

VERBENACEAE

A NEW SPECIES IN THE GENUS *CLERODENDRUM*

1. *Clerodendrum louwalbertsii* P.P.J. Herman, sp. nov., *C. triphyllum* (Harv.) H. Pearson affinis sed inflorescentia thyrsoida indeterminata, foliis linearibus vel anguste ellipticis differt.

TYPE.—Northern Transvaal, 2428 (Nylstroom): 18 km from Nylstroom on road to Warmbaths near Groot Nylturnoff, (–CD), 1985-11-04, *Germishuizen 3343* (PRE, holo.).

Perennial herb with annual stems arising from woody rootstock, stems unbranched or sparsely branched near base, 200–500(–800) mm tall, angular, glabrous or pilose. *Leaves* ternate, sometimes opposite or in whorls of 4, sessile or subsessile, glabrous or pilose, linear to narrowly elliptic, (20–)25–50(–85) × (2–)3–7(–15) mm, decreasing in size upwards, apex acute, base cuneate, margin entire, semi-succulent, glandular-punctate. *Inflorescence* indeterminate, thyrsoid, bracts similar to leaves but smaller, hypopodium (peduncles) (5–)10–30(–45) mm long, mesopodium 5–16 mm long, epipodium (pedicels) 1.5–4.5 mm long, purplish tinged; prophylls (bracteoles) 2–8(–12) mm long, linear.*

Flowers zygomorphic. *Calyx* tubular, 5-toothed, tube 2.5–3.0 mm long, teeth 1–3 mm long, purplish tinged, persistent. *Corolla* tubular in lower part, with 5 lobes, tube 4–6(–8) mm long, curved; 4 lobes lateral, 5–7 × 3–5 mm, purplish, fifth lobe forming lower lip, 7–10 mm long, darker purple marked with white inverted Y-shaped pattern. *Stamens* 4, purple, long exerted, opposite lower lip and curved downwards, attached ± 1 mm below mouth of corolla tube, bases, where attached to corolla tube, covered with white downwardly directed hairs; filaments 14–21 mm long, anthers 1–2 mm long. *Style* long exerted, purple, 22–27 mm long, curved, stigma of 2 unequal lobes, upper lobe shortest, ± 0.5 mm, lower lobe ± 2 mm long. *Ovary* 4-lobed in upper part, papillose, 2 mm long, imperfectly 4-locular, with a single ovule in each loculus. *Fruit* 1–4 drupes, ripe fruit not seen. Figure 1.

Clerodendrum louwalbertsii has been included under *C. triphyllum* since Pearson's treatment of the genus in *Flora capensis* 5,1 (1912). Some voucher specimens quoted under *C. triphyllum* belong to *C. louwalbertsii*, e.g. *Zeyher 1362* (PRE, TCD) and *Burke 365* (K). The thyrsoid inflorescence and linear leaves clearly distinguish *C. louwalbertsii* from *C. triphyllum* which has axillary cymes in the axils of the lower leaves and leaves which range from oblanceolate to obovate to elliptic (Figure 2).

C. louwalbertsii occurs in Northern Transvaal, the eastern part of the North-West, Gauteng (PWV), Eastern Transvaal and Swaziland, and one specimen was collected at the northern border of Kwa Zulu-Natal (Figure 3). It is found in valleys, kloofs, mountains and hillsides, kop-

pies, grassland and open woodland on sandy, stony or rocky soil, dolomite or granite.

The specific epithet '*louwalbertsii*' was chosen in honour of Dr Louw Alberts, the well-known South African scientist and Christian.

To enable other herbarium workers to distinguish between the two species, the specimens of *Clerodendrum triphyllum* examined are listed below. The distribution of the two species is shown in Figure 3.

2. *Clerodendrum triphyllum* (Harv.) H. Pearson, in *Flora capensis* 5,1: 220, 221 (1901); Thomas: 80 (1936).

Cyclonema triphyllum Harv.: 17, 18, t. 27 (1859).

