

RHODODENDRON GUMINEENSE CRAVEN (ERICACEAE, SUBGENUS VIREYA), A NEW RECORD FOR INDONESIA

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Yasper Michael Mambrasar. 2018. *Rhododendron gumineense* Craven (Ericaceae, Submarga Vireya), Rekaman Baru untuk Indonesia. *Floribunda* 6(1): 19–21. — Jumlah jenis *Rhododendron* di Indonesia dilaporkan sebanyak 229 jenis. Satu jenis *Rhododendron* dari Lembah Baliem, Indonesia yang sebelumnya diidentifikasi sebagai *Rhododendron beyerinckianum* Koord. telah diidentifikasi sebagai *Rhododendron gumineense* Craven, berdasarkan bentuk daun dan tangkai putik. Sehingga menambah jumlah jenis *Rhododendron* di Indonesia menjadi 230.

Kata Kunci: Indonesia, Lembah Baliem, Rekaman baru, *Rhododendron*.

Yasper Michael Mambrasar. 2018. *Rhododendron gumineense* Craven (Ericaceae, Subgenus Vireya), a new record for Indonesia. *Floribunda* 6(1): 19–21. — The number of *Rhododendron* species in Indonesia was reported as 229 species. A specimen of *Rhododendron* from the Baliem valley, Indonesia previously identified as *Rhododendron beyerinckianum* Koord. has been identified as *Rhododendron gumineense* Craven, based on leaf shape and style morphology. This increases the number of *Rhododendrons* in Indonesia to 230 species.

Keywords: Indonesia, Baliem valley, New record, *Rhododendron*.

Indonesia is the second richest country in the diversity of *Rhododendrons* after China (MacKay & Gardiner 2017, Gibbs *et al.* 2011). There are presently 229 species spread through Sumatra, Java, Lesser Sunda Island (LSI), Borneo, Moluccas, and Papua (Sleumer 1966, Gibbs *et al.* 2001, Argent 2006, Argent 2015). Papua has the highest diversity of *Rhododendron* compared with the other Indonesian Islands. Argent (2015) records 171 species in New Guinea as a whole. 121 species in the western half of New Guinea and 85 in the eastern. It is estimated that the number of *Rhododendron* species in the western part will increase because many areas have not been explored as much as the eastern Part (Kartikasari *et al.* 2013).

Information about the existence of *Rhododendron* in Papua begins with discovery four species of *Rhododendron* on Mts. Arfak in 1875 recorded by Odoardo Beccari (Beccari 1878). After Beccari, more new species of *Rhododendron* were described from specimens collected by botanists or naturalists from Holland, America, Belgium, French, Spanish, and Australia (Kartikasari *et al.* 2013, Steenis-Kruseman 1950). Information about *Rhododendron* in the western part of New Guinea declined after the Dutch passed Papua to Indonesia in 1 May 1963 due to decreased botanical exploration. In the eastern part, botanical

exploration continued after Papua New Guinea gained independence from Australia in 1975 (Kartikasari *et al.* 2013). In the last four years, two new species of *Rhododendron* have been discovered in New Guinea (James & Argent 2017, Danet 2015). There are several current botanical explorations in Papua conducted by researchers from Indonesia and also abroad. These include the Rio Tinto project by PT. Freeport Indonesia, Lengguru (Joint Research Indonesia Institute of Science (LIPI), Institute of Research for Development (IRD) French, Sorong fisheries Academy, Dinas Perikanan dan Kelautan Kabupaten Kaimana, Universitas Negeri Papua, Universitas Cendrawasih, and Universitas Musamus), E-Win LIPI and exploration of enrichment of Wamena biology garden collection conducted by BO Staff. (Johns *et al.* 2006, Juswara *et al.* 2016, Mambrasar & Hutabarat 2016, Nugroho *et al.* 2016).

The specimen Konsterman & Soegeng 775 (BO), collected on a botanical exploration conducted in the Baliem Valley, Papua Province, Indonesia in 1966. The exploration yielded a specimen of *Rhododendron*, first identified as *R. beyerinckianum* Koord. After being further studied, it was identified as *R. gumineense* Craven using the key in '*Rhododendron* of Subgenus Vireya (Argent 2015). *R. gumineense* was known only in the

eastern part of New Guinea and not previously recorded in the western part (Argent 2015, Craven 2014). So, this find is evidence of a much wider distribution of *R. gumineense*. It also increases the number of *Rhododendron* species recorded from Indonesia to a total of 230 species.

