



**agriculture
& rural development**

Department:
Agriculture and Rural Development
PROVINCE OF KWAZULU-NATAL

MAIZE PRODUCTION

TOGETHER WE HAVE MADE KZN A BETTER PROVINCE TO LIVE IN



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MAIZE PRODUCTION

TOGETHER WE HAVE MADE KZN A BETTER PROVINCE TO LIVE IN

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PLANNING

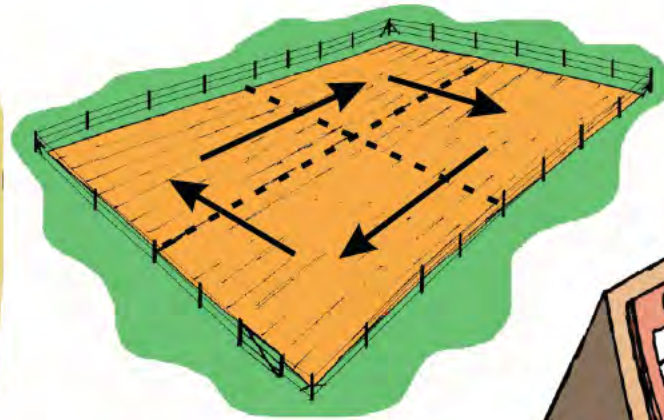
JUNE



Think; what to plant,

where

and when



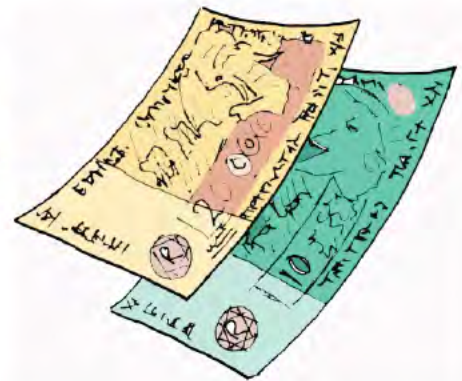
Crop rotation



Who will plough

when

cost

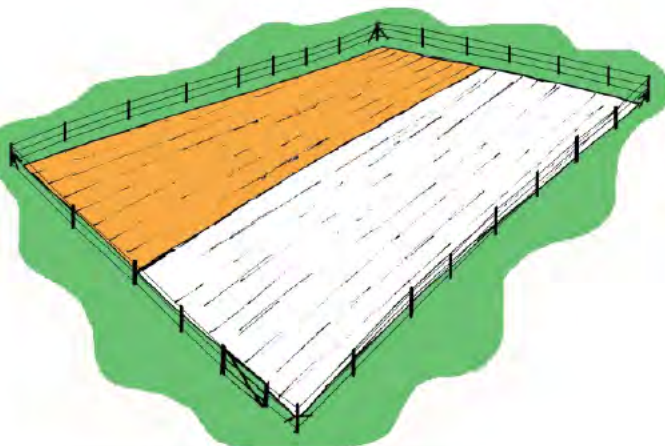


Do you need to buy:

lime

fertilizer

and seed?

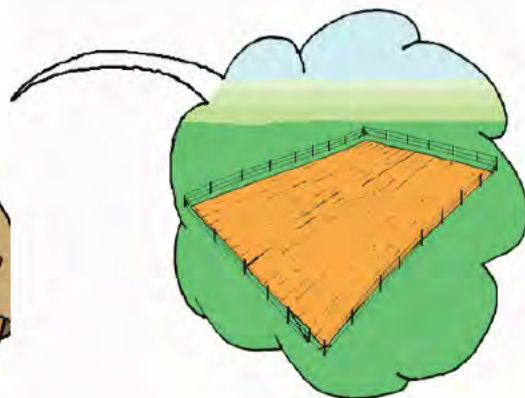
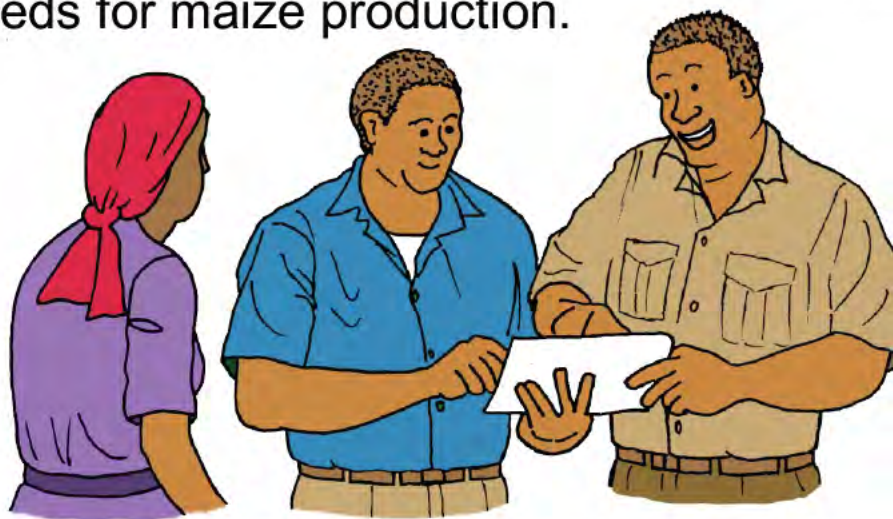


