



Series 5, Episode 17

Ann's farm, Machakos, KENYA

This leaflet contains information on: whiteflies in tomatoes, soil testing, cows (breeding & feeding), fake chemicals, flying gardens and growing indigenous vegetables

Stop Whiteflies In Your Tomatoes

Whiteflies are small, white flying insects which live underneath vegetable leaves. They lay eggs which make holes in the leaves. Whiteflies suck the water out of the plant, and spread diseases. It is important to stop Whiteflies if you see them in your field.

To stop whiteflies, spray with **Actara** from Syngenta. Mix 8g in 20 litres of water for $\frac{1}{4}$ acre.

Spray:

- During drenching of seedlings in the nursery
- When transplanting (after 3 weeks)

For more information, SMS 'TOMATOES' to 30606



Drench with Actara to stop whiteflies



Whitefly is a small, white insect found under leaves

Do not grow crops of the same family every year. Rotate your crops to stop pests and diseases building up.

Do A Soil Test

For more information, SMS 'SOIL TEST' to 30606

A soil test report tells you the type and amount of fertiliser to use. To take a good soil sample:

1. Insert a soil auger or panga 20cm deep into the soil.
2. Turn it several times to dig out a sample.
3. Put the soil in a bag.
4. Repeat the same with 20 other different points in your farm using zigzag method.
5. Put the soil in a sample bag.



Label the sample bag with your name, phone number, address, location and the crops you want to grow. Send the soil sample to SoilCares.

Breeding Cows

For more information, SMS 'COWS' to 30606

To get a good breed of your cow, serve with a good bull or AI using CRV semen from Coopers. When choosing for the right bull/semen to serve your cow, check for the following:

1. A breed which gives more milk.
2. A breed with an average stature/height. Tall cows eat a lot and give less milk. Short cows eat less and give less milk. Use bull with an average height.
3. A good udder. Long udder or long teats can mean your cow gets mastitis easily.
4. A breed which is healthy and fertile. Healthy bulls give healthy calves. Ask for the history of the bull before using the semen to serve your cow.
5. A breed which increases the lifespan of your heifers - a longer lifespan means the cow will live longer and give more calves.



Serve your cow when on heat using a bull with an average stature

Heat Detection

Keep close watch on your cow to know when it is on heat. Heat can be hard to detect so it is important to know the signs.

A cow is on heat when the cow:

- Is restless
- Stands still when mounted by other cows
- Does not want to feed
- Is bellowing often
- Gives less milk



Cows on heat stand if mounted

To make your cow come on heat on time and get pregnant easily:

- Give quality feeds to grow fast and ready to be served.
- Give 100g or 1/2 a glass of **Maclik Plus** everyday.
- When a cow shows the signs of heat, serve after after 12 hours. For instance, when the cow shows signs of heat at 6.00am, serve at 6.00pm.

Check to see if your cow is pregnant after 21 days. If not pregnant, the cow will show the sign of heat again.

Keep good breeding records to know when to expect the calf and to serve your cow next time.



Give **Maclik Plus** to make cows come on heat and become pregnant easily

Counterfeit Chemicals

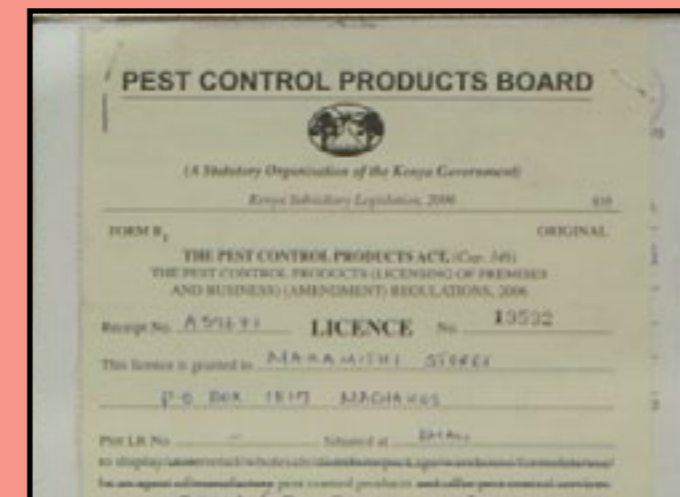
For more information, SMS 'FAKE CHEMICALS' to 30606

Counterfeit/fake chemicals are not real. They look like the real product but do not work at all. This is a big problem for farmers. They harm crops, kill animals and cost money. To make sure you buy the right chemicals, make sure: you

- Know the pest/disease you want to control and the chemical to use.
- Buy from a licensed shop - check for an accreditation certificate from A.A.K. and Pest Control Products Board (PCPB) license. This shows that the chemicals are real.



