

# Novitates Gabonenses 47. Another new *Dichapetalum* (Dichapetalaceae) from Gabon

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**KEY WORDS**  
*Dichapetalum*,  
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## ABSTRACT

*Dichapetalum leucocarpum* is described and illustrated. It is the sixth new species of *Dichapetalum* published since the treatment of Dichapetalaceae for the Flore du Gabon. The distribution of the new species is mapped.

**MOTS CLÉS**  
*Dichapetalum*,  
Dichapetalaceae,  
Gabon.

## RÉSUMÉ

*Novitates Gabonenses 47. Encore un nouveau Dichapetalum (Dichapetalaceae) du Gabon.*

*Dichapetalum leucocarpum* est décrit et illustré. C'est la sixième espèce nouvelle de *Dichapetalum* publiée depuis la parution du traitement de la famille pour la Flore du Gabon. Sa distribution est cartographiée.

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After the publication of Dichapetalaceae for the Flore du Gabon (BRETELER 1991) the ongoing botanical exploration of this country has yielded several new additions (BRETELER 2003). The new species added now was collected before the publication of the flora treatment, but the material (*Breteler 5685, 6548, 6689*) was without flower and fruit. It was referred to *D. heudelotii* (Planch. ex Oliv.) Baill., without the identification to variety (BRETELER 1979: 42). Subsequently, when fertile material was collected (*Louis et al. 703,*

*743*) it was, with some hesitation, identified *D. heudelotii* var. *heudelotii* (BRETELER 1986: 38). Study of new flowering material collected thereafter led to the conclusion that the entity is a distinct species, endemic to Gabon, which is described below.

## *Dichapetalum leucocarpum* Breteler, sp. nov.

*Dichapetalum heudelotii* (Planch. ex Oliv.) Baill. var. *ndongense* (Engl.) Breteler *similis de characteribus*

