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Hygrophila auriculata (Acanthaceae): A new addition for Flora of Andaman & Nicobar Islands, India

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ABSTRACT

A new distributional record of *Hygrophila auriculata* (Schumach.) Heine (Acanthaceae), from the Andaman Islands is described based on the collection from Kulsy areas of Middle Andaman Island. Its nomenclature, description, images and other relevant details have been provided.

Key words: *Hygrophila auriculata*, Acanthaceae, addition, Andaman and Nicobar Islands.

INTRODUCTION

Hygrophila auriculata (Schumach.) Heine is a traditionally used medicinal plant (in different Indian systems of medicine as well as in folklore medical practice), widely distributed throughout India, Sri Lanka, Myanmar, Malaysia and Nepal. It is believed to be indigenous to India from the Himalayas to Sri Lanka, Myanmar, Malaysia, and Nepal (Nadkarni, 2007). In India, this species is distributed in almost all the states (Mao & Das, 2020). However, it is not reported so far from the Andaman and Nicobar Islands.

During the course of field exploration at Middle Andaman in the year 2020, the authors collected a small population of *Hygrophila auriculata* from Kusly area of Middle Andaman. Gregarious population of the species was collected subsequently from Kaushalya Nnagar in Middle Andaman. It was confirmed after the scrutiny of literature (Pandey & Diwakar, 2008; Singh *et. al.*, 2014 & 2021; Murugan *et al.*, 2016) that the species is not yet reported in the flora of the Andaman and Nicobar Islands. Therefore, the species is described here as new addition to these Islands flora. The voucher specimens have been deposited in the herbarium of Botanical Survey of India, Andaman and Nicobar Regional centre (PBL).

Taxonomic treatment

Hygrophila auriculata (Schumach.) Heine, Kew Bull. 16: 172. 1962. *Hygrophila schulli* (Buch.-Ham.) M.R. Almeida & S.N. Almeida, J. Bombay Nat. Hist. Soc. 83 (Suppl.): 221. 1987, nom. superfl. *Bahel schulli* Buch.-Ham., Trans. Linn. Soc. London 14: 289. 1824.

Local Names: Marsh Barbel (*English*), Gokaṇṭa, Kokilaksha (*Sanskrit*); Gokshura, Kolavanke (*Kannada*); Gokula Kanta, Kantakalia (*Hindi*); Koilikhia (*Punjabi*); Kokilaksakamu (*Telugu*); Kolisa (*Marathi*); Kulekhara (*Bengali*); Mulasari (*Telugu*); Neermulli (*Tamil*); Sangmora (*Assamese*); Vayalchulli (*Malayalam*).

Subshrubs; stem up to 150 cm tall, fasciculate, subquadrangular, erect, stout, strigose-hispid, armed with 6 axillary thorns, thorns 2–3.5 cm long. Leaves

in whorls of 8, 6–10 × 1.5–4 cm lanceolate or oblong-lanceolate, base cuneate, apex acute, margins dentate, surfaces white-hairy. Flowers in axillary whorls, *c.* 2.5 cm long, purplish-blue; bracts leafy, 2–2.5 cm long, lanceolate, hairy; bracteoles leafy, 6–8 mm long, linear, pilose. Calyx unequally 4-lobed, lanceolate, apex acute, outer ones longest, 2–2.2 cm long, limb up to 5-lipped, lips subequal, upper lip 2-lobed, lower trilobite, lobes obtuse. Stamens 4; anthers *c.* 2.5 mm long, oblong. Ovary oblong, hairy at tip; style upto 2.5 cm long, filiform. Capsules *c.* 1 cm long, oblong, shorter than calyx, glabrous, 4–8-seeded. Seeds *c.* 3 mm across, orbicular.

