STUDIES ON INDIAN BANANAS

I. A Descriptive Study of Twenty-four Varieties*

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The specific and varietal relations as well as the classification of the banana, an important cultivated agricultural crop, is ill-defined and in some cases contradictory (Linnaeus, 1753; Baker, 1893; Schumann, 1900; Jacob, 1934 and others). The chief reason for the existing confusion in the taxonomy of the cultivated bananas appears to be the lack of proper descriptive study of the numerous varieties, both cultivated and wild. The importance of a detailed descriptive study is stressed by Teodoro (1915) and he is supported by Backer (1924) and Cheesman (1934). In his excellent discourse on the banana varietal problem, Cheesman (1934) discusses the numerous defects in the existing nomenclature and classification and stresses the importance of varietal descriptions suitably illustrated as a preliminary necessity for the study of the various varieties extant in each region before the existing chaos in nomenclature and classification can be removed.

Published work on South Indian bananas have not adequately satisfied the detailed study necessary for ready spotting out of well-known varieties of bananas (Jogiraju, 1931; Jacob, 1934, 1942a, 1942b). In this paper, therefore, an attempt has been made to thoroughly go into the question of the description of twenty-four well-known varieties of bananas grown in this province. This attempt has necessarily to be followed by other investigations in the lines undertaken here, which, in the opinion of the author, will put the banana classification on practical lines.

The materials for the study were obtained from the Banana Experimental Area and the College Orchards of the Agricultural Research Institute at Coimbatore. The brief descriptions presented in this paper are the sum effect of the bulky data collected during two years of investigation on a purely descriptive systematic work.

DESCRIPTION OF VARIETIES

The names applied to the varieties in this paper are those standardised by Jacob (1934). To make the descriptions complete a few of the important

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synonyms of each variety are given, the synonyms referred to being extracts from *South Indian Bananas*, by Jacob (1934).

1. **Kullan**

*Plant.*—The plant is stout and dwarf attaining a height of about seven feet; trunk upto 25 inches in girth at base, light green in colour, tapers very little from the base to the crown; outer sheaths light green with dark spots at the junction of the leaf-sheath and petiole. Leaf-blades about 5 feet long and 24 inches wide at the widest part, green, glaucous on the under-surface, texture tough or leathery. Lamina base equal, deeply cordate. Petiole rather short and stout, margins winged and the channel wide, shape of leaf elliptic. Total number of leaves produced being about 29, and suckers 5. Duration medium (about 15 months).

*Bunch.*—Peduncle or stem thick, tomentose, almost at right angles to the pseudo-stem. Hands and fruits compact; fruits at right angles to the main axis, number of hands 8 to 12; the bunch may weigh from 25 to 30 lb.; the bottommost hand with about 20 fruits and the rest with 12 to 14 fingers or fruits arranged in two rows. The sterile axis is clothed with persistent male flowers and dried bracts.

*Fruit.*—Small, 3 to 4 inches long, about 4·5 inches in girth at the middle, plumpy, irregularly five sided and the angle ridges rather indistinct at full maturity; base broad, apex blunt; skin thin with little spongy fibre on the inner surface, leathery and bright yellow when fully ripened; pulp slightly tending to be yellow, juicy and sweet. Keeping quality of fruit good. This serves as a dual purpose variety (Plate V, Fig. 6; Text-Fig. 11).

*Synonyms.*—Rasalu or Rasa arati of Peddapur (East Godavari Dist.), Theer vazhai of Erode; Kuzhi vazhai of Udamalpet, Enugu arati of Jeypore.

2. **Nendrapadathi**

*Plant.*—Tall, attaining a height of about 10 feet; trunk about 24 inches in girth at base, tapers from base to crown, colour of pseudo-stem light green. Leaf blade about 7 feet long and 22 to 24 inches wide, green, leathery. Lamina base unequal, acuminate. Petiole long, margins pink coloured and slightly apart; total number of leaves 27; suckers 8 per plant. Duration medium (about 17 months).

*Bunch.*—Peduncle or stem tomentose, pendulous. Hands and fruits compact; fruits slightly curved; number of hands 8 to 10 and with about 14 fingers or fruits per hand. Bunch weighs about 40 lb. Male flowers persistent clothing the sterile axis.