



lems, especially from root-knot nematodes, which infect tomatoes, peppers and many root crops. Avoid growing sweet potatoes in areas recently covered with grass, because ground-dwelling grubs and wireworms — often numerous in grass-covered soils — chew holes and grooves into the tubers. Stored sweet potatoes are a favorite of hungry mice, so stash your harvest in a secure location.

## 7. Harvesting and Post-Harvest Management

- You can start digging up the potatoes as soon as they are big enough for a meal. Often, this is 3 to 4 months from when you planted the slips - sweet potatoes are ready to harvest when the leaves and ends of the vines start turning yellow.
- After digging up the potatoes, shake off any excess dirt.
- To store the potatoes for a long time, keeping them at a tempera-

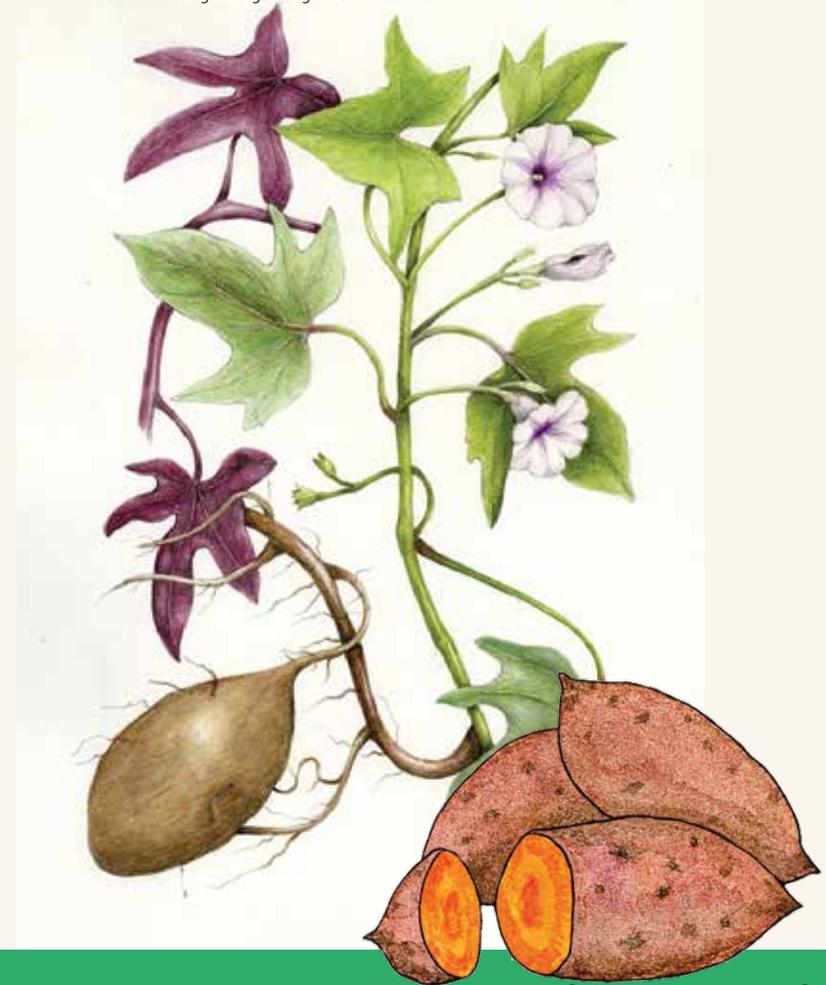
ture range of 12°C - 15°C with high humidity can last for about 6 months.

## 8. Nutrition and Cooking

Sweet potatoes can be baked, boiled, mashed or used in stir-fries. Cooked, mashed sweet potato can be substituted for pumpkin in any recipe, and few desserts are as nutritious as sweet potato pie. In breads and puddings, use cinnamon, nutmeg, cloves or orange to add complexity to sweet potato flavor. In savory dishes, sweet potatoes' flavor is enhanced by a range of spices, including garlic, ginger and curry, and sweet potato salads can carry big handfuls of chopped parsley or cilantro. Thin slices of sweet potato are great for grilling, or you can make sweet potato chips in a hot oven. Don't overlook the new leaves on stem tips, which make excellent cooked greens.

A Collaborative Work of BvAT and The Ecological Organic Agriculture Initiative

BvAT Practical Guide

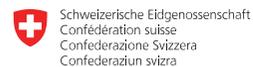


# Sweet Potato growing Guide

**Botanical name:** *Ipomea batatas*

**Common names:** *Viazi vitamu (Swahili); Makwasi (Kamba); Mapwoni (Luhya); Ngwaci (Kikuyu)*

**Module produced with support from:**



Schweizerische Eidgenossenschaft  
Confédération suisse  
Confederazione Svizzera  
Confederaziun svizra

Swiss Agency for Development  
and Cooperation SDC

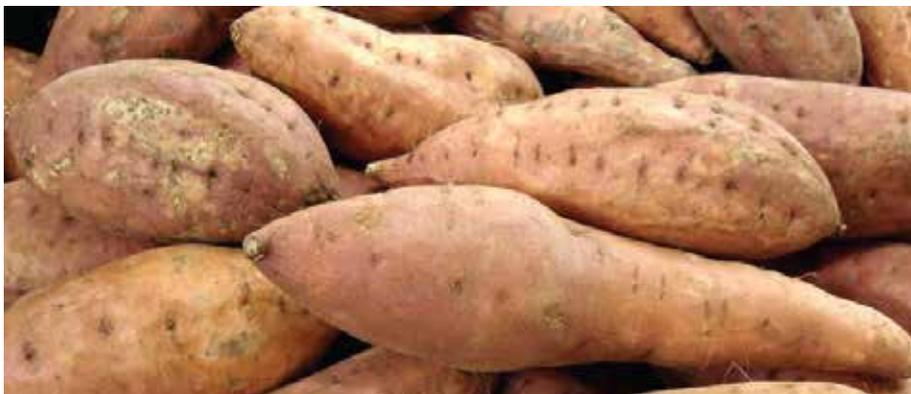


Swedish Society  
for Nature Conservation

This document has been produced with the financial contribution of the Swiss Agency for Development and Cooperation (SDC) and the Swedish Society for Nature Conservation, (SSNC). The views herein shall not necessarily be taken to reflect the official opinion of SSNC or SDC.

