

Phoebe nicobarica (Lauraceae) – a new species from Andaman & Nicobar Islands, India

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Abstract: *Phoebe nicobarica* sp. nov. (Lauraceae) is described from the Great Nicobar Island of Andaman & Nicobar Islands, India. The new species is closely related to *Phoebe macrophylla* Blume and *Phoebe kunstleri* Gamble, but differs by the white glaucous lower leaf surface, indumentum type and fruit shape.

Keywords: Bay Islands, Evergreen Forest, Flora, Novelty, Tropics.

Introduction

Phoebe Nees is a genus of evergreen trees and shrubs belonging to the family Lauraceae distributed in tropical and subtropical Asia with c. 75 species (POWO, 2019). Santapau and Henry (1973) reported nine species from India and subsequently three more species were described from Arunachal Pradesh (Gangopadhyay, 2006; Gangopadhyay & Sarmah, 2007) and Western Ghats (Gangopadhyay, 2009). The occurrence of this genus in the Andaman & Nicobar Islands was not known until Rasingam (2015) reported *Phoebe lanceolata* (Nees) Nees from Little Andaman Island.

While working on the flora of Little Andaman Island, the senior author came across some unidentified specimens collected by D.K. Hore from Laful north of Great Nicobar Island at the herbarium of the Botanical Survey of India, Andaman & Nicobar Regional Centre (PBL), Port

Blair. After critical examination of all the specimens available at PBL and consultation of the relevant literature (Kurz, 1877; Hooker, 1886; Gamble, 1912; Ridley, 1924; Backer & Bakhuizen van den Brink, 1963; Kochummen, 1989), we found that this species is closely related to *Phoebe macrophylla* Blume and *P. kunstleri* Gamble, but differs in many aspects. Hence, it is described here as a species new to science. Further, it is the second addition to the genus *Phoebe* for the flora of Andaman & Nicobar Islands. A key to the species occurring on these islands also provided to facilitate identification.

Taxonomic Treatment

Phoebe nicobarica Rasingam, L.J. Singh & Karthig., sp. nov. Figs. 1 & 2

Phoebe nicobarica is similar to *P. macrophylla* but differs by its white glaucous, pubescent abaxial leaf surface, sub-glabrous inflorescence and globose to sub-globose fruits, whereas in *P. macrophylla* the leaves and inflorescences are ferruginous tomentose throughout and the fruits are ellipsoid.

Type: INDIA, **Andaman & Nicobar Islands**, Great Nicobar Island, Laful North, 13.06.1981, D.K. Hore 8798 (holo PBL [PBL0005000002!]; iso PBL [PBL0005000003!, PBL0000027258!]).

Medium sized evergreen trees, to 12 m high; branchlets 5–7 mm in diam., reddish-brown, terete to sub-terete, pubescent when young, glabrescent on maturity. Leaves simple, alternate or crowded at the tip, obovate, rarely elliptic, 13–29 × 5.5–12 cm, acuminate at apex, acumen 0.5–1 cm long,