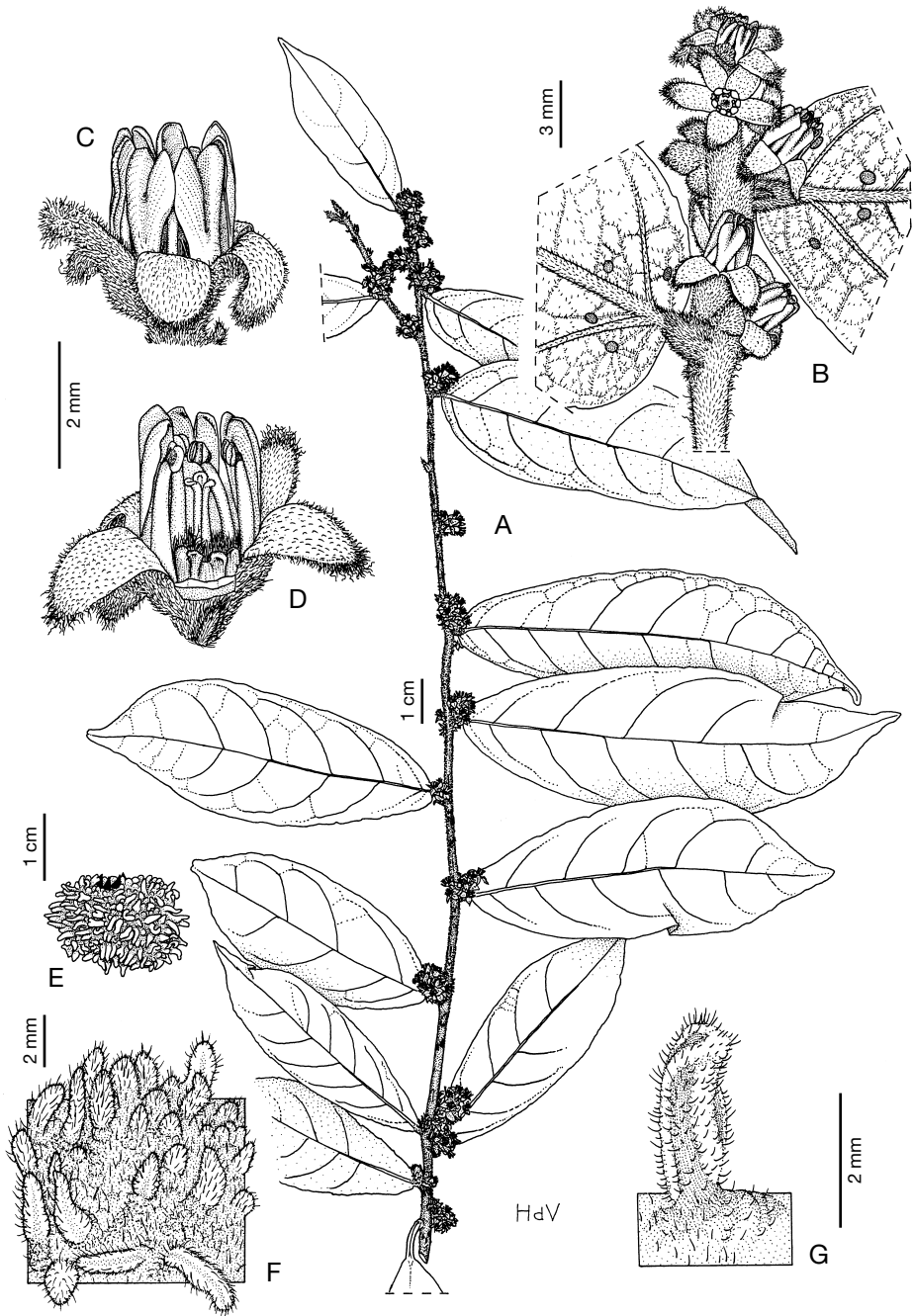


Fig. 1. — *Dichapetalum leucocarpum* Breteler: **A**, flowering branch; **B**, flowering leaf axils; **C**, flower; **D**, flower, one sepal, two petals and one stamen removed, showing staminodes (disc glands) and pistil; **E**, fruit; **F**, detail of fruit wall; **G**, fruit tubercle. (A-D, Breteler et al. 13260; E-G, A.M. Louis et al. 703). Drawing by H. DE VRIES.

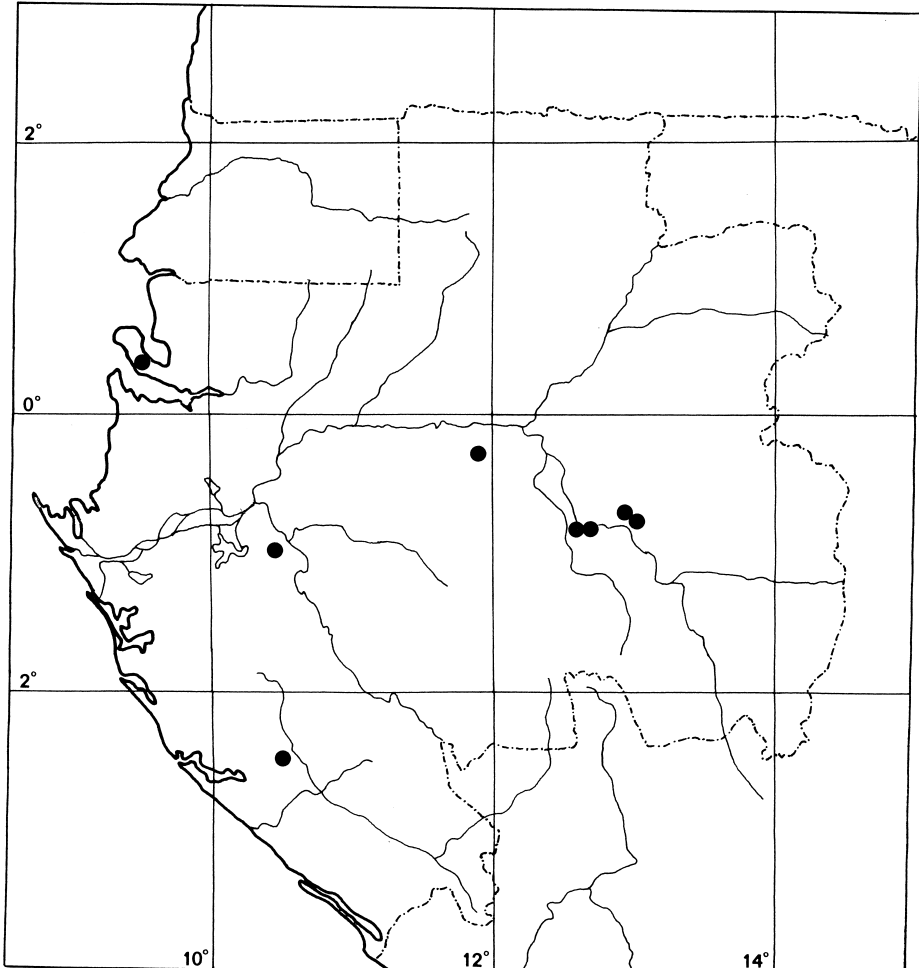


Fig. 2. — Distribution of *Dichapetalum leucocarpum* Breteler.

*florum, sed differt fructibus valde tuberculatis, molliter pilosis, albidis; differt a Dichapetalo heudelotii var. heudelotii floribus multo minoribus et fructibus dissimilibus.*

TYPUS. — Breteler, Nzabi & Wieringa 13260, Gabon, 6 km E of Bambidie, fl., 13 Oct. 1994 (holo-, WAG; iso-, BR, E, G, HBG, K, LBV, MA, MO, P, PRE).

