly curved inside; in males, separated at inner base; in females with inner base separated or not; outer face narrow at base, and with small tooth close to apex; dorsal carina with its limits not evident by inclination and width of inner face (absence of abrupt declivity between top of carina and beginning of inner face); inner margin with a strong concavity close to basal tooth of apex, and without evident teeth between that concavity and base. Eyes wide at ventral ocular lobes, and narrow at dorsal ocular lobes, emarginate; ocular posterior edge distinct. Mentum very sparsely setaceous. Galea extremely short, not reaching the base of first segment of maxillary palp. Antennae surpassing base of elytra; ventral sensorial area of antennomeres III-XI visible or not from side, divided by carina; dorsal sensorial area of antennomere XI large, deep, well delimited.

Pronotum convex; anterior edge slightly sinuate or concave; anterior angles slightly projected forward; lateral angles absent; posterior angles distinct, almost rectangular. Elytra strongly punctate. Veins MP3 and MP4 not fused at their apex (Fig. 55). Apex of prosternal process enlarged. Procoxal cavities closed behind (sometimes, slightly open). Tarsomere III not bilobed (Fig. 81). Paronychium absent.

**Included species.** Stenandra kolbei (Lameere, 1903) - Africa; S. vadoni Quentin and Villiers, 1972 - Africa; S. saitoae Komiya and Santos-Silva, 2011 – Indonesia; S. asiatica Komiya and Santos-Silva, 2011 – Vietnam.

Geographical distribution. Tropical Africa, Madagascar, Vietnam, and Indonesia (Fig. 102).

**Diagnosis**. Stenandra differs from Acutandra by the mandibles (Fig. 197, 200) distinctly more elongate and narrower towards apex after middle, by the presence of setae on elytra, and by the absence of paronychium. In Acutandra the mandibles (Fig. 154) are less elongate and proportionally larger towards apex, the elytra are glabrous, and the paronychium is very distinct. From Adlbauerandra gen. nov. it differs by the presence of spatulate setae on elytra (not so in Adlbauerandra), and by the absence of paronychium (present in Adlbauerandra). Stenandra differ from Meridiandra gen. nov. by the type of mandible and by the elytra with setae. In Meridiandra the mandibles (Fig. 208) are as in Acutandra, and the elytra are glabrous.

# Key to the species of Stenandra from Africa [adapted from Quentin and Villiers (1972)]

 Distance between anterior edge of eye and base of antennae equal to about scape length (Fig. 197). Madagascar
 Distance between anterior edge of eye and base of antennae from much shorter to shorter than length scape (Fig. 200). Central African Republic, Cameroon, Ivory Coast, Tanzania, Democratic Republic of the Congo, Gabon, Ghana, Liberia, Guinea, Mozambique, and Nigeria
 S. kolbei (Lameere)

### *Stenandra vadoni* Quentin and Villiers, 1972 (Fig. 94, 197-199)

Stenandra vadoni Quentin and Villiers, 1972: 209; 1975: 20; Komiya and Santos-Silva 2011: 42 (key).

**Original description** [Quentin and Villiers (1972: 209)] (translation): "Length: 17 mm (including mandibles). Male: Reddish-brown, shiny; antennae, mandibles, genae, pronotal margins and elytral suture blackish. Head sub-square, slightly convex; upper ocular lobe wide, distinctly separated from base of antenna; antennal tubercles *almost* null; median projection of labrum strong. Antennae short, not reaching pronotal base; scape cylindroconical, as long as wide; pedicel more than twice as wide as long; III as long as scape, sub-convex; antennomeres III to X gradually flattening and increasing in length, slightly larger at apex than at base, its apical ventral angle distinctly marked, tending to become dentiform towards apex; XI acuminate at apex, approximately one and half times longer than X, notably longitudinally

depressed. Pronotum very slightly transverse, slightly narrower at base than apex, with basal and lateral margins finely rimmed; anterolateral angles in obtuse tooth tilted downwards; sides sinuate only after middle. Elytra sub-parallel, narrowly rimmed, humeral angle distinct; disc with two coastlines obsolete, erased on apical third. Sutural angles separately rounded".

Geographical distribution. Described and known only from Madagascar (Fig. 94).

**Comments / types / type locality**. Quentin and Villiers (1972) recorded: "Madagascar Est; Maroantsetra, 26-XII-1966 (*J. Vadon*) (Muséum, Paris, holotype [male symbol])". Unfortunately, we did not examine specimens from that locality. The holotype (Fig. 197) is the only known specimen. Norbert Delahaye sent us photos (Fig. 197-199) in high resolution of the holotype (dorsal, ventral and lateral). Eugenio H. Nearns, examined the holotype for us, based on our suspicion, and confirmed that it is a female and not a male.

Quentin and Villiers (1972) showed the differences between *S. kolbei* and *S. vadoni* in the key. However, those differences are variable in *S. kolbei*, and thus, are not reliable to separate the species one from another:

- 1. "Tête transverse" [head transverse] in *S. kolbei*; "Tête subcarrée" [head sub-square] in *S. vadoni*. We examined specimens of *S. kolbei* with both types of head;
- 2. (translation) "Upper ocular lobe narrow and subcontiguous to the base of the antenna (ocular corner almost null)" in *S. kolbei*; (translation) "Upper ocular lobe wide, distinctly separated from the base of the antenna (ocular corner equal to half the upper ocular lobe)" in *S. vadoni*. In comparison of the upper ocular lobes of *S. kolbei* with those of *S. vadoni*, we observed no differences: they seemed identical in both species. The difference is in the size of the scape: very small in *S. vadoni* and, although variable, always distinctly larger in *S. kolbei*. This explains the distance between the anterior edge of eye and antenna ["canthus oculaire"].

Quentin and Villiers (1972) also wrote that the antennae are short, not reaching the base of the pronotum. However, the photos of the holotype indicate that they reach about the humeri, more or less as in *S. kolbei*.

### Stenandra kolbei (Lameere, 1903)

(Fig. 31, 52, 55, 81, 84, 86, 87, 89, 90, 91, 93, 95, 100, 200-202)

Parandra kolbei Lameere, 1903: 6; Burgeon 1931: 72.

Parandra (Stenandra) Kolbei; Lameere 1912: 116; 1913: 7 (cat.); 1919: 18; Schouteden 1920: 122; Gilmour 1956: 8; Ferreira and Ferreira 1959: 3; Mayne and Donis 1962: 156; Villiers 1966: 1220; Duffy 1980: 41.
Stenandra kolbei; Burgeon 1928: 3; Quentin and Villiers 1972: 208 (key); Ferreira 1980: 19; Jenis 2008: 121; Komiya and Santos-Silva 2011: 42 (key).

Material examined (all specimens are females). CAMEROON (Fig. 86), Centre: Ebogo, XI.2001, [no collector indicated] (TGPC); Mbalmayo, 19.I.1973, [no collector indicated; ex Breuning collection] (RMCA); III.1994, [no collector indicated] (KAG); Ndoupé, 3 females, VII.1989, Moretto col. (TBPC); Mount Febe (Yaoundé), female, III.1993, T. Bouyer col. (FVPC); Obout, 05.IV.2009, local collector (TBPC). IVORY COAST (Fig. 91), Lagunes: Adiopodoumé, 28.II.1976, G. Tavakilian col. (NDPC). GABON (Fig. 89), Estuaire Province: Valley of Mbei River, Mount Cristal, Kinguélé waterfall, 22.XI.2002, N. Delahaye col. (NDPC). TANZANIA (Fig. 100), Lindi: Utete (Rufiji river; 30 m; 08°02,8'S, 38°52,4E), Halada and Sni•ek col. (TBPC). GHANA (Fig. 90), Ashanti: Kumasi, IV.1998, T. Bouyer and E. Joly col. (TBPC). LIBERIA (Fig. 93), Bong: Suakoko, 31.III.1952, Blickenstaff col. (USNM); 05.IX.1952, Blickenstaff col. (USNM). DEMOCRATIC REPUBLIC OF THE CONGO (Fig. 84), Tshopo: 3 ex., Yangambi, 1953, C. Donis col. (RMCA); Kisangani (Stanleyville), 1947, P. Henrard col. (RMCA). Kongo Central: Mayidi, 1942, P. Van Eyen col. (RMCA). Kasai: Kanguba, IX.1945, R. E. Bertrand col. (RMCA). Kinshasa: Kinshasa (Léopoldville), 22-24.XI.1952, P. Basilewsky col. (MZSP). Ituri: Yindi, 03.V.1949, A. E. Bertrand col. (RMCA). NIGERIA (Fig. 95), Osun: Ile-Ife, 06.III.1971, J. T. Medler col. (RMCA); 20.IV.1971, J. T. Medler col.

(RMCA); 20.V.1971, J. T. Medler col. (RMCA). CENTRALAFRICAN REPUBLIC (Fig. 87), *Ombella-MPoko*: Bangui, [no date and collector indicated] (RMCA).

**Redescription**. General coloration of integument brown; distal portion of head, of mandibles, margins of prothorax (wider at basal and apical edges), margins of mesosternum and metasternum around coxal cavities, and parts of legs blackish (mainly tarsi); centro-basal area of the scutellum lighter than the remaining; scape, pedicel and antennomeres dark-brown, with blackish areas.

