

WILD ARBOREUM COTTON OF BARODA—A PRIMITIVE FORM OF *GOSSYPIUM ARBOREUM* LINN.

A primitive form of *Gossypium arboreum* Linn. was observed growing wild at the Dhaniavi Bid (Sunderpura) Black Buck Preserve, about 11 km away from Baroda, Gujarat State, on 9th April 1970.

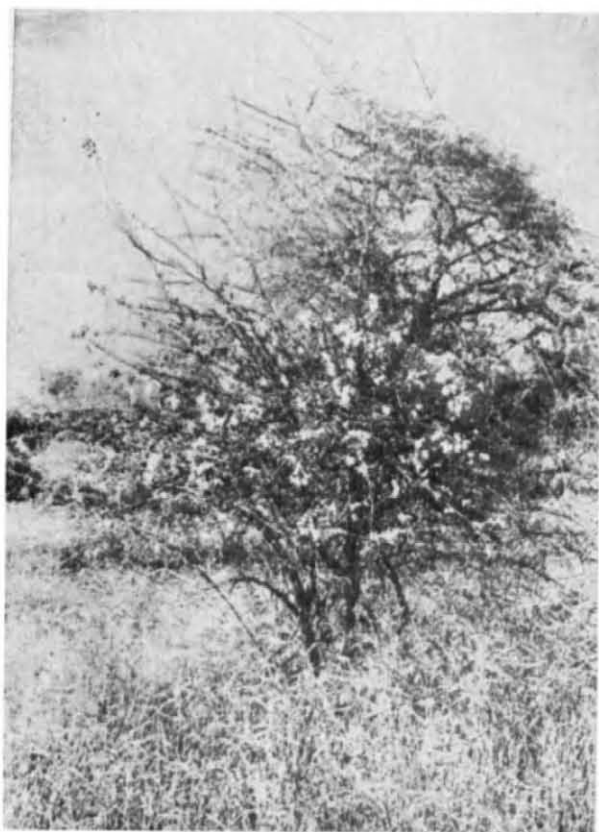


PLATE NO. I: Photograph of a primitive form of *Gossypium arboreum* Linn., growing wild in Baroda!

On the distribution, Watt (1907) reports that it is a native of Ceylon, but not cultivated. This oriental species, one of the stocks from which the best cultivated cottons of India and Africa have been derived, is met with in India, Malay Archipelago, Philippine Islands, Africa and Upper Egypt.

Watt (1907) in India repeatedly collected a wild or self-sown *Gossypium*, and was, according to his belief, the first to definitely suggest its identity with *G. obtusifolium*

Roxb. Fl. Ind. 3: 183, 1832. Watt, in his work, used a number of species names for what we now regard as *G. arboreum*. The wild material dealt with in the present note does come under his *G. obtusifolium*. Watt did fail to discover any authentic type of Roxburgh's plant as existing in any herbarium!

This is to put on record that the Baroda Preserve owned by the Maharaja Fatehsingh Zoo Trust does protect the only species in the genus *Antelope*—the Black Buck which seems to be losing the fight for survival, and houses also a primitive form of *G. arboreum*! The detailed description is as follows:

Perennial shrubs or low trees about 3-4 m tall. Stems slender, branches many, round, brownish-red, covered with minute, soft hairs spreading on leaf-stalks. Leaves broad, smooth, thin, ashy-green when dry, sparsely stellately pilose, 5-lobed, occasionally 3-lobed, lobes entire, obovate-oblong, slightly constricted below into the sinus, emarginate base cordate but scarcely auriculate, presence of an obscure gland on the central vein; petiole slender, ascending, woolly, pink-coloured or sub-glandular at the insertion within the blade; stipules minute, awl-shaped, caducous. Inflorescence axillary, slender lateral shoots, with the common peduncle not much long and bearing one or two small, usually 3-lobed leaves, pedicel very short; bracteoles united to each other very slightly, but firmly adherent to the base of the calyx tube, not very profoundly cordate, thick, ovate-acute, almost entire or coarsely toothed—two or three (*G. herbaceum* has bracteoles with 4-8 teeth), prominently veined, reticulated, gland-dotted, minutely stellately hairy. Calyx irregularly 5-toothed, teeth large, rounded, three glands at its base within the upturned and united margins of the bracteoles. Corolla with short tube, petals only

very slightly attached, limbs wide-spreading, making the flower convolvulate, with the petals rotating to right, bright yellow with dark purple, large spots on the claws and purple tinge on maturity, hairy outside, especially along the outer margin. Fruit hardly exceeding the accrescent bracteoles, ovate, acuminate, beak often deflexed or hooked, 3-celled; ripe capsules opening widely; lint white, long. Seeds large, ovate-rotund.

According to Watt (1907), the plant is easily recognised from all the other Indian cottons, though certain states of *G. Nanking* come very near to it indeed, if such are not hybrids between the two species.

Hutchinson (1950) mentions that the annual sub-shrubs, the commercial strains of Peninsular India, are small, almost unbranched.

The African *arboreums* are perennial forms also. The author, following Silow (1944), concludes that such 'finds' from the Western India have a close parallel with those occurring in Madagascar and the East African Coast and, therefore, fit in with Silow's primitive component—*G. arboreum* race *indicum*!

Hutchinson (1971, in a personal communication) has suggested to the author to grow

some specimens from seed and supplement the type with well grown specimens from the garden.

ACKNOWLEDGEMENTS

Grateful thanks are due to Professor Sir Joseph B. Hutchinson, F.R.S., Cambridge, England, for his valuable advice in the preparation of this note and for sending the photocopies of relevant literature. The author is indebted to the authorities of the Maharaja Fatehsingh Zoo Trust for providing facilities to carry out observations in the Black Buck Preserve.

G. M. OZA

Maharaja Sayajirao University of Baroda, Baroda

REFERENCES

- HUTCHINSON, J. B., R. A. SILOW AND S. G. STEPHENS. *The Evolution of Gossypium and the Differentiation of the Cultivated Cottons*. Oxford University Press, London, 1947.
- HUTCHINSON, J. B. A note on some geographical races of Asiatic cottons. *Emp. Cott. Grow. Rev.* 27: 123-127. 1950.
- SILOW, R. A. The Genetics of Species Development in the Old-World Cottons. *J. Gen.* 46: 62. 1944.
- WATT, G. *The Wild and Cultivated Cotton Plants of the World*. Longmans, London, 1907.

OCCURRENCE OF *CHONEMORPHA GRIFFITHII* HOOK. F. AND *PSILOTRICHUM FERRUGINEUM* (ROXB.) MOQ. IN THE KUMAON REGION

New distributional records for plants are now being increasingly reported, consequent on the detailed plant exploration and collection programme of botanists in several parts of the country. This note is one such report of two such finds in the Kumaon region where until now they were unknown.

Chonemorpha griffithii Hook. f. Fl. Brit. Ind. 3: 662. 1882; Kanjilal, Fl. Assam 3: 265-266. 1939; Chatterjee in Kew Bull. 2: 49. 1947; Seshagiri Rao in Journ. Ind. Bot. Soc. 32: 43. 1953.

Liane with large, fragrant, showy white flowers, easily recognised and differentiated from the hitherto known species in N.W. India [*Chonemorpha fragrans* (Moon) Alston and *C. pedicellata* R. S. Rao] by its deeply 5-partite calyx lobes as against the tubular calyx of the other two. *C. griffithii* Hook. f. was so far known from Khasi Hills, Sikkim and the north-eastern region. It is now collected, along Nachni-Tejum road $\pm$ 2400 m in the Kumaon region. Possibly this may be further spotted in similar altitudes and