

Silage Making using plastic tubes

Information is taken from flyer by USAID and Land O'Lakes International Development.

Introductory remarks

Surplus green forage such as Napier grass, maize trimmings or grass should be conserved for use during the dry seasons. Maize forage can also be grown specifically for silage. There are many methods of making silage but use of plastic tubes is one of those suitable for smallholder dairy farmers. The following steps should be followed when making silage using plastic tubes.



Step 1

Chop the forage to lengths of about 1 inc (2.5cms) using a panga or chaff-cutter.

Spread a polythene sheet, chandarua or canvas onto a flat surface and place 50-70 kg of the chopped material (about one ordinary bag on it. Spread the material into a thin layer



Step 2

Dilute 1 litre of molasses (about 1kg Kasuku tin full) with 1 - 3 litres of water (enough water to spread the 1 litre molasses onto the 50 - 70 kg of chopped forage.

Step 3 (pictured above)

Sprinkle the diluted molasses (preferably in a watering can) onto the chopped forage as evenly as possible. Turn/mix the forage repeatedly to ensure an even spread.



Step 4

Tie one end of a 2.5m long plastic tubing (1.5m width, 1000 gauge) to make a large "plastic bag".

Place the 50 -70kg of forage already mixed with molasses into the "plastic bag" and compact as much as possible.



Step 5

Repeat steps 1 - 3 twice, each time compacting thoroughly after adding the forage into the "plastic bag".



Step 6

Tie the top of the "plastic bag" tightly ensuring as little air as possible remains above the forage - molasses mixture.

Step 7

Store away from direct sunlight or rain. It may be useful to place some weight (rocks/stones) on the tied sack to maintain the compacting.

Notes

- The filled silage bag is very heavy and it is recommended that it is filled at the place of storage. Alternatively, use tubes of 1.5 m length but fill with less material
- You can make as many bags of silage as your forage can allow.
- Only use the silage in times of shortage of green fodder
- Silage is conserved forage and cannot replace concentrates. Therefore, supplement your dairy cows with concentrates when using silage.
- A dairy cow may consume more than 25 kgs of silage per day. Feed at least 2 hours before milking or immediately after milking to

- avoid tainting.
 - Each time after you open a silage bag and remove some silage, expel air from the bag and then tie the remaining silage tightly to avoid spoilage.
 - Plastic tubes are sold per meter and molasses is sold in 20 litre jerrycans. These materials are available in many hard-ware and feed supply shops.
 - The cost of making one tube of silage is estimated at Kshs 500/- and one acre can yield 15 - 20 tubes.
- N.B. Photographs demonstrations at Livestock Breeders Show & Sale events.*