Female (Fig. 200). Body slightly flattened dorso-ventrally. Head transversal; width of head plus eyes equal to 0.95 times that of pronotum at anterolateral angles. Length of mandible equal to 0.9 times that of head; outer and inner surface coarsely, abundantly punctate (punctures elongate), gradually finer towards apex and inner margin; inner and outer faces with short, nearly all decumbent, moderately abundant spatulate setae, becoming shorter, less spatulate towards apex. Dorsal surface of head gradually, distinctly sloping from area between posterior ocular edge and prothorax to clypeus; area between eyes with shallow, wide, longitudinal sulcus; coarsely, abundantly punctate, mainly in the region between eyes and clypeus. Epistomal suture distinct only laterally. Clypeolabral suture indistinct throughout: boundary between clypeus and labrum almost distinct, due to the smooth area at the beginning of the labrum. Median projection of labrum (Fig. 31) sub-acute at apex, projected, but short. Area behind eyes coarsely, confluently punctate in the region of upper ocular lobes, punctures gradually finer, not confluent towards gula. Scape as long as width of upper ocular lobe. Antennomere (Fig. 52) XI 1.5 times longer than X; ventral sensorial area of antennomeres III-IX not visible from side, slightly visible in apical third of X, and throughout XI.

Pronotum coarsely, abundantly punctate (mainly laterally). Metasternum (Fig. 201) coarsely, abundantly punctate laterally, gradually, slightly finely punctate towards central region. Metepisterna moderately coarsely, confluently punctate in the area nearer elytra, shagreened in the area nearer metasternum. Ventrites coarsely, abundantly punctate, mainly laterally.

Male. Head and prothorax proportionally wider [see photo in Komiya and Santos-Silva (2011)].

**Variation**. General coloration of integument from brown to dark-brown; head from transversal to subsquare; margins of pronotum dark-brown at basal and apical edges; width of head plus eyes equal to that of pronotum at anterolateral angles; length of mandible from 0.75 to 0.90 times that of head; epistomal suture indistinct throughout; median projection of labrum almost null; antennomere XI from 1.4 to 1.6 times longer than X; ventral sensorial area of antennomere X not visible from side; ventral sensorial area of antennomere XI visible from side only in apical half or third, or not visible throughout.

**Wing venation**. All specimens in which we examined the wing venation have a very distinct and large sclerotized area (Fig. 55) on anal field. We do not know any other species of Parandrinae that have this sclerotized area. This area can possibly be a generic feature. Some wings studied also show some variations in the veins, as MP3 and MP4 not fused in the area where they separate from MP1+2, and a small additional vein leaving from AA. But those variations are not rare in Parandrinae.

**Dimensions in mm (female)**. Total length (including mandibles), 13.5-21.0; prothorax: length, 2.5-4.0; anterior width, 2.8-4.6; posterior width, 2.7-4.2; humeral width, 3.6-5.6; elytral length, 8.2-12.5. Length of male, according to Lameere (1903): "Long de 17 millimètres".

**Geographical distribution**. Central African Republic, Cameroon, Ivory Coast, Tanzania, the Democratic Republic of the Congo, Gabon, Ghana, Liberia, Guinea, Mozambique, and Nigeria.

**Types / type locality**. Holotype male described from Central African Republic ["Pays des Niam-Niam, Semio (Bohndorff)"], deposited at ZMHB.

### Adlbauerandra new genus

Type species. Parandra morettoi Adlbauer, 2004. Present designation.

**Etymology**. Dedicated to our colleague Karl Adlbauer (KAG), for his extensive contributions to the knowledge of African Cerambycidae. Feminine gender.

**Description**. Male: Body elongate. Dorsal area of head, between eyes, with gibbosities slightly marked. Ocular carina distinctly elevated from clypeus to posterior ocular edge; not bifurcated in "Y" near posterior edge of eyes. Eyes narrow; posterior ocular edge very prominent (Fig. 203); anterior ocular edge with concavity marked. Median projection of labrum weakly projecting. Mandibles (Fig. 203) distinctly not falciform, shorter than head, wide at base of latero-outer face; dorsal carina slightly elevated from base to apical third; inner margin with a single tooth, located about at middle, wide and oblique at apex; apex with two large teeth, visible dorsally, and a third tooth, small, not visible dorsally; infero-outer face without large tooth at middle. Submentum distinctly sloped from gena to anterior edge; setae distinct, moderately abundant. Hypostomal carinae elevated, mainly due the slope of the submentum. Galea long, surpassing apex of second segment of maxillary palp. Ventral sensorial area of antennae visible from side, divided by carina; ventral sensorial area of antennomere XI not extending into dorsal area.

Apical edge of prothorax slightly sinuate; anterolateral angles not projecting forwards; lateral margins subparallel from middle to apex and convergent from middle to base; lateral angles slightly marked; posterolateral angles sub-acute, slightly projecting; basal edge slightly rounded. Pronotum almost flat on disc, laterally curved downwards. Elytra punctate, with microscopic setae (slightly more distinct in apical third). Prosternal process somewhat wide (Fig. 204); sides parallel; apex truncate. Procoxal cavities clearly open behind. Tibiae dorsally sulcated. Tarsomeres I slender and elongate; tarsomere III slightly bilobed. Paronychium not exposed beyond the apex of the onychium; with one long seta.

Female: Eyes (Fig. 206, 207) as in male; anterior ocular edge with concavity marked. Median projection of labrum weakly projecting. Mandibles, submentum and antennae similar to those of male. Hypostomal carinae slightly elevated before anterior ocular edge. Anterior edge of prothorax largely concave. Pronotum, elytra and legs similar to those of male. Veins MP3 and MP4 fused at their apex (Fig. 56).

Included species. Adlbauerandra morettoi (Adlbauer, 2004).

Geographical distribution (Fig. 103). Central African Republic and Cameroon.

**Diagnosis**. *Adlbauerandra* **gen. nov.** differs from *Acutandra*: body slender (Fig. 203); posterior ocular edge very prominent throughout (Fig. 203); median projection of labrum not distinctly projecting forward. In *Acutandra* the body is wider (Fig. 158, 161), the posterior ocular edge is not very prominent (Fig. 151, 154), and the median projection of labrum is distinctly projected forward.

Adlbauerandra resembles the Parandra (Tavandra) Santos-Silva, 2003 from America, mainly some species as, for example, *P.* (*T.*) polita Say, 1835, by its slender body, submentum distinctly sloped from gula to anterior edge, hypostomal carinae elevated, and posterior ocular edge very prominent throughout, but differs notably by the mandibles of males not falciform (distinctly falciform in *Parandra* (*Tavandra*)).

It differs from *Stenandra* Lameere, 1912, mainly, by the procoxal cavities opened behind (closed in the former).

#### Adlbauerandra morettoi (Adlbauer, 2004), comb. nov.

(Fig. 32, 56, 86, 87, 203-207)

Parandra morettoi Adlbauer, 2004: 4.

*Birandra (Yvesandra) morettoi*; Santos-Silva and Shute 2009: 32 (provisional new comb.); Santos-Silva et al. 2010: 3, 6.

Material examined. CAMEROON (Fig. 86), *Centre Province*: Libamba (10 km east of Makak), female, 16.III.1974, J. A. Gruwell col. (USNM).

**Redescription**. General coloration of integument reddish-brown; distal portion of head, parts of mandibles, margins of prothorax, margins of mesosternum and metasternum around coxal cavities, and parts of legs

blackish; centro-basal area of the scutellum lighter than the remaining; scape, pedicel and antennomeres dark-brown, with blackish areas.

Male (Fig. 203). Body slightly flattened dorso-ventrally. Width of head plus eyes a little wider than that of pronotum at anterolateral angles. Mandibles sub-falciform; length of mandible equal to about 0.75 times that of head (including the median projection of labrum); outer and inner surface moderately coarsely, abundantly punctate; inner face with stripe of moderately long setae near inner edge, and very short, sparse setae in the remaining area; outer face with very short, sparse setae; basal half of outer face almost flat and vertical. Dorsal surface of head moderately coarsely, sparsely punctate on central area between eyes (this region almost triangular, with vertex about at level of posterior edge of eyes, and base at clypeus), punctures gradually becoming coarser and more abundant towards occiput and lateral areas; depression between gibbosities and ocular carinae distinct, elongate. Epistomal and clypeolabral sutures distinct only laterally: boundaries between frons and clypeus, and between clypeus and labrum almost indistinct, uniformly sloping from frons to the apex of labrum. Median projection of labrum rounded at apex. Area behind eyes moderately coarsely punctate in the region of upper ocular lobes. Antennae almost reaching the posterolateral angles of prothorax; antennomere XI about twice as long as X; ventral sensorial area of antennomeres III-XI with abundant, short setae.

Pronotum coarsely, abundantly punctate (mainly laterally); anterior edge slightly sinuate. Apex of outer side of meso- and metatibiae with denticles situated between upper and middle teeth (sometimes, one or more of them large).

Female (Fig. 205). Width of head plus eyes a little slender than that of pronotum at anterolateral angles. Eyes (Fig. 207) wide (larger width about 0.5 times length). Length of mandible equal to about 0.6 times that of head. Median projection of labrum (Fig. 32) as in male.

**Dimensions in mm (female)**. Total length (including mandibles), 11.5; prothorax: length, 2.4; anterior width, 2.5; posterior width, 2.3; humeral width, 2.8; elytral length, 7.0.