Icones: Harv.: t. 27 (1859); Phillips: t. 19 (1921).

C. triphyllum occurs in Northern Transvaal, the eastern part of the North-West, Gauteng (PWV), Eastern Transvaal, Orange Free State, Swaziland, Kwa Zulu-Natal, Lesotho and Eastern Cape. It is a typical grassland species.

Specimens examined

Acocks 1918 (2) PRE. *Anderson A41* (2) PRE.

Balkwill & Cadman 3546 (1) J. *Balkwill, Cadman & McCallum 3004* (1) J. *Barnard & Mogg 913* (1) PRE. *Barrett 306* (1) PRE. *Beeton 114* (2) PRE. *Behr 746* (2) PRE. *Bezuidenhout 106* (2) PRE. *Bolus 12236* (1) GRA. PRE. *Botha & Ubbink 1750* (2) PRE. *Botha & Van Wyk 1069* (2) PRE. *Braun 1260* (2) PRE. *Bredenkamp 141* (2) PRE; 236 (2) PRE. *Breyer 17898* (1) PRE. *Brown & Shapiro 209* (2) PRE; 504 (1) PRE. *Buitendag 426* (1) PRE. *Burgoyne 1067* (2) PRE. *Burke 365* (1) K. *Burt Davy 2307, 7098, 7290* (2) PRE.

Clarke 1434 (2) PRE. *Coetzee 227, 343, 533* (2) PRE. *Collins 12188* (2) PRE; 27120 (1) PRE. *Comins 886* (1) PRE. *Compton 27098* (2) PRE; 31232 (1) PRE. *Culverwell 399* (2) PRE; 1423 (1) PRE.

Davide 5981 (2) PRE. *Davidson 2145* (1) J. *De Souza 638* (2) PRE. *Dieterlen 515* (2) PRE. *Dlamini s.n. PRE31357* (2) PRE. *Dohse 45* (1) NU. *Du Plessis 1012, 1083* (1) PRE. *Du Toit 39, 90* (2) PRE.

Edwards 1089 (2) PRE.

Flanagan 1931 (2) PRE. *Fourie 1/2/30* (2) PRE.

Galpin 509M, 9060 (1) PRE; 12364, 14568 (2) PRE. *Germishuizen 3343* (1) PRE; 3964 (2) PRE. *Germishuizen & Retief 578* (1) PRE. *Gerard & M'Ken 1251* (2) TCD. *Gilfillan 76* (*Herb. Galpin 6166*) (2) PRE. *Glen 1840* (1) J; 2479 (1) J. PRE.

Hanekom 1723 (1) PRE. *Hards 104* (1) PRE. *HBG 26891* (2) PRE; 27051 (2) PRE. *Herman 151, 1357–1370* (1) PRE; 1332, 1375–1388 (2) PRE. *Holden 14156* (2) PRE. *Holt 139* (1) NH. PRE. *Huntley 1124* (2) PRE.

Immelman 83 (1) PRE.

Jacobsen 1863 (2) PRE; 2780 (1) PRE. *Jacobsz 145, 1853, 2002* (2) PRE. *Janse 3166* (1) PRE. *Jenkins 6929, PRE 39926* (1) PRE; 9829 (2) PRE. *Joffe 139* (2) PRE. *Junod 17449* (2) PRE.

Kok 284 (2) PRE. *Kroon 10264* (2) PRE.

Lambinon & Reekmans 82/28 (1) PRE. *Lang, Tvl. Mus. 30314* (2) PRE; *Tvl. Mus. 31067* (1) PRE. *Leendertz 376a* (1) GRA. *Le Roux 14* (2) PRE. *Liebenberg 2507, 8838, 8943a* (1) PRE; 8518 (2) PRE. *L'Ons 60/44* (2) PRE. *Louw 101* (2) PRE. *Lucas 374* (1) J.

