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Correspondence on editorial matters and subscriptions for Reinwardtia should be addressed to:

HERBARIUM BOGORIENSE, BOTANY DIVISION,

RESEARCH CENTER FOR BIOLOGY-INDONESIAN INSTITUTE OF SCIENCES

CIBINONG SCIENCE CENTER, JLN. RAYA JAKARTA – BOGOR KM 46,

CIBINONG 16911, P.O. Box 25 CIBINONG

INDONESIA

PHONE (+62) 21 8765066; Fax (+62) 21 8765062

E-MAIL: reinwardtia@mail.lipi.go.id

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Top left: Habit. Top right: Stipules. Below left: Male inflorescence. Middle: Male flower
& female flower. Below right: Fruit & ovary cross section (middle part). Photos: W.H.
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RHODODENDRON WIDJAJAE (ERICACEAE, SECTION SCHISTANTHE) A NEW SPECIES FROM SULAWESI

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GEORGE ARGENT†

Royal Botanic Garden Edinburgh, 20A Inverleith Row, Edinburgh EH35LR, Scotland, United Kingdom. Email: g.argent@rbge.org.uk

YASPER MICHAEL MAMBRASAR

Herbarium Bogoriense, Botany Division, Research Center for Biology-LIPI, Cibinong Science Center, Jln. Raya Jakarta-Bogor Km. 46, Cibinong 16911, Bogor, Indonesia. Email: michael mambrasar@yahoo.com

ABSTRACT

ARGENT, G. & MAMBRASAR, Y. M. 2019. *Rhododendron widjajae* (Ericaceae, section *Schistanthe*) a new species from Sulawesi. Reinwardtia 18(1): 27–30. — A new species of *Rhododendron* section *Schistanthe* (= subgenus *Vireya*) is described, *Rhododendron widjajae* Argent & Mambrasar. It is compared with the two most similar species and the differences demonstrated.

Key words: Ericaceae, Indonesia, Mt. Mekongga, new species, Rhododendron, Sulawesi.

ABSTRAK

ARGENT, G. & MAMBRASAR, Y. M. 2019. *Rhododendron widjajae* (Ericaceae, seksi *Schistanthe*) satu jenis baru dari Sulawesi. Reinwardtia 18(1): 27–30. — Satu jenis baru *Rhododendron* seksi *Schistanthe* (= submarga *Vireya*), dipertelakan sebagai *Rhododendron widjajae* Argent & Mambrasar. Jenis baru ini dibandingkan dengan dua jenis yang hampir mirip dan dijelaskan perbedaannya.

Kata Kunci: Ericaceae, Gunung Mekongga, Indonesia, jenis baru, Rhododendron, Sulawesi.

INTRODUCTION

Of the three subgenera known from the Malesian region: Hymenanthes (Blume) K.Koch, (without scales); Tsutsutsi (G.Don) Pojarkpva (with multicellular lamina hairs) and Vireya Clarke, the present new species clearly belongs in subgenus Vireya with its multicellular, stellate, (not laminar) scales. Rhododendrons of subgenus Vireya is a very large subgenus of 324 described species (Sleumer, 1966; Argent, 2015; James & Argent, 2017) and many more are to be expected from the still poorly botanically explored regions of Indonesia. Sulawesi with 28 species (29 including the present one) is the third richest island after New Guinea to the east with 171 (121 in the Indonesian part) and Borneo in the west with 56 species.

Rhododendron widjajae Argent & Mambrasar, spec. nov. — Type: Indonesia, Sulawesi, S.E. Sulawesi, North Kolaka Regency, Rante Angin Subdistrict, near Tinukari Village. 03°39′51.8″S, 121°14′12.3″E, 2,658 m asl, 26 November 2010, Widjaja et al. 9370 (Holotype: BO!). Fig. 1 & 2.

Diagnosis. Similar to *Rhododendron pseudobuxi*folium Sleumer in its size of flower. It differs in having twigs which are without the short hairs of that species; in having pedicels without simple hairs and the corolla is sparsely scaley outside not glabrous and glabrous inside, not shortly hairy. Superficially similar to *R. celebicum* (Blume) DC. but smaller and significantly differing from that species by the hairy filaments and ovary.