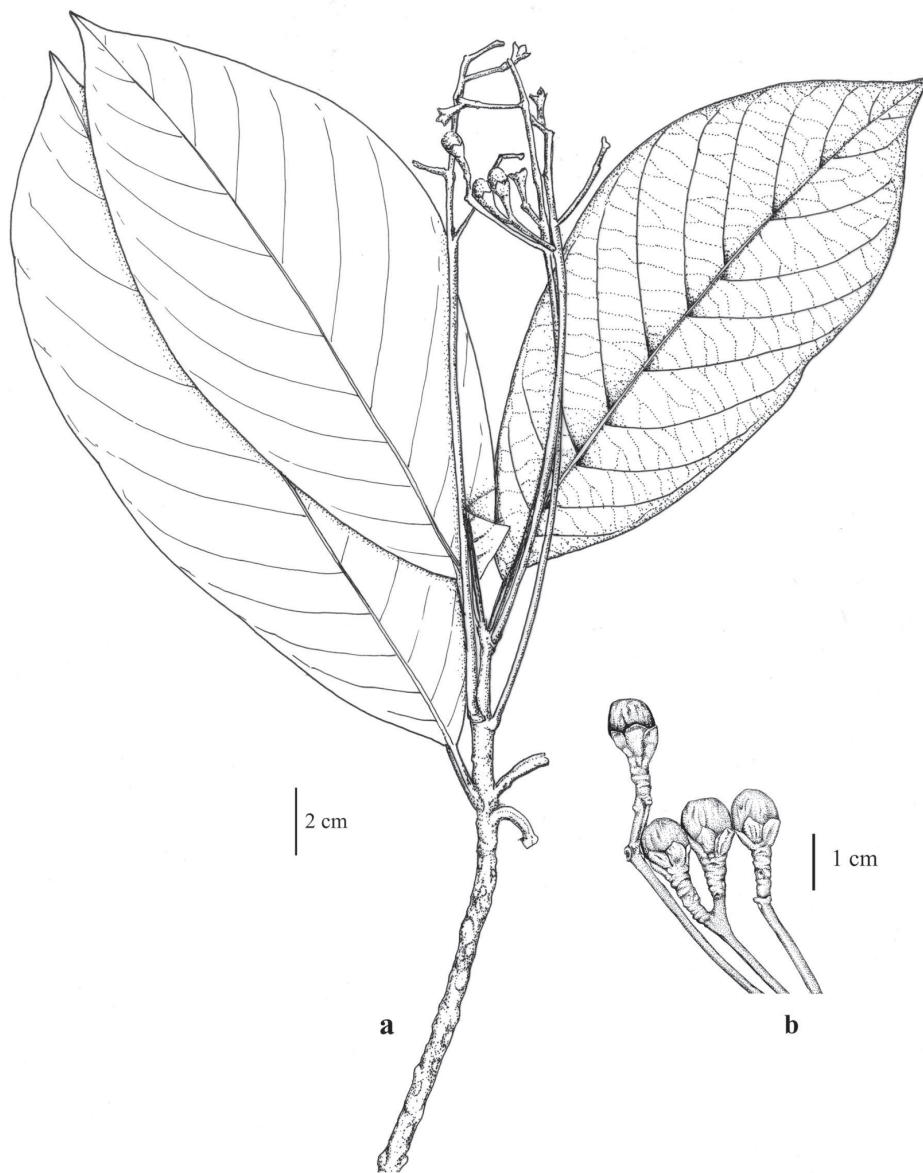


Fig. 1. *Phoebe nicobarica* Rasingam, L.J.Singh & Karthig.: **a.** Fructing branch; **b.** Fruits (from D.K. Hore 8798; drawn by D.K. Shah).

cuneate to acute at base, glabrous above, white glaucous and pubescent beneath; hairs white; midrib prominent beneath, sunken above, lateral nerves 9–13 pairs, prominent beneath, sunken above, arcuate, forming loops near margin; tertiary nerves scalariform, prominent beneath, faint above; petioles 1.5–2.2 cm long, canaliculate, reddish-brown, swollen at base, glabrous. Infructescences axillary panicles, reddish-brown, up to 28 cm long, branched in

the distal third, glabrous to sub-glabrous; peduncles up to 22 cm long, terete. Tepals persistent in fruit, appressed to the berry, outer tepals *c.* 5 mm long, oblong-elliptic, obtusely acute at apex, overlapping and forming a cup, faintly 3-nerved, puberulous, ciliate along margin; inner ones slightly bigger than the outer, broadly ovate, obtusely acute at apex; fruiting pedicels up to 1 cm long, wrinkled, thickened. Fruit a berry, green when young, globose to sub-

