

Novitates Gabonenses 62. *Dichapetalum neglectum* (Dichapetalaceae), a second new species from Gabon with 4-5-locular ovaries, with an adapted key to the Central African species

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ABSTRACT

Dichapetalum neglectum is described and illustrated. The new species, initially overlooked, is, as *D. rabiense* Breteler, characterized by 4-5-locular ovaries and inarticulate pedicels. From *D. rabiense* it may be distinguished by its larger, distinctly pedicelled flowers. An adapted key to the Central African species, which accommodates the 10 new species for the area published since the completion of the revision for Africa in 1986, is provided.

RÉSUMÉ

Novitates Gabonenses 62. Dichapetalum neglectum (Dichapetalaceae), une deuxième nouvelle espèce du Gabon à ovaires 4-5-loculés, avec une clé adaptée pour les espèces d'Afrique centrale.

Dichapetalum neglectum du Gabon est décrit et illustré. L'espèce nouvelle, négligée jusqu'à présent, est caractérisée par les ovaires 4-5-loculés et par les pédicelles inarticulés, comme chez *D. rabiense* Breteler. Elle en diffère par ses fleurs plus grandes à pédicelles plus longs. Une clé adaptée pour les espèces d'Afrique centrale est ajoutée, elle englobe les 10 espèces nouvelles publiées depuis l'achèvement de la révision pour l'Afrique en 1986.

KEY WORDS
Dichapetalaceae,
Dichapetalum,
Gabon,
Central Africa,
key,
new species.

MOTS CLÉS
Dichapetalaceae,
Dichapetalum,
Gabon,
Afrique centrale,
clé,
nouvelle espèce.

INTRODUCTION

A collection from Gabon, *Louis et al.* 370, dated November 1983, was initially referred to *Dichapetalum heudelotii* (Planch. ex Oliv.) Baill. var. *heudelotii* because of its strong, though superficial, resemblance to material of that variety. Later on when all the collections of *D. heudelotii* at Wageningen were screened, one more, sterile, specimen was found that undoubtedly belonged to the same taxon. Recently a third specimen was collected, this time bearing immature fruits. The new species brings the number of *Dichapetalum* species in Gabon to 59 of which 15 are endemic.

Since 1986, when the revision of the African Dichapetalaceae was completed (Breteler 1986), 13 new species have been discovered for continental Africa, 11 in *Dichapetalum* (Breteler 1989, 1990, 1993, 1996, 2003a, b, 2005) and two in *Tapura* (Breteler 1995, 2002), all but one from western Central Africa. To accommodate the new species in the key to the Central African species (Breteler 1986) it was adapted at each occasion. To facilitate future identification of *Dichapetalum* specimens from Central Africa, all adaptations of the past as well as those needed for the new species *D. neglectum*, described here, have been incorporated in a revised key for this area. It is presented hereafter.

SYSTEMATICS

Dichapetalum neglectum Breteler, sp. nov.
(Figs 1; 2)

Dichapetalum heudelotii (Planch. ex Oliv.) Baill. var. *heudelotii* primo aspectu maxime simile, sed ab eo differt floribus pedicellos inarticulatos et ovaria 4-5-locularia habentibus ut in *Dichapetalum rabiense* Breteler; a posteriore floribus majoribus perspicue pedicellatis differt.

TYPUS. — **Gabon.** Oveng, 0°42'N, 11°23'E, 4.XI.1983, fl., *Louis, Breteler & de Bruijn* 370 (holo-, WAG!; iso-, AAU, B, BR!, C, FHI, K, LBV, LG, LISC, MA, MO, P, PRE, SRGH).

PARATYPES. — **Gabon.** 15 km ESE of Pana, X.1970, ster., *Breteler* 6985 (BR!, LBV, MO, WAG!). — S.I. 1904-1905, fr., *Issembe* 763 (LBV, WAG!).