LAND PREPARATION

JULY - AUGUST

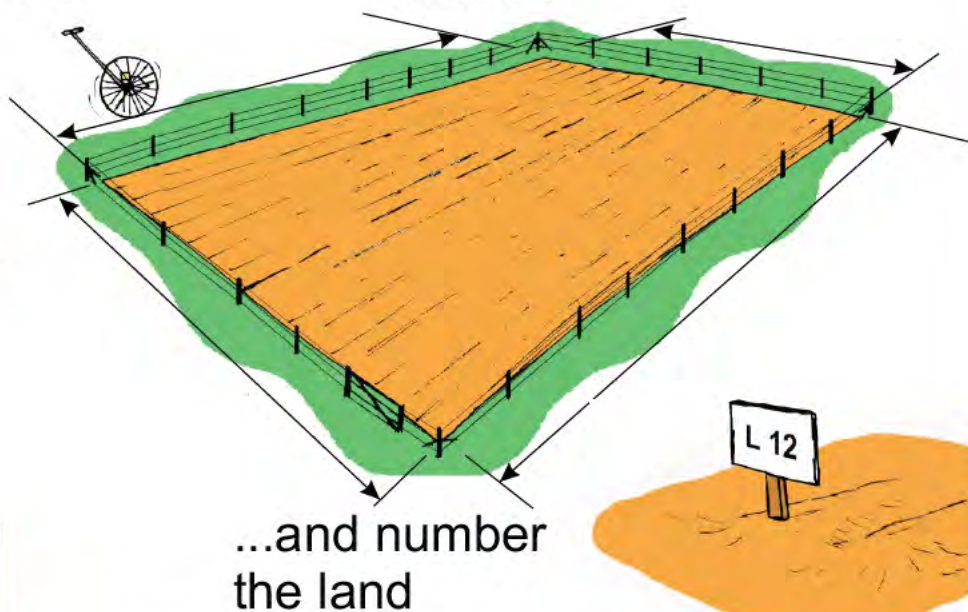


The technician and the farmer need to discuss farmer's needs for maize production.



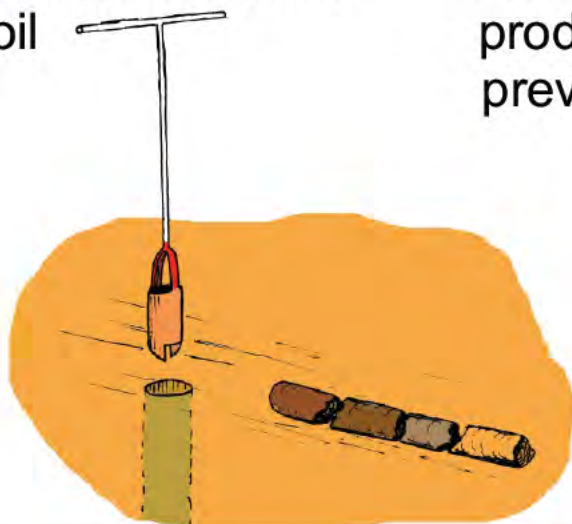
Technician and farmer to

measure



Technician must determine effective soil depth,

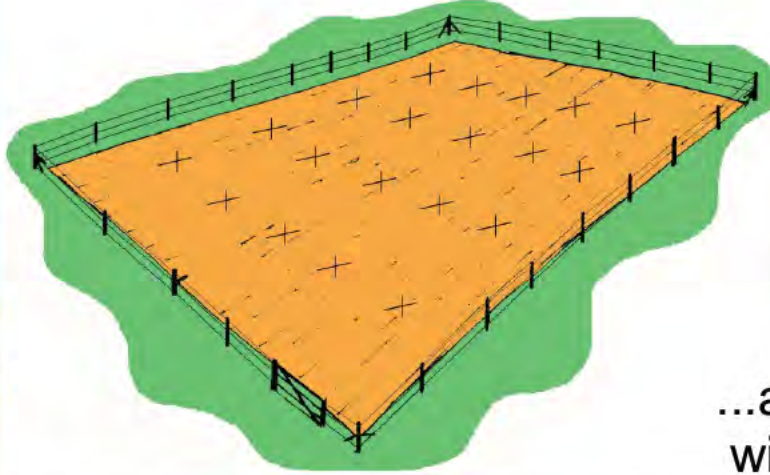
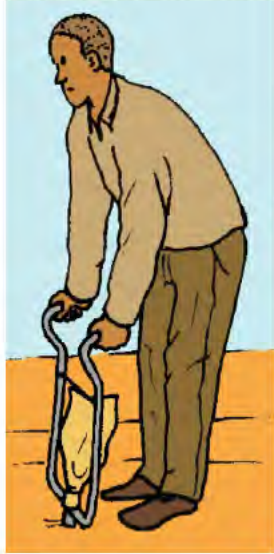
record measurements, and production practices of previous season.



PREPARATION CONTINUED



Take soil samples, 25 cores per land - 15cm deep.

