

Planting material free of cassava mosaic virus

Recognize the problem

Cassava mosaic virus is a disease which affects cassava plants. Symptoms of the disease include the appearance of yellowish green small patches across the leaves (mosaics), and distorted or deformed leaves. When the disease develops as a result of infected planting materials, then symptoms are first seen on the leaves near the ground. If the disease was spread by whiteflies, the symptoms are first seen on the leaves on the upper part of the plant. When stems are heavily infested, they look like candle sticks with tiny leaves. Cassava mosaic virus reduces the development of tubers and leads to a 20-80% yield loss.

Background

Cassava mosaic virus can be transmitted by stem cuttings if the stems used have the disease. If farmers use the same planting materials for a number of years, the disease remains or is carried on in the stem. The stems are also shared among farmers, which spreads the disease further. The disease is also spread by whiteflies when they feed on an infected plant and then fly to another. Disease-free planting materials must be produced in a laboratory under clean conditions so they do not carry any viruses. Afterwards, they are grown in a greenhouse and can be multiplied by experts further in the field. Farmers cannot do this process.

Management

- Plant only disease-free cassava, which farmers can get from:
 - Gart or CFU (Conservation Farming Unit) if they are certified disease free. For example, a Gart is found in Chisamba along Great North Road and CFU is found in Kabulonga, Twinpalm road, House number 33B.
 - Zambia Agricultural Research Institute from January 2014 onwards. This will be at Mount Makulu Central Research Station in Chilanga.
 - Mitengo women association found in Lusaka West.
- Farmers should not produce planting materials themselves or get them from other farmers since their materials may have the disease.
- Only plant cuttings that are not showing symptoms

Deformed leaves with yellow mosaics caused by cassava mosaic virus. (Photo by S. Toepfer)



Weakened plants with curled leaves due to cassava mosaic virus. (Photo by Pasquale Piccirillo CPC)



Scientific name(s) > *Cassava Mosaic Disease, Cassava Mosaic Virus,*

The recommendations in this factsheet are relevant to: Zambia



Authors: Hildah Chimutingiza, Mathews Matimelo
Zambia Agricultural Research Institute ZARI of Ministry of Agic. & Livestock
tel: +260 976799334 email: chimutingiza@yahoo.com

Edited by Plantwise.