DESCRIPTION

Liana or lianescent shrub. Branches and branchlets villous, lenticellate, glabrescent with age. Stipules appressed, triangular, (1.5-)2-4 mm long, pubescent outside, glabrous inside, caducous. Leaves: petiole subterete, grooved above, (3-)4-7(-8) mm long, hairy as branchlet; lamina papery, obovate, 2-2.5(-3) times as long as wide, (8-)10-20(-21) × (3-)4-8(-9) cm, cunate to rounded and often asymmetric at base, rounded to acute to very shortly (≤ 0.5 cm) acuminate at apex, densely villous both sides when young, soon glabrescent, especially so above except for the impressed midrib and beneath with remnants on and along the prominent midrib and the 8-13(-15) pairs of main lateral nerves; glands beneath only, alongside the midrib, distinct, flat to (often) almost semiglobose, 0.5-0.8 mm in diam. Inflorescence a 1-3-flowered sessile cyme, single or racemously arranged on short leaf less shoots, pubescent; bracts and bracteoles subtriangular, \pm appressed, 1-1.5 mm long, pubescent outside, glabrous inside. Pedicel 2-4 mm long, inarticulate, pubescent, the overhung apical part \pm glabrous. Calyx concave at insertion of pedicel. Sepals erect to somewhat spreading, oblong-triangular, shortly united at base, 3-4 × 1.5-2 mm, pubescent outside sparsely so inside. Petals erect, as long as the sepals, free at base, obovate-oblongate in outline, 4 mm long, 1-1.5 mm split, glabrous, lobes concave. Stamens erect, as long as or slightly longer than the petals, 4-5 mm long, glabrous. Staminodes subquadrate in outline, 0.5 × 0.5 mm, glabrous, slightly bilobed. Pistil 4-5-merous, 5-6 mm long; ovary 4-5-loculate, \pm velutinous; style glabrous, 4-5-lobed; lobes ≤ 0.5 mm long. Fruit (immature) depressed globose, tuberculate, tomentose.

HABITAT AND DISTRIBUTION

Rain forest of Gabon, altitude up to c. 700 m.

DISCUSSION

Besides the superficial resemblance to *Dichapetalum heudelotii* var. *heudelotii* to which the type material was first referred, the new species has characters in common with *D. leucocarpum* Breteler (2003) and *D. rabiense* Breteler (1993).

