



Series 6, Episode 3

Hellen and Daniel's Farm, Ruiru, KENYA

This leaflet contains information on: transplanting capsicum seedlings, breeding dairy cows, soil testing, fertilisers, organic tomato farming, GeoPoll

If undelivered, please return to The Mediae Company, PO Box 215-00502, Karen.

Soil Testing

A soil test will tell you how good the soil on your shamba is.

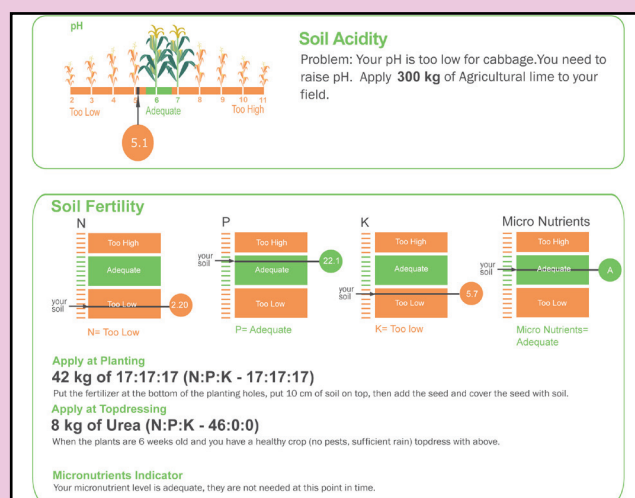
It will tell you the **pH** and which fertilisers to use.

Use the right fertilisers to get a better harvest.

You will get better profits if you invest in the right fertiliser and a soil test

You should do a soil test every 3 years.

Soil pH – this is how acidic or alkaline the soil is. A pH of 5.5 – 7 is good.



Soil test results will tell you what you need to add to your soil to make it better

Fix acidic soil

If your soil is too acidic (less than pH 5.5), add **lime**.

Add lime after harvest. Dig it into the soil. The lime will work faster if the soil is wet.

Add lime every year. Lime takes 4 seasons to fix the pH.

You can also mix **Physiolith** with your planting fertiliser and soil before planting.

Physiolith is a calcium fertiliser which can work faster than lime to fix your pH.

If your soil is acidic, **do not use DAP**.

Mea Mazao 10 fertiliser has **Calcium (Ca)** to stop your soil getting too acidic.

NPK (Nitrogen, Phosphorus and Potassium) are important for your soil.

NPK fertilisers do not acidify your soil.

Use the fertiliser your soil test report tells you.



Buy Mea Mazao fertilisers at agrovents.

For more information, SMS "SOIL" to 30606

Transplanting Tomato and Capsicum Seedlings

For more information, SMS "GREENHOUSE" to 30606

Grow Capsicums and Tomatoes in a greenhouse. You will get a bigger harvest and have less pests. Choose a variety that is for a greenhouse, like "Chonto", "Anna", and "Passarella".

Buy seedlings instead of seeds

- You will get a crop faster - seedlings save you one month
- You will not lose lots of seedlings to pests and diseases
- You do not need a nursery as seedlings can be planted straight away.

Buy seedlings from a good grower, like **Plant Raisers**. Call 0735-752687 to order. They will send you seedlings by **Wells Fargo Courier**.



Plant Raisers grow seedlings in clean trays and soil to stop pests and diseases. You do not need to add fertiliser at planting.

Get your soil ready

Dig your soil so it is loose and deep. This is so the roots can grow through the soil. Make beds 15 cm high and 30 cm apart. Do a soil test to see which fertilisers you need.

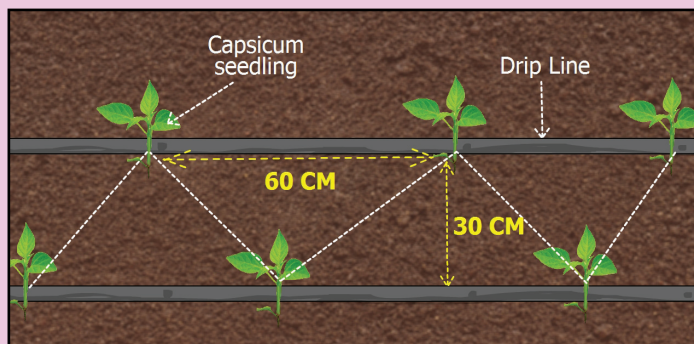
If soil is **acidic** (low pH) add **lime**.
If soil is **alkaline** (high pH) add **gypsum**.

Get a water tank



For a 240m² greenhouse (about 600 plants), you need a 500 litre water tank – the plants will use 500 litres per day

Planting



Draw a zigzag along the bed between the drip lines. Plant seedlings 60cm apart. If they are too close together when they are bigger they will not grow well.

Plant seedlings next to the holes in the drip line. More water will get to the roots and less will be wasted. The drip holes should face up.

Check soil moisture with your hand

If the soil sticks to your hand when picked up it is too wet. If the plant has too much water it will fall over and the stem will rot. This is called **damping off** and the plant can die.

