

FEEDING SILAGE – PIT MANAGEMENT

AIM: TO PROVIDE INFORMATION ON BEST MANAGEMENT OF A SILAGE PIT TO AVOID THE SILAGE SPOILING

1. The pit

- To make good silage, you need to ensure the pit is covered **airtight** and made so that **water is not able to enter**.
- Walls must be leak proof, e.g. thick plastic sheeting.
- The silage stack must be **well compacted** to remove all the air and protected with plastic before being covered with soil, or old tyres.
- When covering ensure water will run off and not pool, e.g. make a heap on top (*see photo*) or let the top slope.
- Pits can be lined with concrete to help prevent invasion by termites.
- Smaller/narrower pits can be easier to manage than one large/wide pit.



Pit lined with plastic to prevent water entering



Pit closed, covered with plastic and a soil heap to let water run off



Two narrower concrete pits rather than one wide one

2. Managing a silage pit:

- Only open the pit when you are ready to feed silage to your cattle.
- Once a pit is opened, take care to prevent **air, water, sunlight, soil** or **dirt** from entering the open surface. This can be done by:
 - ✓ Making **narrow pits** (*see page one*)
 - ✓ Making a **straight edge** when cutting/taking out silage . Take silage out from top to bottom each time to minimise the amount of silage exposed to air at the open end of the stack.
 - ✓ **Covering** the open end of the pit with heavy-duty plastic, or sacks. Keep the plastic in close contact with the silage using old tyres or a heavy material on top.
 - ✓ Putting any soil removed from the top of the plastic onto the side of the pit and making sure this **soil does not go inside the pit**.
 - ✓ Only opening the plastic when removing silage. Replace the plastic as soon as you've removed the required amount of silage.
 - ✓ **Keeping animals away** from the pit to ensure they don't step into the pit or damage it.

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Narrow pit



Straight edge at open end of silage pit.



Plastic covering the open end of a pit.



Cow eating maize silage

3. Quality of silage

- Pits can be opened after 6 weeks.
- Good silage **smells slightly sweet** (like wine), has a **light brown colour** and a **slightly sour taste**.
- It should be **slightly moist**, but not too wet.
- Check silage for mould (grey spots) or rotting. **If silage does not look good, do not feed to cows.**
- Silage should **not be hot**. If hot, it's changing into compost! Dig out all hot silage and dispose of it. Use the good, cooler silage quickly.



4. Feeding silage

- A 50 kg bag contains about 20 - 25 kg of non-compacted good green maize silage.
- Feed silage as soon as you remove it from the pit. Take out silage in the morning and evening.

To **avoid wastage**:

- ✓ Feed smaller amounts at first to let the cow to get used to silage;
- ✓ Feed silage in a feeding trough (*see separate fact sheet*);
- Cows may not like silage at first. It's a new taste and texture. If the cow is reluctant to eat, mix the silage with other feeds the cow is used to, e.g. maize bran, *kapenta nsoku*;
- If your cow still doesn't like silage after trying the suggestions above:
 - ✓ **Check the silage is of good quality** (smell, taste, moisture);
 - ✓ Lock the cow in the kraal with no other fodder than maize silage;
 - ✓ Continue giving dairy meal at feeding times;
 - ✓ Don't let the cow graze or feed on maize stovers;
 - ✓ The cow should soon give up and start eating silage.

If you have any concerns, contact your local **Extension Officer**.

The ZDTP is focused on supporting dairy farmers to improve their productivity, milk quality and linkages to urban markets. The views expressed in this publication are those of the implementers of the programme and do not necessarily reflect those of the New Zealand Government. For further information, please contact ZDTP Country Manager Tania Thomson on tania@primeconsultants.net or +260 96 456 4206