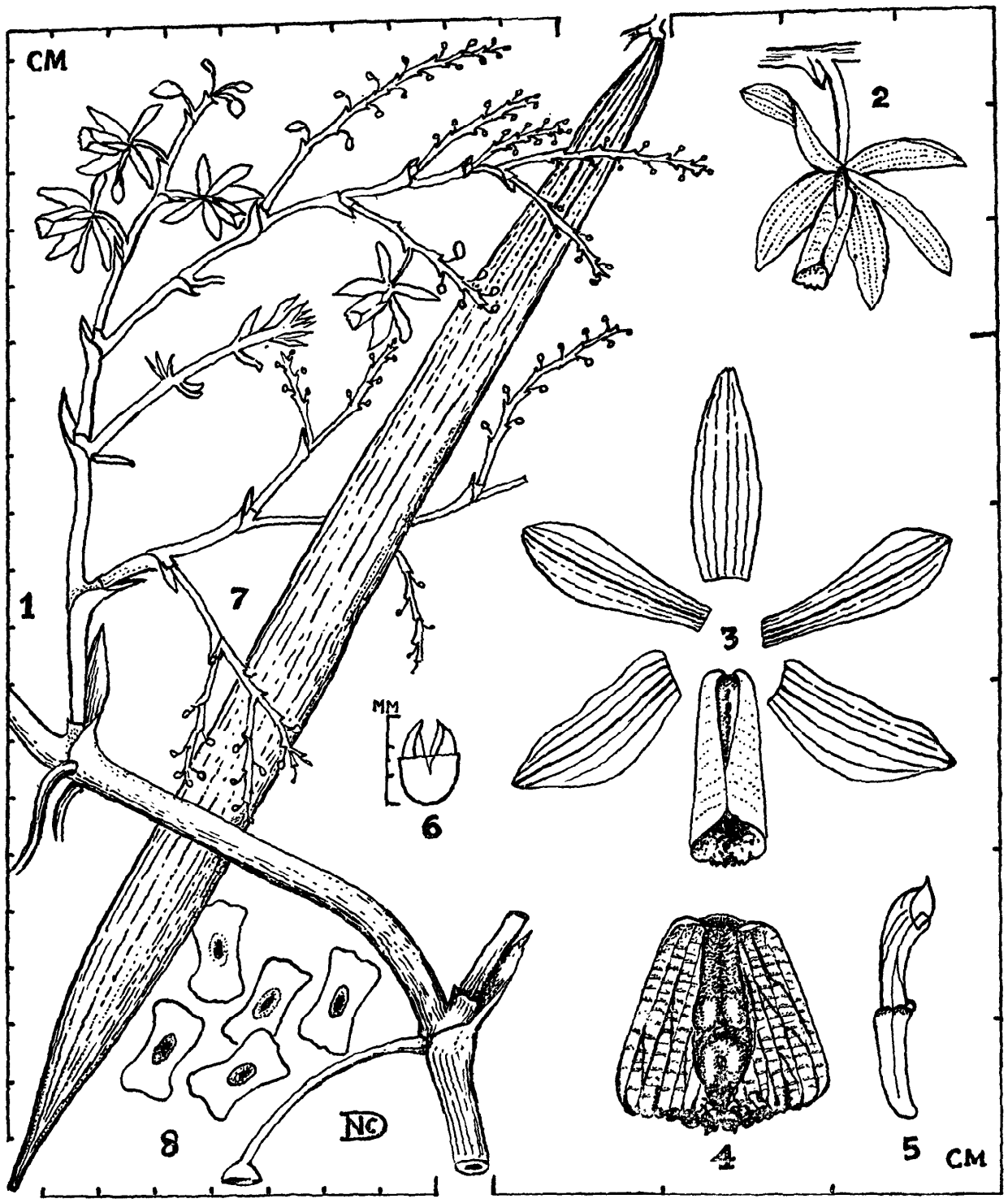
GALEOLA ALTISSIMA (BL.) REICHB. F.—FIRST REPORT OF ITS OCCURRENCE IN INDIA, FROM NORTH CACHAR HILLS, ASSAM