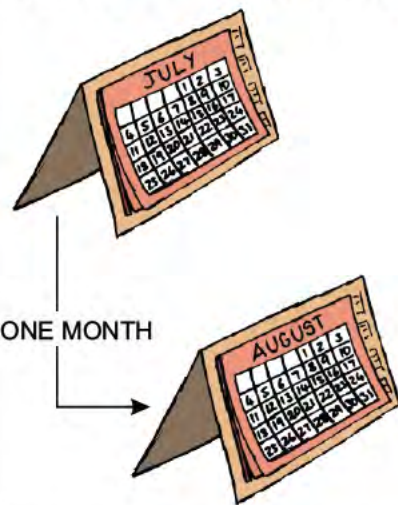


Mix, fill in form...



...and send to Cedara with payment

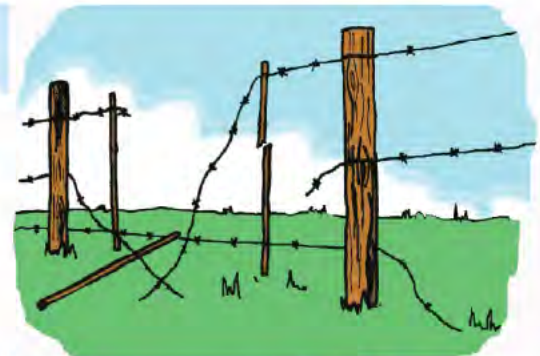
Wait for soil analysis results and fertilizer recommendations.



Meanwhile, apply kraal manure,



fix fences, and...



...repair and maintain equipment.



After receiving results from Cedara, technician to:

- talk on maize production
- give advice on:
 - lime
 - fertilizer
 - and seed needed (type and quantities)

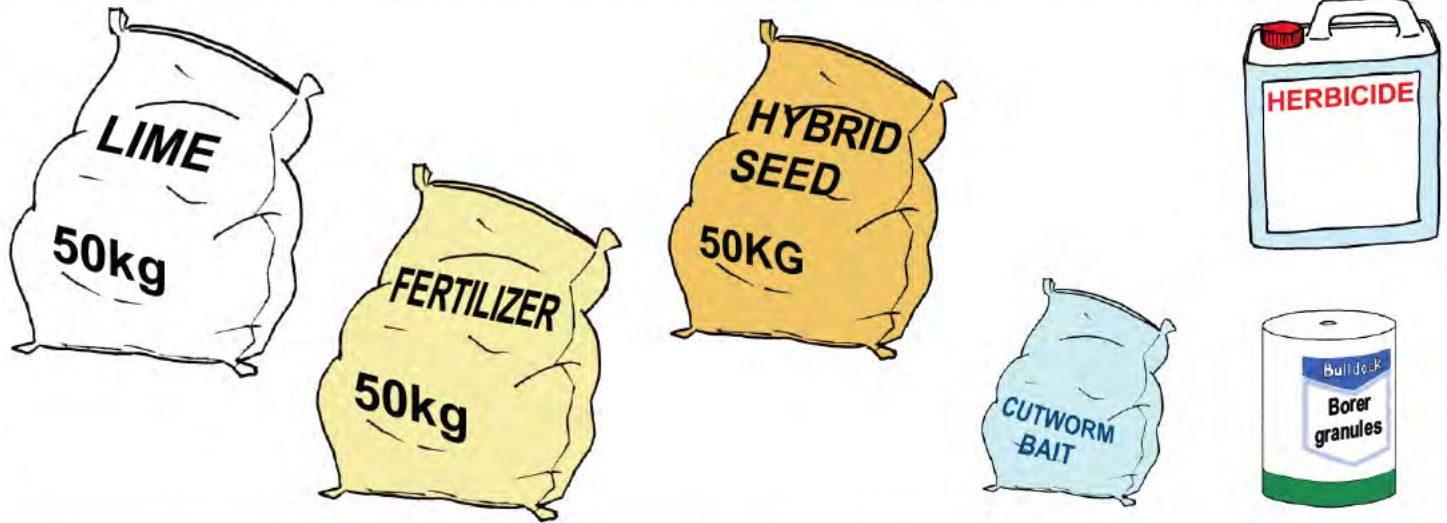


FERTILIZATION

SEPTEMBER



According to recommendations, buy required supplies...



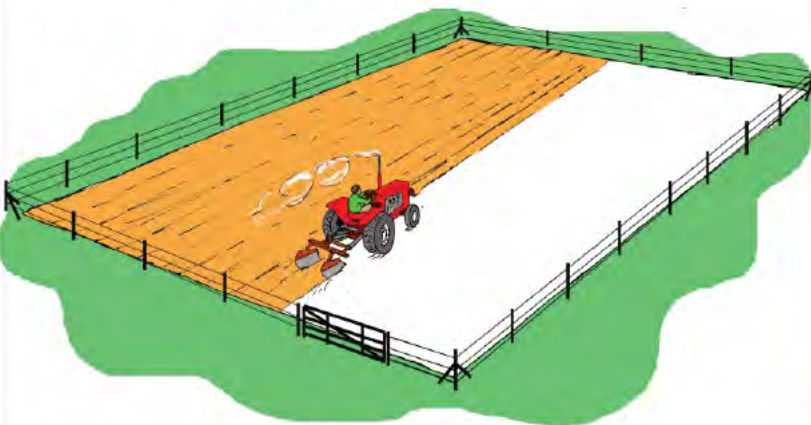
If recommended, apply lime more than a month before planting



