

## NOVITATES GABONENSES 67. A NEW SPECIES OF *BAPHIA* (LEGUMINOSAE – *PAPILIONOIDEAE*) FROM GABON

F. J. BRETELER

The new species *Baphia megaphylla* Breteler (*Leguminosae* – *Papilionoideae*) from Gabon is described and illustrated. It is most closely related to *Baphia maxima* Baker. The differences between the two species are summarised in a key.

*Keywords.* *Baphia*, Gabon, *Leguminosae*, new species, *Papilionoideae*.

### INTRODUCTION

The African genus *Baphia* G.Lodd. contains 46 species (Soladoye, 1985; Breteler, 1994) of which 17 species occur in Gabon. According to Sosef *et al.* (2006) there are 18 species known from Gabon. They also list *Baphia obanensis* Baker f. as being represented in this country, but the only two specimens cited under this name belong to *B. leptostemma* Baill. The new species described below originates from an area that was never collected by Le Testu (Raynal, 1968) and remained botanically unexplored until recently. It comprises the new Ivindo National Park and the area southeast of it towards Lastoursville, east of the Ogooué River.

#### ***Baphia megaphylla* Breteler, sp. nov. Figs 1, 2.**

*Baphia maximae* Baker maxime similis forma foliorum inflorescentiaeque, sed ab ea differt indumento ramunculorum foliorum inflorescentiaeque, foliis majoribus plures venas laterales et petiolos longiores habentibus, fasciculis inflorescentiae plures flores habentibus et bracteolis multo minoribus. – Type: Gabon, NE of Milolé, 12°44'E, 0°20'S, 12 vii 2006, *Breteler* 16024 (holo WAG; iso LBV, MO, P).

Slender unbranched to few-branched *treelet* up to 6 m tall, the leaves concentrated at the top or end of the branches. Branches puberulous, glabrescent. *Stipules* narrowly triangular, 3–15 mm long, up to 1.5 mm wide, pubescent outside, ± glabrous inside. *Leaves*: petiole terete, 6–30(–40) cm long, puberulous; blade ovate-elliptic, rarely almost orbicular, up to two times as long as wide, (10–)15–30(–52) × 7–20(–28) cm, obtuse to cordate at base, acute to acuminate, sometimes rounded to obtuse or even emarginate at apex, mucronate or not, acumen 0.5–1.5(–2) cm long; midrib impressed above, prominent beneath, lateral nerves 11–17 pairs; both sides

