

Crop Protection

The control of weeds during early crop establishment is essential. Weeds can be controlled by using pre-emergence herbicide, mulch or be removed manually.


Mealybug, nematode and rats are known to attack pineapple. Control measures include Basudin, rat baits and nematicide (Furadan) which should be added to the soil.

Harvesting

Depending on the size, age and type of the planting material, harvesting can begin at 18 months after planting. Thereafter, each plant will produce on average one fruit per year. Mature fruits, three-quarters green from the top should be reaped over a period of time. Several growth hormones, smoke, ethylene and acetylene can be used to enhance out of season production. Under good conditions the crop should produce between 25 and 50 tonnes/ hectare (10 and 20 tons/ acre) from a pure stand cultivation.



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Best Bet Technology



Pineapple Barriers



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Morant Yallahs Agricultural
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Pineapple Barriers

Many measures have been proposed to minimize soil erosion problems on sloping land. The use of vegetative/live barriers grown on the contour is receiving much attention as a system for the management of hillsides. Barriers which bring financial returns in addition to soil conservation benefits are more acceptable to farmers. These barriers are cared for in the normal manner as other crops. In St. Thomas pineapple barriers are being used by farmers under the Morant Yallahs Agricultural Development Project (MYADP).

Pineapple Uses

Pineapple is mainly used as a fresh fruit. Commercial production is normally geared towards processing. The main products are canned fruit slices and chunks, juices, jams, and dried candied pineapples. By products such as vinegar, citric acid, enzymes and wine are also produced. The pineapple plant and fruit are also used as ornamentals.

Pineapple Varieties

Several varieties of pineapple are grown in Jamaica. However, only a few are grown commercially. The main varieties are Sugar Loaf, Red Spanish, Ripley and Smooth Cayenne. Smooth Cayenne is currently being reintroduced to Jamaica. It is the variety most suited to commercial production as the spines are minimal, is a high producer, has good flavour, carries a longer shelf life and has an ideal shape for mechanical processing. The Smooth Cayenne is, however, highly susceptible to Mealy Bug and nematode attacks.

Optimum Requirements

Pineapple is grown all over Jamaica from close to sea level to the foothills of the Blue Mountains. The optimum elevation is between 1000 and 1500 metres (3300-5000 feet) above sea level.

Rainfall should be between 500 and 2500 mm/ year (20-100 ins) and be well distributed. The crop is grown on a wide range of soils in Jamaica although sandy loams which are acid (pH 4-6) are preferred.

Fertilizer Use

Many small farmers do not use commercial fertilizers on pineapple. The crop will produce and grow without added fertilizer, but for optimum production the soil nutrient has to be managed.

The following fertilizer rates are generally recommended for pineapple production: 620kg/ hectare (546 lbs/ acre) of 23-10-20 or 860 kg/ hectare (757 lbs/ acre) of 16-5-19 or 16-9-18. This is approximately 28 g (1 oz) per plant or one condensed milk tin per 8 plants.

For organic producers various types of manure and compost may be applied between 2 and 5 tonnes/ hectare (1-2.5 tons/ acre).

Planting Material

Several materials have been used for propagating pineapples.

- Suckers* New plantlets which arise from buds at ground level (most desirable to plant)
- Slips* New plantlets produced on the fruit stalk just below at the base of the fruit
- Crowns* Top of fruits (most uniform planting material)
- Stump* The remainder of the plant after the fruit has been harvested

The planting material should be stripped of excess dry, dead leaves and rotting tissue to expose young roots. The cut end or base should be turned upwards and allowed to harden and dry for a few days before planting. At planting the cut end should be dipped in a mixture of fungicide (Bravo/ Mancozeb) and insecticide (Basudin) to reduce infection. Plants should be allowed to drain before planting.



Rapid Multiplication

Various methods of rapid propagation have been used. These include tissue culture and other micro-propagation using stem and shoot subdivisions. Treating the plant with chemicals can also result in the formation of many new plants.

Management Husbandry

Prior to crop establishment, the land should be cleared of bushes. Suckers can be planted using a minimum tillage system. The farmer should fork the strip across the contour using the A-frame as a guide. Mulch is recommended between rows and plants to control weed and reduce soil loss.

The plants are placed 40-60 cm (16-24 inches) within double or triple rows, which are 50 cm (20 inches) apart. Suckers should be planted in a V-shape pattern, 7 cm (3 inches) deep. The spacing between the barriers will depend on the slope, the crop and the financial resources of the farmer. For coffee production, the barriers can be placed after one or two rows either at 3 m or 6 m (10-20 ft.) intervals. This spacing of barriers is also suitable for cash crop.