**Types / type locality**. Holotype and paratype males described from the Central African Republic (Bayanga) (Fig. 87), deposited, respectively at KAG and PMPC.

#### Meridiandra new genus

Type species. Parandra capicola Thomson, 1861. Present designation.

**Etymology**. Combination of meridianus (Latin) = south with *Parandra*. Alluding to the country where the genus occurs (South Africa). Feminine gender.

**Description**. Dorsal area of head, between eyes, without gibbosities. Ocular carina slightly elevated from posterior ocular edge to clypeus; not bifurcated in "Y" near posterior edge of eyes. Eyes moderately narrow (Fig. 210); posterior ocular edge prominent (Fig. 208); anterior ocular edge with concavity well marked. Epistomal suture only visible laterally or distinct throughout. Clypeal base not vertical or strongly oblique. Clypeolabral suture visible in full extension or only laterally. Median projection of labrum of males rounded at apex, somewhat narrower, rounded in females. Mandibles of major males (Fig. 210) subfalciform, shorter than head, wide at base of latero-outer face; dorsal carina not strongly elevated, not or slightly surpassing basal half in both sexes; inner margin with two teeth, together protracted, located about middle, usually distinctly separated at their apex (mainly in major males); apex with two large teeth, visible dorsally, and a third, small tooth, not visible dorsally; infero-outer face without large tooth at middle. Mandibles of females (Fig. 212) Birandra-like, shorter or distinctly shorter than head, similar to those of males. Submentum with moderately long setae. Galea long (reaching, at least, middle of third segment of maxillary palp). Ventral sensorial area of antennomeres III-IX (Fig. 53) slightly visible from side, distinctly visible in the antennomeres X-XI, divided by carina; ventral sensorial area of antennomere XI apically fused with dorsal sensorial area; dorsal sensorial area of antennomere XI not divided by carina.

Pronotum convex with disc slightly flat; anterior edge from slightly to distinct sinuate in both sexes; anterolateral angles of males projected or not forward; projected forward in females; lateral margins subparallel at anterior two thirds in both sexes (sometimes moderately convergent towards anterolateral angles), convergent towards posterolateral angles in posterior third; lateral angles indistinct; posterolateral angles from obtuse to rounded. Elytra glabrous, punctate. Veins MP3 and MP4 fused at their apex (Fig. 57). Apex of prosternal process barely enlarged. Dorsal face of tibiae usually distinctly furrowed. Procoxal cavities clearly open behind. Tarsomeres I-II slender and elongate (mainly tarsomere I); tarsomere III bilobed (Fig. 63). Paronychium present, not exposed beyond the apex of the onychium and with one long seta.

Included species. Meridiandra capicola (Thomson, 1861).

## Geographical distribution (Fig. 103). South Africa.

**Diagnosis**. *Meridiandra* **gen**. **nov**. differs from *Acutandra*: veins MP3 and MP4 fused at their apex (Fig. 57) (not fused in *Acutandra*). From the African species of *Acutandra* it also differs by the ventral sensorial area of antennomeres III-XI divided by carina, and by the paronychium, not exposed beyond the apex of the onychium. In African species of *Acutandra* the ventral sensorial area of antennomeres III-XI is not divided by carina and the paronychium is distinctly exposed beyond the apex of the onychium. It differs from *Adlbauerandra* **gen**. **nov**. mainly by the elytra glabrous (with short setae in *Adlbauerandra*), and from *Komiyandra* Santos-Silva et al., 2010 by the absence of gibbosities on dorsal surface of head (present in *Komiyandra*). From *Neandra* Lameere, 1912 it differs, mainly by the presence of paronychium (absent in the former).

## Meridiandra capicola (Thomson, 1861), comb. nov.

(Fig. 33, 34, 53, 57, 63, 82, 99, 208-214)

Parandra capicola Thomson, 1861: 81; 1867: 107, 112; Lacordaire 1868: 23 (note); Thomson 1878: 4; Lameere 1902: 97 (syn.); Quentin and Villiers 1977: 128 (reval.); Arigony 1984: 107; Santos-Silva 2002: 32 (note).
Parandra thunbergii Thomson, 1867: 112; 1874: 4; Lacordaire 1868: 23 (note).

Parandra thunbergi; Lameere 1902: 100; 1912: 116; 1913: 7; 1919: 18; Ferreira and Ferreira 1952: 31; 1955: 178; Gilmour 1956: 4; Ferreira and Ferreira 1959: 3; Quentin and Villiers 1977: 128 (*syn.*); Ferreira 1980: 16.

Birandra (Yvesandra) capicola; Santos-Silva and Shute 2009: 32.

**Material examined**. SOUTH AFRICA (Fig. 99), Western Cape: Cape Town (33°57'S, 18°24'E), female, I.1961, Block col. (SACI); (Camp's bay), female, 09.XII.1954, A. L. Capener col. (RMCA); George (33°58'S, 22°28E), male, I.1979, S. J. V. Tonder col. (SACI); (Saassveld), male, I.1970, H. Geertsema col. (SACI); Simonstown (34°12'S, 18°27'E), male, 31.I.1919, J. J. Cillie col. (MZSP); female, 31.I.1961, J. J. Cillie col. (SACI); male, 19.I.1962, A. Boonzdaick col. (SACI); male, 11.I.1963, [no collector indicated] (SACI); 1 male, 2 females, 26.II.1964, A. Boonzdaick col. (SACI); Nature's Valley (33°59'S, 23°34E), female, I.1979, S. J. V. Tonder col. (SACI). Eastern Cape: Storms River Mouth (34°02'S, 23°54'E; 220 m), female, 17-18.II.2001, M. W. Mansell, H. and U. Aspöck, H. Hölzel and P. Duelli col. (SACI); male, II.1986, [no collector indicated] (TBPC); 7 km SW Kareedouw (33°59'S, 24°14'E, 260 m), 2 males, 2 females, 7-8.I.2010, A. Kudrna Jr. col. (AKCO). Northern Cape: Montagu, female, 21.I.2001, M. Snizek col. (TBPC).

**Redescription**. General coloration of integument reddish-brown; dorsal surface slightly darker than ventral surface; parts of head, of mandibles, margins of prothorax, margins of elytra (suture and epipleura), margins of meso- and metasternum, and parts of legs blackish; margins of scutellum and extreme distal area of ventrites darker than remaining surface.

Male (Fig. 208). Body not flattened dorso-ventrally (Fig. 210). Head elongate behind eyes. Width of head plus eyes equal to 0.9 times that of pronotum at anterolateral angles. Length of mandible equal to

0.8 times that of head, coarsely, abundantly punctate on outer, dorsal, and inner surfaces, finer towards apex and confluent on basal third of outer surface; dorsal surface, between outer surface and dorsal carinae, flat (mainly in *major* males); basal third of outer surface almost vertical; inner face with moderately long and sparse setae; outer and dorsal face with short, sparse setae (shorter towards apex). Dorsal surface of head finely, sparsely punctate on central area between eyes and clypeus, coarsely, abundantly punctate laterally, distinctly coarser and confluent near apex of ocular carina, punctures coarse and sparse in central area near prothorax, and distinctly coarser towards area behind eyes; area near ocular carina somewhat depressed. Clypeus moderately coarsely, sparsely punctate (more distinctly laterally); setae short, moderately sparse in centro-basal region, sparser laterally; almost absent towards apex of median projection. Apex of median projection of labrum (Fig. 33) with one long seta on each side. Larger width of eyes about 0.55 times length. Area behind eyes coarsely, moderately sparsely punctate, punctures slightly finer and sparser towards apex of lower ocular lobes. Submentum slightly separated from gula, distinctly separated from genae, gradually depressed towards anterior edge; surface coarsely, abundantly punctate; anterior edge elevated; hypostomal carinae distinct. Antennae (Fig. 53) reaching base of elytra; antennomere XI 1.6 times longer than X; apical third of antennomere XI gradually inclined towards apex.

Anterolateral angles of prothorax (Fig. 208) rounded at apex. Disc of pronotum finely, moderately sparsely punctate from base to apex, gradually coarser, more abundantly punctate laterally, mainly towards anterolateral angles; area near to anterolateral angles without small plates. Metasternum (Fig. 209) laterally and anteriorly coarsely, deeply, moderately abundantly punctate, finer, sparser punctate towards central area. Metepisterna coarsely, abundantly, partially confluently punctate. Elytra abundantly, coarsely punctate, mainly laterally; dorsal carinae absent. Ventrites moderately coarsely, abundantly punctate, mainly laterally; setae short (mainly centrally) on ventrites I-IV, moderately longer and abundant on ventrite V (mainly on centro-apical area). Profemur slightly longer than mesofemur; metafemur about 1.1 times longer than mesofemur. Tibiae strongly enlarged towards apex, mainly protibiae; protibiae with brush of setae on ventral surface; meso- and metatibiae dorsally sulcated, mainly in apical two-thirds; apical cavity of meso- and metatibiae, where the tarsi is inserted, wide on side opposite to tibial spurs. Tarsi not notably slender; mesotarsomere I slightly longer than II-III together; meso- and metatarsomere V (Fig. 82) (without claws) shorter than I-III together (length equal to about 0.75 times), in dorsal view, slender on basal half; paronychium not exposed beyond the apex of onychium, with one seta.