Maguire 1264, 1265, 8624 (1) J. *Marloth 3823* (1) PRE; 3855 (2) PRE. *Mauve s.n.* (1) NU. *McCallum 561* (2) PRE. *McMurtry 5235* (1) J. *Medley Wood 3381* (2) NH. *Miller 3878, 8511* (2) PRE. *Mitchley 86* (2) PRE. *Mogg 10127, 14656, 15.336, s.n. PRE 39943* (2) PRE; 31555

* Terminology of inflorescence according to Weberling (1989).

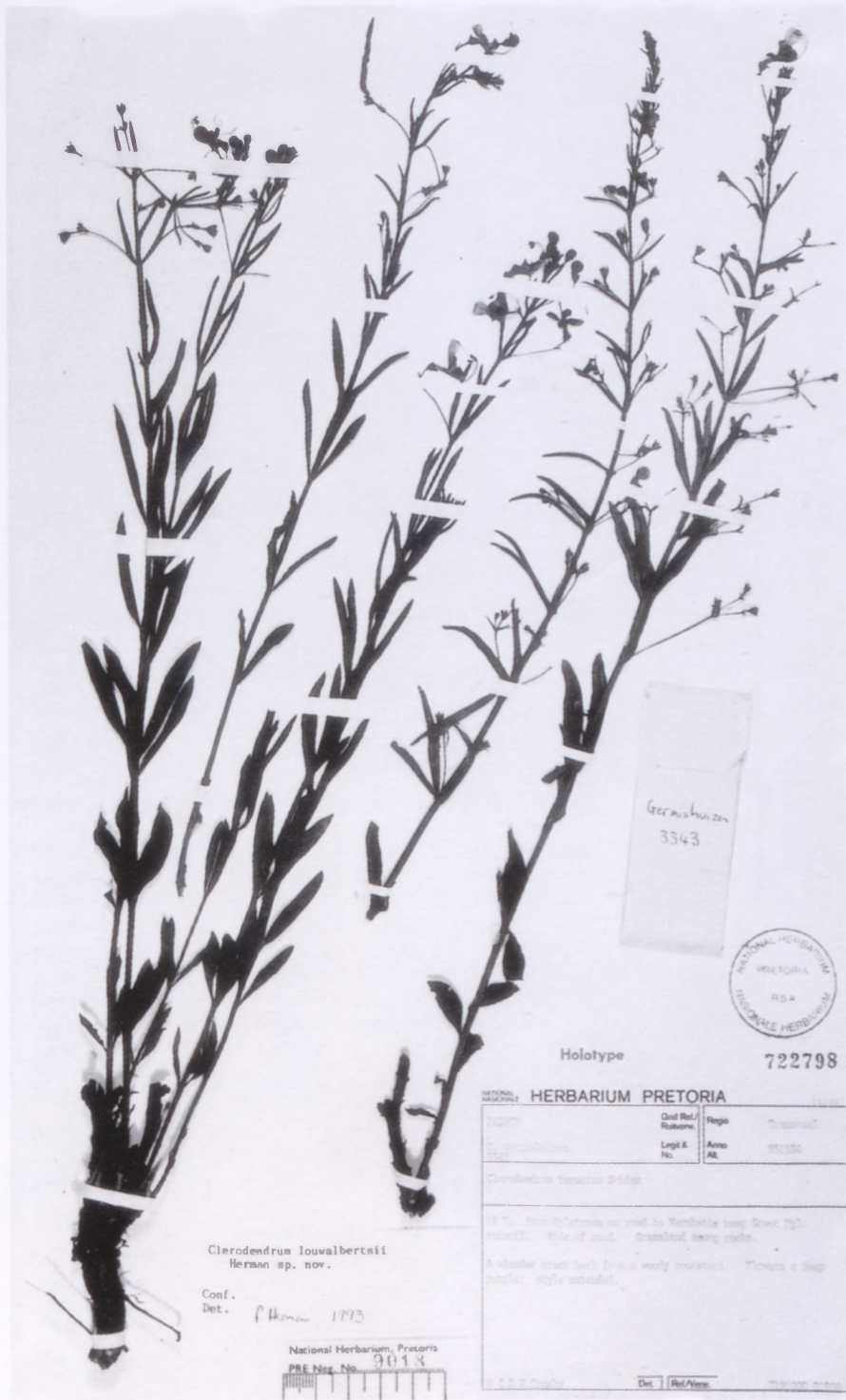


FIGURE 1.—Holotype of *Clerodendrum louwalbertsii*, Germshuizen 3343.

