Notes RBG Edinb. 38(1):141–144 (1980)

A NEW RHODODENDRON (ERICACEAE) FROM NEW GUINEA

L. A. CRAVEN*

ABSTRACT. A new species of *Rhododendron, R. rubineiflorum* Craven, is described and illustrated from New Guinea.

In 1974 the late Mr D. B. Stanton, of Wollongong, New South Wales, drew my attention to a *Rhododendron* being cultivated in the National Botanic Gardens, Canberra, Australian Capital Territory. The plants had been grown from cutting material collected in New Guinea in 1972 by Stanton and Mr L. K. Searle, then an officer in the Papua New Guinea administration.

When these plants flowered the species could not be identified with certainty using the *Flora Malesiana* account of the genus by Sleumer (1966-7). They keyed to *R. anagalliflorum* Wernh., but appeared to differ from that species in several details. Examination of specimens in CANB determined as *R. anagalliflorum* showed that they differed from the cultivated plant in the features tabulated below.

	Searle & Stanton plant	*CANB specimens*
Leaves	obovate to elliptic	ovate to elliptic
Corolla	12–18 mm long	17–25 mm long
	funnel-shaped	campanulate to broadly funnel-shaped campanulate
	lobes ± elliptic	lobes ± orbicular
	white, flushed purple from base	red to pink
Anthers	0·6 mm long	1·2–1·5 mm long
Style	0·2 mm diam.	0·5–0·75 mm diam.

Believing that Searle & Stanton's white-flowered plant might represent *R. linnaeoides* Schltr., which Sleumer (1960) had placed in synonymy under *R. anagalliflorum,* I requested the Australian Botanical Liaison Officer at Kew, then Dr A. Kanis, and again later his successor, Mr J. R. Maconochie, to examine isotype material in P of *R. linnaeoides* and the holotype in BM of *R. anagalliflorum*. Their examinations indicated that *R. linnaeoides, R. anagalliflorum* and the Searle & Stanton plant might represent a single species. To settle any doubts, I borrowed the relevant types from BM and P. Study of these proved that they, together with the cultivated plant, were conspecific. Thus the red-flowered plants in CANB which were determined as *R. anagalliflorum* represent a new species which is described below as *R. rubineiflorum*. The available type material of *R. anagalliflorum* (and also of *R. linnaeoides*) is not ideal, and, without good material of the species such as I have been able to obtain from live plants, it could be possible to confuse it with *R. rubineiflorum*. Presumably this is what Sleumer has done

*Herbarium Australiense, CSIRO, P.O. Box 1600, Canberra, A.C.T. 2601. Australia.

as several of the sheets of *R. rubineiflorum* in CANB have been annotated by him as *R. anagalliflorum*.

Rhododendron rubineiflorum Craven, **species nova** a *R. anagallifloro* Wernh. foliis ovatis ad ellipticis, corolla campanulata, antheris longioribus et stylo crassiore distincta. **Fig. 1.**

Fruticulus nanus, epiphyticus vel terrestris; ramuli squamis breviter stipitatis vel sessilibus ad subsessilibus, glabrescentes, internodiis 0·5–2·5 cm longis. *Folia* plerumque pseudo-verticillata 3–5 (rariter opposita vel 2–3 mm semota), ovata ad elliptica, 5–10 × 2–5 mm, apice acuta ad obtusa, interdum subacuminata, basi cuneata ad obtusa, initio utrinque lepidota sed supra glabrescentes (squamae brunneae, sessiles, applanatae ad concavae, centro incrassato, zona marginali obtuse et plerumque irregulariter incisa, rariter subintegra), margine recurvato, nervis obscuris quamquam saepe in pagina infera foliorum juvenium costa et nervi laterales aliquot prominentes; petiolo 0·5–2 mm longo. *Flores* solitariae; perulae externae anguste ovatae apice attenuato, extra glabrae, fimbriatae squamis stipitatis, perulae internae latiores sed aliter similares, 5–9 × 1·5–3 mm. *Pedicellus* squamis stellatis stipitatis, glabrus vel sparsim pubescens, 6–15 × c. 0·75 mm. *Calyx* squamis stellatis stipitatis extra tantum, glaber, obscure 5-lobatus, c. 3 mm diam. *Corolla* laxe stellato-lepidota extra tubum tantum (rariter paucis squamis in lobis), campanulata ad late infundibuliformo-campanulata, 5-lobata 1/3–1/2 longitudine corollae, rubra vel rosea, 17–25 mm longa, basi 5–7 mm diam., lobis orbiculatis ad late oblongis, obtusis, 7–10 mm longis. *Stamina* 10, subaequilonga; filamento glabro, 5–8 mm longo; anthera oblonga, 1·2–1·5 mm longa. *Discus* breviter pubescens. *Ovarium* lepidotum et dense pubescens (pilis c. 0·25 mm longis), cylindrico-conicum, 3–3·5 × 1·5 mm, ad stylum contractum; stylo in 1/2–2/3 inferiore lepidoto et pubescenti, 2·5–3 × 0·5–0·75 mm; stigmate clavato-capitato. *Capsula* fusiformis, c. 20–25 × 4 mm; seminibus c. 6 mm longis caudis inclusis.

Typus. New Guinea. Papua New Guinea. Western Highlands District: upper Minj River valley on the Minj-Nona divide at c. 3400 m, 28 vii 1957, *Pullen* 227 (holo. CANB).

