

- Use alternative high yielding forages such as *Brachiaria spp* (Table 1).
- Consult your nearest extension staff

***Brachiaria mulato* as an alternative forage to Napier grass**



Table 1: Comparison of *B. mulato* with Napier grass

| Parameter | <i>Brachiaria mulato</i> | Napier grass |
|------------------------------------|--------------------------|--------------|
| Average Fodder yield (DM t/ha/yr) | 20.1 | 16.5 |
| CP content (%) | 13 | 11 |
| In vitro OMD (%) | 70 | 68-7 |

Application of manure to affected fields reduces disease incidence and improves fodder yield by over 40%



Figure 3: Effect of manure application on fodder yield

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Napier Stunt Disease Management in Uganda



Introduction

Napier grass (*Pennisetum purpureum*) provides over 80% of the fodder in intensive smallholder dairy farming systems in Uganda. However, Napier grass production is threatened by the emergence of Napier stunt disease causing serious economic loss in the smallholder dairy industry.

Napier stunt disease (NSD) was first observed on farmers' fields in central Uganda in 2001. It has now spread to over 75% of the districts in Uganda (Figure 1). Disease incidence is higher in lowlands than highlands (Kabirizi et. al., 2010)

Symptoms of Napier stunt disease



Affected plants remain stunted, have short internodes, bunched appearance and produce very low biomass yields (Figure 2)

Eventually the stool may be completely destroyed

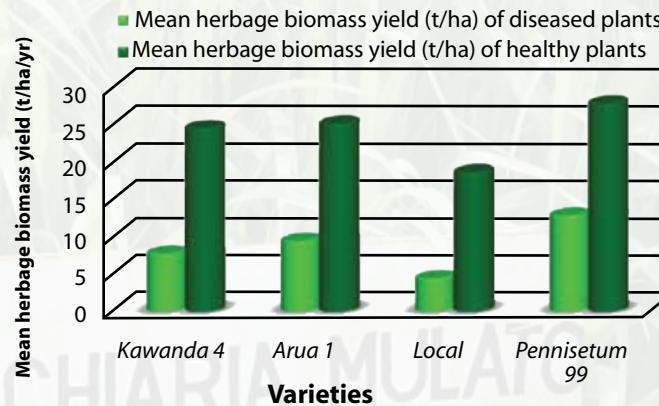


Figure 2: Effect of NSD on mean herbage biomass yield (t/ha/yr) of selected Napier grass varieties

Cause and spread of NSD

NSD is associated with a phytoplasma belonging to the 16SrXI (*Candidatus Phytoplasma oryzae*) Group (Nielsen et. al., 2010). The disease is spread by:

- specific feeding insects, especially leaf hoppers and plant hoppers;
- infected cuttings;
- ignorance on symptoms and mode of transmission and;
- movement of infected plants.

Methods used to reduce NSD incidence

- Uproot and burn infected plants
- Plant disease free cuttings or splits
- Follow recommended agronomic practices
 - ✓ remove all weeds
 - ✓ apply fertilizers/manure (Figure 3)
 - ✓ plants should be harvested at least 1 inch above the ground
 - ✓ spacing (1 m x 1m)
 - ✓ cutting intervals

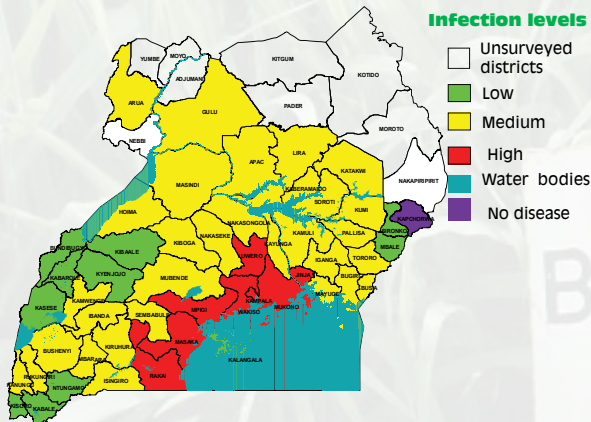


Figure 1: Spread and level of infection of NSD in Uganda (Kabirizi et. al. 2010)