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Cucumber Green Mottled Mosaic Virus

How to protect your property – farm biosecurity is essential

As there is no known cure for Cucumber Green Mottled Mosaic Virus (CGMMV), preventing infection is the key to protecting the health of your crops.

CGMMV can spread easily. The virus can stay alive for an extended time in plant debris and soil and on vehicles, equipment and tools.

A significant risk of spreading CGMMV onto farms arises when propagation material, people, machinery and equipment move from property to property and from region to region.

It's the responsibility of property owners and managers to ensure these risks are minimised.

How can CGMMV be spread?

- Planting infected seed - CGMMV can be dormant.
- Contaminated soil - CGMMV can survive in soil contaminated with infected plant debris for some time.
- Infection of roots or plants growing in contaminated soil.
- Root to root contact of infected and healthy plants
- Transfer of infected sap through pruning, staking and handling.
- Using infected root stock or grafts
- Infected water or nutrient solutions – CGMMV can survive in water or nutrient solutions.
- Infected sap or contaminated soil on hands, vehicles, equipment, tools, clothing and footwear.
- Packaging materials

WHAT IS CUCUMBER GREEN MOTLED MOSAIC VIRUS?

Cucumber Green Mottle Mosaic Virus (CGMMV) is a plant disease that infects cucurbit crops including watermelon, cucumber, melons, zucchini, pumpkin, squash, bitter melon and bottle gourd.

CGMMV can result in substantial crop losses.

Symptoms can vary between plant species and sometimes can be difficult to diagnose without laboratory testing. The most common symptoms can be observed on the leaves or fruit.

Symptoms on leaves

- Mottling and mosaic
- Blistering or bubbling
- Vein clearing
- Leaf distortion

Symptoms on fruit

- Often no external symptoms
- Spotted and distorted
- Internally discoloured and rotting
- Uneven ripening

CGMMV does not pose any risk to human health.

What you can do to prevent CGMMV?

- Screen plant material and seeds before planting, or ask for seed certified as being free of the virus.
- Obtain appropriate training and advice on safe chemical use.
- Ensure vehicles, machinery and equipment (such as pruning tools) are inspected and cleaned.
- Effective control measures are in place for the movement of vehicles and machinery.
- Ensure footwear is clean and restrict unnecessary people movements around the farm.
- Ensure effective weed control.
- Ensure plant residues and dead leaves are removed and destroyed
- Place warning and information signs at the entrance and gates of properties

WHAT IF I FIND SOMETHING?

Remove and destroy suspect infected plants, avoiding contact with other plants and follow biosecurity guidelines.

If you suspect any of your crops are affected by Cucumber Green Mottled Mosaic Virus report any finding **IMMEDIATELY** to the Exotic Plant Pest hotline 1800 084 881

How to use and place warning and information signs



Warning signs tell visitors to your property that you have biosecurity measures in place that minimise the spread of pests such as CGMMV.

Place warning and information signs on property entrances and gates. As visitors may not be aware of relevant biosecurity protocols, all people entering the property should have a clear view of any such signs.

The signs should contain simple messages such as do not enter the property without prior approval or use wash down facilities for cleaning vehicles and machinery.

The signs also provide an opportunity to remind workers that farm biosecurity is a priority.

Signs should include up to date contact details for people to gain further information.

Visitors

For more information on CGMMV including an on-farm biosecurity checklist for CGMMV visit the PIRSA website (www.pir.sa.gov.au).



Photo of CGMMV watermelon leaf mottling courtesy of Monsanto Vegetable Seeds.