

8. IND 001–Kappadam Tall (IC0430667; INGR13059), a Coconut (*Cocos nucifera*) Germplasm with Low Husk (33 to 36%) and High Copra Content (215 to 280 g)

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Kappadam Tall coconut—a selection from the west coast populations (WCT) coconut population has scientific and commercial value as it has potential to be used in breeding programmes for increased fruit size and lower husk content. The accession also known as ‘Chappadan’ in some parts of Kerala, is a robust palm from the South-west coast of India. The accession was collected and planted at CPCRI, Kasaragod during 1935. An *inter se* mated population of this collection is conserved in the National Gene Bank at CPCRI.

Morpho-agronomic Traits: Compared to the other Indian varieties from WCT, this accession gives heaviest fruits with thinner husk. The fruits of this selection are predominantly green, oblong to round in shape. The palms of this selection are tall statured with clear bole on the stem and about 25 leaf scars over the stem between 1 and 2 m from the ground. The leaves are longer (3.7 m) with broader and longer leaflets. The palms are strictly cross pollinating as there is no overlapping of male and female phases within and between inflorescences. The palm starts flowering after 6 to 7 years of age yielding

heavier nuts. The average fruit weight is around 1200 g with dehusked fruit weight of about 800 g. The kernel weight ranged from 400 to 550 g which gives 215 to 280 g of copra.

Cultivation Practices: The palms of Kappdam Tall selection can be grown with the regular recommended package of practices with summer 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 size and copra yield.

References

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9. IND 030-Laccadive Micro Tall (IC0430669; INGR13060), a Coconut (*Cocos nucifera*) Germplasm with Cluster Bearing Heavy Bunches of Micro Nuts

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The accession was first introduced from Lakshadweep islands to mainland India in 1940, Conserved in field gene banks and evaluated in replicated trials. The Laccadive Micro Tall is a selection from the tall coconut populations of Lakshadweep Islands known for cluster bearing, heavy bunches of micro nuts with high oil

content. The accession is unique for its heavy bunches with large number of micro nuts and has scientific and commercial value as it has recorded highest copra oil content (75%) among the conserved coconut accessions. The accession is also found suitable for ball copra production as the very slow rate of germination, small

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.

References

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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