NEW GUINEA. Papua New Guinea. West Sepik District: on ridge leading from Tamanagabip up to surrounds of Mt Capella summit ridge, 5° 00′S, 141° 05′E, 3000 m, 11 iv 1975, *Vinas & Wiakabu* LAE 67058 (CANB). Western Highlands District: Wabag area, upper Ambum valley, Ambum-Marimui divide, c. 3050 m, 24 vii 1960, *Robbins* 3069 (CANB); Kubor Range, Minj-Nona divide, 3250 m, 2 vii 1963, *Vink* 16005 (CANB); SW side of Mt Hagen, Tomba track, 2900–3140 m, vi 1966, *Wheeler* ANU 6139 (CANB); Mt Hagen, south side, c. 3050 m, 8 vii 1957, *Robbins* 303 (CANB). Eastern Highlands District: W side of Mt Otto, 5° 58′S, 144° 28′E, 2740 m, 25 i 1970, *Johns & Noble* NGF 47035 (CANB). Southern Highlands District: Mt Né, c. 6°S, 143°E, 3140 m, 26 viii 1966, *Vink* 17524 (CANB). Central District: W slope of Wharton Range, 7°S, 147°E, c. 2650 m, 20 i 1965, *van Royen* NGF 30033 (CANB).

R. rubineiflorum has been collected in alpine shrubberies and upper montane forest, where it usually grows as an epiphyte on, or at the base of,

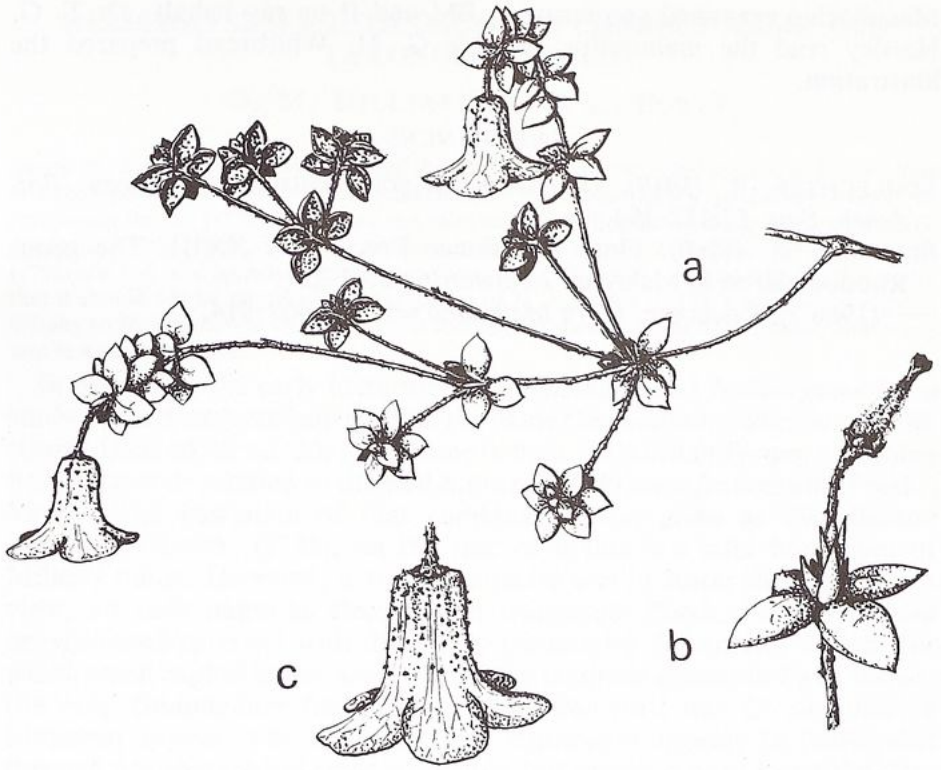

FIG. 1. a-c, *Rhododendron rubineiflorum:* a, habit × c.½; b, branchlet with very immature fruit × 1½; c, flower × 1. (from *Pullen* 227).

trees. The species belongs to sect. *Vireya* subsect. *Vireya* ser. *Linnaeoidea* and, together with *R. anagalliflorum* (including *R. linnaeoides*) and *R. womersleyi* Sleum., is distinguished from the other species of the series by the hairy ovary (see Sleumer (1966-7, p. 568)). From *R. womersleyi* it differes, *inter alia,* in the corolla not being hairy outside, in the campanulate as against more or less tubular corolla, and in the relatively short style. The major differences from *R. anagalliflorum* are given in the table on p. 141; the right hand column refers to *R. rubineiflorum* and the left to *R. anagalliflorum*. The difference in corolla shape of the two species is clearly shown by comparing Fig. 1 with the illustration of *R. linnaeoides* Schltr. (a synonym of *R. anagalliflorum*—see Sleumer, 1960) on p. 144 of Schlechter (1919).

ACKNOWLEDGMENTS

The directors and curators of the following herbaria are thanked for the opportunity to study collections in their care: British Museum (Natural History), London (BM); Museum National d'Histoire Naturelle, Paris (P); and Herbarium Australiense, Canberra (CANB). The Curator of the National Botanic Gardens, Canberra, is thanked for allowing me to obtain propagation material of *R. anagalliflorum* from the Gardens; Dr R. D.

Hoogland checked the Latin description; and Dr A. Kanis and Mr J. R. Maconochie examined specimens in BM and P on my behalf. Dr T. G. Hartley read the manuscript and Mr G. H. Whitbread prepared the illustration.

REFERENCES

SCHLECHTER, R. (1919). Die Ericaceen von Deutsch-Neu-Guinea. *Bot. Jahrb. Syst.* 55:137–194.

SLEUMER, H. (1960). Flora Malesianae Precursores XXIII. The genus Rhododendron in Malaysia. *Reinwardtia* 5:45–231.

——(1966-7). Ericaceae. *Flora Malesiana* ser. I, 6:469–914.