Katambora

Rhodes Grass

Chloris gayana

INTERNATIONAL

KEY FEATURES

- Katambora offers nematode resistance
- Well adapted to a wide range of soils
- Not adapted to acid, infertile soils
- Some tolerance to saline conditions
- Very drought tolerant
- Tolerant of heavy grazing
- Requires high fertility to persist
- Poor tolerance of waterlogging
- Produces high quality hay
- Easily established with quick growth in pasture blends

KATAMBORA is late flowering diploid type Rhodes grass. It is later than Pioneer but earlier than Callide. KATAMBORA remains leafier and more productive into autumn than Pioneer. It is also finer leaved and more stoloniferous.

It is easily established to produce high quality grazing and hay value (if cut at appropriate time). KATAMBORA is well utilised in a grass or legume blend, it displays strong growth in both irrigated and dryland operations. It displays very good water use efficiency in comparison to other sub-tropical grasses.

In areas that have extremely cold winters or long dry seasons, KATAMBORA Rhodes can act as an annual and can also be used for erosion control.

Growing Conditions

Soil Type:
Rhodes grass is adapted to a wide range of soils, from infertile sands to fertile brigalow clays. It is difficult to establish and have it persist on heavy-cracking clay soils.

Sowing Rate:
Pure 1 - 2kg/ha Dryland
Pure 3 - 5kg/ha Irrigated

Rainfall:
600mm+

pH:
5.5 - 7.5 ($CaCl_2$)

Rhodes Grass Agronomic Information

Scientific name(s) *Chloris gayana*

Strengths

- Widely adapted
- Easily established
- Spreads by runners
- Very drought tolerant
- Good salt tolerance
- Tolerates heavy grazing
- Ideal for horse pastures (no oxalate problems)
- Few pests or diseases of economic importance
- Nematode resistance in cultivar 'Katambora'
- Good seed production
- Good competitor for weeds such as spiny burr grass

Limitations

- Fluffy seed difficult to sow
- Not adapted to acid, infertile soils
- Not tolerant of high exchangeable aluminium levels
- Requires high fertility to persist
- Quality drops rapidly with onset of seeding
- Low shade tolerance
- Poor tolerance of waterlogging

Plant characteristics

Plant: tufted perennial grass 1 - 2m tall, spreading by looping runners forming new plants along the runners (stolons).

Stems: smooth and shiny; creeping stems 4 - 5mm diameter, and upright stems 2 - 4mm diameter.

Leaves: leaf blades are hairless except at the base near the stem, and usually of the order of 30 - 40cm long and 3 - 5mm wide, tapering to a point.

Seedhead: mostly a single (sometimes double) circle of radiating light, greenish brown (ripening to darker brown) branches 4 - 15cm long.

Seeds: light and fluffy, 3.5 mm long, each bearing a long ('Callide') or short (other cultivars) awn (bristle); 4 million ('Katambora') or 7 - 10 million (other cultivars) seeds/kg. Seeds contain a small dark brown grain (caryopsis), with 2 million caryopses/kg.

Pasture type and use

Rhodes grass can be used as permanent pasture or a short- to medium-term pasture ley. It is also useful for erosion control by virtue of its spreading growth habit. It makes good hay if cut at or just before early flowering, and provides better standover feed than buffel grass or the panics.

Where it grows

Rainfall

It is usually sown in areas receiving an average annual rainfall of 700 - 1,200mm, and is well-suited to irrigation. While it can be successful at lower annual averages (as low as 500mm in NSW), it is not suited to areas of very high rainfall (more than 1,800 mm/yr.).

Soils

Rhodes grass will grow on most well drained soils, providing fertility is adequate. It prefers well-structured loams and clays of volcanic origin but is not suited to very heavy clays. It is best in soils with pH between about 5.5 and 7.5, but will grow down to pH 4.5 (if available aluminium and manganese levels are low) and up to 10. It is the most salt-tolerant of the commonly sown tropical grasses, tolerating soil salt levels where electrical conductivity exceeds 10 dS/m.

Temperature

It has moderate frost tolerance, with 'Katambora' and 'Pioneer' types being less affected by frost than is 'Callide'. All are generally less affected than are green or Gatton panics.

Establishment

Companion species

Grasses: buffel grass, green and gatton panics, setaria.

Legumes: burgundy bean, butterfly pea, glycine, lotononis, lucerne, medics, serradella, siratro, and white clover.

Sowing/planting rates as single species

1 - 5 kg/ha. Seed should be sown on the surface (no deeper than 2 cm) of a well-prepared seedbed. For broadcasting, seed is best mixed with sawdust or fertiliser, and for drilling, it flows more readily if pelleted (coated).

Sowing/planting rates in mixtures

0.5-1 kg/ha.

Sowing time
It can be sown from spring to early autumn. As a general rule, it is best to choose a suitable sowing time for any associated legume.

Fertiliser
It is advisable to use an establishment application of say 200 - 300 kg/ha of superphosphate on less fertile soils. A post-emergence application of 100 kg/ha of urea (= 46 kg/ha N) in pure stands will stimulate more rapid stand development.

Management

Maintenance fertiliser
Split applications, each of 50 - 100 kg/ha N, are used in pure stands when economically feasible.

Grazing/cutting
Rhodes grass is very tolerant of cutting or grazing. The stand should be maintained in a leafy condition by fairly regular cutting or grazing, since feeding value declines rapidly with onset of flowering. However, too frequent cutting or grazing (say every 14 days) leads to production losses and stand decline. Annual winter legumes are favoured by heavily grazing the pasture in late summer.

It makes good hay if cut at or just before very early flowering, giving up to 6, 25- to 50-day harvests.

Ability to spread
Rhodes grass is commonly found on roadsides and other areas of disturbance throughout the tropics and subtropics. It spreads readily by seed and runners.

Weed potential
It invades disturbed ground and is a weed of cultivation. However, it usually dies out after 4 - 5 years in the absence of further disturbance or nitrogen fertilisation. It rarely invades natural areas.

Major pests
Severe attack by armyworm and pasture webworm can destroy much of the leaf, particularly young leaf - largely restricted to coastal areas.

Major diseases
No serious diseases.

Herbicide susceptibility
It is very susceptible to the selective grass herbicide, haloxyfop (Verdict®), even when mature. While weakened, by glyphosate at normal rates, it mostly survives unless resprayed.

Animal production

Feeding value
Crude protein levels vary with age of regrowth and level of available soil nitrogen, from about 17% (on a DM basis) in very young leaf, to 3% in old leaves. Similarly, digestibility may vary from 80% in very young growth to 40% in older growth.

Palatability
Young growth is very palatable, particularly in 'Callide'. Palatability declines with age, more rapidly with the onset of seeding.

Production potential
It can carry about 1 - 4 beasts/ha depending on pasture productivity and size of animal. Annual liveweight gains of up to 170 kg/head are achievable. Production levels decline without a vigorous legume or the use of fertiliser nitrogen.

Livestock disorders/toxicity
None recorded.

Source : Pastures Australia

Australian Government
Rural Industries Research and Development Corporation
RIRDC www.rirdc.gov.au

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