

A collaboration between AWI, GRDC, MLA, RIRDC and Dairy Australia

Kangaroo grass

Scientific name(s)

Themeda triandra

Strengths

- · Native grass.
- Persistent under low soil nitrogen conditions.
- · Very palatable to livestock pre-flowering.
- Rapid early spring growth.
- Seed can be harvested from native pasture stands.

Limitations

- · Seeding and seedling recruitment required for long term persistence of sward.
- Chaffy seed difficult to harvest, handle and sow.
- · Low seed purity.
- Large seed and relatively few seeds/kg requiring high sowing rates and high cost of pasture establishment.
- · Susceptible to competition from weeds, especially annual grass weeds.
- · Low seed germination.
- Slow seedling growth compared with many sown grasses and low production in the establishment year.
- · Early maturity and low autumn feed quality.
- Intolerant of waterlogging.

Plant description

Plant: A native, tufted, perennial warm season grass.

Stems: Culms erect; up to 1.5m tall, usually unbranched, smooth, often becoming golden-coloured at maturity. Nodes hairless.

Leaves: Leaves growing from the base of the stems. Leaf-blades 15-50 cm long; 2-5 mm wide, green or sometimes bluish, folded with a more or less clasping base, becoming more or less flat along the blade towards the acutely pointed tip. Ligule, a ciliolate membrane later splitting into a rim of short hairs with some longer, marginal hairs.

Seedhead: An open, , usually reddish-coloured panicle 10-30 cm long, with long awns on the seed clusters.

Seeds: 100,000-325,000 seeds/kg.

Pasture type and use

Widespread in Australian native pastures, but abundant only in areas subject to low growing season grazing pressure. Rarely sown as permanent pastures and then on very small scale. Used mainly as an amenity grass in landscapes; often planted from tube stock.

Where it grows

Rainfall

It grows over a wide rainfall range, about 500-2000 mm/yr.

Soils

It is adapted to a wide range of soils, from sands to heavy clay soils, and does particularly well on more fertile red and dark forest soils.

Temperature

It grows during the warm season and tops are killed by heavy frost.

Establishment

Companion species

Grasses: queensland bluegrass, weeping grass (microlaena).

Legumes: annual medics, clovers, birdsfoot trefoil.

Sowing/planting rates as single species

10 kg/ha.

Sowing/planting rates in mixtures

5 kg/ha.

Sowing time

It can be sown from spring to late summer.

Inoculation

Not applicable.

Fertiliser

No fertiliser is needed for establishment.

Management

Maintenance fertliser

No maintenance fertiliser is required but it will respond to a moderate level of nitrogen (say 50 kg N/ha).

Grazing/cutting

Periodic seeding, perhaps on average every third year, is required for stand persistence and can be achieved by rotational spelling of paddocks following good spring or early summer rain. It can be cut for hay yielding 2-5 t/ha from native pasture stands, depending on stage of growth, soil fertility and rainfall.

Seed production

It can be harvested with brush harvesters. Seed yield of 50-100 kg/ha may be achieved. Freshly harvested seed may be dormant for up to 12 months.

Ability to spread

It spreads on animal coats and in mud on hoofs.

Weed potential

It has negligible weed potential.

Major pests

There are no known major pests.

Major diseases

There are no known major diseases.

Herbicide susceptibility

It is killed by glyphosate, but is tolerant of atrazine.

Animal production

Feeding value

Forage quality declines with maturity to low levels in winter, especially when the top is killed by frost.

Palatability

It is very palatable while green.

Production potential

The carrying capacity is about the same as for other native grass pastures on the same soil type.

Livestock disorders/toxicity

It is low in oxalate and therefore suitable for horses.

Cultivars

Cultivar	Seed source/Information
Burrill	Native Seeds
Tangara 🕭	Native Seeds Plant Breeders Rights Database
Mingo Ø	Plant Breeders Rights Database

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

Further information

Tothill, J.C. and Hacker, J. B. (1983) The Grasses of Southern Queensland. St Lucia: University of Queensland Press
GrassBase - The Online World Grass Flora
Grassland Species Profiles -Themeda triandra
Grassland Species Profiles - Themeda australis
NSW DPI Grassed up - Themeda triandra
Ecological Management & Restoration

Author and date

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