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# Full Length Article

# Six species of Asteraceae, New Distributional Records for Andaman and Nicobar Islands, India

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#### **ABSTRACT**

Six asters, Acmella radicans, Blumea fistulosa, B. laciniata, B. viscosa, Emilia scabra, Launaea acaulis are reported as new distributional records for Andaman and Nicobar Islands, India. Brief description, phenology, distribution pattern and photographs of the six species are provided.

**Key words:** Asteraceae, New records, Andaman and Nicobar Islands.

#### **INTRODUCTION**

During the recent floristic explorations in the Middle and South Andamans, the authors collect curious plant specimens belonging to family Asteraceae. After a critical study these specimens were identified as *Acmella radicans*, *Blumea fistulosa*, *B. laciniata*, *B. viscosa*, *Emilia scabra* and *Launaea acaulis*. A thorough perusal of literature of the region (Hajra *et al.*, 1999; Sinha, 1999; Pandey and Diwakar, 2008) revealed that these six taxa have not been reported from Andaman and Nicobar Islands and hence form the new distributional records for the region. Brief description, phenology, distribution pattern at India and global level and photographs of the six species are provided.

## **TAXONOMIC TREATMENT**

Acmella radicans (Jacq.) R.K. Jansen, Syst. Bot. Monogr. 8:69. 1985. Spilanthes radicans Jacq., Collect. Bot. Chem. Hist. Nat. 11(3): 1714. 1804. (Fig. 1).

Annual erect herb, to 50 cm high; stem minutely pubescent. Leaves ovate, 7 x 4 cm, base cuneate-attenuate, apex acute, margins minutely serrate; petiole hairy. Heads many, terminal and

axillary, white, homogamous, not rayed, 8 mm across. Receptacle glabrous, Involucral bracts in 2rows, oblong, 3-nerved from the base, minutely hairy from outside. Corolla 4-5 lobed, papillose, triangular-ovate. Achenes dimorphic, marginal ones trigonous, inner onesellipsoid, laterally compressed, brownish-black, margins densely ciliate. Pappus of two subequal bristles.

Fl. & Fr.: October - January.

**Ecology:** Rare, in crop fields and waste lands.

**Distribution**: India: Kerala, Tamilnadu, Andhra Pradesh; World: Native to Central America and Mexico.

**Voucher specimens**: Middle Andaman (Billiground, Elevation: 38m), 14-02-2014 MB & MCN 47140 (SKU).

Blumea fistulosa (Roxb.) Kurz, J. Asiat. Soc. Bengal, Pt.2, Nat. Hist. 46 (2):187. 1877. Conyza fistulosa Roxb., Fl. Ind. 3: 429. 1832. B. glomerata DC. in Wight, Contrib. Bot. Ind. 15. 1834; Hook. f., Fl. Brit. India 3: 262. 1881(Fig. 2).

Annual erect herb, to 1m high; stem glabrate at base, puberulous above. Leaves oblanceolate to obovate, 8 x 6.5 cm pubescent on both surface, base narrow long attenuate, apex acute, margin dentate.

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Heads in compact globose clusters, arranged in interrupted spicate panicles; 5mm in diameter, yellow, heterogamous, not rayed. Receptacle pubescent, Involucral bracts in 4-seriate, liner-lanceolate, purplish tinged, pubescent with multicellular hairs and glands on dorsal side. Corolla offemale florets 2-3-lobed, glabrous; corolla of bisexual florets 5-lobed, pubescent. Achenes brown, oblong, quadrangular, 1mm long, puberulous. Pappus white.

Fl. & Fr.: December-May.

**Ecology:** Rare in forest peripheries.

**Distribution India**: Uttar Pradesh, Madhya Pradesh, Bihar, Orissa, Tamilnadu, Andhra Pradesh, Maharashtra; **World:** Nepal, Bhutan, China, Philippines and South East Asia.

**Voucher specimens**: South Andaman (Thirur, Elevation: 9m), 18-05-2013 MCN 47140 (SKU).

**Blumea laciniata** DC., Prodr. 5: 436. 1836; Hook. f., in Fl. Brit. India 3:264. 1881. *Conyza laciniata* Roxb., Fl. Ind. 3: 428. 1832 (**Fig. 3**).

Annual erect aromatic herb, to 1 m high; stem woody at base, shortly hairy with stalked glands.Lower leaves lyrately lobed, petioled, obovate,6 x 4 cm, base tapering, apex apiculate, margin entire to coarsely dentate, pilose on both surfaces, sessile. Heads yellow, combined in to large, lax terminal panicle. Receptacle minutely pilose. Involucral bracts in 3rows, linear-lanceolate, white hairy with prominent midrib, glandular hairy on dorsal surface. Corolla of bisexual florets 5-lobed, pubescent; corolla of female florets 2-3-lobed, glabrous. Achenes brown, ribbed, oblong, 1mm long, sparsely pubescent. Pappus white.

Fl. & Fr.: All seasons.

**Ecology:** Rarein wastelands and along roadsides. Distribution: India: Throughout; World: South and South-East Asia, China and Africa.

