

Popular Coconut Cultivars of Goa

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Out of about 60 coconut cultivars grown in India, three tall cultivars are confined to Goa state. They are Benaulim, Nadora and Calangute. Recently a few hybrids have also found their way to some gardens.

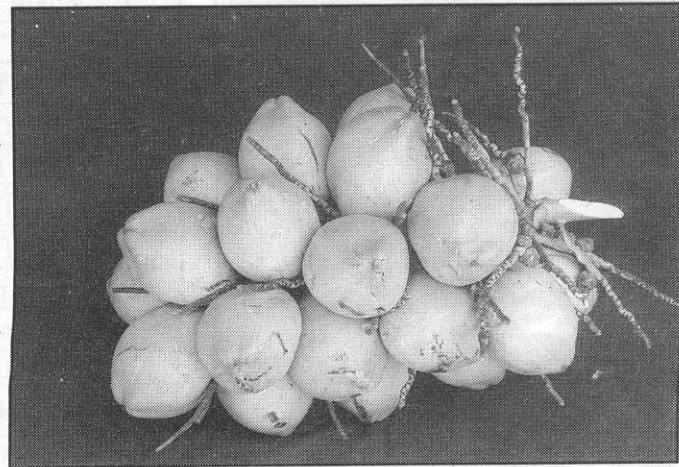
coconut covering an area of 20,488 ha with annual nut production of 113 million nuts. The productivity of coconut in the state is estimated at 5515/ha and the state average per palm per year is 30 nuts (*Directorate of Agriculture, Govt. of Goa, 1996*).

The cultivar Benaulim is mostly cultivated in the southern part of Goa, while the cultivars Nadora and Calangute are grown on the northern part. These three cultivars differ in many of the characters especially in fruit characters.

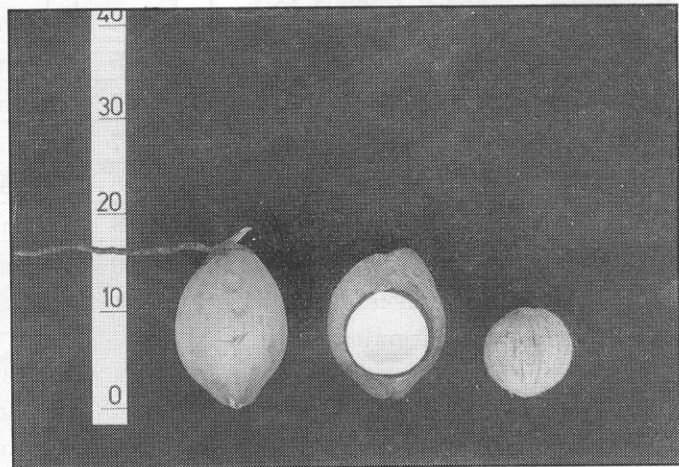
Central Plantation Crops Research Institute (CPCRI),

Kasaragod, Kerala has introduced these cultivars from Goa during 1965 and planted in the field genebank at Kasaragod. They are being grown under identical environmental conditions. The climate at Kasaragod is warm and humid. The temperature ranges between 21°C and 32°C, with average annual rainfall of 317.6 cm. The soil is red sandy loam with pH 4.3 to 5.5.

The description of these popular Goan coconut cultivars is given below :



