PINEAPPLE

Designed By:

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Categories

Pineapples are divided into four categories: smooth cayenne, Queen, Abacaxi and Red Spanish.

Soil Requirement.

Pineapples grow best on loose soil, light, well aerated, permeable and rich in humus. They prefer when soils are slightly acidic soil, with PH between 4.5 and 6.0. A flat land is most suitable or when the slope is slight.

Climatic conditions

Annual rainfall between 1,200 and 1,500 mm evenly spread throughout the year boosts growth.
Average temperature of 25°C is desired and exposure to sunlight (minimum light) 1,500 hours. To achieve this, avoid the presence of large trees in the planting area.

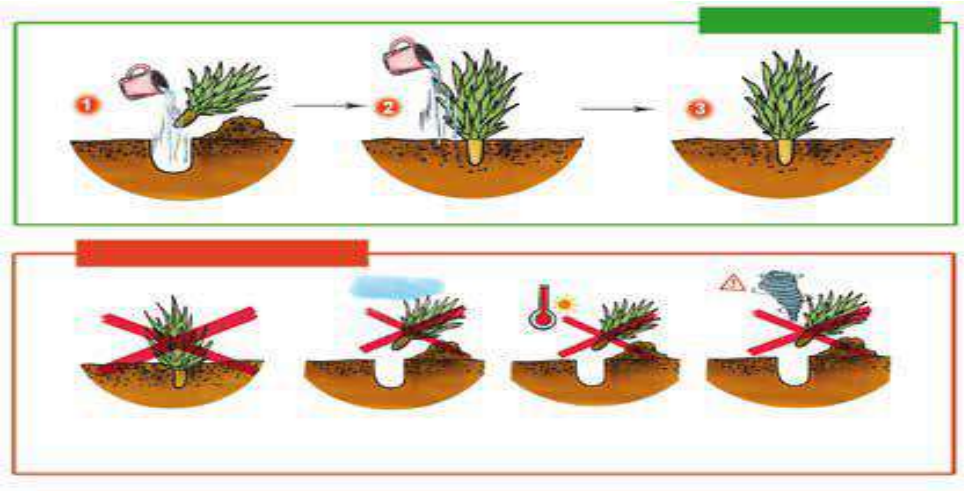
Climatic effects on plant.

Low Temperature might result in fall in acidity and gradual decrease of the coloring of the skin of the fruit.

Prolonged lack of water leads the color of the fruit to go from pale green to yellow and then red moreover low sunlight makes the fruit look dull.

Planting

Distribute the graded propagules on the plot.
• Make holes (8-10 cm deep) with a machete or dibber at the places indicated.
• Plant the propagules in slightly wet soil, fill in the hole, and then lightly tamp down the earth to ensure good contact between the stem and the soil.



Fertilization

The pineapple needs quite a lot of fertilizing. The production of one fruit requires 4 g of nitrogen (N), 112 g of phosphorus (P) in the form of phosphorus pentoxide (P2O5), 2-3 g of magnesium (Mg) in the form of magnesium oxide (MgO), and 10 g of potassium (K) in the form of potassium oxide (K2O): these are the theoretical needs for a pineapple planted using TFI. Fertilization must be calculated in accordance with soil analyses (mineral and PH content) and the local availability of fertilizers in formulation and form.

Weed control

Pineapple plants are slow growing and do not cover the ground well enough to suppress weeds from developing. Weeds compete with the pineapple plant not only for nutrients, but also for water and sunlight and can cause considerable reduction in the growth of the pineapple, resulting in poor crop yields.

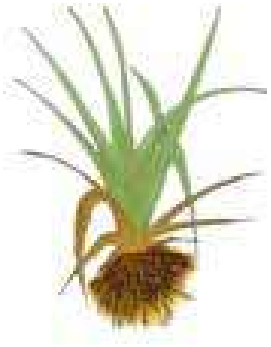
Weeds can be controlled manually by cutlassing, hoeing etc., mechanically with tractor drawn implements, or by use of chemicals. In practice, however, it is a combination of these operations that is usually conducted.

Where chemical control is preferred, they are usually applied at three different stages of the plant cycle. These are: For chemical treatment, apply herbicides at three stages of the cycle: During the preparation of the soil: between two tillings, spray a contact herbicide with an active material (Glyphosate, triclopyr, glufosinateammonium or diuron), using a backpack sprayer or a tractor-towed sprayer.

