





A CLARIFICATION OF THE STATUS OF *RHYNCHOGLOSSUM LAZULINUM* (GESNERIACEAE: DIDYMOCARPOIDEAE)

M. Taram ¹, D. Borah ², H. Tag ¹ & D. J. Middleton ³

The status of the species *Rhynchoglossum lazulinum* A.S.Rao & Joseph as distinct from *R. ampliatum* (C.B.Clarke) B.L.Burt is discussed. It is concluded that *Rhynchoglossum lazulinum* should be treated as a synonym of *R. ampliatum*.

Keywords. Arunachal Pradesh, synonymy.

Received 14 December 2022 Accepted 13 April 2023 Published 6 July 2023

Introduction

The genus *Rhynchoglossum* Blume (including *Klugia* Schltdl.) includes approximately 13 species mostly found in tropical Asia but with a single species from Central and South America (Burt, 1962; Kartonegoro, 2013; Pattharahirantricin, 2014; GRC 2023, [continuously updated](#)). *Klugia ampliata* C.B.Clarke was described from the specimen Griffith 3846 (K [K000858040]) from the Mishmi Hills of Arunachal Pradesh, India, and later transferred to *Rhynchoglossum ampliatum* (C.B.Clarke) B.L.Burt (Clarke, 1883; Burt, 1962). Although the specimens were not cited by Burt, he appended *Rhynchoglossum ampliatum* (C.B.Clarke) B.L.Burt determination labels on the specimens *Bor* 18179 (ASSAM [ASSAM0000000092]), collected in 1936, and *Deka s.n.* (ASSAM [ASSAM0000000093]), collected in 1951, both from Kameng Forest Division in Arunachal Pradesh (Burt, 1962). Later, *Rhynchoglossum lazulinum* A.S.Rao & Joseph was described based on a 1964 collection by Joseph from Kameng in Arunachal Pradesh, with the aforementioned *Bor* and *Deka* collections cited as paratypes (Rao & Joseph, 1967). Sinha & Datta (2016) catalogued both species but provided a detailed description only of *Rhynchoglossum lazulinum*, treated *R. ampliatum* as “imperfectly known”, and did not include *R. ampliatum* in the key. The only other *Rhynchoglossum* species in Northeast India is *R. obliquum* Blume (Sinha & Datta, 2016), which differs in multiple characters from the species under consideration.

When *Rhynchoglossum lazulinum* was published, no comparison with *R. ampliatum* was made, but when the protologue of *R. lazulinum* is compared with the material of *R. ampliatum* known at that time, the only discernable difference between them is that the inflorescence is described as terminal in *R. lazulinum* and the majority of material of

¹ Department of Botany, Rajiv Gandhi University, Rono Hills, Doimukh – 791112, Arunachal Pradesh, India.

² Department of Botany, Kaliabor College, Kuwaritol – 782137, Assam, India.

³ Singapore Botanic Gardens, National Parks Board, 1 Cluny Road, 259569 Singapore. Author for correspondence. E-mail: davidmiddletonsing@gmail.com.

R. ampliatum then known had axillary inflorescences. However, even the type material of *Rhynchoglossum ampliatum*, which includes two plants, has both axillary and terminal inflorescences.

More recently, the first two authors have had an opportunity to conduct repeated field surveys for the two species, have made multiple collections throughout their ranges, and have examined herbarium material in ARUN, ASSAM, CAL, E and K (herbarium codes from Thiers, [continuously updated](#)), either in the herbarium or available through online resources. Plants may have terminal or axillary inflorescences (which later turn lateral, meaning the inflorescence becomes somewhat distant from the leaf axil) even within a single population, and we conclude that this character is variable within a single species. Because this was the only character used to distinguish the two species, and even then was not diagnostic, and we can find no other differences, we conclude that *Rhynchoglossum lazulinum* is not distinct from *R. ampliatum*. We provide below a key for identifying the species in India, and a new and expanded description of *Rhynchoglossum ampliatum*.

Key to the *Rhynchoglossum* species of India

- 1a. Corolla < 2 cm long; fertile stamens 2 _____ *R. obliquum*
 1b. Corolla > 2 cm long; fertile stamens 4 _____ 2
 2a. Lower lip of corolla distinctly 3-lobed; Northeast India _____ *R. ampliatum*
 2b. Lower lip of corolla not or barely 3-lobed; South India _____ *R. notonianum*

Taxonomic treatment

Rhynchoglossum ampliatum (C.B.Clarke) B.L.Burtt, Notes Roy. Bot. Gard. Edinburgh 24: 168 (1962). – *Klugia ampliata* C.B.Clarke in A.DC. & C.DC., Monogr. Phan. 5(1): 160 (1883).

