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# CASHEW CULTIVATION PRACTICES

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Cashew is a foreign exchange earning crop. This is cultivated extensively in Kerala, Maharashtra, Goa, Karnataka, Tamilnadu, Andhra Pradesh and West Bengal. Cashew kernels are used as ingredient in icecreams, pastrics and confectioneries. It is assuming more importance as an ingredient in health foods owing to its high protein and low sugar content.

In India cashew is cultivated in about 5.3 lakh ha with a production of about 3.5 tonnes of rawnuts. Considering the demand in the domestic as well as international market the level of production at present is low. In India a processing capacity of 5.5 lakh tonnes has been established by Industry.

The existing cashew orchards have been raised with seedling progenies which are heterogeneous with respect to flowering, fruiting and other characteristics due to the cross pollinated nature of the crop. To overcome this deficiency currently, vegetatively propagated cashew grafts are being recommended as planting material.

In this folder useful tips on improved methods of cashew cultivation are detailed.

## Varieties

Twentynine high yielding varieties of cashew have been released for cultivation, so far. The varieties recommended for Karnataka and Kerala are as follows.

**Karnataka:** Ullal-1, Ullal-2, Ullal-3, NRCC Selection-1, NRCC Selection-2, Chintamani-1 (For maidan parts) BLA-39-4. VRI-1 and VRI-2

**Kerala :**BLA 39-4, K-22-1, NDR 2-1 and Dhana.

## Land Preparation

Wild growth including forest growth and weeds should be cleared from the site selected for cashew cultivation. The roots of the weeds and bushes should be completely uprooted from around 2m. radius of the planting spot. This ensures competition free environment for the newly planted cashew graft.

## Digging pits

Pits of 60 cm x 60 cm x 60 cm dimension should be dug at a distance of 7.5m x 7.5m or 8m x 8m across the slope. If there is hard pan in the sub surface of the soils, the dimension of the pits should be extended to 1 cubic meter. Hedge row method of planting with a spacing of 10m x 5m will be beneficial for growing intercrops in initial years of orchard life. Pits should be dug 15-20 days before planting and exposed to sun so as to get rid of soil borne pests especially termites affecting roots. Later, the pits should be filled upto the ground level with a mixture of top soil, 5 kg compost or 2 kg poultry manure, and 200g rock phosphate. The pits should be provided with side drains to avoid water stagnation.

## Planting of grafts

Usually 5-10 month old grafts are supplied from the nurseries. Healthy grafts should be planted after carefully removing the polythene bag without disturbing the ball of earth. Soil at the centre of the pit should be scooped out to plant the graft. Later, the soil should he pressed gently after placing the graft, with the ball of earth intact, into the scooped out pit. Care should be taken to see that the graft joint is at least 5 cms. above the ground level.

This clearance will help to locate and remove the sprouts on the root stock below the graft joint.

## Staking

After planting the graft, a stake should be provided to the plant and the plant should be tied by a loose knot with the stake. This prevents damage to the graft by wind blow.

## Mulching

The soil around the plant should be mulched with dried leaves or green leaves for conservation of moisture.

## After care:

1. Remove the shoot growth below graft joint periodically.
2. Allow the main stem to grow straight without lateral branches upto a height of 0.75m to 1.0m. This can be done by pruning the side shoots periodically with a sharp secateurs.
3. Remove the old stake and plant longer stakes during the 2nd and 3rd years.
4. Carryout deblossoming for the first two years after planting. First fruiting should be allowed in the third year after planting.
5. Allow only 4-5 strong branches by pruning weak and criss-cross branches.
6. Behead the main branch growing vertically after 4 years at a height of 3.5 to 4m.

## Fertilizer application

The fertilizer dosage for the first two years of planting and afterwards is detailed in the following table.

## Time of fertilizer application (g/plant)

| | Urea | Rock Phos-phate | Muriate of potash |
|---|---|---|---|
| First year | 330 | 200 | 70 |
| Second year | 660 | 400 | 140 |
| Third year and onwards | 1100 | 625 | 208 |

## Method of fertilizer application

Fertilizer should be applied in circular trenches around the plants. The trench should be dug at a distance of 0.75m, 1.0m and 1.5m away from the main stem during the first, second, third year and onwards of planting respectively.

Fertilizer application should be avoided during heavy monsoon and also when the soil moisture status is poor. Application of fertilizers, however, can be taken up during the second week of August when there will be a break in monsoon.

## Soil and water conservation measures

In the case of slopy lands terracing should be taken up around each plant during the second and third year. Terraces should be of 1.8 to 2.0m radius with a catch pit (1.5m x 45 cm x 30 cm) on the upper side of the terrace. The soil around the plant should be mulched with organic materials which will help to avoid direct exposure there by conserving soil moisture.

## Plant protection

Tea mosquito attacks cashew plants during flushing, flowering and fruiting. To control the pest spraying should be taken up with Monocrotophos (1.5 ml/litre) or endosulfan (1.5 ml/litre) or Carbaryl (2g/litre) solution. The following procedure should be followed strictly while spraying the insecticides.

1. Take up sprayings only during the cool hours of the day upto 10 a.m. in the morning and after 4 p.m. in the evening.
2. Do not spray against the wind direction.
3. Spraying should be done after weeding the plot.

Old and neglected plots are prone to the attack of stem and root borer. The infested plants turn yellow and start exudating gum which gets hardened subsequently resulting in gummosis.. The trees, if not treated in early stage of infestation will die.

The grubs should be scooped out of the plant by scrapping the affected portion and destroyed Scraped portion should be treated with 2% solution of carbaryl.

## Harvesting

Only the dropped nuts should be collected from below the tree. The fruits should not be harvested from the tree. The nuts, after seperating from the fruits, should be sun dried and stored in gunny bags at a height of at least 4" from the ground level.

## Yield

All the varieties recommended have a yield potential over 8 kg/tree or 7 to 7 tons per hectare. Though cashew yields from the third year, its full potential (about 8kg/tree) will be realised at 8-10 years of age, depending on level of management.


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