



RESEARCH ARTICLE

Hoya acuminata (Wight) Benth. ex Hook. f. (Apocyanaceae): An addition to the flora of Nagaland, India

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ARTICLE HISTORY

Received: 10 January 2024

Accepted: 20 October 2024

Available online

Version 1.0 : 17 December 2024



Additional information

Peer review: Publisher thanks Sectional Editor and the other anonymous reviewers for their contribution to the peer review of this work.

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Indexing: Plant Science Today, published by Horizon e-Publishing Group, is covered by Scopus, Web of Science, BIOSIS Previews, Clarivate Analytics, NAAS, UGC Care, etc See https://horizonepublishing.com/journals/index.php/PST/indexing_abstracting

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CITE THIS ARTICLE

Kuotsu R & Limasenla. *Hoya acuminata* (Wight) Benth. ex Hook. f. (Apocyanaceae): An addition to the flora of Nagaland, India. Plant Science Today (Early Access). <https://doi.org/10.14719/pst.3269>

Abstract

Hoya acuminata (Wight) Benth. ex Hook. f. (Apocyanaceae) is reported here as a new distributional record and an addition to the flora of Nagaland from Kohima District.

Keywords

addition; Apocyanaceae; Hoya; Kohima; Nagaland; Northeast

Introduction

Hoya R.Br. (Apocynaceae: Asclepiadoideae) is a diverse genus of flowering plants found from India to the Pacific Islands (1). About 553 species are recorded globally (2), and they are usually epiphytic climbers, distributed across Asia, Pacific islands, and northeastern Australia (3). In India, it is represented by 31 species primarily found in the tropical forests of Northeast India, Western and Eastern Ghats and Andaman, and Nicobar Islands (4). *Hoya acuminata* (Wight) Benth. ex Hook. f. was first described in 1883 in The Flora of British India (5), and its native range is from Eastern Himalaya extending to Myanmar (6). This species is reported as rare and is found in wet evergreen forests of Mawsmi village, Khasi hills of Meghalaya (7). In Nagaland, there is only one species, *Hoya lanceolata* Wall. ex D.Don has been reported from Koziiri forest (8). Therefore, the present report of *H. acuminata* in the state of Nagaland shows its extended distribution towards North East India.

Materials and Methods

Nagaland, situated between 25°06'N and 29°04'N latitudes and 92°20'E and 95°15'E longitudes, shares an international boundary with Myanmar. This region, encompassing an area of 16,579 sq. km, owing to the diverse physiographic and geo-climatic conditions, is recognised as one of the richest repositories of biodiversity. Approximately 52% of the total geographical area is covered by forests, which include tropical and sub-tropical wet evergreen forests, sub-tropical broad-leaved forests, montane wet temperate forests, and sub-tropical pine forests (9).

During a field survey in the month of June 2023 at Kohima District in Nagaland 25°39'29"N 94°04'16.18"E, 1721m AMSL, the first author came across and collected an interesting species of *Hoya*. After scrutiny and perusal of relevant taxonomic literature, regional floras (10-12) and after confirmation of the absence of the specimen record in the Indian Virtual

Herbarium database BSI (13), it was further consulted with an expert from the National Parks Board, Singapore Botanic Gardens (Dr. Michele Rodda), and was identified as *Hoya acuminata* (Wight) Benth. ex Hook. f. which hitherto not reported from Nagaland. Hence, it is reported here as a new distributional record in addition to the flora of Nagaland. The detailed descriptions, along with coloured photographs, are provided to facilitate better identification (Fig. 1). Herbarium preparation was done by following the standard field and herbarium methods (14). The voucher specimen has been deposited in the herbarium of the Botany Department, Nagaland University.

Results and Discussion

Taxonomic treatment

Hoya acuminata (Wight) Benth. ex Hook. f. Gen. Pl. 2: 777. 1876; Hook. f. Fl. Brit. India 4: 53. 1883; Kanjilal et al., Fl. Assam 3: 303. 1939; Haridasan & Rao, Forest Fl. Meghalaya

619. 1987. *Pterostelma acuminata* Wight, Contr. Bot. India. 39. 1834. Jagtap et al., Fasc. Fl. India 24. 1999 (Apocynaceae: Asclepiadoideae).

Epiphytic shrub

Stem erect, pendulous branch; internodes terete, 1.5-2 cm long, nodes sparsely pubescent. Leaves opposite, decussate, 4-10×2-3.5 cm, elliptic to lanceolate, apex caudate acuminate, base cuneate, glossy, fleshy, glabrous along mid-rib, petioles short, 2-5 mm long. Lateral veins 2-4 pairs on the lower side. Inflorescence terminal, umbellate cymes, 2-3 flowered, flowers white with pink centre, peduncle short 1-1.5 cm long; pedicels 3-5 cm long, glabrous. Calyx 5-lobed, linear, oblong, ca 6×1.5 mm, glabrous. Corolla reflexed, lobes 5; united, tube ca 6-7 mm, lobes 1-2 cm long, acute at apex, ciliate margins. Corona staminal, uniseriate, 5-lobed, fleshy, laterally flattened, narrowly pointed 3 mm long, adnate. Stamens 5, 0.5-1 cm long; pollinia 5, yellow. Gynostegium 5-7 mm long.

