

Extension Folder No. 6

MANGALA
A high yielding arecanut variety

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MANGALA – A HIGH YIELDING ARECANUT VARIETY

Crop improvement work in arecanut at CPCRI has been mainly through introductions of exotic and indigenous types and refinement of selection procedures in mother palms, seed nuts and seedlings. A collection of 34 cultivars from other arecanut growing countries of the world were introduced to CPCRI Regional Station, Vittal, at various stages, starting from 1957. On the basis of morphological characteristics, earliness in bearing and comparative yield evaluation of the cultivars, the accession VTL-3 obtained from Beijing (China) was found to have a number of desirable characters and was released in 1973 for large scale planting, under the name 'Mangala'.

FEATURES OF MANGALA

- It is semi-tall
- It has partially drooping crown, well-spread leaves, more number of leaflets invariably crinkling at the tips.
- Fruits medium sized with good chewing quality of nuts acceptable to the consumer.
- Early in bearing, more number of female flowers per inflorescence, higher fruit set, early stabilisation of production, initial and cumulative higher yields and hence has reduced pay back period.



MANGALA

CULTIVATION PRACTICES

1. **Planting time:** *Planting is to be done during May–June in well-drained soils and during August–September in clayey soils.*
2. **Spacing:** *2.7 m × 2.7 m. The successive line should be deflected at an angle of 35° towards west to minimise sun-scorching of the stem.*
3. **Planting:** *In pits of 90 cm × 90 cm × 90 cm filled with mixture of top soil, cowdung and sand to a height of 50 to 60 cm from the base of the pit.*
4. **Manurial schedule:** *Annual application of 150 g N, 60 g P₂O₅ and 210 g K₂O in the form of fertilizers and 12–15 kg each of green leaf and compost or cattle manure per palm from the third year of planting is recommended. Half the quantity of fertilizers and full quantity of green leaf and compost may be applied in September–October and the balance of fertilizers to be made up in February–March.*
5. **Irrigation and drainage:** *Needs irrigation once in 4–5 days depending on the soil type and climatic factors.*
6. **Inter and mixed cropping:** *Mangala is ideal for mixed cropping with banana, cocoa, pepper, pineapple, betlevine etc. without loss in arecanut yield.*

MANGALA vs. LOCAL (SOUTH KANARA)

	Mangala	Local
1. Height of palm at 10th year	66 cm	315 cm
2. Age at first flowering	3 years	4 years
3. Age at which stabilization of yield occurs after planting	5/6 years	8/10 years
4. Cumulative yield of ripe fruits/palm upto 10th year from planting	80 kg	35 kg

AREAS SUITABLE FOR MANGALA

Coastal districts of Kerala and Karnataka where *chali* (*Biligotu*) is prepared from ripe fruits, up to an altitude of about 800 m above MSL.

SPECIAL HINTS

- * Because of the heterozygous nature of the crop, about 2 per cent of the palms develop weak stem with lanky growth. These may be located and rogued out within two years after planting and replaced.
- * Mangala palms suffer if underplanted in heavily shaded old areca gardens.
- * Thorough drainage during monsoon is equally important as supply of adequate soil moisture during dry, hot weather period.

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