

Sabi grass

Scientific name(s)

Urochloa mosambicensis

Strengths

- Fast growing in spring
- Excellent drought survival ability
- Grows well on a wide range of soil types and environments
- Tolerates heavy grazing
- Tolerates lower fertility than most sown grasses with some salinity tolerance
- Responsive to increased soil fertility
- Good seed producer and can be harvested mechanically
- Few pests and diseases

Limitations

- Matures quickly and dries off early in autumn
- Sensitive to frost
- Not suited to heavy clays

Plant description

Plant: stoloniferous and loosely tufted, sprawling lower branches, sometimes rooting from lower nodes, 30-100 cm high

Stems: branching and from 50 - 100 cm tall, or trailing, hairy nodes

Leaves: often pale green, hairy, 20 - 80 cm long, up to 1.5 cm wide

Seedhead: 3-15 branches, 2-8 cm long, seeds in 2 symmetrical rows

Seeds: vary from a dull green to straw in colour, to 1M seeds/kg.

Pasture type and use

Summer growing perennial grass used in tropical cattle grazing systems, roadside stabilisation and mine rehabilitation. Palatable plant with good forage quality when green.

Where it grows

Rainfall

500 - 1300 mm/annum

Soils

Well adapted to a wide range of well drained, not waterlogged, soils including sands, loams and lighter clay soils of low to high fertility. Tolerant of lower fertility than alternative sown grasses. Some salinity tolerance.

Temperature

Summer growing grass with most production occurring in the warmer months, responding rapidly to spring and early summer rainfall; dries off rapidly in autumn. Plants frosted in winter but shoot in early spring when moisture is available.

Establishment

Companion species

Grasses: Not usually sown with grasses; has invaded run-down buffel pastures and grown with Indian couch (*Bothriochloa pertusa*)

Legumes: Not usually sown with legumes; Potential legumes vary from the tropics to the sub-tropics and with soil type; Sown legumes, include the summer growing legumes stylo (*Stylosanthes* spp.), desmanthus (*Desmanthus virgatus*), butterfly pea (*Clitoria ternatea*), leucaena (*Leucaena leucocephala*) and lucerne (*Medicago sativa*), and annual winter growing medic cultivars (*Medicago* spp.).

Sowing/planting rates as single species

2-4 kg/ha; usual seed quality (germination and purity) and maturity considerations, 600,000-1 M seeds/kg. Sow up to 2 cm deep.

Sowing/planting rates in mixtures

1-4 kg/ha, sow at a pro rata rate depending on the number of species in the mixture; sowing rate is unchanged when sown with legumes.

Sowing time

On spring to early summer rainfall or mid-January to February to avoid heat wave periods. Freshly harvested untreated seed remains dormant for the current season (6 months), but can be hammer-milled to remove the inhibiting glumes for earlier sowing.

Inoculation

Not applicable

Fertiliser

Varies with soil texture, fertility and rainfall; responds to phosphorus (to 35 kg P/ha) and nitrogen (to 100kg N/ha).

Management

Maintenance fertiliser

Not usually fertilised for grazing; Depending on soil -responds to nitrogen (to 100 kg/ha) and phosphorus. High rates for seed production.

Grazing/cutting

Heavy grazing, cutting and fire tolerant, responds rapidly to spring/early summer rain and is selectively grazed, can become 'papery' in a dry autumn even before frosting

Seed production

Usually 100 kg/ha/year by direct mechanical harvesting, but up to 300kg/ha/year is possible by fertilising and multiple harvests in a long growing season.

Ability to spread

Good ability to spread by seed and stolons, adapted to low fertility soils. Fast growing seedlings.

Weed potential

Potential competitor in ungrazed sites e.g. roadsides.

Major pests

No significant pests under grazing.

Major diseases

No significant diseases under grazing.

Herbicide susceptibility

Glyphosate (Roundup) susceptible, tolerates atrazine to 4L/ha.

Animal production

Feeding value

High quality when green and growing; CP in fertilised young leaf to 20% and IVDMD to 70% declining rapidly when mature to less than 10% CP and 45% IVDMD. Phosphorus range of 0.1-0.6% depending on soil fertility and fertiliser. Sodium levels 0.1-1.5% varies with soils.

Palatability

High palatability when growing, lower on maturity.

Production potential

0.5-5t DM/ha depending on soils and fertiliser (N and P rates), producing 80-360 kg LWG /ha/year (the higher levels with fertiliser and companion legumes).

Livestock disorders/toxicity

No disorders or toxicity.

Cultivars

Cultivar	Seed source/Information
Nixon	Public variety (opportunistic harvesting), Southedge Seeds, Rural Agents, Progressive Seeds P/L (most pasture seed companies can source seed).
Saraji Ⓢ	Progressive Seeds P/L, Rural Agents.

Ⓢ Denotes that this variety is protected by Plant Breeder's Rights Australia

Further information

Burt, R.L., Sinclair, D.F., Harrison, P., Pengelly, B.C. and Williams, W.T. (1980) Preliminary agronomic evaluation of some perennial Urochloa species over a range of environments. Australian Journal of Experimental Agriculture and Animal Husbandry, 20, 439-446.

Burt, R.L., Williams, W.T., Gillard, P. and Pengelly, B.C. (1980) Variation within and between some perennial Urochloa species. Australian Journal of Botany, 28, 343-356.

<http://www.fao.org/ag/AGP/AGPC/doc/Gbase/data/pf000337.htm>

Acknowledgements

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Author and date

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