Female (Fig. 211). Head slightly less robust, width plus eyes equal to 0.8 to that of pronotum at anterolateral angles. Eyes as in males. Mandibles similar to that of males, length equal to about 0.6 times that of head, with the same type of punctures as in males; setae of inner surface as in male. Median projection of labrum (Fig. 34) slightly narrower than in male, of the same shape. Sides of prothorax slightly rounded. Sculpture of pronotum similar to that of males, punctures slightly sparser; anterior edge as in males; lateroanterior angles as in males, with the same kind of variation.

**Dimensions in mm (male/female)**. Total length (including mandibles), 12.5-17.3/13.2-19.1; prothorax: length, 2.6-3.7/2.5-3.8; anterior width, 3.4-5.1/3.1-4.8; posterior width, 2.9-4.4/2.9-4.6; humeral width, 3.4-5.0/3.3-5.3; elytral length, 7.4-10.2/8.0-11.8.

**Variation**. General coloration of integument from reddish-brown to brown; dorsal surface of the same color to slight darker than ventral surface; blackish parts could be dark-brown. Males: width of head plus eyes from 0.85 to 0.90 times that of pronotum at anterolateral angles; length of mandible from 0.65 to 0.80 times that of head; submentum distinctly separated from gula; antennomere XI from 1.4 to 1.6 times longer than X; anterolateral angles of prothorax acute at apex; posterolateral angles of prothorax rounded. Females: width of head plus eyes equal from 0.8 to 0.9 times that of pronotum at anterolateral angles; sides of prothorax as in males.

**Comments / types / type localities**. Quentin and Villiers (1977) characterized the types of *Parandra capicola* as follows (translation): "Species described based on several specimens from Cap (Collection Buquet, Mniszech and Thomson); there are only one specimen from Thomson's Collection and one from Mniszech's Collection. We designated as LECTOTYPE a male specimen from Thomson's Collection measuring 17 mm in length and equipped with three labels: one handwritten label "Capicola Type Thom. Mon. Cap", two rectangular printed by R. OBERTHÜR with "ex Museum James Thomson". We examined

photos in high resolution of the lectotype sent by our colleague Norbert Delahaye (Fig. 215-218). It is important to record that Thomson (1861) stated he had specimens from Buquet and Mniszech collection besides his collection, but he did not state how many specimens he examined: "Patria : Cap. Long. 17-20 mill.; lat. 5-6 12 mill". The lectotype and paralectotype are deposited at MNHN.

The holotype of *Parandra thunbergii* is also deposited at MNHN, and we also examined its photos sent by Norbert Delahaye (Fig. 211-214). Quentin and Villiers (1977) wrote: "holotype [male symbol] (MNHN, Paris)". However, the photo of the holotype shows that the specimen is a female. Thomson (1867) also mentioned that the specimen was a male: "Patria : Cap. [male symbol] Long., 20 mill.; lat., 6 mill.". Notwithstanding, the original description obviously perfectly agrees with the female specimen labeled as holotype.

Gilmour (1954) compared the *P. gabonica* and *P. thunbergii* [*sic*] as follows: "Regarding the separation of this species from *Parandra* (s. str.) *thunbergi* THOMSON, care should be taken regarding the character of lack of a lateral carina on each side of the submentum in *Parandra* (s. str.) *gabonica* THOMSON, and its presence in *Parandra* (s. str.) *thunbergi* THOMSON. A faint trace of this may be seen in this species [*P. gabonica*] and I believe that stronger separative reliance should be placed on other characters as given in my Revision". This is not a good character to separate these species. However, Gilmour (1956) kept this character and added two others (far better, mainly concerning the tarsi): "It is easily distinguished from *P. (P.) gabonica* Thoms., by the structure of the submentum and the tarsi, apart from being much lighter in colour". The tarsomere III is distinctly bilobed in *Meridiandra capicola* and not so in *Acutandra gabonica*.

#### Neandra brunnea (Fabricius, 1798)

Species described by "Indiis" and with several synonyms. Chemsak (1996) recorded the species from the United States and Canada ("Central and eastern North America to Texas and Idaho"). Duffy (1953) recorded *N. brunnea* in the United Kingdom as "Occasionally imported in timber from North America". Mattson et al. (2007) affirmed that the species is established in Europe.

The specimen examined was collected in "Canadian elm wood" (Ulmus sp.). Plants of this genus have been recorded as hosts of *N. brunnea* [Duffy (1953); Brooks (1915)]. We do not know if the species is actually established in South Africa.

**Material examined**. SOUTH AFRICA, *Western Cape*: Simonstown (34°12'S, 18°27'E), male, 16.VI.1945, [no collector indicated] (SACI).

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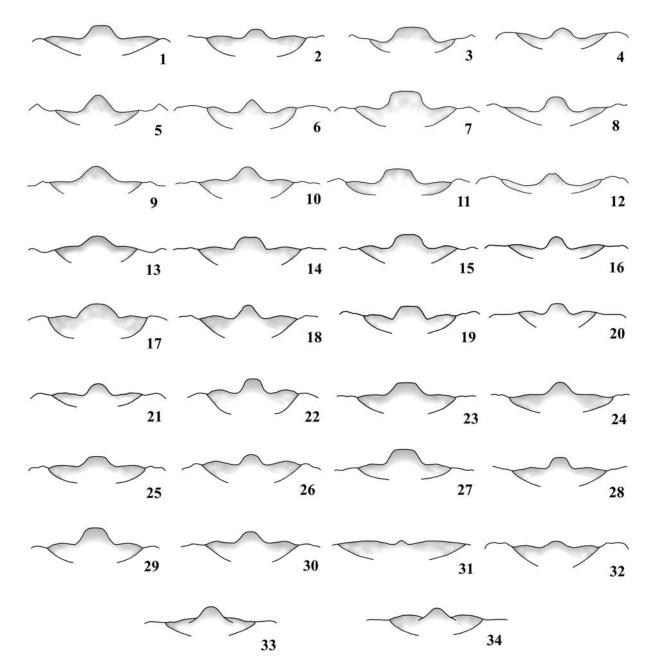
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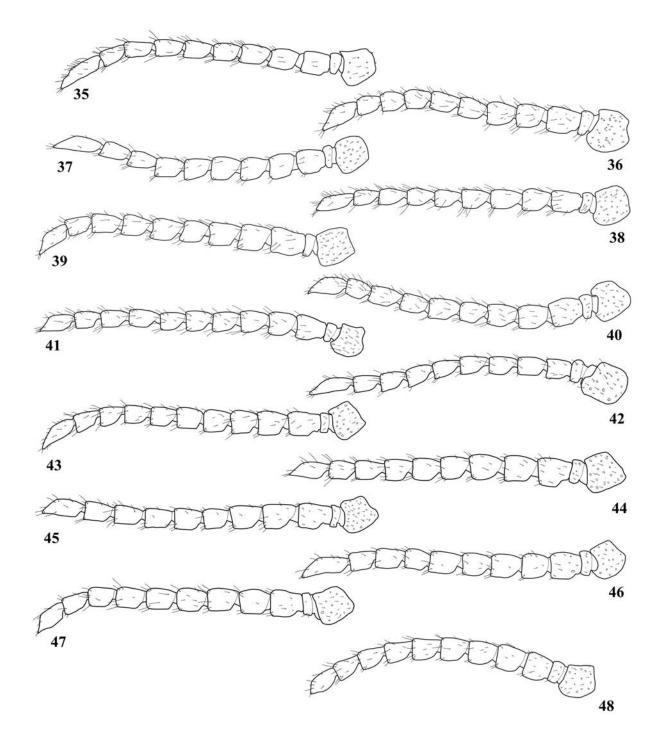
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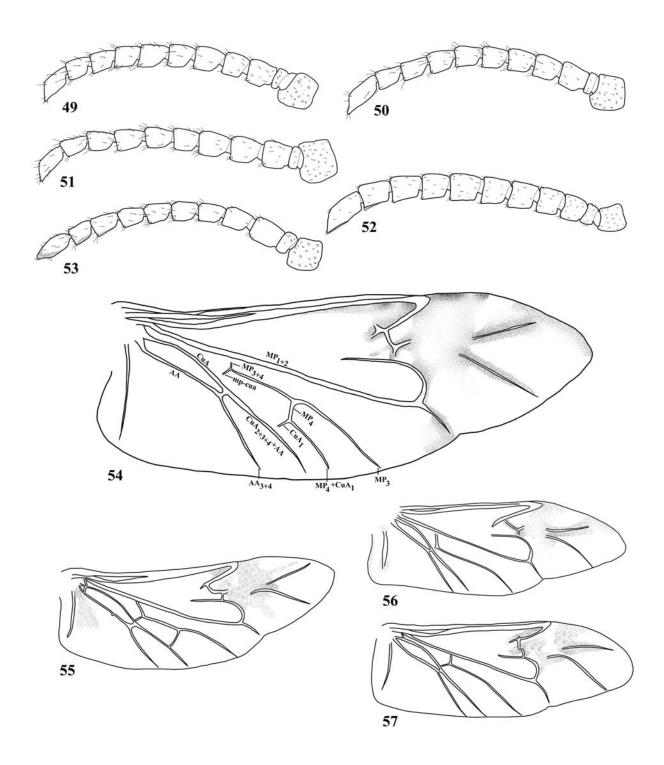
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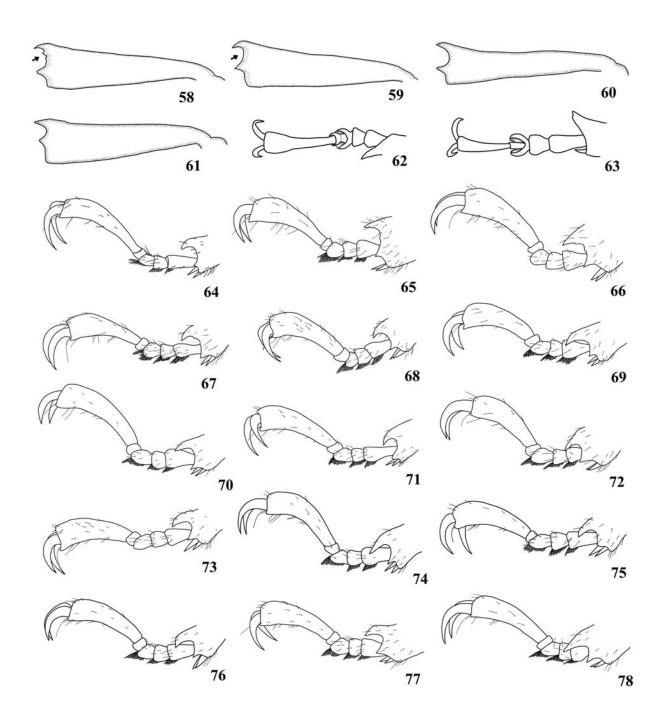
Figures 1-34. Labrum- 1-2, Acutandra conradti: 1) male; 2) female. 3-4, A. oremansi: 3) holotype male; 4) paratype female. 5-6, A. amieti: 5) paratype male; 6) paratype female. 7-8, A. gaetani: 7) paratype male; 8) paratype female. 9-10, A. vingerhoedti: 9) holotype male; 10) paratype female. 11-12, A. dasilvai: 11) paratype male; 12) paratype female. 13) A. leduci, holotype male: 14) A. delahayei, holotype male. 15-16, A. camiadei: 15) holotype male; 16) paratype female. 17-18, A. quentini: 17) holotype male; 18) paratype female. 19-20, A. plenevauxae: 19) holotype male; 20) paratype female. 21) A. noellae, holotype female. 22) A. leonardi, holotype male. 23-24, A. barclayi: 23) holotype male; 24) paratype female. 25) A. hugoi, paratype male. 26) A. jolyi, holotype male. 27-28, A. garnieri: 27) holotype male; 28) paratype female. 29-30, A. lucasi: 29) holotype male; 30) paratype female. 31) Stenandra kolbei, female. 32) Adlbauerandra morettoi, female. 33-34, Meridiandra capicola: 33) male; 34) female.



