

Kazungula *Setaria*

(A pasture grass for the wet areas)

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DESCRIPTION

Kazungula (*Setaria sphacelata* cv Kazungula) is a robust tussocky perennial grass. It forms dense tussocks and spreads by short rhizomes (underground stems). When heavily grazed, the tussocks can form a complete sward.

Kazungula may grow to 2 m high at flowering. Leaves are broad and bluish-green 10 to 70 cm long and 10 to 12 mm wide. The sheaths of the basal leaves are purple and strongly flattened in young tillers. The nodes on the stems are pale red. The seed head is an elongated cylindrical spike-like panicle 10 to 50 cm long. Seeds are small, averaging 2.4 mm long, 1.1 mm broad and 1.5 million per kg.

There are other cultivars of setaria available in Australia, but Kazungula is the only one suitable for the NT.

CLIMATE AND SOILS

Kazungula is a native of tropical and sub-tropical Africa and is suitable for areas receiving 1,100 mm or more of average annual rainfall.

It is adapted to a wide range of soil types including solodic, yellow earths and black cracking clays. In the NT it does best on waterlogged soils which stay moist late into the dry season. It tolerates prolonged waterlogging and can withstand temporary flooding.

SOWING

Seed should be sown at 2 - 6 kg/ha depending on seed quality and seedbed preparation. For best results, seed should be sown onto a well prepared surface and lightly rolled. Kazungula seed should not be covered too deeply.

Seed must be stored in a cool dry area as fluctuations in temperature (particularly high temperature) and moisture will reduce seed viability. Kazungula should be sown mid to late December, depending on moisture conditions.



MANAGEMENT

Fertiliser requirements: These have not been studied in the NT, but Kazungula is very responsive to nitrogen applications.

Generally, the seed should be sown with 100 - 200 kg/ha of superphosphate, and maintenance applications should be 50 - 100 kg/ha yearly.

Nitrogen should be supplied to the sward by sowing a legume with Kazungula.

Yield: Dry matter yields of 4-6 tonnes per hectare have been recorded for pastures which were not fertilised with nitrogen.

Grazing: Kazungula is very palatable and has a high digestibility. Established stands can withstand extremely heavy grazing, except during the storm period early in the wet season when they are susceptible to severe defoliation.

Kazungula should not be stocked during the wet season of establishment, except in mixtures where the grass is severely out competing the legumes. In this case, a heavy stocking rate for a short time is best.

Mixtures: Legumes which could be included in mixtures with Kazungula are Wynn, Maldonado, Glenn, Lee, Cavalcade, Bunday, Verano and Amiga . Kazungula is an aggressive grass, and it is difficult to maintain a legume in a sward.

Oxalate Toxicity: Kazungula can have high oxalate levels, i.e. up to 7% but levels are generally lower than this. High oxalate levels can be toxic to grazing animals, particularly horses, lactating cows or hungry cows. The oxalate levels are higher in leaves than in stems, and higher in leafy young regrowth than in older regrowth. Oxalate levels are increased by applying high levels of potassium or nitrogen fertilisers.

To avoid the possibility of oxalate poisoning, sow Kazungula as a component of a mixed sward. Do not excessively fertilise with potassium or nitrogen, and keep horses and lactating or hungry cows off heavily fertilised swards.

Pests and Diseases: No pests or diseases are recorded which affect the production of Kazungula in the NT.



WARNING

Pasture plants have the potential to become weeds in certain situations. To prevent that, ensure that pasture seeds and/or vegetative materials are not inadvertently transferred to adjacent properties or road sides.

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