Novitates Gabonenses 60. Salacia hallei, a name for a rare Celastraceae species from western central Africa

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Jongkind C. C. H. 2006. — Novitates Gabonenses 60. *Salacia hallei*, a name for a rare Celastraceae species from western central Africa. *Adansonia*, sér. 3, 28 (1): 101-104.

ABSTRACT

KEY WORDS Celastraceae, Salacia, Gabon, Cabinda,

new species.

A new species, *Salacia hallei* (Celastraceae), from Gabon and Angola is described and illustrated. The species is unique by the combination of glabrous leaves with a transverse tertiary venation, a conspicuous pedunculate inflorescence and glabrous flowers with 3-4 mm wide, almost round, petals and 4 to 6 ovules in each carpel.

RÉSUMÉ

Novitates Gabonenses 60. Salacia hallei, un nom pour une espèce rare de Celastraceae d'Afrique centrale occidentale.

MOTS CLÉS Celastraceae, Salacia, Gabon, Cabinda, espèce nouvelle. Une nouvelle espèce, *Salacia hallei* (Celastraceae), du Gabon et d'Angola est décrite et illustrée. L'espèce se distingue des autres espèces de *Salacia* d'Afrique équatoriale par ses feuilles à nervures intersecondaires transverses et ses inflorescences pédonculées à fleurs glabres avec pétales suborbiculaires de 3-4 mm de diamètre et l'ovaire à 4-6 ovules par loge.

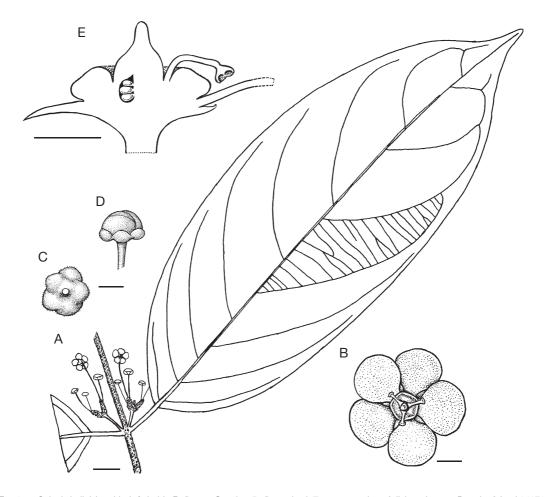


Fig. 1. — Salacia hallei Jongkind: **A**, habit; **B**, flower; **C**, calyx; **D**, flower bud; **E**, cross-section of disk and ovary. Breteler & Leal 14170. Scale bars: A, 1 cm; B-D, 2 mm; E, 1 mm.

INTRODUCTION

The pantropical genus *Salacia* L. is, with *c.* 90 species, one of the largest genera in the African equatorial forest, the majority of the species are large woody climbers. *Salacia* species can be found in all kinds of forests and the brightly coloured, fleshy fruits are eaten by many different animals. Even after the completion of the *Flore du Gabon* for this genus (Hallé 1986) it can still be very difficult to identify newly collected specimens and the new species proposed here will certainly not be the last.

In the *Flore du Gabon* N. Hallé described a new species of *Salacia* with pedunculate inflorescences and leaves with a very characteristic nervation (Hallé 1986: 145). This species was known at that time from two incomplete specimens only and, because of this, did not receive a scientific name in that publication yet. Since 1986 more complete specimens of this species were collected on different locations in Gabon and today it is known well enough to give it a scientific name. It is named here after N. Hallé who first recognised this species and who studied *Salacia* and related genera for many years.

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SYSTEMATICS

Salacia hallei Jongkind, sp. nov. (Fig. 1)

Salacia spec. N.Hallé (1986): 145.

Liana magna, ramulis lenticellatis. Folia subopposita, in sicco discoloria. Inflorescentiae pedunculatae. Pedicellus 18 mm, gracilis. Flos c. 10 mm in diam. Petala 3,5-4,5 mm lata. Stamina brevia. Discus subpentagonatus. Ovula 4-6 in quoque loculo. Fructus ignotus.