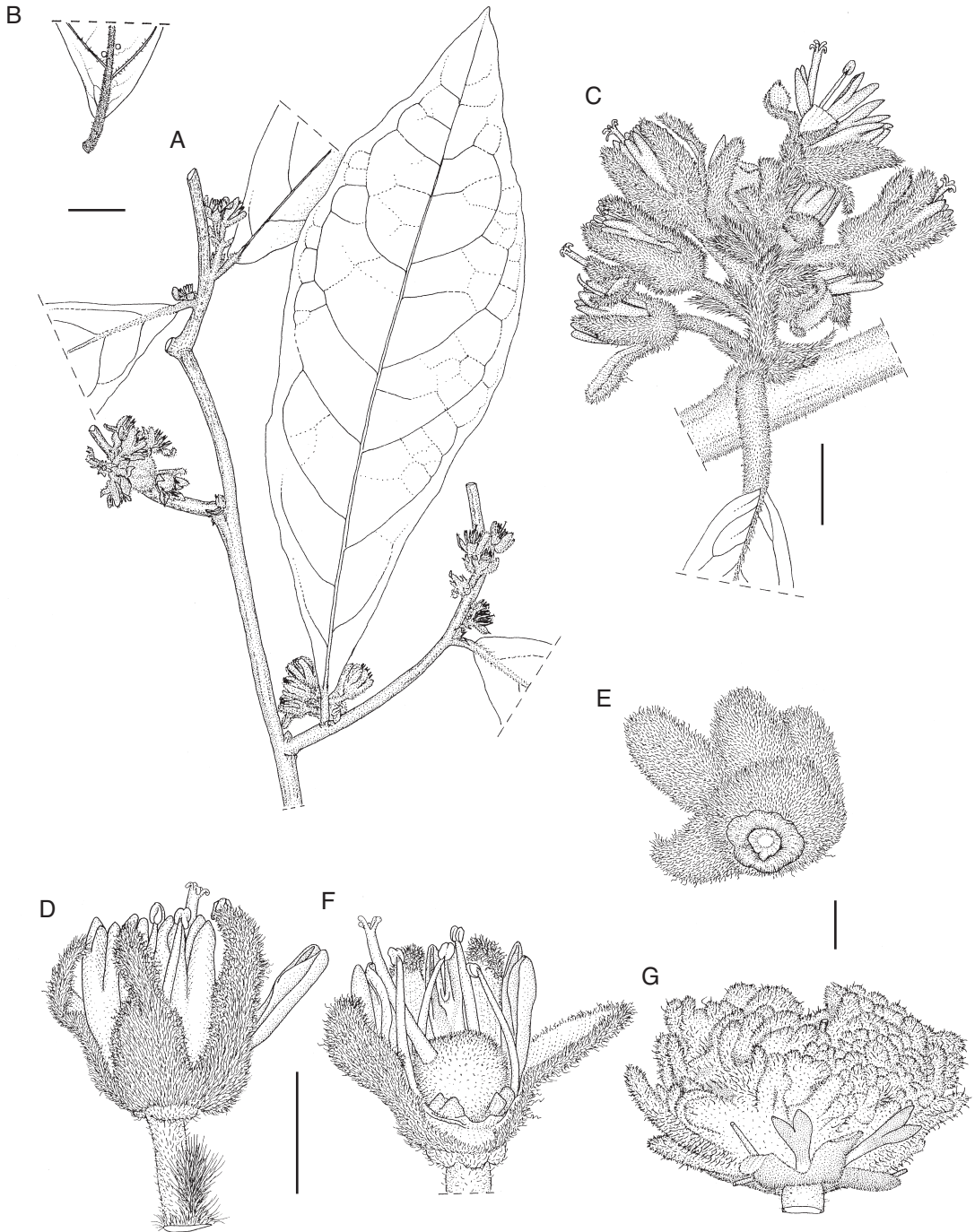


FIG. 1. — *Dichapetalum neglectum* Breteler: **A**, flowering branch; **B**, detail of leaf base beneath; **C**, compound inflorescence of sessile, 1-3 flowered cymes; **D**, flower with bracteole at base of pedicel; **E**, base of calyx with impressed scar of pedicel; **F**, flower, one sepal, two petals and one stamen removed, showing staminodes (disc glands) and developing fruit with style; **G**, immature fruit. A-F, A.M. Louis *et al.* 370; G, Issembe 763. Drawing by H. de Vries. Scale bars: A, B, 1 cm; C-G, 3 mm.

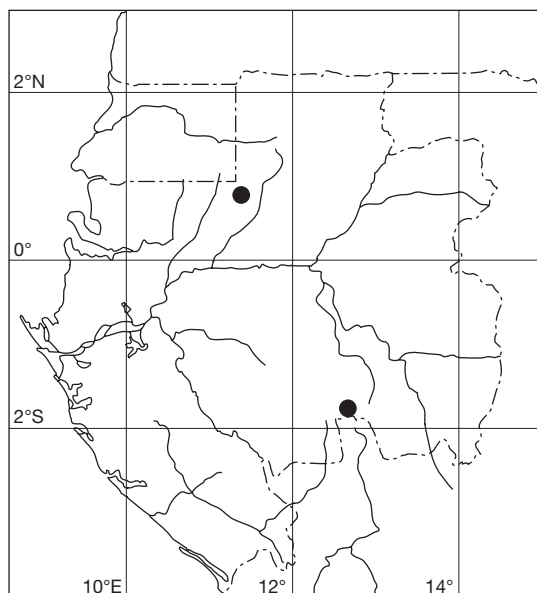


FIG. 2. — Distribution of *Dichapetalum neglectum* Breteler.

The latter species also has 4-5-merous pistils and lacks the articulation in its pedicels too. However, its flowers differ significantly in other characters from those of *D. neglectum*, like the length of the pedicel and the size of the flower. In *D. rabiense* the flowers are \pm sessile and *c.* 3 mm long, in *D. neglectum* the flowers are 4-5 mm long and have 2-4 mm long pedicels. The fruit of *D. neglectum* has the same tuberculate pericarp as in *D. leucocarpum*. However, the flowers of the latter have (2-)3-locular ovaries and its pedicels are articulate.