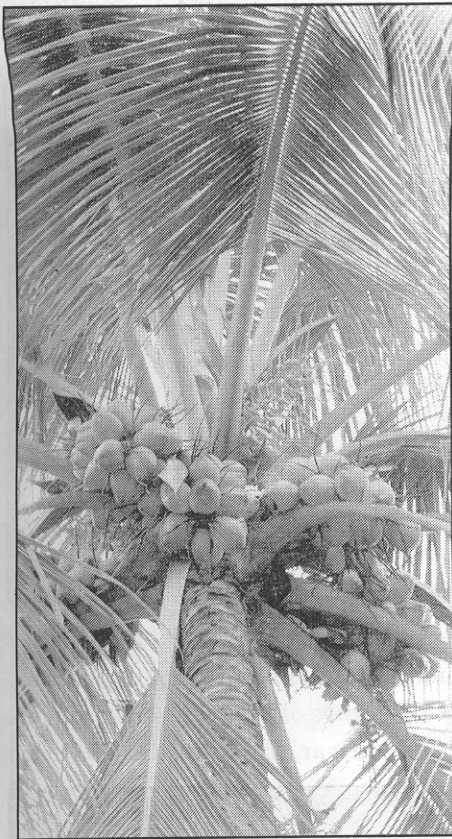
Bunch of Benaulim



Benaulim : Whole fruit; transverse section; husked nut

Benaulim

This cultivar is also known as 'Banawali'. Based on the shape of fruits, two types have been identified i.e., long and round. The colour of the fruits varies from yellow, green to red. They are popularly known as Banawali Green Round, Banawali Red Round, Banawali Green Long and Banawali Yellow Long. The Benaulim (Banawali Green Round) palms which is most extensively cultivated is tall in stature, grows to a height of about 7 metres with about 32 fronds on the crown. It takes



Benaulim

Goa is the smallest state situated in the Western Coast of Indian peninsula which is bounded on the north by the Terekhol river, the east by the Western Ghats and the West by the Arabian Sea. The climate is warm and humid with little variation in temperature. The annual rainfall is between 230 and 480 cm. The state is divided into two districts viz., North Goa and South Goa. The main crop grown in Goa is



Nadora

about 8 years for flowering and attains a steady bearing in about 18-22 years after planting. The palm produces about 10 bunches per year and nut yield varies from 80 to 190 with a mean of 151. The highest yield potential of the palm is 316 nuts/year. The fruits are

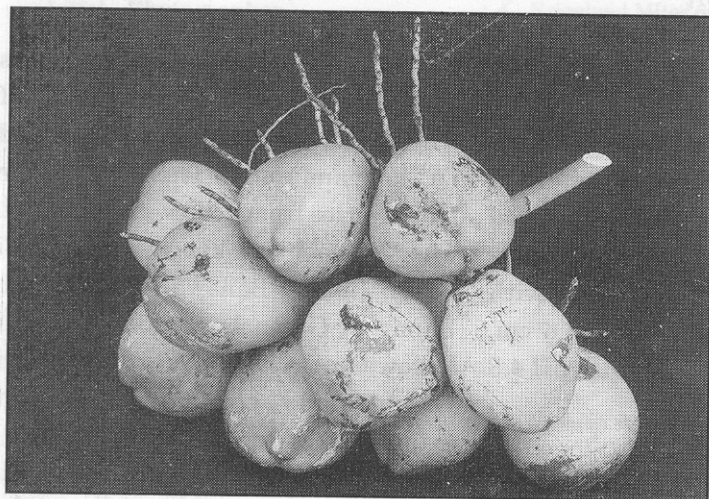
Table. 1 : Comparative Performance of Benaulim, Nadora and Calangute

Sl. No.	Characteristics	Benaulim	Nadora	Calangute
1	Plant height (cm)	700.4	962.9	898.9
2	No of leaves on the crown	31.9	30.1	27.5
3	Total length of leaf (cm)	578.5	570.1	531.4
4	No. of leaflets	239.0	242.0	238.0
5	Time taken for flowerig (Years)	8	8-9	8-9
6	No. of bunches per year	10.0	8.5	9.0
7	No. of nuts per palm/year	151.0	104.4	101.0
8	Yield potential per palm	300 nuts	195 nuts	230 nuts
9	Weight of fruit (g)	602.8	890.2	824.5
10	Length of fruit (cm)	21.5	27.3	26.1
11	Breadth of fruit (cm)	18.4	20.6	21.8
12	Thickness of husk (cm)	1.9	2.7	2.4
13	Weight of husk (g)	232.4	376.0	325.2
14	Percentage of husk to whole fruit wt.	38.5	42.4	39.4
15	Weight of nut (g)	368.0	502.8	496.2
16	Weight of copra (g)	143.0	174.0	148.5
17	Copra/palm/year (kg)	21.6	18.2	15.0
18	Copra/ha (t)	3.7	3.2	2.6
19	Oil content %	64.0	64.5	68.0
20	Oil/palm/year (kg)	13.8	11.7	10.2
21	Oil/ha (t)	2.4	2.0	1.8