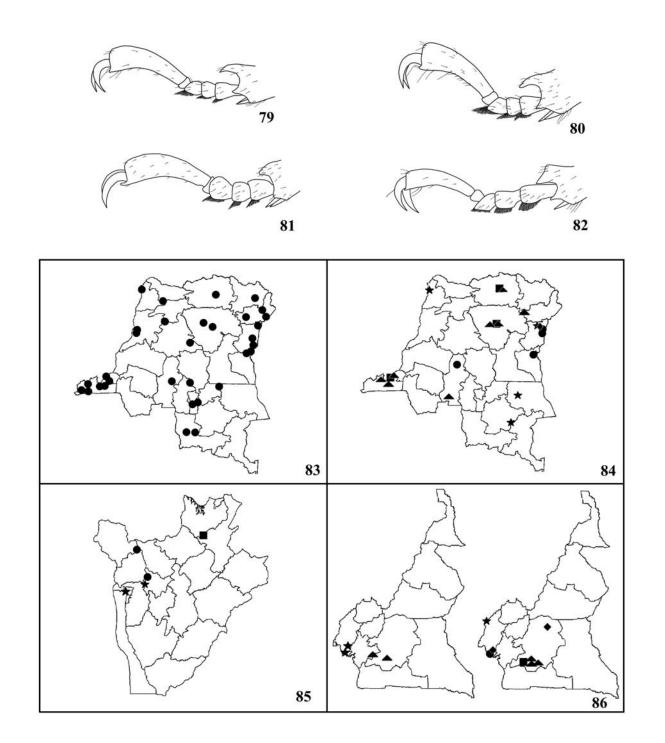
Figures 35-48. Antennae- 35) Acutandra oremansi, holotype male. 36) A. amieti, paratype male. 37) A. gaetani, paratype male. 38) A. vingerhoedti, holotype male. 39) A. dasilvai, paratype male. 40) A. leduci, holotype male. 41) A. delahayei, holotype male. 42) A. camiadei, paratype male. 43) A. quentini, holotype male. 44) A. plenevauxae, holotype male. 45) A. noellae, holotype female. 46) A. leonardi, holotype male. 47) A. barclayi, holotype male. 48) A. hugoi, paratype male.



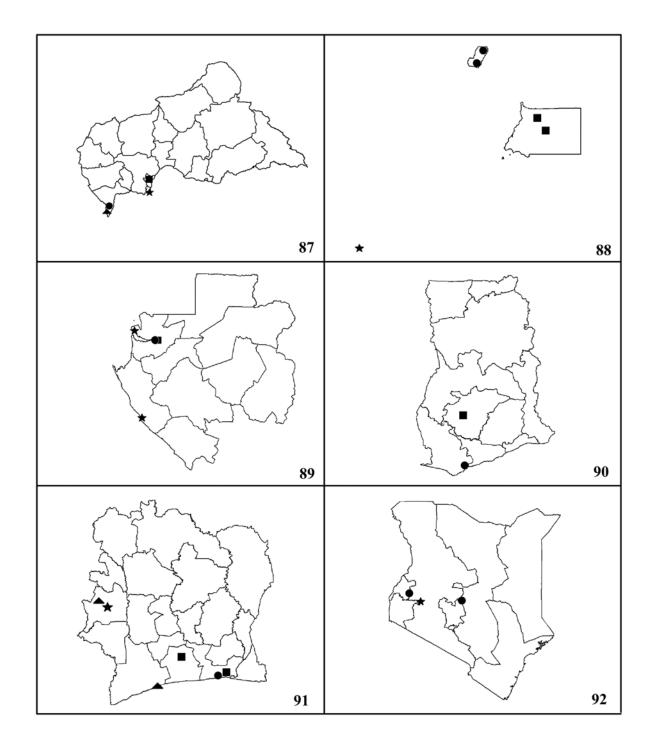
**Figures 49-57**. Antennae- **49**) *Acutandra jolyi*, holotype male. **50**) *A. garnieri*, holotype male. **51**) *A. lucasi*, holotype male. **52**) *Stenandra kolbei*, female. **53**) *Meridiandra capicola*, male. Wing- **54**) *Acutandra oremansi*, holotype male. **55**) *Stenandra kolbei*, female. **56**) *Adlbauerandra morettoi*, female. **57**) *Meridiandra capicola*, male.



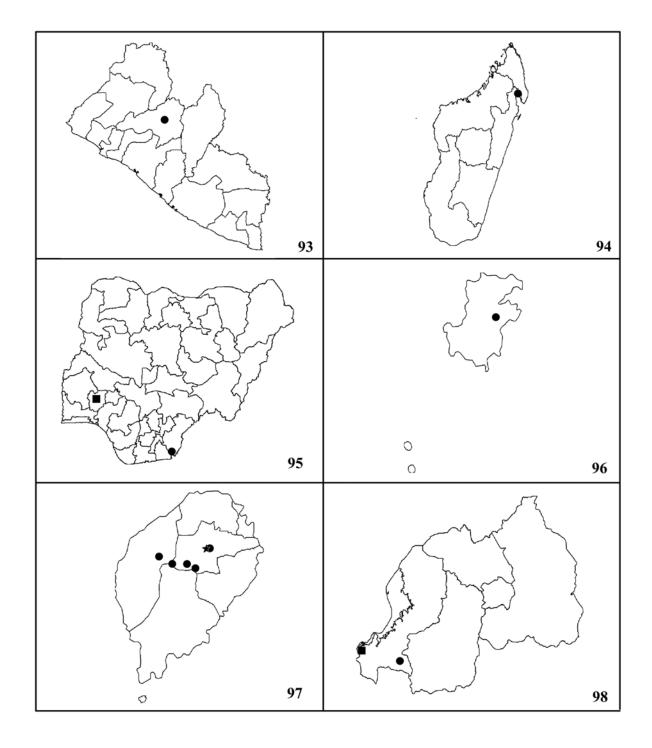
Figures 58-78. Metatibiae- 58) Acutandra comoriana, female. 59) A. gabonica, female. 60) A. gaetani, holotype male. 61) A. quentini, holotype male. Metatarsi, dorsal view- 62) Acutandra gabonica, male. 63) Meridiandra capicola, male. Metatarsi, lateral view- 64) A. oremansi, holotype male. 65) A. amieti, paratype male. 66) A. gaetani, paratype male. 67) A. vingerhoedti, holotype male. 68) A. dasilvai, paratype male. 69) A. leduci, holotype male. 70) A. delahayei, holotype male. 71) A. camiadei, holotype male. 72) A. quentini, holotype male. 73) A. plenevauxae, holotype male. 74) A. noellae, holotype female. 75) A. leonardi, holotype male. 76) A. barclayi, holotype male. 77) A. hugoi, paratype male. 78) A. jolyi, holotype male.



