

Two Lamiaceae Members Additions to Flora of Andaman and Nicobar Islands

Johny Kumar Tagore¹, Sebastian Soosairaj^{2*}, Rathinam Sathiyaseelan¹ and Prakasam Raja²

¹Botanical Survey of India, Andaman and Nicobar Regional Centre, Haddo, Port Blair – 744 102, Andaman and Nicobar Islands, India.

²Department of Botany, St. Joseph's College, Trichy – 620002, Tamil Nadu, India.

*Corresponding author: pspsoosai@yahoo.co.in

Abstract

The present paper deals with two medicinally important plants belonging to Lamiaceae, viz. *Pogostemon paniculatus* (Willd.) Benth. and *Premna tomentosa* Willd. collected from North Andaman Islands constituting the new distributional records for the flora of Andaman and Nicobar Islands.

Key words: Lamiaceae; New Record; Pogostemon paniculatus; Premna tomentosa.

Introduction

The Andaman and Nicobar Islands with a total geographical area of 8,250 sq km, is the largest archipelago representing an arcade festoon of Islands situated 1200 km off the south-eastern coast of India in the Bay of Bengal stretching from Myanmar in North to Sumatra (Indonesia) in South (6°45' to 13° 41' N lat. and 92° 12' E to 93° 57′ E long.). These Islands harbour luxuriant low land rain forests besides wetlands, mangroves and coral reefs. There are 106 Protected Areas in the Andaman & Nicobar Islands including nine National Parks, 96 Wildlife Sanctuaries and one Biosphere Reserve. The floral elements of these Islands often show close affinity with that of Indonesia, Malaysia, Myanmar, Thailand and Sri Lanka. The phytodiversity of these islands is unique and one of the richest in the country and in terms of biodiversity, these islands fall on two Biodiversity Hotspots - Andaman group in the Indo-Burmese region and the Nicobar group in the Sundaland which makes them more diverse biologically.

While working on 'Quantitative Assessment and Mapping of Plant Resources of Andaman and Nicobar Islands', a DBT program, two plant specimens belonging to the family Lamiaceae have been collected from Mayabundar forest division of North Andaman Islands. On critical study and detailed examination these specimens are identified as *Pogostemon paniculatus* and *Premna tomentosa*. Consultation of literature (Parkinson, 1923; Sinha, 1999; Pandey & Diwakar 2008) reveals that

these two species are not reported yet from Andaman and Nicobar Islands. Therefore, the present finding constitutes new distributional records for Andaman and Nicobar Islands. Detailed descriptions along with illustrations are provided for these two species to facilitate easy identification and future studies.

Taxonomy

Pogostemon paniculatus (Willd.) Benth. in Wall., Pl. Asiat. Rar. 1:30.1830; Hook. f., Fl. Brit. India 4: 631. 1885. [Fig. 1]



Fig. 1: *Pogostemon paniculatus* (Willd.) Benth. – **A**: Habit; **B**: Inflorescence; **C**: Flower.



Description: Herb to subshrub. Leaves simple, opposite, 8 × 4 cm, ovate, acuminate at either ends, irregularly dentate, densely hirtus-tomentose; lateral nerves 3–4 pairs; petiole 2 cm, tomentose. Panicle large, terminal and from upper leaf axils, branches 5–10-flowered, 1-sided; bracteoles 5 × 3 mm, oblique, falcate, imbricating regularly. Flowers densely packed. Calyx 4 mm, 5-ribbed; lobes acuminate, hirtus. Corolla purplish white, 5 mm; pubescent outside; filaments sparsely hairy. Fruits 4, dry nutlet, ovoid, smooth, often angled.

Flowering & Fruiting: October–February.

Habitat: Moist deciduous and semi-evergreen forests.

Distribution: Peninsular India (and now from Andaman and Nicobar Islands), Myanmar.

Specimens examined: India, Andaman & Nicobar Islands, North Andaman, Mayabunder forest division, Jagannathdera, 13°4'24.98"N & 92°57'28.44"E, 30 m, 24.02.2013 *M.V. Ramana* 1219 (PBL, CAL).

Premna tomentosa Willd., Sp. Pl. 3: 314. 1800; Hook. f., Fl. Brit. India 4: 576. 1885. [Fig. 2]



Fig. 2: *Premna tomentosa* Willd. – A: Habit; B: Inflorescence; C: Flower & Fruits

Description: A moderate-sized deciduous tree, upto 7 m, bark greyish-brown, smooth; young parts with stellate tomentum. Leaves simple, opposite, estipulate; petiole 15-40 mm, slender, tomentose; lamina $5-20 \times 4-12$ cm, broadly ovate, base obtuse or cordate, apex acuminate, margin entire, densely tawny yellow

stellately tomentose, yellowish, chartaceous; lateral nerves 5–7 pairs, densely tomentose beneath, intercostae scalariform. Flowers bisexual, yellow, small, in terminal and axillary corymbs, 7 cm long; calyx tubular, 5-ribbed, lobes 5, stellate pubescent; corolla 7 mm across, 4 mm long, tube cylindric, hairy, lobes 5, orbicular; stamens 4, didynamous, 1.5–2 mm; anthers rounded, 0.5 mm; ovary truncate, superior, puberulus; style 3 mm; stigma unequally. Fruit a drupe, obovoid, 5–6 mm, 4 mm across, green, purplish black when ripe, hairy; seeds 4.

Flowering: February–May; Fruiting: March–June.

Habitat: Moist deciduous and semi-evergreen forests.

Distribution: China, India (and now from Andaman and Nicobar Islands), Indonesia, Malaysia, Myanmar, Sri Lanka, Thailand, Vietnam.

Specimens examined: India, Andaman & Nicobar Islands, North Andaman, Mayabunder forest division, Rest Camp, Bamboo Nala, 12°50′4.33″N & 92°49′7.12″E, 35 m, 26.06.2012 *M.V. Ramana & J.K. Tagore* 921 (PBL, CAL).

Acknowledgements

The authors [JKT & RS] are grateful to DBT, MoST, New Delhi, India, for the fellowship under the project 'Mapping of Plant Resources of Andaman and Nicobar Islands'. They are also thankful to the Project Coordinator, Prof. K.N. Ganeshaiah, UAS, GKVK, Bangalore; Principal Investigator, Dr. M. Sanjappa, former Director, Botanical Survey of India and Dr. P. Singh, Director, Botanical Survey of India, Kolkata for facilities, Dr. Lal Ji Singh, Scientist-D and Dr. C. Murugan, Scientist-D for their cooperation and Dr. M. Venkat Ramana, Osmania University, Hyderabad, for critical comments.

References

Pandey, R.P. & P.G. Diwakar (2008). An Integrated Checklist of Andaman and Nicobar Islands, India. *J. Econ. Taxon. Bot.* 32(2): 403–500.

Parkinson, C.E. (1923). A Forest Flora of the Andaman Islands. Bishen Singh Mahendra Pal Singh, Dehdra Dun, India.

Sinha, B.K. (1999). In: Hajra, P.K. & P.S.N. Rao (eds.), Flora of Great Nicobar Island. Botanical Survey of India, Calcutta.