Shrub. Twigs laxly scaly, from a smooth surface, the scales flattened with a broad ribbed flange, without simple hairs. Leaves in tight pseudowhorls 5-7 together; blade elliptic to sub-elliptic-obovate, $20-25 \times 6-8$ mm, apex broadly pointed, sometimes apiculate; margin weakly crenulate, with impressed scales in the pits of the crenulations distally, strongly revolute proximally, more narrowly and less strongly so distally; base tapering and shortly decurrent into the petiole. Scales adaxially laxly distributed and extremely caducous leaving a glabrescent surface; abaxially laxly distributed, somewhat impressed in small depressions, sub-circular to weakly stellately lobed, the centres small, with a broad distinctly ribbed flange; mid-vein narrowly impressed above in the proximal half of the leaf, then level with the blade surface, broadly raised beneath proximally but tapering rapidly and slender distally; lateral veins not visible. Petiole 2-6 × ca. 1 mm, flattened, grooved above, laxly scaly. Flower buds

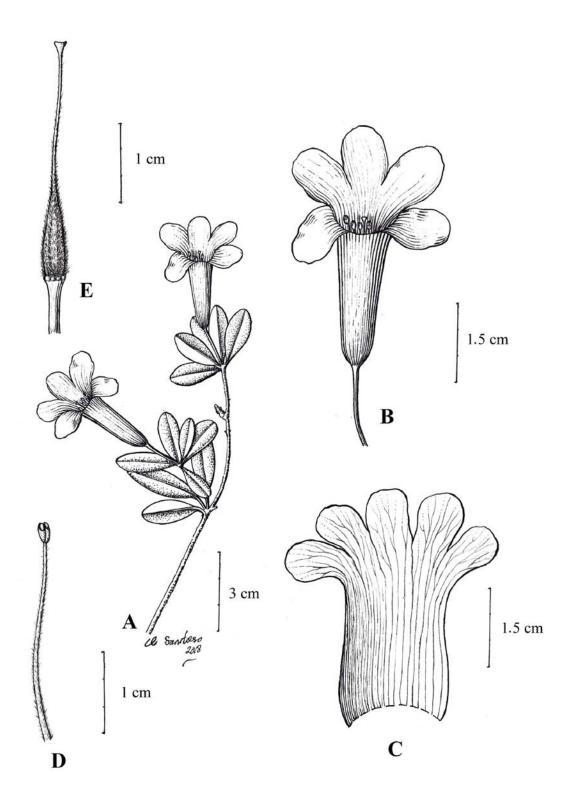


Fig. 1. *Rhododendron widjajae* Argent & Mambrasar, *spec.nov*. A. Branch showing habit of flowers. B. Flower. C. Corolla opened out. D. Stamen. E. Pistil. From Widjaja *et al.* 9370 (BO), drawn by Wahyudi Santoso (BO).

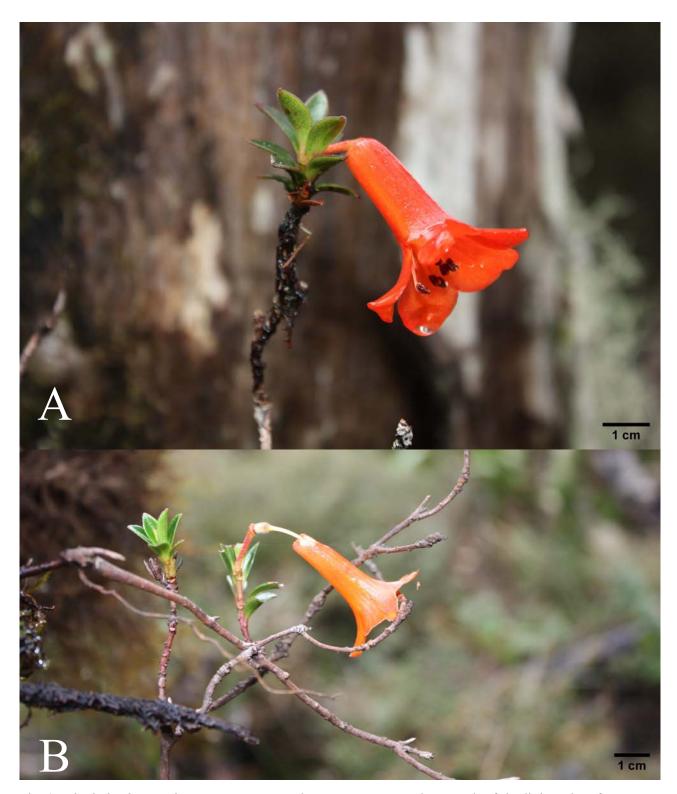


Fig. 2. *Rhododendron widjajae* Argent & Mambrasar, *spec.nov*. Photograph of the living plant from type location. Photos: Elizabeth A. Widjaja.

