

## **Sweet Potato Production**

Sweet potato is an important root crop in the north Rift Valley. It provides food in April and May when there is little other food, and can provide vines for animal feed.

### **VARIETIES**

There are many varieties of sweet potato.

**In lower altitude areas** like Aror and Ortum, farmers of Marakwet, West Pokot Districts and KARI scientists found that KSP20 and Sandak varieties do well when planted as a single crop.

**In medium altitude areas** like Kitale where sweet potato is intercropped with maize, Sandak variety is recommended. KSP20 also does well as a monocrop in this region.

Kemblo and KSP20 produce the best vines, especially where farmers look after the crop well.



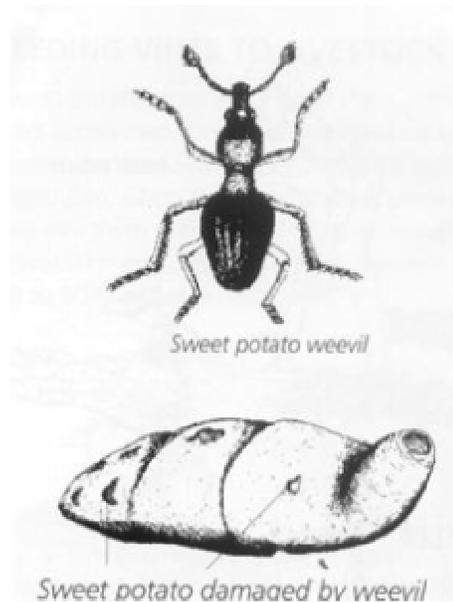
### **HOW TO PLANT**

For sole cropping, prepare the land immediately after the first rains. For intercropping with maize, prepare the land after harvesting beans. Use a jembe to loosen the soil to at least six inches deep and remove all the weeds. Avoid stony soils because they limit tuber expansion. In drier areas, plant when the top 6 inches of soil is wet. In high rainfall areas like Kitale you can plant when the top 3 inches is wet. Cut the vines into 1-2 feet

pieces and bury 2/3 in the wet soil. The leaves should point upwards.

You can plant the vines on the flat ground at 2-3 ft by 1-2 ft spacing or on ridges or mounds of soil at 2-4 ft by 1-2 ft. The mounds or ridges should be between 6 to 18' high. Spacing is not very critical as far as yield is concerned.

Correct spacing for mounds and vines



## **WEEDING**

Keep the land free from weeds until the crop covers the ground. The first weeding should be done 3 weeks after planting. Remove occasional weeds by hand after the crop covers the ground.

## **FERTILIZERS**

Very few farmers apply fertilizers on sweet potato. If the soil is very poor, apply 40 to 200 'debes' per acre of farmyard manure or 1/2 bag of DAR. If your major interest is vine production, apply 1/2 bag of DAP per acre.

## **PESTS**

The most important pest of the crop is the sweet potato weevil. Plant sweet potato only on land where the crop has not been grown in the past 2 years. Earth up the soil around

the crop every 4 to 6 weeks in order to control weevil build up.

## **HARVESTING**

You can harvest KSP20 and Sandak varieties after 3 1/2 months in the low, hot areas like Arror and Sigor and after 4 months in the cooler higher areas like Kitale. You can harvest the tubers at once or you can leave some in the ground for up to 4 months until you need them. Locate the large tubers by cracks in the ground. Loosen the soil around the tuber with a sharp tool like a fork and lift the tuber from the ground. Use a jembe if you want to harvest the whole plot at once.

## **YIELD**

KSP20 and Sandak can produce 6 to 20 t per acre (18,000 - 60,000 tubers). Kembl 0 can produce 6 to 15 t of tubers and 12 to 20 t of vines per acre. Farmers in Arror, Sigor and Kitale areas found that for every shilling spent on labour to plant, weed, earth up and harvest, they could get 7 to 13 shillings profit (1997 prices).

## **FEEDING VINES TO LIVESTOCK**

Sweet potato vines are a good dairy animal feed supplement because they have a high protein content (10 to 15%) and are easily digestible. Chop the vines in small pieces and mix them with Napier grass or maize stover. The mixture should have between 20 to 50% sweet potato vines.

Compiled by

VM Kega, WK Malinga, A Blocland

EA Wekesa, W Mwinga, JR Onyango and P Chege

KARI Headquarters Library

resource.center@kari.org

KARI/MTWAPA po Box 16 Mtwapa