

Sweet Potato Information Bulletin and Production Guide (PRODUCTION FOCUS) for SVG Farmers

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Adapted from research done in St. Vincent and the Grenadines, Antigua and Barbuda and Literature Reviews

Site Selection and Preparation: Use fields where sweet potatoes have not been grown over the last two to three years. Well drained sandy loam soils are preferred. Soil pH should be adjusted to about 6.0.

Land Preparation: Plough the land 2 to 3 months before planting. This helps to rot plant debris and reduces nematode and some disease problems. Sweet potato is best grown on **raised beds, ridges or mounds**. Beds/ridges/mounds should be approximately 12 in high and 18 in wide at the base. Space the ridges 3 – 5 ft apart. **For control of the sweet potato white grub (*Phyllophaga sp*), Actara should be applied to the soil 2 weeks before planting. Where soil analysis cannot serve as a guide for fertilizer application, “work” 25.5 g of triple super phosphate into each planting per hole.**

Slip (Cutting) Collection: Slips **12 to 16 in long, with approximately 8 nodes** are collected from the nursery bed or the last established planting. **Always pull the knife up and away from the soil, in order to prevent contamination.** Clean knives frequently by dipping into a solution of bleach and water (1:1). The lower leaves should be cut away as tearing them off may damage the nodes that will eventually produce roots. Cuttings can be left under moist cloth in the shade for a couple of days to promote nodal rooting before planting.

Planting Cuttings: Half of the cutting or 3 to 4 nodes should be buried at a spacing of 1ft between plants. Cuttings need to be watered at or immediately after planting. **Plantings should be scheduled to allow for fortnightly harvests over the desired production period.**

Irrigation: Two types of irrigation systems are recommended, the **Drip and the Mini-sprinkler.**

Application of Fertilizers: Where there is no soil and leaf analysis to guide fertilizer recommendations, farmers can apply **25.5 g Triple Super Phosphate** at planting (incorporated into the holes at planting) and **25.5 g N:P:K (12:12:17)** about 5 weeks after planting.

Weed Control: Allow the prepared ridges to weather for about two weeks after land preparation was completed. Spray growing weeds with glyphosate, thus ensuring a prolonged period of weed control i.e. over three months. **Planting should take place no less than two weeks after the glyphosate was applied.** Weed control after this period should be manual, selective and should be carried out on an “as-per-needs-basis”.

Pest Management: The most important pest of sweet potato in SVG is the **sweet potato white grub (*Phyllophaga sp*).** Actara (active ingredient **Thiamexotham**) was the most effective of the chemicals and biological agents used in the control of the white grub. Actara should be applied to the soil 2 weeks before planting and 2 and 6 weeks after planting. Use the recommended manufacturer’s rate. Actara can also be used to control **Eucepes** another pest of importance. Admire can also be used to control these pests.

Tuber Maturity: Tuber maturity can vary between varieties and root development may be slower in cooler months. Growers need to **monitor the development of tubers** with regular checks of root size after 18 weeks. The colour of the **exudates, black for immature and white for mature tubers,** can also be used as a test of maturity.

Harvesting: Try and avoid damaging tubers during harvest. Transport roots immediately to a cool shed. Avoid lengthy exposure to the sun and skin damage will be less if the roots are kept wet during handling.

Curing: Store at about **85°F with a relative humidity of about 90% for 4 to 6 days.** This must be done immediately after harvest and results in the formation of a wound skin which heals any mechanical damage suffered during harvest. Post-harvest rot infections are also minimized and excessive moisture loss is curtailed, thus preventing shrinking. Curing may also improve the eating quality by increasing sweetness. **During curing ventilation is required. After curing the storage temperature should be reduced to 57 ± 2 degrees at 90% relative humidity.** Most properly cured sweet potato cultivars will keep satisfactorily for 4 to 7 months at this temperature and relative humidity.