

Grey leaf spot disease management in maize

Recognize the problem

Grey leaf spot is a fungal disease that affects maize. If not well managed it can cause high losses. It causes grey rectangular spots that stretch along the leaf veins on the top surface of the leaf. The spots may join together to cover the whole leaf, causing it to turn brown. On the underside of the leaf are small black spots. If you see many yellow thin long streaks along the veins, this is streak virus and not leaf spot fungus.

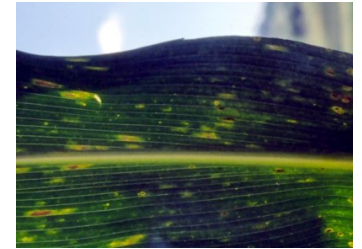
Background

The disease survives on maize residues left on the soil surface from season to season. When the weather is good, the fungus begins to develop on residues and produces a powdery substance. This substance is blown by wind onto the lower leaves of the maize plants and infects them. Later, the upper leaves of the plant will also be affected. When maize is affected early in the season, losses will be very high.

Management

- Rotate maize with legumes such as beans, cowpeas and groundnuts, or cereals other than maize
- You may also rotate maize with a deep-rooted crop such as sunflower and cotton which will also improve the soil
- Use grey leaf spot resistant maize varieties available from various seed companies. Read brochures of seed suppliers to know if the variety is resistant or not.
- Plant on time, preferably at the onset of rains, because the disease will attack later. Planting on time will mean the disease will have little effect on yield.
- You may also consider spraying fungicides when the disease is seen on the leaves. You may use Flusilazole/ Carbendazim -products or Tebuconazole-products in a 16 litre sprayer. Before spraying, observe the weather to ensure that it will not rain until at least 6 hours after spraying.

Early symptoms of grey leaf spot disease. (Photo by Julian Ward/KwaZulu-Natal Dept of Agriculture, South Africa)



Typical grey leaf spots due to the grey leaf spot disease. (Photo by B. Das and Kanyanta Musonda)



When using a pesticide, always wear protective clothing and follow the instructions on the product label, such as dosage, timing of application, and pre-harvest interval.

Scientific name(s) > *Cercospora zeae-maydis*

The recommendations in this factsheet are relevant to: Zambia



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