Acknowledgements

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ADAPTED KEY TO THE CENTRAL AFRICAN SPECIES OF *DICHAPETALUM* THOUARS (for the delimitation of Central Africa see Breteler 1986: map 1).

1. Petals firm, entire, \pm flat. Gabon *D. petaloideum*
— Petals thin, as a rule bilobed and bicuculate apically 2
2. Pistil glabrous, at most with a very few sparse hairs (ovary may become densely hairy soon after fertilisation) 3
— Pistil, at least the ovary, hairy 4
3. Leaves and branchlets glabrous or nearly so; fruits glabrous. Gabon, Congo (Brazzaville) *D. bellum*
— Leaves and branchlets hairy; fruits velutinous. Western Central Africa *D. umbellatum*
4. Indumentum of the ovary like cotton-wool, i.e. with wavy or strongly curled hairs, either white or dirty brown 5
— Indumentum of the ovary consisting of erect or nearly erect, usually straight or slightly curved hairs, either short and usually stiff or long and usually flexible 42
5. Leaves, at least when young, with long arachnoid (cobwebby) hairs beneath, either forming a loose web or a close felt 6
— Leaves without arachnoid hairs beneath 10
6. Stipules, at least some, palmately divided into 2-4(-5) parts, the parts leaving separate or quite nearly separate scars 7
— Stipules entire 9
7. Sepals reflexed. Gabon *D. nyangense*
— Sepals erect or nearly so 8

8. Young leaves above and often also the branchlets with an arachnoid indumentum. Whole area *D. lujae*
 — Young leaves above and branchlets lacking the arachnoid hairs. Whole area *D. bangii*
9. Arachnoid hairs on leaves beneath forming a persistent close felt. Western Central Africa *D. pallidum*
 — Arachnoid hairs on leaves beneath deciduous. Western Central Africa *D. arachnoideum*
10. Stipules pinnatilobed to pinnatisect, usually ± long persistent 11
 — Stipules entire, at most (sub)dentate, or stipules early caducous 12
11. Styles predominantly 3(-4)-lobed, ovary 3(-4)-locular. Whole area *D. angolense*
 — Styles predominantly 2-lobed, ovary 2-locular. Sao Tomé & Príncipe *D. bocageanum*
12. Fully developed leaves with strongly and rather abruptly revolute margins at extreme base, more or less covering one or a pair of rather large glands on each side of the midrib. Whole area *D. congoense*
 — Base of leaf-blade not as above 13
13. Sepals rather sharply reflexed in fully developed flowers 14
 — Sepals not sharply reflexed in fully developed flowers, at least never most sepals of a single flower, but sepals usually erect or slightly or loosely spreading 28
14. All or nearly all flowers of a specimen with 2-lobed styles and 2-locular ovaries 15
 — All or nearly all flowers of a specimen with 3-lobed styles and 3-locular ovaries 16
15. Inflorescence sessile in the leaf axil or nearly so; petals dark-brown to black in dry specimens. Whole area *D. choristilum*
 — Inflorescence usually distinctly pedunculate; petals yellowish to pale brown in dry specimens. Whole area *D. zenkeri*
16. Styles deeply split, lobes 1-3 mm long 17
 — Styles very shortly lobed 18
17. Leaves elliptic to obovate, acuminate at top, rarely not so, usually tapering to a cuneate or narrowly rounded base. Whole area *D. choristilum*
 — Leaves ovate to elliptic, top rounded, rarely acuminate and then not distinctly so, broadly rounded to obtuse or cordate at base. Cameroun, Gabon *D. potamophilum*
18. Flowers with an up to 15 mm long slender pedicel with 3-6 mm long upper part, and aggregated on a knob-like or very shortly branched base; peduncle at most as long as the petiole, usually adnate to it. Eastern Congo (Kinshasa) *D. ugandense*
 — Flowers not arranged as above and/or pedicels different 19
19. Sepals glabrous outside or nearly so, the margin puberulous. Whole area *D. mundense*
 — Sepals completely hairy outside 20
20. Inflorescence a slender-stalked usually indistinctly branched (sometimes distinctly branched apically, i.e. just below the head) subglobose head; leaves with rather long, more or less appressed (but usually perpendicular to the nerves) hairs on midrib and main lateral nerves beneath. SE Gabon, Congo (Brazzaville), Congo (Kinshasa) *D. gillettii*
 — Inflorescence not as above; leaves glabrous or nearly so, if hairy hairs appressed on main nerves beneath 21

