

Novitates Gabonenses 49. *Aristogitonia* (formerly Euphorbiaceae, now Picrerdendraceae) present in Gabon by a new species *A. gabonica*

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ABSTRACT

Aristogitonia gabonica (Picrerdendraceae) from the calcareous outcrops near Libreville, Gabon, is described and illustrated. This second species from western Africa is very different from the other, Angolan species, *A. limoniifolia* Prain by its large, unifoliolate leaves. It differs from the related east African *A. monophylla* Airy Shaw by its glabrous branchlets, the pilose anthers and by the female flower with pilose tepals and glabrous ovary. Its geography is discussed.

KEY WORDS
Picrerdendraceae,
Aristogitonia,
Gabon.

RÉSUMÉ

*Novitates Gabonenses 49. Aristogitonia (autrefois Euphorbiaceae, maintenant Picrerdendraceae) présent au Gabon par l'espèce nouvelle *A. gabonica*.*
Aristogitonia gabonica des affleurements calcaires près de Libreville, Gabon, est décrit et illustré. Cette deuxième espèce de l'Afrique de l'Ouest est très différente de l'autre espèce *A. limoniifolia* Prain d'Angola par ses grandes feuilles unifoliolées. Elle diffère de l'espèce voisine *A. monophylla* Airy Shaw d'Afrique de l'Est par ses jeunes branches glabres, les anthères poilues et par sa fleur femelle à tépales poilus et ovaire glabre. Sa géographie est discutée.

MOTS CLÉS
Picrerdendraceae,
Aristogitonia,
Gabon.

INTRODUCTION

Aristogitonia is an Afro-Malagasy genus of six species: *A. limoniifolia* Prain (1908), the type species, from Luanda, Angola, *A. monophylla*

Airy Shaw (1972) and *A. magnistipula* Radcl.-Sm. (1996) from the East coast of Kenya and Tanzania, and *A. lophirifolia* Radcl.-Sm. (1988), *A. perrieri* (Leandri) Radcl.-Sm. (1988) and *A. uapacifolia* Radcl.-Sm. (1998) from Mada-

gascar. A few years ago *Aristogeitonia* was for the first time collected on calcareous outcrops near Libreville, Gabon. The material proved to be very distinct from not only *A. limoniifolia*, the other species from Africa's west coast, but also from the other five species of the genus, from Africa's east coast and Madagascar. It is described below.

***Aristogeitonia gabonica* Breteler, sp. nov.**

Aristogeitonia monophyliae Airy Shaw *affinis foliis unifoliolatis, ab ea differt ramunculis glabris, staminibus 8-9 antheras pilosas habentibus in floribus masculis, tepalis pilosis et ovario glabro in floribus feminis.*

TYPUS. — Breteler, Issembe & Sosef 15657, NE of Libreville, débarcadère d'Oveng, c. 0°29'N, 9°31'E, y. fr. 15 Oct. 2000 (holo-, WAG; iso-, BR, G, BATA, K, LBV, LISC, MA, MO, P, PRE, S, US).

Shrub to small dioecious tree up to c. 5 m tall and 30 cm d.b.h. Branches glabrous, lenticellate. Branchlets glabrous. Stipules partly united with petiole up to ± half the petiole length or less, the free part narrowly triangular to subulate, (1)-2-4 (-5) mm long, glabrous. Leaves unifoliolate, petiole suberete, (0.3-)0.8-1.5(-6) cm long, appressed-pubescent abaxially in very young leaves; petiolule 1-2(-7) mm long, articulation with petiole often indistinct; lamina coriaceous to firmly chartaceous, narrowly elliptic, (2.5)-3-4 (-4.5) times as long as wide, (6)-16-30(-40) × (2)-5-10(-12) cm, cuneate, rarely rounded at base, rounded to acute to faintly acuminate at top, the acumen 0.5-1 cm long, obtuse to retuse apically; midrib prominent on both sides, the often ± faint, (12)-15-19 pairs of main lateral nerves slightly prominent both sides, glabrous except for the appressed-pubescent midrib beneath in very young leaves. Flowers fasciculate inserted on knob-like structures (cicatricose brachyblasts) below the leaves (rarely axillary in female specimens), apparently flowering for several years and becoming elongated; bracts and bracteoles minute, subtriangular-ovate, c. 0.5 mm long, appressed-puberulous. Male flowers: pedicel 2-2.5 mm long, glabrous; tepals 6-7, imbricate, subcircular to elliptic-obovate, 1-1.5 ×

1 mm, glabrous except for the ± appressed-puberulous apical part outside; stamens 8-9, free, 2-2.5 mm long, filament glabrous, anther c. 0.8 mm long, with hairs on apex; disc 6-7-lobed, 0.5 mm thick, glabrous; pistillode small, with a few hairs on top. Female flowers: pedicel 2.5-3 mm long, elongating to 15 mm in fruit, glabrous; tepals 6, 2 × 2 mm, hairy as in male flower; disc entire, c. 0.5 mm thick, glabrous; pistil 4 mm long, glabrous; ovary 3-locular, 2 mm long, style 3-lobed, stigma ± flat. Immature fruit, depressed-subglobose, subtriangular in transverse section, c. 1 cm long, 1.5 cm in diameter, glabrous, dehiscent. — Fig. 1.

HABITAT AND DISTRIBUTION. — On calcareous outcrops at the inner border of mangrove vegetation NE of Libreville.

