

***Bauhinia roxburghiana* Voigt (Caesalpiniaceae) – A new record for North-East India**

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Abstract

Bauhinia roxburghiana Voigt (Caesalpiniaceae) is reported for the first time for North East India from Arunachal Pradesh. Detailed description, illustrations and other relevant notes are provided.

Key words: *Bauhinia roxburghiana*, new record, Flora, Arunachal Pradesh, India

INTRODUCTION

The genus *Bauhinia* Linnaeus (Caesalpiniaceae) comprises of about 300 species in the world (Dianxiang 1998), distributed mostly in Bangladesh, Nepal, Pakistan, China, Myanmar, Vietnam, Thailand and India. In India, the genus is represented by 18 species with 13 species from N.E. India (Bandyopadhyay *et al* 2005). However the record of about 17 species has been found from North East India including 13 from Arunachal Pradesh (Kanjilal *et al* 1938; Chowdhery *et al* 1996; Chauhan 2000; Singh 2002).

During the survey of tree flora in the Papum Pare district of Arunachal Pradesh, an uncommon species of *Bauhinia* has been collected from a few localities. The detailed study on floral and fruiting characters of the species showed some distinction with other commonly occurring species of the region, and was identified as *B. semla* R.P. Wunderlin. However, the recent nomenclature note has confirmed that *B. semla* is the synonym of *Bauhinia roxburghiana* Voigt (Bandyopadhyay, 2007). The distributional feature of the species showed that it was not reported earlier from North East India. Hence the species is reported here as a new record for North-East India and particularly for the state of Arunachal Pradesh.

Bauhinia roxburghiana Voigt, Hort. Suburb. Calcutta. 254. 1845, Bandyopadhyay. Taxon 56(2): 587 – 589. 2007. *B. emarginata* Roxburgh ex G. Don, Gen. Hist. 2:462. 1832, non Mill. (1768); *B. retusa* Roxburgh, Fl. Ind. 2:322. 1832, non Poir. (1811); Hooker f., Fl. Brit. India 2: 279. 1878; Brandis, Ind. Trees 257. 1921; *Phanera retusa* Benthham in Miquel, Pl. Jungh. 263. 1852; *B. semla* R.P. Wunderlin in Taxon 25: 362; Bandyopadhyay *et al*, J. Econ. Tax. Bot. 29(4): 785 – 788. 2005.

Vernacular name: *Gyese*n (Nyshi)

An erect medium tree. Stem branches long, slender, strong, grayish, glabrous. Leaves alternate, entire or slightly emarginate, almost orbicular with two lobes, broader than long, mature lamina 10 – 14 x 13 – 17 cm in size, dark-green above and pale beneath, glabrescent; nerves mostly 9, arise from base, base cordate with two distinct glands and retuse at the tip; petioles 4.5 – 5.5 cm long,