Galeola altissima Reichb. f. one of the three scandent species of the stout saprophytic genus *Galeola* has hitherto not been recorded from India, its inclusion in Hooker's Flora of British India being based upon extra-Indian specimens. However, two other scandent species *G. kuhlii* (Reichb. f.) Reichb. f. (under its synonym *G. hydra*) and *G. cathcartii* Hook. f. have been known from Sikkim, apart from 3 other erect species *G. lindleyana* Reichb. f., *G. falconeri* Hook. f. and *G. javanica* Benth. Of these the former two are somewhat alike. *G. falconeri* Hook. f. has been collected in Kameng, Subansiri and Tirap districts of Arunachal Pradesh (formerly NEFA) and *G. javanica* Benth. has still eluded plant collectors in Assam, being known only from a drawing of Masters in the Calcutta Herbarium.

A *Galeola* extensively climbing on a large shrub, profusely flowering and with dangling long slender capsules, was observed and collected, during a general botanical survey in the Garampani hot spring area of the Mikir Hills, Assam. A careful study of the specimen proved it to be the hitherto unrecorded *G. altissima* (Bl.) Reichb. f. In view of the rarity of the species and to facilitate possible further collections in the country a detailed description with illustrations, based on ample material, is now furnished. A perusal of the literature shows that the descriptions are somewhat uneven based as they are on very few, odd and rare collections. Holttum (1957) has largely drawn on the earlier description of J. J. Smith of this species. The petals are clearly 5-veined, as against the usual description of 3-veined. The lip when fresh clearly shows the curls and pleats, concealing the distal notch of the midlobe, and the rolled nature also conceals the faint lateral lobes. However, all these become evident when spread out, and particularly so when dry.

Galeola altissima (Bl.) Reichb. f. Xen. Orch. 2: 77. 1865; J. J. Sm. Fl. Btzg. 6: 67, f. 44. 1905; Bull. Btzg. Ser 2, 26: 9. 1918; Hooker f. Fl. Brit. India 6: 89. 1890; Holttum, Rev. Fl. Malaya 1. 99. 1957; Backer & Bakhuizen Van den Brink, Fl. Java 3: 260. 1968. *Erythrorchis altissima* Bl. Rumphia 1: 200, t. 70. 1825.

Stout russet brown saprophytic scrambler to 2 m, scrambling by adhesive roots at nodes. *Stem ca* 1 cm thick, smooth, swollen at the nodes. *Scale-leaf* ovate, entire, acute, *ca* 2.7 cm long. *Inflorescence* a much branched panicle, *ca* 2.6 dm high and equally broad. *Bracts* small, ovate, acute. *Flowers* yellowish, *ca* 3 cm across, *ca* 1.5 cm long; perigone subcarnose; *sepals* elliptic-oblong, 11-14 mm long, 3-5 mm broad, the dorsal one 5-nerved, faintly crenulate at the obtuse apex, the laterals 5-6 nerved, slightly asymetrical. *Petals* alike, narrower than the sepals, spathulate, 5-nerved with a ventral long median raised band, obtuse, 11-14 mm long, 3-4 mm broad. *Lip in situ* rolled and embracing the column at base, when spread out 10-12 mm long, 12-13 mm broad, faintly 3-lobed distally (the lobation becoming distinct when dry), the mid part with a long fleshy canescent, bilobed ridge, and a distal ovoid faintly bilobed callus, the distal margins around the callus, crenulate, pleated and rolled inwards, the lateral margins entire, the surface of the lateral parts distinctly veined and closely tessellated. *Column ca* 1.2 cm high, arcuate; *anther* 2-celled mitriform *ca* 3 mm high, *pollinia* powdery; pedicellate *ovary* slender, arcuate, 8-11 mm long. *Capsules* pendant, subsessile, longitudinally ridged with scattered small warts, the



Galeola altissima (Bl.) Reichb. f.

Figs. 1-8 : 1. Panicle branch. 2. Flower. 3. Perigone, lip *in situ*. 4. Lip spread out. 5. Ovary with column. 6. Anther. 7. Capsule. 8. Seeds (much enlarged). *Deori* 50276.

ridges emphatic towards the base, slender, fusiform, 14-25 cm long. *Seeds* reddish, winged.

