



National Agricultural Research Institute

Good Agricultural Practice for Bananas



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INTRODUCTION

Bananas are the world's favourite tropical fruit. Bananas are a major food crop in many parts of Papua New Guinea (PNG), ranking second in importance after sweetpotato. PNG is unique in that it is probably the only country in the world that diploid bananas remain agriculturally significant. In recent times, these ancestral cultivars have generally been replaced by more vigorous and disease tolerant triploid varieties.

Good Agricultural Practices (GAP) *"addresses environmental, economic and social sustainability for on-farm processes, and result in safe and quality food and non-food agricultural products"*.

GAP are particularly important in the banana industry, not only for sustainability of production and minimisation of environmental impact, but also to Ensure that harvesting, packaging and transport activities are conducted in hygienic conditions in order to deliver safe and good quality fruit to consumers.

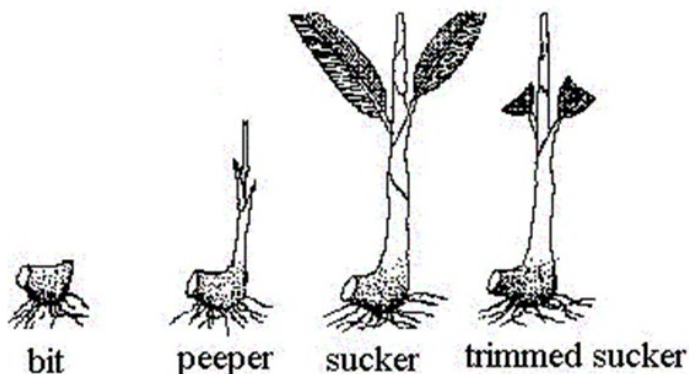


Planting material

Vegetative planting material

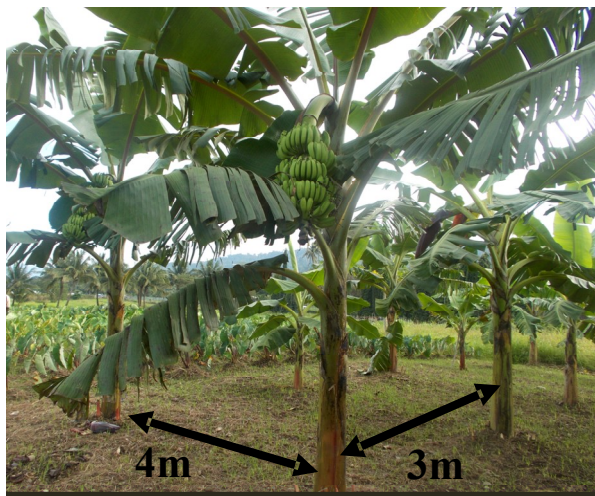
Vegetative planting material consists of pieces of plant rhizomes (corms) called bits, that carry mature eyes or buds, or small corms of advanced suckers (offshoot of parent plant).

Use **sword leaf suckers** which have better growth potential in preference to broad leaf suckers, and avoid water suckers.



Planting

Select site for planting. Planting space for banana is 4m between rows and 3m between plants for better yield. Width and depth of planting hole is 30cm x 30cm. Bananas take 8-9 months before fruiting after planting in the field.



Weed control

Weeds compete for nutrients, water and light, harbour pests and make it more difficult to detect pests and diseases. The main method of weed control in bigger plantations is use of herbicides but it is recommended that this be combined with mulching and ground covers where possible.

Bananas are suckering plants. But producing too many suckers will reduce yields. Just go for a leader and two followers or two strong suckers - and remove the rest.

Remove any dead material and when a stem has finished fruiting it will die. Cut it out and remove the dead leaves regularly.

Desuckering

Desuckering is the practice of removing unwanted suckers from the mother plant leaving the sucker that you wish to become the next cropping plant.

Remove all suckers until the parent plant is about to bunch, and then select the next sucker alongside the parent.



One of two methods may be used in desuckering.

1. Cut unwanted suckers off at ground level
2. Use a gouging tool (a bar or desuckering shovel) to destroy the sucker.

Debelling

This is commonly done to increase bunch weight and to remove feeding sites for pests and insects. The bell is removed to within 100 mm of the lowest hand of fruit after the last hand has set. Bells can be conveniently removed when bunch trimming is done. -



Cut the bell after the last hand

Bunch support

Support may be required to prevent the bunched plant from toppling during wet and/or windy conditions. Cavendish varieties (Mons Mari and Williams) will require propping or tying.

Bunch trimming

Bunch trimming is done to remove smaller fruit from the bottom of the bunch. The practice helps maximise the production of larger and marketable fruit.

Harvesting and dehanding

Assessing bunch maturity Bananas are harvested in a mature green condition. The fruit should be fully formed and well filled, but with some of the angular appearance still visible.

Harvesting

Harvesting is best done by teams of two people. One person cuts and the other carries. Banana bunches are harvested by nicking the pseudostem at about head height to allow the bunch to fall slowly to the carrier's shoulder.



Dehanding

Fruit is dehanding using a thin bladed knife, a curved cutter or a modified jigsaw. Any obviously damaged or undersized fingers or hands are removed. Hands of fruit are washed in a water trough or rinsed on a packing wheel to avoid sap stain and to remove dirt.

Grading & packing

Particular size and quality gradings exist for marketing in different places depending upon variety and specific packing methods are used for the various size grades of each variety.

These general guides are available for use by growers, packers and their customers (agents and retailers) to accurately describe the fruit they have for sale.



NOTE:

The fruit bunches are heavy so be careful, and when ever you're working around banana plants, wear old clothes because the sap will stain permanently.

With some effort and regular attention you can share the pleasure of growing your own bananas.

Copies of this leaflet can be obtained from:

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