NAPIER GRASS SMUT
DISEASE MANAGEMENT


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Chopped Napier ready for feeding

FOR HIGH MILK YIELD
**Introduction**

Napier head smut disease was 1st reported in central Kenya mainly in tea growing zones in early 1990s and has since spread to eastern and Rift Valley regions of Kenya. It is caused by a fungus (*Ustilago kamiruniensis*) and spread by wind, farm tools, infected plants, water and animal manure from infected farms. Yield loss is between 60 and 80%.

**Symptoms of head smut disease**

- Early flowering
- Black powder on flowering Napier heads
- Thin leaves and stems
- The plant is easily uprooted

**How to manage head smut disease**

- Plant resistant varieties (Kakamega 1 and Kakamega 2)
- Plant healthy material with 1-2 bottle-tops of TSP/DAP fertiliser per hole or 1-2 handfuls of FYM per hole to reduce disease pressure
- Plant single canes of 3 nodes or root splits in holes spaced at 1 x 1 m
- Weed regularly and topdress with 2-3 bottle-tops of CAN per stool or FYM (avoid manure from infected farms) to sustain a healthy crop for along time
- Uproot diseased Napier grass from the field as they act as source of infection
- At every harvest cut at the basal height of 5-10 cm at a frequency of 6-8 weeks to enhance and maintain crop vigour
- Avoid feeding diseased material to animals as the fungus passes through the gut and spread via manure to Napier grass fields
- Follow other recommended agronomic practices that enhances plant vigour

**Source of planting material (root split/cane)**

- KARI Centres
- Agricultural Training Centres
- Ministry of Agriculture

**Benefits of head smut tolerant varieties**

- Increased fodder production in head smut prone areas
- Increased milk yields
- Increased family income
- Reduced soil erosion