

Management of African lovegrass

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Graziers on the Northern Tablelands of NSW are faced with the ever increasing problem of African Lovegrass (*Eragrostis curvula* - Chloromelas form) invading introduced and native pastures. *Eragrostis* is a controversial pasture species. Agronomically it is a valuable plant for animal production and soil conservation purposes in countries such as South Africa, North and South America.

In Australia, *Eragrostis* is considered to have weed potential because of low palatability, low protein, susceptibility to frosting and ability to invade. A survey by M.H. Campbell in 1981-82 showed that 12400 ha in the Tenterfield Shire alone was infested with African lovegrass. By 1990 this was much larger, a situation beyond the economic scope of chemical control. In 1990 the Tenterfield Landcare Group was formed to investigate management strategies that could utilise the potential of this plant.

Methods

A demonstration was established in December 1992 to investigate 3 management strategies:

- low stocking rate (2 steers/ha) to build up a reserve of mature feed to be utilised with a protein supplement during winter;
- medium stocking rate (2.5 steers/ha) with surplus summer feed to be baled and the area to be sod-seeded with subterranean clover (cultivars Woogenellup and Seaton Park) in the initial year to increase the subsequent winter/spring production; and,
- heavy stocking rate (4 steers/ha) with nitrogen applications (250 kg/ha/yr of Urea) over

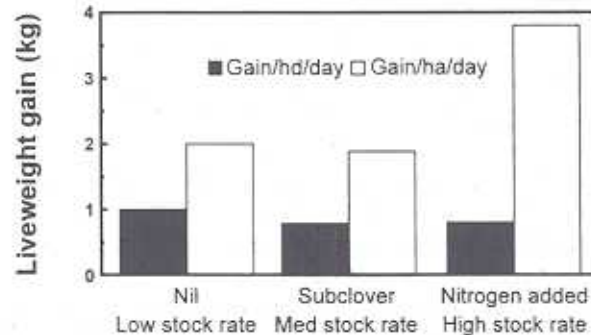


Figure 1. Effect of management strategies and stocking rate on cattle production.

summer and livestock either supplementary fed or removed from the area during winter.

Results and Discussion

Significant weight gains were achieved over 3 spring/summer/autumn periods in drought years from all management strategies; the histograms in Figure 1 are three year averages. Stocking rate dictates livestock production/hectare. Individual animal performance decreased as stocking rate increased, but overall performance per hectare increased.

African lovegrass can be very productive in the Northern Tablelands where temperate pasture species have difficulty in persisting. By keeping lovegrass relatively short and highly vegetative, animal production over the spring/summer/autumn period is relatively high and similar to or better than many highly improved temperate pastures.

Acknowledgments

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