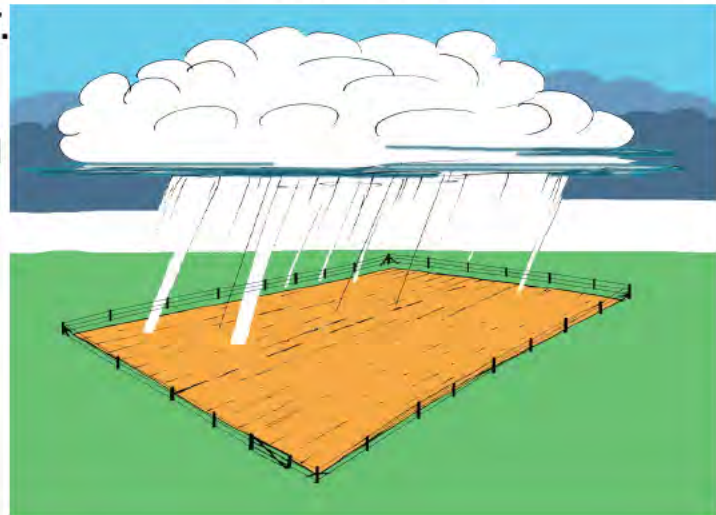
If farmer does not want to apply fertilizer in planting furrows or with a planter, broadcast fertilizer.



Disc or deep plough land the next day to incorporate lime and fertilizer.



Wait for rain

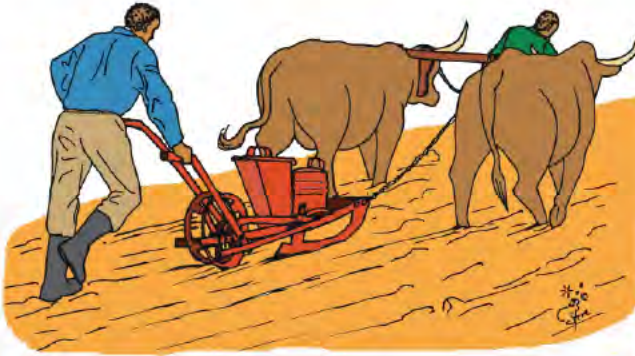


PLANTING

OCT - NOV

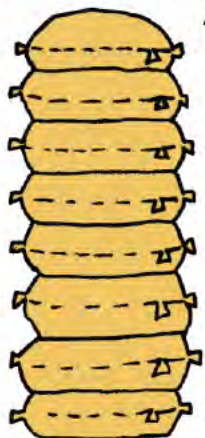


Maize can be planted by hand, ox or tractor drawn planters.

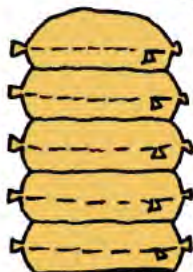


Plant early to achieve high yields:
15 October - 15 November

Inspect to see if the soil is
wet enough before planting.

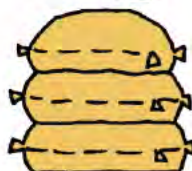


15 Oct - 15 Nov

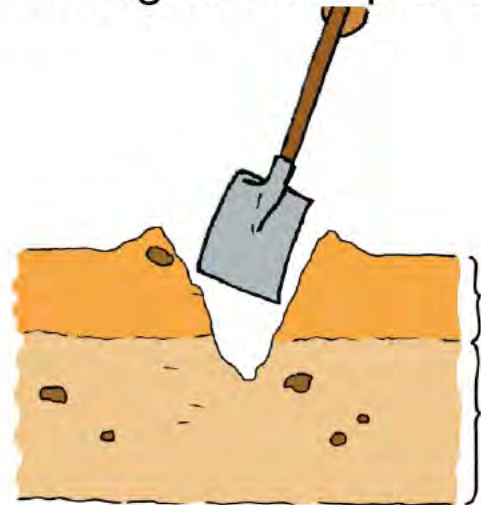


5 Dec

Yields



20 Dec



When using purchased
fertilizer, use hybrid seed.

Suitable varieties or cultivars to
be recommended by Technician.



Buying in
bulk and
sharing
is cheaper.

Always state the seed size you
require. Amount of seed needed
to plant 1ha:

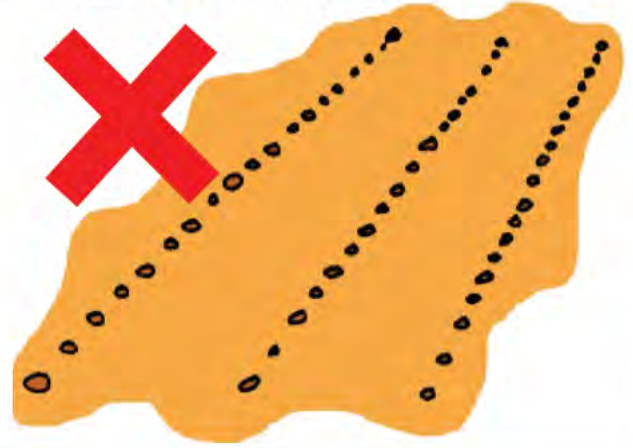
- Size 4F: 12 kg seed/ha.
- Size 5F: 14 kg seed/ha.

