

in the Agri-Horticultural garden, Alipore. Herbarium specimens (without flower or fruit) of this tree were sent by P. Lancaster the then Secretary of the Agri-Horticultural Society, Alipore to the Royal Botanic Gardens, Kew (K) and the British Museum (Natural History), London (BM). Dr. R. S. Raghavan, Botanist at Kew on request reported that the sheets at BM are labelled as *Sterculia alata* Roxb. var. *irregularis* Smith, while those at K are annotated by Dr. Kostermans as *Pterygota alata* (Roxb.) R. Br. forma *diversifolia* without any reference to the var. *irregularis* Smith.

However, this tree labelled as *P. alata* (Roxb.) R. Br. var. *diversifolia* drew the attention of the senior author on his posting in the Garden in 1977, there being no authority for the varietal name. Failing to get any reference for the varietal status under *P. alata* (Roxb.) R. Br. (Syn. *S. alata* Roxb.) it was considered prudent to examine *Sterculia diversifolia* which is alluded to have diverse leaves. This name has been assigned to 3 different species, none of which is synonymous with *P. alata* (Roxb.) R. Br. *S. diversifolia* R. Br. (= *S. diversifolia* Don) is an Australian species and is quite different in shape, size, nature and degree of lobation of leaves, size of fruits and seeds to distinguish it from the Indian plant. It is now known as *Brachychiton diversifolium* R. Br.

Sterculia diversifolia Seem. is now *Firmiana diversifolia* Gray, while *S. diversifolia*

Boerl. & Koorders remains unchanged and is also very different.

It may be inferred from these that Kostermans did not consult *S. alata* Roxb. var. *irregularis* Smith and annotated the specimens at Kew as *P. alata* (Roxb.) R. Br. forma *diversifolia* without any consideration for *S. diversifolia*. It does not appear to have been published.

Since a percentage of plants bears this characteristic variation of the leaf, generation after generation, it seems Smith (l.c.) is justified in treating it as a variety. As *S. alata* Roxb. is correctly known as *P. alata* (Roxb.) R. Br. the variety concerned deserves a new combination as follows.

Pterygota alata* (Roxb.) R. Br. var. *irreguralis
(W. W. Smith) Deb et Basu comb nov.
Sterculia alata Roxb. var. *irregularis* W. W. Smith in Journ. Asiat. Soc. Bengal N. S. 7: 85. 1911 (Type: Hort. Cult. Calcutta, 25.2.1902, Dr. Prain's Collector, Shaik Ismail s.n.! CAL). *Pterygota alata* forma *diversifolia* Kostermans Mss.

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AND

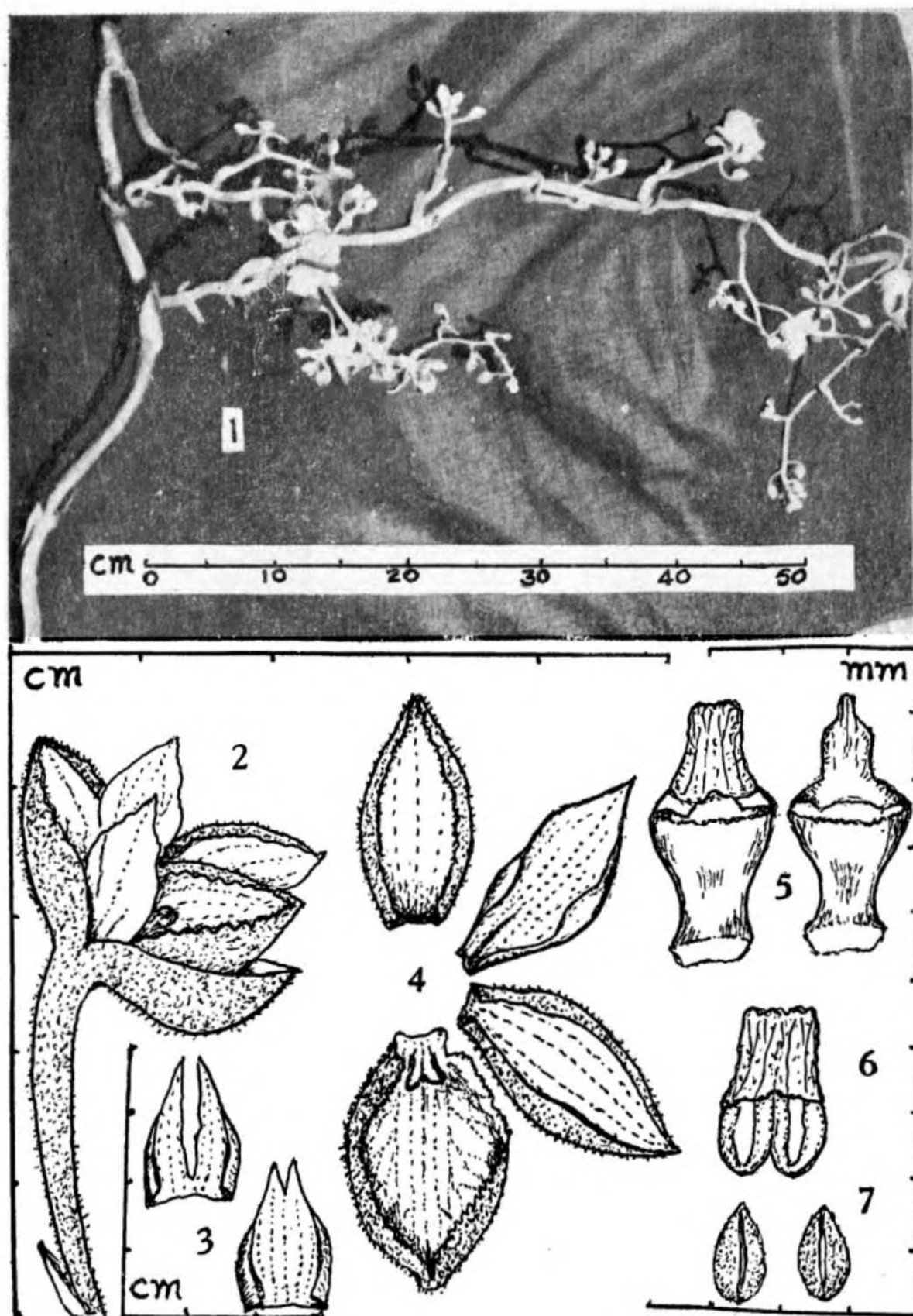
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GALEOLA NUDIFOLIA LOUR.—A RARE ORCHID FROM SUBANSIRI DISTRICT, ARUNACHAL PRADESH, INDIA

