

NEW ARECANUT VARIETIES OF ICAR-CPCRI

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Introduction

Arecanut (*Areca catechu* L) is one of the important commercial crops of South India, Konkan, Andaman & Nicobar group of Islands and North Eastern region of the country. Mainly grown for its masticatory nuts popularly known as 'betelnut' or 'supari'. Arecanut plays a prominent role in the religious, social, cultural and economic life of people in India. Presently, arecanut is commercially grown in India, Bangladesh, Sri Lanka and Myanmar. Other countries where arecanut is grown are Malaysia, Indonesia, Vietnam, Thailand and Philippines. India ranks first in the world both in area and production of arecanut. Karnataka, Kerala, Assam and West Bengal together produce 85 percent of total production in the country.

Central Plantation Crops Research Institute (CPCRI), Regional Station at Vittal came into existence in 1970, with a mandate to carry out research on arecanut and cocoa. The efforts on this direction started as early as 1947 through the establishment of ad-hoc arecanut committee by Indian Council of Agricultural Research (ICAR) to study the problems of arecanut industry. Based on the recommendation of the committee, the Central Arecanut Research Station (CARS) was established at Vittal in 1956, which gave a firm foundation for arecanut research. Consequent to the establishment of the Central Plantation Crops Research Institute (CPCRI) in 1970, the

Central Arecanut Research Station (CARS) became the Regional Station of the CPCRI.

At ICAR-CPCRI Regional Station, Vittal comprehensive collection of germplasm from within the country and abroad has been made and screening them under uniform conditions was undertaken since 1957. A total of 164 accessions were collected so far and being maintained in the field gene bank of the Station. Out of which 141 are indigenous accessions of arecanut collected from different parts of India (Assam, Goa, Gujarat, Karnataka, Kerala, Maharashtra, Meghalaya, Tamil Nadu, West Bengal, Andaman & Nicobar group of islands) as well as 23 exotic accessions introduced from other areca growing countries of the world especially South-East Asian countries such as Fiji, Mauritius, South China, Sri Lanka, Indonesia, Saigon, Singapore, British Solomon Islands and Australia.

Breeding works resulted in release of high yielding varieties viz., Mangala, Sumangala, Sreemangala, Mohitnagar, Swarnamangala, Kahikuchi tall, Cal-17 and dwarf hybrids (VTLAH-1 and VTLAH-2). Recently two more new high yielding arecanut varieties, Madhuramangala and Nalbari were released and notified for cultivation by Central Sub-committee on Crop Standards, Notification and Release of Varieties for Horticultural Crops, Ministry of Agriculture, New Delhi. Characteristic features of these new varieties are given below.

Madhuramangala (VTL-62)

- * The yield performance of the variety is higher than the earlier released varieties viz., Mangala, Sumangala, Sreemangala and traditional local types, suitable for both tender nut and ripe nut processing.
- * Also fetches more prices in the market because of its quality and marble appearance of the split nut.
- * The average yield is 3.54 Kg dry kernel/palm/year and about 4500-5000 Kg dry kernel/ha/year and 2.95 Kg dry tender processed nuts/palm/year and about 3800-4500 Kg dry tender processed nuts/ha/year.
- * The variety has been recommended for commercial cultivation in Karnataka and Konkan region.



Fig. 1. Madhuramangala

Nalbari (VTL-75)

- * The yield performance of the variety is higher as compared to all the earlier released varieties and found suitable for ripe nut processing.
- * The variety possesses high yielding nature, tall type with medium thick stem, longer internodes, partially drooping crown, homogeneous population, regular bearer, consistent in yield, bunches are well placed on the stem, round shaped yellow colour nuts, high recovery (25.18 %) of dry kernel from fresh nuts, comes to bearing by 5th year and economic yield can be realized up to 40-45 years.
- * The average yield is 4.15 kg Chali (dry kernel)/palm/year and 5600 Kg dry kernel/ha/year.
- * The variety has been recommended for release for Karnataka, North Bengal and North Eastern region.



Fig. 2. Nalbari