

Table 1. Forage dry matter (DM), soil water depletion (SWD), and water use efficiency (WUE) as influenced by nitrogen (N) application and grass-legume mixture ratios

Treatment†	2014	2015	2016	SWD*	WUE*
	DM kg ha ⁻¹			(mm)	(kg DM mm ⁻¹)
100AF	5210	6100	11000	317	50
50AF+50MB	4670	6820	16000	306	60
30AF+70MB	4790	8220	12000	301	74
25AF+25SF+50MB	3630	7340	10000	305	52
100SF	5240	4680	3000	310	44
50SF+50MB	3670	5110	8000	308	44
30SF+70MB	4530	5980	8000	307	57
25AF+25BFT+50MB	3840	8580	16000	305	67
100BT	5430	6670	9000	318	49
50BFT+50MB	3860	6580	12000	306	54
30BT+70MB	5000	6560	13000	305	57
16AF+16SF+16BT+50MB	3610	8080	13000	312	63
100MB+N0	4260	6580	8000	306	57
100MB+N56	5440	7680	10000	301	67
100MB+N112	5980	7830	12000	314	69
Average	4611	6854	11000	-	-
<i>P</i> value	0.001	0.0005	0.0001	0.013	0.005

†% of AF = alfalfa; BT = birdsfoot trefoil; SF = sainfoin; MB = meadow brome grass; N0 = 0 kg N ha⁻¹; N56 = 56 kg N ha⁻¹; N112 = 112 kg N ha⁻¹

*Soil water was monitored using a neutron probe