not seen unopened. Bracts: the outer narrowly ovate with sharply acute apices, minutely hairy outside and with densely overlapping scales along the margins and in the distal half abaxially. Inner bracts and bracteoles not seen. *Flowers* solitary or three together, hanging. *Pedicels* 14 × 0.5 mm,

laxly scaley, more densely scaly at the distal 1 mm, without simple hairs. Calyx a low disk, densely scaly outside. $Corolla~35~\times~30~$ mm, orange; tube $25~\times~4~\times~8~$ mm, straight, laxly scaly outside, glabrous inside; lobes 5, spreading, $18~\times~8~$ mm, subspathulate. Stamens~10~ to 25~ mm long,

clustered on the upper side of the mouth of the corolla; filaments 24 mm, laxly hairy with irregularly spreading hairs in the proximal half, glabrous distally, linear but slightly broader towards the base; anthers 2 × 1 mm oblongoid, without tails, smooth. Disc glabrous except densely white-hairy on a narrow upper margin. Ovary 5 × 2 mm, densely covered with white, appressed distally pointing hairs which obscure the small scales except at the distal end; style subdensely hairy with irregularly pointing hairs in the proximal half, glabrous distally; stigma ca. 1.25 mm diameter, placed on the upper side of the mouth. Fruit not seen.

Distribution. Presently only known from the type locality.

Habitat and ecology. Mt. Mekongga is a volcanic peak rising to 2,779 m in the north-west part of South East Sulawesi. This new species was collected in the sub-alpine area at 2,658 m asl. which is close to the summit (2,779 m). This area is described as: jagged limestone karst and the *Rhododendron* was probably an epiphyte. The associated species have not been recorded but will no doubt have been semi-open dwarf shrubs.

Conservation status. Data Deficient. The habitat of *Rhododendron widjajae is* on the sub alpine area. Mt. Mekongga recently has been designated as protected forest by Indonesia Ministry of Environment and Forestry. But the status of Mt. Mekongga not include to conservation area like Nature conservation or National Park (Kartonegoro, 2014). The damage habitat is likely to be caused more by fire than from lightning.

Etymology. Named in honour of Prof. Elizabeth A. Widjaja, former senior researcher at the Herbarium Bogoriense and joint collector of this species for her contribution to Indonesian botany.

Notes. Rhododendron widjajae was collected on the 'Mekonga expedition' as Rhododendron species '2'. There appear to be no duplicates. This species keys to R. pseudobuxifolium in Argent 2015, but have some different characters. The ridged flanges to the leaf scales are another significant feature of this species.

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Scope. *Reinwardtia* is a scientific regular journal on plant taxonomy, plant ecology and ethnobotany published in June and December. Manuscript intended for a publication should be written in English.

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Abstract. English abstract followed by Indonesian abstract of not more than 250 words. Keywords should be given below each abstract.

Manuscript. Manuscript is original paper and represent an article which has not been published in any other journal or proceedings. The manuscript of no more than 36 pages by using Times New Roman 11, MS Word for Windows of A4 with double spacing, submitted to the editor through <reinwardtia@mail.lipi.go.id>. New paragraph should be indented in by 5 characters. For the style of presentation, authors should follow the latest issue of Reinwardtia very closely. Author(s) should send the preferred running title of the article submitted. Every manuscript will be sent to two blind reviewers.

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Map/line drawing illustration/photograph. Map, line drawing illustration, or photograph preferably should be prepared in landscape presentation to occupy two columns. Illustration must be submitted as original art accompanying, but separated from the manuscript. The illustration should be saved in JPG or GIF format at least 350 pixels. Legends or illustration must be submitted separately at the end of the manuscript.

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