STOP THE SPREAD OF NAPIER STUNT DISEASE

Using Recommended Disease Management Practices

Compiled by:
F.N. Muyekho, S. Ajanga, Z. Khan, C. Midega, S. Mwendia,
I. Kariuki, M. Masibili, M. Shisya, J. Wamalwa, G. Sudi, M.
Mulaa, D.T. Cheruiyot and J. Munyasi

For further information, contact:
Centre Director
Kalro Kakamega
P. O. Box 769-50100, Kakamega
Tel: +254 056 3030031/39
Email: kalro.kakamegai@kalro.org
http://www.kalro.org

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Introduction
- Napier stunt disease affects Napier grass mainly in western Kenya and is also spreading to other Napier growing areas in Kenya.
- The disease was first reported in western Kenya in early 1990s.
- The disease causes biomass yield loss of 40-90%, thereby affecting livestock productivity.

Causes and mode of spread of the disease
- Napier stunt disease is caused by a small bacterium referred to as Phytoplasma 16Sr XII that is transmitted by leafhoppers.
- The leafhoppers feed on young leaves by sucking the sap and carry the pathogen from one plant to another.
- The disease is also spread through infected Napier grass canes and root splits.
- Movement of contaminated materials may be a source of disease infection.

Symptoms
- Stunted stools
- Yellowing of leaves
- Production of many thin tillers
- Stems with shortened internodes
- Low crop yields
- Infected stools dry up

Management of Napier stunt
- Plant tolerant varieties like South Africa and Ouma.
- To ensure that the materials are free from the diseases, one can use either tissue-cultured plantlets or hot water treatment with guidance from KARI or frontline extension officers.
- Plant healthy material with 1-2 bottle-tops per hole of TSP/DAP fertiliser or 1-2 handfuls of FYM per hole to reduce disease pressure.
- Weed regularly and topdress with 2-3 bottle-tops of CAN per stool or FYM will sustain a healthy crop for a long time.
- Uproot diseased Napier grass from the field as they act as source of infection.

Source of planting materials
- These varieties are available in KARI Centres (Kakamega, Kitale and Alupe), ICIPE (Mbata campus) and the Ministry of agriculture offices in western region Counties.

Benefits of Napier grass
- Increased livestock feeds and hence high milk production.
- Increased family income.
- Reduced soil erosion.