

NOTES ON THE GENUS RHODODENDRON (ERICACEAE) IN
PAPUA NEW GUINEA

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SUMMARY

A new species, *Rhododendron caliginis* (Ericaceae) is described from Papua New Guinea and 2 species of *Rhododendron* previously described as new by A. Gilli (1980) are reduced. *Rhododendron heptaster* is reduced to *R. konori* and *R. sleumeri* is reduced to *R. blackii*.

Rhododendron caliginis Kores, *spec. nov.* – Fig. 1.

R. hooglandii Sleumer, *Blumea* 21 (1973) 361, p.p.

Frutex parvus 25–50 cm altus, terrestris, multiramis. Ramuli teretes, graciles, novellis dense ferrugineo-stellato-lepidotis, partibus vetustioribus glabratis laevibus et griseo-suberosis, 1–2 mm diam.; internodia 1–4 (–7.5) cm longa. *Folia* ad nodos 2 vel 3 ultimos in pseudovorticillis 4–7-meris disposita saepe in magnitudine diverso in nodo singulari, linearia vel lineari-lanceolata, apice subobtusum, basi late cuneata vel rotundata, subcoriacea, initio utrinque dense ferrugineo-lepidota, mox supra glabrata et denique laevia, subtus constante lepidota (lepidibus ± profunde stellato-incisis, subsessilibus vel breve arborescentibus, omnibus supra tuberculum minutum epidermidis affixis), margine integra paulo revoluta, 1–4 (–5) cm longa, 1–3.5 mm lata, costa supra subimpressa, subtus prominente elevata et tam crassa quam petiolo, nervis lateralibus non evidentibus; petioli dense lepidoti, 2–3 (–4) mm longi, graciles. *Flores* solitariae vel 2 vel 3 in umbellis parvis. Perulae exteriores subulatae, interiores ovato-acuminatae, 7–12 mm longae, 2–7 mm latae, omnino in dimidio parte superiore et in partibus medio-dorsalibus dense stellato-lepidotis aliter glabris, marginibus lepidoto-fimbriatis. Bracteolae lineares vel anguste oblanceolatae, usque ad 8 mm longae, marginibus laxe fimbriatis. Pedicelli graciles, dense stellato-lepidoti, (0.6–)0.8–1.2 cm longi. *Calyx* disciformis, extus dense stellato-lepidotus, intus glaber, 2.5 mm diam. Corolla inferne tubulosa, superne ad lobos paulo expansa, parum curvata et zygomorpha, albida, crenea vel interdum dilute rosea, extus dense stellato-lepidota et pilosa, intus glabra, tota 3–3.5 cm longa, tubo 2–2.5 cm longo, in basi 4 mm diam., ad apicem sensim expanso, 6–8 mm diam., lobis 5, late obovatis vel suborbiculatis, paulum expansis, 7–9 mm longis, 6–8 (–9) mm latis. *Stamina* 10, inaequilonga, corollam longitudine fere aequantia; filamenta glabra; antherae subquadrato-oblongae, 2 mm longae, 1 mm latae. Discus inferne glaber, sed in margine superne dense stellato-lepidotus. *Ovarium* subovoideum ad stylum sensim diminuenti, densissime stellato-lepidotum et valde 5-costatum, 7 mm longum 3.5 mm latum; stylus albidus gracilis, basi per 1/3 dense lepidotus, supra glaber fere ad corollam aequans; stigma album clavato-capitatum indistincte 5-lobatum. *Capsula* fusiformis, ± ferrugineo-lepidota, 2–2.5 cm longa, 0.3–0.4 cm lata. – *Typus*: Kores WEI 1600 (LAE, holo).