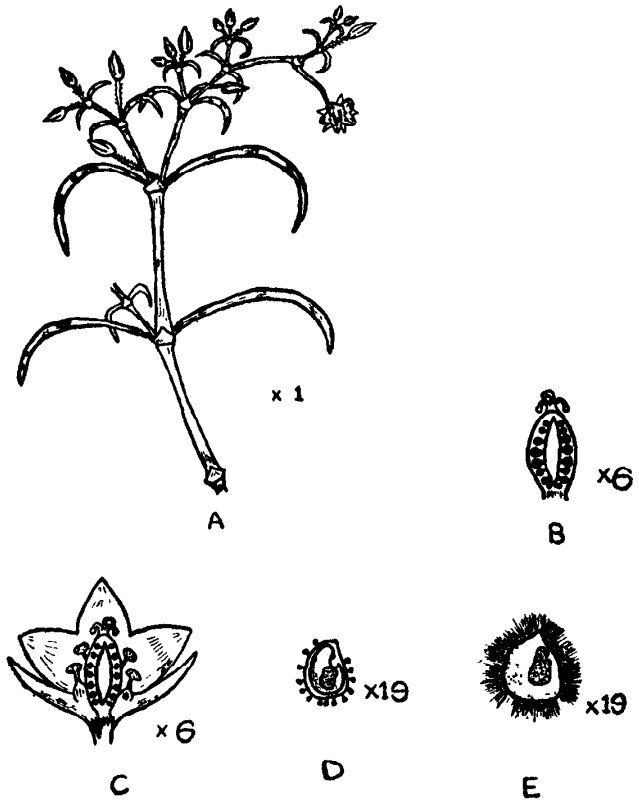
Fls. & Frts.: April-August.

ASSAM: North Cachar Hills, on hill slopes along the Kopili river bank, vicinity of the Garampani Springs, rare, 7-4-1972, *Deori* 50276.

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A NOTE ON THE DISTRIBUTION OF *SPERGULARIA RUBRA* (LINN.) J. & C. PRESL (CARYOPHYLLACEAE)

Spergularia rubra (Linn.) J. & C. Presl is a caryophyllaceous common weed of cultivated fields. It is widely distributed in North and West Asia and throughout Europe. Although it is reported from the plains of Punjab and adjacent areas, this is the first report of its occurrence in Delhi. The correct nomenclature, concise description and ecological notes of this species are given here.



Spergularia rubra (Linn.) J. & C. Presl
A. Habit. B. Gynoecium. C. L. S. Flower. D, E. Seeds.

Spergularia rubra (Linn.) J. & C. Presl Fl. Cechica 94. 1819. *Arenaria rubra* Linn., Sp. Pl. 423. 1753. *Spergula rubra* (Linn.) Dietr. Syn. Pl. 2: 1598. 1840; Edgew. & Hook. f. in Fl. Brit. Ind. 1: 244. 1874; Duthie, Fl. Upp. Gang. Pl. 1. 64. 1960 (repr. ed.).

Suberect or prostrate annual herb, stem slightly compressed, much branched at the base, hairy, 2-3 mm across. Leaves in opposite unequal pairs, sessile, stipulate, linear, flat, fleshy, 40-50 × 2-2.5 mm; stipules broad, scarious, silvery, connate. Inflorescence a lax cymose panicle, flowers on 5-6 mm long pedicles, 6-8.5 mm across. Sepals 5, free up to the base, lanceolate, obtuse, greenish, hairy, 5.6 × 2.5 mm. Petals 5, light pink or white, ovate, obtuse, shorter than sepals, 3.5-4.5 × 3 mm. Stamens 10, filaments dilated at base, anthers yellow. Ovary sessile, 3-carpelled, 1-locule with many ovules; styles 3. Capsule ovoid, longer than sepals; seeds dark brown, subtrigonous, granulate, glandular hairy, with slightly thickened margins, usually exalate, rarely alate. By