Four new species of Sabicea (Rubiaceae) from tropical Africa, with additional notes on the genus

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Four new species of Sabicea (Rubiaceae) from tropical Africa, with additional notes on the genus

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Abstract

ZEMAGHO, L., O. LACHENAUD & B. SONKÉ (2018). Four new species of Sabicea (Rubiaceae) from tropical Africa, with additional notes on the genus. In English, English and French abstracts. *Candollea* 73: 277–293. DOI: http://dx.doi.org/10.15553/c2018v732a12

Four new species of *Sabicea* Aubl. *(Rubiaceae)* from tropical Africa are described and illustrated: *Sabicea desseinii* Zemagho, O. Lachenaud & Sonké from Cameroon, Gabon and Equatorial Guinea, *Sabicea ezangae* Zemagho, O. Lachenaud & Sonké from Gabon, *Sabicea jongkindii* Zemagho, O. Lachenaud & Sonké from Liberia and Ghana, and *Sabicea uniflora* Zemagho, O. Lachenaud & Sonké from Gabon. Their affinities are discussed, and the conservation status of each species is assessed. *Sabicea speciosissima* K. Schum. is excluded from the genus, neotypified, and synonymised with *Rothmannia octomera* (Hook.) Fagerl. Three other species are sunk into synonymy: *Sabicea gigantea* Wernham with *Sabicea dewevrei* De Wild., *Sabicea arachnoidea* Hutch. & Dalziel with *Sabicea discolor* Stapf, and *Sabicea neglecta* Hepper with *Sabicea speciosa* K. Schum. Lectotypes are designated for these six names.

Résumé

ZEMAGHO, L., O. LACHENAUD & B. SONKÉ (2018). Quatre nouvelles espèces de Sabicea (Rubiaceae) d'Afrique tropicale, avec des notes complémentaires sur le genre. En anglais, résumés anglais et français. *Candollea* 73: 277–293. DOI: http://dx.doi.org/10.15553/c2018v732a12

Quatre nouvelles espèces de *Sabicea* Aubl. *(Rubiaceae)* d'Afrique tropicale sont décrites et illustrées: *Sabicea desseinii* Zemagho, O. Lachenaud & Sonké du Cameroun, du Gabon et de Guinée Equatoriale, *Sabicea ezangae* Zemagho, O. Lachenaud & Sonké du Gabon, *Sabicea jongkindii* Zemagho, O. Lachenaud & Sonké du Liberia et du Ghana, et *Sabicea uniflora* Zemagho, O. Lachenaud & Sonké du Gabon. Leurs affinités sont discutées, et le statut de conservation de chaque espèce est évalué. *Sabicea speciosissima* K. Schum. est exclu du genre, néotypifié et mis en synonymie de *Rothmannia octomera* (Hook.) Fagerl. Trois autres espèces sont également mises en synonymie: *Sabicea gigantea* Wernham avec *Sabicea dewevrei* De Wild., *Sabicea arachnoidea* Hutch. & Dalziel avec *Sabicea discolor* Stapf, et *Sabicea neglecta* Hepper avec *Sabicea speciosa* K. Schum.; pour ces six noms, des lectotypes sont désignés.

Keywords

RUBIACEAE – *Sabicea* – Africa – Cameroon – Equatorial Guinea – Gabon – Ghana – Liberia – New species – Taxonomy

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Introduction

The genus *Sabicea* Aubl. *(Rubiaceae-Sabiceeae),* here considered in the broad sense, includes c. 150 species, of which c. 100 occur in tropical Africa (WCSP, 2018), 43 in tropical America (Khan, 2007), 6 in Madagascar (Razafimandimbison & Miller, 1999), and a single one in Sri Lanka. *Sabicea* species are mostly twining lianas or creepers occurring in forest edges, and are characterised by the combination of axillary inflorescences, valvate corolla aestivation, soft berries with numerous small seeds, and absence of raphides (Dessein et al., 2001; Khan et al., 2008).

The African species of *Sabicea* have not been revised as a whole since Wernham's (1914) worldwide monograph of the genus, although important local treatments have been published for West Africa (Hepper, 1963) and Gabon (Hallé, 1966). They are quite diverse morphologically, and have been variously treated as a single genus (Hepper, 1958, 1963) or up to four different genera, namely *Sabicea* s.s., *Pseudosabicea* N. Hallé, *Ecpoma* K. Schum. and *Stipularia* P. Beauv. (Hallé, 1963, 1966). Recent molecular studies led to the inclusion of all the segregate genera in *Sabicea* s.l. (Khan et al., 2008). A new classification of the genus has been proposed (Zemagho et al., 2016), which recognises four subgenera. *Sabicea* subg. *Stipularia* (P. Beauv.) Zemagho et al. and *Sabicea* subg. *Stipulariopsis* Wernham include species with an erect habit, and are both endemic to tropical Africa. Subg. *Anisophyllae* (N. Hallé) Zemagho et al. includes sarmentose or creeping plants with sessile inflorescences and 2-locular ovaries; this group was recently revised by Zemagho et al. (2017) and includes 15 African species. Finally, *Sabicea* subg. *Sabicea*, by far the largest, includes mostly twining plants with 5-locular ovaries; all species treated in this paper belong here.

During the work carried out in view of a revision of African *Sabicea*, we came across numerous new species and taxonomic issues, some of which have already led to several publications (Zemagho et al., 2014, 2017; Lachenaud & Zemagho, 2015). The present paper describes four additional new species: *Sabicea desseinii* Zemagho, O. Lachenaud & Sonké from Cameroon, Gabon and Equatorial Guinea, *S. ezangae* Zemagho, O. Lachenaud & Sonké and *S. uniflora* Zemagho, O. Lachenaud & Sonké, both endemic to Gabon, and *S. jongkindii* Zemagho, O. Lachenaud & Sonké from Liberia and Ghana. It also investigates the status of several poorly known species, one of which, *S. speciosissima* K. Schum., is excluded from the genus and synonymised with *Rothmannia octomera* (Hook.) Fagerl., while an additional three are sunk into synonymy of more widespread *Sabicea* species: *S. gigantea* Wernham with *S. dewevrei* De Wild., *S. arachnoidea* Hutch. & Dalziel with *S. discolor* Stapf, and *S. neglecta* Hepper with *S. speciosa* K. Schum.

Material and methods

This paper is based on a study of the herbarium material from BM, BR, BRLU, FHO, K, LBV, MO, P, WAG and YA. Descriptive terminology follows Robbrecht (1988). The descriptions are based on herbarium specimens, field notes, and spirit material when available. Unless otherwise stated, the dimensions mentioned for the various organs refer to dry material, and the colours to fresh material. Phytogeographical considerations follow White (1979, 1983, 1993). The conservation status of the new species was assessed by calculating their extent of occurrence (EOO) and area of occupancy (AOO) using the GeoCAT tool (Bachman et al., 2012) and applying the IUCN Red List Categories and Criteria (IUCN, 2012, 2014). The AOO was calculated based on a user defined grid cell of 2 km.

Taxonomic treatment

Four new species from tropical Africa

Sabicea desseinii Zemagho, O. Lachenaud & Sonké, **spec. nova** (Fig. 1A–C, 2, 3A–B).

Holotypus: Gabon. **Ogooué-Ivindo:** Peripheric area (NE) of Mwagna National Park, close to Mabekwe camp, 0°35'49"N 13°49'57"E, 506 m, 19.I.2018, fl. & fr., *Texier et al. 1895* (MO!; iso-: BR!, BRLU!, LBV, P, WAG!).

Inflorescentiis capitatis ad nodos defoliatos saepe natis, calyce tubo conspicuo sed lobis longioribus, stipulis reflexis, ramulis foliisque indumento hirsuto Sabicea geophiloide Wernham, S. pilosae Hiern et S. speciosae K. Schum. similis. A S. geophiloide differt calycis tubo intus dense villoso (nec glabro), corollae tubo 22–27 mm longo (nec 14–20 mm) et extus longe villoso (nec pilis appressis brevibus munito), ramis foliisque indumento densiore et in sicco rufescente (nec albido). A S. pilosa calycis lobis anguste lanceolatis 0.7–1.5 mm latis intus villosis et statu fructifero patentibus (nec ovatis, 1.8–5 mm latis, intus glabris et statu fructifero erectis), a S. speciosa corolla alba (nec rubra), bracteis rubris vel rubrescentibus (nec viridibus), calycis lobis pilis longioribus 1–2.5 mm (nec 0.5–1 mm) munitis, et ab ambabus inflorescentiis 6–15-floris (nec 1–5-floris) bracteis 4 (nec 2) cinctis bracteolisque carentibus distinguitur.