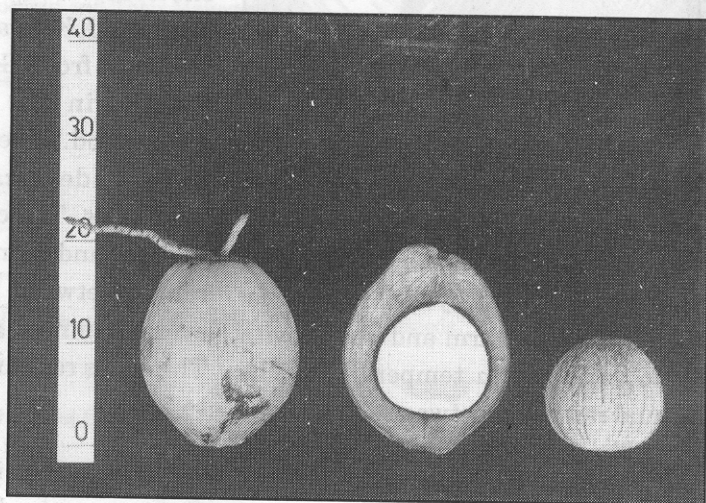
small with round/oblong shape. The kernel in the nut is thick, sweet and tasty and mainly used for culinary purposes. The copra in the nut is 143

g/nut, the range being 120 to 152 g / nut. The oil content in the copra is 65%.

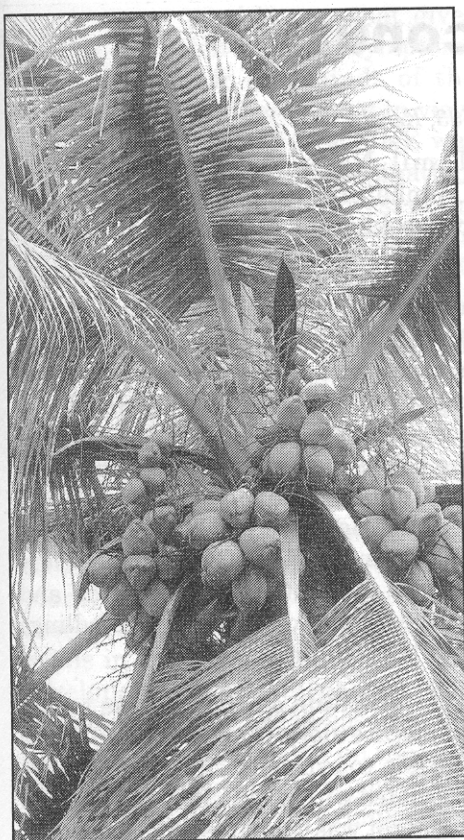
Because of the high yield potential, the cultivar, Banawali Green Round



Bunch of Nadora



Nadora : Whole fruit; transverse section; husked nut



Calangute

was recommended for release in 1987 by the Konkan Krishi Vidyapeeth, Dapoli, Maharashtra, under the name of 'Pratap' for commercial cultivation in coastal Maharashtra.