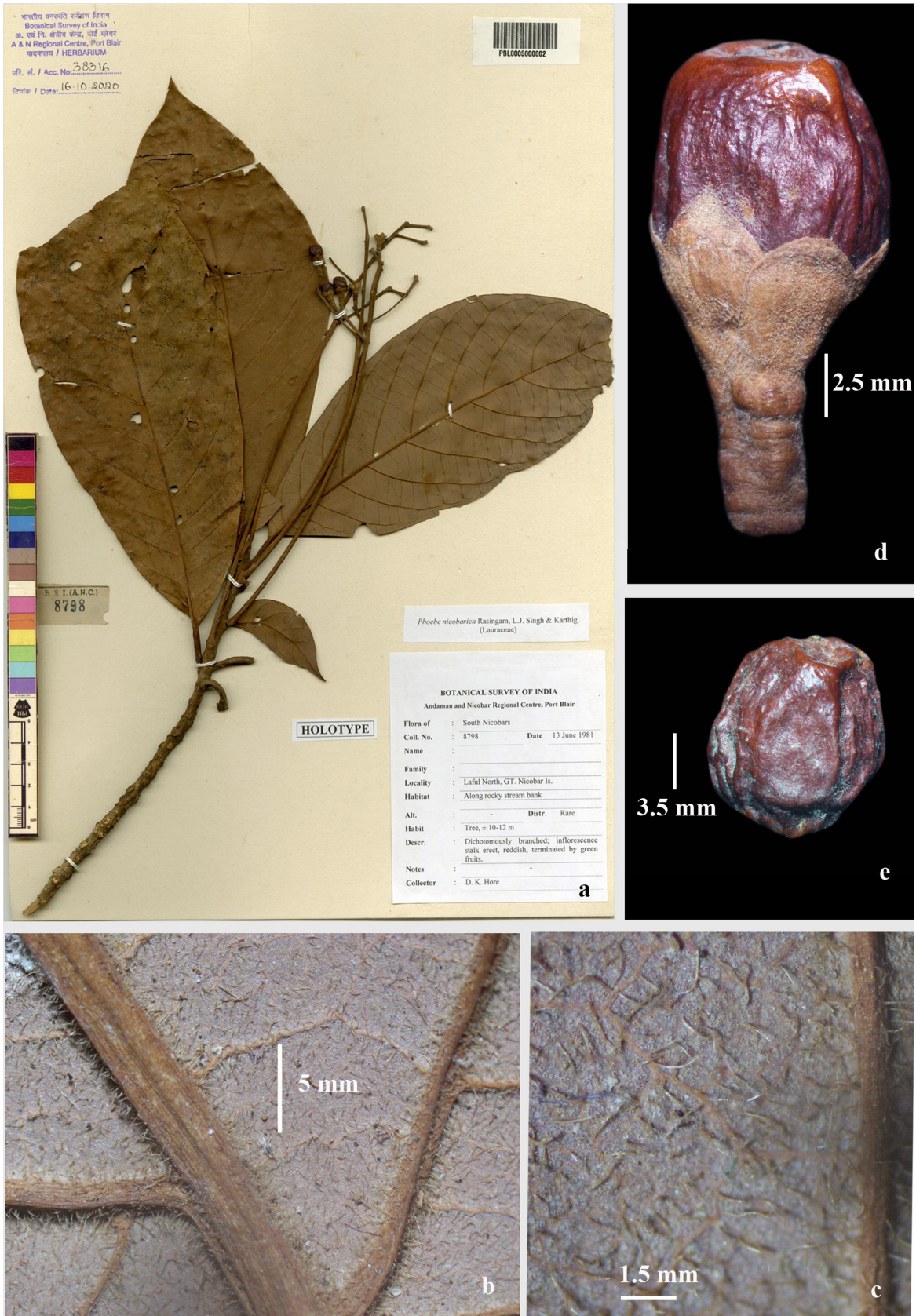


Fig. 2. *Phoebe nicobarica* Rasingam, L.J. Singh & Karthig.: **a.** Image of holotype; **b.** & **c.** Abaxial leaf surface showing white glaucous hairs; **d.** Fruit with cup shaped tepals; **e.** Fruit (from D.K. Hore 8798; photos by Gautam Anuj Ekka).

Table 1. Morphological comparison of *Phoebe nicobarica*, *P. macrophylla* and *P. kunstleri*

Characters	<i>P. nicobarica</i> Rasingam, L.J.Singh & Karthig.	<i>P. macrophylla</i> Blume	<i>P. kunstleri</i> Gamble
Leaf indumentum	White glaucous beneath, sparsely pubescent; hairs whitish	Densely ferruginous tomentose beneath; hairs reddish-brown	Minutely puberulous
Leaf base	Cuneate or acute	Cuneate or attenuate	Attenuate
Infructescence indumentum	Glabrous to sub-glabrous	Densely ferruginous tomentose	Puberulous
Tepal indumentum	Pubescent	Densely ferruginous tomentose	Tomentose
Fruits	Globose to sub-globose, 0.5–1.2 × c. 1 cm, wrinkled	Ovoid-ellipsoid, c. 2 × 1 cm, smooth	Ovoid, c. 1.5 × 1 cm, wrinkled

globose, 0.5–1.2 × c. 1 cm, flat at the top, glabrous.

Flowering & Fruiting: Flowering unknown and fruiting from July.

Distribution: India: Andaman & Nicobar Islands, Great Nicobar Island.

Etymology: The species is named after the type locality Great Nicobar Island, the southernmost and largest Island of the Nicobar group of Islands, India.

Notes: *Phoebe nicobarica* is also similar to another Malaysian species *P. kunstleri* by its leaf shape and size but differs mainly by indumentum types, glaucous nature of the abaxial leaf surface and fruit shape.

Key to the *Phoebe* species occurring in Andaman & Nicobar Islands

1. Leaves obovate, rarely elliptic, pubescent beneath; fruiting tepals pubescent
..... *P. nicobarica*
1. Leaves lanceolate or elliptic-lanceolate, glabrous; fruiting tepals glabrous
..... *P. lanceolata*

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