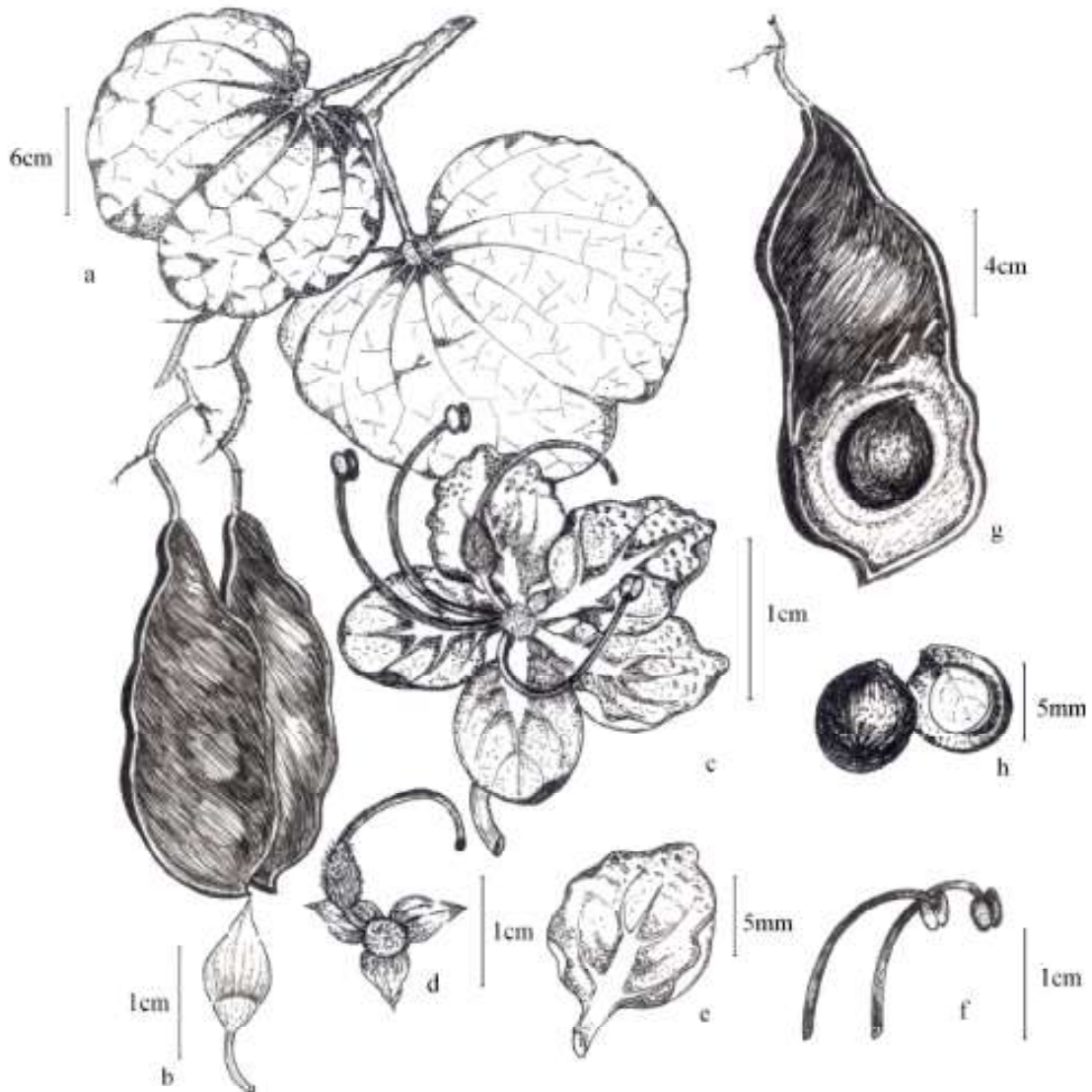


Fig. 1: *Bauhinia roxburghiana* Voigt – a. fruiting twig; b. Flower bud; c. Flower; d. Sepals and gynoecium; e. Single petal [Which petal? – remember, the flower is zygomorphic!!; f. Stamens; g. Pod h. Seed.

pulvinus at both ends. Flower in bracteate axillary or terminal compound racemes, 1.5 – 2 cm across, light yellow. Pedicels 1 – 1.5 cm long, pubescent. Calyx 3 lobed, ovate, caudate light yellow, *ca.* 0.6 cm long. Petals 5, obovate or oblong, 1.0 – 1.4 x 0.6 – 0.7 cm, upper 3 petals with wavy margin and with numerous purple-red spots on the surface, standard obovate, others 2 petals yellow and entire, distinct vein, finely pubescent along the vein. Fertile stamens 3, yellowish green, filaments \pm 1.5 cm long, anther distichous dorsifixed and introrse, yellow; staminodes 2, reduced to swollen fleshy glands, *ca* 1 mm, bright orange, opposite to fertile stamen; disc cushion shaped. Gynoecium sickle shaped with distinct gynophore, pubescent *ca* 1.8 cm long, ovary 0.3 – 0.5 cm long, stigma capitate. Pods flattened and elongated, 12.5 – 17 cm long, broader at the

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apex, gradually tapering downwards, apiculate, greenish to light violet, brown when ripe, woody, sometimes wavy at the margin, 4 – 8 seeded. Seeds flat, almost orbicular, ca 1.5 cm across, yellowish brown. [Fig-1]

Flowering: October – December; **Fruiting:** January – April.

Habitat: Found to grow in tropical semi-evergreen forest in open areas between 150 – 500 amsl.

Distribution: Bangladesh, Nepal, Pakistan, India (Andhra Pradesh, Bihar, Haryana, Himachal Pradesh, Karnataka, Madhya Pradesh, Maharashtra, Orissa, Punjab, Rajasthan, Tamil Nadu, Uttar Pradesh, West Bengal and Arunachal Pradesh).

Exsiccatae: Arunachal Pradesh: Karsingsha, 2nd November 2008, *Doley 131*; Tosso, 24th January 2009, *Doley 152* (NERIST); Naharlagun 10th April 2009, *Doley 171*; Sagalee (Pila) 15th December 2009, *Doley 211* (NERIST).

Uses: For house poles, firewood and fodder.

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