Twining woody *liana*, up to 3 m tall; young stems cylindrical, 1–3 mm thick, hirsute, with stiff hairs 1–3 mm long, often intermixed with much shorter uncinate hairs; older stems 4-sulcate, the bark peeling in strips. *Stipules* interpetiolar, ovate, 6–20 × 3.5–8 mm, acute to obtuse at apex, recurved backwards, hirsute outside, glabrous inside except at the base, persistent. *Leaves* opposite, equal; petiole 0.5–4 cm long, with same indumentum as the stems; leaf-blade elliptic to obovate, 5–13.5 × 2.6–6.2 cm, cuneate to rounded at base, acuminate

Fig. 1. – A. *Sabicea desseinii* Zemagho, O. Lachenaud & Sonké: inflorescence; **B.** *Sabicea desseinii*: immature fruits; **C.** *Sabicea desseinii*: mature fruits; **D.** *Sabicea ezangae* Zemagho, O. Lachenaud & Sonké: flowering stem; **E.** *Sabicea ezangae*: detail of lower leaf surface; **F.** *Sabicea ezangae*: inflorescence. [**A–B:** *Texier et al. 1895*; **C:** *Sonké & Simo 5004*; **D–F:** *Lachenaud et al. 1544*] [Photos: **A–B:** N. Texier; **C:** B. Sonké; **D-F:** O. Lachenaud]

at apex, papyraceous, green on both sides but markedly paler below, drying olive green to olive brown; both surfaces hirsute, with hairs 0.5–1.2 mm long, denser below; secondary veins 7–12 pairs, markedly curved and ascending, eucamptodromous; tertiary veins darker and conspicuous below, forming a dense reticulum with areolae c. 1 mm in diameter. *Inflorescences* usually on old leafless stems, more rarely axillary, solitary, capitate and involucrate, 6–15-flowered; peduncle 0.2–0.5 cm long, hirsute; involucre consisting of two pairs of free bracts, these red to greenish-red, ovate, 6.5–13 × 5–8.5 mm, acute at apex, the inner pair often narrower than the outer, hirsute outside, glabrous inside except at the base, persistent. *Flowers* 5-merous, sessile, heterostylous. *Calyx* red to greenish-red; tube 2–3 × 2–3 mm at anthesis, accrescent to 5–7 mm long in the fruiting stage, hirsute to densely appressed-pubescent outside, densely villose with appressed hairs inside; lobes lanceolate, 10–15 × 0.7–1.5 mm, acute at apex, ± erect at anthesis and becoming patent afterwards, hirsute with stiff hairs 1–2.5 mm long on the margin (and sometimes more sparsely on both surfaces) and shorter appressed to half-erect hairs 0.5–1 mm long inside (sometimes also outside) and a basal area inside with very dense appressed hairs in continuation of the tube. *Corolla* white; tube 22–27 mm long × 1–1.5 mm wide at base and 2–3 mm wide at apex, almost cylindrical, villose outside (except at the base) with patent to appressed long silky hairs 1–1.5 mm long often intermixed with shorter crisped hairs, sparsely pubescent inside except at the very base; lobes triangular, 2–3 × 1.2 mm, outside with same indumentum as the tube, inside glabrous. *Stamens* included for their whole length, inserted around the upper ⅓rd of the corolla tube (long-styled flowers) or included except for the tip, attached a little below throat (short-styled flowers), subsessile; anthers c. 4 × 0.4 mm. *Ovary* 1.5–2 mm long, 5-locular, densely villose with stiff appressed to ± patent hairs 1–2 mm long. *Disk* cylindrical, c. 0.3 mm long, glabrous. *Style* 5-lobed, exserted, c. 29 mm long (long-styled flowers) or included, c. 15 mm long (short-styled flowers), 5-lobed at the apex, the stigmas linear, 5–5.5 mm long, papillose, otherwise glabrous. *Fruits* bright red, ellipsoid, 11.5–14 × 8.5–13 mm when dry, hirsute to appressed-pubescent, crowned with persistent calyx, on pedicels 1–2.5 mm long. *Seeds* polygonal, pale brown, 0.5–0.7 mm long, the surface with close parallel striations.

Etymology. – Named after Dr. Steven Dessein, the Director of the Botanic Garden Meise, in recognition of his active support to the authors.

Distribution, ecology and *phenology*. – Lower Guinea subcentre of endemism (White, 1979). This species occurs in southern Cameroon, Equatorial Guinea (Rio Muni) and north-eastern Gabon (Fig. 4); it may be expected in adjacent Republic of Congo. It occurs in secondary rainforest, up to 530 m in altitude, sometimes on seasonally flooded soils, and is locally common in Cameroon *(J. & A. Raynal 9859)* but apparently rare elsewhere. Flowers have been collected in October, November and January; fruits in January, February and July.

Conservation status. – The extent of occurrence (EOO) of *S. desseinii* is estimated to be 33,344 km² (exceeding the limit for "Vulnerable" status under criterion B1) and its area of occupancy (AOO) to be 28 km² (within the limit for "Endangered" under criterion B2). The species is restricted to Atlantic Central Africa and is known from eight specimens representing seven subpopulations. One of these occurs in a protected area, the Monte Alén National Park in Equatorial Guinea; the other subpopulations are unprotected and exposed to deforestation for agriculture and mining. Even though the species occurs in secondary forest, and thus tolerates a certain degree of habitat degradation, the level of human pressure in its range leads us to anticipate a decline in the extent and quality of habitat, number of locations, number of individuals, and thus EOO and AOO. The seven subpopulations represent seven "locations" (sensu IUCN, 2012) and the species qualifies for "Vulnerable" status [VU B2ab(i,ii,iii,iv,v)] using the IUCN Red List Categories and Criteria (IUCN, 2012).

Notes. – *Sabicea desseinii* superficially resembles *S. speciosa* K. Schum., but is probably more closely related to *S. geophiloides* Wernham and/or *S. pilosa* Hiern. All these species have in common (sub)capitate inflorescences that are often borne on older stems below the leaves, a calyx tube well developed but shorter than the lobes, a relatively long corolla tube, reflexed stipules, and a hirsute indumentum usually covering most of their organs (though some variants of *S. pilosa* are almost glabrous). The differences between these four species are summarised in Table 1. *Sabicea desseinii* also resembles *S. gabonica* (Hiern) Hepper in its inflorescences and calyces, but the latter species has erect stipules, stems and leaves with appressed pubescence, and inflorescences borne on young leafy stems and usually surrounded by a single pair of bracts, these green in colour.

The only specimen from Gabon was chosen as type since it is the most complete (with both flowers and fruits) and has numerous duplicates. It differs slightly from the rest of the material (from Cameroon and Equatorial Guinea) by the appressed (vs patent) indumentum of the calyx tube, ovaries and fruits, and the slightly shorter indumentum of the stems, but in other characters all collections agree very well and their conspecificity is beyond doubt. The colour of the bracts and calyces may vary from deep red to pale reddish-green in the same population (Fig. 1A–B).

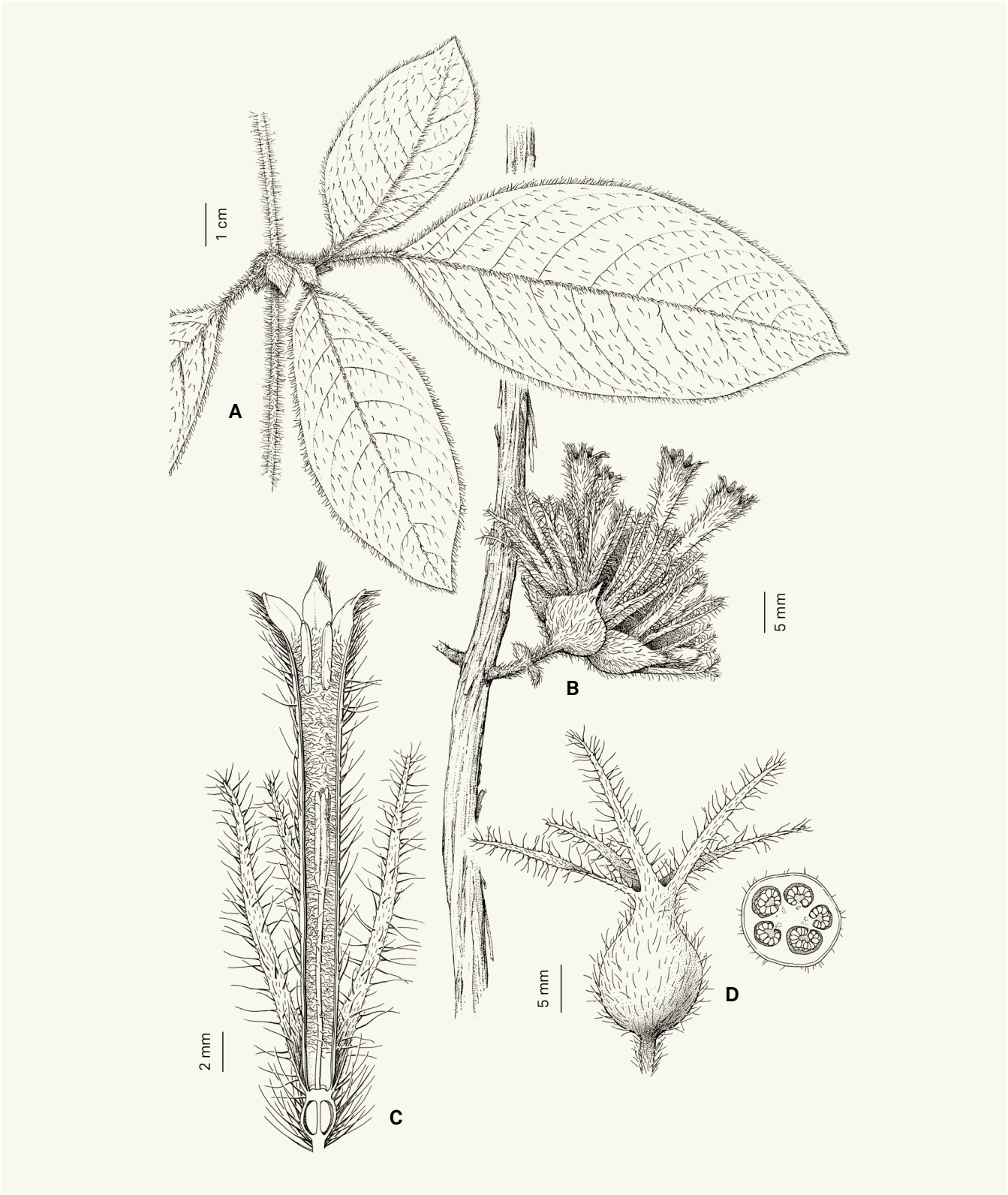

Fig. 2. – *Sabicea desseinii* Zemagho, O. Lachenaud & Sonké. **A.** Leafy stem; **B.** Inflorescence and portion of old stem; **C.** Longitudinal section of flower (short-styled); **D.** Fruit, lateral view (left) and cross-section (right). [**A–C:** *J.J.F.E. de Wilde 7648A*, WAG; **D–E:** *Sonké et al. 2498*, BRLU] [Drawing: S. Bellanger]

