

Vine harvesting

- Harvesting for further multiplication should be done 2-3 months after planting
- Vines are cut 10-15 cm above the ground
- Second harvesting is done at 1-2 months if beds are well maintained.

Management after vine harvesting

- Fertilize the ratoon crop with urea at a rate of 13 gm per m² or use manure
- Control weeds

The rapid multiplication technique should be widely embraced by sweet potato farmers especially during times of scarcity of planting materials such as after a long dry spell. This will ensure timely availability of planting material at the onset of the rains. It also alleviates the problem of transporting bulky planting materials over long distances.



Orange Flesh sweet potato Vital in conferring vitamin A for Control of malnutrition



Sweet potato for food and income



NARO

**National Agricultural
Research Organization**



SWEET POTATO RAPID SEED MULTIPLICATION



**Nabuin Zonal Agricultural Research
and Development Institute
(Nabuin ZARDI)**

P.O Box 132 Moroto

Tel: +256 454660693, +256 0454463663 ,

Fax: 0454463507, Email: naronabuinzardi@yahoo.com,

www.naronabuinzardi.go.ug, www.naro.go.ug

SWEET POTATO RAPID SEED MULTIPLICATION

Lack of planting material is a major constraint to sweet potato production. This is normally experienced immediately after prolonged dry spell when all the sweet potato has been harvested and the vines have dried. It is a common practice for farmers to use cuttings from root sprouts from the previous season's crop for the next planting. This practice is risky in that farmers normally cut diseased and insect infested materials. It also leads to a delay in planting the next crop. Therefore, it is important that farmers adopt the Rapid Multiplication Technique.

What is rapid multiplication?

Rapid Multiplication is a farmer friendly technique which can be adopted to rapidly increase planting materials which may be in short supply. This ensures timely planting of healthy and insect free materials during the following season.

Objectives of Rapid Multiplication

- To overcome the problem of low multiplication rate of sweet potato
- To ensure availability of planting material at the onset of the rains.
- To rapidly increase material that is in short supply.

Principles of Rapid Multiplication

- Each auxiliary bud (eye) on the stem (vine) can develop into a shoot
- The whole vine is utilized
- Only healthy planting materials are produced

Rapid Multiplication Technique

- Choose a variety of your choice.
- Select healthy (disease and pest free) vines preferably from 2-3 months old crop.
- Remove all leaves except the young ones at the apex.
- Cut vines into pieces of between 2-3 nodes depending on portion and age of the vine.



Potato vines in multiplication site

Selection of site for rapid multiplication nursery.

- Should have well drained, easy to work, fertile soils
- Should be near a reliable water source
- Should not have hosted sweet potato for the past 4 seasons
- Should be at least 50 meters away from an old sweet potato crop

Planting mini vine cuttings

- Prepare nursery bed before cuttings are made
- The bed should be 1.2M wide , 15-20cm high and 10-20 M long
- Allow 50 cm between beds to ease movement while watering
- Apply manure at a rate of 2.5 kg per M² or NPK (17:17:17) 42g per M to ² enhance plant growth
- Water beds lightly before planting
- Spacing : 10cm between plants and 20 cm between rows
- Plant deep enough to cover at least ¾ of the mini cutting. (1-2 nodes buried)
- Plant while nodes are facing upwards
- Water immediately after planting
- Place label against each bed- stating the variety and date of planting

Nursery maintenance

- Continue applying water twice a day (i.e morning and evening) until when the plantlets are well established
- You may put temporary shelter over the bed if it's too dry but this should be removed immediately after establishment
- Remove weeds by hand
- Rogue out diseased plants.

Sprouting and establishment

Under proper management this takes 4-7 days