

been given by Hartog (Fl. Mal. 1:5: 411-412. fig. 17a. 1957). Further fresh collections, especially of male flowers are needed to supplement the description.

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REFERENCE

UNTAWALE, A. G. AND T. G. JAGTAP. New record of *Halophila beccarii* Aeschers. from Indian coast. *Mahasagar* 10(1-2): 91-93. 1977.

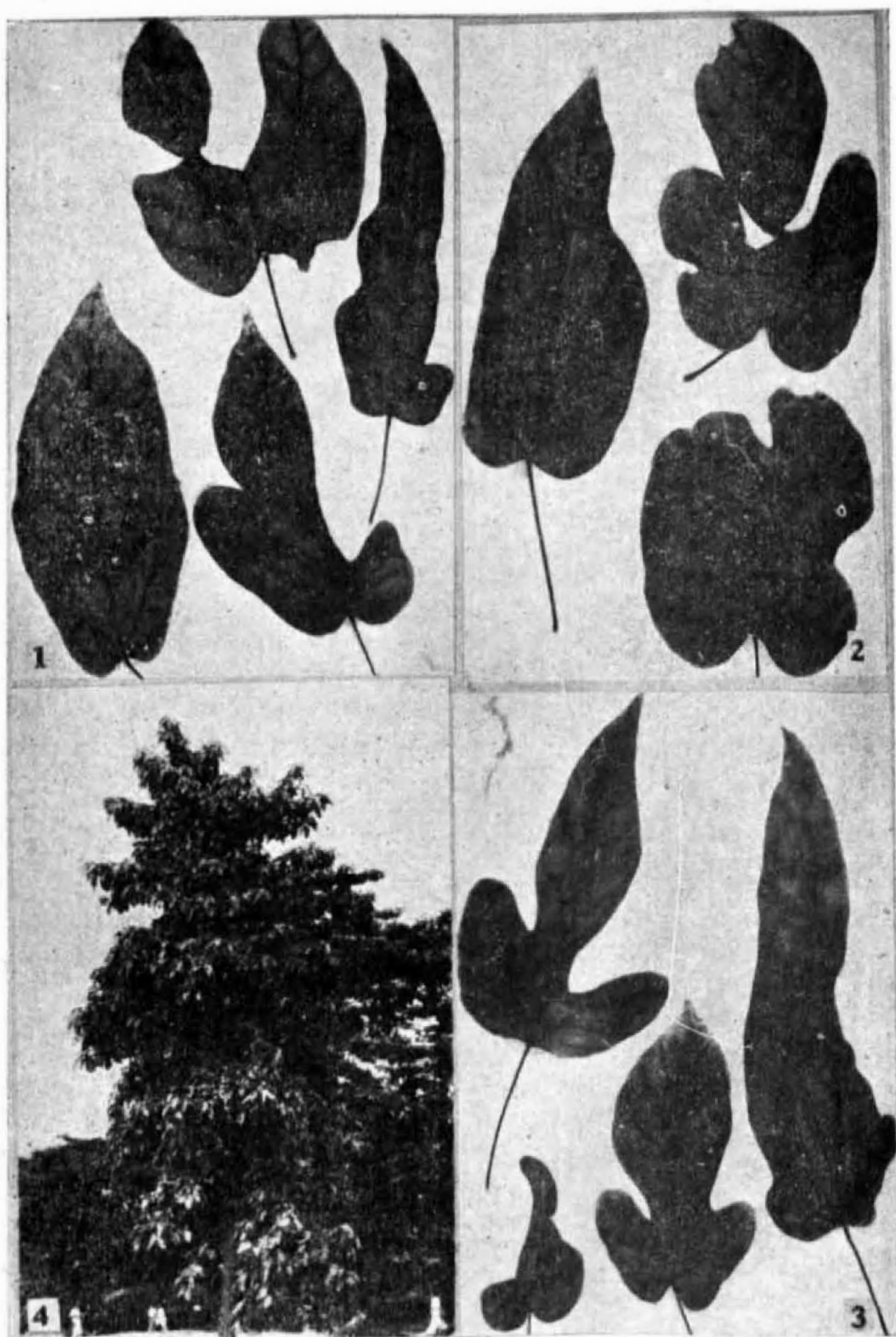
OBSERVATION ON THE MAD TREE

The *mad tree* locally known as the *Paglagachh* is one of the most fascinating plants in the Indian Botanic Garden, Calcutta. Leaves of this tree are variable in form, shape, nature and degree of segmentation and lobation of the lamina to such an extent that no two leaves are similar, for which it is called the *mad tree* or *Paglagachh*. One lobe of the lamina is sometimes excessively elongating with contraction at its base. The venation is palmate with 7, sometimes 5, 8 or 9 veins radiating from the apex of this petiole. The outer two veins are, however, much weaker than the others. The amount of irregularity is perhaps, without any parallel.

The mother plant affording this striking instance of leaf variation was raised in about the year 1870 from seeds obtained from *Pterygota alata* (Roxb.) R. Br. (Syn. *Sterculia alata* Roxb.) and planted out along with others in the *Sterculia* Avenue. Growth of the plant was normal. It had quite normal flowers, fruits and seeds. The leaves which are cordate, ovate, acute, with entire or slightly undulating margin, show a great variety of shapes. W. W. Smith in *Journ. Asiat. Soc. Bengal* N. S. 7: 85-86, 1911 reported on this remarkable instance of leaf variation. He studied this plant for 3 successive fruiting years, when

it was about 23 m in height and 1.5 m in girth (at the height of about 1.2 m), as is the normal size of this species in this area. 3-5% of the seeds of the first three fruiting years on sowing showed variation of leaves to different extent and magnitude, and about 1% as great a variation as the mother plant. In 1910 the trial of seeds showed a higher percentage than was observed in the first fruiting years. When seeds from this variety were sown, the population of seedlings segregated into normal as well as abnormal plants (partly or fully). It has been recently observed that some of the seeds obtained from *P. alata* (Roxb.) R. Br. produce seedlings bearing abnormal leaves. These evidences tend to suggest that the morphological variation of the leaf is due to genetic variation. Smith (*l. c.*) named this plant *Sterculia alata* Roxb. var. *irregularis* Smith.

The mother tree which was studied by Smith (*l. c.*) does not exist now. When and how it died could not be traced out. However, there are three other trees, one in each Division nos. 13, 19, 21 and another seedling is planted this year in Divn. no. 25. Tree in Division no. 21 is developed from the seedling studied by Smith in the course of his experiments and bears both normal and abnormal leaves. One such tree presented by Smith at the seedling stage is seen



Figs. 1-3 : Leaves of the mad tree showing variation in shape, segmentation and lobation. 4. Photograph of the mad tree in Divn. No. 21.

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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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