GUIDE TO THE PRODUCTION OF PINEAPPLE

Site Selection

Well drained soils rich in organic matter, preferably acid soils, and low in salts are most suitable. Heavy soils or water logged soils should be avoided, mainly because of difficulties in securing proper aeration

Variety

There are several varieties of pineapple but some are recommended for commercial production and canning. The recommended pineapple varieties include

1. Smooth cayenne
2. Sugarloaf
3. MD 2

Planting materials

Pineapple is propagated vegetatively. The following planting materials can be used:

1. **Slips**: these are basal suckers known and located at the base of the fruit. They produce fruit within fourteen to sixteen months after planting and are the preferred type of planting materials
2. **Suckers:** side shoots or suckers are shoots produced above ground level and when used, bear fruit within eighteen to twenty months after planting.
3. **Crowns:** crowns are situated at the apex of the fruit. This type of planting material is not commonly used by farmers, and even when used, they take as long as twenty –four months after planting to produce fruits.
4. Ratoon suckers- are shoots produced from ground level and when used, will produce fruit in twelve to fourteen months after planting.

Nursery operations

This involves the production of pineapple suckers for the orchard establishment. The technique used involves a 100g weight of pineapple crown which is split longitudinally into four equal parts using a very sharp knife. The pieces are dipped in a solution of “Benlate” or “bentex” fungicide made up of 5g fungicide in 20 litres of water and air dried over night before planting to prevent rotting.

The split crowns are planted in a 90cm wide bed made of topsoil mixed with weathered sawdust in a 1:1 v/v ratio and watered twice a week after planting in the dry season. As from six weeks after planting small suckers sprout and emerge on the nursery bed. These sprouts are removed (milked) and transferred to another bed, known as the nursery bed.

Baby suckers are transplanted in to nursery beds of 1m wide and of any convenient length 15cm apart. The rate of growth can be accelerated by incorporating organic manure into the nursery bed. Alternatively, apply Nitrogen (Urea) fertilizer to boost the growth at three weeks after planting.

Visual observation can be used to determine suitable sites for pineapple production. For example, a piece of land with preponderance of *Chromolaena odorata* is preferred to a predominantly grassy field. Soil should be well drained. Avoid water logged area, pH range of 4.5-5.5 can support the crop. Having obtained planting materials, sorting of planting materials into sizes is very important. Criteria also used for sorting include, types, number, degree of disease infestation or deterioration etc.

Planting and Orchard Establishment

Field establishment starts with marking out, getting the baseline at a convenient point, the line which should be able to run across the field intercepting each other at a right angle. This is followed by the spacing and the planting pattern.

Sketch of orchard layout (Double Row Spacing)

50cm

X-----X-----X-----X-----X-----X-----X

X-----X-----X-----X-----X-----X-----X

100cm

X-----X-----X-----X-----X-----X-----X

X-----X-----X-----X-----X-----X-----X

Be adopted which must have been determined giving consideration to cultural practices to be adopted and the end product. There are different spacing and planting pattern. Pineapple can be closely or widely spaced depending on the size of fruits desired. A two-row spacing (50x50x100cm) is recommended by the institute for better performance of plants and easier field operations.

Orchard Management and Cultural Practices

Mulching and Weed control

Pineapple plants are slow growing and do not cover the ground well enough to suppress weed. Weeds compete with the pineapple plan not only for nutrient but also for water and sunlight and can cause considerable reduction in the growth of pineapple, resulting in poor crop yields. Weeds can be controlled manually by using cutlasses, hoes etc or with chemicals (herbicides) like diuron, ementryne at 2-3 litres /ha. Mulching can be done to reduce the cost of weeding and also loss of nutrients through leaching. Grass mulch could be used in some but the use of plastic mulch technology has been adopted and developed in NIHORT.

Fertilizer Application

The types and quality of fertilizer applied should be related to the nutrient status of the soil. A blanket recommendation of 300-350kg of NPK 20:10:10 or NPK 15:15:15. May be applied in three split doses during the rainy season.

Harvesting

Harvesting takes up to 15-18 months from planting 4-5 months after flower induction. Harvesting of pineapple fruits depend on whether the fruits are for domestic or distant / export market. Fully ripe fruits are suitable for local market but mature green fruits can be exported abroad. Average crop yield in pineapple is 80 tons / ha with proper fertilization and good management. Yield can be increased to 90-100 tons/ha.

NOTE: Feasibility report on Pineapple production is available on request.

For further information, contact

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