

THE PERFORMANCE OF S170 TALL FESCUE IN CANTERBURY

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AN Aberystwyth selection of tall fescue (*Festuca arundinacea* Schreb.) , known as S170, was sown with certified New Zealand white clover (*Trifolium repens*) and red clover (*T. pratense*) and compared under sheep grazing with other grass/clover pastures at the Grasslands Division Regional Station at Lincoln (Watkin, 1975) .

Over an experimental period of three years, the tall fescue pasture was highly productive, largely because of the substantial contribution of the tall fescue component. The figures in Table 1 have been extracted from Watkin (1975) to illustrate the relative performances of the species.

Seasonal production of S170 was particularly well spread, being equal or superior to all the other grass/clover pastures compared. Tall fescue, along with short-rotation ryegrass, was the first to commence growth in the spring and still showed ap-

TABLE 1: ANNUAL AND SEASONAL PASTURE AND SPECIES

	Total	Annual			Spring			
	Total	sp.	Cl.	Other spp.	Total	Sp.	Cl.	Other spp.
Perennial								
ryegrass	9 670	7 250	2 260	170	4 450	3 790	570	90
S.R. ryegrass	7 350	5 720	1 080	550	4 560	3 740	480	340
Cocksfoot	8 550	6 500	1 330	710	4 120	3 270	480	370
Timothy	9 800	6 180	2 370	1 260	4 520	3 280	710	530
Tall Fescue (S170)	11 080	8 740	1 360	980	5 590	4 460	640	490
Yorkshire fog	10 150	7 300	2 010	850	4 740	3 790	500	450

*Species required oversowing owing to Argentine stem-weevil attack.

preciable productivity in the summer. Associated clover production was generally low, reflecting the strongly competitive nature of tall fescue when in association with white clover. This would suggest that careful attention to grazing management will be necessary to maintain an adequate clover component in the pasture.

Although the leaves of S170 tall fescue display an erect habit and are rough to the touch, there is little evidence of lack of palatability. In a "cafeteria-type" trial at Grasslands (Lincoln), where a wide range of grasses were compared as single plants in replicated rows, each of 10 plants, tall fescue generally displayed high relative palatability. In other words, the sheep showed a grazing preference for tall fescue when given access to the trial and along with timothy and prairie grass this was the first species to be fully grazed. However, there was one consistent occasion in the year when the sheep did not show a grazing preference for tall fescue, namely, the mid-spring grazing. This evidence of low relative palatability was possibly associated with the reproductive development of the plant. On all other occasions, however, the palatability of tall fescue was ranked as high.

REFERENCE

Watkin, B. R., 1975: *Proc. N.Z. Grassld Ass.*, 36: 180-90.

PRODUCTION (MEAN OF THREE YEARS) (kg/ha)

	Summer			Total	Autumn			Total	Winter		
	Total	Sp.	Cl. Other spp.		Sp.	Cl.	Other spp.		Total	Sp.	Cl. Other spp.
2080	1150	870	60	2490	1730	750	10	650	580	70	Tr.
1840	1210	490	130	*—	—	—	—	950	770	100	80
1750	1270	370	100	2090	1490	420	180	590	480	60	60
2060	1110	660	290	2 520	1270	890	370	700	520	110	70
2200	1570	380	250	2240	1850	250	150	1040	860	90	90
2120	1330	650	130	2380	1390	770	210	920	780	80	60