## A NEW SPECIES OF RHODODENDRON FROM NEW GUINEA (ERICACEAE)

## PAUL KORES

Wau Ecology Institute,
P.O. Box 77, Wau, Papua New Guinea

The Star Mountains of New Guinea are situated at the geographic center of the Island of New Guinea extending on both sides of the Indonesian-Papua New Guinea border. Access to these mountains from either side of the border which divides the island is relatively difficult and as a result few collections have come from the area. A Dutch expedition traveled to the western Star Mountains in 1959, but ran into various difficulties and as a result did little collecting above 1500 m. In 1975 an expedition sponsored jointly by the Division of Botany, Lae, and the Rijksherbarium, Leiden, returned to the Star Mountains collecting extensively throughout the eastern half of the range. The results of this expedition include the first extensive collections of material from the higher altitudes within the Star Mountains. Material collected for the Division of Botany, Lae, by J. R. Croft and G. S. Hope while on the 1975 expedition is surprisingly rich in species of Rhododendron. I was asked by Mr. Croft to examine the Lae material prior to its distribution. The collections contain representatives of several poorly known species of the genus, at least one new plant record for Papua New Guinea, Rhododendron rubrobracteatum Sleumer, and the new taxon described below.

## Rhododendron capellae Kores, sp. nov. - Fig. 1

Frutex parvus c. 50 cm altus, terrestris, erectus. Ramuli teretes erecti, graciles, apicibus sparse lepidotis deorsum glabrescentibus. Folia inferne alternata, ad nodos ultimos aggregata, elliptica vel obovata, (0.8—) I-1.5 × 0.3 - 0.6 cm, apice abrupte acuminata, basi acuta, coriacea, in vivo supra saturate viridia, subtus pallidiora, initio utrinque subdense lepidota, matura supra glabra et nitida, subtus lepidota (lepidibus centro incrassatis, zona marginali integris vel subirregulariter crenatis), margine incrassata, subcrenulata, haud vel vix revoluta, costa supra immersa, subtus obtuse prominente, nervis lateralibus inconspicuis; petioli graciles parum applanati, sublaxe lepidoti, 2-3 mm longi. Flores bini vel solitarii. Perulae exteriores ovato-acuminatae, subulatae vel apiculatae, 6-10 mm longae, extus sparse lepidotae et puberulae; perulae interiores multo latiores, obovatae, apiculatae et sparsissime lepidotae. Pedicelli graciles, lepidoti, 12-15 mm longi. Calyx membranaceus, 5-lobatus, extus dense lepidotus, lobis deltoideis, 0.5-I mm longis. Corolla tubulosa, rubra, superne paullo dilata, 2.5-3 cm longa, extus (loborum marginibus exceptis) sparse lepidota, intus glabra, tubo cylindrico 1.7-2 cm longo, basi 3-4 mm diam., infra lobos 5-7 mm diam., subcurvato, lobis erecto-patentibus, late obovatis, 4—6 mm latis. Stamina 10, inaequilonga, 2—3 mm e tubo exserta, filamentis linearibus parte  $\frac{1}{4}$  inferiore laxe pilosis, superne glabris, antheris obovatis, 1.5×1 mm. Discus inferne glaber, superne margine pilosus. Ovarium cylindraceo-conicum, dense albo-hirsutum et subdense lepidotum, c. 5 x 1.5 mm, in stylum attenuatum; stylus corollae tubum subaequans, basi sparsissime pilosus, ceterum glaber; stigma clavato-capitatum.

Small, terrestrial, erect, branching shrub, c. 0.5 m. Branchlets erect, slender, terete, 1—2 mm in diameter, tips laxly lepidote, glabrous below. Leaves scattered below, crowded above especially at the upper part of the new shoots, elliptical or obovate, apex abrupt-

