

Kikuyu Shows Multiple Benefits on KI

Overabundance of winter and spring feed followed by a scarcity in drier months caused some Kangaroo Island farmers to explore the benefits of Kikuyu.

Written for Grain & Graze 2 by Mike Roberts Communications, Research and Consulting

Kikuyu experience on KI:

- A robust summer active perennial grass
- Withstands heavy grazing and set stocking
- Provides green feed for livestock at a time when other pastures have declined in quality.
- Close-knit structure offers good summer soil cover reducing erosion risk
- If properly managed, allows companion species like sub clover to thrive in winter.



Photo courtesy Tim Prance

Kikuyu trials:

Grain & Graze 2 funded trials on 3 sites compared feed quality and quantity of kikuyu and annual pastures over 18 months.

- Kikuyu paddocks grew more pasture than the annual paddocks for most months of the year.
- In terms of feed value, kikuyu outperformed the annual pastures for nearly all criteria over the 18 month monitoring period.
- Kikuyu paddocks were able to sustain a higher stocking rate than the annual paddocks

Kikuyu needs good management:

Conventional wisdom said that kikuyu pastures basically fade away in the winter because the plants go dormant. KI experience shows kikuyu pastures still produced as well as the annuals in paddocks with good clover stands. When the kikuyu became dormant in winter, the clover flourished.

Hard grazing prevents kikuyu becoming tall and rank. Grazing the kikuyu hard at the end of autumn means a healthy clover stand can get away on winter rains. That means no loss of feed in the winter.

Feed Quality:

- Kikuyu outperformed the annual pastures in terms of metabolizable energy and food proteins and even the relative feed value. Freshly grazed kikuyu leaves:
 - Can exceed 70% digestibility
 - Metabolizable energy of around 10 Mg/ha dry matter (DM)
 - Crude protein of between 10 to 20%.

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Less hand feeding:

When, over the summer the annual pastures were less than ideal for all stock types, those with kikuyu remained suitable for dry stock. Kikuyu pastures can mean less hand feeding over summer.

Better livestock performance:

Kangaroo Island veterinarian Greg Johnsson's KI Flock Production Group placed the same number of sheep on the same size paddock of kikuyu as the annual pasture paddock and then monitored livestock performance. Results showed better weight gain of weaners on the kikuyu, lower mortality with light weaners, better vitamin E status, increased wool cut, tensile strength and lower supplementary feeding costs.

Higher stocking rate and less erosion risk:

Kikuyu pasture can be stocked at a higher rate than annual pasture because it grows more feed at better quality. In summer annual paddocks can become bared out and start blowing away. Because kikuyu is actively growing in summer, higher stocking rates are less likely to pose an erosion risk.

Water and drought tolerant:

Kikuyu tolerates waterlogging and is relatively drought tolerant. It is one of the few perennial species suited to acidic infertile sands. Due to its high water usage kikuyu also has the potential to reduce salinity impacts."

Other benefits:

Anecdotally, some farmers who have sown kikuyu around their houses say they feel a bit more comfortable in the summer months when not only don't they have as much dust blowing but if there's a fire coming, feel they have that extra measure of protection afforded by the green feed.

Weed potential in native vegetation:

Work done in WA, which has been backed up by older stands on KI, show that Kikuyu doesn't handle shade or competition well. Where thick healthy native vegetation with close to 100% shade exists, Kikuyu is unlikely to persist. It will persist in areas of degraded vegetation but in those cases other weeds are also likely to be a problem.

In terms of control, Kikuyu is unlike couch. Whilst couch is very hard to control, Kikuyu is easy to control with herbicides.

Some spread occurs with manure so if likely to be a problem then animals can be emptied out before moving to a new paddock.

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