

BROME VARIETY TRIAL – 1983

Dickinson Experiment Station

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A Bromegrass Variety Trial was seeded at the Dickinson Experiment Station in the spring of 1979. The 10 X 25 foot plots were arranged in a randomized block design with four replications. The alleys between the replications were 5 feet wide. Eleven varieties of smooth bromegrass (*Bromus inermis*) and one selection of meadow bromegrass (*Bromus biebersteinii*) were included in the trial. The trial was designed to evaluate the performance of the varieties in western North Dakota on the basis of dry weight above ground herbage production.

The annual dry weight above ground herbage production for each variety is shown in Table 1. The four highest producing bromegrass varieties in 1983 were: Meadow brome, Fox, Baylor and Rebound with 1792, 1609, 1546 and 1491 pounds of herbage production per acre respectively. The three varieties with the greatest four year (1980-1983) mean annual herbage production were: Baylor, Rebound and Meadow brome with 2334, 2180 and 2128 pounds per acre. The two varieties with the lowest four year mean herbage production were: Mandan 404 and Beacon with 1642 and 1728 pounds per acre respectively.

The bromegrass varieties in this trial have performed satisfactorily under the environmental conditions of western North Dakota. All of the eleven varieties of smooth bromegrass and the selection of meadow bromegrass have had four year mean annual herbage production of over 1600 lbs/acre, nine varieties have had production of over 1800 lbs/acre and four varieties have had mean annual production of over 2000 lbs/acre. The top producing bromegrass varieties show good potential for use as tame grass pastures and hay land in western North Dakota.

Table 1. Bromegrass Variety Trial – 1983

	Annual Herbage Production in Lbs/Acre				Mean
	1980 June 23	1981 June 30	1982 June 28	1983 June 23	
Barton SB	1441	2306	2364	1294	1851
Baylor SB	1441	2557	3792	1546	2334
Beacon SB	1473	2364	1902	1172	1728
Blair SB	1443	2456	2224	1407	1883
Fox SB	1372	2358	2576	1604	1978
Lancaster SB	1395	2975	2752	1263	2096
Lincoln SB	1483	2380	2384	1135	1846
Lyon SB	1411	2692	2342	1314	1940
Manchar SB	1337	2356	1995	1310	1750
Mandan 404 SB	1290	2038	2105	1134	1641
Rebound SB	1557	2433	3239	1491	2180
Meadow brome	1275	2194	3249	1792	2128

SB – Smooth bromegrass – *Bromus inermis*.

Meadow bromegrass – *Bromus biebersteinii*.