

## Disease Control

Disease	Product Recommended & Cultural Control	Application Rate
Fusarium Wilt	Carbendazim Rizolex	10 mls. in 4.5 L of water 30 grams in 4.5 L of water
	Disease can be avoided by practicing 2 - year rotations out of sweet potatoes and by using clean planting materials	
Soft Rot	Banrot, Rizolex	10 - 30 grams in 4.5 L of water
	Coback	15 - 30 grams in 4.5 L of water
Black Rot	Take measures to avoid spreading soil bacteria from infested to non infested soils. Cultivating equipment should be disinfested before use on non - infested fields.	
	Rizolex, Manzeb	10 - 30 grams in 4.5 L of water
Root - Not Nematode	Use disease free planting materials, practice crop rotation and good field sanitation	
	Vydate L	10 - 25 ml in 4.5 L of water
	Practice good farm sanitation, crop rotation and flood fallow	

1 gallon is equivalent to 4.5 L

## Harvesting & Post-Harvest Care

Harvesting varies for 3 - 6 months. Maturity is also determined by examining the latex exuded "ooze" from a cut tuber. Immature tubers give a black exudate, while that of a mature tuber is white.

Harvesting is usually done manually using a fork to lift the tubers from the soil. Care should be taken not to damage the tubers during the process. Avoid transporting in bags since this can also damage the tubers.

Harvested tubers must be washed in a 100 milligrams of bleach in one liter of water and allowed to dry. Curing is also recommended. This involves storing the tubers at room temperature for 3 - 5 days, allowing the wounds to heal and toughen the skin.



### Estimated Yield

With good care and favorable weather conditions, farmers can obtain yields of mature sweet potatoes at a rate of 17000 - 20000 pounds per acre.



Promotion of Regional Opportunities for Produce through Enterprises and Linkages (PROPEL)



# Growing Sweet Potatoes in Guyana



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The Promotion of Regional Opportunities for Produce through Enterprises and Linkages (PROPEL) project is implemented by World University Service of Canada (WUSC) with the financial support of donors and from the Government of Canada through Global Affairs Canada(GAC).

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## Introduction

Sweet Potato is grown throughout the tropics for its edible tubers. Guyana is one of the tropical countries in which this crop is cultivated. It is mainly used in its primary state boiled, fried, baked or mixed with other root crops to form composite meals. In processed form, the tubers of sweet potato can be prepared in many ways for consumption such as; canned, frozen, dehydrated or made into flour and starch.

Several varieties of sweet potato are grown in Guyana. They are: Black Rock, Strong Man and Viola. The tubers are an excellent source of carbohydrates and vitamin A. The yellow-fleshed varieties contain more vitamin A than the white-fleshed ones.

## Cultivation Requirements

Sweet potato requires soils with a pH of 5.6 - 6.6. High quality tubers are best produced on fertile, well drained, sandy loams. On flat land, mechanical preparation is done; ploughing, rotovating and ridging. Soil depth should be 12 inches to accommodate the sweet potato tubers. Sweet potatoes cannot withstand waterlogged conditions, there must be adequate drainage.

Crops grown in heavy clay loams may produce irregular shaped tubers. They are sensitive to drought at tuber initiation stage (50-60 days after planting) and should be well irrigated during this period.

## Crop Establishment

Sweet potatoes are propagated vegetatively by stem cuttings called slips. Cuttings should be 20 - 45cm (8 - 18 ins.) long and selected from mature, insect and disease free plants. In order to control pests during the initial stages of growth, planting material should be treated by soaking in an insecticidal solution for approximately 10 minutes. Admire/Admare 2 F at the rate of 1 ml/L water or Vydate L at a rate of 2 ml/L of water are recommended. The apical or new growth cuttings should be used to plant, this gives better growth than middle or basal portions. Apical cuttings are also less likely to have pests than the older stem cuttings.

Planting is usually done at the top of the ridge. Ridges should be 75 - 90 cm (2.5 to 3 ft.) apart and 30 - 40 cm high. When planting place stem cutting at an angle, 30 cm (1 ft.) between plants, with half of its length placed in the ground.



## Fertilizing

Addition of fertilizer is usually necessary for best production of high quality tubers. The best suited soils are sandy, which are normally of low or moderate fertility.

High nitrogen levels can lead to excessive vine growth and poor tuber development. High levels of potash have been reported to give good results, by aiding in tuber development and shape.

As a general rule, before applying fertilizers, the soil should be analyzed to determine the specific types and amounts of fertilizers that are to be used. If a soil analysis is not done the following fertilizer elements may be applied:

Fertilizer Rate of Application  
Urea 168 kg/ha  
TSP 150 kg/ha  
MOP 140 kg/ha

Apply the TSP and MOP to the ridges one or two days before planting. Apply all the urea six weeks after planting, when the vines are turned to prevent formation of small tubes at the nodes (joints) of the stems.

## Turning of Vines

It is customary to turn back the vines from time to time to prevent rooting at the nodes of the plant. This is to ensure a more even crop and fewer smaller tubers.

## Weed Control

The sweet potato vines grow rapidly and effectively compete with weeds. As result, weed control measures are only necessary for the first two months after planting.

## Insect Pest Control

Pest	Chemical & Cultural Control	Application Rate	Pre-Harvest Interval
Sweet Potato Weevil	Diazinon	10 - 30 mls to 4.5 L water to spray once monthly	Discontinue spray 3 - 4 weeks before harvest
Vine Borer	Sevin	15 grams to 4.5 L of water	Discontinue use 7 days before harvest
	Diazinon	10 mls to 4.5 L water. Spray in vicinity of main stem.	Discontinue spray 3 - 4 weeks before harvest
	Crop rotation		
Cricket	Diazinon,Vydate L or Fastac	10 - 25 mls to 4.5 L water sprayed to cultivated area	
	Good land preparation, exposure of area to sunlight and good field sanitation		
White Fly	Admire,Diazinon or Vydate L	10 ml to 4.5 L water	
	Do not plant new crop next to mature ones. Practice good field sanitation.		

1 gallon is equivalent to 4.5 L