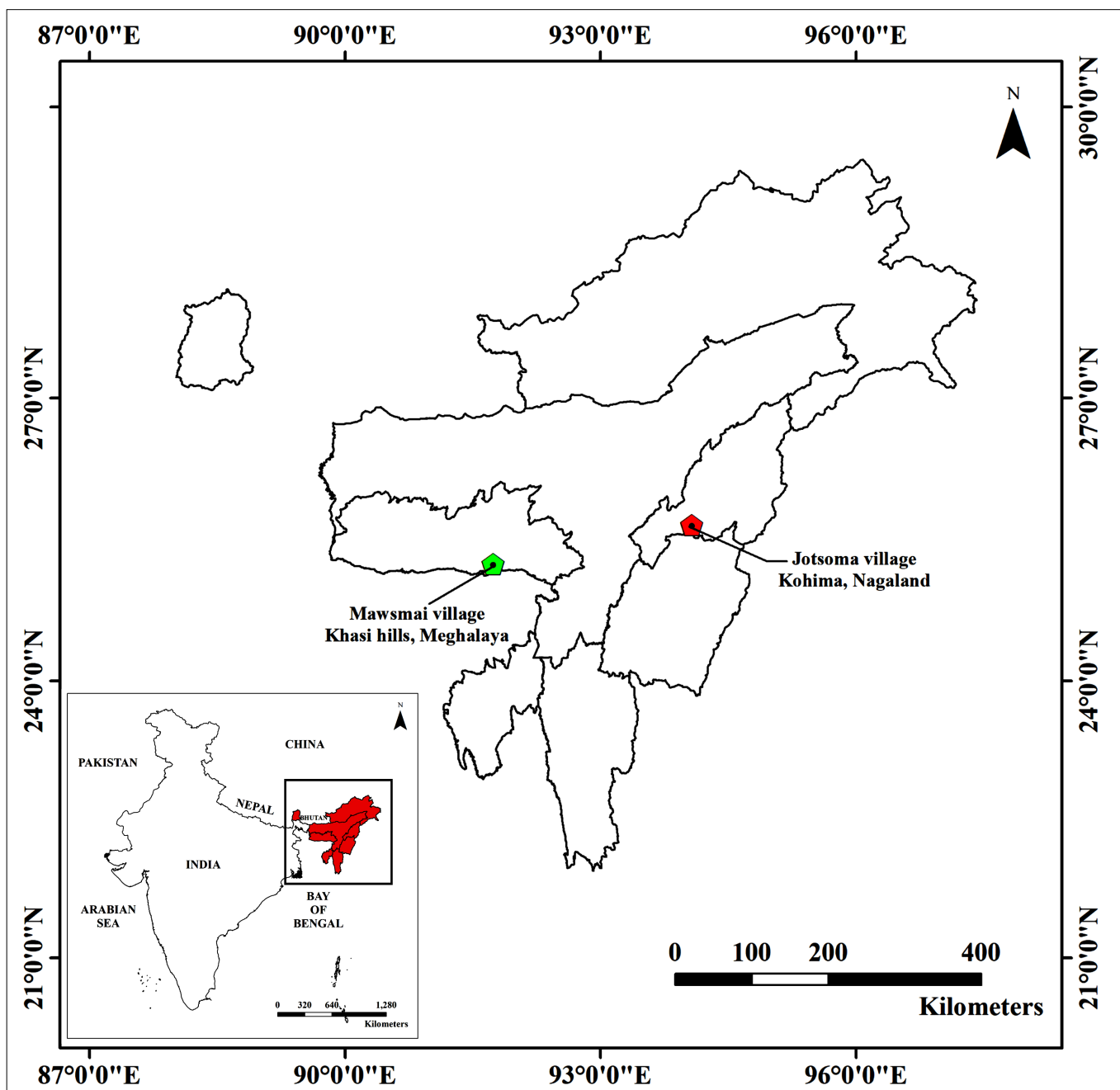


Fig. 1. Distributional map of *H. acuminata* in North east India.