**Voucher specimens**: South Andaman (Bamboo flat, Elevation: 21m), 02-03-2011 MVS, KP & MB 47140 (SKU).

Blumea viscosa (Mill.)V. M. Badillo Revista Fac. Agron. (Maracay) 7:9. 1974; Laggera aurita (L.f.) Benth.ex C. B. Clarke, Compos. Ind. 92. 1876; Hook. f., Brit. India 3: 271. 1881 (Fig. 4).

Perennial erect aromatic herb, to 90 cm high; stem not winged; branches hairy. Leaves obovate or oblanceolate,  $3.5 \times 0.5$  cm, base

auricled and decurrent with 2-3 linear lobes on side,apex acute, margins dentate, each membranous, viscid pubescent; upper leaves smaller, often bract like, sessile. Heads in corymbose or diffuse panicles, terminal on shoot and axillary branches, pinkish tinged, heterogamous, not rayed. Receptacle flat, glabrous. Involucral bracts multiseriate, linear, acute, green, silky hairy. Florets pink, fertile. Corolla of bisexual florets, 5-lobed, pubescent; corolla of female florets 3-lobed, glabrous. Achenesdarkred, oblong, subcompressed, 1 mm long, obscurely ribbed, thinly hairy. Pappus white.

Fl. & Fr.: September - February.

Ecology: Rare in Wastelands.

**Distribution:** India: Throughout; World: Bangladesh, Myanmar, Pakistan, SriLanka.

**Voucher specimens:** Middle Andaman Islands (Long island, Elevation: 6m), 13-02-2014 MB & MCN 47140 (SKU).

**Emilia scabra** DC., Prodr. 6: 303. 1838. *E. sonchifolia* (L.) DC. var. *scabra* (DC.) Hook. f., FI. Brit. India 3:336. 1881 (**Fig. 5**).

Small herb, to 20 cm high; stem slender, glabrescent. Leaves chiefly radical, cauline very few; radical leaves ovate-lanceolate, subobtuse, lyrate,2 x 0.6 cm, scabrid on both surfaces; cauline leaves lanceolate, 7 mm long, scabrid, all leaves sessile,base amplexicaul, apex acute, margin dentate. Heads terminal, lax corymb, pink, homogamous, not rayed, ebracteolate; Involucral bracts uniseriate, dark brown, glabrous, linear-lanceolate, faintly veined on the dorsal surface, with narrow scarious margins. Achenes dirty brown, linear-oblong, 2 mm long, deeply ribbed, hispid on the angles, Pappus white.

Fl. & Fr.: April-November.

**Ecology:** Rare, along seashore.

**Distribution**: India: Endemic (Meghalaya, Andhra Pradesh, Kerala, Tamilnadu, Karnataka and Maharashtra). Voucher specimens: South Andaman Islands (Wandoor, Elevation: 1.6m), 24-04-2013MCN& MB 46149 (SKU).

Launaea acaulis (Roxb.) Babc. Ex Kerr, Fl. Siam. Enum.2: 299. 1936. Prenanthes acaulis Roxb., Fl. Ind. ed. 2, 3: 403. 1832. Crepis acaulis Hook. f., Fl. Brit. India 3: 396. 1881. (Fig. 6.)

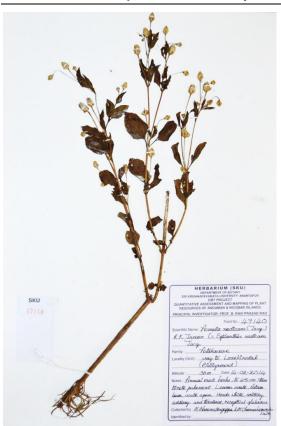


Fig. 1. Herbarium specimen of Acmella radicans



Fig.3.Herbarium specimen of Blumea laciniata



Fig. 2. Herbarium specimen of Blumea fistulosa



Fig.4.Herbarium specimen of Blumea viscosa



Fig. 5. Herbarium specimen of Emilia scabra

Perennial herb with long woody cylindric rhizome, to 4-25 cm high; stem simple, often with many flowering branches from the base, sometimes solitary. Leaves chiefly radical, linear or spathulate, 5 x 1 cm, base cuneate, apex acute, margin denticulate or sub entire. Heads cylindric, subpaniculate on bracteolate peduncle. Involucral bracts in 2 rows, obovate or linear-lanceolate, glabrous, membranous towards margins. Ligule yellow. Achenes pale yellowish, darker between the ribs, ellipsoid, subcompressed, 5 mm long, contracted at both ends, strongly ribbed. Pappus silvery white longer than achenes.

Fl. & Fr.: March - September.

**Ecology:** Rare in Sea shore areas.

Distribition: India: Jammu & Kashmir, Himachal Pradesh, Uttar Pradesh, West Bengal, Orissa and Madhya Pradesh. World: Afghanisthan, Pakisthan, Nepal and Iran.



Fig.6. Herbarium specimen Launaea acaulis

**Voucher specimens:** South Andaman Islands (Neil Island, Elevation: 6m), 05-05-2013 MCN & MB 46225 (SKU).

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