***Rhododendron gumineense* Craven (Figure 1).**

J. Adelaide Bot. Gard. 2014. 27:31. Type : *A. Rouse s.n.* 29 Dec. 2012. Cultivated specimen (CANB!, E, MEL).

Shrub to 2,5 m, twig rounded, densely scaly. *Leaves* 3–5 together in pseudo whorls. *Blade* 30–53 × 10–25 mm, broadly elliptic to elliptic, apex obtuse or shortly acuminate; margin revolute; base broadly tapering; *scales* dense, dendroid; *petiole* 5–15 mm, densely scaly. *Flowers* 2–3 together, half hanging. Pedicel *ca.* 20 × 1 mm, slender, densely brown-stellate-scaly, without simple hairs. *Calyx* ca. 1 mm in diameter. *Corolla* 24–35 mm, pink; tube tubular-curved, moderately scaly outside, glabrous inside; lobes 6 mm long, scaly outside. *Stamens* slightly exerted, filaments 28 mm, glabrous; anthers 1–2.8 mm, oblong, light brown. *Ovary* 8 × 3 mm, sub-cylindrical, tapering to style, densely scaly; style 20 mm, slightly exerted and approximating the stamens in length, scaly to within 4 mm of the apex; stigma *ca.* 2 mm in diameter.

Distribution: Gumine, Chimbu Province, Papua New Guinea and Baliem Valley, Jayawijaya Regency, Papua Province, Indonesia.

Habitat: Terrestrial, grown in montane forest, 2500 m asl. Fl. August.

Specimens examined: (Photo) Cultivated in Hawthorn East green house, Victoria Australia, 29 Dec. 2012, *A. Rouse s.n.* CANB880074 (CANB); W. Irian. Baliem valley, Above Welleey, 29 Aug. 1966. *Kostermans & Soengeng 775* (BO).

Notes: This species was first described from a living collection in Australia, cultivated in Hawthorn East, Victoria in a greenhouse. There is no information about the habitat. It was collected by D. Stanton, of Wollongong, NSW, Australia at Gumine, Chimbu Province, (now Simbu Province) Papua New Guinea in 1971, and sent to the Australian *Rhododendron* Society, Olinda, Victoria, Australia by L. Searle (Kundiawa, Chimbu Province, PNG) in 1974. Craven (2014) and Argent (2015), give the distribution of *R. gumineense* as only known in Papua New Guinea, not from Indonesian New Guinea. Thus the record of *R. gumineense* from Baliem valley is a new record for the flora of Indonesia.

This species is similar to *Rhododendron rarum* Schltr. but differs in that the style of *R. gumineense* is scaly whereas that of *R. rarum* always has some simple hairs and the leaves are shorter and broader in relation to their length (Argent 2015). Its also similar to *R. beyerinckianum*, but it differs in having the leaf lamina narrowly elliptic to elliptic, base cuneate and often very narrowly so, apex obtuse or shortly acuminate to very narrowly acute to very narrowly acuminate; and the ovary sub-cylindrical and tapering to the style. In *R. beyerinckianum* the leaf lamina is narrowly ovate, to broadly elliptic, obovate or subcircular, the base broadly tapering to rounded, the apex obtuse, broadly acute, sometimes apiculate; and the ovary elongate conical or subovoid, usually abruptly tapering distally (Craven 2014).

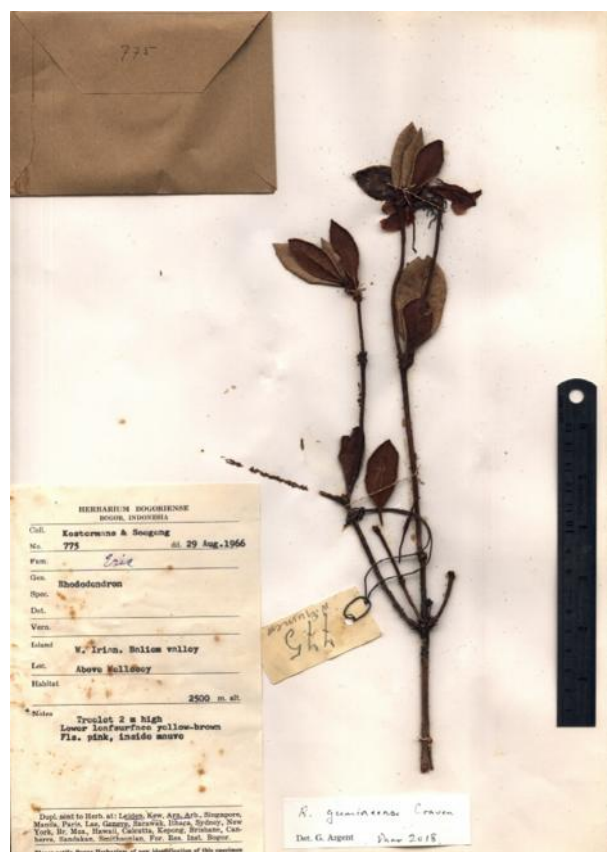


Figure 1. Specimen of *R. gumineense* (Photo: Y. Michael Mambrasar based on Kostermans & Soengeng 75)

ACKNOWLEDGEMENT

I would like to thank I Putu Gede Parlida Damayanto, M.Si., Lulut Dwi Sulistyaningsih, M.Si. and Dr. Rugayah are gratefully acknow-

ledged for critically reading the manuscript.

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