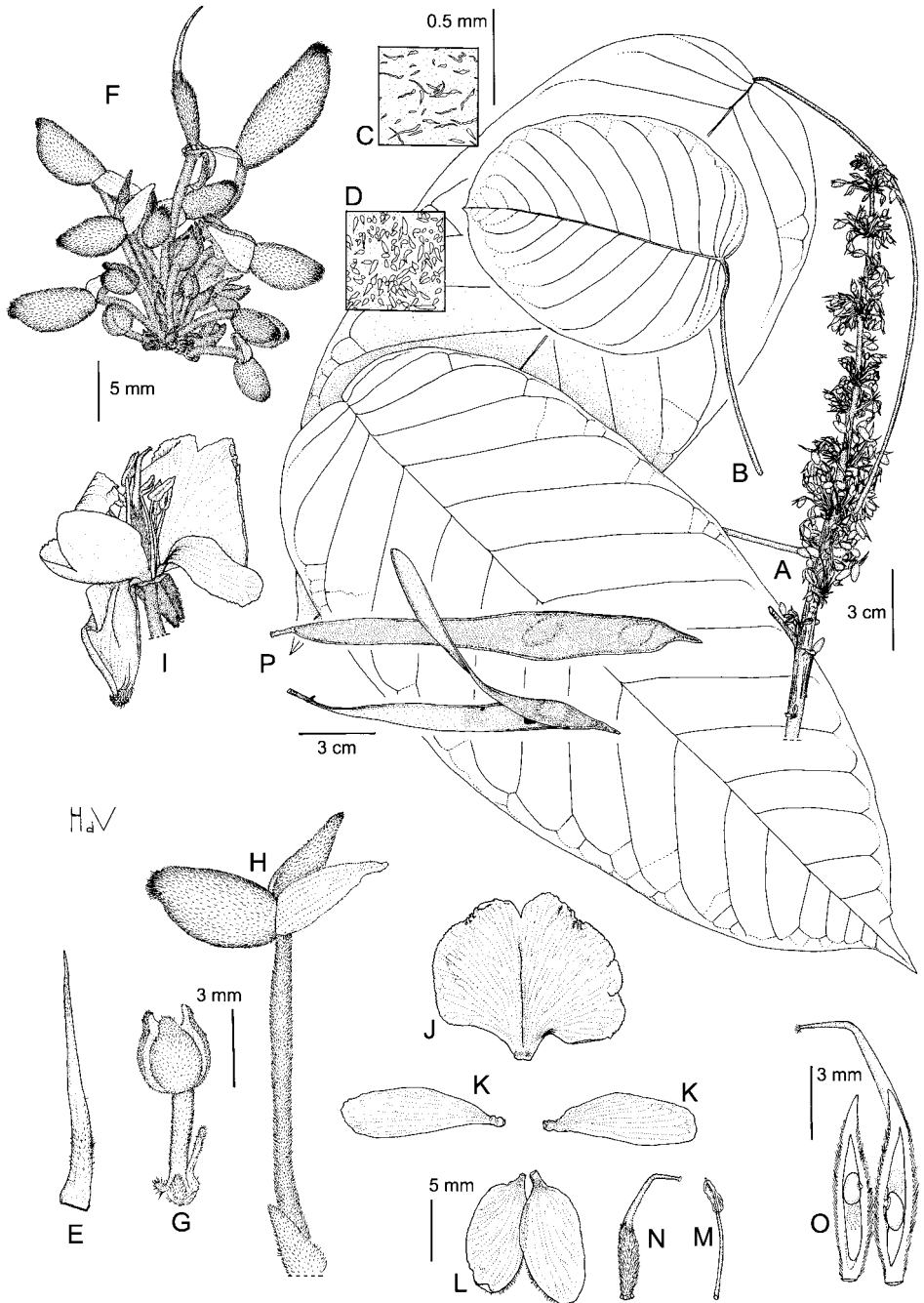


FIG. 1. *Baphia megaphylla* Breteler. A, flowering branch; B, leaf; C, detail of leaf indumentum of upper surface; D, idem, of lower surface; E, stipule; F, fascicle of flowers; G, young flower bud with bracteoles; H, mature flower bud; I, open flower; J, standard; K, wings; L, keel-petals; M, stamen; N, pistil; O, young pod; P, pods (A, *Breteler* 16010; B, *Breteler* 16024; C–E, *Breteler* 16003; F–O, *Breteler* 16019). Drawn by H. de Vries.

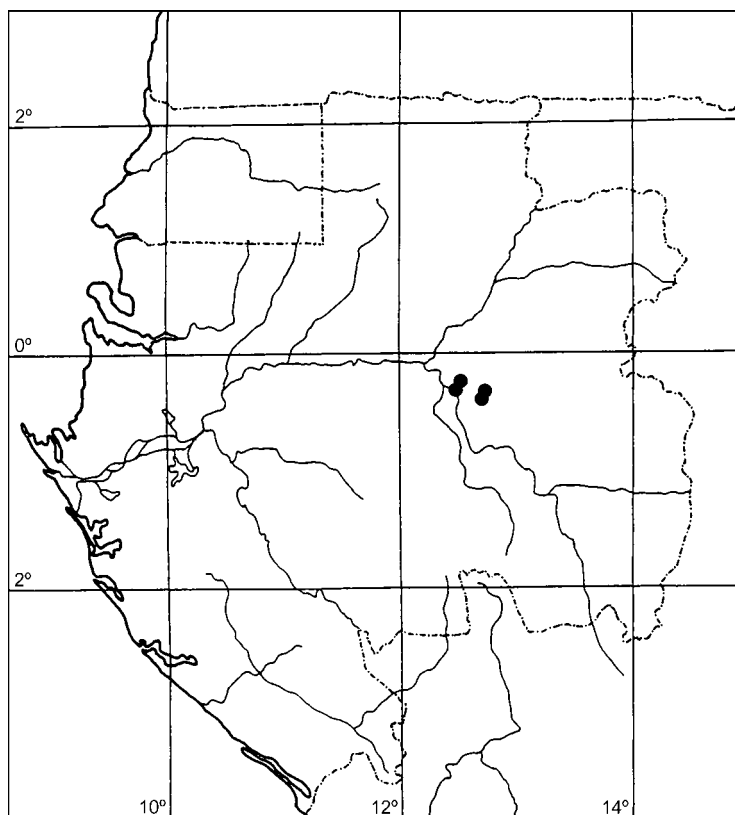


FIG. 2. Distribution of *Baphia megaphylla* Breteler in Gabon.

