



# Plant coconut in your homestead gardens

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**P**lanting season has commenced and people in the urban areas are in search of quality coconut seedlings for planting. In view of the increasing demand for good quality coconut seedlings in the urban areas of Kochi, Coconut Development Board has made arrangements for advance booking and distribution of quality seedlings produced in CDB farm Neriamangalam for sale at head quarters during the current planting season for promoting planting coconut in urban homesteads. We can easily plant coconut in the urban homesteads according to the availability of land. The Central Plantation Crop Research Institute (CPCRI) and Coconut Research Institutes of various coconut growing states have introduced several high yielding varieties suitable for homestead gardens. Various critical factors should be carefully taken into account while planting coconut in your home garden which are detailed below.

### **1. Selection of suitable planting material**

The most suitable variety for planting in urban homestead is DXT hybrids (Dwarf x Tall), which are early bearing (3-4 years). It can produce 130-200 nuts per year under good management conditions. These variety seedlings are available in the nurseries of CDB, state agriculture/ horticulture departments, CPCRI and State Agricultural Universities.

### **2. Selection of planting site.**

Coconut is a sun loving plant which requires hundred percent sunlight to fall on the crown for proper growth and economic yield. In urban home garden, shade is the main problem for growing coconut. Therefore location of planting should be carefully selected. In shady locations,

even good quality seedlings with better management practices will have slow growth and the nut production will be very low.

### **3. Planting method**

Planting should be done by taking pits. The dimension of a pit should be 1m x 1m x 1m. Remove the top fertile soil up to one foot depth and heap separately. Place two layers of husk at the bottom of the pit which will be useful for moisture conservation. Then fill the rest of the planting pit with top soil and 10 kg of powdered cow dung / compost, 1 kg dolomite up to a depth of 50 to 60 cm before planting. Then take a small pit inside this, so as to accommodate the nut attached to the seedling. Plant the seedling inside this pit and fill with soil. Press the soil well so as to avoid water stagnation. If there is any chance for white-ant attack apply sevidol 8G (5gm./plant) or Imidacloprid 20 % ( 1ml in 1 liter of water inside the small pit before planting. In laterite areas, apply 2 kg common salt per pit for improving the physical condition of the soil

### **4. Management Practices**

The seedlings should be shaded and irrigated adequately during summer months. Shading is a must to the transplanted seedlings. Provide mulch up to 3 ft. from the base of seedlings. Use either coconut fronds or husks as mulch. Provide staking so that winds may not uproot the young seedlings. For the first two years after planting, irrigate the seedling twice a week during the dry summer months. Ten litre of water should be supplied once a week per seedling. Deep planting of seedlings should be avoided as it may increase the incidence of



fungal infection and water logging.

Regular manuring from the first year of planting is essential to achieve higher productivity. 10 kg organic manure should be applied per palm per year with the onset of south west monsoon, when soil moisture content is high. Different forms of organic manures like compost, farm yard manure, bone meal, fish meal, neem cake, groundnut cake etc. can be used for this purpose. In addition to this, the application of following fertilizer schedule is also recommended.

Fertilizer schedule recommended for coconut at different stages						
Age of Palm	Nutrient dosage	Quantity of fertilizer to be applied (gm)				
		Ammo. Sulphate	Urea	Super Phosphate (single)	or Ultra-phos/Rock Phosphate	Muriate of Potash
3 months	1/10 of full dose	250	110	180	115	200
1 year	1/3 of full dose	800	360	590	380	670
2 year	2/3 of full dose	1675	720	1180	760	1340
3 year onwards	full dose	2000	1080	1780	1140	2010

To get early and optimum production, above fertilizer and dolomite (500 gm. per seedling) should be applied as

shown in the table. Fertilizers should be mixed together and broadcasted around the seedlings three feet away from the base and incorporated to the soil. Application of organic manures will not only provide nutrients to the seedlings but also improve the soil properties. Adoption of proper management of seedlings and availability of sufficient sunlight is essential for early bearing and high yield. Growing coconut in home gardens will help to supply nuts for consumption. It will also reduce the financial burden and increase the production of coconut in our country.

### Management of pest and diseases in early stages

There are different types of pests viz rhinoceros beetle, red palm weevil, mealy bugs etc attacking the young coconut seedlings in nursery and also during the initial months of establishment. Adult Rhinoceros beetle bores into the collar region of the coconut seedlings, eats away the central core of the spindle leading to irrecoverable loss. The characteristic symptom of the attack is presence of geometric V shaped cuts on the leaflets. Integrated pest management measures including use of beetle hooks, application of pesticide mixed with 10g neem cake/marotti cake with sand is recommended for application in collar region of seedlings. Red palm weevil is another severe pest attacking seedlings which are retained for longer periods in nurseries. All stages of the pest attack leads to toppling of the entire seedling. Curative treatment with imidacloprid (0.025%) is very effective in controlling the pest.

Mealybugs are other pests attacking the young coconut seedlings. This pest suck the sap from leaves continuously leading the plants to become weaker. The control of the pest has to be initiated in the initial stage of attack itself. The natural enemies of the pests are to be conserved. Destruction of the heavily infested leave parts is a healthy way for controlling the pest attack. Based on the severity of infestation, application of neem oil 0.5% can be adopted.

Bud rot is a disease affecting the young seedlings even in nursery. This fungal disease has symptoms like yellowing and withering of the spindle leaf followed by drying and the death of the seedlings. The spindle of the affected seedlings will easily come out with a gentle pull and rotting can be seen in the lower end of the detached leaf. The affected portion emits a foul smell. The affected seedlings are to be removed and the surrounding seedlings should be treated with 1% Bordeaux mixture. Seed nuts should be dipped in Copper oxychloride 0.25%.