Table 1. – Comparison of morphological characters and distribution between *Sabicea desseinii* Zemagho, O. Lachenaud & Sonké, *S. geophiloides* Wernham, *S. pilosa* Hiern and *S. speciosa* K. Schum. Characters diagnostic for one species are in bold.

	S. desseinii	***S. geophiloides***	***S. pilosa***	***S. speciosa***
Indumentum of stems & leaves	+/- dense, rufescent when dry	sparse, whitish	dense to sparse, whitish	+/- dense, rufescent when dry
Inflorescences	aerial	usually near the ground	usually near the ground	aerial
Number of flowers per inflorescence	6–15	5–7	(1–)3–5 (but inflorescences often fasciculate)	3–5
Number of involucral bracts	2 pairs	2 pairs	1 pair	1 pair
Bracteoles	absent	absent	1 pair/flower	1 pair/flower
Bract colour	red/greenish red	?	red	green
Bract size [mm]	6–13 × 5–8.5	10–17 × 8–14	6–15 × 3–9	5–8 × 3–5
Calyx tube (inside)	villose	**glabrous**	villose	villose
Calyx lobes (indumentum) [mm]	long stiff hairs (1–2.5) at least on the margin + shorter hairs at least inside	long stiff hairs (1–1.5) outside, sometimes also inside	stiff hairs (0.5–1.5) outside, inside glabrous	**short stiff hairs (0.5–1) on both sides**
Calyx lobes (size) [mm]	10–15 × 0.7–1.5 10–15 times longer than wide	5.5–13 × 1–3 4–6 times longer than wide	6–18 × 1.8–5 1.8–4.5 times longer than wide	6–20 × 0.5–1.5 8–20 times longer than wide
Corolla	white	white	white	**red**
Corolla tube length [mm]	22–27	14–20	18–27	20–26
Corolla indumentum (outside)	long-villose	shortly appressed-pubescent	variable	long-villose
Calyx lobes on fruit	patent	patent	**erect**	patent
Distribution	Cameroon, Equatorial Guinea, Gabon	Ivory Coast to Cameroon	Cameroon, Equatorial Guinea, Gabon	Nigeria to D.R. Congo

Paratypi. – **Cameroon. South:** Station du Cacaoyer de N'koemvone, S. of Ebolowa, 14 km on the road to Ambam, on bank of the Seng river, 2°49'N 11°08'E, 16.X.1974, fl., *J.J.F.E. de Wilde 7648A* (WAG); près Bidjap, piste pygmée d'Akom II, 75 km W Ambam, 30.XI.1979, fl., *Letouzey 15288* (BR, P, YA); Mékomengona (17 km SW Ambam), au N du village, 20.II.1963, fr., *J. & A. Raynal 9859* (P, YA); 3 Km NE de Bindem, 2°41'27"N 10°47'31"E, 21.VII.2008, fr., *Sonké & Simo 5004* (BR).

Equatorial Guinea: Inselberg de Bicurga, près du village de Bicurga, 1°35'N 10°28'E, 18.II.2001, fr., *Parmentier 1758* (BRLU); *ibid. loco,* 24.V.2002, fl., *Parmentier & Esono 3159* (BRLU); Monte Alén, 1°38'N 10°18'E, 10.VIII.2001, fr., *Sonké, Esono & Ndong 2498* (BRLU).

Sabicea ezangae Zemagho, O. Lachenaud & Sonké, **spec. nova** (Fig. 1D–F, 5).

Holotypus: Gabon. Moyen-Ogooué: Concession Maurel & Prom, près du Lac Ezanga, 1°05'41"S 10°15'25"E 22.XI.2013, fl., *Lachenaud et al. 1544* (BR [BR0000024387149]!; iso-: BRLU!, LBV!, MO!, P!, WAG!).

Inflorescentiis capitatis, axillaribus et involucratis bracteis 4–8 liberis cinctis bracteolisque carentibus, calyce tubo brevissimo lobisque anguste ovatis, corollae tubo longiore (16–18 mm) Sabicea calycinae Benth. et S. schaeferi Wernham affinis, sed differt a primo calyce (4–)5– nec 3(–4)-lobato, et a secundo capitulis 4–5 floris (nec 7–15-floris) pedunculo hirsuto (nec appresse-pubescente). Ab ambabus bracteis et calyce hirsutis (nec glabrescentibus), ovario dense villoso (nec glabro vel sparse appresse-pubescente), foliisque subtus indumento mixto pilis longis erectis et brevibus lanuginosis distinguitur.

Twining or creeping *liana*, up to 3 m tall; young stems cylindrical, 1–2 mm thick, with a mixed indumentum of soft patent hairs 1.5–2.5 mm long and much shorter crispate hairs; older stems with scaling bark. *Stipules* interpetiolar, ovate, 5.5–10 × 3.5–6.5 mm, acute at apex, recurved, villose outside, glabrous inside except at the base, persistent. *Leaves* opposite and equal; petiole 0.4–2 cm long, with same indumentum as the stems; leaf-blade elliptic, 6–14 × 2.8–5.7 cm, rounded at base, acuminate at apex, thinly papyraceous, green on both sides but markedly paler below, drying olive green to olive brown; upper surface sparsely villose with suberect hairs