21. Petiole (5-)6-12(-19) mm long; branches hollow or not 22
 — Petiole (1-)2-5(-10) mm long; branches solid 24
22. Peduncle of inflorescence adnate to the petiole; branches solid. Cameroun *D. letouzeyi*
 — Peduncle of inflorescence free from the petiole; branches hollow 23
23. Branches and branchlets glabrous or glabrescent; leaves glabrous or nearly so. Gabon ...
 *D. beilschmiedoides*
 — Branches and branchlets densely tomentellous; leaves tomentellous, at least on petiole
 and part of midrib. Gabon *D. mathisii*
24. Leaf-top distinctly glandular and tomentose beneath. Whole area *D. librevillense*
 — Leaf-top not as above 25
25. Fruits beaked to apiculate, indehiscent. Whole area *D. fructuosum*
 — Fruits rounded to obtuse at top, exocarp dehiscent 26
26. Inflorescence a long-stalked, shortly but distinctly branched, rusty puberulous cyme; flow-
 ers with long slender pedicels, aggregated on a few knob-like bases. Congo (Brazzaville),
 Congo (Kinshasa) *D. pedicellatum*
 — Inflorescence long-stalked or not, usually long-branched, pale-hairy; flowers not aggre-
 gated 27
27. Leaf-blade (2-)3-4(-5) times as long as wide, (4-)6-10(-14) × (1-)2-4(-5) cm; exocarp not
 reticulately fissured. Gabon, Congo (Brazzaville), Congo (Kinshasa) *D. acuminatum*
 — Leaf-blade 2.5-3 times as long as wide, (6-)8-12(-16) × (2-)3-4(-6) cm; exocarp reticulately
 fissured. Cameroun, Gabon *D. altescandens*
28. Inflorescence a slender-stalked subglobose head, indistinctly branched or once distinctly
 so just below the head, peduncle free from petiole 29
 — Inflorescence either very distinctly and more than once branched or not slender stalked
 or both, or peduncle adnate to petiole or inflorescence sessile 30
29. Stamens distinctly longer than petals; fruits with dehiscent exocarp and stinging caducous
 hairs. SE Gabon, Congo (Brazzaville), Congo (Kinshasa) *D. gillettii*
 — Stamens as long as the petals or nearly so; fruits indehiscent, velutinous to tomentose.
 Western Central Africa *D. tomentosum*
30. Peduncle of inflorescence adnate to petiole (the blade of the supporting leaf may be strongly
 reduced) 31
 — Peduncle of inflorescence free from petiole or inflorescence sessile or nearly so 36
31. Branches and branchlets hollow, at least between the nodes 32
 — Branches and branchlets solid 33
32. Fresh leaves papery, usually with domatia in some lateral nerve axils beneath; glands on
 lower surface less than 0.2 mm in diam.; petals 3-4.5 mm long, usually slightly shorter than
 the stamens; pistil 2-3-merous, 3-6 mm long. Western Central Africa *D. gabonense*
 — Fresh leaves coriaceous, without domatia; glands on lower surface 0.3-1 mm in diam.;
 petals 5.5-8 mm long, usually slightly longer than stamens; pistil 3-merous, 6.5-8 mm
 long. Gabon, Congo (Brazzaville), Congo (Kinshasa), northern Angola *D. thollonii*
33. Fruits glabrous 34
 — Fruits hairy (hairs may be very short!) 35

