

## **New report of *Blumea axillaris* (Lamarck) de Candolle [Asteraceae] for North East India from Assam**

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### **Abstract**

*Blumea axillaris* (Lamarck) de Candolle [Asteraceae] is reported for the first time from Assam in North East India. It is already reported from other parts of India except North East India. Morphological differences with putative details of the species are discussed in the article along with flowering and fruiting time and distribution.

**Key words:** New record; *Blumea axillaris*; Assam, NE India.

### **INTRODUCTION**

*Blumea* de Candolle [Asteraceae] is a genus of herbs, shrubs and small trees characterised by disciform capitula with outer filiform female florets and inner tubular bisexual florets, tailed anthers, and cypsela wall epidermis with one large oxalate crystal present in each cell. The genus is one of the largest in the Inuleae-Inulinae, comprising approximately 100 species distributed throughout the Old World tropics, with the highest diversity in tropical Asia and a few species in Australia and Africa (Randeria 1960; Anderberg 1994). Many members of *Blumea* de Candolle are widespread weeds commonly found in disturbed areas. Some species also play important role in various undisturbed, open vegetation types, but only a few are restricted to evergreen forests. There are several examples of geographically and ecologically restricted species.

In India the genus is represented by 36 species (Hooker 1892) and according to Hajra, *et al* (1995) the genus is represented by 29 species. In North–Eastern region the genus is represented by 6 species (Kanjilal *et al* 1939) while in Assam 11 species (Choudhury 2005) or 10 species as reported by Barua (1998). Many earlier works also recorded species of *Blumea* de Candolle in the *Flora of India* (Hajra *et al* 1995) and in other regional floras viz. Tripura (Deb 1983), Assam (Kanjilal *et al* 1939) Nongpoh (Joseph 1968). Online herbarium sheets and literature of Flora of Taiwan (Peng *et al* 1998) also consulted for Identification. From the consultation of literature and herbarium specimens at Assam, it has been observed that *Blumea axillaris* (Lamarck) de Candolle is not so far reported from North-East India.



**PLATE - I:** *Blumea axillaris*. **A.** Whole plant; **B.** Single head with leaf; **C.** Display of capitula; **D.** Single capitulum; **E.** & **Ee.** Disc floret; **F.** Outer bract; **G.** Upper part of syngenesious anthers; **H.** Tailed anther base; **I.** Stigma of disc floret; **J.** Stigma of ligulate floret; **K.** Ovary of disc floret; **L.** Ovary of ligulate floret; **M.** Cypsela

## TAXONOMIC TREATMENT

*Blumea axillaris* (Lamarck) DC., *Prodr.* 5: 434. 1836; *Conyza axillaris* Lamarck *Encycl.* 2: 84. 1786; *Blumea mollis* (D. Don) Merrill, *Philipp. J. Sci.*, 5: 395. 1910; Kitamura, *Phytotax. Geobot.* 23: 69. 1968; Li, *Fl. Taiwan* 4: 814, 1978; Hajra *et al.*, *Fl. Ind.* 13:135. 1995. *Erigeron molle* D. Don, *Prodr. Fl. Nepal.* 192. 1825. *B. neilgherrensis* Hooker *f.* in *Fl. Brit. Ind.* 3: 261. 1881.

Annual aromatic herbs, erect, ±40 – 120 cm tall, with a tap root. Stems terete, herbaceous, simple, often branched, branched often ascending, soft pilose with spreading hairs and viscid tomentose particularly on younger parts and inflorescence axis, woody at base, 0.5 – 10 cm in diameter. Leaves ovate-oblong, chartaceous, 9 – 12 cm x 3.5 – 4 cm, sub-sessile or petiolate, apex obtuse to apiculate, base attenuate, margins closely doubly serrate, densely silky villous on both surfaces, veins 5 – 7 pairs. Heads in terminal, small, narrow, compact, spiciform panicle, subsessile to pedunculate, 4 – 6 cm long, 3 – 4 mm in width, peduncles villous and glandular. Involucre globose-campanulate, bracts tri-tetra seriate, outer bracts shorter, linear-lanceolate, 2 – 3 mm long and 0.2 – 0.3 mm across, densely soft villous on outer surface; inner bracts linear 5 – 6 mm long and 0.2 – 0.3 mm breadth, margins ciliate. Receptacle convex, avleolate, sometimes glabrous, 1.8 – 2 mm in across. Central florets tubular, bisexual, pinkish-purple apically, whitish or pale yellowish at base, 3.5 – 4.5 mm long, pentamerous, lobes triangular, pubescent and with sessile glands. Stamens five, syngenesious, tip obtuse, base tailed, 3 – 4.2 mm long; gynoecium bicarpellary, united, hairy, 4.2 – 5.5 cm long. Outer florets filiform, female, 4.5 – 5 mm long, 2 – 3 lobed limbs, limbs glandular 3.5 – 4.5 mm long; gynoecium bicarpellary, united, hairy, 5 – 6 cm long. Achenes oblong, brown, pubescent, 0.8 – 1 mm long and 0.2 – 0.3 mm in across. Pappus white, 3 – 4 mm long, white, hairy (**Fig. – 1**).

**Flowering and Fruiting period:** March – May

**Exsiccate:** Jalukbari (Kamrup), *Santa Paul 0076*, datd 15.03.2012.

**Distribution:** Pakistan, India, Nepal, Bhutan, Bangladesh, Myanmar, China, Sri Lanka, S.E. Asia, Africa and Australia.

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