Flowering

May- July

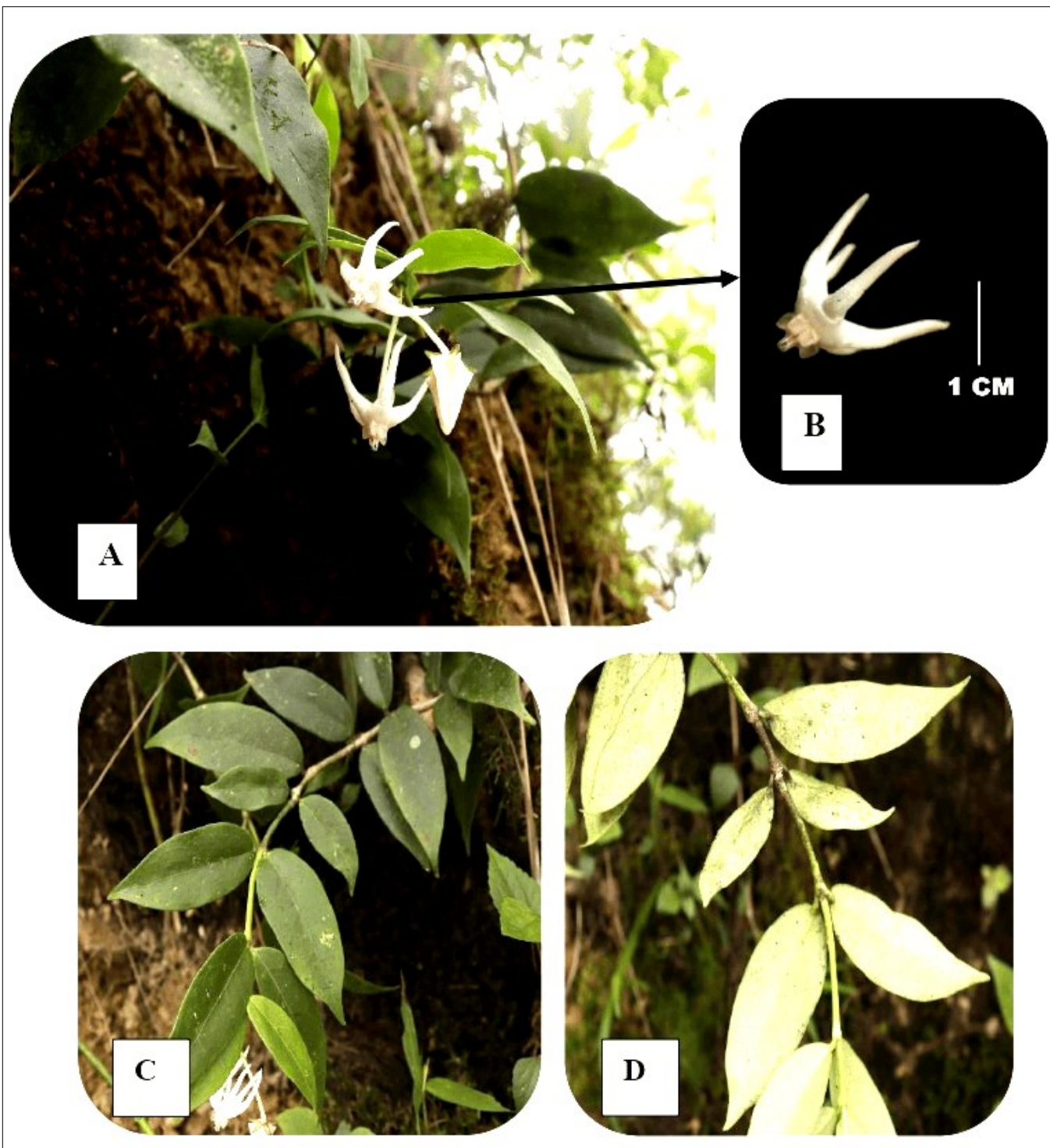
Distribution

GLOBAL: E. Himalaya to Myanmar. INDIA: Meghalaya, Jotsoma village, Kohima District, 25°39'29"N 94°04'16.18"E, 1721m AMSL, Nagaland.

W. Theob., *Malus indica* (Colebr. ex Wall.) B.B. Liu and *Ligustrum robustum* subsp. *robustum*.

Specimens examined

Nagaland, Jotsoma village, Kohima District, (Fig: 2) 1721m, 25°39'29"N 94°04'16.18" E, 23 June 2023, *Ruokuonuo Kuotsu* NU-BOT-RK-1108.



Ecology and habitat

A small population was observed growing in higher altitude forests at 1721m AMSL, growing epiphytically on forest slopes.

Associated plants

Nyssa javanica (Blume), Wangerin, *Aspidopterys indica* (Willd.)

Acknowledgements

RK thanks the Ministry of Tribal Affairs (2019-NFST-NAG-03004) for financial assistance. Special thanks to Dr. Michele Rodda, National Parks Board. Singapore Botanic Gardens for helping in the identification of the species. The authors are also grateful for the facilities provided by UGC-SAP (DRS-III), DST-FIST, and DBT-funded Institutional Biotech

Hub for financial assistance to the Department of Botany, Nagaland University.

Authors' contributions

Fieldwork and manuscript preparation by RK, proof reading of manuscript, and supervision by L.

Compliance with ethical standards

Conflict of interest: The authors declare that they have no competing interest.

Ethical issues: None

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