### 3. Filling the silo:

In a standing position, fold the top half of the tubing over the sides of the lower part. Fill the tubing a little at a time with the chopped/mixed material from (2) above. Every after adding about 25 kg step over the material to compact before adding more. Take care not to tear the polythene tube.



Fill until about one quarter of a meter is left. Tie off the top using sisal twine. Place bricks on top of the silo to aid further compaction during fermentation. If a plastic drum is used it should be filled up to the brim (no space should be left between the material and the cover of the drum).

Leave the material to stand in a rat free area. Silage is ready to be fed after a minimum of 30 days of storage.



### **Qualities of good SPV silage:**

Silage of good quality has(i) Yellowish green color.(ii) Sweet smell.(iii) Firm texture.Poor quality silage has a bad ammonia smell.

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to overcome poverty



RESEARCH PROGRAM ON Roots, Tubers and Bananas

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# How to Make Sweetpotato Silage

# What is sweetpotato vines silage?

This is a nutritious livestock feed consisting of fresh sweetpotato vines (SPV) preserved in an air-tight container. The silage is made by fermenting the SPV in the absence of air. It can keep for more than six months without spoilage. It is advisable to save and feed silage during periods of feed scarcity.

# To make 100 kgs of silage you require:

- a. 90 kgs fresh vines
- b. 10 kgs of maize bran
- c. If unmarketable roots are available, mix 75 kgs vines with 15 kgs roots
- d. 1.5 metres of polythene tubing (600-800 gauge).
- e. 2 metres of sisal twine (divide this into two).
- f. Labour : one person.

## 1. Making a tube silo:

The container in which the silage is kept is called a silo. A simple plastic tube container (tube silo) made in such a way that it can be closed off to exclude air is suited for smallholder farm conditions. A 200 kg plastic drum can also be used as a silo.



a) First open up the polythene tubing.



- b) On one open end of the tube make pleats(20 cm long) starting from the end towards the centre on each side of the tubing.
- c) Twist the pleats together and tie off with the string.



d) Turn the tubing inside out so that the tied knot is on the inside.



## 2. Preparing the material for ensiling:

- a. Chop the sweetpotato vines to be ensiled into pieces of about 2-2.5 cm length.
- b. Chop the roots that you may want to add to be added into small pieces too.
- c. One can either use a panga or a chopper.



d. Spread out the chopped material and let it wilt for 4-6 hours.



e. Uniformly sprinkle 10 kg of maize bran (ferment starter) over the chopped material.