Active material	Dose of active material in kg/ha	Volume of mixture in l/ha
Glyphosate 1,5	3 800	1,000
Triclopyr 2	3 800	1,000
Glufosinate	ammonium 3	4 800
Diuron 1,7	2,2 400	1,000

Diseases

Nematodes



Symptoms

- Small plant size.
- Leaves will become red and drv.

Treatment

- Use clean and healthy propagules.
- Leave the land uncultivated for at least 6 months, then cultivate using the recommended doses of fertilizer.

Chemical treatment

- Application of nematicides.

Fungus (Thielaviopsis)

Symptoms

- Soft rot of the fruits.
- Black rot on the stem of the propagule.
- Leaf rot.

Treatment

- Make sure that the base of the propagule is completely closed.
- Avoid impacts on the fruit during harvesting and packing.
- Ensure cleanliness of the harvesting and packing locations.
- Treatment carried out against Phytophtora with fosetyl-aluminium 80 g/kg (Aliette 80 WG) at a ratio of 7.5 kg/ha by spraying the mixture on all the leaves.

Fungus (Fusarium sp.)

Symptoms

- Black spot disease on the fruits.

Treatment

Sensitivity to black spot is increased by a wet period with little sunshine at the point when the inflorescence emerges, and by a sunny and dry period near to the harvest. Variations in the intensity of black spot are unpredictable and can be very severe. Bearing in mind the rapid development of black spot as the fruits ripen, bring the cutting forward to limit this problem. Regular observation of the fruits between the TFI interval and harvest make it possible to change the cutting date and preserve the quality of the taste of the fruit.

Heart Rot

Symptoms

- Yellowing of the young leaves of the heart of the plants;
- Young leaves fall off easily and display a rotten base which gives off an unpleasant smell.

Treatment

Use of fungicide at various stages of the plant's development:

- During the soaking of the propagules.
- During vegetation: 2 days after planting, or 1 week after the TFI, plan a treatment using the active material fosetyl-aluminium 80 g/ kg (Aliette 80 WG) at a ratio of 7.5 kg/ha by spraying the mixture onto the heart of the young plants.

Wilt

Symptoms

- Violent, swift and usually irreversible withering,
- Attacking isolated or neighboring plants, and the curling of the edges of the leaves.

Treatment

Preventive actions:

- Burn and plough in the plant material of the previous crop.
- Only harvest the propagules of healthy plants.
- Destroy all plants showing symptoms of wilt.
- Destroy plant with large colonies of cochineals or ants.

Chemical actions

- . Spray with insecticides containing chlorpyriphos-ethyl (Dursban 4E) at a ratio of 1-1.5 l/ha), cypermethrin 25 g/l (Cythrine 25 EC) at 2 l/ha, imidacloprid 20 g/l and cypermethrin 80 g/l (Cofresh P 100 EC) at 1.5 l/ha.
- Treat the propagule plots regularly with insecticide using a backpack sprayer.
- Soak the propagules in an insecticide solution.
- Apply insecticide in the field every 2 months (particularly in the dry season).
- If ethephon is used to improve the colour of the fruit, add an insecticide with a pyrethroid base (low endurance), for example cypermethrin 50 g/l (Cigogne 50 EC), to the ethephon, and then brush the fruit to prevent cochineals appearing at the base.

Symphylans

Symptoms

These are small ‘centipedes’ that live in the soil and feed on the roots of the pineapple.

- You can see an even development in the vegetation, with strands of poor growth with a moth-eaten appearance alongside well developed green plants.
- A ‘witch’s broom’ deformation appears in the roots.

Treatment

- Treatments against symphylans involve the same products as those against nematodes, but using a double dose.

Chemical treatment

- Application of symphylicides.

Harvesting

The Pineapple is hand harvested with the pickers being directed as to the stage or stages of ripeness required. It is harvested by breaking or cutting the stalk a few centimeters below the fruit.
The harvested fruit is packed either in the field or at a central packing shed. While in the field it should be placed in shaded conditions. From the collection in the field and from field to Pack house, polyethylene sacks or bags should not be used for packing and transport, as this will cause a high level of mechanical damage and eventual losses in quality.