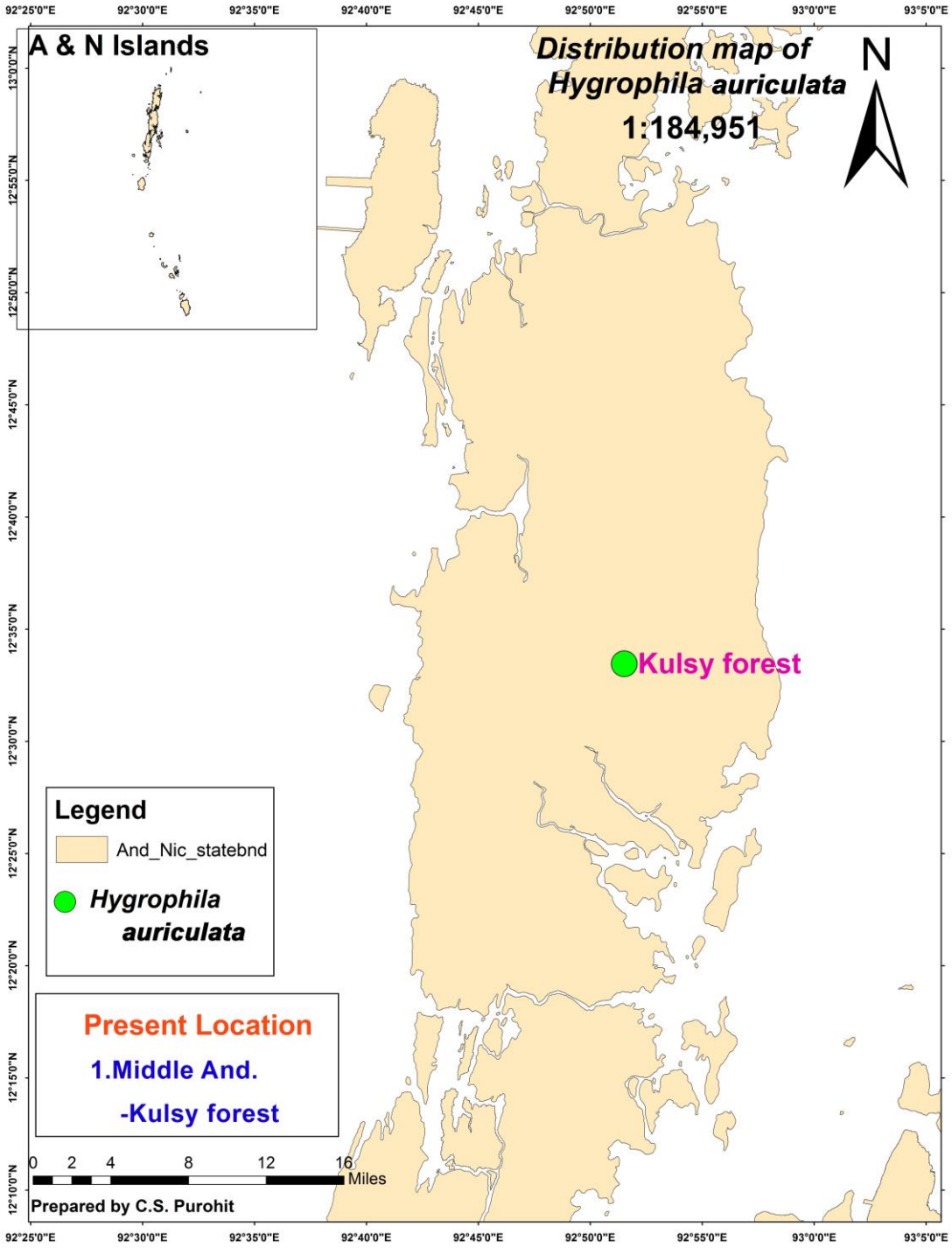

Fig. 1: Distribution map of *Hygrophila auriculata* in Andaman & Nicobar Islands

Fl. & Fr.: October–April.

***Distribution*:** Africa, Bangladesh, Cambodia, Cameroon, Gambia, Ghana, India, Indo-China, Malaysia, Myanmar, Nepal, Nigeria, Pakistan, Senegal, South Africa, Sri Lanka, Sudan, Swaziland, Thailand, Togo, Viet Nam.

INDIA: Andaman and Nicobar Islands (present work), Andhra Pradesh, Arunachal Pradesh, Assam, Bihar, Chhattisgarh, Daman & Diu, Gujarat, Haryana, Himachal Pradesh, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Meghalaya, Odisha, Rajasthan, Sikkim, Tamil Nadu, Tripura, Uttarakhand, Uttar Pradesh and West Bengal.

***Specimens examined*:** Andaman and Nicobar Islands, Middle Andaman, Kulsy, *C.S. Purohit, & Vivek C.P.*, 34126 (PBL).

Ecology: Grows near marshes and swamps.

IUCN Red List Category: Least Concern (ver 3.1: 2010).

***Notes*:** Pharmacologic studies on *Hygrophila auriculata* has revealed its potentiality in the treatment of diarrhoea, inflammatory ailments, including liver and kidney disorders, as well as microbial and bacterial infections, cancer, and others (Kshirsagar, 2010). The species has invasive tendencies at times colonize along drainage channels, paddy fields, etc.

Fig. 2 : *Hygrophila auriculata*: A) natural location at Kulsy ; B) Inflorescence; C-D) Flower close-up

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