34. Fruits lenticellate, beaked. Whole area *D. mombuttense*
 — Fruits smooth, at most with a few lenticels, obtuse to apiculate apically. Cameroun, Equatorial Guinea, Gabon *D. affine*
35. Branchlets glabrous, if puberulous soon glabrescent. Gabon *D. pierrei*
 — Branchlets with a brown, powdery-like indumentum, often mixed with some normally developed hairs, not soon glabrescent. Cameroun, northern Gabon *D. rudatisii*
36. Style deeply split, lobes 1-3 mm long. Whole area *D. choristilum*
 — Style very shortly lobed 37
37. Petals and stamens 2-3 mm long. Cameroun, Gabon *D. tetrastachyum*
 — Petals and stamens (3.5-)4-6 mm long 38
38. Style 2-lobed, ovary 2-locular (a few 3-merous pistils may be present). Cameroun, Gabon *D. oblongum*
 — Style 3(-4)-lobed, ovary 3(-4)-locular (a few 2-merous pistils may be present) 39
39. Petals tomentose outside and on keel inside. Gabon *D. pierrei*
 — Petals glabrous or with very few hairs just below split outside 40
40. Sepals 5-6.5 mm long. Cameroun, Gabon *D. witianum*
 — Sepals 2.5-4 mm long 41
41. Petals and stamens basally united into a 2-3 mm long tube. Angola *D. sumbense*
 — Petals free from stamens or nearly so. Whole area *D. unguiculatum*
42. Leaf-blade at base with 2 very distinct pear-shaped pouches. Gabon *D. gassitae*
 — Leaf-blade at base not as above 43
43. Stipules deeply lobed, at least dentate, usually long persistent 44
 — Stipules entire or stipules early caducous 46
44. Flowers arranged in a stalked subglobose head; petal lobes hairy outside. Gabon *D. trichocephalum*
 — Flowers glomerate; petal lobes glabrous outside 45
45. Stipules ovate to elliptic in outline, deeply pinnatisect with almost thread-like lobes; pistil 3-4.5 mm long. Central Congo (Kinshasa) *D. germainii*
 — Stipules triangular in outline, dentate; pistil 5.5-9 mm long. Cameroun, Gabon, Congo (Brazzaville) *D. pulchrum*
46. Flowers predominantly with 2-lobed styles 47
 — Flowers predominantly with 3(-4)-lobed styles or with 4-5-lobed styles 55
47. Petals geniculate below the spreading lobes; stamens at most half as long as the petals. Central Congo (Kinshasa) *D. staminellatum*
 — Petals geniculate or not, stamens relatively longer 48
48. Petals and stamens at base united into a distinct 0.5-1 mm long tube, the stamens usually distinctly shorter than the petals, the anthers sometimes almost sessile on the tube 49
 — Petals and stamens free from each other or nearly so 51
49. Branchlets sparsely hairy when young, soon glabrescent. Cameroun, Gabon, eastern Congo (Kinshasa) *D. montanum*