Shrub, lianescent shrub, or liana. Branches ± glabrous, the orthotropic main lianescent stem distinctly lobed in transverse section; branchlets tomentose, glabrescent, sparsely lenticellate.

Stipules inconspicuous, appressed, triangular, usually broadly so, 1-1.5(-2) × 0.5-1(-1.5) mm, tomentose. Leaves: petiole subterete, 1-2(-3) mm long, tomentose; lamina papery, obovate-elliptic, (4-)7-9(-17) × (1.5-)2.5-4(-6) cm, 2-3(-3.5) times as long as wide, ± gradually tapering to a rounded to cordate and often oblique base, apex acuminate, the acumen 0.5-1 cm long; glabrous to tomentose but soon glabrescent above, often except for the impressed midrib, ± tomentose beneath, mainly on midrib and the 5-6(-8) pairs of main lateral nerves, more sparsely so (to glabrous) on the often distinctly paler (in older

leaves) tertiary venation; glands c. 0.5 mm in diam., borne only on lower surface, mainly alongside the midrib, often very distinct near base. Flowers (4-)5-merous, arranged in 1-5-flowered, tomentose glomerules. Bracts and bracteoles triangular, up to 1 mm long. Pedicel 0-1.5 mm long, the upper part c. 0. Sepals spreading to reflexed, ovate-elliptic, 1.5-2.5 × 1-1.5 mm, tomentose outside, sparsely so and mainly on upper part inside. Petals erect, ± free at base, obovate in outline, 2-2.5 mm long, glabrous, bilobed for 0.5-1 mm, lobes concave. Stamens suberect, 1.5-2 mm long, distinctly shorter than petals, glabrous. Stamminodes (disc glands) subquadrate to oblong, 0.5 × 0.3-0.5 mm, glabrous, slightly bilobed at apex or not. Pistil 2-3 mm long; ovary subglobose, (2-)3-locular, velutinous; style glabrous, shortly (2-)3-lobed apically. Fruit ± white, tomentose, 1-3-seeded, subglobose and c. 1 cm diam. to 2-3-lobed, strongly tuberculate, the tubercles short to filiform and up to at least 5 mm long. — Figs. 1, 2.

**HABITAT AND DISTRIBUTION.** — Rain forest of Gabon, up to c. 300 m. alt.

**PARATYPES.** — GABON: *Breteler 5685*, 42 km SE Lambaréné, ster., Sep. (BR, WAG); *Breteler 6548*, 4 km SW Lastoursville, ster., Sep. (BR, LBV, MO, WAG); *Breteler 6689*, 3 km Lastoursville - Koulamoutou, ster., Sep. (BR, LBV, MO, WAG); *Breteler et al. 13186*, Bambidie, fl., Oct. (BR, K, LBV,

MO, P, WAG); *A.M. Louis et al. 703*, 50 km SE Achouka, fr., Nov. (LBV, WAG); *A.M. Louis et al. 743*, same locality, fl., Nov. (B, BR, C, LBV, LG, MA, MO, P, PRE, SRGH, WAG); *Reitsma c.s. 2804*, 20 km SW Doussala, fr., Jan. (WAG); *Simons & Westerduijn 633*, Libreville, Sibang Arboretum, ster., Jan. (WAG).

**DISCUSSION.** — Based on its morphological characters *Dichapetalum leucocarpum* appears to be closely related to *D. heudelotii* and it keys out as if it represents that species (BRETILER 1991: 106). As it does not fit any of the four varieties recognized within *D. heudelotii* (BRETILER 1979: 27), one may ask why *D. leucocarpum* is not described as a fifth variety of this species instead of as a distinct species close to *D. heudelotii*. The four varieties of *D. heudelotii* are in fact founded on small flower characters only (BRETILER 1979: 26), while *D. leucocarpum* has flower characters that indeed fit one of the varieties of *D. heudelotii*, but the characters of its fruits are quite distinct from the rather wide range of fruit variation within *D. heudelotii*, and its stipules are much smaller. This combination of characters does not fit *D. heudelotii* sensu lato and therefore the new taxon is distinguished at the specific level.

To identify *D. leucocarpum* with BRETILER's (1986) Key II: Central African Species (p. 22) the following adaptations are proposed. Replace the present couplet 65 by the following new one and insert a new couplet 65\* as follows:

- 65 a. Style hairy in lower half. Whole area ..... **D. madagascariense**  
 65 b. Style glabrous in lower half or nearly so ..... 65\*  
 65\*a. Fruits strongly tuberculate ..... **D. leucocarpum**  
 65\*b. Fruits not tuberculate, at most strongly nerved ..... 66

For the Flore du Gabon (BRETILER 1991) it is necessary to insert after 58' a new couplet 58a as follows:

- 58 a. Fruits fortement tuberculés ..... **D. leucocarpum**  
 58 a'. Fruits non tuberculés, fortement nervurés au plus.

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