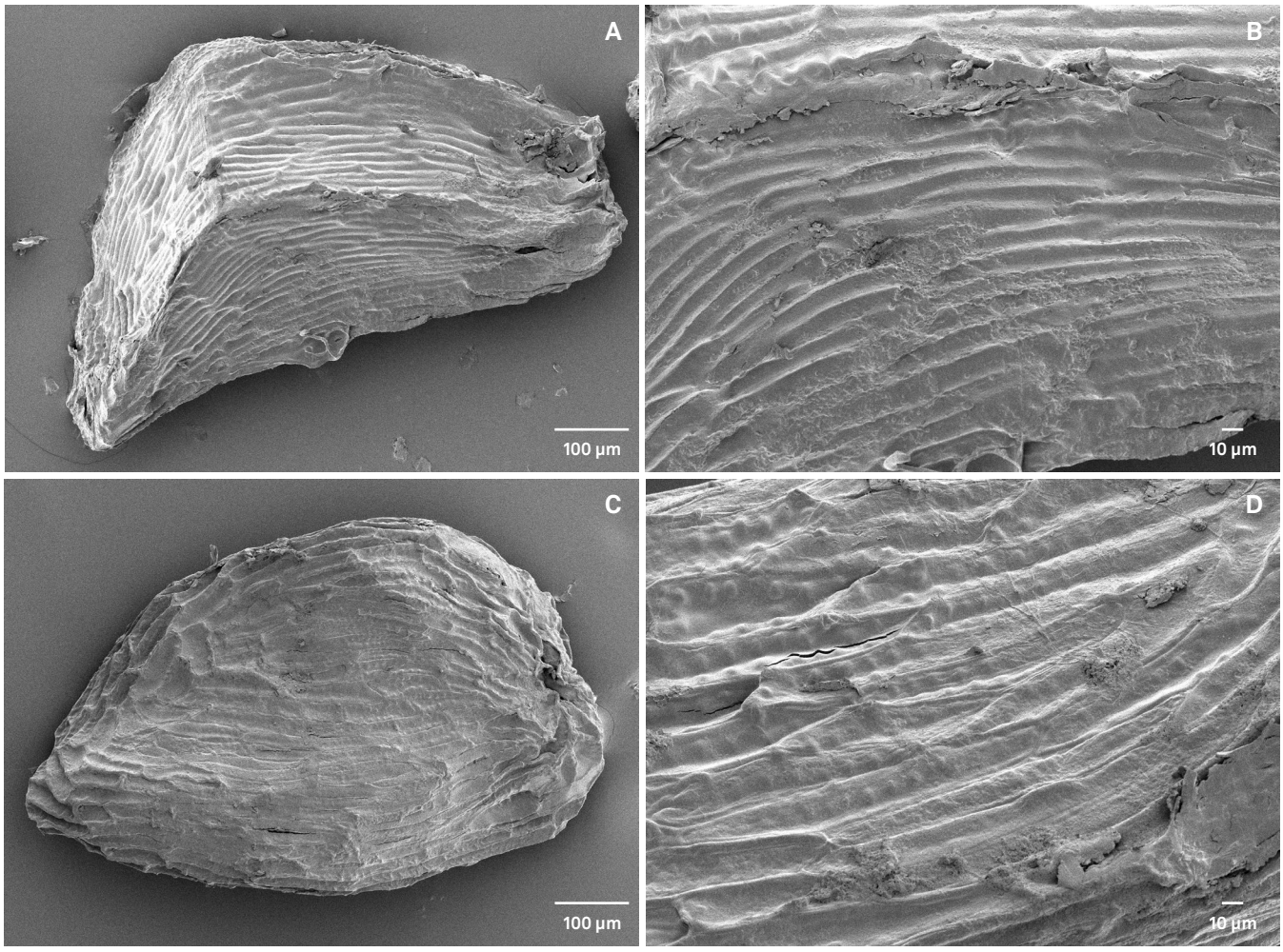

Fig. 3. – Seeds of *Sabicea* spp. viewed in electron microscopy. **A.** *Sabicea desseinii* Zemagho, O. Lachenaud & Sonké: entire seed; **B.** *Sabicea desseinii:* detail of seed surface; **C.** *Sabicea jongkindii* Zemagho, O. Lachenaud & Sonké: entire seed; **D.** *Sabicea jongkindii:* detail of seed surface. [**A–B:** *J. & A. Raynal 9859*, P; **C–D:** *Jongkind et al. 12457*, BR] [Photos: I. van der Beeten]

c. 1 mm long, intermixed with shorter uncinate hairs; lower surface with mixed indumentum of rather sparse short woolly hairs, and long soft hairs 1.5–2 mm long (these mostly on the veins); secondary veins 10–17 pairs, markedly curved and ascending, eucamptodromous; tertiary veins densely reticulate below, but mostly hidden by the indumentum. *Inflorescences* axillary, solitary, capitate and involucrate, 4–5-flowered; peduncle 0.7–6.2 cm long, with same indumentum as the stems; bracts 2–4 pairs, pale green or sometimes pink-tinged, broadly ovate, 11–17 × 7.5–13 mm, free, acute at apex, outside with mixed indumentum of soft erect hairs 1–1.5 mm long and short crisped hairs, inside sparsely hirsute in the upper half; bracteoles absent. *Flowers* (4–)5-merous, sessile. *Calyx* pale pinkish; tube very short, c. 0.5 mm long, sparsely hirsute outside, glabrous inside; lobes narrowly ovate to lanceolate, 4.5–9.5 × 1.5–3 mm, acute at apex, unequal, erect at anthesis, sparsely villose outside and in the upper half inside, alternating with minute colleters. *Corolla* white; tube 16–18 mm long × c. 1 mm wide at base and c. 3 mm at apex, very narrowly infundibuliform, outside sparsely silky-pubescent in the upper half, inside sparsely villose in the upper ⅔rds and with short white hairs c. 0.3 mm long in the throat; lobes triangular, 1.5–2 × 1.5–2 mm, reflexed, outside densely silky-pubescent, inside minutely papillose. *Stamens* half-exserted, inserted just under the apex of the corolla tube, subsessile; anthers white, c. 2 × 0.5 mm. *Ovary* c. 1.5 mm long, 5-locular, densely villose with stiff hairs c. 1.5 mm long. *Disk* cylindrical, c. 0.7 mm long, glabrous. *Style* 5-lobed, included, c. 14 mm long including the c. 2.5 mm long linear stigmas, the latter papillose, otherwise glabrous. *Fruits* and *seeds* unknown.

Etymology. – Named after Lake Ezanga, in the vicinity of which the species was found.

Distribution, ecology and phenology. – Lower Guinea subcentre of endemism (White, 1979). Only known from the

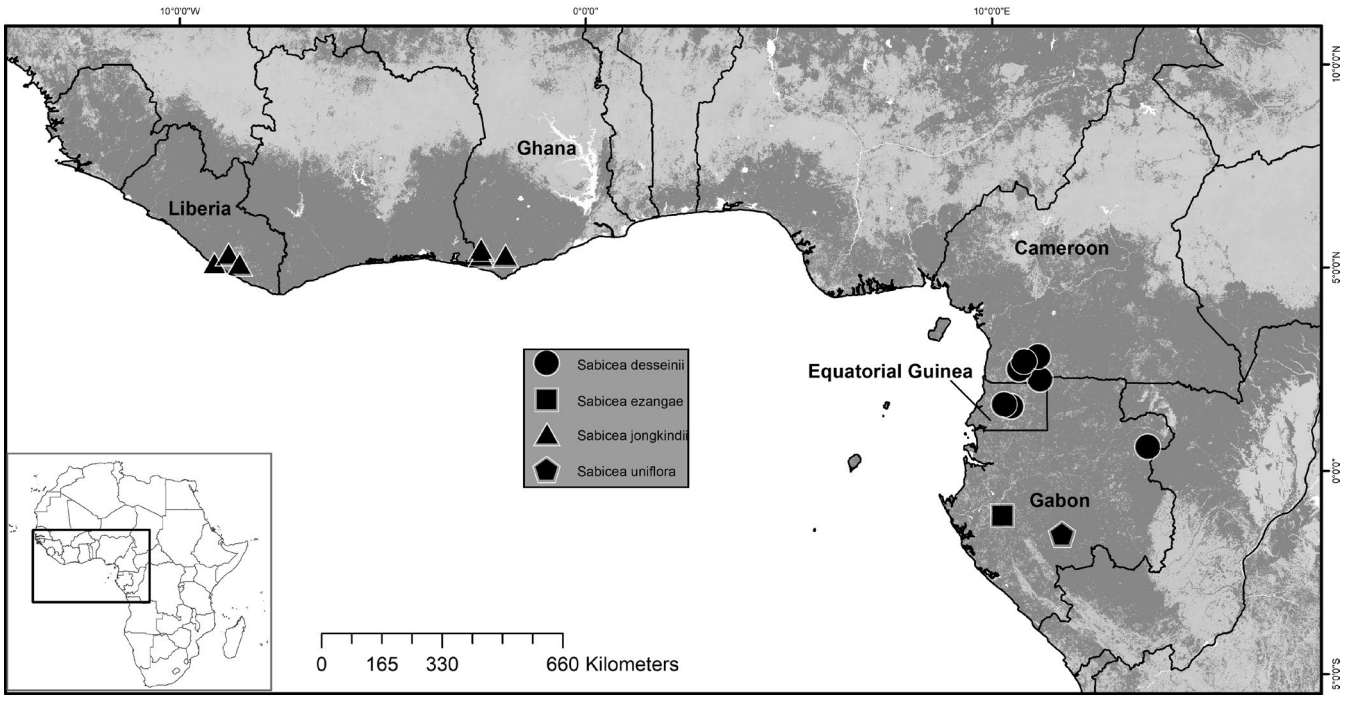

Fig. 4. – Geographic distribution of *Sabicea desseinii* Zemagho, O. Lachenaud & Sonké (circles), *S. ezangae* Zemagho, O. Lachenaud & Sonké (squares), *S. jongkindii* Zemagho, O. Lachenaud & Sonké (triangles) and *S. uniflora* Zemagho, O. Lachenaud & Sonké (pentagon).

type locality in west-central Gabon (Fig. 4), near Lake Ezanga (about 50 km south-east of Lambaréné), where a dense population of the species was found growing on a forest edge along a track, not far from a savanna boundary, c. 70 m in altitude. The species has never been recollected, although special attention was given to *Sabicea* spp. during recent botanical inventories in Gabon. *Sabicea ezangae* is flowering in November.

Conservation status. – *Sabicea ezangae* is endemic to west-central Gabon, and has been collected only once. Its extent of occurence (EOO) is therefore not calculable, and its area of occupancy (AOO) is estimated to be 4 km², within the limit for Critically Endangered status under criterion B2. Its only location is situated in an oil concession, where a dense population occurs on a forest edge along a track. In view of its habitat, the species is likely to be favoured by a limited level of forest clearance, and there is no evidence of a decline. However, any degradation on a larger scale, e.g. for the building of roads or other infrastructures, may affect negatively the extent of quality of habitat, number of locations, number of individuals, and thus AOO and EOO, and the species qualifies for "Critically Endangered" [CR B2ab(i,ii,iii,iv,v)] using the IUCN Red List Categories and Criteria (IUCN, 2012). It is possible that further populations will be found in the future, but so far this has not happened despite specific prospecting efforts. Given its rarity, and the fact that *Sabicea* species are generally easy to cultivate, an *ex situ* conservation program for *S. ezangae* may be recommended.

Notes. – *Sabicea ezangae* resembles both *S. schaeferi* Wernham and *S. calycina* Benth.; all three species share capitate inflorescences borne on young stems, with two or more pairs of free involucral bracts, and without bracteoles surrounding the individual flowers; a calyx divided almost to the base in relatively broad lobes; and a relatively long corolla tube for the genus. Their main diagnostic characters are summarised in Table 2. The differences between *S. ezangae* and *S. schaeferi* are rather slight, but taking into account their different ecology, it seems appropriate to treat them as separate species. It is not known if there are additional differences in the fruits, since those of *S. ezangae* have not been collected, and those of *S. schaeferi* are known in the very young stage only.