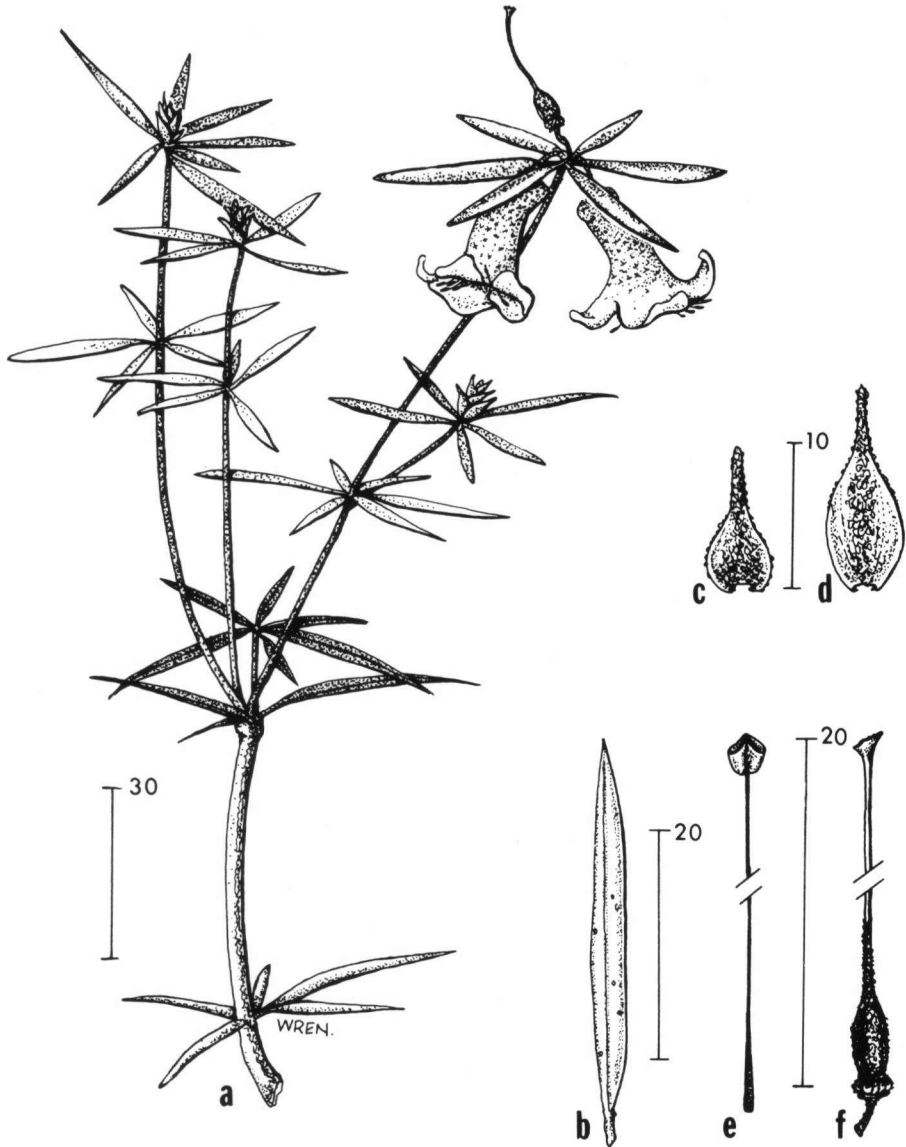


Fig. 1. *Rhododendron caliginis* Kores. a. Flowering branchlet; b. upper surface of mature leaf; c. outer perula; d. inner perula; e. stamen; f. ovary and style (Kores WEI 1600).

Small, straggling, much branched shrub, 0.25–0.5 m tall. Branchlets slender, terete, c. 1–2 mm in diam., tips densely rufous-stellate-lepidote, older parts glabrescent, smooth, covered with greyish cork; internodes 1–4(–7.5) cm. *Leaves* in 4–7-merous pseudowhorls at the upper 2 or 3 nodes, often noticeably different in size in the same pseudowhorl, linear or occasionally linear-lanceolate, apex subobtusate, base very broadly cuneate or rounded, subcoriaceous, very densely rufous-lepidote on both faces initially (scales \pm deeply stellate-incised, sessile or short-dendroid, each on top of a minute epidermal tubercle), early glabrous and finally smooth above, persistently rufous-lepidote beneath, margin entire, slightly revolute, 1–4(–5) cm by 1–3.5 mm, midrib faintly impressed above, as thick as the petiole and prominently raised beneath, nerves obscure; petioles slender, densely lepidote, 2–3(–4) mm. *Flowers* solitary or in small umbels of 2 or 3. Outer perulae subulate, inner ones ovate-subulate to ovate-acuminate, densely stellate-lepidote throughout the upper half and along the dorsal median below, glabrous otherwise, margin lepidote-fimbriate, 7–12 by 2–7 mm. *Bracteoles* linear to narrowly oblanceolate, up to 8 mm, margin laxly fimbriate. Pedicels slender, densely stellate-lepidote, (0.6–)0.8–1.2 cm. *Calyx* small, disk-like, densely stellate-lepidote externally, c. 2.5 mm in diam. Corolla white to cream-coloured, sometimes very faint pink, tubular below, slightly expanded at the limb, a little curved, zygomorphous, 3–3.5 cm long, densely stellate-lepidote and epilose outside, glabrous inside, tube 2–2.5 cm, c. 4 mm in diam. at the base, gradually widened to 6–8 mm at the apex, lobes 5, broadly obovate to suborbicular, somewhat expanded, c. 7–9 by 6–8(–9) mm. *Stamens* 10, unequal, the longest nearly equalling the corolla; filaments linear, glabrous; anthers subquadrate-oblong, c. 2 by 1 mm. Disk glabrous below, densely stellate-lepidote at the upper margin. *Ovary* subobovoid, gradually tapering to the style, very densely stellate-lepidote and conspicuously 5-ribbed, c. 7 by 3.5 mm; style white, rather slender, lepidote throughout the lower 1/3, glabrous above, \pm equalling the corolla in length; stigma white, clavate-capitate, obscurely 5-lobed. *Capsules* fusiform, \pm densely rufous-lepidote throughout, 2–2.5 by 0.3–0.4 cm.

