

GUIDELINES TO MAIZE SILAGE MAKING (Level 1)

Topic	Training & information Content
2.1	Fodder conservation and storage
2.2	Estimating ideal time of harvesting
2.3	Guideline for silage making
2.4	Fermentation process
2.5	Treatment of straw with Urea
2.6	Making of urea/molasses/mineral lick
2.7	Management of silage pit (feed out)
2.8	Estimating fodder supplies for dry season feeding & planning of feeding management



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1. You will learn about (learning objectives):

- The rights steps for making maize silage:

Identifying the right stage of harvesting, using right machinery for best results and ensuring proper management of pit / clamp before and after feed out.



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2. Making Maize silage

- Maize silage is a way of preserving maize fodder for future use
- The silage provides low cost energy for dairy cows
- If prepared in enough quantity, it helps a farmer to counter seasonality in milk production



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3. Stage of harvesting maize fodder for silage

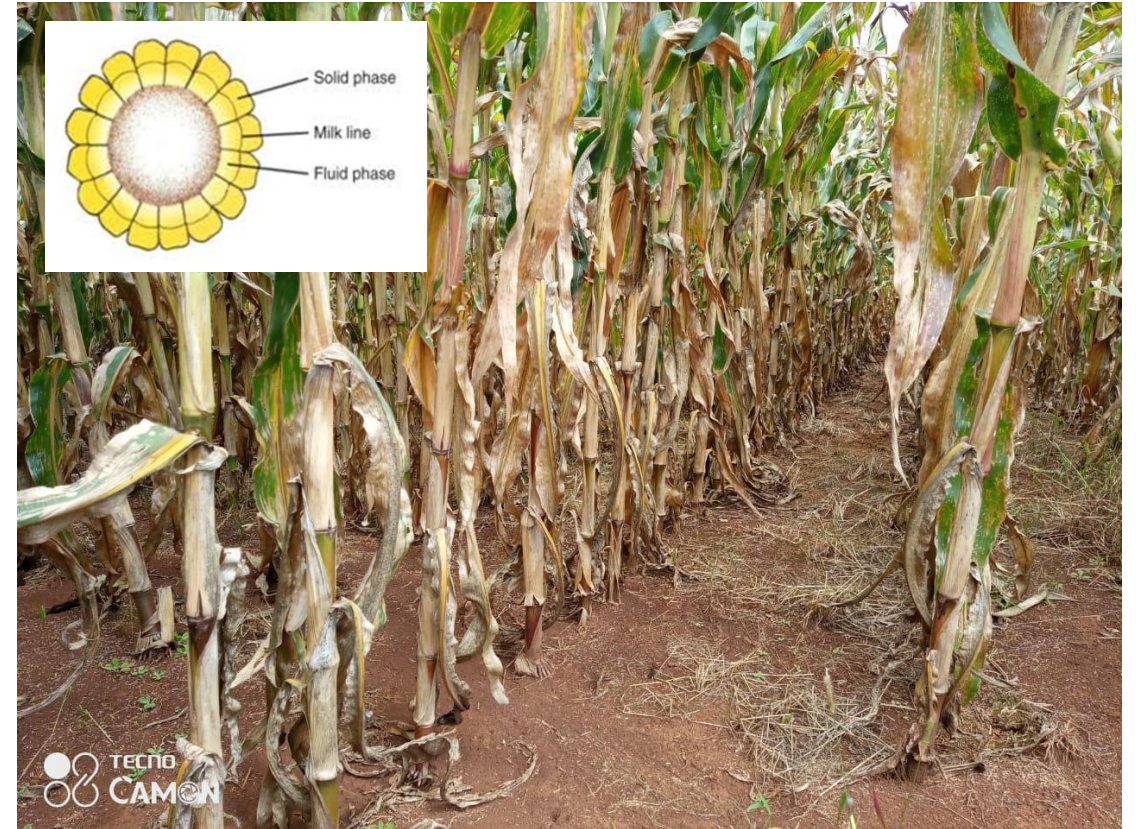
- The ideal stage of harvesting is when the kernel is dough-ripe / ripe
- That is, when twisting the stem, only few drops of moisture can still be seen coming out



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3.1 Stage of harvesting maize fodder for silage Cont'd...

- The leaves below the cob are dry
- The milk line is at half to three quarters of the kernel



Leaves below the cob are dry

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4. Chopping

- Chop length should be between 8 – 12mm
- Sharpen the knives at least every day
- When harvesting is done at dough-ripe stage the chopper needs a kernel crusher



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5. Transportation

- The distance between the field and pit/clump must not be more than 3km, if motorized transport is available



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6. Silage pit dimensions and location

- The silage pit should be narrow and long



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7. Compacting

- Compaction is necessary to remove air (oxygen) from the chopped maize



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8. Sealing

- Ensure that the polythene sheet is not punctured and has a good overlap to cover the silage pit / clamp completely



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9. Covering with soil

- Soil cover of at least 20-30cm is important for four reasons:
 1. Continuously compacts the silage
 2. Protects the polythene sheet against direct sunlight
 3. Protect the polythene sheet from being damaged by birds and small wildlife
 4. Protect the silage underneath the polythene sheet from heating up.



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10. Fermentation

- After closing the pit / clamp, it should stay closed for 6 weeks before opening
- Making a narrow pit / clamp will ensure feeding speed on feed out.



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11. Feed Out

- The feeding speed should be 1.5 - 2 meters per week (20-30 cm per day)
- Slow feeding speed will increase the risk of secondary fermentation



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11. Feeding

- A mature cow can consume between 15-35 kg of maize silage per day

Watch this Video

- <https://www.youtube.com/watch?v=kyMiebvXVuI>



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