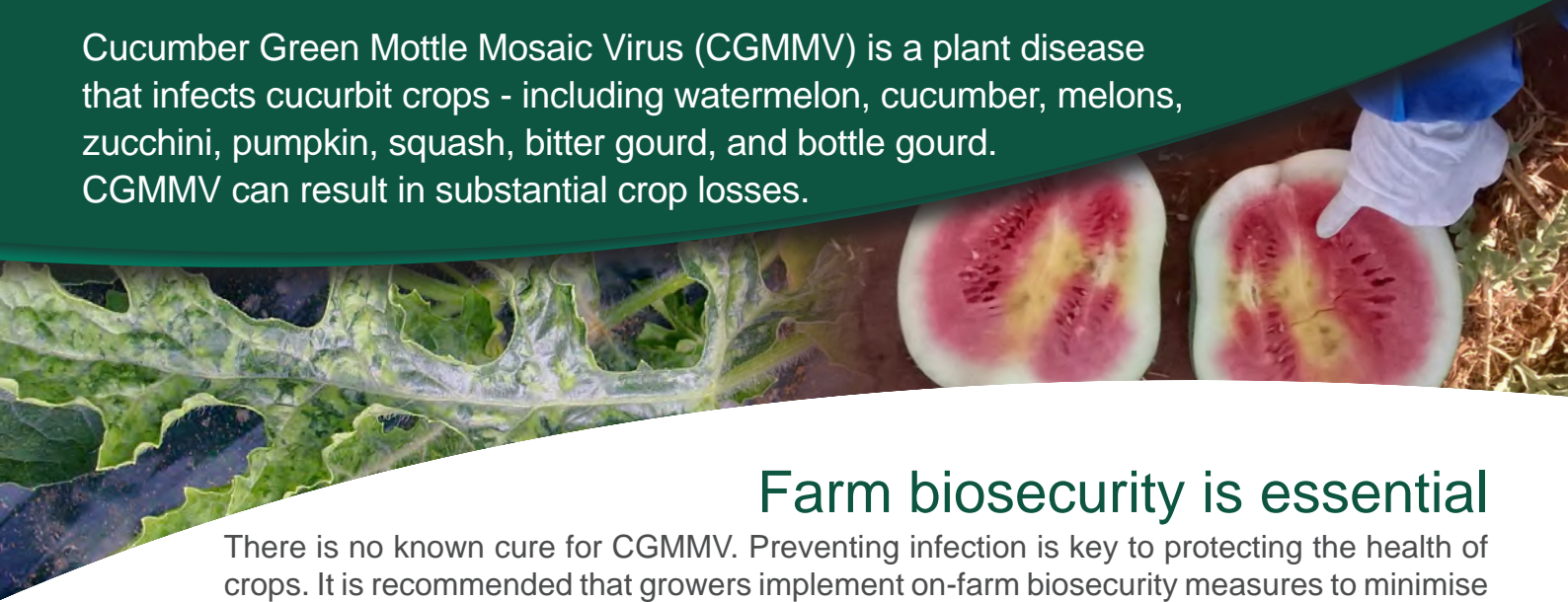




Cucumber Green Mottle Mosaic Virus

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.



Farm biosecurity is essential

There is no known cure for CGMMV. Preventing infection is key to protecting the health of crops. It is recommended that growers implement on-farm biosecurity measures to minimise infection or spread. **See on the reverse of this flyer for a biosecurity checklist.**

What are the symptoms of CGMMV?

Seedlings and plants

Visual identification of CGMMV can be unreliable. Symptoms can vary with crop type and variety and can be mistaken for other cucurbit viruses or nutrition problems. Some varieties may not show any symptoms.

In severe infections cotyledons may become yellow. Affected plants may wilt and then runners, or the whole plant, may die prematurely.

Leaves

Depending on crop type infected young leaves can show vein clearing and crumpling, while mature leaves may display mottling or mosaic patterns, or be pale, yellow, or yellow-white. Leaves are often distorted.

Fruit

In some cases, fruit showing no external symptoms may be internally discoloured or necrotic. This can be especially pronounced in watermelon.

Symptoms can include internal yellowing or possibly a dirty red discolouration (in watermelon). A breakdown of flesh may occur in patches surrounded by normal flesh. Infection may cause fruit malformation or fruit may fail to develop and abort.

How is it spread?

- Planting infected seed - disease can be dormant.
- In soil contaminated with infected plant debris, CGMMV can survive for an extended period.
- The transfer of infective sap through regular pruning, staking and handling.
- Using infected root stock and grafts.
- Infection of roots of plants growing in contaminated soil.
- Root-to-root contact of infected and healthy plants.
- CGMMV can survive in water or nutrient solutions to infect healthy plants.
- Infective sap or contaminated soil on hands, vehicles, equipment, tools, clothing and footwear.
- Packaging materials.
- Chewing insects may spread CGMMV.

What if I find something?

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

Call the Pest and Disease Information Service on 1800 084 881 to report any suspected cases of CGMMV. If asked to send in samples, refer to sampling instructions at agric.wa.gov.au/bacteria/ddls-plant-pathology-services

If CGMMV is confirmed on your property, you will still be able to harvest and market crops.

On-farm biosecurity checklist

- Do you have biosecurity signs in place at property entrance? Does it include a phone number and instruction for visitors to contact the farmer before coming on farm?
- Can you manage access to your property through a single access that is able to be shut/locked?
- Do visitors, contractors and staff park in designated signed areas?
- Do all visitors and contractors to the site sign a register and are they informed of your farm's biosecurity measures and to not bring plant material on farm?
- Do you restrict movement of vehicles on-farm?
- Do you maintain a complete register of machinery coming onto the farm?
- Do you use on-farm only vehicles, if possible, for transport around the growing area?
- Are all deliveries and produce pickups done at a designated area?
- Do you use certified CGMMV clean seed or own 'clean and tested' seeds?
- Are seedlings from a registered nursery and supplied in new trays?
- Has a seed/seedling register been completed?
- Are footbaths available on your property?
- Do all visitors use a footbath before entering the production area?
- Are clothes and equipment cleaned daily or on re-entry?
- Are boots and secateurs used only on farm and cleaned between tunnel/planting blocks?
- Do you clean any machinery or vehicles coming onto the growing area or leaving the farm with a high pressure cleaner and detergent?
- Is there a concrete wash down area located near to the front of property with run-off collected so as not to contaminate the growing area?
- Is wash down water collected in confined area (sump, evaporation pond)?
- Is there a hardstand loading area that is cleaned once produce has been picked up?
- Are field crates and bins washed and disinfected when moving from one production area to another?
- Are wooden pallets cleaned in a 1% Chlorine bath before going into the farm area and placed on a stand or hard surface area?
- Do you avoid used or recycled packaging?
- Are fences and nets maintained to restrict access to production areas?
- Do you remove waste away from the growing area to a designated area?
- If possible do you dispose of waste by deep burial, burning or feeding to stock?
- Do you know and can you identify the host weeds for CGMMV on your farm?
- Do you monitor host weeds and remove where possible, especially around wash down areas?
- Do you monitor your crops regularly for disease symptoms?
- Are staff trained in biosecurity? Has the training been recorded?
- Do you train workers to identify and report the symptoms of CGMMV?

Important disclaimer

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