OCCURRENCE OF MALABAR GOURD (*CUCURBITA FICIFOLIA* BOUCHÉ) IN KHASI HILLS

DURING the exploration tour to Meghalaya in October 1971 for the collection of germplasm of agrihorticultural plants, a few populations of a species of *Cucurbita* with fruits/seeds different from the usual cultivated types of the genus were observed in and around Mawphlong in Khasi hills (1,500 m). The material has now been identified as of *Cucurbita ficifolia* Bouché, the Malabar Gourd or the Figleaf Gourd, a native of Central and Southern America. Bird's[2] discoveries in the Chicama valley of Peru have produced seed remnants and peduncles of this species stratified at preceramic, pre-maize level, indicating that this plant was cultivated by the farmers of that period, conservatively estimated to about 2000 B.C. Evidently, it is one of the earliest of man's cultivated plants in the Americas[2,6]. Though known to be cultivated in the tropics of the Old and New World now[5], no earlier record of this cultigen is available from India. It is not mentioned in the monograph on Cucurbitaceae of India[3], and is also not represented by any collection in the Central National Herbarium of the Botanical Survey of India.

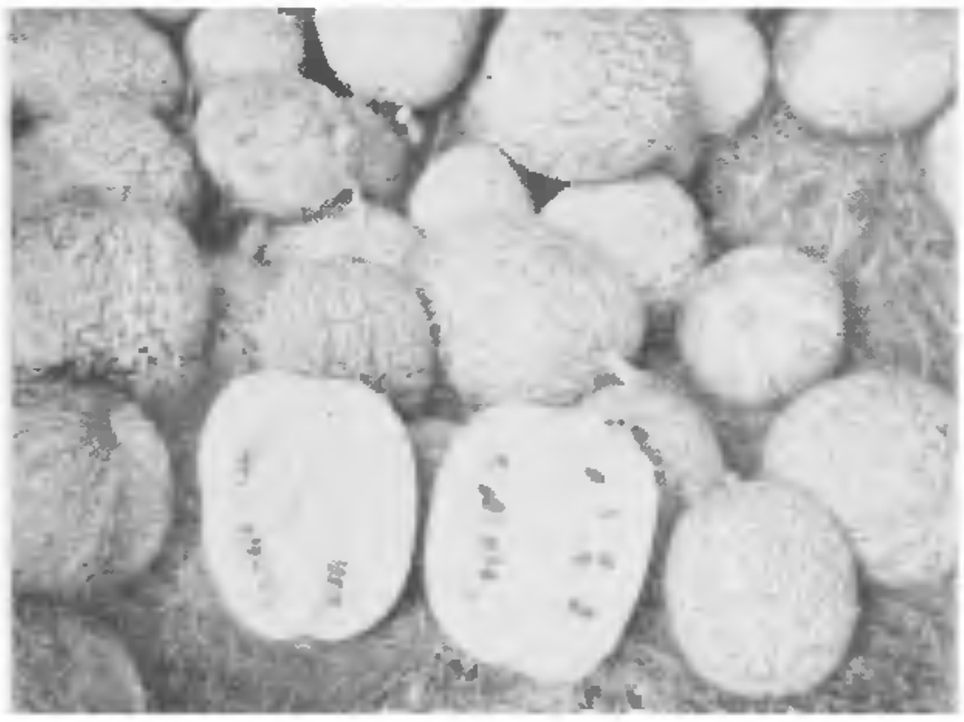

FIG. 1

The plant is well described in the *Manual of Cultivated Plants*[1]. It can be distinguished from the other species by its semi-shining, rough, broadly oblong to roundish globular fruits, each about 20–35 cm long with outer greenish white irregularly rather reticulately patterned skin (reticulations green), rind hard and gourd-like, the inner core of whitish flesh with much fibrous centre wherein lie loosely embedded numerous black seeds, each about 1·8 × 1 cm across, ovate, obtuse and thickly marginate (Fig. 1). The species possesses bold orange yellow flowers and large irregularly orbicular, lobed foliage—characters which have also placed this species among the ornamental cucurbits[1].

In certain Latin American countries the flesh of *Cucurbita ficifolia* is candied and eaten as a confection or occasionally fermented to make an alcoholic drink[6]. The fruits are also consumed as a vegetable after boiling or cooking. The Khasi tribals occasionally eat the young fruits as a vegetable but invariably the mature fruits are collected and dumped or stored near the huts or piggeries to be used subsequently as pig feed.

There are reports on the possibilities of using perennial cucurbits (seeds) as sources of vegetable fats and protein[4]. In view of this, and for its possible utility in plant breeding, this report on the occurrence and acclimatization of this perennial cultigen (incidently the only perennial species among the cultivated *Cucurbita* species) in Khasi hills will be of considerable interest. The plant is tolerant of cool temperature. Presumably, its occurrence presents either a case of unintentional introduction, the seed material having found its way with the other introduced American types much under cultivation in Khasi hills now, *e.g.*, *Phaseolus vulgaris*, Chou-Chou, *Cyclanthera pedata*, *Cucurbita* spp., or it might be an intentional introduction for ornamental purposes possibly through some missionaries.

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New Delhi-12, *August* 3, 1972.

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