Limitations of Tropical Grasses

- ⇒ Tropical grasses often have lower nutritive quality than temperate species, due to greater lignification of the plant leaves. However it is important compare tropical pastures to alterative summer feed options available over the growing period and not just temperate grasses.
- ⇒ The digestibility of tropical grasses can decline at faster rate than that of temperate species, meaning grazing management plays a key role in maximising periods of higher animal production.
- ⇒ Tropical grasses are slower to establish than annual species, especially summer weeds. Therefore good weed control and paddock preparation are key for successful establishment.
- ⇒ Some tropical grass seed can be of low quality with germination rates under 30%. To avoid purchasing low quality seed, request a recent seed test for purity, viability, germination and weed contamination. Note that germination rates are considered reasonable at 40% and very good at 70%.
- ⇒ Tropical grasses only grow in the warmer months of the year and require adequate summer rainfall to grow.

References and Resources



Sub-tropical pastures for southern meat producers (MLA)

Increase feedbase production and quality of subtropical grass based pastures NSW component (MLA final report)





Pasture species and varieties (NSW DPI)

Tropical perennial grasses for northern inland NSW (Online Book)





Successful establishment in southern NSW (webinar)

Tropical grasses for southern environments (YouTube)





Establishing Tropical Pastures (Central West LLS)

Tropical Pasture Guide (Aus West Seeds)



HLN is undertaking Producer Demonstration Sites across southern NSW as part of this 5 year project, funded by MLA.

If you would like to know more or become involved, get in touch via our details below



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Testing Tropicals in the **NSW Southern Slopes**

A project demonstrating the performance of sub-tropical/tropical pasture species in Southern NSW grazing systems, funded by Meat & Livestock Australia





Why Tropical Pastures?

Climate

Climate predictions for the Southern slopes of NSW suggest decreasing winter rainfall and increasing in summer rainfall patterns with a shorter growing season for temperate grasses. In addition to increasing minimum temperatures, there may be an opportunity to utilise tropical or summer growing pastures in southern NSW.



A Better Alternative?

The incorporation of tropical pastures into southern systems has the potential to address some key challenges faced by southern graziers over the summer period. These include:

- Lack of high quality, green pasture
- Loss/reduction of ground cover
- * Limited utilization of increasing summer rainfall
- Management of annual summer weeds
- Loss/decline in soil carbon stores
- Bloat in livestock from Lucerne

Species

Digit grass

Persistent perennial. Performs best on the light-medium soils and therefore can be good for secondary country. Performs on low fertility and medium to heavier textured soils. Drought tolerant. Intolerant of waterlogging. Very palatable, somewhat frost tolerant.



Kikuyu

Perennial that, with rainfall, can be invasive via its runners, making it a good option for erosion control. Suited to very fertile and well-drained soils.



Rhodes grass

Suited to many soil types from light sandy loams to heavier textured soils., but requires good fertility. Moderate drought tolerance. Spreads via runners. Easy to establish. Other species are more persistent.



NSW DPI © State of New South Wales

Bambasti panic

Persistent when established due to poor seedling vigour. A perennial with excellent tolerance of water logging. Suited to very fertile, clay soils. Pastures lacking variety with Bambasti panic may cause saponin poisoning.



Reference: NSW DPI: Pasture species and varieties

Key determinants for success with tropicals

Weed Control

Competitive summer weeds are often responsible for tropical pasture failures. It is important that annual summer weeds are prevented from setting seed, in the years leading up to sowing tropical pastures, so that tropical perennials have a chance to establish.

Soil Temperature

The rule of thumb is to sow when day temperatures are consistently above 20°C and night temperatures above 10°C or once the soil temperature reaches 16°C and rising at 9am, consistently. This is often around early November.

Soil Moisture

Sowing in spring/summer as evaporation increases means it can be difficult to retain the recommended 50-60cm of stored soil moisture, especially in the top 10mm of soils.

Sowing into crop stubble can help prevent moisture loss and reduce soil temperature.

Species Selection

Choosing species/cultivars that are best suited to your soil type and situation are important for giving you the best chance of success with tropicals.