

Fact sheet

Mungbean yellow mosaic virus

What is Mungbean yellow mosaic virus?

Mungbean yellow mosaic virus (*Begomovirus*) is a major exotic disease of mungbeans causing leaf discoloration and yield losses. The virus is spread between plants by the Silverleaf white fly (*Bemisia tabaci*), which is present in Australia. Mungbeans and black gram as well as other legumes such as pigeon pea, soybean, cowpea and common (navy) beans are all affected by the virus.

What does it look like?

The virus causes a range of symptoms. These first appear as scattered yellow specks on the leaves. As the disease progresses the leaves show irregular green and yellow patches and new leaves may emerge completely yellow. Green areas on the leaf often become raised and the leaf may become papery white and thin. Infected plants produce fewer flowers and pods. The pods that are produced tend to be small, mottled and contain fewer and smaller seeds than non-infected pods. The infected pods also tend to curl upwards and mature later. Infections can lead to significant yield losses.

What can it be confused with?

Early stages of infection may be confused with other biotic and abiotic factors that can cause the formation of yellow specks, however the combination of symptoms described above are only likely to be caused by a pathogen.

What should I look for?

To protect your crop you should look for the characteristic yellow specks and the irregular green and yellow mottling of the leaves. You should also look for whiteflies as these insects spread the virus between plants. If you see any unusual symptoms in your crop please contact the Exotic Plant Pest Hotline on 1800 084 881.



Close up of infected leaf. Note the green and yellow mottling of the leaf surface



Infected plants

Ramakrishnan Nair, AVFDC, India

Ramakrishnan Nair, AVFDC, India



Murray Sharman, DAFF Qld

Infected plants, note leaf discolouration



Murray Sharman, DAFF Qld

Infected leaves and pods

How does it spread?

This virus is spread by the Silverleaf whitefly (*Bemisia tabaci*) which is already present in Australia. This virus is not spread with seed.

Where is it now?

Mungbean yellow mosaic virus has been found in several Asian countries including India, Pakistan, Sri Lanka, The Philippines and Thailand. This pathogen is not known to occur in Australia. If it enters Australia leguminous crops, such as mungbeans, could be at risk.

How can I protect my farm from Mungbean yellow mosaic virus?

You can protect your farm from Mungbean yellow mosaic virus by checking your property frequently for the presence of new pests (such as whiteflies) and unusual symptoms. Make sure you are familiar with the symptoms of common pathogens so you can tell if you see something different.

If you see anything unusual, call the Exotic Plant Pest Hotline

**EXOTIC PLANT PEST HOTLINE
1800 084 881**



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