PLANTING CONTINUED

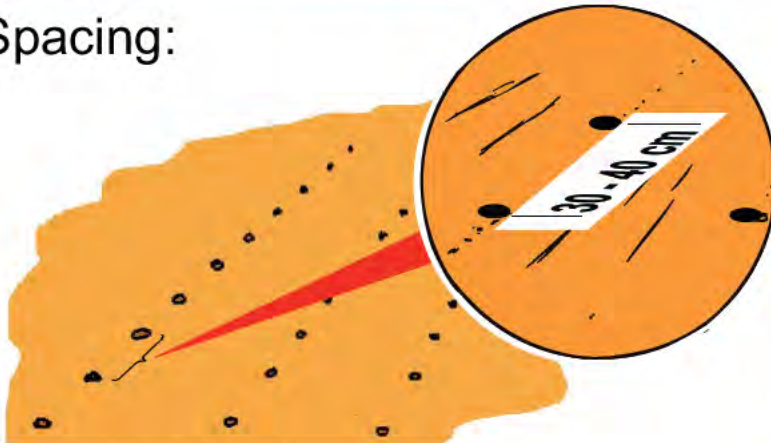
Never mix kraal manure, fertilizer and seed when planting by planter.



Do not plant more seeds in the row to compensate for cutworm damage.



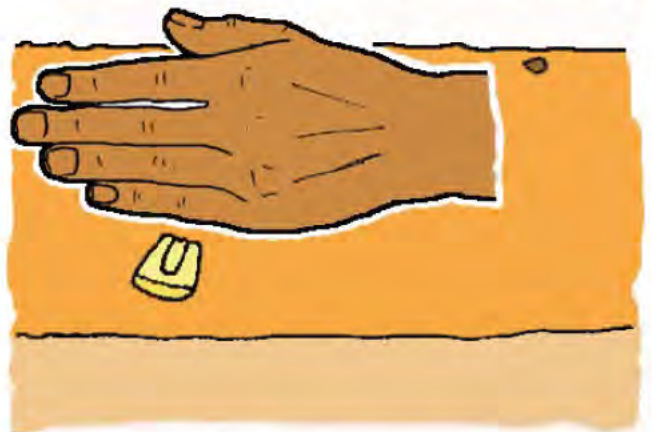
Spacing:



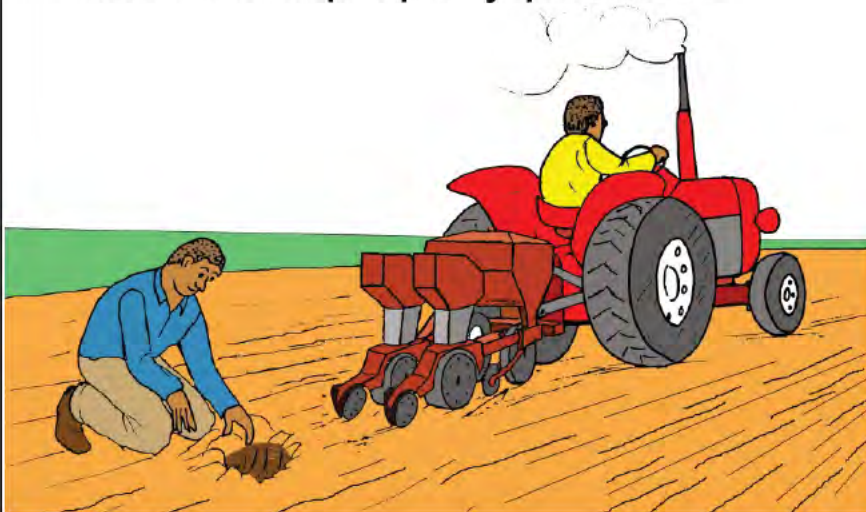
/90-100cm/90-100cm/

Choose planter plates that match the seed size.

Depth of planting:
(no more than four fingers)



Investigate to ensure that seeds are properly planted.



Planting is the most important activity.
Do it properly.



INSECT AND DISEASE CONTROL



Cutworms:

Their numbers are reduced by keeping lands weed-free before planting.



If necessary, apply cutworm bait directly after planting,...

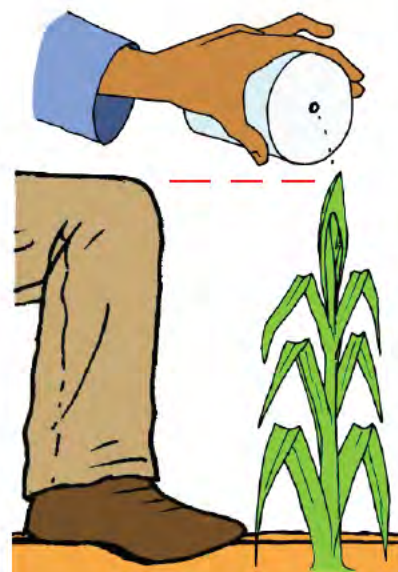


or spray with a registered insecticide over the row.