There is also some resemblance between *S. ezangae* and *S. gracilis* Wernham, but the latter has a much shorter corolla tube (c. 8 mm long vs 16 mm), calyx lobes and bracts glabrous inside and usually smaller, more strongly discolorous leaves with a dense felt of whitish hairs beneath, and a widely separate range, being restricted to south Cameroon and Equatorial Guinea (Rio Muni).

It is not known whether this species is heterostylous; only short-styled flowers are known so far.

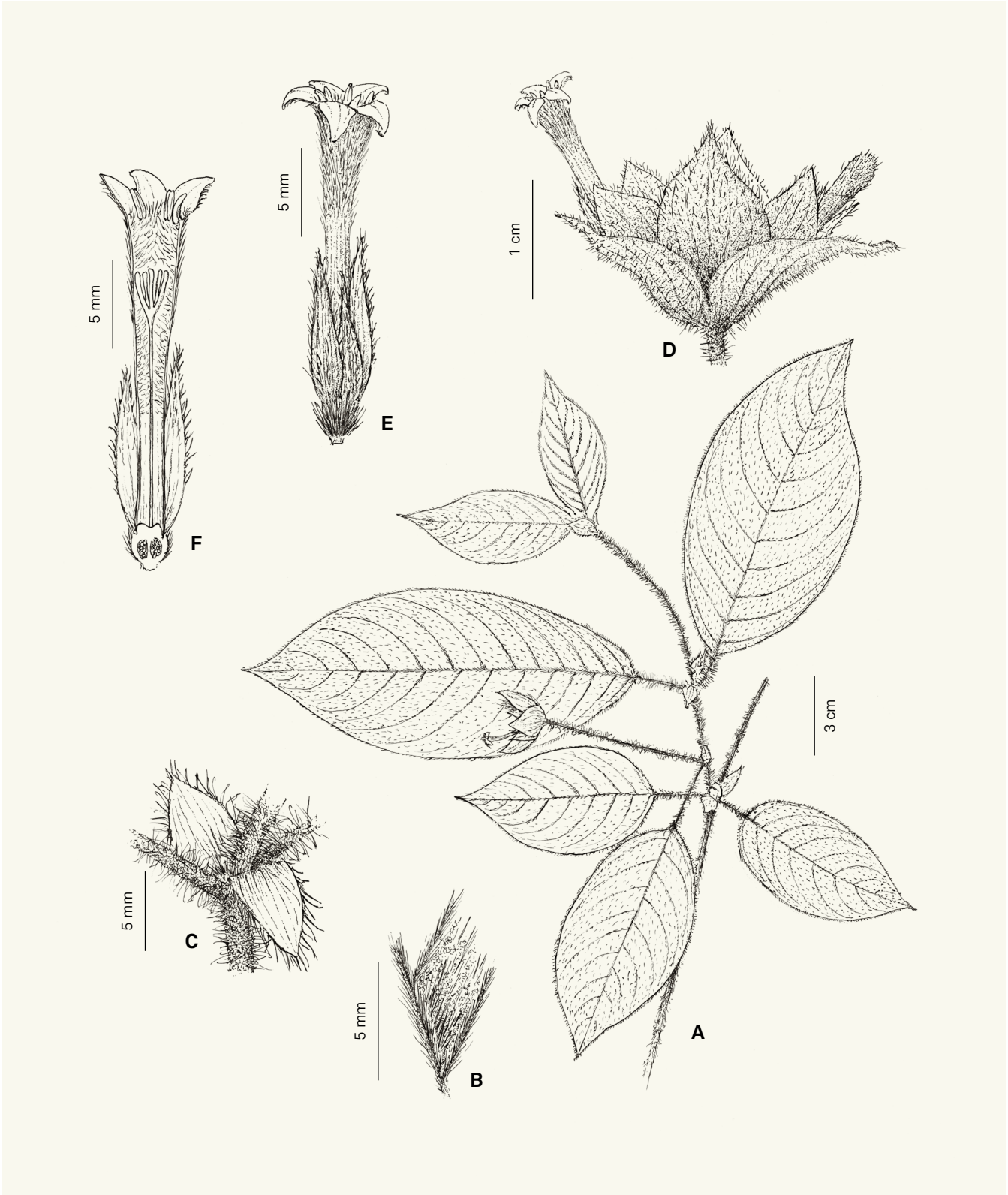

Fig. 5. – *Sabicea ezangae* Zemagho, O. Lachenaud & Sonké. **A.** Flowering stem; **B.** Detail of lower leaf surface; **C.** Node and stipules; **D.** Inflorescence; **E.** Flower; **F.** Flower, longitudinal section.
[*Lachenaud et al. 1544*, BR & BRLU] [Drawing: A. Fernandez]

Sabicea jongkindii Zemagho, O. Lachenaud & Sonké, **spec. nova** (Fig. 3C–D, 6).

Holotypus: Liberia. Sino: c. 50 km E of Greenville, 5°05'00"N 8°31'45'W, 14.III.2014, fl. & fr., *Jongkind et al. 12457* (BR!; iso-: K!, MO!, P!, WAG!).

Corolla rubra, stipulis minutis 1–2 mm longis, inflorescentiis axillaribus 1–2-floris saepe fasciculatis bracteis bracteolisque parvulis Sabicea bracteolatae Wernham et S. roseae Hoyle affinis, sed differt a primo corollae tubo 16–18 mm longo (nec 11–13 mm) et stipulis semper erectis (nec saepe recurvatis), a secundo fructibus late ellipsoideis in sicco 8–16 × 6–12 mm (nec oblongis vel fusiformibus (6–)8–18 × 3–6 mm). Ab ambabus calycis lobis linearibus 5–11 × 0.2–0.5 mm (nec triangularibus 1.5–5.5 × 0.8–1.8 mm) distinguitur.

Scrambling woody *liana*; young stems ± angular, 1–3 mm thick, with dense appressed hairs 0.3–0.7 mm long. *Stipules* interpetiolar, triangular, 1–2 × 1.8–2.8 mm, acute or shortly bifid at apex, erect, shortly appressed-hairy ouside, persistent. *Leaves* opposite, usually ± unequal; petiole 0.5–3.2 cm long, with same indumentum as the stems; leaf-blade elliptic to obovate, 2.7–8.7 × 1.6–4.5 cm, cuneate at base, acuminate at apex, ± coriaceous, green on both sides but markedly paler below, drying brownish; upper surface with short and very sparse appressed hairs c. 0.1 mm long, lower surface with similar indumentum, mixed with longer appressed hairs c. 0.7 mm long on the main veins; secondary veins 7–12 pairs, strongly curved and ascending; tertiary veins darker and conspicuous on the lower leaf surface, forming a very dense reticulum with areolae c. 0.5 mm in diameter. *Inflorescences* axillary, opposite, 1(–3)-flowered, often fasciculate (up to 4 per axil); peduncle 0.3–1 cm long, shortly appressed-pubescent, with a pair of bracts at the apex, and two bracteoles under each flower; bracts ovate, 1.5–2.5 × 1–1.5 mm, acute at apex, shortly fused at base (then splitting after anthesis) shortly appressed-pubescent outside, densely villose at the base inside; bracteoles similar but slightly smaller, 1–1.5 × 0.7–1.2 mm. *Flowers* 5-merous, sessile. *Calyx* green; tube campanulate, 2–3.5 × 3–4 mm, shortly and sparsely appressed-pubescent outside, densely villose inside; lobes linear, 5–11 × 0.2–0.5 mm, erect, shortly and sparsely appressed-pubescent on both sides, ± canaliculate inside towards the base, alternating with minute colleters. *Corolla* red; tube 16–18 mm long × 2–2.5 mm wide at base and 4–5 mm at apex, almost cylindrical, outside with dense appressed silky hairs c. 0.5 mm long, inside sparsely hairy in the upper half and with a ring of dense hairs towards the lower ¼th; lobes triangular, 2.5–3 × 1.7–2.2 mm, apparently erect, silky-pubescent like the tube outside, minutely papillose inside. *Stamens* mostly included with only the tips exserted, inserted in the upper part of the tube, sessile; anthers 2.8–3 × 0.8 mm. *Ovary* 2–3 × 2–2.5 mm, 5-locular, densely covered with short appressed hairs. *Disk* cylindrical, c. 0.6 mm long, glabrous. *Style* 5-lobed, included, 12–14 mm long including the c. 5 mm long linear stigmas, the latter papillose, otherwise glabrous. *Fruits* red, obovoid to ellipsoid, 8–16 × 6–12 mm when dry, sparsely appressed-pubescent, sessile, crowned with persistent calyx. *Seeds* polygonal, c. 0.5 mm, pale brown, the surface with close parallel striations.

Etymology. – This species is named after Carel Jongkind, collector of the type specimen and specialist of the West African flora, co-author of the reference book *Woody Plants of Western African forests* (Hawthorne & Jongkind, 2006).

Table 2. – Comparison of morphological characters and distribution between *Sabicea calycina* Benth., *S. ezangae* Zemagho, O. Lachenaud & Sonké and *S. schaeferi* Wernham. Characters diagnostic for one species are in bold.

