WISCONSIN - Fescues 'Leaf' Other Grasses Behind

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The yield and nutritive value of leaves, stems, and total forage of eight perennial cool-season grasses were compared over 30-day intervals in spring, summer, and fall at two Wisconsin locations. Total forage production of all grasses was greatest during spring (as expected), and differences in leaf yield were minimal except for smooth bromegrass (Table 1).

During summer and fall, endophyte-infected (EI) and endophyte-free (EF) tall fescue produced greatest leaf yields, while quackgrass and smooth bromegrass produced the least leaf yield. Crude protein concentrations varied among grass-species leaves throughout the grazing season, but always exceeded 16% and were thus likely inconsequential. Leaves of meadow fescue and timothy had the least fiber (NDF) and greatest fiber digestibility (NDFD).

Table 1. Leaf yield and fiber digestibility of 8 perennial cool-season grasses averaged over 2 years at 2 Wisconsin locations.

Species	Leaf Yield (lb DM/ac)			NDF Digestibility (%NDF)		
	Spring	Summer	Fall	Leaf	Stem	Total
Meadow Fescue	1,080	990	700	67	69	67
Orchardgrass	1,190	1,210	800	62	67	62
Quackgrass	1,080	810	480	60	62	59
Reed Canarygrass	1,020	910	600	61	63	60
Smooth Bromegrass	1,430	770	0	69	65	68
Tall Fescue (EI)	1,170	1,460	880	61	63	61
Tall Fescue (EF)	1,080	1,390	960	64	66	64
Timothy	1,030	810	500	67	69	67

Total-season yield differences among grasses were due largely to differences in spring stem yield. The greater nutritive value of meadow fescue must be balanced against its lesser productivity compared to orchardgrass and tall fescue. Tall fescue demonstrated a clear leaf-yield advantage over the other grasses.