Stalk borers:

Apply stalk borer granules into maize funnels when plants are knee height.



Grey leaf spot:



Plant seed of resistant hybrids,



OR



spray with a fungicide.

WEED CONTROL AND TOP DRESSING



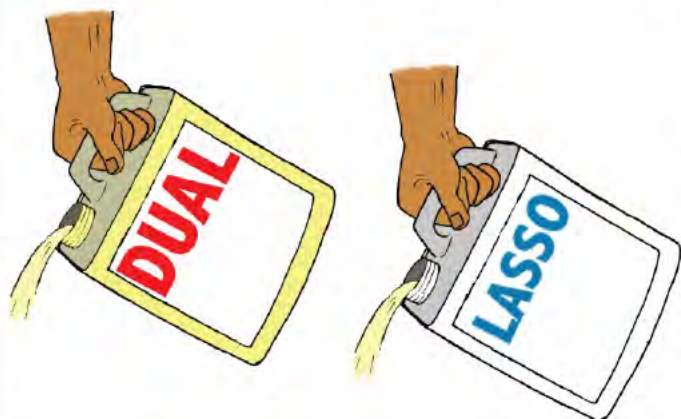
When weeds are still small, weed by hand hoeing or with an ox cultivator.



Weed at least twice to keep lands weed free for the first two months.



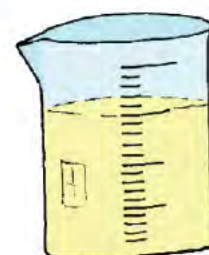
Or apply a herbicide with a knapsack or tractor sprayer on the same day as planting.



Ask for assistance from the Technician



Read instructions



Calibrate sprayer properly

Herbicides applied incorrectly will damage the maize and result in a waste of money.



When maize is knee height, apply LAN fertilizer.



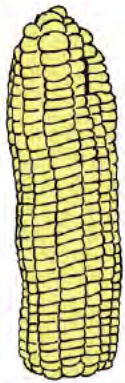
HARVESTING AND STORING



The month of harvesting will be determined by:

A) The type of maize (cultivar) planted

OR



Open pollinated



Sold as:

Short, medium or long season cultivars.

B) Planting date:

Early planting ensure higher yields and early harvesting.

Late planting reduces yields and contribute to late harvesting



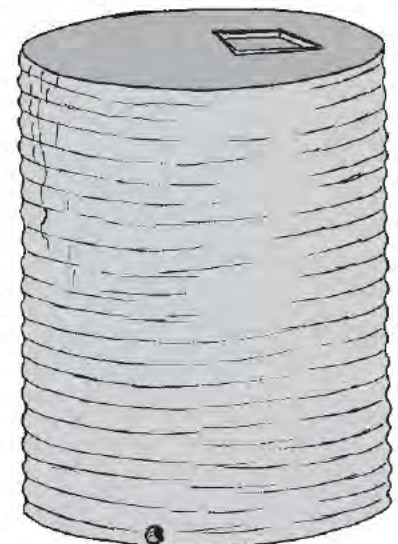
An indicator of when to harvest is to look at the base of the maize pips.



When you scratch it, it should be black

Dented and hard

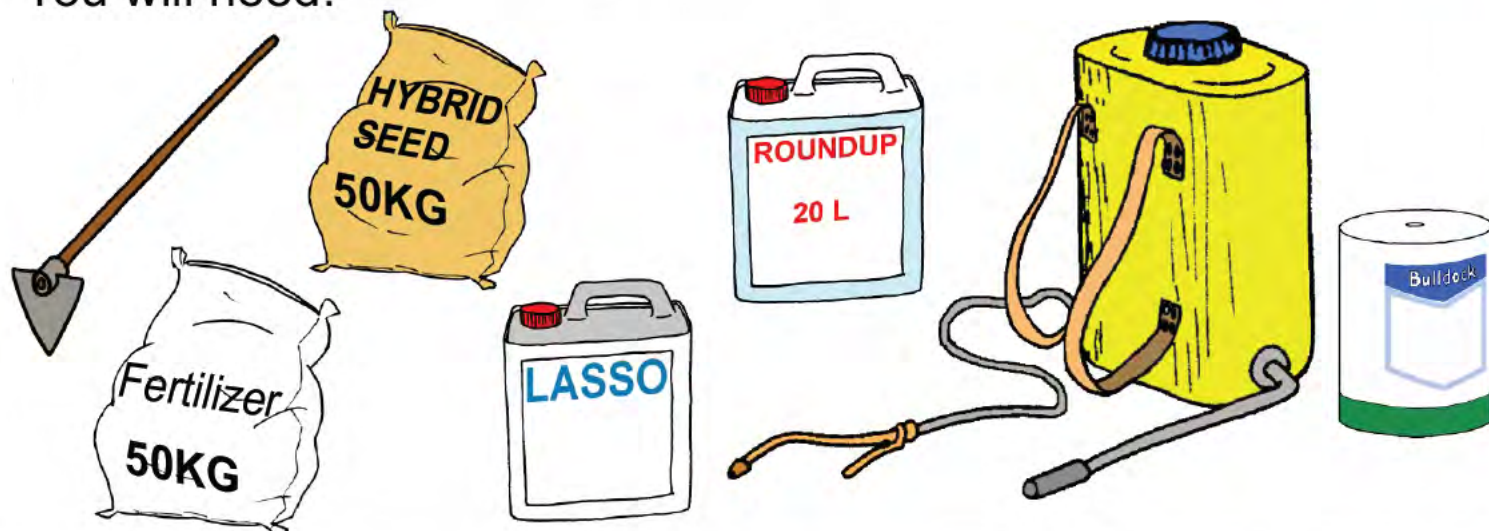
Store maize grains in a cool dry place.



