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Observation on the occurrence of the Brazil jute plant, *Malachra* L. (Malvaceae) in the Andaman and Nicobar Islands, India.

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Abstract

The genus *Malachra* L. is reported and described here as new record, with a single species *Malachra capitata* (L.) L. for the flora of Andaman and Nicobar Islands from Shaheed Dweep (Neil Island). The present study provides brief notes on this Brazilian jute plant along with taxonomic description.

Key words: *Brazil Jute, Mallow family, New Record, Shaheed Dweep, Taxonomy*

Introduction

Malachra is a small genus in the mallow family, Malvaceae which was described by Linnaeus in 1767 for the first time. *Malachra* L comprises eight species distributed in the Tropical & Subtropical America, W. Tropical Africa to Sudan (POWO, 2025) of which *Malachra capitata* (L.) L. is only species recorded from India. The species is usually found in the warmer parts of the country (Paul, 2020). This species was collected for the first time from the tropical forests of Shaheed Dweep (Neil Island), Andaman and Nicobar Islands (ANI). The ANI is recognized as a rich and unique phytogeographical region with high endemism in India and consists of two groups of islands (Andaman group and Nicobar group of Islands) with 836 islands (Singh *et al.* 2014, 2021a, b; Singh & Ranjan 2021). The current collection locality, Shaheed Dweep (Neil Island) comes under Andaman group of Islands and locally known as Vegetable Bowl of Andaman.

During floristic surveys conducted between 2023-25, authors collected interesting specimens of Malvaceae family from Shaheed Dweep (Neil Island), Andaman group of Island. After critical study, perusal of relevant literature and consultation of herbarium held at Indian herbaria and with digital herbarium, the authors identified it as *Malachra capitata* (L.) L., Thorough literature survey revealed that this species has so far not been recorded and reported from ANI. Hence, this collection is found to be an addition to the flora of Andaman and Nicobar Islands and reported here.

Materials and Methods

During the field explorations, specimens were collected from the Shaheed Dweep (Neil Island), South Andaman (Fig.1). Herbarium specimens were prepared according to standard techniques. The descriptions were made based on living specimens and field data. Plants were photographed and GPS coordinates were recorded. To verify the identity of the specimens critical analysis of morphological characters was carried out by comparing our collections with the herbarium specimens from Indian herbaria (CAL, PBL), online taxonomic databases and digital herbaria (POWO 2025; JSTOR 2025; The Herbarium Catalogue 2025) and relevant literature was also consulted. The voucher specimens of the same are deposited at the Herbarium of the Andaman Nicobar Regional Centre, Botanical Survey of India (PBL).

Taxonomic treatment

Malachra capitata (L.) L., Syst. Nat. ed. 12, 2: 458. 1767. *Sida capitata* L., Sp. Pl. 2: 685. 1753. (**Fig.-1&2**).

Annual or perennial erect herbs or under shrubs, up to 1.5 m high, densely pubescent with simple and prickly stellate hairs. Leaves alternate, petiolate, petioles 2-8 cm long; stipulate, stipules 1-2 cm long, filiform, rarely forked, hispid; lamina orbicular - ovate, 3-5-lobed, 3-14 × 4-20 cm, cordate and 5- nerved at base, crenate to serrate on margins, obtuse to rounded at apex, velutinous with simple and stellate hairs on both surfaces, glabrescent. Inflorescences stout, 0.5-1.5 cm long, bearing 3-7 heads;

each head consists 2-5 flowers encircled by 3 or 4 leafy bracts; bracts ovate - orbicular, 0.5-2 cm long, cordate to rounded at base, entire or crenate-serrate on margin, acute at apex with a slightly re-curved tip. Calyx cupular, accrescent; lobes oblong to deltoid, ca. 6 × 1.5 mm, 3-nerved, acuminate with a few stiff simple hairs at apex. Corolla bright yellow, ca. 1.5-2.5 cm; petals obovate, ca. 1.5 × 1 cm, ciliate at base, densely stellate-hairy outside, glabrous inside. Staminal column ca. 1 cm long, pubescent with simple, stellate and few glandular hairs. Ovary glabrous, glabrous, styles ca. 1.3 cm long, 10-branched; stigmas capitate, hairy. Schizocarps obpyriform, 5-6 mm long; mericarps 5, 3-gonous; seeds 3-gonous, ca. 2.5 mm long, covered with minute stellate hairs, brownish black.