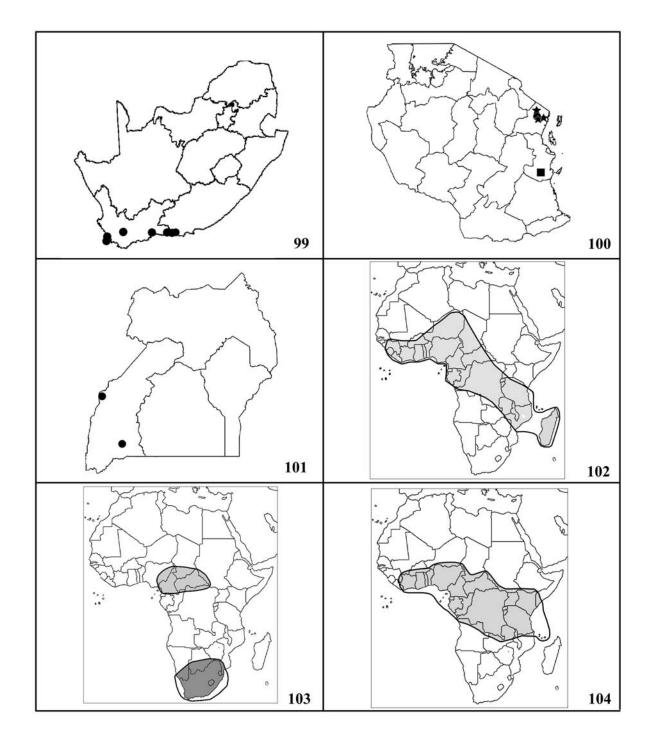
Figures 79-86. Metatarsi, lateral view- 79) Acutandra garnieri, holotype male. 80) A. lucasi, holotype male. 81) Stenandra kolbei, female. 82) Meridiandra capicola, male. Maps- 83) Democratic Republic of the Congo, Acutandra gabonica. 84) Democratic Republic of the Congo: A. amieti (circle); A. plenevauxae (star); A. hugoi (square); A. lucasi (diamond); Stenandra kolbei (triangle). 85) Burundi: A. vingerhoedti (circle); A. gaetani (star); A. gabonica (square). 86) Cameroon: A. gabonica (diamond); A. gaetani (circle); A. garnieri (star); Adlbauerandra morettoi (square); Stenandra kolbei (triangle).



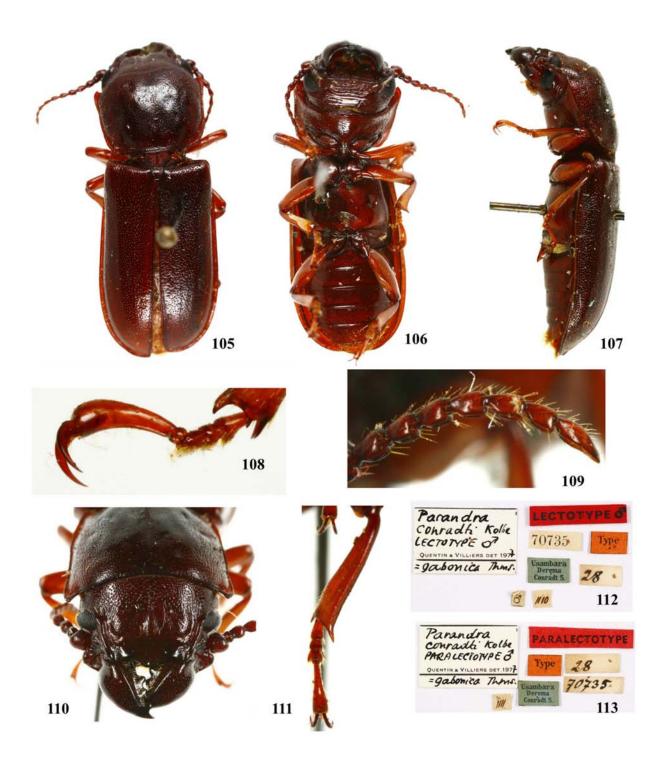
Figures 87-92. Maps- 87) Central African Republic: Adlbauerandra morettoi (circle); Stenandra kolbei (square); Acutandra gabonica (star); Acutandra plenevauxae (triangle). 88) Equatorial Guinea: Acutandra gaetani (circle); A. camiadei (star); A. gabonica (square). 89) Gabon: Acutandra noellae (circle); A. gabonica (star); Stenandra kolbei (square). 90) Ghana: Acutandra jolyi (circle); Stenandra kolbei (square). 91) Ivory Coast: Stenandra kolbei (circle); Acutandra gabonica (square); Acutandra jolyi (star); Acutandra grobbelaarae (triangle). 92) Kenya: Acutandra quentini (circle); A. leonardi (star).



**Figures 93-98**. Maps- **93**) Liberia: *Stenandra kolbei*. **94**) Madagascar: *Stenandra vadoni*. **95**) Nigeria: *Acutandra beninensis* (circle); *Stenandra kolbei* (square). **96**) São Tomé and Principe (Principe Island): *Acutandra dasilvai*. **97**) São Tomé and Principe (São Tomé Island): *Acutandra oremansi* (circle); *A. delahayei* (star). **98**) Rwanda: *Acutandra vingerhoedti* (circle); *A. gabonica* (square).



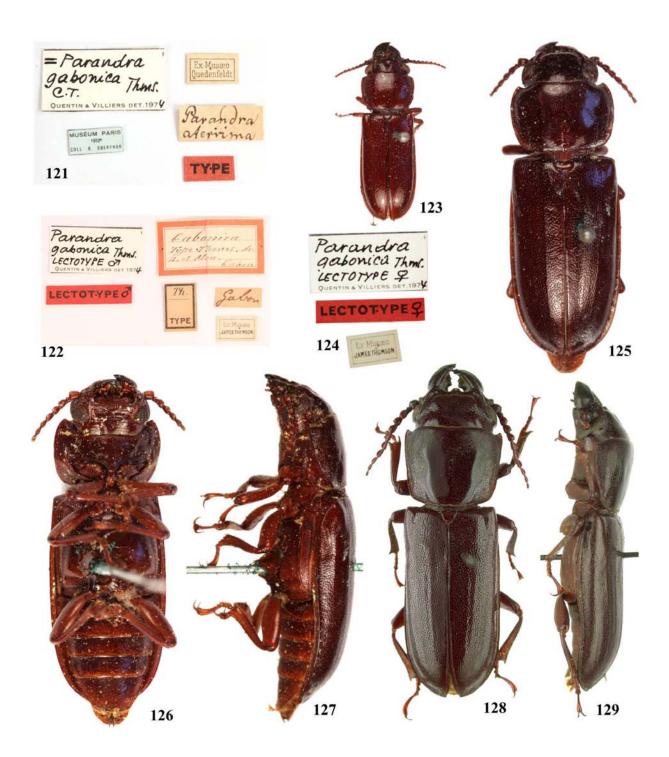
**Figures 99-104**. Maps- **99**) South Africa: *Meridiandra capicola*. **100**) Tanzania: *Acutandra leduci* (circle); *A. conradti* (star); *Stenandra kolbei* (square). **101**) Uganda: *Acutandra plenevauxae*. **102**) Distribution of *Stenandra* in Africa. **103**) Distribution of *Adlbauerandra* (lighter area) and *Meridiandra* (darker area). **104**) Distribution of *Acutandra* in Africa.



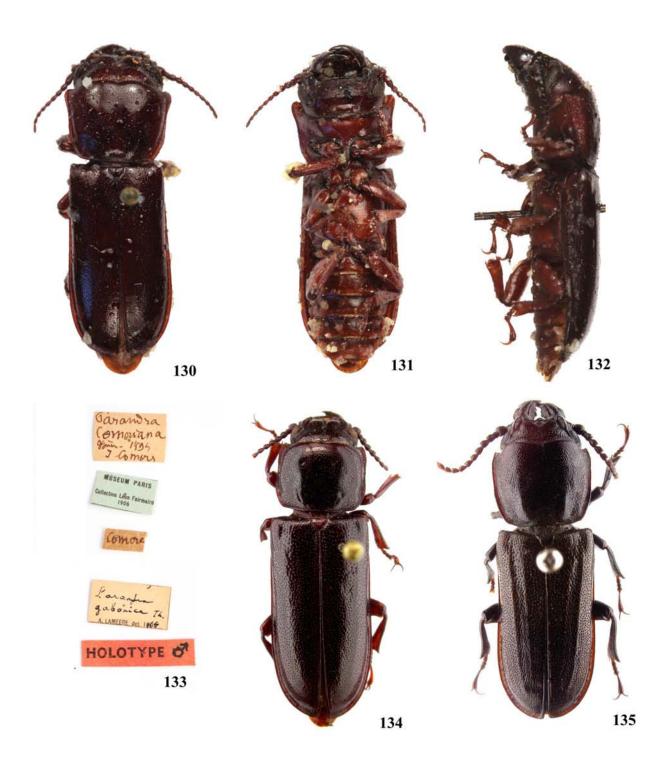
Figures 105-113. Acutandra conradti: 105) Lectotype male, dorsal view; 106) idem, ventral view; 107) Paralectotype male, lateral view; 108) Lectotype male, metatarsi, lateral view; 109) idem, left antenna; 110) idem, head, frontal view; 111) idem, right tibia and metatarsi, dorsal view; 112) idem, labels; 113) Paralectotype, labels. Photos by Stéphane Hanot (RMCA).