Distribution. Papua New Guinea.

PAPUA NEW GUINEA. West Sepik Prov.: Hindenburg Range, Mt Amdutakin, 2400–2460 m, in fire induced secondary forest on limestone, fl. white, 13-9-1966, Vink 17578 (L, LAE), Kalkman 5281 (L, LAE), 5282 (L, LAE); Victor Emanuel Range, Mt Womtakin, 2850 m, in open shrubbery on limestone, fl. white, 8-7-1976, Kores WEI 1600 (BISH, E, L; LAE, type). – Enga Prov.: Laiagam-Porgera Div., c. 2400 m, on fallen logs along the roadside, fl. white, 12-6-1977, Kores WEI 1658 (LAE).

Notes. A rather striking new species owing to its linear leaves which are densely covered with dark brown, dendroid scales when immature and its apparent predilection for limestone outcrops. *Rhododendron caliginis* should be included within the existing system of classification for the genus throughout Malesia, set forth by Dr. H. Sleumer in *Flora Malesiana* I, 6 (1966) 469–668, as a member of the subsection *Phaeovireya* closely allied to *R. hooglandii* Sleumer. The new species may be distinguished from *R. hooglandii* on the basis of its patent, slightly or non-revolute leaves;

dark brown, dendroid scales; smooth, older branchlets; ovate-subulate, subdensely lepidote perulae and white, zygomorphous flowers. Contrasting this, *R. hooglandii* has erect or ascending, strongly revolute leaves; golden-brown, \pm stellate scales; conspicuously verruculose older branchlets; ovate perulae which are either entirely glabrous or with a few scattered scales and tubular, pink or red flowers. As presently known, *R. caliginis* is restricted to the extreme northwestern portion of Papua New Guinea and occurs from 2400 to 2850 m, while *R. hooglandii* appears to be restricted to the north central portion of Papua New Guinea where it is found from 3050 to 3400 m.

Rhododendron caliginis was first collected by the author at the edge of a fog-swept precipice on the summit of Mt Womtakin. All of the plants which I observed seemed to be perpetually enshrouded in mist; hence the specific epithet for this new species.

Rhododendron konori Becc. — *R. heptaster* A. Gilli, Ann. Naturh. Mus. Wien 83 (1980) 434.

PAPUA NEW GUINEA. Chimbu Prov.: mountains near Nera Gaima, 2400 m, Gilli 279 (type in W!).

Notes. One of the most difficult aspects of identifying rhododendrons within Malesia is determining to which subsection the unknown material belongs. If the undetermined material is correctly placed within the right subsection, identification to the specific and infraspecific levels is generally accomplished without difficulty. When material is assigned to the wrong subsection, however, the collector is often faced with what appears to be an undescribed taxon. A case in point is *R. heptaster* Gilli. The author incorrectly assumed this species was a member of the subsection *Euvireya* and since it was distinct from all other species within this subsection described it as new. The species should have been assigned to the subsection *Phaeovireya* where it keys out to *R. konori* using the existing treatments for the genus in Malesia.

The holotype of this species agrees in all essential characters with those of *R. konori* with the exception of the size of the flowers. Typical *R. konori* has flowers 9–14 cm long while *R. heptaster* has flowers only 7–8 cm. This size difference is probably due to the fact that Gilli based his measurements of the corolla upon fairly mature buds and not fully expanded flowers. The holotype at W contains only a single umbel of 4 flowers which are in late bud. These are subtended by much of the perulae and the style in the one flower which was dissected is deeply inserted within the tube of the corolla with a non-receptive stigma. All this suggest that the buds were still several days away from anthesis and that the corollas would have continued to expand during the interim.

Rhododendron konori is one of the most common species throughout the Highlands of New Guinea and has been collected on numerous occasions within the Chimbu Province. It is one of the few species within New Guinea with more than 5 corolla lobes and the flowers are frequently marked with pink or rose.

Rhododendron blackii Sleumer. — *R. sleumeri* A. Gilli, Ann. Naturh. Mus. Wien 83 (1980) 435.

PAPUA NEW GUINEA. Enga Prov.: between Laiagam and Kandep, 3100 m, Gilli 429 (type in W!, dupl. L!).

Notes. Species which belong to the subsection *Solenovireya* all have narrowly tubular, salver-shaped, more or less actinomorphic flowers which are usually white to faint pink. *Rhododendron sleumeri* has distinctly zygomorphic, deep red flowers which are tubular below but gradually expanded distally. This type of corolla is typical of many of the red flowered species within the subsection *Euvireya* and this is where Gilli's new species should have been placed and not in the subsection *Solenovireya* as indicated by its author.

The type of *R. sleumeri* collected between Laiagam and Kandep, is indistinguishable from the type of *R. blackii*, and the two species should be regarded as conspecific. *Rhododendron blackii* occurs throughout the Mt Hagen-Laiagam area of Papua New Guinea and is a moderately common species as a forest epiphyte between 2560 and 3390 m.

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