



CULTIVATION PRACTICES OF KAROND (UNDER EXPLOITED FRUIT)

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INTRODUCTION

Karonda- *Carissa carandas*

Family- Apocynaceae

Origin- Himalayas

Karonda is commonly known as “Christ thorn”. It is an exotic and very important fruit crop. It is an evergreen shrub. It is rich source of iron and contain fair amount of vitamin C. Mature fruit contain high amount of pectin. It is found grown in wild in India, Malaysia, South Africa.

Climate

Karonda is both tropical and subtropical fruit. Heavy rainfall and waterlogging conditions are not suitable. High temperature and arid climate is suitable for cultivation. It grows well as rainfed crop.

Soil

Grown in variety of soil types which include sandy loam, laterite, alluvial sandy and calcareous soil. Alluvial sandy loam soils with good drainage produce better growth and crop yield. PH level ranges from 5-8.

Varieties

There are two categories;

- Pickle type varieties – Pant Manohar, Pant Sudarshan, Pant Suvarna.
- Table purpose – Konkanbold, CHES-K-11-7, CHES-K-V-6.

Propagation

Karonda is propagated mostly through seed propagation and vegetative propagation method such as stem cutting air layering and budding.

Method of planting

- Before planting, the soil should be level and all existing old plants should be removed. Pit is made of size 3x3 ft. Pit should be prepared at least one month before planting. Pit should be filled with equal amount of FYM and soil mixture. Recommended planting season is June – July.
- Square system planting is used for table purpose varieties of Karonda should be planted at 3x3 m distance.

Training and pruning:

- Training of plant at initial Stage is important to give necessary framework. It is done for first 2 years.
- Unwanted branches should be clipped off to give more defined shape and encourage the growth of trunk and crown of tree. Pruning is performed in October under Coorg condition.

Manures and fertilizers

5 kg of FYM and 100 gm mix of NPK is provided for 1 year plant, 15-20 kg of FYM and 400 g of mixture of NPK is provided for more than three year old plants. Best time of application is June – July.

Intercrop

Cowpea, French bean, okra, brinjal etc., are used as intercrop. In mature Karonda orchard, green manure crops can be cultivated and incorporated into soil which improve soil fertility, moisture holding capacity and physical conditions.

Irrigation management

Basin or flood approach is usually done for irrigation. Young plants should be irrigated every 10-15 days in winter and every 6-7 days in summer. Drip irrigation also has been found to be successful. In adult orchard irrigation is rarely used.

Weed management

Weeding is required after every irrigation.

Disease

Anthraxnose - controlled by spraying copper oxide, copper trioxide in initial stage.

Pests

- Leaf eating caterpillar
- Fruit fly

Harvesting

Maturity is judged on basis of colour. Harvesting is done manually for 3 to 4 times. Karonda plant starts yielding after third year of planting.

Yield

- Plants may yield 4-5 kg of fruits.
- Orchard may yield 10-15 kg per tree.

Post-harvest handling and storage

Raw fruit is used for making pickle. Ripened fruit are used in making squash syrup. Karonda is known for its perishability, allowing for storage of 2-3 days under typical condition.

Punnet boxes or aluminium foil boxes are effectively utilized to extend its shelf life. To enhance preservation, the fruit is stored in cold storage at 13°C and 85% of RH.

CONCLUSION

To transform Karonda, an underutilized crop into a commercially viable and globally recognised fruit crop, the crop improvement holds huge future as prospects for Karonda. Through breeding techniques, that is great potential to enhance its yield, nutritional value and overall market value.