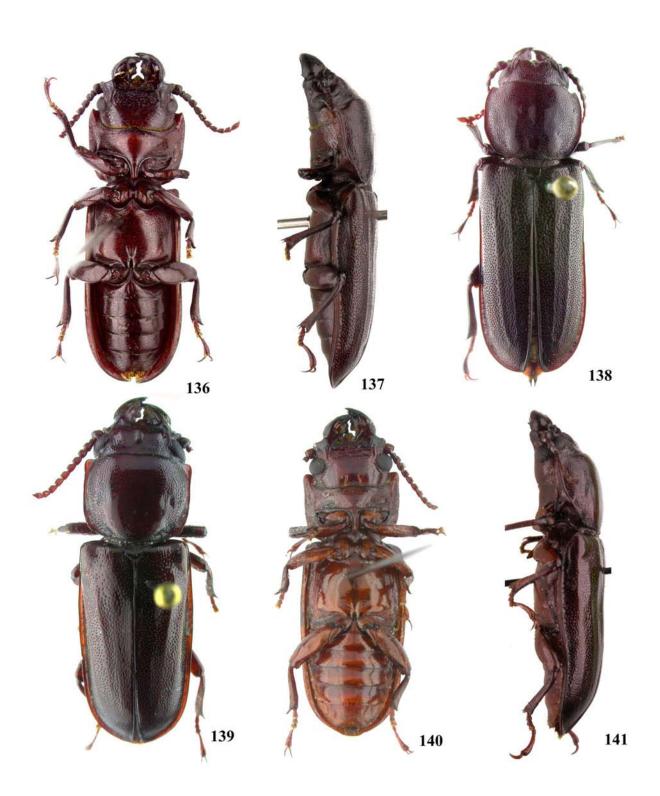
**Figures 114-120**. **114-118**, *Acutandra beninensis*, holotype male: **114**) dorsal view; **115**) ventral view; **116**) lateral view; **117**) head, frontal view; **118**) labels. **119-120**, *Parandra gabonica*, Lectotype male of *Parandra aterrima*: **119**) dorsal view; **120**) ventral view. Photos 114-118 by Hillery Warner (BMNH), and photos 119-120 by Norbert Delahaye.



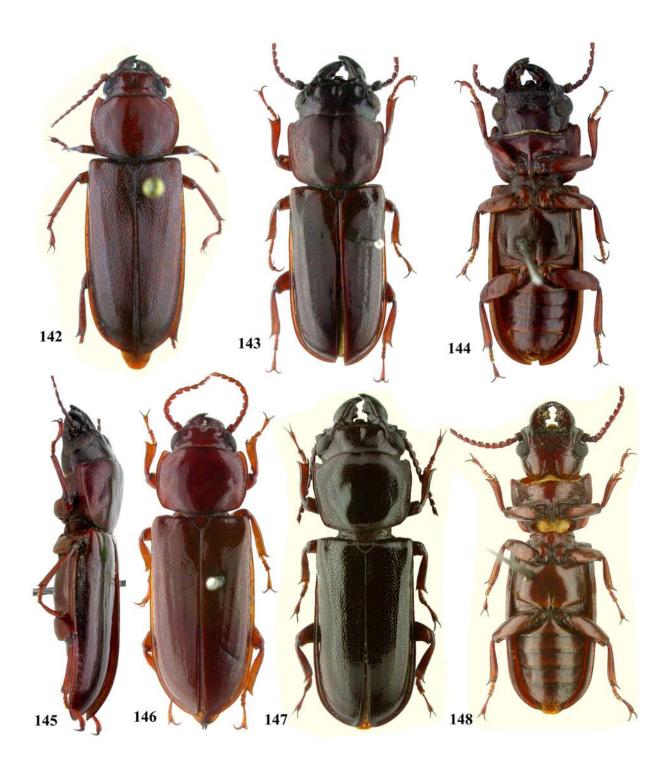
Figures 121-129. 121) Parandra gabonica, Lectotype male of Parandra aterrima, labels. 122-123, Lectotype male of Parandra gabonica sensu Quentin and Villiers (1975): 122) labels; 123) dorsal view. 124-127, Lectotype female of Parandra gabonica: 124) labels; 125) dorsal view; 126) ventral view; 127) lateral view. 128-129, Acutandra gabonica, male: 128) dorsal view; 129) lateral view. Photos 121-127 by Norbert Delahaye.