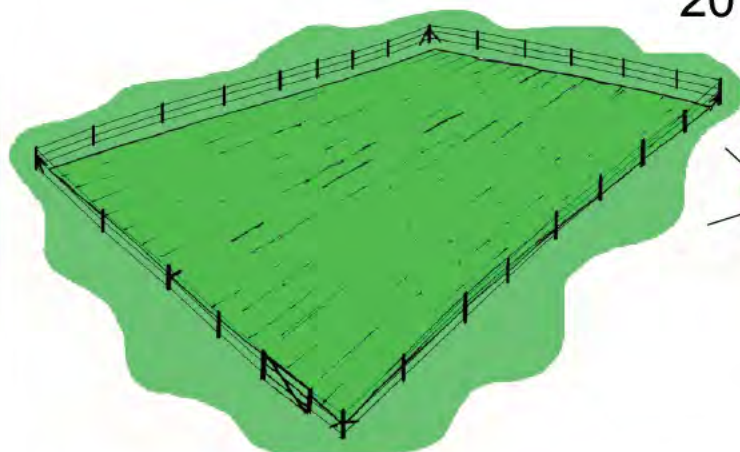
THE NO TILL OPTION



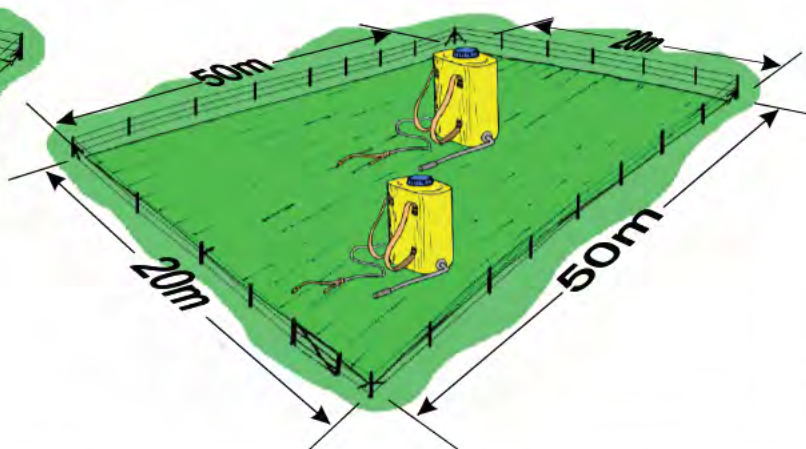
You will need:



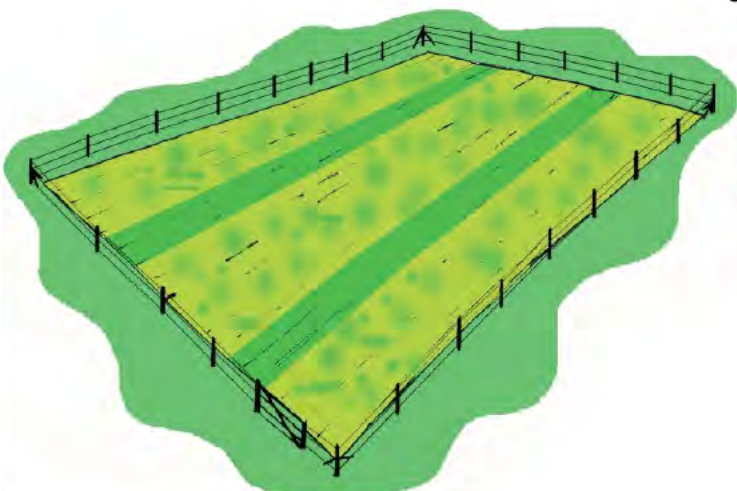
If the field to be used does not need lime,



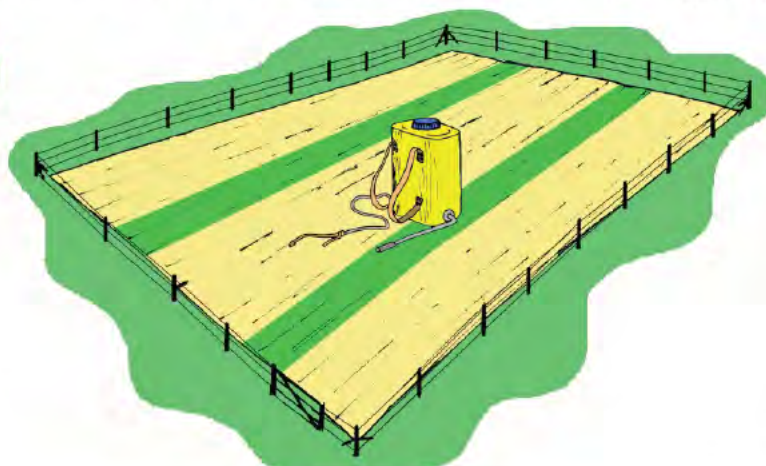
Spray green growing weeds in late October using a cup of Roundup in 20 L water.