Production and Editing of the modules by EOA team  
Dr. David Amudavi, Hudson Wereh, Pauline Mundia and Venancia Wambua

Biovision Africa Trust P. O Box 30772 – 00100 Nairobi [www.biovisionafricatrust.org](http://www.biovisionafricatrust.org)



## 1. Description

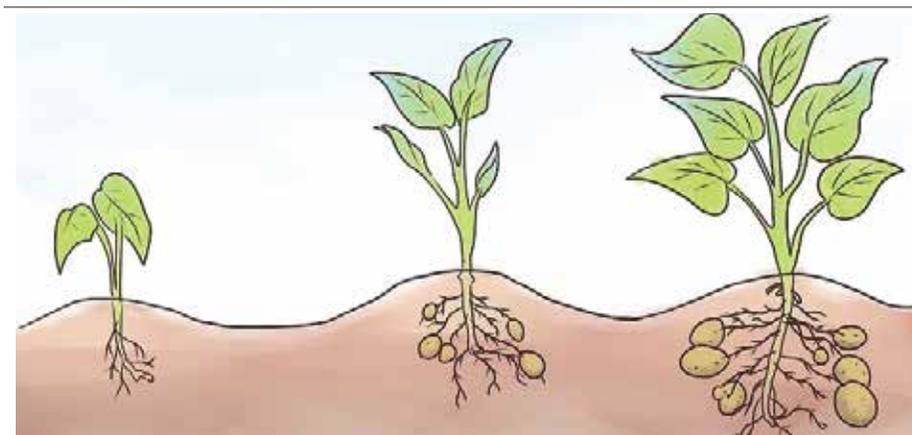
Sweet potatoes belong in the "*Convolvulaceae*," or morning glory family, as is evident by their morning glory-type blossoms. They are productive, delicious and super-nutritious. This crop is a staple mostly in the western parts of Kenya. Sweet potato varieties differ in skin and flesh color and texture, as well as in leaf shape and vine length. The flavor and nutritional qualities of sweet potatoes vary with flesh color: Orange-fleshed sweet potatoes are rich sources of fiber and vitamins A and C. White-fleshed varieties contain less vitamin A but are a good source of minerals and B vitamins. Purple sweet potatoes contain a little vitamin A but are loaded with antioxidants.

## 2. Uses and Benefits

- Orange-fleshed sweet potatoes may be one of nature's unsurpassed sources of beta-carotene. Several recent studies have shown the superior ability of sweet potatoes to raise our blood levels of vitamin A. This benefit may be particularly true for children. In several studies from Africa, sweet potatoes were found to contain between 100-1,600 micrograms (RAE) of vitamin A in every 3.5 ounces—enough, on average, to meet 35% of all vitamin A needs, and in many cases enough to meet over 90% of vitamin A needs (from this single food alone).
- Sweet potatoes are not always orange-fleshed on the inside but can also be a spectacular purple colour. The purple-fleshed sweet potato anthocyanins—primarily peonidins and cyanidins—have important antioxidant properties and anti-inflammatory properties. Particularly when passing through our digestive tract, they may be able to lower the potential health risk posed by heavy metals and oxygen radicals.

## 3. Climatic, Soil and Water Requirements

Because sweet potatoes are of a tropical origin, they adapt well to warm climates and grow best during dry seasons. Sweet potatoes are cold sensitive. The optimum temperature to achieve the best growth of sweet potatoes is between 21 and 29 degrees, although they can tolerate low temperatures as low as 18°C and as high as 30°C. Storage roots are sensitive to changes in soil temperatures, depending on the stage of root development.



## 5. Husbandry

- Side-dress the potatoes 3 to 4 weeks after transplanting with organic fertilizer for higher yields.
- Hoe the beds occasionally to keep weeds down. Remember to reshape the beds with soil or mulch.
- For good harvests, do not prune the vines, because they should be vigorous.
- Remember to keep the potatoes watered. Deep watering in hot, dry periods will help to increase yields,

## 4. Propagation and Planting

Sweet potatoes are grown from rooted stem cuttings called "slips;". Apply compost manure into the well prepared soil before planting. Space rows at least 1m apart; long-vined varieties may need even more space. Place the sweet potato slips diagonally in prepared soil, so that only the top two leaves show at the surface. Water well and frequently for the first several days and be patient. After about two weeks, the plants should be well-rooted and showing sturdy growth.

although if you are planning to store some of the potatoes, do not give the plants extra water late in the season.

## 6. Common Pests & Diseases and their control

Slightly acidic soil conditions help suppress sweet potato diseases, and the plants' lush vine growth naturally smothers many weeds. Rotating sweet potatoes with grains, cowpeas or marigolds helps prevent disease prob-