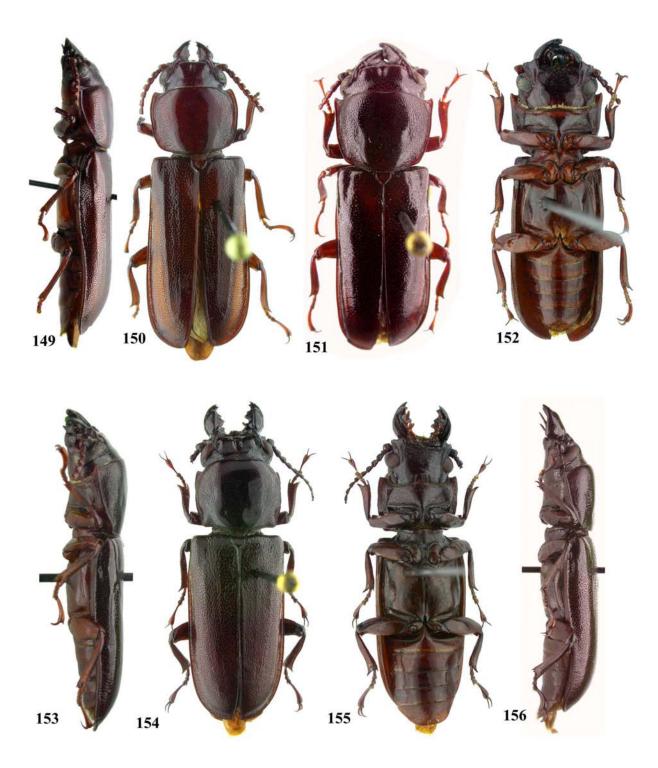
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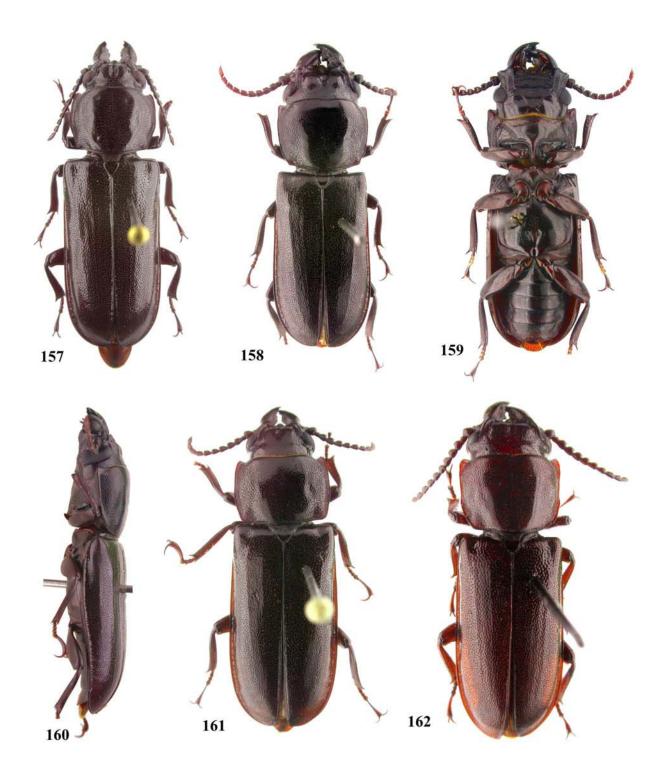
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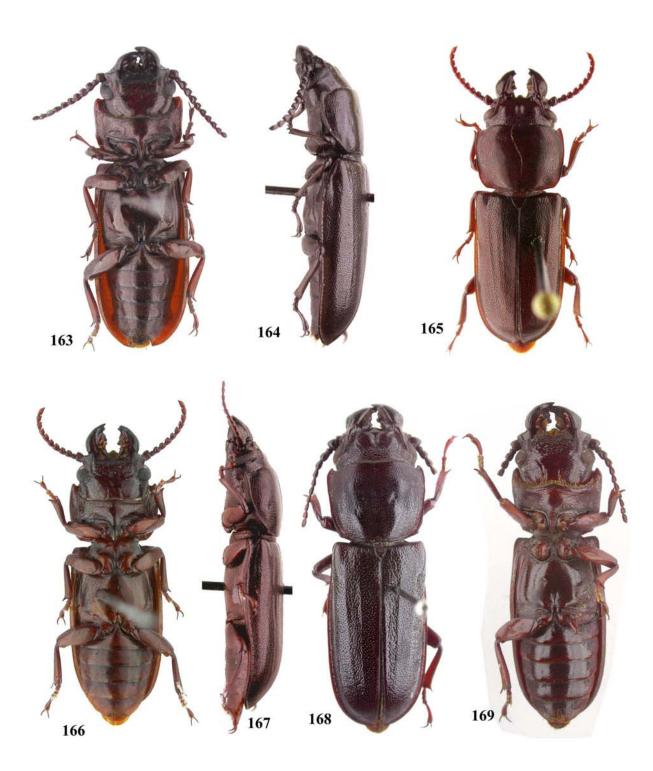
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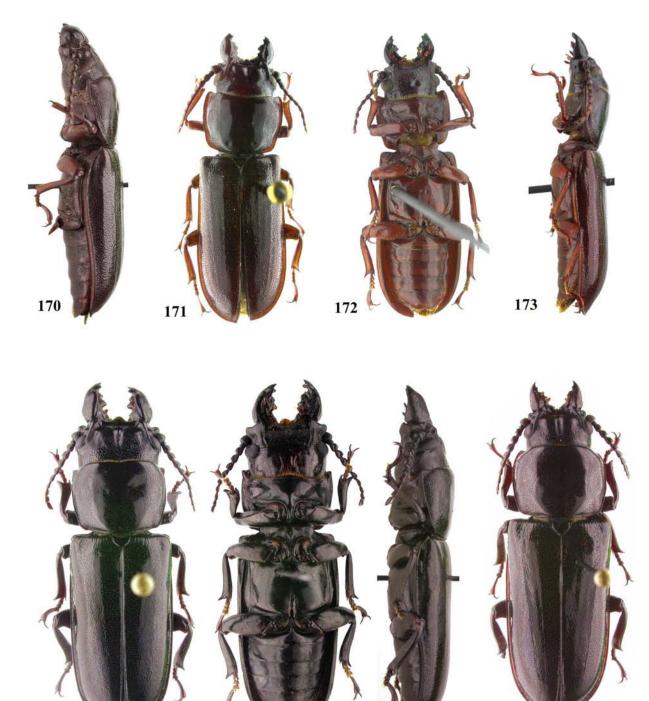
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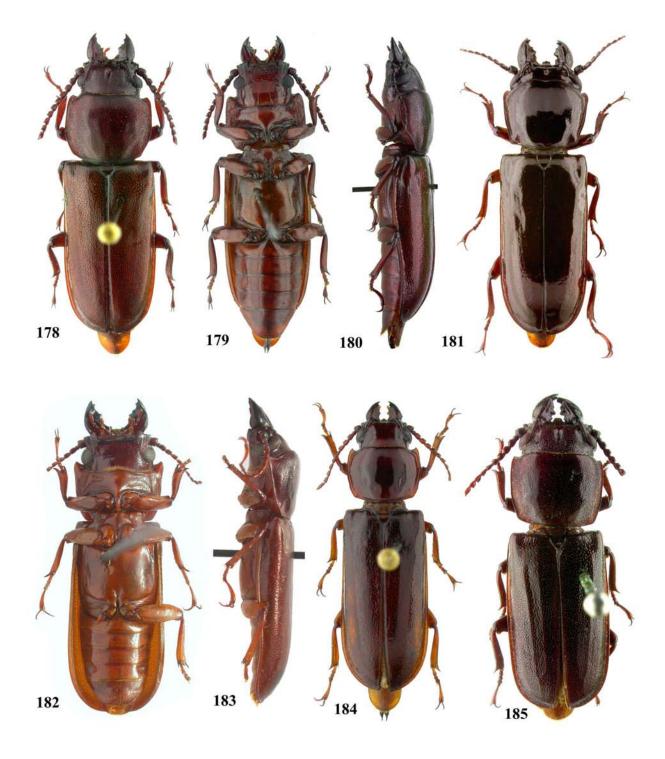
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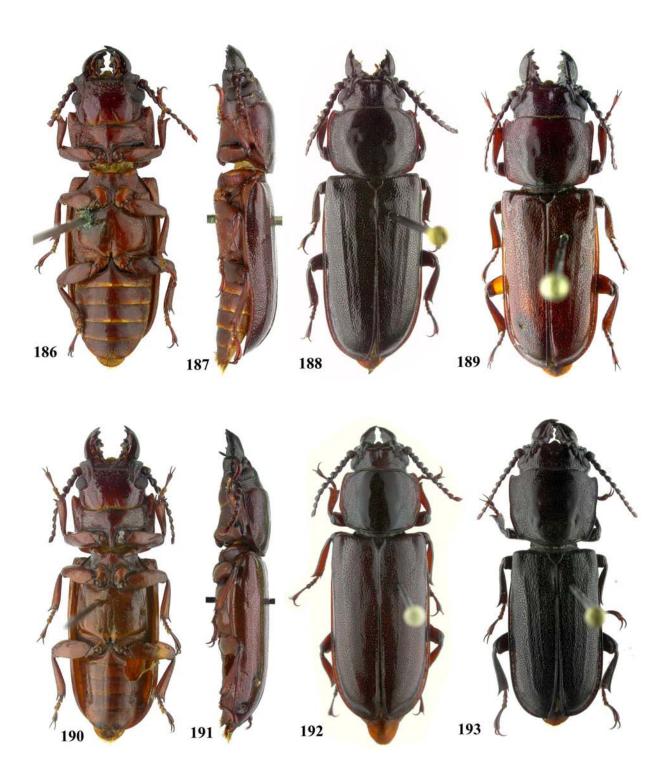
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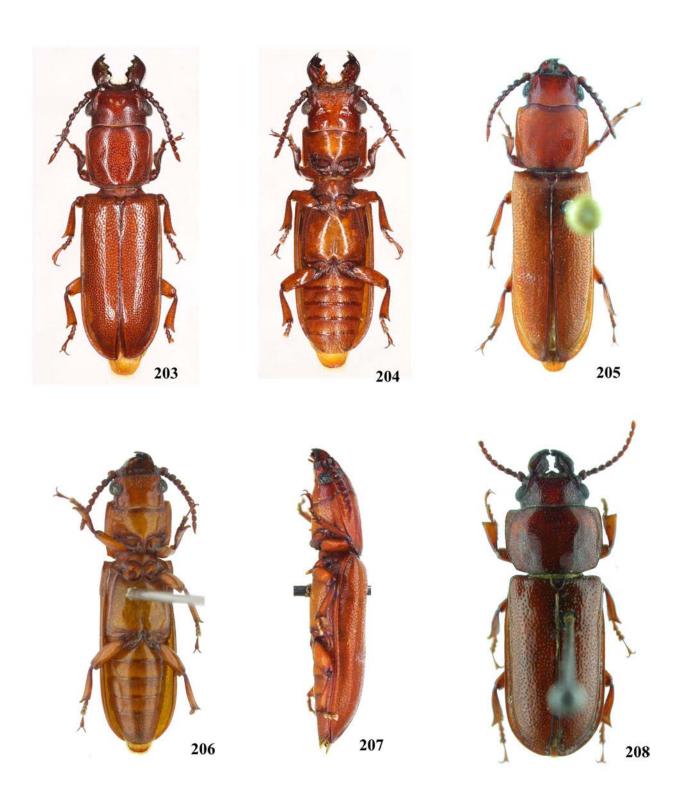
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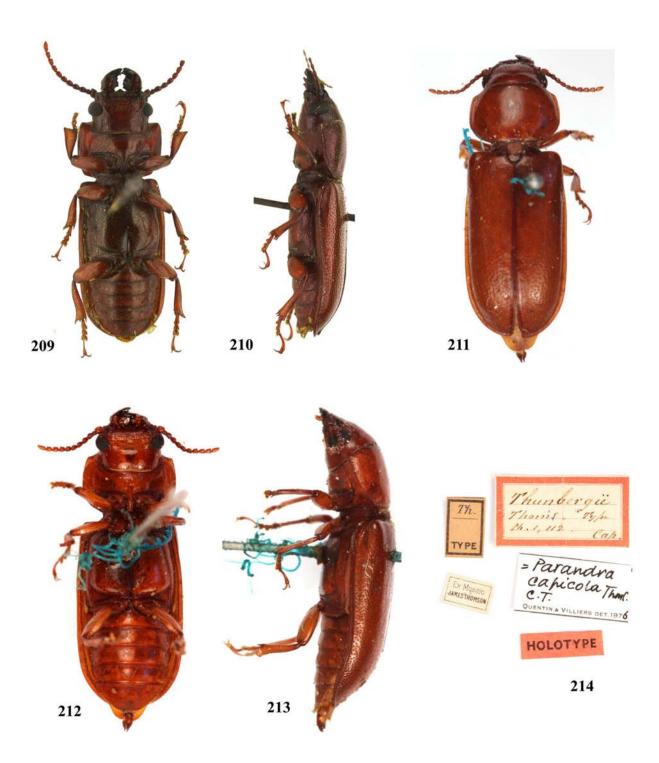
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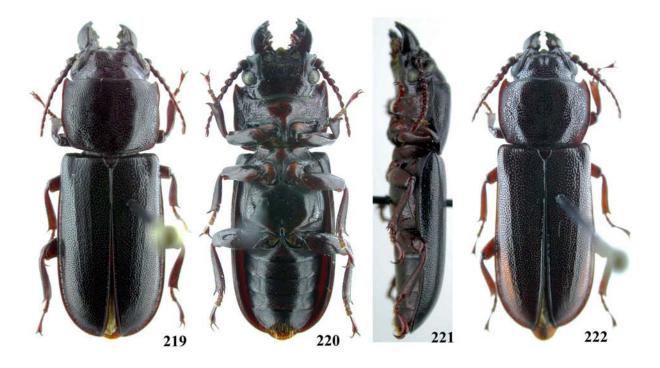


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