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.

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.

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**.

**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**.

**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.

---

**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.

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.
**Organic Farming**

**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.

**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

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

**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.

**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.

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

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.

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!

For more information, SMS “COW” to 30606

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

For another leaflet or more information, SMS 30606