	S. calycina	***S. ezangae***	***S. schaeferi***
Indumentum of stems	patent to appressed	patent	appressed
Indumentum of leaves (lower side)	uniform, with soft +/- straight hairs, patent to appressed	**mixture of short woolly + long straight hairs** (the latter mostly on the veins)	uniform, with straight appressed hairs (denser on the veins)
Inflorescences	4– to c. 15-flowered	4–5-flowered	7–15-flowered
Peduncles	glabrous, or rarely sparsely hirsute	hirsute	**appressed-pubescent**
Bracts	glabrous or shortly ciliate	**hirsute**	glabrous or with very sparse appressed hairs
Calyx lobes	**3(–4)**, glabrous or shortly ciliate	(4–)5, **hirsute**	(4–)5, glabrous except ciliate margin
Ovary	glabrous	**densely villose with stiff hairs**	glabrous or with sparse appressed hairs
Distribution	Sierra Leone to Uganda	Gabon	SW Cameroon and Equatorial Guinea (Bioko Island)
Altitudinal range	0–1025 m	c. 70 m	**1500–2000 m**

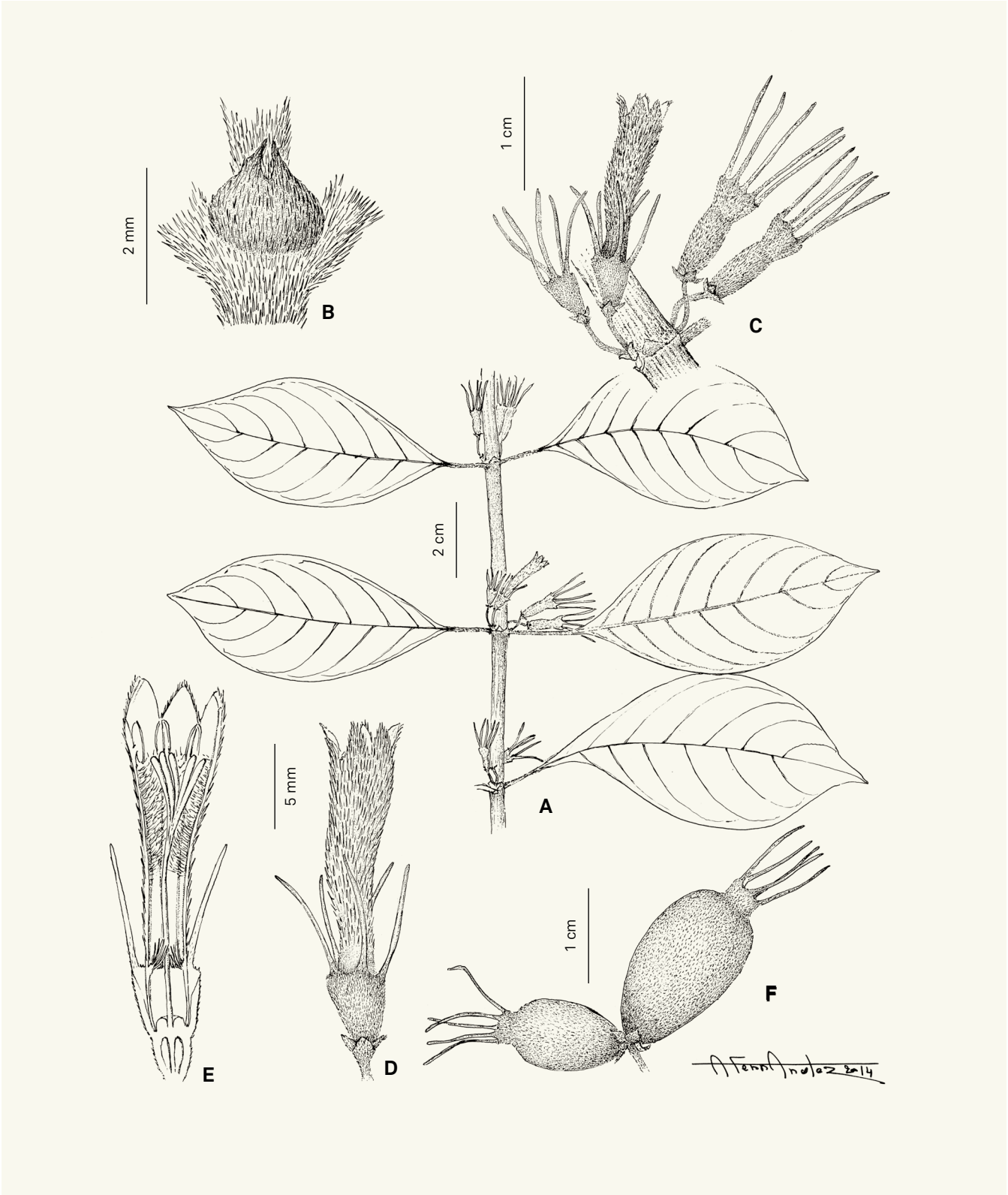

Fig. 6. – *Sabicea jongkindii* Zemagho, O. Lachenaud & Sonké. **A.** Flowering stem; **B.** Node and stipules; **C.** Node with inflorescences; **D.** Flower; **E.** Flower, longitudinal section; **F.** infructescence with two fruits. [**A, C–D:** *Jongkind & Blyden 5349*, WAG; **B, E–F:** *Jongkind et al. 12457*, BR] [Drawing: A. Fernandez]

Distribution, ecology and phenology. – Upper Guinea subcentre of endemism (White, 1979). *Sabicea jongkindii* has a disjunct range (Fig. 4), occurring both in south-eastern Liberia (Sinoe R. basin) and south-western Ghana (Ankasa and surroundings); it may also be expected in Ivory Coast close to the Ghanaian border. The species grows on the edges of lowland wet evergreen forest. The two areas where it occurs are believed to have been forest refuges during dry periods (Sosef, 1994) and similar disjunct distributions are not uncommon among wet forest species, e.g. *Ixora badwinii* (*Rubiaceae:* De Block, 1998), *Monocyclanthus vignei* Keay (*Annonaceae:* Poorter et al., 2004) or *Synsepalum ntimii* W.D. Hawthorne (*Sapotaceae:* Hawthorne, 2014). *Sabicea jongkindii* is flowering in November, January and March and is fruiting in March-April and October.

Conservation status. – The extent of occurrence of *Sabicea jongkindii* is estimated to be 16,937 km² (within the limit for Vulnerable status under criterion B1) and its area of occupancy to be 20 km², within the limit for Endangered status under criterion B2. The species occurs in south-eastern Liberia and south-western Ghana, and is known from six specimens representing five extant subpopulations (a sixth one, only known from an old collection around Tarkwa in Ghana, is possibly extinct due to mining activities). Only one of its subpopulations is in a protected area (Ankasa National Park in Ghana); the other ones are exposed to deforestation for agriculture. Even though the species occurs in forest edges, and thus may tolerate a certain degree of habitat degradation, the strong human pressure in its range leads us to anticipate a decline in the extent and quality of habitat, number of locations, number of individuals, and thus AOO and EOO. The five subpopulations represent five "locations" (sensu IUCN, 2012) and the species qualifies as "Endangered" [EN B2ab(i,ii,iii,iv,v)] using the IUCN Red List Categories and Criteria (IUCN, 2012)

Notes. – This species is very close to *S. bracteolata* Wernham and *S. rosea* Hoyle, both of which have similar leaves and inflorescences, a red corolla, and very small stipules that are often bifid at apex. It differs from both species by the linear and usually longer calyx lobes; it is further separated from *S. rosea* by the relatively broader fruits, and from *S. bracteolata* by the longer corolla tube and the stipules being always erect (Table 3). The earliest collection of *S. jongkindii*, *Vigne 4841*, was briefly discussed under *S. bracteolata* by Hepper (1963: 172) who already noted the difference in the calyx lobes.

J.B. Hall in 1972 annotated the type specimen of *S. rosea* as "probably = *S. bracteolata*", but a careful examination of the material shows them to be distinct species (Table 3). The ranges of *S. jongkindii* and *S. rosea* overlap (the latter being much more widespread) but that of *S. bracteolata*, which is restricted to the highlands of Guinea, appears to be separate from both.

The only flowers seen are short-styled; due to the paucity of the material, it is not known whether the species is heterostylous.

Paratypi. – **Liberia. Sino:** Butaw, 17.III.1948, fr., *Baldwin 11486* (K, MO); Sapo NP, buffer zone, near rapids in Sinoe River, 5°20'06"N 8°48'12"W, 23.XI.2002, fl., *Jongkind & Blyden 5349* (BR, WAG).

Ghana. Western Region: Ankasa Forest Reserve, 6.X.1973, fr., *Enti R 1164* (BR, K, MO, WAG); 2 miles N of Ankasa F.R., 5.IV.1968, fr., *Enti & Hall GC 38430* (FHO, K); near Tarkwa, fl., I.1941, *Vigne 4841* (FHO).

Sabicea uniflora Zemagho, O. Lachenaud & Sonké, **spec. nova** (Fig. 7).

Holotypus: Gabon. Ngounié: 27 km on the road Mimongo to Koulamoutou, 4.XII.2000, fl., *Wieringa et al. 4567* (BR [BR0000024875851]!; iso-: DSM, E, K!, LBV!, MA, MO, WAG!).

