

nuts with less nut water aiding in very low spoilage during storage for making ball copra.

Morpho-agronomic Traits: The palms of this selection are tall statured with clear bole on the stem. The palms start flowering after 6 to 7 years of age but profuse fruit production generally observed after 9 to 10 years of planting. The mean annual bunch production is 11 with a range of 8 to 12. The average yield varies from 100 to 320 fruits per annum in Kasaragod whereas still higher in selected palms in few years. The palms are mostly alternate bearers, nuts are small, kernel is thick with average copra content of about 90 g. The copra oil content is 75%, the highest recorded among the germplasm evaluated so far. The nuts of Laccadive Micro tall are suitable for production of ball copra mainly due to the slow rate of germination resulting in lowest damage during storage which is required for ball copra production. The inflorescences are longer with strong peduncle with partial overlapping of male and female phases in alternate years during successive inflorescence production making the palms self pollinated to some extent. The fruits are green or greenish brown, oval to round shaped. The dehusked nuts are also oval or round shaped with a pointed tip.

Cultivation Practices: The palms of Laccadive Micro Tall selection can be grown with the regular

recommended package of practices with irrigation for sustained yield of nuts. It can be grown in all coconut growing regions for conservation and further utilization. It has good potential for use in breeding programmes aiming for increasing the nut yield, oil content and more copra out turn.

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10. IND 092 - Cameroon Red Dwarf (IC0598219; INGR13061), a Dwarf Coconut (*Cocos nucifera*) Germplasm with Distinct Bright Orange Colored Nuts. Higher Content of Tender Nut Water and High Copra Content

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The said type of CRD selection was made from the originally introduced orange dwarf population from Cote d'Ivoire and conserved during 1977 in the field gene bank at CPCRI. Palms developed from the seed nuts through *inter se* mating of selected mother palms have been conserved at National Genebank at CPCRI. After evaluation for decades, the present selection was made having higher copra among the dwarf accessions with bright orange coloured fruits among the germplasm with dwarf plant stature. The nuts produced from the selected palms were used to establish progeny blocks at

CPCRI. The selection has both scientific and commercial value owing to the dwarfness coupled with attractive orange fruits with good quantity of tender nut water and high copra content.

Morpho-agronomic Traits: The palms of this dwarf selection are dwarf statured attaining a height of 4.4 m at 18 years of planting. The palm does not possess bole but the stem is not very slender with a girth of about 76 cm. The internodal length is very short and the length of 10 internodes is about 25 cm. The palms start flowering after 6 years of age. The inflorescences are short with

strong peduncle with complete overlapping of male and female phases making the palms autogamous. The fruits are attractive orange red in colour, medium sized, oval shaped with a pointed apical end. The dehusked nuts are also oval, medium sized with strong shell and thick kernel. The palms tend to bear in alternate years with an average bunch production of 10 per year. The average nut yield is 80 fruits per palm per year. The fruit weighs about 945 g, with a smaller percentage of husk to whole fruit weight (27.8%). The nut without the husk weighs about 657 g and produces nearly 220 g of copra per nut which is highest among the conserved orange dwarf accessions in the genebank.

Cultivation Practices: The palms of Cameroon Red Dwarf selection can be grown with the regular recommended package of practices with irrigation for sustained yield of nuts. It can be grown in all coconut growing regions for conservation and further utilization. It has good

potential for use as apparent in breeding programmes aiming for earliness, tender nut yield, copra yield and attractive coloured fruits.

References

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11. IND 414–Chowghat Yellow Dwarf (IC0598220; INGR13062), Distinct Dwarf Coconut (*Cocos nucifera*) Germplasm with Yellow Coloured Nuts and Erect Leaves

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Chowghat Yellow Dwarf is a unique indigenous yellow dwarf coconut line developed through selection from the original population of Chowghat Orange Dwarf conserved at National Gene Bank at CPCRI. The palms in the gene bank were developed through the *inter se* mated original mother palms available at CPCRI followed by progeny selection at CPCRI for nut colour. After evaluation of the progenies for inheritance of the trait, the selection was made for the unique trait of yellow fruits, rachis, flowers and petiole. As there are no indigenous yellow dwarf population exists in the mainland India, the selection is considered unique. Useful variety as a parent for crossing with selected tall to produce hybrids and hence of commercial value.

Morpho-agronomic Traits: Most yellow dwarf populations of the coconut growing regions of the world has been related to Malayan dwarfs which are

characterized with drooping leaves and straight spindle. The Chowghat Yellow Dwarf is observed as having erect leaves, large sized nuts with higher tender nut water, higher nut yields has excellent adaptability to the coconut growing environment in the country as it is a selection from the Chowghat Orange dwarf. The inheritance of the yellow colour traits is also confirmed as the *inter se* mated seedling progenies exhibited mostly seedlings with yellow coloured petiole and few with orange colour. The typical palms of this type could be selected based on the petiole colour.

The number of fruits per bunch was observed to range from 12 to 20. The palms belong to dwarf type of coconut with a stem girth of 55 cm at 1 m height and an average leaf length of 3.45 m at the age of 30. The bunch production in the selected palms are regular and ranged from 9 to 13 bunches per year after