Of the 25 species of *Galeola* Lour. distributed from the East-African Islands through Asia, north to Korea and south-east through Indonesia to Australia and the Pacific, 5 species have been so far recorded from India.

These are *G. altissima* Reichb. f. *G. cathcartii* Hook. f., *G. falconeri* Hook. f., *G. lindleyana* Reichb. f. and *G. nudifolia* Lour. The text of these, earlier recorded from Sikkim, has now been discovered in



Galeola nudifolia Lour.

Figs. 1-7 : 1. Habit. 2. Flower. 3. Bracts showing degree of forking. 4. Dorsal sepal, lateral petal, lateral sepal and lip. 5. Column with and without anther cap. 6. Anther cap. 7. Pollinia (G. D. Pal 72552 Assam)

Subansiri district, extending its range of distribution in India. A detailed illustrated description is here presented to enable possible find in other localities also.

Galeola nudifolia Lour. Fl. Cochinch. 2: 520. 1970; Seidenf. 1. Dansk Bot. Arkiv 32(2): 194. f. 82. 1978. *G. hydra* Reichb. f. Xen. Orchid. 2: 77. 1865; Hook. f. Fl. Brit. Ind. 6: 89. 1890; Grant, Orchid Burma 350. 1895; King et Pantl. in Ann. Roy. Bot. Gard. Calcutta 8: 264. Pl. 351. 1898. *G. kuhlii* (Reichb. f.) Reichb. f. Xen. Orchid 2: 78. 1865; Holttum, Fl. Malaya 1: 99. 1957; Rao et Balak. in Rec. Bot. Surv. Ind. 20(2): 212. 1973.

Stem ca 2 cm thick, stout, terete, curving, branching, sparsely prickly all over, yellowish brown. *Internodes* 10-30 cm long. *Roots* 3-10 cm long, one at each node opposite the scale. *Leaves* terete, white. *Scaly bracts* 0.7-2.5 × 1.0-2.0 cm, erect, broadly ovate, acute, slightly or deeply forked, fleshy, yellowish green. *Inflorescence* axillary lax panicles, 70 cm long, 50-100-flowered, densely papillose hairy more so towards the upper half. *Flowers* 3-4 cm long, ca 2 cm across, yellow. *Floral bracts* 2-5 × 1.5-3.0 mm, ovate-lanceolate, acute, much shorter than the ovary, densely pubescent outside yellow. *Dorsal sepal* ca 17 × 8 mm, ovate-oblong, obtuse, concave, profusely papillose hairy outside, 3-5-nerved. *Lateral sepals* ca 20 × 8 mm, ovate, obtuse to acute, curved at tip, concave, profusely papillose hairy outside, 3-5-nerved. *Lateral petals* ca 17 × 8 mm, elliptic-oblong, obtuse to acute, wavy at upper margins, 3-5-nerved, mid-nerve thickened at the base. *Lip* ca 20 × 10 mm, cymbiform, ovate when spread out, obtuse at lip, erose at margins, covering the column by the lateral margins at the base, with a callus towards the base, 3-5-nerved, the extreme lateral nerves further dichotomously branching and ending towards lateral margins, cordate at the base, profusely papillose hairy outside, purple

streaked at the base. *Column* ca 5.0 × 2.5 mm, short, stout, curved forwards about the middle; anther cap ca 2 × 2 mm, ovate-oblong, undulate at apex, ridged vertically with 4-5 dichotomously branched purple streaks on the ventral surface, shortly papillose all over, 2-celled, hinged to the column; rostellum membranous, yellow; pollinia 2, vertically grooved, granular. *Ovary* with pedicel 1.5-2.5 cm long, slightly curved, profusely pubescent. *Pod* 5.0-14.0 cm long, 0.5-1.0 cm dia., stalked, terete, linear-oblong, obtuse at apex, yellow (Figs. 1-7).

Rare. A robust sprawling saprophyte spreading over hill slopes on loose soil of cuttings amidst low herbs, some *Aroids* and *Mikania*.

Flowering and fruiting: April-May.

Specimen studied: Itanagar (ca 450 m), Subansiri District, Arunachal Pradesh, India, G. D. Pal 72552 (ARUNACHAL FIELD STATION, ASSAM, CAL) 19-05-80.

The species is closely allied to *G. cathcartii* Hook. f. reported from Sikkim but can easily be distinguished by the sepals being ovate-oblong instead of linear-oblong, in lip being cordate at base instead of cuneate and in having a callus at the base of the lip instead of near the apex. The densely papillose hairy nature of the sepals has not been described by King and Pantling (1898), and not shown in the illustrations of Seidenfaden (1978).

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