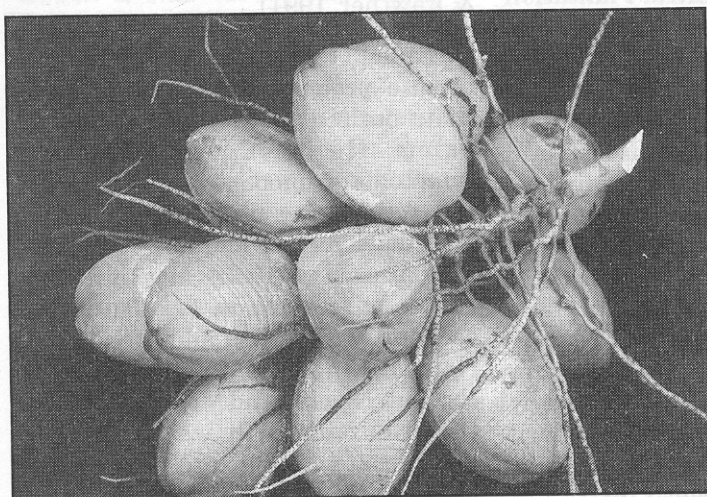
Nadora

The cultivar is native of northern part of Goa and more adapted to coastal region. The name of the cultivar is derived from 'Nadora' the village from where it is being cultivated. The palm is taller than Benaulim and reaches up to a height of about 9-10 meters, with 30 green fronds. It is a late flowering type, takes about 9-10 years for initial flowering. The average nut yield is 104 with a range of 50 to 150 nuts per palm. Some of the high yielding palms give as many as 195 nuts per palm. The fruits are bigger than those of Benaulim. The copra content is 174 g/ nut. The oil content in copra is 64.5%.

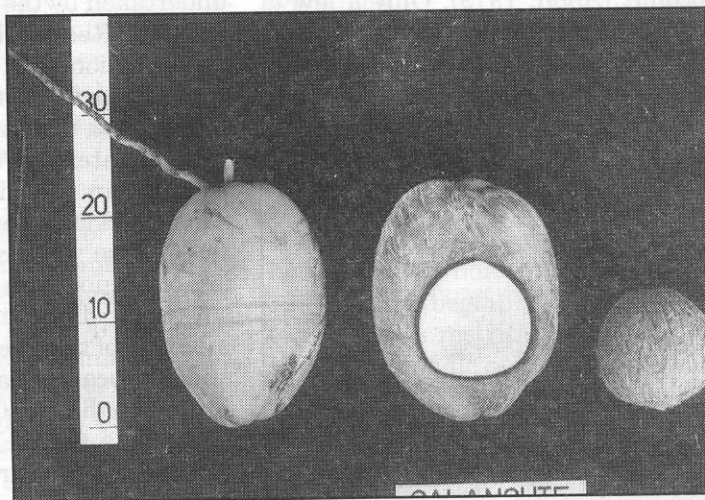
Calangute

The cultivar is grown mainly in northern part of Goa. The palm reaches up to 8-9 metres height with about 27-28 fronds on the crown. It is a late flowering type, takes 8-9 years for the initial flowering. The fruits are oblong and green. The annual yield of nuts per palm varies from 60 to 120 nuts with an average of 101 nuts/palm. The highest yield recorded in this cultivar is 230 nuts/palm. Nuts are oval shaped and bigger than those of Benawali. The copra content is slightly lesser than that of Nadora but higher than that of Benaulim with 148.5 g/nut. The oil content in copra is 68 percent. The kernel is thick and sweet.

The comparative performance of Benaulim, Nadora and Calangute is given in *Table 1*.



Bunch of Calangute



Calangute : Whole fruit; transverse section; husked nut

LOOSE EDIBLE OIL BANNED

Sale of loose edible oil has been banned in the capital. Oil can only be sold now in packed form. The Food and Civil Supplies Department through a notification issued on 13th January, has implemented the provisions of the central government order called the Edible Oil Packaging (Regulation) Order, 1998.

According to this order, all edible oils including mustard oil will now be sold only in packed form. For this purpose the Commissioner, Food and Civil Supplies, has been authorised as the registering authority. All edible oil manufacturers and packers will now have to register themselves with the Department.