A new name for an Australian *Rhododendron* (*Ericaceae*)

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Introduction

Investigation of the taxonomy of *Rhododendron lochiae* F. Muell. resulted in the recognition of two species of *Rhododendron* in Australia, *R. lochiae* and *R. notiale* Craven (Craven & Withers, 1996). As the type of Mueller's species belonged to a plant that was scarcely known, in contrast to the other plant that was well known to botanists and horticulturists, conservation of the name *R. lochiae* F. Muell. with a new type was proposed in order to maintain the conventional application of the name (Craven, 1996). The species that Mueller's type represents was described as *R. notiale* Craven (Craven & Withers, 1996). This proposal was not approved by the Committee for Spermatophyta (Brummitt, 1998), the relevant nomenclatural committee set up under the ultimate auspices of the International Union of Biological Sciences (IUBS), and its decision was subsequently ratified by the other relevant fora. Following a query by the author, the secretary of the Committee, R.K. Brummitt, agreed to reopen the case within the Committee, but their second decision was similarly negative (Brummitt, 2000).

The first report (Brummitt, 1998) states that the 'name is not being changed for purely nomenclatural reasons; its application is being restricted for taxonomic reasons'. The present author considers the relevance and significance of this statement to be unclear.

Several species names have been successfully conserved in cases where misidentification has resulted in names being applied to taxa that do not include the nomenclatural types of those names (e.g. *Andropogon bicornis* (Prop. 1417), *Peucedanum nodosum* (Prop. 1426), *Spartium capense* (Prop. 1439), *Cuscuta capitata* (Prop. 1440), all in Brummitt, 2001). This type of conservation is not an unusual occurrence. From a perusal of recent volumes of *Taxon*, it appears that, when it comes to conservation of species names, the Committee makes somewhat arbitrary decisions. It seems, from my interpretation of their reports relating to the *Rhododendron lochiae* proposal, that the Committee believes that as far as the application and conservation of names is concerned there should be rigid separation between taxonomy and nomenclature *per se*. However, such an extreme view, even if achievable, is not in accordance with the wishes of many users of plant names, the majority of whom are not herbarium botanists. This view is also inconsistent with the Committee's recent decisions on other proposals that were made to conserve species names with a new type so as to preserve the nomenclatural *status quo*.

The decisions of the Committee are difficult to reconcile with the following

statements in the International Code of Botanical Nomenclature (Tokyo Code) (Greuter et al., 1994):

'The Section urges the General Committee and through it all Permanent Committees to make full use of the options that the *Code* now provides in order to ensure nomenclatural clarity and stability.' (*Tokyo Code*: ix)

"... the XV International Botanical Congress urges plant taxonomists, while such work continues, to avoid displacing well established names for purely nomenclatural reasons, whether by change in their application or by resurrection of long-forgotten names..." (*Tokyo Code*: xiv)

In passing, it is worth noting that the subsequent edition of the *Code*, the *St Louis Code* (Greuter *et al.*, 2000), does not refute the sentiment underlying the above-cited passages.

The type method has clearly provided a successful way of unambiguously determining the application of names to plant taxa. However, automatic adherence to this method will not promote stability in nomenclature and will force the users of plant names to make unnecessary, and unwelcome, adjustments. Ideally, advances in taxonomic knowledge should have a minimal effect upon conventional nomenclature. Conservation of the name *R. lochiae* F. Muell. with a new type as proposed (Craven, 1996) would have permitted new taxonomic information to be integrated seamlessly with the present majority application of the name and would have avoided the lamentable confusion that is likely to ensue.

However, unfortunate as it may be, in accordance with the decisions made by the nomenclatural committee, *R. lochiae* sensu auctt. non F. Muell. is re-described below as the new species *R. viriosum*, and *R. notiale* Craven is synonymized with *R. lochiae* F. Muell.

Rhododendron lochiae F. Muell., Victorian Nat. 3: 157 (1887 as '*R. Lochae*'). *Azalea Lochae* (F. Muell.) Kuntze, Rev. Gen. Pl. 387 (1891). Type: Australia, Queensland, Mt Bellenden Ker, *Sayer* 135 [cited in the protologue as *Sayer & Davidson*, without number] (holo. MEL).

Syn.: *R. notiale* Craven, in Craven & Withers, Edinb. J. Bot. 53: 33, fig. 3 (1996). Type: Australia, Victoria, cultivated in garden at Montrose, Melbourne, 21 i 1993, *Craven & Elliot* 9105 (holo. CANB; iso. A, BRI, E, MEL). (Provenance: Mt Bartle Frere, Queensland, 1975, *leg. D.L. Jones* [unvouchered].)

Rhododendron viriosum Craven, sp. nov.

Species ad *R.* sect. *Vireyam* ser. *Javanicam* Sleum. pertinens, et affinis *R. lochiae* F. Muell. a qua corolla recta et limbo ad angulum 90° , tubo corollae intra pubescenti, filamentis pubescentibus, antheris dispersis circum faucem sed numerosioribus in dimidio inferiore et perrubra, et stylo basali 2/3 ad 3/4 stellatolepidoto differt.

Type: Australia, Australian Capital Territory, cultivated in the Australian National Botanic Gardens at Canberra, 22 ii 1994, *Craven* 9354 (holo. CANB; iso. A, B, BRI, E, L, MEL, QRS). (Provenance: Queensland: Mount Windsor Tableland, 27 v 1989, *Jones & Clements* 4420 (CANB).)

