

## Basilisk Signal Grass

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### DESCRIPTION

Signal grass (*Urochloa decumbens* cv Basilisk) is a vigorous trailing perennial grass which branches and roots readily at the lower nodes, forming a dense sward.

Leaf blades are hairy and lanceolate in shape with a rounded base, up to 20 cm long, and 10-15 mm wide. Leaves are commonly dark green during the wet season, and yellowish green during the dry season.

Swards grow up to 70 cm in height, with erect flowering stems up to 85 cm high. Grazed pastures are generally lower.



Seeds are broad, oblong 4.5 x 1.5 mm, almost smooth and whitish. There are 286 000 seeds per kilogram.

### CLIMATE AND SOILS

Signal grass is native to the open grasslands of Uganda and adjoining east and central African countries.

While it is suitable for areas receiving more than 1000 mm average annual rainfall, it grows best in the wetter areas of the Top End.

Basilisk is adapted to a wide range of soil types, but it prefers a well drained soil and it will not tolerate flooded or waterlogged situations except for short periods. It grows longer into the dry season and stays green longer in the dry season than other grasses.

### SOWING

A well prepared, weed free seed-bed is required for good establishment. For best results, the seed should be sown by combine or drum seeder, dropped onto a freshly disturbed soil surface and rolled.

Seed can be sown at 3-6 kg/ha. Use the higher rates if weed competition is likely to be strong and lower rates if it is to be used in mixtures with legumes.



Freshly harvested seed has only a low germination percentage because of seed dormancy. Germination improves after 8-12 months of storage or with acid treatment of freshly harvested seed.

## MANAGEMENT

**Fertiliser requirements:** Have not been closely studied in the Top End. Types and amounts of fertilisers required will depend on soil type, rainfall, pasture mix and intended use of the pasture.

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

Potassium may also be required on some soils, and with more intensive use, i.e. haymaking.

Signal grass will respond to split applications of nitrogen during the wet season, producing yields similar to pangola grass.

**Yield:** In ungrazed swards at Beatrice Hill Farm, Signal grass has produced 4-6 t/ha dry matter without nitrogen fertiliser, and 12-14 t/ha dry matter with 200 kg/ha nitrogen fertiliser as urea applied in two split applications.

Seed yields of 600-700 kg/ha have been reported from Queensland. In the Top End yields are much lower than this as the production of seed heads is uncoordinated and many of the seeds do not fill out.

**Grazing:** It 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 very short time is best.

Try not to graze until well into the first dry season to allow the plants to establish. Normal grazing can be commenced in the mid wet season of the second year.

Signal grass is palatable to cattle and buffalo but most horses tend to reject it. The stems may become coarse and unattractive to stock. Established stands can withstand heavy grazing and trampling except during the storm period early in the wet season. It is particularly susceptible to overgrazing during the early wet in low rainfall years. Grazing in the same dry season after haymaking may cause loss of signal grass from a pasture.

**Mixtures:** Legumes which can be included in mixtures are Bunday, Cavalcade, Glenn, Lee, Amiga and Verano. Signal grass is aggressive but it is not as difficult to maintain a legume in a sward as with pangola grass.

**Haymaking:** Although hay made from signal grass in the Top End of the Northern Territory is generally not good quality, and the bales are very light, it is well accepted by stock.

**Pests and Diseases:** There is no evidence of pests or diseases causing production problems 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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