Good shops have an accreditation certificate



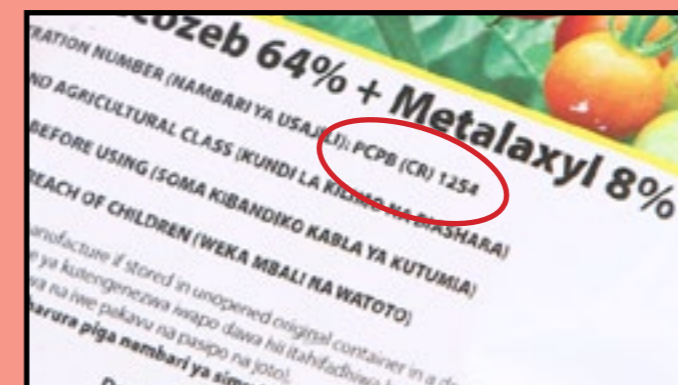
Check for a PCPB license before you buy chemicals

When buying chemicals:

- Check the lid and seal of the container - make sure it is secure and has not been opened.
- Check has a Pest Control Products Board (PCPB) number.
- Check the expiry date. Expired chemicals will harm you crop/animals and waste your money.
- Check the batch number.
- Make sure there is a security mark on the product.
- Get a receipt showing the name of the shop, address and contacts. If you have a problem, it will be easy to follow back.
- Take a note of the price. A fake product is usually cheaper.



Get a receipt for any chemicals you buy



Real chemicals have P.C.P.B. numbers



Do not buy chemicals from an unlicensed car or boda boda

Grow Indigenous Vegetables For A Healthy Family

Vegetables are good food for your family. They are rich in vitamins and minerals which make your family strong.

A flying garden is simple and cheap to build and a good way to grow vegetables in a small area.

Make a flying garden because it:

- Needs only a small space
- Is easy to build
- Uses less water

One gunia holds 60 sukuma wiki/spinach and 10 onions. You need 20 litres of water per bag in a week.

Another good way of making your family eat healthily is by eating orange fleshed sweetpotatoes (OFSP). They are very rich in vitamin A, which is good for children and pregnant women.



OFSP are good for children and pregnant women

In dry areas, you can grow moringa. Moringa can help with many illnesses, such as digestion and constipation. It is high in calcium, potassium, vitamin A and vitamin C.

Harvest the leaves when fresh and cook with vegetables as food. You can also dry the leaves, crush to a powder and mix with liquid or your food.



LightWorkersXM

Moringa grows easily in Kenya and has a good market worldwide



Superfood for Superhealth

Moringa can be dried, made into a powder and added to food or liquid

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



lachlan@griculture.com
+254 020 2073912



aak@aak.or.ke
+254 20 222 4806



information@unga.com
+254 020 393 3000



Lachlan@griculture
lachlan@griculture.com
+254 020 2073912



info@ultravetis.com
+254 20 235 8205



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



sales@dlightdesign.com
0800 721 110/ 21555



RESEARCH PROGRAM ON
Water, Land and
Ecosystems
ciat@cgiar.org



worldagroforestry@cgiar.org
+254 739 333 340/+254 702 392 601



SMS 'JOIN' to
21606



info@galvmed.org



info@coopers.co.ke
+254 20 4206000



ccafs@cgiar.com
+254 20 6978 000



info@agrochem.co.ke
+254 734 447 777



syngenta.east_africa@syngenta.com
+254 20 322 8000



info@soilcares.com
+254 20 8632800