Combinatione habitu reptante, inflorescentiis axillaribus 1(–3)-floris, bracteis bracteolisque quam calyce multo minoribus, corolla alba tubo longiore (17–19.5 mm) ab omnibus congeneribus facile distinguitur.

Creeping *herb* c. 15 cm high; stems cylindrical, 1–1.5 mm thick, with a mixed indumentum of straight appressed hairs c. 0.7 mm long and shorter uncinate hairs. *Stipules*

Table 3. – Comparison of morphological characters and distribution between *Sabicea bracteolata* Wernham, *S. jongkindii* Zemagho, O. Lachenaud & Sonké and *S. rosea* Hoyle. Characters diagnostic for one species are in bold.

	S. bracteolata	***S. jongkindii***	***S. rosea***
Stipules	**usually recurved at apex** (rarely erect)	erect	erect
Leaves	equal	usually unequal	equal to slightly unequal
Calyx lobes [mm]	triangular, 2–5.5 × 1–1.8	**linear, 5–11 × 0.2–0.5**	triangular, 1.5–4.5 × 0.8–1.5
Corolla tube length [mm]	**11–13**	16–18	17–25
Fruits (dry) [mm]	ellipsoid, 4–6 × 2.5–4 (only known when immature)	ellipsoid, 8–16 × 6–12	**narrowly oblong to fusiform**, (6–)8–18 × 3–6
Distribution	**Guinea (Fouta Djalon & Simandou range)**	SE Liberia & SW Ghana	Liberia to Nigeria

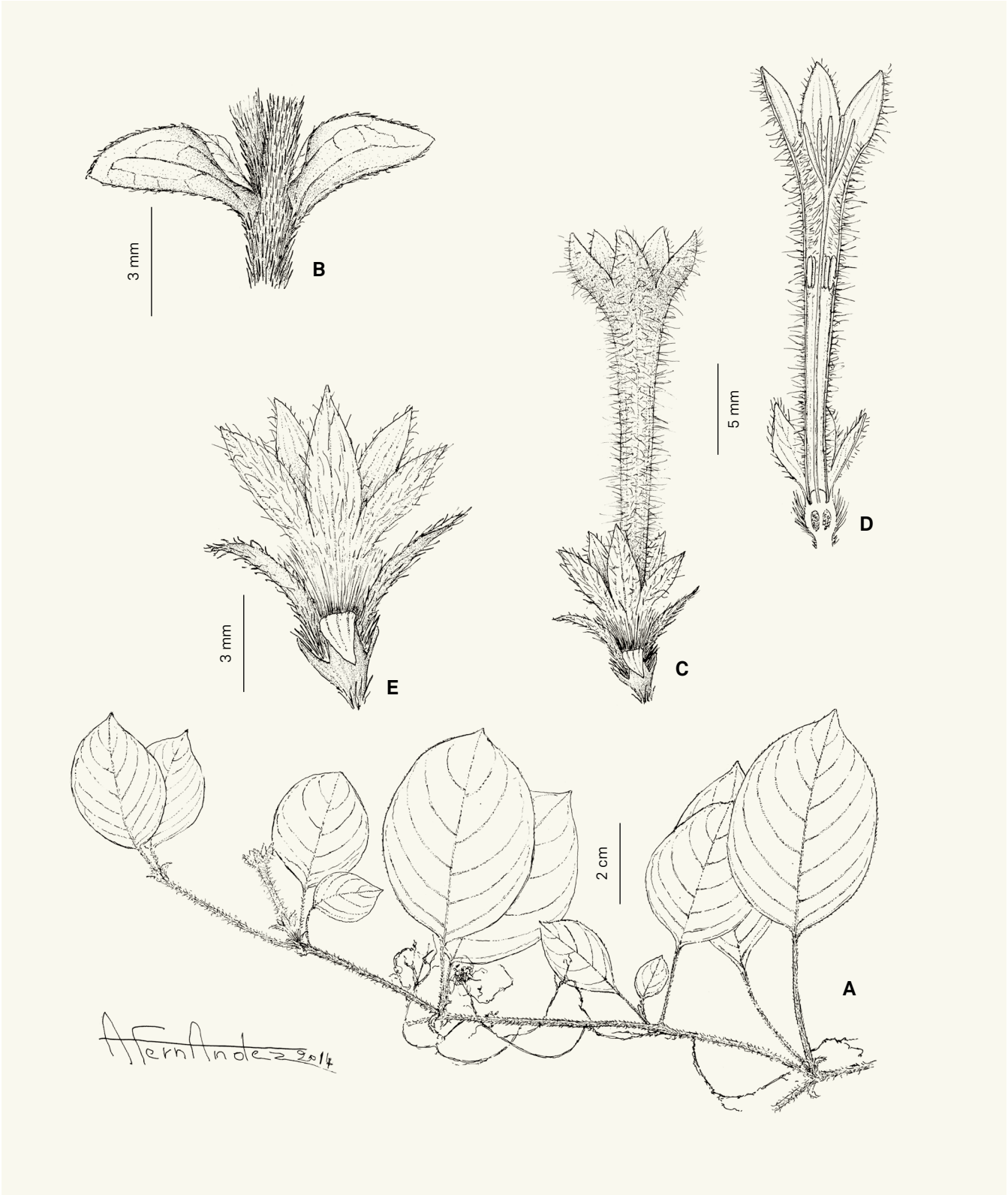

Fig. 7. – *Sabicea uniflora* Zemagho, O. Lachenaud & Sonké. **A.** Flowering stem; **B.** Node and stipules. **C.** Inflorescence; **D.** Longitudinal section of flower; **E.** Inflorescence (corolla removed). [*Wieringa et al*. *4567*, BR] [Drawing: A. Fernandez]

interpetiolar, ovate to elliptic, 3.3–8 × 2.2–5 mm, obtuse at apex, curved ± at a right angle from the stem, glabrous to very sparsely pubescent outside, glabrous inside except at the base, persistent. *Leaves* opposite and ± equal; petiole 1.5–5 cm long, with same indumentum as the stems; leaf-blade elliptic, 3.3–8 × 2.2–5.1 cm, acute at base, obtuse or hardly acuminate at apex; papyraceous, green on both sides but markedly paler below, drying olive green to olive brown; both surfaces with minute appressed or half-erect scabrid hairs, intermixed with sparse longer hairs (these mostly on the veins); secondary veins 6–8 pairs, markedly curved and ascending, forming irregular loops 1–2.5 mm from the leaf margin; tertiary veins darker and conspicuous below, forming a rather lax reticulum with areolae c. 2 mm in diameter. *Inflorescences* axillary, solitary, 1(–3)-flowered, sessile, with a single pair of bracts and one pair of bracteoles per flower; bracts elliptic, 2.5–3.5 × 0.7–1.2 mm, shortly connate at base, acute at apex, sparsely pubescent outside and villose at the base inside; bracteoles lanceolate, 4–4.5 × 0.7–1.2 mm, free, otherwise similar to the bracts. *Flowers* 5-merous; pedicel 1–2.5 mm long, villose. *Calyx* pale pink-green outside and reddish-green inside; tube 1.5–2 × 1.7–3.5 mm, sparsely appressed-hairy on both sides; lobes ovate to narrowly triangular, 3–5 × 1–2 mm, acute at apex, shortly and sparsely pubescent outside and in the upper half inside, alternating with minute colleters. *Corolla* white; tube 17–19.5 mm long × 1–1.2 mm wide at base and 2.5–3 mm at apex, almost cylindrical, outside sparsely villose with patent silky hairs 1–1.5 mm long, inside sparsely pubescent in the upper half and with white hairs c. 0.5 mm long in the throat; lobes triangular, 4–4.5 × 1.8–2.5 mm, patent, outside sparsely villose like the tube, inside minutely papillose. *Stamens* included, inserted around the upper ⅓rd of the corolla tube, subsessile; anthers c. 2.2 × 0.5 mm. *Ovary* c. 1.5 × 1.5 mm, 5-locular, densely villose with stiff hairs 1.5–2 mm long. *Disk* cylindrical, c. 1 mm long, glabrous. *Style* 5-lobed, exserted, c. 22 mm long including the c. 4.5 mm long linear stigmas, the latter papillose, otherwise glabrous. *Fruits* and *seeds* not known.

Etymology. – The species is named after its usually 1-flowered inflorescences, an uncommon (although not unique) character in the genus.

Distribution, ecology and phenology. – Lower Guinea subcentre of endemism (White, 1979). *Sabicea uniflora* occurs in the Chaillu Massif in south-central Gabon (Fig. 4), and is only known from the type specimen, collected in primary forest at an altitude of 570 m. The area where it is found is a well-known centre of endemism, and has been postulated as a former forest refuge (e.g. Sosef, 1994; Robbrecht, 1996; Janssens et al., 2011). *Sabicea uniflora* is flowering in December.

Conservation status. – *Sabicea uniflora* is endemic to the Chaillu Massif in south-central Gabon, and has been collected only once. Its extent of occurrence is therefore not calculable, and its area of occupancy is estimated to be 4 km^2, within the limit for Critically Endangered under criterion B2. The area where it occurs has no protection status. It does not seem immediately threatened by human activities, and there is no evidence of a decline. However, the species' very limited range makes it vulnerable to any threats that might arise in the future, e.g. forest clearance for agriculture or mining, and the species qualifies for "Vulnerable" [VU D2] using the IUCN Red List Categories and Criteria (IUCN, 2012).

