

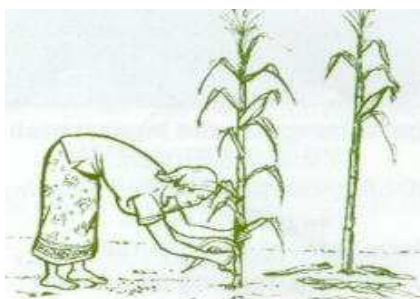
Your Feed Shortage Problem: Use Maize Forage

Shortage of forage is the biggest problem in milk production. Availability can be improved by using forage from maize. Maize forage can be obtained in 3 ways: thinning, topping and defoliating.

THINNING

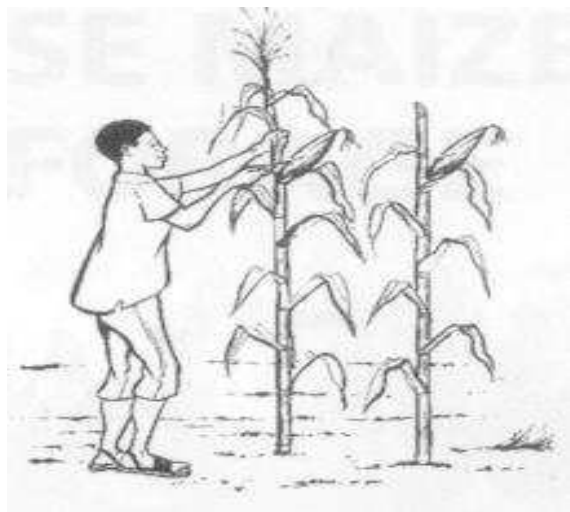
To produce green forage by thinning:

- Plant maize as usual but add 1 seed so that 3 seeds are planted in each hole.
- Thin 1 plant from each hole one month after planting.



DEFOLIATING

- To produce green forage by defoliating:
 - * Plant the maize according to the recommended practices.
 - * Start removing the leaves when silk has turned brown in over half the crop.
 - * For maize hybrid 500 series, remove 2 leaves per plant every week.
 - * For maize hybrid 600 series, remove 1 leaf per plant every week.



TOPPING

To produce green forage by topping:

- * Plant the maize following the recommended practices.
- * Cut each maize plant above the cob, 7 weeks after silking.

EXPECTED YIELDS OF MAIZE FORAGE

Research has shown that:

- For hybrid 51 1 more than 3.2 tonnes of green maize forage (54 bags of fresh chopped material) can be obtained per acre from thinning without reducing grain yield.
- For the same hybrid (51 1) more than 2.8 tonnes of green maize forage (47 bags of fresh chopped material) can be obtained from topping without reducing grain yield.
- For hybrids 500 and 600 series more than 1.7 tonnes of green maize forage (28 bags of chopped fresh leaves) can be obtained per acre from defoliation without reducing grain yield.
- Stover yield is about 1.5 tons per acre of maize with a little less in the case of topping and defoliating.

AMOUNTS OF GRAIN, STOVER AND GREEN FORAGE OBTAINED PER ACRE						
AMOUNTS	THINNING		TOPPING		DEFOLIATING	
	NONE	THINNED	NONE	TOPPED	NONE	DEFOLIATED
GRAIN						
STOVER						
GREEN						

FEEDING

- Conserved forage from thinnings, toppings or defoliation from 1 acre can feed a mature cow for between 1.5 and 2 months. This is about half a bag of silage (25 - 30 kg) per cow per day. Silage making is described in the leaflet "Make silage for more milk in dry seasons".
- Fresh forage cut daily provides extra nutrients for more milk but at the time when milk prices are low. Dried forage assists feeding in the dry season when

milk prices are high.

- Maize leaves are particularly high in crude protein (11%) and rich in calcium and phosphorus for high milk yields.

BENEFITS

- Using maize forage does not reduce your grain and stover yields.
- Using maize forage gives you higher returns from the land.
- Feeding maize forage leads to higher milk yields and income.

REMEMBER

It is preferred to conserve fresh thinnings and toppings as silage, and defoliated maize leaves as hay for use during the dry season when there is shortage of feed.

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