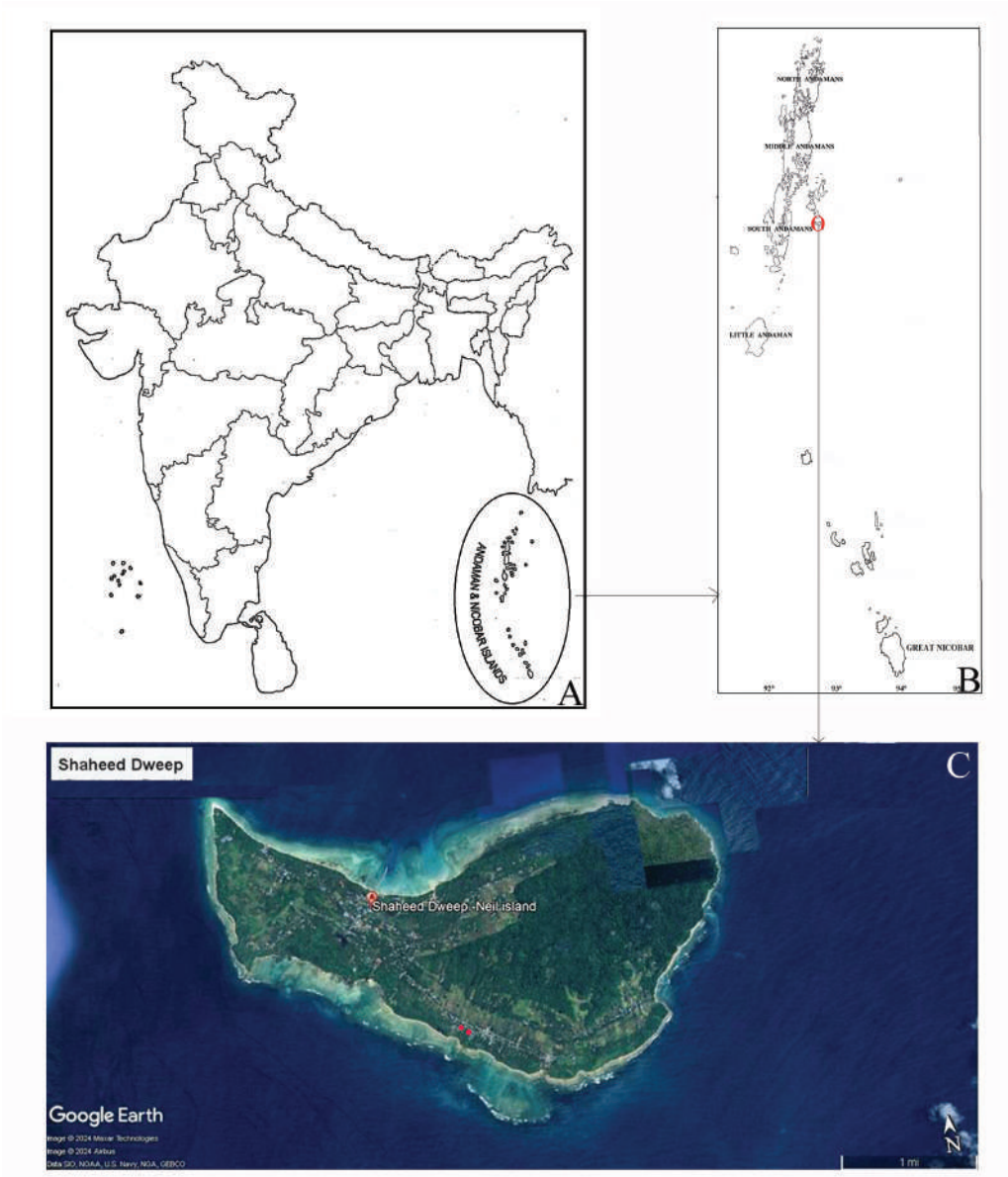

Fig. 1: Distribution of *Malachra capitata* (L.) L. in ANI: A. India, B. Andaman & Nicobar Island, C. Shaheed Dweep (Marked showing collection locality)

Flowering & Fruiting: May – December

Habitat and ecology: It grows near agricultural fields and adjoining forest areas, associated with *Anisomeles indica* (L.) Kuntze., *Hyptis capitata* Jacq., *Ipomoea aquatica* Forssk. and *Leea indica* (Burm.f.) Merr. etc.

Distribution: India: Andaman and Nicobar Islands (from present study), Andhra Pradesh, Arunachal Pradesh, Assam, Bihar, Daman & Diu, Goa, Kerala, Madhya Pradesh, Maharashtra, Manipur, Nagaland, Odisha, Tamil Nadu and West Bengal.

Specimen Examined: India, Andaman and Nicobar Islands, South Andaman, Shaheed Dweep Sitapur, 29.12.2023, P.A. Dhole 34509 (PBL).

Note: During filed exploration its luxuriance growth was observed in the natural habitat.

Fig. 2: *Malachra capitata* (L.) L., A. Habit; B. Inflorescence clusters, C. Flower. D. Inflorescence (dried).

Discussion

The family Malvaceae is socioeconomically particularly fiber yielding, medicinal and vegetables as well as ecologically significant which has received little attention from taxonomists in ANI. Although, ANI is one of the hotspots of biodiversity and a phyto-geographical region with unique and rich plant diversity, where more systematic explorations will be required to elucidate what species still exist in the wild. In the present paper, the genus *Malachra* L. is reported and described here as a new generic record with a single species *M. capitata* (L.) L. for the flora of ANI.

M. capitata (L.) L. is well known for value as jute as well as its medicinal potentiality. Due to its potential, it is known in cultivation not only in India, also worldwide. Its luxuriance growth in the natural habitat evidently indicates that ecological conditions of these Islands are suitable for this species. It seems that the occurrence of this species in these Islands is an immense utility for local farmers in terms of good genetic resource.

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