– Type: India, [Arunachal Pradesh], Mishmee [Mishmi], near Yen, *W. Griffith EIC* 3846 (holotype K [K000858040]). [Figure](#).

Rhynchoglossum lazulinum A.S.Rao & Joseph, Bull. Bot. Surv. India 9: 280, figs 1–6 (1967). – Type: India, [Arunachal Pradesh], Kameng district, at Krishna 36 km from Bhalukpong, on the way to Sessa, c.1250 m, 10 ix 1964, *J. Joseph* 39716A (holotype CAL [CAL0000019187], isotype ASSAM [ASSAM0000000085] n.v.), **syn. nov.**

Perennial herbs, 30–60 cm tall. *Leaves* alternate, more rarely subopposite; lower leaves long petiolate, petioles 2–2.5 cm long, upper leaves sessile, petioles c.0.2 cm long; lamina membranous, elliptic to broadly lanceolate, 8–20 × 4–11 cm, base strongly oblique, subcordate to cuneate, apex acute to acuminate, margin entire; adaxially dark green with appressed glandular hairs, abaxially pale green, glabrous; lateral veins 12–30. *Inflorescences* terminal or axillary (later turning lateral), 10–24 cm long, 7- to 10-flowered; peduncle glabrescent, white, 5–20 cm long; bracts 1 or 2, subulate, 4–10 mm long, green,

