Avoiding Cassava Mosaic Virus in your field

Recognize the problem
Cassava is a hugely important crop in central West Africa. Unfortunately, it is affected by some major diseases and pests. Cassava Mosaic Virus has spread to many parts of Africa and can reduce yields considerably. In the field, you can recognise the virus by its mosaic pattern on the leaves, as well as making the leaf deformed and with blisters. The roots are reduced in size as well. This virus is transmitted from one plant to another through the whitefly insect that feeds off the sap of the cassava. This small white fly is about the size of the tip of a ball point pen, and is generally found on the underside of the leaf. They are more active early in the morning and before dusk.

This disease resembles another virus, called Cassava Brown Streak Virus, which also causes mosaic colours on the leaves. However, they differ in two ways: the tubers have dry brown streak inside, and the leaves are not deformed.

Background
This disease is caused by a virus that lives in the plant and that cannot be seen, apart from its symptoms. It is not possible to cure a plant once it has been infected.

Removing infected materials from the field is a cultural technique that aims to reduce the amount of disease in the field, and to control the spread to other health plants. It may also reduce the chances of the disease being in the field the following season. Seeds from an infected plant will also be diseases, as well as seedlings or cuttings.

Management
Firstly, choose healthy seeds, cuttings or seedlings, without any disease symptoms or white flies on them, from a respected or well run nursery. This will reduce the chances of getting the disease in your field in the first place. Certified multiplication nurseries, controlled by the SENASEM are the best choices.

Monitor the field once a week to check on the state of the seedlings or plants. If many whiteflies are observed, there is a high chance the disease might spread. Get ready to pull out diseased plants at the first symptoms. Put them in a plastic bag when you uproot them (to keep the whiteflies in) and destroy them by burning them outside the field. In addition:

- Remove weeds that could be alternative hosts of whiteflies
- Intercrop with maize or cowpeas, to repel whiteflies
- Avoid planting cassava if your neighbours have virus-infected cassava as the virus will be carried by whiteflies to your field.
- Avoid planting alternative hosts for the whitefly which is the vector for this disease.

The recommendations in this factsheet are relevant to: Democratic Republic of the Congo

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