

Diet composition of sheep and cattle grazing *Microlaena*-ryegrass pastures

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Native grasses are important components of many pastures and commonly invade sown pastures on the Northern Tablelands of New South Wales. Almost all of these grasses are perennials but they differ widely in their value as fodder for sheep and cattle. Although some of the more leafy

and productive native grasses such as *Microlaena stipoides* (Labill.) R.Br. are significant components of highly productive perennial grass/clover pastures, there is little information available concerning the contribution that these grasses make to the diets of grazing animals. Some graziers maintain that they are extremely valuable while others, as well as some pasture agronomists, claim that they are such obvious components of the pastures because they are not eaten by the grazing animals.

The aim of this study was to obtain objective information about the species composition of the diets of sheep and cattle grazing complex, highly productive pastures containing a substantial component of native grasses.

Methods

Botanical composition of the pasture of two paddocks on "Powalgarh", 10 km north west of Guyra was determined in April, June, September and November of 1994 using the Botanal sampling procedure. Both paddocks had both sheep and cattle grazing in them for at least 10 days prior to each sampling. Five fresh faecal samples from both sheep and cattle were collected from each paddock at each Botanal sampling and the species composition of the diet estimated by examination of epidermal fragments in the faeces.

Results and Discussion

Drought conditions prevailed on "Powalgarh" for much of 1994 and the herbage mass varied from

a maximum of nearly 1500 kg/ha in April to a minimum of 150 kg/ha. The three major components of the pastures throughout the year were *Microlaena stipoides*, *Danthonia* spp. and *Lolium perenne*. The proportion of *M. stipoides* in the diets of sheep and cattle was roughly proportional to the proportion of this species in the paddock in April but then decreased through to September. The proportion of *L. perenne* in the diets of sheep was always higher than in cattle (with one exception) and likewise decreased throughout the year. The proportion of *Danthonia* spp. in the diets of both sheep and cattle increased throughout the year as did the proportion of these species in the herbage mass.

Conclusions

The native grasses in a mixed pasture made a major contribution to the diets of both sheep and cattle grazing these pastures.

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Reference

Lodge, G.M. and Whalley, R.D.B. (1989). Native and natural pastures on the Northern Slopes and Tablelands of New South Wales. *NSW Agriculture and Fisheries Technical Bulletin* 35, 49 pp.