PRODUCTS FROM THE TREE LEGUME ALBIZIA LEBBECK As SUPPLEMENTS FOR SHEEP IN THE DRY TROPICS

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The tree legume ***Albizia lebbeck*** **(siris)** has attributes suggesting that it should be of high value to the pastoral industry in tropical Australia (Lowry 1989). Leaves, flowers and pods fall sequentially, in similar amounts, from August to December, and are thus available as dry season feed for grazing livestock. In this experiment we evaluated the tree products as a supplement to mature spear grass, for their effects on speargrass intake and digestibility, liveweight gain, and wool growth.

Thirty-six Merino wethers were supplied verano and mixed medium quality hay for a 6-week pre-treatment period. All were then offered chopped speargrass *ad libitum* for a 6-week pre-treatment period, the amount being adjusted so that residues for each animal were about 100 g/day. The treatment groups, each of 6 sheep, were: no supplement (control); fallen leaf 100 g/day; green leaf 100 g/day; intact pods (i.e. with seeds) 100 g/day; fallen flower 100 g/day. Live weights *were* measured each week. Wool growth was determined by clipping a delineated mid-side patch at 3-week intervals. During the last 8 days faeces were collected for digestibility determination.

Table 1 Effects of feeding siris supplements to sheep

Treatment	Control	FL	GL	P	FF	l.s.d.
Initial wt (kg)	40.0	39.9	40.0	40.0	40.0	4.9
Live wt loss (g/hd/6 wk)	167	119	100	118	112	43
Total DMI (g/day)	470	503	604	552	634	100
DMD (whole diet %)	29.8	34.2	37.5	38.5	38.1	4.2
DMD suppl (%)		53	79	84	85	
Wool growth (mg/100 mm^2)						
Pre-treatment	1.143	1.158	1.356	1.155	1.259	0.318
Treatment	0.630	0.801	0.984	0.726	0.829	0.219
Change (%)	56	70	76	64	66	18.4

FL, fallen leaf; GL, green leaf; P, intact pods; FF, fallen flower.

All supplements had positive effects on dry-matter intakes, dry matter digestibility, and live weight; significantly so for green leaf and fallen flower. The data were in good agreement with earlier results obtained when these materials were fed as the sole diet (Lowry 1989). Wool growth decreased during treatment due to the high-quality pre-treatment diet, but all supplements gave enhanced wool growth relative to the control diet, with that for green leaf (c. 40%) similar to that for 20% verano supplementing Mitchell grass (A.C. Schlink, unpubl.).

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