



NTS production (grasses)

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Introduction

Rhodes grass (*Chloris gayana* Kunth) is an important tropical grass widespread in tropical and subtropical countries. It is a useful forage for pasture and hay, drought-resistant and very productive, of high quality when young. NTS contract farmer to grow Katambora Rhodes grass. NTS conduct visits to farmers interested in growing the grass and assess the available infrastructure. Upon certification the grower will be issued out with a contract to do seed production.

Rhodes grass is a robust drought-tolerant grass with a strong root system that enables it to spread quickly to form a ground cover. One challenge with Rhodes grass, however, is its poor germination rate, making seeds and planting important issues for a farmer to plan for maximum benefits. The minimum germination acceptable for Rhodes grass is 30%.

Land Preparation and Sowing

NTS monitors the process of land preparation and sowing.

Farmer do direct sowing and seed rate is 8 -12 kg/ Ha. On previously cropped land, plough towards the end of the preceding rainy season. Follow with dry-season ploughing and harrowing for weed control. On virgin land, farmers will do three ploughings and two harrowing. Seed is then sown close to the surface (not more than 1cm) to get them in contact with moist soil so that they will absorb moisture and germinate. NTS growers broadcast grass seeds or drill in rows 30–40cm apart.

Immediately after sowing, compact the seedbed to enhance germination of the grass seed by improving contact with the soil. NTs farmers use a roller to compact the soil. The seeds germinate in 1-7 days.

Fertilisation

Fertiliser application at planting: NTS farmers used phosphate fertiliser to promote strong root development. The rates of fertiliser application are as follows:

- Single super phosphate (SSP) 2–4 bags/ha
- Triple super phosphate (TSP) 1–2 bags/ha

The crop will then be top dressed at 2 split applications, each of 50-100 kg/ha N.

Pests and diseases management

Rhodes grass can be attacked by Insect pests include fall armyworm (*Spodoptera frugiperda*), larvae of *Mocis latipes*, (both *Lepidoptera: Noctuidae*), the lesser corn-stalk borer (*Elasmopalpus lignosellus*), Rhodes Grass Scale or Rhodes Grass Mealybug (*Antonina graminis*), chinch bugs (*Hemiptera: Lygaeidae: Blissus* spp.) and the two-lined spittle bug (*Homoptera: Cercopidae: Prosapia bicincta*). Some of these can severely damage stands if conditions are suitable. NTS provide farmers with pesticides for specific pest and diseases. In seed crops chemical treatment is rarely applied against diseases pest. But armyworm is problem and can be controlled by cabaryily, Dipterex, Malathion.

Weeding

Weed can seriously compete with both the establishing and developing katambora seeds. NTS provide growers with good cultural practices in the season before sowing (pre-cropping or fallow) will help reduce the weed seed population in the pasture seedbed. Hand pulling of weeds is used as an effective way of controlling weeds. Broad leaf weeds can be controlled by chemicals and further advice should be obtained from chemical suppliers or research laboratories.

Crop Inspection

The crop should be inspected regularly, and off types removed as and when they are seen. Not more than one undesirable plant is allowed in 10m². The major period for roguing should be between flowering and harvest.

Harvesting

NTS growers harvest the seed mechanically with fair proportion of straw. Some NTS growers used do hand picking for small areas, and this seed needs minimal cleaning.

Seed Inspections

NTS do conduct inspection at every stage of growth. The government inspectors inspect the seed at flowering and at physiological maturity.

No	INSPECTION STAGE	ZSTA/OECD
1	Land verification	√
2	Foundation seed verification at farm	√
3	Planting	√
4	Emergence	√
5	Vegetative	√
6	Pre-flowering	√
7	Flowering	√ X 3
8	Maturity	√
9	Harvesting	√
10	Pre-Delivery Farm tests and sampling	√