

A NEW RECORD OF NATURAL STANDS OF *Psidium guineense* SWARTZ FROM KOLLAM, KERALA, INDIA

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Psidium guineense Swartz, a native of Central and South America, had been reported earlier to occur as wild in Guwahati (Assam) and Tripura state. This is the first report of this species from Peninsular India. Detailed description, illustration and notes on ecology, adaptability and economic importance are provided.

Key words: *Psidium guineense*, distribution, ecology, adaptability

The Central-South American genus *Psidium* with its most important fruit tree species *P. guajava* is represented in Kerala by less popular edible species like *P. littorale* (strawberry guava) and *P. friedrichsthalianum* (Chinese guava). Natural stands of *P. guajava*, mostly with red flesh, grow in heaps from bird castings in open fields and partially disturbed plantation sites. Good variability exists for fruit size (30-225 g), fruit colour (yellow, purple), fruit shape (round, oval, pyriform), flavour, flesh colour (white, yellow, cream, red, deep red) and bearing habit. An interesting specimen of *Psidium* was collected from the banks of Ashtamudi lake at Kumbalam, Kundara, Kollam District of Kerala, which was identified as *P. guineense*. This has been later confirmed by the Herbarium Curator, New York Botanical Garden, USA.

A brief description and diagram/photograph (Fig. 1, 2) is given here to facilitate easy identification: Shrubs, prostrate or erect upto 3m high; stems thin, terete, covered with brown tomentum on growing parts; leaves opposite,

elliptic or elliptic-oblong, 13 × 6 cm, thick, villous below, apex obtuse, base nearly acute, petiole 7-12 mm long, grooved, densely hairy, mid vein hairy on both sides, laterals 6-10 pairs, marginal venation not prominent; inflorescence a simple cyme, triflorous, rarely uniflorous, peduncle 5-25 mm long; mature flower buds 8-11 mm long, pedicels of lateral buds (fruits) closely appressed to the main; calyx 4-6 mm long, splitting irregularly into 5 parts, persistent in fruit; petals 5, 6-10 mm long, white, spatulate, glabrous; stamens numerous, 7-9 mm long; ovary 3-4 locular, 1.9-2.4 mm diameter; fruits weighing 4-10 g, epicarp green, yellow when ripe, flesh creamy white, temptingly aromatic when ripe.

This specimen differs from the description of *P. guineense* Swartz (Deb, 1961) in having spatulate petals and no modification of the stamens to petals.

Distribution, plant association and migration

Earlier reports of its occurrence in India are from Tripura (Deb, 1961) and Guwahati, Assam (Rao and Hajra, 1973). They further record the



Fig. 1. *Psidium guineense* Swartz

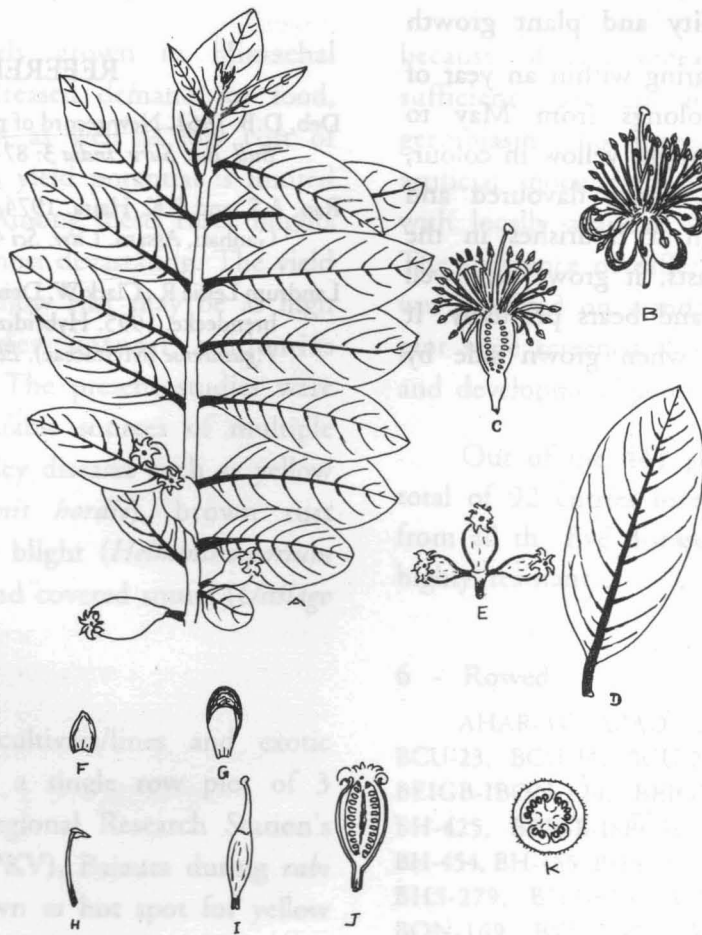


Fig. 2. *Psidium guineense* Swartz — A. fruiting twig; B. flower; C. flower L.S.; D. leaf; E. fruits; F. sepal; G. petal; G. stamen; I. pistil; J. ovary L.S.; K. ovary T.S.

introduction of this species to Indian Botanical Garden, Calcutta in 1845 from Guinea via West Indies. It is also reported from Sri Lanka and Indonesia. This species having originated in South America might have come to this particular location through sea route as Kollam was one of the most important ports of the Portuguese, Dutch and later English rulers. Another possibility is through cultural contacts between this part of India and South East Asian countries as many Keralites use to live in Singapore, Colombo, Penang and Malaysia during colonial times. This species, resembling very closely to cultivated guava, is sometimes confused as guava by local inhabitants. Often it grows in association with natural stands of *Annona squamosa* (primitive type) and *P.guajava*.

Observation on adaptability and plant growth

Seedlings come to bearing within an year of planting and fruiting prolongs from May to December. Ripe fruits are bright yellow in colour, pyriform, weighing 4-10g, fruity flavoured and agreeable in taste. Though it flourishes in the natural stand near the coasts, it grows very well in midland also (laterite) and bears profusely. It is free from white scales when grown side by

side of guava collections. As it is reported to hybridize freely with *P.guajava* (Landrum *et al.*, 1995), it may be of importance for crop improvement, especially for imparting fruity flavour.

One set of herbarium sheets has been deposited at Madras Herbarium, Coimbatore and another set at the National Herbarium of Cultivated Plants, NBPGR, New Delhi.

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