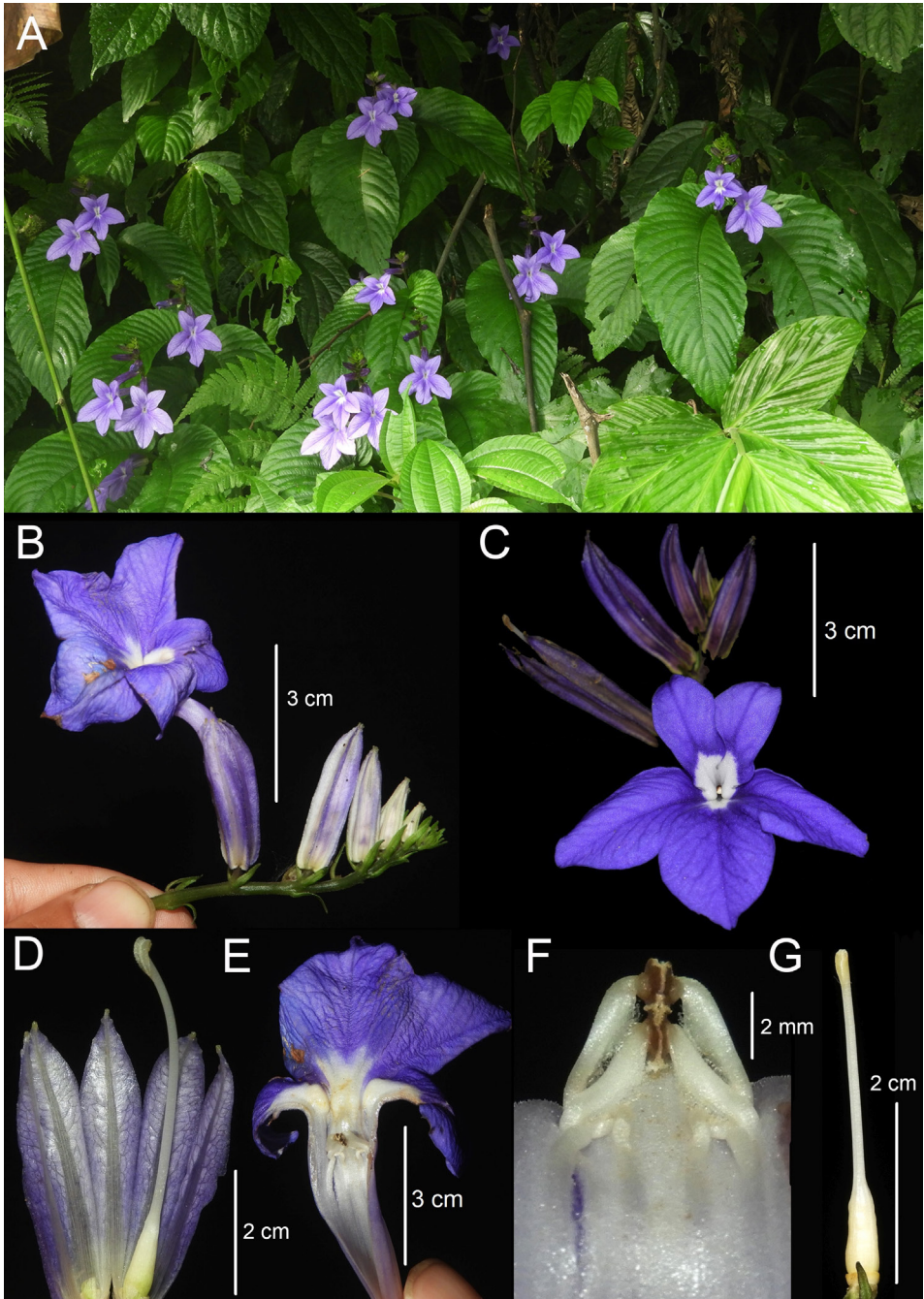


Figure. *Rhynchoglossum ampliatum* (C.B. Clarke) B.L. Burtt. A, Habit; B, inflorescence; C, flower (front view); D, calyx (dissected open); E, corolla (dissected open); F, stamens; G, pistil. Photographs of Momang Taram & Ojar Taku 808: A–B and D–G, M. Taram; C, D. Borah.

sparingly pubescent, apex acute to rounded; pedicels glabrescent, 3–6 mm long. *Calyx* tubular, glabrescent, 3.5–4.2 × 0.5–1 cm, purplish white, conspicuously uniformly ridged, venation reticulate, dark purple; lobes triangular, 8–11 × 5–8 mm, apex acute, margin entire, with glandular hairs. *Corolla* blue or violet; tube 2.8–3.3 × c.0.5 cm, bluish to purplish white, finely puberulent outside, dilated and curving upwards near throat, inside glabrous; distinctly 2-lipped, upper lobes broadly ovate, 1.5–2 × 1.3–1.8 cm, lower lobes broadly ovate to suborbicular, 2.5–3 × 2.3–3 cm, apex obtuse. *Stamens* 4, didynamous, coherent, inserted 2.6–3.2 cm above the corolla base; filaments 3–5 mm long, white, glabrous; anthers 3–4 mm long, brown. *Disc* annular, c.1 mm high; ovary 0.6–1 cm long, creamy white, glabrous; style 2–3.5 cm long, creamy white, stout, glabrous; stigma papillose, c.3 mm in diameter, lingulate. *Capsules* 8–11 mm long, ovoid-oblong, included within accrescent calyx.

Distribution. India (Arunachal Pradesh, Assam). Endemic (Taram *et al.*, 2022).

Habitat and ecology. On hill slopes, in moist forests at 200–1500 m altitude in association with *Henckelia umbellata* Kanthraj & K.Narayanan, *Loxostigma griffithii* (Wight) C.B.Clarke, *Begonia* sp., *Elatostema sessile* J.R.Forst. & G.Forst., mosses and liverworts. Flowering and fruiting June–November.

Specimens examined. INDIA. Arunachal Pradesh: Lower Subansiri district, near Potin road, 980 m, 4 vii 2018, *Momang Taram & Ojar Taku* 808 (ARUN, Herbarium of Rajiv Gandhi University); Lower Subansiri district, Ziro, 1200 m, 4 ix 2018, *Momang Taram & Ojar Taku* 812 (Herbarium of Rajiv Gandhi University); West Kameng district, 8 ix 2019, *Dipankar Borah* 5232 (Herbarium of Rajiv Gandhi University); Pakke Kesang district, 10 x 2019, *Ojar Taku* 107 (Herbarium of Rajiv Gandhi University); Subansiri, on way from Palin to Sayata, 19 xi 1964, *Sastry* 40738 (ASSAM [ASSAM0000000095]); Kameng FD, Balipara, 13 xi 1951, *G.K. Deka s.n.* (ASSAM [ASSAM0000000093]); Kameng, 1936, *N.L. Bor* 18179 (ASSAM [ASSAM0000000092]); Kameng, Krishna 8 km to Sessa (36 km from Bhalukpung), 10 ix 1964, *J. Joseph* 39716 (CAL [CAL0000019186]), 39716A (CAL [CAL0000019187]), 39716B (E [E00155098]), 39716C (ASSAM [ASSAM0000000091]), 39716D (ASSAM [ASSAM0000000086]), 39716E (ASSAM [ASSAM0000000085]); Mishmi Hills (Mishmee), *Griffith* 3846 (K [K000858040]).

Acknowledgements

The authors are grateful to Rajiv Gandhi University for providing the permissions and facilities necessary for this work, and to Mr Ojar Taku for his help in collection of the specimen.

ORCID iD

M. Taram  <https://orcid.org/0000-0002-4669-615X>

D. Borah  <https://orcid.org/0000-0002-3016-1070>

H. Tag  <https://orcid.org/0000-0003-4468-8380>

D. J. Middleton  <https://orcid.org/0000-0003-3754-1452>

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