

Morinda lucida Benth. S (Rubiaceae)- New record from India

Dhaarani Vijayakumar, Pavithra Chinnasamy, Sarvalingam Ariyan and Rajendran Arumugam*

Phytodiversity Research Laboratory Department of Botany Bharathiar University, Coimbatore – 641046 Tamil Nadu, India

Received: December 17, 2016 Revised: January 24, 2017 Accepted: January 29, 2017

Abstract

Morinda lucida Benth. (Rubiaceae) a Nigerian species has not been reported so far from India. This species has been collected for the first time from coastal regions of Tamil Nadu. A detailed description of phenology, ecology with illustrations of the species is provided.

Keywords: *Morinda lucida* Benth., Rubiaceae, New record, Coastal region, India.

1. Introduction

The genus *Morinda* Benth belonging to the family Rubiaceae Juss. The genus consists of 90 species (Mabberley, 2008). In India, the genus is represented by c. 8 species (Hooker, 1988), and in Tamil Nadu by c. 5 species (Henry et al., 1983). During the floristic exploration in the coastal regions from Tranquebar, Nagapattinam district, Tamil Nadu an interesting species of *Morinda* Benth was collected, after critical studies and consultation with specimens deposited at MH (Botanical Survey of India) Coimbatore. It was identified as *Morinda lucida* Benth. (Figs. 1 & 2) and, therefore, it is an addition to Indian flora. *Morinda lucida* Benth., occurs only from Senegal to Sudan and southward to Angola and Zambia, Nigeria. It has neither been collected nor reported from India (Henry, 1987; Gamble, 1957; Hooker, 1872; Matthew, 1987). The voucher specimen has been deposited in the Bharathiar University Herbarium (Bharathi) Coimbatore, Tamil Nadu, India.



Figure 1: Natural Habit of *Morinda lucida* Benth. S A. Stem; B. Lower surface of leaf; C. Flower; D. & E. Fruit

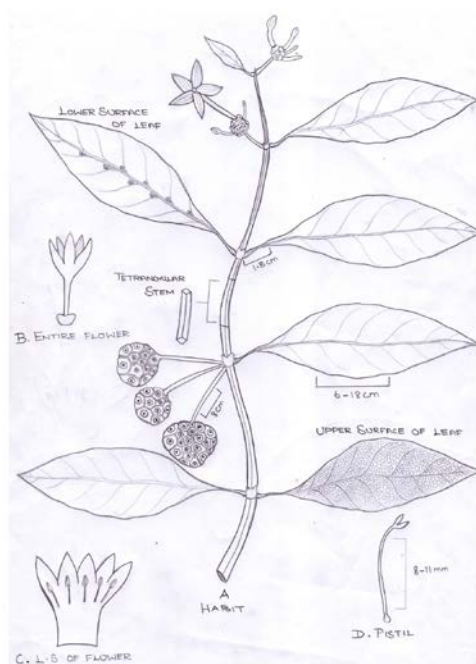


Figure 2: Illustration of *Morinda lucida* Benth. S

2. Affinities

Morinda lucida Benth. is morphologically similar to *M. citrifolia* and *Morinda coreia* Buch.-Ham. *Morinda coreia* Buch.-Ham, chiefly differs from the former in having chartaceous seed not winged.

3. Key to the Species

- 1a. Seeds winged.....2
- b. Seeds not winged.....1. *M. coreia*

* Corresponding author. e-mail: slvmlingam@gmail.com.

- 2a. Leaves glabrous, shining; fruit yellow...2.*M.citrifolia*
 b. Leaves slightly hairy, without shining; fruit brown.....3.*M.lucida*

Description

Shrub evergreen or small to medium-sized tree up to 18(-25) m tall, with bole and branches often crooked or gnarled; bark smooth to roughly scaly, grey to brown, often with some distinct purple layers. Leaves opposite, simple and entire; stipules ovate or triangular, 1-7 mm long, falling early; petiole up to 1.5 cm long; blade elliptical, 6-18 cm × 2-9 cm, base rounded to cuneate, apex acute to acuminate, shiny above, sometimes finely pubescent when young, later only tufts of hairs in vein axils beneath and some hairs on the midrib. Inflorescence a stalked head 4-7 mm in diameter, 1-3 at the nodes opposite a single leaf; peduncle up to 8 cm long bearing at base a stalked cup-shaped gland. Flowers bisexual, regular, 5-merous, heterostylous, fragrant; calyx cup-shaped, c. 2 mm long, persistent; corolla salver-shaped, c. 1.5 cm long, white or greenish yellow, lobes ovate-lanceolate, up to 5 mm × 2.5 mm; ovary inferior, 2-celled, style 8-11 mm long with 2 stigma lobes 4-7 mm long; stamens 5, inserted in the corolla throat, with short filaments. Fruit a drupe, several together arranged into an almost globose succulent syncarp 1-2.5 cm in diameter, soft and black when mature; pyrene compressed ovoid, up to 6.5 mm × 4 mm, dark red-brown, very hard, 1-seeded. Seed ellipsoid, c. 3.5 mm × 2 mm × 0.5 mm, yellowish, soft.

Flowering & Fruiting: October – January.

Uses: The fruits are edible, used to treat diabetes.

Habitat: Coastal regions near 25 m, species associated with *M. coreia*.

Distribution: Tropical Africa, Ethiopia and India.

Specimen examined: India: Tamil Nadu, Coastal regions from Tranquebar, Nagapattinam district, October 30th 2016. V. Dhaarani, Field number: 306 (Bharathi).

4. Conclusion

This appreciated plant was not cited previously in any India floras and the species is found growing abundantly in its new habitat in Tamil Nadu state and therefore, it is likely that it may soon become naturalized and may occupy larger areas in the near future.

Acknowledgement

We are grateful to the Professor and Head, Department of Botany, Bharathiar University, Coimbatore, Tamil Nadu, India for providing the necessary facilities.

Reference

- Gamble JS and Fisher CEC. 1915-1936. *The flora of the Presidency of Madras*. Vols. I – III. Adlard & Son, Ltd, London (Repr. 1957). Botanical Survey of India, Calcutta.
- Henry AN, Kumari GR and Chithra V. 1987. *Flora of Tamil Nadu, India: Series 1: Analysis*. Vol. 2. Botanical Survey of India, Coimbatore
- Hooker F. 1872. *The flora of British India*. Bishen Singh Mahendra Pal Singh, India.
- Johansson JT. 1987. Pollen morphology of the tribe Morindeae (Rubiaceae). *Grana* **26**, 134- 50.
- Mabberley DJ. 2008. *The plant- Book: A portable dictionary of plants their classification and uses*. third ed. Cambridge University Press, Cambridge.
- Mathew KM. 1983. *The Flora of the Tamil Nadu Carnatic*. Vol. 1. Rapinat Herbarium, St. Joseph's College, Tiruchirapalli.