

# NURSERY PRACTICES



---

M H L Padmasiri.

---

## Selection of Nursery site

A Land which gets adequate sunlight and has sandy or sandy loam soils with scattered shade should be selected as a nursery site. Clayey soils are not suitable. There should be a source of water close to the nursery site to facilitate irrigation when required,

## Season for laying seednuts

The season for laying seednuts depends on the agroclimatic zone. Only Maha season is suitable for laying seednuts in the dry areas while both Yala and Maha are suitable in other areas.

## Nursery beds

Seednuts are laid in nursery beds. Each bed can accommodate five rows, and the length of the bed can be arranged according to the requirements. This arrangement of nursery beds facilitates irrigation, weed control, application of fertilizer and inspection of seedlings.

Initially, the rows should be marked in the bed. The distance between two rows for seednuts of tall and dwarf variety should be 45 cm and 40 cm respectively. Traditionally, seednuts are laid in a trench of 15-20 cm deep in the row. The seednuts are placed horizontally with a spacing of 15 cm between two adjacent nuts and covered with a thin layer of soil so that the surface of the nut is just visible. The seednuts in any single trench should face the same direction. The seednuts in the adjoining trench should be placed in the opposite direction and should be alternated in position.

Each nursery bed should have five rows as described. A shallow drain should be cut around the nursery bed to remove excess water. It may be useful to turf the sides of the nursery beds to reduce erosion.

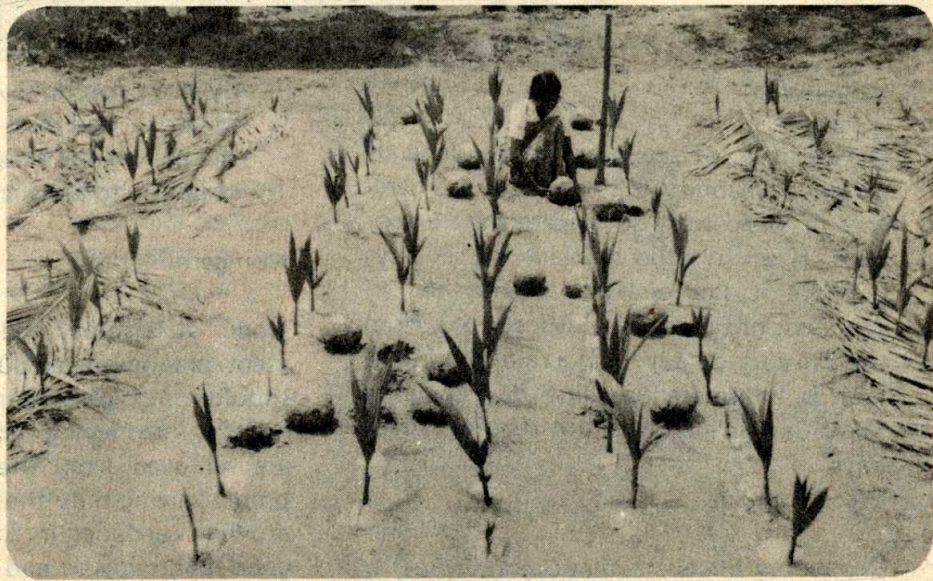
## Management of Nursery beds

### (i) Conservation of soil moisture

A mulch should be used to conserve moisture in the nursery beds. Normally, coconut fronds are used for this purpose. In certain areas weed trash and straw are used, depending on their availability.



^  
Laying Seednuts  
^



Non-germinated nuts  
are removed



Irrigation and Weed  
Control

### Fertilizer application



### (ii) Irrigation

Germination of seednuts greatly depends on the availability of soil moisture. Therefore it is necessary to irrigate the nursery beds. If dry weather prevails for six days or more, it is necessary to irrigate the nursery beds once in three days, starting from the 7th day. A day with a rainfall of 0.25 mm is considered a rainy day. After a rainy day, irrigation is not required for 7 days.

### (iii) Weed Control

Depending on the climatic conditions, it may be necessary to weed the nursery beds once or twice a month.

### (iv) Pest Control

Damage to seednuts from a number of pests, notably termites, is possible. A careful surveillance for pest damage is necessary, and appropriate pesticides should be used to control the pests.

### (v) Crop Rotation

Continuous use of nursery beds will reduce the soil fertility. This can be avoided

by crop rotation. A leguminous crop can be grown and incorporated into the soil at the end of the season to improve the soil structure to enhance moisture retention.

### Non-germinations

Under satisfactory soil, climatic and management practices over 80% of the seednuts laid should have germinated at the end of five months from laying. Non-germinated seednuts are removed from the nursery beds at this point, leaving only the healthy and vigorously growing seedlings in the nursery. Under very good soil, climatic and management, 80% germination could be achieved in less than five months. Under such conditions, non-germinations should be removed once the 80% germination level is reached.

### Fertilizer application.

Fertilizer has to be applied six months after seednuts are laid. The following mixture is recommended for this purpose.

Urea	1½ parts
Muriate of Potash	2 parts
Concentrated - Super Phosphate	1 part
Kieserite	1 part

Fertilizer should be broadcast at the rate of 70 g per seedling and mixed with soil. Soon afterwards, the nursery beds should be irrigated if there is no rain.

#### -- Selection of seedlings

Seedlings should be selected after seven months from laying seednuts. Seedlings are suitable for planting after 7-9 months from laying of seednuts.