12 steps to MLN free seed

Maize Lethal Necrosis (MLN) disease is a viral disease which affects maize.

MLN disease is caused by the co-infection of Maize Chlorotic Mottle Virus (MCMV) and any of the following viruses; Sugarcane Mosaic Virus (SCMV), Maize Dwarf Mosaic Virus (MDMV) and Wheat streak mosaic virus (WSMV).



fields before planting.

fertility levels to ensure healthy crops. Soil testing is recommended after a maximum of 3 years to guide fertilizer selection.

Use certified MLN disease free seed stocks in subsequent seed multiplication.

Clean farming equipment before and after use to remove MLN contaminated debris. **D** Plant at the onset of rains to facilitate disease

escape.



Frequent monitoring of the field for build up of vector population: Eliminate grasses, weeds and alternative hosts from the field.

MLN disease symptoms

- Severe chlorosis (loss of green coloration on leaves) and lead necrosis
- Formation of sterile tassels (no pollen production)
- Poor or no grain filling
- Premature drying of husks
- Dead heart symptoms
- Rotting of cobs

Scout for MLN symptoms, rogue and destroy (burn/bury) outside the field. Control vectors using recommended chemical and spray regime.

Crop rotation for at least one season with non-cereal crops preferably legumes and practice a closed maize season of at least 2 months where applicable. Treat seed using recommended systemic insecticides for ensure early control of the disease. Cob selection and postharvest seed sampling for MLN causing viruses. Destroy (Burn) infected seed. Disinfect leaf punchers after sampling each plant.

Sample suspect plants

for diagnostic testing;

MLN disease transmission mode

- Insect vectors such as thrips, aphids, leaf beetles and root worms.
- Animal/people/farm machinery movements in infected fields.
- It can also be seed borne.



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