Notes. – This is a very distinctive species, easily recognised by the combination of a creeping habit, and 1(–3)-flowered inflorescences with bracts much shorter than the calyx. It has no obvious close relatives, and in the absence of fruits, its exact affinities within the genus are unclear.

It is not known whether this species is heterostylous; only long-styled flowers are known so far.

New synonymies in the genus and other nomenclatural notes

Sabicea speciosissima K. Schum. in Bot. Jahrb. Syst. 33: 338. 1903, **syn. nov.**

Holotypus: Cameroon. Southwest: Kebo, 19.VI.1899, *Conrau 247* (B†). **Neotypus** (designated here): **Cameroon. Southwest:** forest near Boa Bakundu village, SW of Kumba, 19.IV.1986, *Etuge & Thomas 60* (BR [BR0000018696042]!; iso-: MO).

= ***Rothmannia octomera*** (Hook.) Fagerl. in Arkiv För Bot. Stockh. 30A, 7: 39. 1943. ≡ *Gardenia octomera* Hook. in Bot. Mag.: tab. 5410. 1863. **Holotypus: [Equatorial Guinea]:** "ex Fernando Po" [Bioko Island], cult. hort. Kew, X.1863, *Mann s.n.* (K!).

Notes. – The original material of *Sabicea speciosissima* was destroyed in Berlin, and no duplicates have been found; a photograph is kept in BM, but is of very poor quality and shows only a leafy branch (the flowers being presumably hidden in a pocket). A figure of the flower has been published by Wernham (1914: Pl. XII.40) whose account of this species in his monograph is otherwise very brief. There are no more recent records of the species, which is not even mentioned by Hepper (1963) in his regional treatment of the genus.

Schumann (1903) describes *S. speciosissima* as a shrub ("*fruticosa*") with leaves pubescent on both sides, stipules 1 cm long and abruptly acuminate from a triangular base ("*e basi late triangulari abrupte acuminatis et subulatis*"), 5-merous axillary solitary flowers, a 2-locular ovary, a calyx with tomentose linear lobes c. 3 cm long, and a tomentose corolla 10 cm long. The corolla size is much longer than in any species of *Sabicea* – as

Schumann already noted – and the stipule shape and habit are also aberrant for the genus. Among the few genera of Central African *Rubiaceae* that may show solitary flowers of this size, i.e. *Adenorandia* Vermoesen, *Euclinia* Salisb., *Gardenia* J. Ellis and *Rothmannia* Salisb., the first two can be excluded due to their broadly foliaceous calyx lobes, strictly terminal inflorescences and 1-locular ovary, and the third owing to its very different, sheathing stipules. Thus, *Rothmannia* (with inflorescences not truly axillary, but often appearing so due to sympodial growth of the stem) remains the only possibility. Within this genus, the only species fitting Schumann's description in leaf, stipule and calyx characters is *R. octomera*, which however has a 6- to 8-merous and even longer (16–22 cm) corolla. The possibility of an aberrant 5-merous specimen seems not unlikely, and Schumann's description may have been based on a flower in bud, which would explain the discrepancy in corolla size – though the figure in Wernham (1914: Pl. XII.40) shows an open corolla, the stiffly erect position of the lobes suggests it may have been artificially opened. The photograph of the type, however poor, appears to match *R. octomera*, and additional support for this interpretation comes from Schumann's (1903) note that the fruits produce a black dye, used by local people to paint their faces ("apúme des Engeborenen, die sich der Beeren zum Schwarzfärben des Gesichtes bedienen"), a usage which is documented in several species of *Rothmannia* including *R. octomera* (Burkill, 1997).

A specimen from the same region as Conrau's original type, and matching well the original description (except in its 6-merous flowers) is designated here as neotype.

Sabicea dewevrei De Wild. in Ann. Mus. Congo, Bot. ser. 3, 1: 112. 1901.

Lectotypus (designated here): **Democratic Republic of Congo. Tshopo:** Waboundou, 6.XII.1896, *Dewèvre 1143* (BR [BR0000008856791]!; isolecto-: BR [BR0000008856807]!).

= *Sabicea gigantea* Wernham, Monogr. Sabicea: 71. 1914. **Lectotypus** (designated here): **Democratic Republic of Congo. Sankuru:** Munungu, III.1910, *Sapin s.n.* (BR [BR000000885698]!; isolecto-: BR [BR000000885695]!), **syn. nov.**

Notes. – Wernham (1914) already noted the close resemblance between *S. gigantea* and *S. dewevrei*, which share, among other characters, inflorescences subtended by a single pair of shortly connate involucral bracts, and a calyx tube much longer than the lobes. He separated them based on a supposed difference in habit (tree vs liana) and the indumentum of the stems and peduncles (glabrous in *S. gigantea* vs hirsute in *S. dewevrei*). The type of *S. gigantea* is indeed reported as a tall tree, but this is certainly an error (no arborescent species of *Sabicea* are known to date) and the indumentum is actually quite variable in *S. dewevrei*. Accordingly, the two species are here synonymised.

The type collections of *S. dewevrei* and *S. gigantea* both consist of two sheets; in either case, we have selected the most complete one as lectotype.

Sabicea discolor Stapf in J. Linn. Soc., Bot. 37: 105. 1905.

Lectotypus (designated here): **Liberia. Sinoe:** Sinoe Basin, 1904, *Whyte s.n.* (K [K000043317]!). **Syntypi: Ghana:** Akwapim, III.1900, *Murphy 679* (K [K000043305]!). **Liberia. Montserrado:** Monrovia, 1904, *Whyte s.n.* (K [K000043318]!).

= *Sabicea arachnoidea* Hutch. & Dalziel, Fl. W. Trop. Afr. 2: 106. 1931. **Lectotypus** (designated here): **Sierra Leone. Northern Prov.:** Yonibana, 11.XI.1914, *N.W. Thomas 5275* (K [K000043255]!). **Syntypi: Sierra Leone. Northern Prov.:** Yonibana, 11.XI.1914, *N.W. Thomas 5062* (K [K000043256]!); Roruks, 24.XI.1914, *N.W. Thomas 5703* (K [K000043257]!), **syn. nov.**

Notes. – *Sabicea arachnoidea* was described based on three very poor collections from Sierra Leone, and has never been recollected since. It is supposedly characterised by dense globose inflorescences, linear or filiform calyx lobes, and discolorous leaves with arachnoid indumentum beneath (Hutchinson & Dalziel, 1931; Hepper, 1963). A reexamination of the syntypes shows that the so-called inflorescences are actually leaf galls, which bear structures resembling calyx lobes at first sight – similar galls have been reported in *S. sciaphilantha* subsp. *hirsuta* Zemagho, O. Lachenaud & Sonké (Zemagho et al., 2017). In vegetative characters the syntypes of *S. arachnoidea* are inseparable from *S. discolor*, which has also been collected at Yonibana (*N.W. Thomas 5038*, K) and it is therefore obvious that the two species are identical.

Among the three syntypes of *S. arachnoidea*, the most complete collection [K000043317] is designated here as lectotype. The original description of *S. discolor* (Stapf, 1905) is also based on three syntypes, as the author states: "near Monrovia and in the Sinoe Basin, *Whyte*. Also in the Gold Coast near Akwapim, at 1400 feet, *Murphy* (herb. *Johnson*, 679)". One of the *Whyte* collections, which is slightly better than the others, is selected here as lectotype.

Sabicea speciosa K. Schum. in Bot. Jahrb. Syst. 23: 429. 1896.

Holotypus: **Cameroon. Southwest:** Barombi-Station, 22.XI.1889, *Preuss 150* (B†; iso-: K [K000414554]!). **Lectotypus** (designated here): (K [K000414554]!).

= *Sabicea neglecta* Hepper in Kew Bull. 14: 255. 1960. **Holotypus: Nigeria. Cross River State:** Okarara, Oban Group Reserve, 14.V.1952, *Ujor FHI 30836* (K [K000414562]!; iso-: FHI [FHI0030836-0]!), **syn. nov.**

Notes. – The synonymy of these two species was recognised as long ago in 1972 by J.B. Hall, but seems never to have been published. Hepper (1960) separated *S. neglecta* from *S. speciosa* by its axillary (vs cauliflorous) inflorescences and caudate leaf-tips, but these characters are not reliable: as in e.g. *S. desseinii* or *S. pilosa,* the inflorescences of *S. speciosa,* though usually borne on old stems, may be axillary as well (e.g. *Dessein et al. 2763* or *Letouzey 5275,* both BR). In all other respects, e.g. red corolla, linear calyx lobes, broad reflexed stipules, and hirsute indumentum of most organs, the type of *S. neglecta* is a very good match for *S. speciosa.*

The original material of *S. speciosa* has presumably been lost in B, so the only duplicate traced, in Kew, is designated here as lectotype.

Sabicea speciosa occurs in eastern Nigeria, Cameroon, Equatorial Guinea (Rio Muni), and disjunctly in D. R. Congo. A record from Togo (Wernham, 1914; Hepper, 1963; Brunel et al., 1984) is very dubious, as it based on a specimen now destroyed, *Büttner 263*, which is more likely to have been *S. cordata* Hutch. & Dalziel. The latter species appears to be the western vicariant of *S. speciosa*, and does occur in Togo (Brunel et al., 1984).

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