- Branchlets densely villous-tomentose, the indumentum long persistent. Western Central Africa 50
- 50. Leaves (8-)9-11 × 3-4 cm; stipules early caducous, (1-)2-4(-5) mm long, at most 0.5 mm wide. Cameroun *D. korupinum*
- Leaves (9-)12-23(-30) × (3-)5-8(-12) cm; stipules long-persistent, 4-5(-20) × (2-)4-6(-10) mm. Western Central Africa *D. insigne*
- 51. Branches glabrous to sparsely puberulous or strigose; inflorescence a sessile or very shortly peduncled, up to 9-flowered cymule; fruits glabrous 52
- Branchlets more or less densely hairy, glabrescent or not, if glabrous or nearly so the inflorescence different; fruits hairy 53
- 52. Branches glabrous to sparsely puberulous; petiole 2-6(-10) mm long, the lamina with glabrous margin; petals, stamens, and pistil subequal in length. Cameroun, Gabon *D. minutiflorum*
- Branches ± strigose; petiole 1-4 mm long, the lamina with strigose margin; petals, stamens, and pistil unequal in length. Gabon *D. findouense*
- 53. Petiole 2-11(-13) mm long; sepals erect; petals suberect; style hairy in lower half. Whole area *D. madagascariense*
- Petiole 0-3(-5) mm long; sepals erect to reflexed; upper part of petals often curved; style usually glabrous 54
- 54. Inflorescence up to *c.* 25-flowered; pedicel usually slender, (1.5-)3-5(-10) mm long; leaves usually with a cordate to subcordate base. Western Central Africa *D. dewevrei*
- Inflorescence up to 4-flowered; pedicel stiff, up to 1.5 mm long; leaves rounded to cuneate at base. SE Cameroun *D. oliganthum*
- 55. Hispid liana or lianescent shrub with hollow branchlets; stipules, bracts and bracteoles slender, usually curved; flowers large (up to 10 mm long) arranged in up to 20-flowered inflorescences; petals hairy inside, usually black when dry. Western Central Africa South of Cameroun *D. chalotii*
- Above characters not associated 56
- 56. Upper part of pedicel nearly as long as the reflexed sepals, at least as long as lower part. Whole area *D. parvifolium*
- Upper part of pedicel shorter than the lower part, or when equal at most half as long as the sepals, or upper part absent, or flowers sessile or nearly so, or joint in pedicel absent 57
- 57. Thin hispid liana or lianescent shrub with solid branchlets and sessile inflorescence of 1-3 flowers only; sepals spreading; petals glabrous inside, lobes flat, spreading; petals and stamens distinctly adnate at base. W Gabon *D. geminostellatum*
- Above characters not associated 58
- 58. Petals distinctly lobed, the lobes completely hairy outside 59
- Petals distinctly lobed or not, the lobes glabrous outside or apical part glabrous outside 60
- 59. Inflorescence a subumbel, flowers distinctly stalked; petiole (4-)6-9(-15) mm long, the blade 1.5-2 times as long as wide. Cameroun *D. reticulatum*
- Inflorescence a subglobose head, flowers sessile or nearly so; petiole (2-)4-7 mm long, the blade 2.5-3 times as long as wide. Gabon *D. ruficeps*

60. Bracts and bracteoles 3-5(-6) mm long, nearly as long as or longer than the stout pedicels; young vegetative parts barbate with a fur of hirsute indumentum; leaves usually cordate at base, above with prominent midrib and main lateral nerves. Cameroun, Gabon
D. barbatum
 — Above characters not associated 61
61. Pedicels without a joint; flowers persistent 62
 — Pedicels jointed; flowers, at least partly, caducous 65
62. Styles 3(-4)-lobed, ovaries 3(-4)-locular 63
 — Styles 4-5-lobed, ovaries 4-5-locular 64
63. Stipules 1-5(-6) mm long; leaves (4-)10-16(-24) × (1.5-)3.5-6(-12) cm with 8-12(-16) pairs of main lateral nerves; sepals 1.5-2.5 mm long; petals (3-)4-6 mm long. Whole area
D. glomeratum
 — Stipules (4-)8-17(-22) mm long; leaves (15-)20-35(-42) × (6-)7-11(-14) cm with (10-)11-14(-16) pairs of main lateral nerves; sepals 3-5 mm long; petals 4.5-8 mm long. Western Central Africa
D. pulchrum
64. Flowers 4-5 mm long; pedicel 2-4 mm long. Gabon *D. neglectum*
 — Flowers *c.* 3 mm long, ± sessile. Gabon *D. rabiense*
65. Fruits glabrous, if sparsely puberulous then 3(-4)-lobed and 1-seeded 66
 — Fruits hairy, if sparsely so not as above 69
66. Leaves glabrous or nearly so, leaf margin revolute at extreme base and more or less covering large glands beneath; fruits 3(-4)-lobed, 1-seeded. Cameroun, Gabon, northern Angola (Cabinda)
D. integripetalum
 — Leaves different; fruits when lobed more than 1-seeded 67
67. Leaves drying greenish to pale-brown, (8-)11-15(-18) × 3.5-6(-9) cm, midrib glabrous above or nearly so. Gabon, Congo (Brazzaville), western Congo (Kinshasa) *D. bodyi*
 — Leaves drying dark brown to black, (3-)8-12(-15) × (1-)3-4(-5) cm, midrib always distinctly hairy above 68
68. Sepals reflexed, 2-2.5 × 1.5 mm; petals erect-spreading 2.5-3(-3.5) mm long, 1-1.5 mm bilobed; stamens distinctly longer than petals, 3-4(-4.5) mm long. SE Cameroun
D. cymulosum
 — Sepals suberect, 1.5 × 0.5-0.8 mm; petals erect, 1.5-2 mm long, 0.2-0.3mm bilobed; stamens distinctly shorter than petals, ± 1.5 mm long. Gabon
D. findouense
69. Branches when freshly cut exuding a reddish slime turning dark-brown to black in drying; leaves usually coriaceous, glabrous or rather soon glabrescent; petals entire to emarginate, at base distinctly united with stamens into a 0.5-2.5 mm long tube. Whole area
D. crassifolium
 — Above characters not associated 70
70. Flowers *c.* 3 mm long; stamens distinctly shorter than petals and united with them, the anthers almost sessile on the tube. Cameroun, Gabon *D. melanocladum*
 — Petals and stamens free or nearly free from each other, if distinctly united the flowers much longer 71
71. Flowers in glomerules or fascicles (some inflorescences of a specimen may be very shortly stalked and/or branched) 72

