

Herbage Quality of Two Yearlong Green Native Grasses

Peter Simpson

District Agronomist
NSW Agriculture
GOULBURN NSW 2580

About 60% of pastures on the Southern Tablelands are still based on native grasses and half of this area has received varying amounts of superphosphate and sub clover. Recent survey results (Munnich *et al.*, 1991) showed that the productivity of native grass pastures fertilized and oversown with subterranean clover was 80% that of a sown pasture based on introduced species (7 versus 9 DSE/ha, respectively).

This survey showed that the two potentially most useful yearlong green native grasses, *Microlaena stipoides* (weeping grass) and *Danthonia pilosa* (wallaby grass) were wide-

spread. These grasses are drought tolerant, grazing and fertility responsive, acid soil tolerant and have been selected for commercialisation. Information on their quality is important (Lodge *et al.*, 1990)

AIM

To compare the seasonal variation in quality of wallaby grass (*Danthonia pilosa*), weeping grass (*Microlaena stipoides*), with perennial ryegrass (*Lolium perenne*) at "Collector" on the Southern Tablelands.

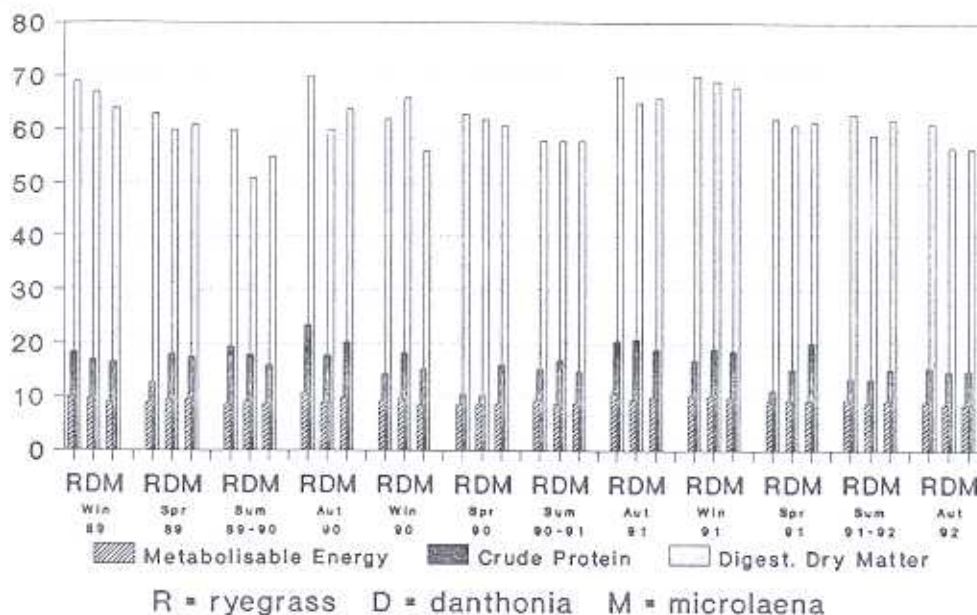


Figure 1: Seasonal herbage quality of native grasses and ryegrass, 1989-1992.

A paddock (sown in 1963) containing areas of these three grasses in close proximity was selected. These areas were grazed or mown off. After regrowth, the green leaf of each grass was sampled prior to stem elongation. Soil type was a yellow podzolic, pH (CaCl₂) 4.2, CEC 4.0, phosphorus 6 ppm (Bray No. 1). Annual rainfall for "Collector" is 700 mm/annum with a winter-spring dominance.

RESULTS & DISCUSSION

The results shown in Figure 1 indicate that these two native grasses can produce quality leafy growth throughout

the year given rainfall.

Feed quality was more than adequate for all the grasses throughout the year to meet the accepted requirements (Bell, 1991) of dry and lactating stock and occasionally for finishing stock. Ryegrass generally had higher digestible dry matter.

Danthonia, however, can very quickly cease growth over late spring - summer - early autumn under moisture stress and drop in feed quality. The early growth from both *Danthonia* and *Microlaena* is very prostrate compared to the more erect type of growth from

ryegrass. This may limit availability to cattle.

REFERENCES

- Bell, A.K. (1991). "Sheep Production from Pastures". *Sheep and Wool Officers Refresher Course Vol 21*, 1991.
- Munnich, D., P.C.Simpson and A.I.Nicol (1991). A Survey of Native Grasses in the Goulburn district and factors influencing their abundance. *Australian Rangeland Journal*, 13: (2).
- Lodge, G.M., G.G.Robinson and P.C.Simpson (1990). Grasses Native and Naturalized. *NSW Agriculture, Agfact 2.5.32*.