

Birdsfoot Trefoil Variety Test, 1980-83*

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A forage yield test of seven varieties (Norcen, Fergus, Carroll, Leo, Dawn, Empire, and Viking) and three experimental strains (Missouri-20, NC-83 germplasm, and T68) was completed in 1983. The main purpose was to evaluate the new variety Norcen developed as a result of cooperative research among several North Central states and released in 1981. Fergus is another new variety developed by the Kentucky Agricultural Experiment Station.

The 1981-83 average yields in tons/acre ranged from 3.84 for T-68 to 4.71 for Missouri-20. Fergus and Empire were respectively the highest and lowest yielding released varieties over years. Norcen's yield was near the average of the test.

The early-flowering variety Viking was the highest yielding variety in the second and third harvest years. Fergus (early flowering) and NC-83 germplasm were also relatively high yielding in those two years. Those three entries appeared to have the least winter injury and the most vigor in early May, 1983. In contrast, the late-flowering variety Empire was poorest in spring recovery, winter survival, and yield in 1983. Leo and Carroll (both late flowering) were also relatively low in 1983 yield. Simultaneous harvesting of varieties with a wide range in time of flowering may have affected the outcome of this test.

* Progress Report, Clovers and Special Purpose Legumes Research 16: 28, 1983.

Performance of birdsfoot trefoil strains in an Iowa State University test near Ames, Iowa, Field 4, 1980-83.

Entry	Days to flowering after April 30	5-11-83		Yield of dry matter in tons/acre					1981-83 avg.		
		1983 avg.	1981-83 avg.	Spring recovery rating ^{1/}	Winter injury ^{2/} rating ^{2/}	1981	1982	1983		Total	
						6-13	7-19	9-23			
Missouri-20	39	30	3.0	2.5	5.92	4.48	1.61	0.98	1.13	3.72	4.71
Fergus	32	23	1.9	2.0	5.31	4.55	1.82	1.08	1.15	4.06	4.64
NC-83 germplasm	36	31	1.9	1.9	4.99	4.55	1.88	1.07	1.07	4.02	4.52
Dawn	41	33	3.6	3.0	5.74	4.28	1.56	0.89	1.08	3.53	4.52
Viking	29	19	1.9	2.0	4.40	4.72	2.10	1.10	1.14	4.35	4.49
Norcen	41	35	3.0	2.5	5.18	4.28	1.62	1.04	0.99	3.65	4.37
Leo	40	36	3.8	3.2	4.84	4.34	1.45	1.00	0.76	3.21	4.13
Carroll	41	36	3.0	2.6	4.92	4.16	1.40	0.96	0.88	3.24	4.10
Empire	43	37	4.5	3.6	5.01	3.92	1.26	0.73	0.95	2.94	3.96
T-68	31	21	3.0	2.8	3.73	4.05	1.58	1.07	1.09	3.74	3.84
Experiment mean	37		2.9	2.6	5.00	4.33	1.63	0.99	1.02	3.65	4.33
L.S.D., 0.05	3		0.5	0.6	0.64	0.24	0.20	0.09	0.13	0.34	0.28
C.V. (%)	5.9		12.5	14.8	17.6	6.6	8.4	6.6	8.7	11.2	4.4

^{1/} Rated from 1 = most to 5 = least amount of growth

^{2/} Rated from 1 = least to 5 = most winter injury, based on frequency of dead or weak plants

Planting date: April 24, 1980 Plot description: 6 rows 9 inches apart and 12 feet long, 4 reps

Fertilizer applied: 300 lbs/acre of 0-26-26 in March, 1981 and April, 1982, and 337 lbs/acre in April, 1983