Sprayed weeds will die within two weeks.



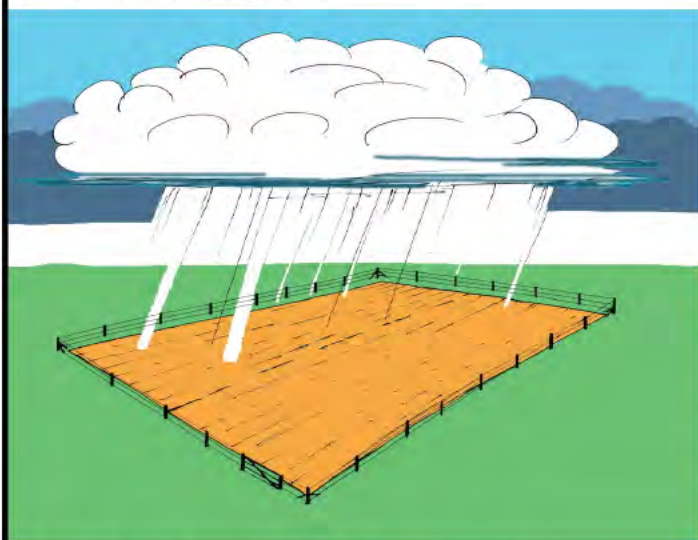
If some weeds are still green, spray those areas again. Respray weeds that didn't die with the first spraying.



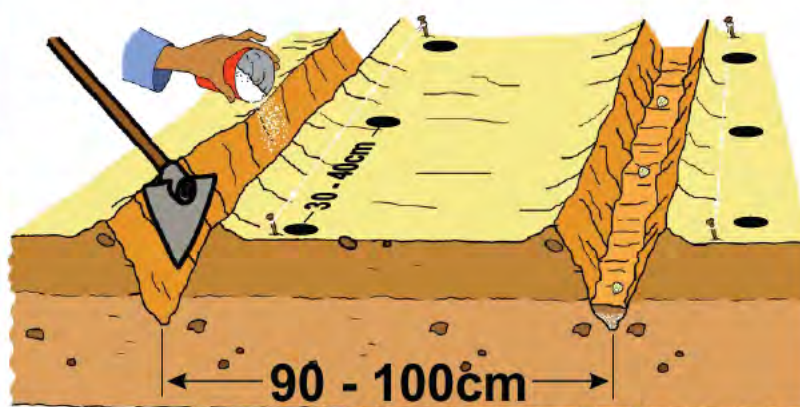
NO-TILL (CONTINUED)



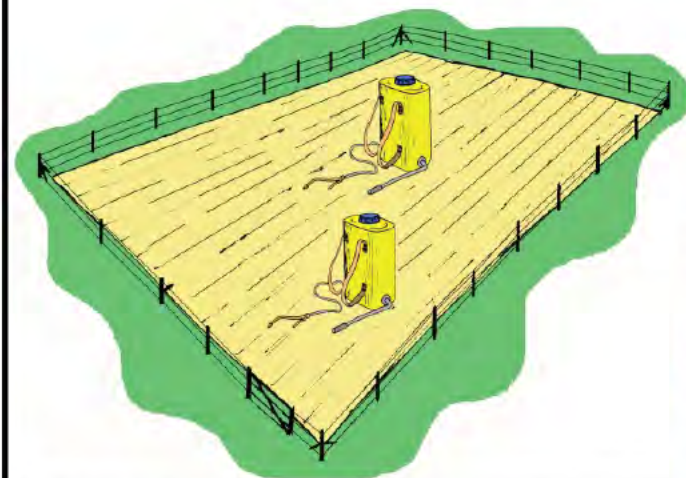
Wait for rain



Plant: 15 Oct - 15 Nov



Apply Lasso herbicide
(one cup per 20 L container).



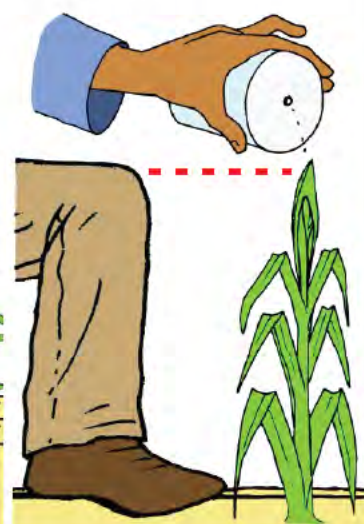
To control cutworms, apply 20ml of cypermethrin to 20 L of water mixed with Lasso, or apply cutworm bait directly after planting.



Hand - hoe all emerging weeds or those that may have survived. Keep land weed free.



Apply LAN and stalk borer granules when maize is knee height.



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