PARATYPES. — GABON: F.J. & B.J.M. Breteler 15529, débarcadère d'Oveng, ster. July (K, LBV, MO, P, WAG); Sosef 1794, from same locality, ♂ fl. Nov. (BR, G, K, LBV, MO, P, WAG).

DISCUSSION. — *Aristogeitonia gabonica* can easily be distinguished from the other Atlantic coast species *A. limoniifolia* Prain from Angola by the 2-3-foliolate leaves in the latter. The three species from Madagascar *A. lophirifolia* Radcl.-Sm., *A. perrieri* (Leandri) Radcl.-Sm. and *A. uapacifolia* Radcl.-Sm. have unifoliolate leaves like the East African *A. monophylla* Airy Shaw and *A. magnistipula* Radcl.-Sm. Their distinction has been described very well by RADCLIFFE-SMITH in 1998 and 1996 respectively.

Like *A. monophylla* from East Africa (RADCLIFFE-SMITH 1987), *A. gabonica* and, as far as known also *A. lophirifolia* and *A. perrieri* (RADCLIFFE-SMITH 1988) are associated with limestone. This association may be the reason why at least *A. gabonica* has such a small area of distribution.

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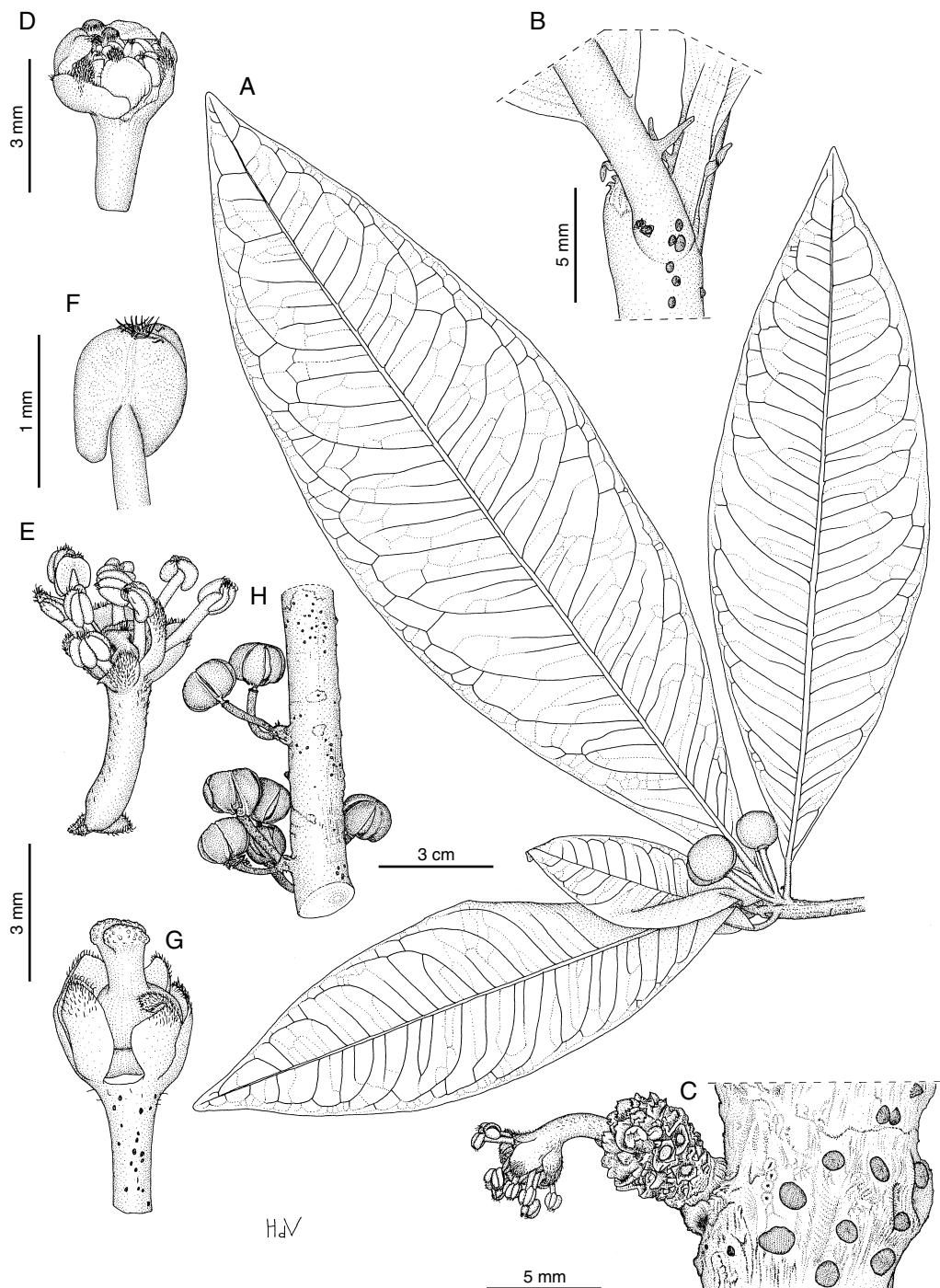


FIG. 1. — *Aristogeitonie gabonica* Breteler: A, fruiting branchlet; B, apical part of shoot showing stipules; C, male inflorescence; D, male flower bud; E, male flower; F, anther; G, female flower, one tepal removed; H, branch with immature fruits. A, B, G, H, Breteler et al. 15657; C-F, Sosef 1794. Drawing by H. DE VRIES.

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