

Cow Feed



- Fodder should be cut into small pieces. Feeding fodder to a cow without cutting it means not all the nutrients are taken in by the cow
- Enough food needs to be given to the cows to make sure they are healthy and make enough milk.

- Cows need to be fed protein and mineral supplements in addition to fodder and dairy meal to help them make lots of milk
- 'Kupakula Advanced Formula' protein supplement. Give 200g per day (10 tablespoons per day)
- 'Maclick Plus' Mineral supplement at the rate of 100g per day (5 tablespoons per day)
- A digestive enhancer, such as 'Diamond V XPC' (rate 1 table spoon per day) helps cows break down fodder much faster.

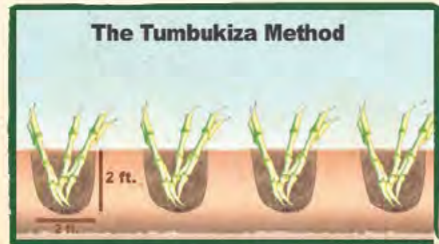


A happy cow has a good body condition which means more milk!

For more information, contact Coopers or SMS the words 'ANIMAL HEALTH' to 5606
 Cooper K-Brands Ltd
 Kaptagat Road, off Waiyaki Way
 PO Box 40596-00100, Nairobi
 Tel: 020-4180612-7
 Email: info@coopers.co.ke

Tumbukiza Method for growing Napier Grass

The Tumbukiza Method of planting Napier grass is a new method which leads to higher yields.



- Dig holes 2 feet deep and 2 feet wide
- Remove top soil and put to one side
- Remove sub soil (below top soil) and put to one side
- Mix one bucket of manure with the top soil

- Add 50 grams (ten bottle tops of fertiliser) to this mix. Use TSP or DAP
- Mix top soil, manure and fertiliser
- Put this mixture back in the hole
- Put 5-10 Napier shoots in the hole
- Two nodes should be below the surface and one node above the surface

Advantages

- More fodder is produced
- Napier grass re- grows faster
- This method means Napier grass grows well even when it is dry
- Less weeding is needed
- Yields are 2-3 times higher than the old method.

Shamba Shape Up Series 1: Episode 3

Jeremiah's Farm - Undiri, Kikuyu



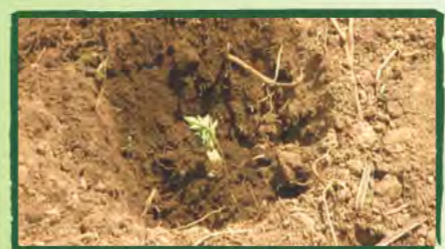
This leaflet contains information on Tomato Planting, Keeping Chickens, Cattle Sheds and Growing Napier Grass

Tomato nursery



- Loosen soil and add a wheelbarrow of compost or well-rotted manure for every square metre
- Make nursery bed 15cm above the ground
- Nursery beds should not be more than 1 metre wide so you can easily water your seeds
- Make furrows 2.5cm deep and 30cm apart
- Place seeds in furrows
- Cover with a thin layer of soil
- Put dried grass over the top of the furrows, this is called mulch
- Mix 5 litres of water with 2 grams of Actara. Actara is an insecticide that stops insects eating the seedlings
- Water seeds
- Once seedlings emerge, remove the mulch so sun light can get to the seedlings
- Water twice a day
- Seeds should **not** be grown where potatoes, brinjals and peppers have been grown in the last 3 years. This helps protect them from soil diseases.

Moving tomato seedlings



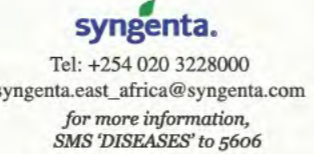
- Seedlings take 21 to 28 days before they should be moved from the nursery, when they are 15 to 25cm high with 3 to 5 leaves. One week before you move seedlings, reduce the amount of water you give them so that they harden a little.
- Prepare the land. Dig and clean the plot well
- Make rows 60cm apart and use a line of string tied to 2 sticks to keep the rows straight
- Make holes about 8cm deep and space them 60cm apart
- Put one bottle top of fertiliser in each hole
- Cover with soil
- Put seedlings in the holes & firmly push soil around them
- Mix water and Actara together
- Use 8 grams of Actara with 20 litres of water
- Water the seedlings straight away.

Produced by Mediae



Watch us on citizen television on Saturday 1.30 - 2.00pm(English) Sunday 1.30 - 2.00pm (Kiswahili)

For another leaflet or more information sms 5606



Tomato Field Management

Gapping

Gapping should be done to replace seedlings that dry up after transplanting.