- Flowers in distinctly branched and/or distinctly stalked inflorescences 76
72. Petals and stamens slightly spreading at base, upper parts usually curved inwards; petal lobes flat or nearly so. Western Central Africa *D. dewevrei*
 — Petals and stamens erect without incurved upper parts; petal lobes concave 73
73. Style hairy in lower half. Whole area *D. madagascariense*
 — Style glabrous in lower half or nearly so 74
74. Fruits strongly tuberculate. Gabon *D. leucocarpum*
 — Fruits not tuberculate, at most strongly nerved 75
75. Leaf acumen with a distinct mucro, if not the leaf blade beneath at least with distinct, large (0.2-0.7 mm in diam.) glands along midrib, especially near base and/or on the acumen or top (sometimes hidden by indumentum). Whole area *D. heudelotii*
 — Leaf acumen usually rounded or obtuse, without a distinct mucro; glands usually smaller. Whole area *D. staudtii*
76. Style hairy in lower half; sepals (1-)1.5-2.5(-3) mm long. Whole area ... *D. madagascariense*
 — Style glabrous in lower half, or with a very few hairs only; sepals (2.5-)3-6(-7) mm long 77
77. Petal lobes distinct, concave, not incurved to inflexed 78
 — Petal lobes flat or nearly so, often incurved or folded one over the other, or petals emarginate 80
78. Branchlets with (long) persistent, brown-tomentellous indumentum; stipules (5-)8-12(-14) mm long, \pm (long) persistent; leaves (12-)14-25(-46) \times (6-)7-13(-21) cm, with 10 to 16 pairs of secondary nerves. Gabon *D. berendinae*
 — Branchlets glabrous or glabrescent; stipules 2-5 mm long, caducous; leaves (5-)8-13(-18) \times (2.5-)4-7(-10) cm with 4 to 7 pairs of secondary nerves 79
79. Leaves drying dark-brown to black, 1.5-2 times as long as wide, \pm symmetrical, glabrous or only with appressed-puberulous midrib and secondary nerves; petals 3-4.5 mm long, bilobed for 0.5-1.5 mm. Cameroun, eastern Congo (Kinshasa) *D. dewildei*
 — Leaves drying pale-green, 2.5-3 times as long as wide, usually asymmetrical, hairy on entire surface when young; petals 5-6 mm long, bilobed for 0.5 mm. Gabon *D. inaequale*
80. Lianescent shrub or liana; fruit obovoid, velutinous, firmly walled, endocarp filmy. Angola, Congo (Kinshasa) *D. rublandii*
 — Erect shrub or tree; fruits subellipsoid to subglobose, velutinous to tomentellous, usually echinate to tuberculate or rugose-wrinkled, rarely smooth, wall itself rather thin, endocarp pergamentaceous, fibrous 81
81. Petals 5-6.5 mm long; stamens (4.5-)5-6.5(-7) mm long; pistil 6-7.5 mm long. Western Central Africa *D. barteri*
 — Petals and stamens 3-4 mm long; pistil 3-4.5 mm long. Eastern Congo (Kinshasa) *D. stublmannii*

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