(1) J. PRE. Moss 8637, 10826, 16223, 16764, 17820 (1) J. Moss & Oetley s.n. (1) J. Muller 2014 (2) PRE. Murray II (2) PRE.

Nation 35 (1) PRE. Nel 290 (1) PRE. Netshungani 665 (2) PRE.

Obermeyer 895 (2) PRE.

Phillips 18, 3113, 3276 (2) PRE. Pienaar 748 (1) PRE. Pole Evans H13132 (2) PRE. Potgieter 21837 (2) PRE. Prosser P1062 (2) PRE. Pupils of Convent 97 (2) PRE.

P. Raal & G. Raal 911 (2) PRE. Rademacher 7306, 7478 (2) PRE. Reid 436 (1) PRE. Repton 160 (1) PRE; 422, 3431 (2) PRE; 754 (1) NH, PRE. Retief 134 (1) PRE. Rogers 2930, 22062 (1) PRE; 12412, 19026, 21580 (2) PRE.

Scheepers 694, 1434 (2) PRE. Schiff 471 (2) PRE. Sekhaolelo 156 (1) PRE. Sidey 1944 (2) PRE. Smith 1267, 1278 (1) PRE. Smuts & Gillett 3055, 3326, 4129 (1) PRE. Stirton 5739 (2) PRE. Story 1404 (2) PRE. Sutton 351 (2) PRE.

Theron 705, 1405 (1) PRE. Thode A1338, A1631 (2) PRE. Thompson 8011 (2) PRE. Thorncroft 11291 (2) PRE. Tiedt & Young 2159a (1) PRE. Turner 222 (2) PRE.

Ubbink & Van Wyk 514 (2) PRE.

Van Dam 20755, 27099, 27121 (1) PRE. Van der Merwe s.n. PRE39945 (2) PRE. Van Rooyen 2027 (1) PRE. Van Vuuren 369 (1) PRE. Van Wyk 6875 (2) PRE. Venter 7202 (1) PRE. Verdoorn 141 (1) PRE; 496 (2) PRE.

Walker s.n. PRE39923 (2) PRE. Wasserfall & Van Niekerk 41 (1) PRE. Werdermann & Oberdieck 1279 (1) PRE.

Young A202 (1) PRE.

Zeyher 1362 (1) PRE, TCD; 1363 (2) TCD (type of *Cyclonema triphyllum* Harv.).



FIGURE 2.—Diagram showing the differences in inflorescences of A, *Clerodendron louwalbertsii* and B, *C. triphyllum*.

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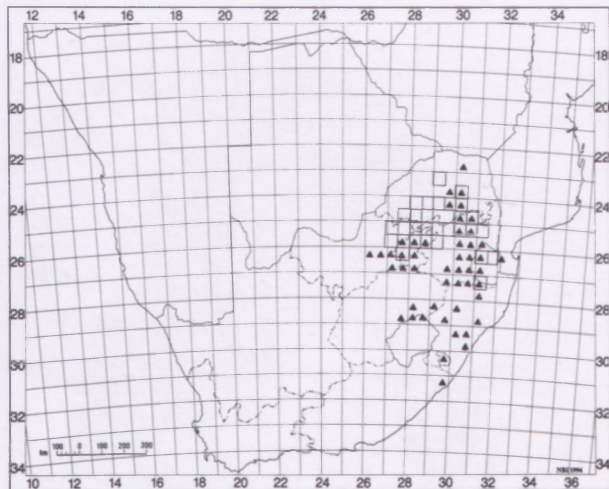


FIGURE 3.—Distribution of *Clerodendron louwalbertsii*, □; and *C. triphyllum*, ▲.

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