

Maize Mosaic Virus

Farmer
Fact Sheet

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What is it?

The disease is caused by a virus that infects maize and sweet corn, and the wild grass, *Rottboellia* (itch grass), which is common on the Guadalcanal Plains and elsewhere in Solomon Islands. The scientific name: is *Maize mosaic nucleorhabdovirus*.

Damage

Although a common disease, and individual plants are severely affected, usually only a few are present in any one garden. Plants are stunted (photo, right), cobs are absent, or deformed, with fewer seeds than normal. Sweet corn appears to be more susceptible than maize.



How do I identify it?

Look for stunted plants with light green to yellow stripes along the leaves (photo, left). These stripes are either narrow, the width of a single leaf vein, or in bands 1-2 cm wide.

The virus is spread by an insect called a plant hopper (*Peregrinus*) that lives and breeds on maize and *Rottboellia*. The plant hoppers feed on these plants, acquire the virus and, after a few days, spread it as they feed. They continue to spread the virus until they die.

How to manage maize mosaic virus

CULTURAL CONTROL: Pull out plants as soon as symptoms are seen. DO NOT wait; otherwise, the insects will breed and spread the disease. Pull out by grasping the young leaves, holding them together, to prevent the insects in the “funnel” from escaping. Burn the plants and insects.

RESISTANT VARIETIES: Maize and sweet corn have been bred for resistance to this disease.

CHEMICAL CONTROL: Not a method to use. It would not be practical to use insecticides to kill the plant hoppers that spread the virus. Removal of plants is the best option.

AUTHORS **Helen Tsatsia** • **Grahame Jackson**

HT works for MAL; GJ is with TerraCircle Inc.



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