Staking

For tall tomato varieties staking is very important.

1. Put a stake 2 metres long firmly into the ground
2. You need one stake per tomato plant
3. Tie the plant stems around the stake loosely with nylon or plastic twine

4. Sisal twines should not be used. They can lead to mould growing which is bad for your crop as it can cause stem rot.

Weed control

Weeds attract pests and diseases which is why you must weed often.

Top Dressing

Early preparation is important. Once seedlings are 25cm-30cm high top dress with a nitrogenous fertilizer like CAN. You need 12.5 kg for ¼ acre.

21 days later, top dress with a compound fertilizer such as 17:17:17 or 20:20:20. You need 12.5 kg of either of these for ¼ acre.

Where to buy chemicals for pests and diseases

For more information on how to control diseases and pests contact Syngenta or SMS the word 'DISEASES' to 5606

Syngenta East Africa Ltd
Upper Hill, Matumbato Road
PO Box 30393-00100
Nairobi
Tel: 020-3228000
Email: syngenta.east_africa@syngenta.com

Common Pests & Diseases

Spider mites

These are tiny spider like pests. Check under the leaves of the tomato plant. If you see whitish-yellowish spots on the leaf, this might be spider mite. Spray with 'Dynamec Spidermite' from Syngenta. You need 10ml for ¼ acre. 10ml costs 140 kshs.

American Bollworms & Caterpillars

These pests dig into the tomato fruit and eat it. Spray with 'Match' which you can get from Syngenta. Mix 25ml with 20 litres of water (this is enough for 1/4 acre). 25ml costs 130 kshs.

Bacterial Wilt

This disease leads to wilting of leaves. Whitish-yellowish ooze when the stem is cut is a sign of this disease. You can control by crop rotation, planting of resistant varieties and burning of all infected plants.

Late Blight

This is a fungus disease. Dry patches on the leaves and fruit are signs of late blight. Use a fungicide such as 'Ridomil' to treat. Mix 50g in 20 litres of water. 50 g costs 180 kshs. You need 100g for ¼ acre.



Spider mites on leaves



Bacterial Wilt

Poultry House

For more information on building a poultry house, please send an SMS with the word 'LEAFLET 2' to 5606



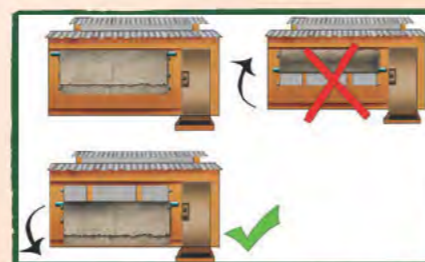
Dust Coats

Dust coats need to be worn when going in the poultry house. The coat should not leave the house, but be hung up by the door. Wearing a dust coat stops diseases spreading.



Foot Bath

A foot bath with disinfectant should be put in the entrance. Hand wash for humans should also be put in the entrance to stop diseases spreading.



Curtains

A curtain needs to be hung up outside the house to protect the chicks from the wind. It is important to make sure the curtain opens from the top down. This allows fresh air in, but stops cold air getting to the chicks which might chill them.

Chick Brooder



Layout of Brooder

When it is cold, young chicks will crowd together for warmth. They tend to crowd in sharp corners. This may lead to them being squashed and the death of some chicks. Making the brooder round makes sure they can't crowd in sharp corners.

Drinkers and feed trays should be put one after the other around the brooder so water and food is close to all of the chicks. Place a closed jiko in the centre of the brooder to stop heat getting lost.



Cattle Shed



Floor

- Cattle pen floors should be cleaned daily to stop the spread of diseases like foot and mouth
- A pit should be built 5 metres away from the pen to put dung in
- Make sure the side of the hut where the wind comes from is a solid wall to stop the cows getting ill from the cold wet wind
- A clean pen means a clean cow and clean milk!

Water and food troughs

- Water in the water trough should be changed every day to stop the spread of disease
- Feeding troughs should be big enough to hold 40 – 70 kg of food every day
- Where possible, there should be one trough for grass/ Napier grass and one trough for dry feeds such as concentrates.

Calf Pen

- Young calves should be kept in a pen to protect them from the rain, sun and wind
- They need a place to sleep that is under a roof
- Make a raised pen 1.5m long by 1.2m wide
- Use wooden slats 2 cm wide and 2 cm deep on a platform. Lay them 1 inch apart. Leaving a small gap between the slats lets droppings go through but not the calf's foot
- The front of the pen should be made so that the calf can easily be given food and water
- The front of the pen should also allow the calf to be moved out without lifting.