Terrestrial, lithophytic or epiphytic shrub to 3m (once recorded as scandent). Branchlets 2-4 mm in diameter, terete to subterete, moderately to laxly stellatelepidote, sometimes glabrescent; internodes 1–10(–19) cm long. Leaves in 2–6-merous pseudowhorls at the distal 1–3 nodes; lamina $2.5-11 \times 1-7$ cm, elliptic to broadly elliptic to obovate, coriaceous (sometimes thinly so), moderately and persistently stellate-lepidote abaxially, glabrescent adaxially (scales minute, sessile, marginal zone irregularly lobed or dented or subentire to entire, centre \pm flat to prominulous); apex acuminate (often bluntly so) to obtuse, ultimate apex entire; base obtuse to attenuate; margin revolute (sometimes slightly so); midrib prominent abaxially, impressed adaxially; primary veins 4-7 on each side of the midrib, prominent to prominulous abaxially, impressed to prominulous adaxially; lower order venation obscure; petiole 0.5-2cm. Umbels 2-7-flowered. Pedicel 1.8-3.5cm, subpendulous in flower, erect to suberect in fruit, moderately stellate-lepidote (subdensely stellatelepidote distally), usually pubescent. Calyx wanting, rarely to 5mm and 5-lobed. Corolla 3.5–5cm long, straight, funnel-shaped, with limb \pm at 90° to tube, red to reddish pink, moderately stellate-lepidote and sparsely pubescent outside, pubescent on tube inside; tube 6–10mm wide proximally, widening to 12–20mm at the throat; lobes 12-20mm long, suberect to spreading, very broadly obovate to subcircular, emarginate. Stamens 10, alternately long and short, not or only slightly exserted, presenting the anthers around the throat $(\pm$ in a circle, absent or rarely present in the upper part of the throat); filaments pubescent, the longer 23–30mm, the shorter 21–28mm; anthers 3mm long, very dark red, suboblong. *Disk* scarcely or slightly prominent, pubescent. Ovary 3-6mm long, subcylindric to subellipsoid, tapering to the style, densely stellate-lepidote and densely pubescent; style stellate-lepidote and pubescent in the proximal c.2/3 to 3/4, equalling or slightly exceeding the level of the anthers, lying in lower part of the corolla tube, at maturity 14–23mm long; stigma capitate. Capsule subcylindric to narrowly ellipsoid, 1.5-3cm long. Seeds narrow, 3-4mm long, tailed at each end.

Illustration. Craven & Withers, Edinb. J. Bot. 53: 32, fig. 2 (1996), as R. lochiae.

Distribution. Rhododendron viriosum occurs in four main regions: Mt Finnigan, Thornton Peak, Mount Windsor Tableland, and Main Coast Range. In the last two it has been collected from several locations in each but the degree of geographic discontinuity is not known. The distribution is given in fig. 2 in Craven & Withers (1996) under the name *R. lochiae*.

Habitat. Recorded as a lithophytic, epiphytic or terrestrial shrub in rainforest, in low *Borya* herbfield on boulder outcrop, in moss forest, in windswept mossy thickets amongst bare rock exposures, and in simple notophyll vineforest with *Agathis* emergents on granite soils. Altitude 910–1330m.

Additional specimens examined. QUEENSLAND. Mt Finnigan [all from summit region], 21 ix 1948, Brass 20340 (BRI), 25 viii 1972, Webb & Tracey 10844 (CANB), 25 xii 1991, McDonald

s.n. (BRI). Thornton Peak [apparently all from summit region], 14 iii 1932, *Brass* 2284 (BRI), 12 xi 1973, *Hartley* 14036 (CANB), 12 xi 1973, *Stocker* 1087 (QRS), 1 x 1979, *Teese & Loyn* s.n. (BRI), 24 ix 1984, *Clarkson* 5559 (BRI), 26 ix 1984, *Clarkson* 5613 (BRI, QRS), 16 ix 1991, *Christophel* 91/106 (QRS). State Forest Reserve 144, Bower Bird Logging Area, 3 ii 1988, *Hyland* 13513 (QRS). Pinnacle Rock Track, 4.5km W of Karnak, 22 vi 1992, *Forster, Sankowsky & Tucker* 10717 (BRI). Roots Creek, 5 ii 1933, *Carr* 11/340 (QRS), 5 i 1936, *Robbins* 1252 (QRS); Upper Roots Creek, 12km WSW of Mossman, 1 i 1989, *Baird* 1748 (BRI). Mt Spurgeon, ii 1923, *Merrotsy* s.n. (BRI), 12 viii 1971, *Stocker* 772 (QRS). Platypus Creek at head of Mossman River, ix 1972, *Tracey* 14896 (BRI); head of Mossman River, 11 i 1935, *McLean* s.n. (BRI). Mt Lewis road, 28km from Mt Molloy–Mossman road, 31 i 1981, *Jessup & Clarkson* 279 (BRI, CANB). State Forest Reserve 143, Riflemead, North Mary Logging Area, 2 ii 1977, *Dockrill* 1363 (QRS), 21 x 1991, *Gray* 5341 (QRS). Several collections made from cultivated materials have been seen; these are not listed here.

The type collection was made from as exually propagated plants derived from wild-collected material. The specific epithet is derived from the Latin, *viriosus*, robust, strong, in recognition of its qualities when used in hybridization programmes. Typically, the F_1 progeny have reddish to rose-pink corollas, its floral pigment genes apparently always being dominant, and demonstrate good vigour.

Key to the Australian species of Rhododendron

Corolla tube straight; filaments pubescent; anthers dark red, presented around the throat with most being in the lower half; style lying in lower part of corolla tube _____ **R. viriosum**

Corolla tube curved; filaments glabrous; anthers yellowish, presented in a cluster at the top of the throat; style in upper part of corolla tube _____ R. lochiae

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