TYPUS. — Gabon. Haut-Ogooué, about 30 km E of Lastoursville, S of Bambidie, 3.X.1997, *Breteler & Leal 14170* (holo-, WAG; iso-, BR, LBV, K, MO, P).

PARATYPES. — **Gabon.** NE of Asok, 560 m, 17.VIII.1978, Breteler & de Wilde 84 (WAG). — Between Doussala and Igotchi, SW of Doussala, 29.XI.1986, de Wilde, Arends & de Bruijn 9038 (BR, EA, K, LBV, MA, MO, P, PRE, SRGH, WAG). — Makanda surroundings, about 65 km SSW of Booué, 2.III.1999, Breteler et al. 15273 (LBV, BR, WAG). — Réserve de Lopé-Okanda, 10.XI.1990, L.J.T. White [series 2] 176 (MO, WAG).

Angola, Cabinda. Mayumbe, collines de Mbulu, région de Hambe, 11.IV.1919, *Gossweiler 7993* (BR).

DESCRIPTION

Large liana. Branchlets densely lenticellate, glabrous. Leaves subopposite; petiole 1-2 cm long; blade elliptic to ovate-elliptic or oblong-elliptic, $11-26 \text{ cm} \times 4.5-12 \text{ cm}$, entire, glabrous, when dry greyish-green above and olive-green beneath; midrib prominent above, 5-7 pairs of main lateral nerves, tertiary nervation subparallel and almost perpendicular on midrib; base acute to obtuse; apex acuminate; no resinous threads present to the breaking leaf. Inflorescence subumbellate or cymose; peduncle 4-7 mm long. Flower c. 10 mm wide, completely glabrous; slender pedicel up to 18 mm long; calyx c. 2.5 mm across with short and rounded calyx-lobes, pale green, margin often fimbriate; petals orbiculare, spreading, 3.5-4.5 mm wide, pale orange; 3 stamens, c. 1 mm long, anthers very short, both in one line, pale orange; disk 1.5-2 mm wide, slightly angular, dark orange to red; style shorter than stamens; 4 to 6 ovules in two rows in each carpel; flower in bud wider than high. Fruit not known.



Fig. 2. - Distribution of Salacia hallei Jongkind.

REMARKS

In the keys of the Flore du Gabon the new species would end up on page 36 next to S. devredii Wilcz. and S. lehmbachii Loes. However the shape of its disk is different from that of both other species, it is more or less pentagonal but not cupuliform like in S. devredii and not as flat as in S. lehmbachii. An other important character is the number of ovules in each carpel, S. devredii has only 2 ovules per carpel while S. hallei has 4 to 6 ovules. The difference with S. lehmbachii, with 2-4 ovules per carpel, will be less clear at this point, but in addition the leaves and habit are clearly different. Salacia lehmbachii is never a liana and does not show the subparallel tertiary venation, which is characteristic of S. hallei. The new species can even be identified when sterile because of its characteristic venation and conspicuously tuberculate branches.

HABITAT AND DISTRIBUTION

Dense equatorial forest in Gabon and Angola (Cabinda).

Looking at its geographical distribution on the map and its ecology it is likely that *S. hallei* can be found in the dense forest in Congo-Brazzaville south of Gabon as well (Fig. 2).

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Conservation status

The species is here mentioned as rare because it is represented by only few collections compared to a large number of other, just as conspicuous, *Salacia* species. Because the new species seems to be widely spread in the southern part of the Lower Guinean forest area, an area with still an abundant presence of original forest, it can at the moment not be considered as threatened.

Acknowledgements

As starting point for the illustration of the new species I have used a few basis flower illustrations from N. Hallé published in the *Flore du Gabon*.

REFERENCE

HALLÉ N. 1986. — Salacia, in MORAT P. (ed.), Flore du Gabon 29. Muséum national d'Histoire naturelle, Paris: 28-175.

Submitted on 18 October 2005; accepted on 24 March 2006.

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