

## 14. IND 099–Niu Leka Green Dwarf (EC0415218; INGR13065), a Coconut (*Cocos nucifera*) Germplasm of Short Statured Palm but Possessing the Advantageous Characters of Talls

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Niu Leka Dwarf selection is a unique coconut type selected from the original population collected from Fiji islands during 1983, conserved and evaluated at World Coconut Germplasm Centre, CARI, Sipighat over 25 years. The palms of this selection planted in the National Gene Bank at CPCRI, were developed through *inter se* mating of selected original mother palms available at Andaman followed by seedling selection. The present selection was made having higher copra among the dwarf accessions in the germplasm with dwarf plant stature, allogamous trait and robust growth. The selection has both scientific and commercial value owing to its dwarfness coupled with higher copra content and attractive green nuts. This variety has good commercial potential since it combines commercially favorable traits of tall and dwarf varieties

**Morpho-agronomic Traits:** This accession is a Green Dwarf with higher copra content among the dwarf populations in the gene bank. The palms are very dwarf with nuts and pollination behaviour similar to talls. The average weight of dehusked fruit is about 800 g with kernel weight of about 450 g yielding about 260 g of copra. Generally, dwarf accessions of coconut are highly self pollinated due to the overlapping of male and female phases in the inflorescences. However, this Niu Leka Dwarf selection is observed with a greater degree of cross pollination owing to its non-overlapping phases. The palms are dwarf characterized with higher number of leaf scars (over 33 in 1 m) on the stem making the selection is exhibiting the higher level of dwarfness. The stem of the palms are robust with girth at 1 m over 100 cm which is unlikely in other dwarf accessions. The stem is intermittently constricted which is a unique trait of this selection whereas the stem is smooth in other tall and dwarf accessions. The palms come to flowering in about 4 to 5 years; the leaves are shorter and stiff,

leaflets closely arranged (nearly plicate) allowing less light below the crown. The fruits are green in colour, oblong to round in shape, with a cavity volume of over 300 ml in mature nuts. The tender nuts are large with a fresh weight of about 2 kg having on an average of 470ml of sweet tender nut water. Biometric clustering revealed that the grouping of this accession with talls due to the allogamous nature and higher copra.

**Cultivation Practices:** The palms of Niu Leka dwarf selection has to be established with careful selection of mother palms followed by *inter se* mating among them and seedling selection to maintain the dwarfness and other desirable traits. They can be grown with the regular recommended package of practices with summer irrigation for sustained yield. It can grow in all coconut growing regions for further utilization. It has tremendous potential to be used in the coconut improvement programme for breeding for dwarfness coupled with higher copra out turn and tender nut yield.

### References

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