subappressed-puberulous to tomentellous, soon glabrescent above. *Flowers* 8–25 per fascicle, in the axils of the upper leaves and/or arranged in a terminal, spike-like, puberulous inflorescence; bracts ovate-triangular, 1–3 mm long, up to 1 mm wide, pubescent outside,  $\pm$  glabrous inside. *Pedicel* 12–20(–25) mm long, puberulous; bracteoles inserted  $\pm$  unilaterally at the tip of the pedicel, ovate-triangular, (3–)5–7  $\times$  1–2 mm, appressed-puberulous outside, subglabrous inside. *Calyx* spathaceous, up to 14 mm long, puberulous outside, glabrous inside. *Corolla* white; standard suborbicular to broadly transversely elliptic in outline, 12–14  $\times$  14–18 mm, with a 1–2 mm long, broad claw, 1–3 mm indented at apex, glabrous both sides, with a yellow spot above the claw; wings oblanceolate, slightly asymmetric, 12–14  $\times$  4 mm, claw 1–2 mm, glabrous; keel-petals free, subelliptic, slightly shorter than wings, 12  $\times$  5 mm, asymmetric at base, claw 1–2 mm long, glabrous except for the ciliate upper part of the dorsal margin. *Stamens* 10, free, 9–11 mm long, glabrous; anthers 2.5–3.5 mm long, cordate at base, shortly apiculate at apex. *Pistil* 11–14 mm long; ovary 6–9 mm long, sericeous, 2-ovuled; style  $\pm$  glabrous. *Pod* narrowly oblanceolate in outline, 13–16  $\times$  2–2.5 cm, 1–1.5 cm rostrate, puberulous-tomentellous, 1–2-seeded. Mature seeds not seen.

*Distribution and habitat.* Old secondary to primary evergreen rain forest in eastern Gabon. Alt.  $\pm$  300–500 m.

*Other specimens examined.* GABON. Near Milolé, 4 vii 2006, *Breteler* 16003 (WAG); 7 vii 2006, *Breteler* 16010 (WAG); 11 vii 2006, *Breteler* 16019 (WAG); Ivindo N.P., Langoué plateau, 11 v 2006, *Leal et al.* 1262 (WAG); Mouyabi railway station, border of Niadou R., 20 vii 2004, *Moungazi* 1645 (WAG); 1 km W of Langoué Bai, 28 xi 2002, *Stone & Niangadouma* 3542 (WAG).

*Notes.* *Baphia megaphylla* is easily recognised in the field by its habit: a treelet in forest undergrowth with a bunch of large, long-petioled leaves at the top. This is not seen in any other *Baphia* species, not even in the closest relative *B. maxima*. That species is a true liana, but sometimes may be shrub- or tree-like in appearance. In Soladoye's revision (1985) *Baphia megaphylla* keys out as belonging to *Baphia* sect. *Longibracteolatae* ser. *Macranthae*, together with *B. bequaertii* De Wild., *B. letestui* Pellegr. and *B. maxima* Baker. These three species are distinguished by Soladoye partly on the presence (*Baphia bequaertii*, *B. letestui*) or absence (*B. maxima*) of a villous indumentum at the line of fusion of the two keel-petals. In fact the two keel-petals are connected by these hairs, which are, however, also present in *Baphia maxima* as well as in *B. megaphylla*, but only obscurely so on a small part of the keel-petal's margin (see Fig. 1L) and hardly strong enough to keep these petals together.

*Baphia maxima* and *B. megaphylla* share the unilateral position of the bracteoles, which are oppositely inserted in the other two species of this series.

*Baphia maxima* and *B. megaphylla* may be distinguished as follows.

Lianescent shrub to small tree, leaves not concentrated at the top of the branches; indumentum of branches, leaves and inflorescences tomentose; petiole 2–11.5 cm long, blade 8–20 × 4.5–11.5 cm, with 7–10 pairs of main lateral nerves; pedicel 8–18.5 mm long; bracteoles 8–9 × 2–5 mm	_____ <i>B. maxima</i>
Slender treelet with leaves concentrated at the end of the unbranched stem or branches; indumentum of stem, branches, leaves and inflorescences puberulous; petiole 6–30(–40) cm long, blade (10–)15–30(–52) × 7–20(–28) cm, with 11–17 pairs of main lateral nerves; pedicel 12–20(–25) mm long; bracteoles (3–)5–7 × 1–2 mm	_____ <i>B. megaphylla</i>

#### ACKNOWLEDGEMENTS

The author is grateful to his wife B. J. M. Breteler-Klein Breteler for the preparation of the electronic version of the manuscript, to Mr H. de Vries for the fine drawing, and to Mr Dr R. H. M. J. Lemmens for the translation of the species diagnosis into Latin.

#### REFERENCES

- BRETELER, F. J. (1994). Novitates Gabonenses 21. A new species of *Baphia* (Leguminosae–Papilionoideae) from Gabon. *Novon* 4: 83–85.

- 
- RAYNAL, J. (1968). Itinéraires et lieux de récolte de Georges Le Testu. *Flore du Gabon* 14: 17–66.
- SOLADOYE, O. (1985). A revision of *Baphia* (Leguminosae–Papilionoideae). *Kew Bull.* 40: 291–386.
- SOSEF, M. S. M., WIERINGA, J. J., JONGKIND, C. C. H., ACHOUNDONG, G., AZIZET ISSEMBE, Y., BEDIGIAN, D. *et al.* (2006). Checklist of Gabonese vascular plants. *Scripta Bot. Belg.* 35: 1–438.

*Received 21 June 2007; accepted for publication 4 October 2007*