acuminate, base acute, coriaceous, dark green above, lighter below, subdensely lepidote on both faces initially, glabrous and shiny above at maturity, persistently lepidote below (scales impressed with thickened centers, marginal zones entire and somewhat irregular), margin thickened and a little paler than the lamina, subcrenulate by impressed scales, slightly or not revolute, (0.8) 1—1.5 by 0.3—0.6 cm, midrib impressed above, raised beneath, nerves obscure; petiole rather slender, somewhat flattened, ± laxly lepidote, 2-3 mm long. Flowers solitary or in twos. Outer perulae ovate-acuminate, subulate, or apiculate, laxly lepidote and very laxly pubescent, inner perulae broader, obovate, apiculate, and very laxly lepidote dorsally, 6-10 mm. Pedicels slender, lepidote, 12—15 mm long. Calyx membranous, 5-lobed, densely lepidote outside, lobes deltoid, 0.5—I mm. Corolla tubular, slightly dilated at the limb, bright red, 2.5—3 cm long in all, laxly lepidote outside at the tube and lower parts of the lobes, glabrous inside; tube cylindrical, 1.7-2 cm long, 3-4 mm in diameter at the base, widened to 5-7 mm at the apex, slightly curved, lobes erectopatent, broadly obovate, 4-6 mm wide. Stamens 10, nearly equal in length, extending to the middle of the corolla lobes; filaments linear, laxly hairy in the lower 1th, glabrous above; anthers obovate, 1.5 by 1 mm. Disk glabrous below, minutely pubescent at the upper margin. Ovary cylindric-conical, densely covered with long white hairs and subdensely lepidote, c. 5 by 1.5 mm, tapering to a slender style which nearly attains the corolla tube in length; style with a few hairs at the base, glabrous above: stigma clavate-capitate.

D is tribution: Papua New Guinea. W. Sepik Province: Star Mts., summit region of Mt. Capella, in subalpine shrubbery, 3800 m, fl. 29-V-1975, J. R. Croft & G. S. Hope LAE 68056 (holotype, LAE; duplicates sent to A, BRI, CANB, CANU, E, K, L).

This new species of Rhododendron would fit into the existing system of classification for the genus within Malesia proposed by Dr. H. Sleumer in 'Flora Malesiana' as a member of the subsection Pseudovireya. Under Sleumer's system of classification for the subsection the new species would, by virtue of the fact that the ovary is both hairy and lepidote, key out to R. vinkii Sleumer, Fl. Mal. I, 6 (1966): 493—494 (once collected in the hinterland of Fak-Fak, West New Guinea). The new species, however, can be distinguished from R. vinkii by its much smaller leaves, shorter, laxly lepidote petioles, hairless corolla, and almost entirely glabrous style. Phyletically, this new taxon might better be assigned a position closer to that of R. pulleanum Koord., Fl. Mal. I, 6(1966): 483—484. Vegetatively, the two taxa appear to be very similar differing only in the degree to which the branchlets become verruculose; in R. pulleanum, this feature is much more pronounced. Floristically, the new species can be distinguished from R. pulleanum by its longer, more subulate outer perulae and ovary both densely hairy and subdensely lepidote.

## **ACKNOWLEDGEMENTS**

The author wishes to express his sincerest thanks to Messrs. J. Croft and M. Galore of the Division of Botany, Office of Forests, Lae, for the kind loan of the specimen used in the description; to Dr. P. van Royen of the Bishop Museum, Honolulu, Hawaii, and Dr. P. Stevens of the Arnold Arboretum, Cambridge, Massachusetts, for their assistance in the preparation of the Latin diagnosis; and to Mr. B. Adams of the Wau Ecology Institute, Papua New Guinea, for the illustration which accompanies this text. Grateful acknowledgement is also given to the Stanley Smith Horticultural Trust which has sponsored my work in Papua New Guinea.

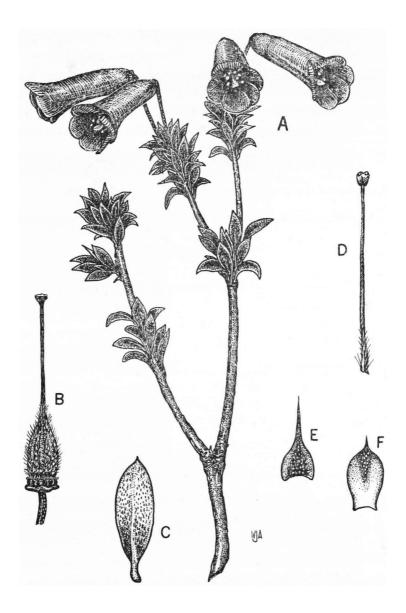


Fig. 1. Rhododendron capellae Kores. a. Flowering branchlet,  $\times 1$ ; b. ovary and style,  $\times 3$ ; c. single leaf,  $\times 3$ ; d. stamen,  $\times 3$ ; e. outer perulae,  $\times 3$ ; f. inner perulae,  $\times 3$  (J. R. Crost & G. S. Hope, LAE 68056).