Maize Lethal Necrosis Disease (MLND) is a viral disease resulting from a co-infection of two viruses namely Maize Chlorotic Mottle Virus (MCMV) and Sugarcane Mosaic Virus (SCMV). It affects maize causing up to 100% yield loss.

**MLND symptoms**

- **Leaves:** Fine chlorotic specks starting from the base of young leaves in the whorl; specks merge to produce chlorotic stripes leading to premature drying/ burnt appearance and entire leaf death.

- **Stem:** Short internodes, stunted growth, drying leaf sheaths.

- **Tassels:** Deformed male flowers and infertile tassels.

- **Ears:** Malformed ears, premature drying, partially filled cobs, moldy rotting ears.

- **Vectors:** Aphids and Thrips

**ATTENTION!**
Management

- **Seed:** Use certified seeds; avoid recycling of seed.
- **Varieties:** Use recommended MLND tolerant varieties, suitable for your area.
- **Farm hygiene:** Remove and destroy all volunteer maize, maize debris and alternative host plants, use clean farm tools and equipment.
- **Agronomic practices:** Avoid relay planting of maize, timely planting, rogue out diseased plants, crop rotation with non MLND host crops (sweet potato, Irish potato, sunflower, pyrethrum, etc), use manure and recommended fertilizers.
- **Pest Management:** Scout regularly for insect damage and diseased plants, use recommended pesticides to control insect vectors.
- **Postharvest management:** Timely harvest, sort, dry well and ensure proper storage.
- **Closed Season:** Observe a closed maize season of at least 3 months.

Monitoring

For effective management and timely control;
- Regularly scout maize fields checking for MLND infected plants and insect vectors starting two weeks after crop emergence, moving as shown in the pattern.

Currently Available MLND Tolerant Varieties

**AEZ 1 (900-1500 masl), AEZ 2(1200-1800 masl), AEZ 3 (1500-2000 masl)**

- **Western Seed Company**
  1. AEZ-1-WH301, WH101 (sweet and heavy grain weight)
  2. AEZ-2- WH301, WH101
  3. AEZ-3- WH101

- **Agriseedco Seed Company**
  1. AEZ-1-SC439, SC441, SC447
  2. AEZ-2- SC439, SC441, SC447

- **Agriscope Africa Ltds**
  1. AEZ-1- MH501(Taji)
  2. AEZ-2- MH501(Taji)

- **Bayer EA Ltd**
  1. AEZ-1- DK777
  2. AEZ-2-DK777

Chemical Control

- **Apply approved pesticides to control insect vectors:** THUNDER OD 145

Suitable Crops or Rotating with Maize

- **Root crops:** Irish potato, sweet potato
- **Legumes:** Beans, chickpea, pigeon peas
- **Oil crops:** Canola, Sunflower
- **Vegetables:** Indigenous Cabbage, Kales
- **Others:** Pyrethrum, Avacado

For more information:

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