For the first 2 weeks, water seedlings 2-3 times a week. After 2 weeks, water every day. This makes roots go deeper into the soil and makes them stronger. The plants will grow well and give you a good harvest.



Too wet



Too dry



Just right

Organic Farming

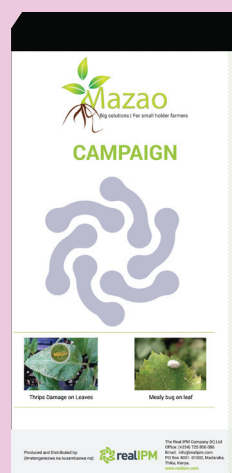
For more information, SMS "ORGANIC" to 30606

Kill Whiteflies on Tomatoes

Campaign is a fungus that kills Whiteflies. It also kills Leafminer, Scales and Mealybugs. It does not kill good insects like predatory mites and bees.

Use on your tomatoes and other vegetables:

1. Mix 20ml (1 sachet) **Campaign** with 20 litres of water in a knapsack.
2. Spray.
3. Repeat after 7 days for the first month, then every 14 days.



Each **Campaign** packet has two 20ml sachets.

20ml is enough for $\frac{1}{4}$ acre.

Stop Nematodes and make fruits bigger

Sustain controls nematodes and diseases in the soil, like Bacterial Wilt. You can use it on many different crops. It will make your fruits bigger.

In the nursery:

1. Mix 20ml (1 sachet) **Sustain** with 20 litres water in a knapsack.
2. Spray the soil until it is wet. This is called a **drench**.
3. Repeat: Month 1: Four times - every 7 days
Month 2: Twice - every 14 days
Month 3: Once



Each **Sustain** packet has two 20ml sachets.

20ml is enough for $\frac{1}{4}$ acre.

When transplanting:

1. Mix 20ml of **Sustain** with 20 litres water.
2. Dip the seedlings for 2 minutes, then transplant.



TIP

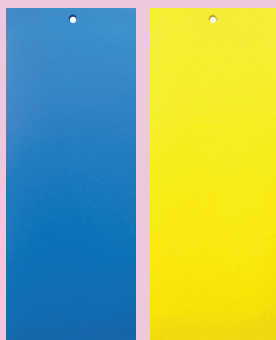
If you are growing plants from seed, use a **seed tray**. This protects the seeds and seedlings from pests and diseases that live in the soil. Use **Cocopeat** in the seed tray.

Trap insects

Hang Sticky Traps over your crop to trap pests.

Use blue traps for Thrips.

Use yellow traps for other insects, like Aphids, Leafminer and Whitefly.



Real IPM products are available

- in an agrovet near you
- from their website www.realipm.com
- or call Real IPM on 0725-806086 to order.

Products are available for different pests and diseases.

Cows - Choosing breeds

For more information, SMS "COW" to 30606

Artificial Insemination (AI) is the best way to get better cows.

Keep records so you know when the cow will be on heat.

Call your vet when you first see signs of the cow on heat.

A vet will do AI 12 to 18 hours after your cow starts showing a swollen vulva and clear discharge.

Use CRV semen from Coopers. Choose the semen from the catalogue before your cow comes on heat to make sure you can get the semen you want.

Choose semen for your cow based on what you will use the calf for. For milk? For meat? For farming?

e.g. If you want a lot of milk you need to breed for:

- a good udder (strong, square and with well spaced teats)
- good feet and legs (straight, wide and strong)
- good fertility (breeds easily, calves easily).

Choose the semen yourself.
Do not let someone else choose for you!

If the discharge has blood, you are too late and the heat was 72 hours ago. You will have to wait another 18-21 days.



A swollen vulva and a clear discharge means your cow is on heat.



Take part in surveys with GeoPoll

SMS **JOIN** to 70555 to sign up to **GeoPoll** surveys.

You can take part in countrywide polls using your mobile phone. Make your voice heard!

Produced by Mediae



Watch us on Citizen TV on:
Saturday 1.30pm (English)
Sunday 1.30pm (Kiswahili)

For another leaflet
or more information,
SMS 30606



www.plantraisers.com
+254 700 723 220
+254 735 752 687



info@galvmed.org
+254 715 831 853



africa@soilcares.com
+254 782 970 136



info@realipm.com
+254 717 741 717
+254 725 806 086



Alama ya Ubora
information@unga.com
+254 20 697 8000



kassim.owino@agriseed.co.ke
+254 702 934 938



International Crops Research Institute
for the Semi-Arid Tropics

<http://www.icrisat.org/shambashapeup2016/>



info@dlightdesign.com
+254 20 210 6793



SMS: 70555



info@mea.co.ke
+254 724 253 312



info@coopers.co.ke
+254 20 420 6000



marketing@oshochem.com
+254 711 045 000
+254 732 167 000,
SMS: 20560



info@kenchic.com
+254 722 202 163
+254 734 600 204

