



Current Report

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FORAGE PRODUCTION FROM SMALL GRAIN, 1980

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After several years of testing, a variety with a proven record of good or poor forage production may be dropped from the test so newer varieties can be included. This does not mean the dropped variety is no longer an acceptable forage producer. Data from previous Current Reports can be used to compare varieties for those years.

Forage production from small grain during the winter months is very important and essential for the livestock industry in Oklahoma. Cattle gains of 1¼ to 1½ pounds per day are easily obtained during the fall, winter, and spring months on small grain pasture. However, good gains are produced during January and February only if forage is available. Very little new growth is produced at

this time and one must stockpile sufficient fall growth to carry the cattle through these winter months. The yields in this report simulate a system where small grains are used for pasture. Forage yields would probably be lower under grazing conditions.

Production is in oven dried pounds of forage per acre. Seasonal production for fall and winter grazing should be an important consideration in selecting varieties. Research has shown that eight pounds of small grain forage produced at these clipping frequencies have been adequate to produce one pound of beef.

Numbered varieties preceded by "OK" or "NF" are experimental varieties. Seed is not currently available.

Table 1. Precipitation for each location from August, 1979 through May, 1980.

Month	Locations			
	Goodwell	Haskell	Lahoma	Perkins
<u>1979</u>				
August	2.56	3.02	1.68	1.62
September	1.05	0.26	2.80	1.94
October	2.51	2.51	2.91	1.19
November	0.06	5.72	2.63	2.05
December	0.16	1.11	0.91	2.15
<u>1980</u>				
January	0.88	1.30	1.27	2.14
February	0.21	0.94	0.73	0.86
March	1.11	4.36	2.21	2.39
April	2.87	3.26	4.88	4.07
May	4.28	5.54	6.71	7.57
Total	15.69 ^{1/}	28.02	26.73	25.98

1. Irrigated 8 times with 3 inches per application.

Table 2. GOODWELL small grain forage variety test, forage production (lbs/acre) 1979-1980 season. Richfield clay loam.

Variety	Harvest Dates					1979-80 Total
	10-16	2-26	4-17	5-9	6-16	
RYE						
Bonel	1696	3265	2012	1430	1560	9963
NF 74	1639	2946	1630	1327	2001	9543
Maton	1520	2971	1756	1169	1653	9069
NF 72	1816	3204	1666	999	1307	8992
NF 214	1640	2957	1670	915	1525	8707
Ath. Abruzzi	1470	2823	1352	1278	1496	8419
WHEAT						
Osage	1524	1524	3522	1902	1540	10012
Pioneer HR915A	1624	1968	3299	1411	1561	9863
TAM 101	1572	2061	2929	1358	1812	9732
OK 78014	1386	1902	3087	1471	1564	9410
OK 78047	1365	1829	3016	1282	1628	9120
Newton	1611	1563	2816	1563	1279	8832
Triumph 64	1401	1793	3312	937	1374	8817
OK 78058	1289	1519	2744	1505	1483	8540
NF 121	1549	2252	1261	1230	2161	8453
OK 78002	1465	1887	2500	1025	1359	8236
BARLEY						
Kerr	1841	1894	2848	2604	1544	10731
Volbar	1426	2157	2160	2505	1964	10212
Post	1607	1917	2578	2578	1461	10141
Wintermalt	1485	1906	2563	2168	1136	9348
TRITICALE						
NF 185	1450	1925	1707	1635	1409	8126
LSD (lb/Ac)	375	680	626	406	940	1628
CV (%)	17	22	18	19	43	12

Seeded: September 7, 1979
 Soil Test: pH 7.0, P 43 lb/A, K 799 lb/A
 Fertilizer: 60-40-0 September 7, 1979
 60-0-0 October 18, 1979
 60-0-0 February 28, 1980
 60-0-0 May 12, 1980

Table 3. HASKELL small grain variety test, forage production (Lbs/Acre) 1979-1980 season. Taloka soil.

Variety	Harvest Dates					Total
	11-26	3-6	4-2	4-28	5-27	
RYE						
Bonel	3260	2546	2071	686	----	8563
NF 214	3096	2436	1828	408	----	7768
NF 74	2995	2212	1824	612	----	7643
Maton	3116	2291	1659	550	----	7616
NF 72	2516	2042	1928	657	----	7142
Athens Abruzzi	2906	2114	1372	552	----	6944
WHEAT						
Osage	686	588	2581	2318	----	6173
Pioneer HR915A	790	913	2412	1722	----	5837
Triumph 64	1301	900	2220	779	----	5200
TAM 101	891	1684	2009	613	----	5198
NF 21	1557	1327	1127	982	----	4993
Newton	653	947	2058	1207	----	4866
OK 78047	760	873	1940	1191	----	4764
OK 78014	506	878	1775	1523	----	4683
OK 78058	209	782	1497	1022	----	3510
OK 78002	123	751	1465	922	----	3260
BARLEY						
Kerr	2392	1192	1933	3144	----	8661
Post	2269	817	1436	3400	----	7921
Wintermalt	1437	590	1804	2902	----	6734
Volbar	1534	915	1875	2298	----	6621
OATS						
Walken	713	379	788	3196	2477	7554
Coker 234	1766	497	692	2824	612	6391
Okay	1514	528	643	2283	1053	6020
NF 21	265	383	728	3107	1040	5523
Bob	1929	163	318	1457	1238	5106
TRITICALE						
NF 185	2091	819	1053	1338	----	5300
LSD (lb/Ac)	609	245	216	456	404	820
CV (%)	27	15	10	20	20	9

Seeded: September 4, 1979.
 Soil Test: pH 5.8, P 51 lb/A, K 180 lb/A, NO₃-N 103 lb/A.
 Fertilizer: 60-40-40 Sept. 4, 1979
 60-0-0 Nov. 27, 1979
 60-0-0 March 7, 1980
 60-0-0 April 3, 1980

Table 4. LAHOMA small grain variety test, forage production (lbs./acre) 1979-80 season. Pond Creek silt loam.

Variety	Harvest Dates		1979-80 Total
	4-7	6-4	
RYE			
NF 72	3637	3102	6738
NF 214	3744	2900	6644
NF 74	2815	3547	6362
Bonel	2790	2479	5269
Maton	2964	2173	5137
Ath. Abruzzi	2717	2062	4779
WHEAT			
Osage	1537	5109	6646
OK 78014	1256	4935	6191
OK 78047	1245	4743	5988
Pion. HR915A	1659	4267	5926
OK 78058	1045	3870	4915
OK 78002	1064	3675	4739
Tam 101	1467	3258	4725
Newton	1521	2971	4492
Triumph 64	1523	2552	4075
NF 21	1216	2536	3725
BARLEY			
Post	1893	5338	7231
Wintermalt	1710	5343	7053
Kerr	1942	4659	6601
Volbar	1134	3871	5005
OATS			
Walken	882	6864	7746
Coker 234	575	6481	7056
Okay	621	6038	6659
Bob	593	6039	6632
NF 121	477	6118	6595
TRITICALE			
NF 185	1196	3567	4763
LSD (lb/Ac)	688	1252	1466
CV (%)	21	29	18

Seeded: September 11, 1979
 Soil Test: pH 5.3, P 70 lb/A, K 486 lb/A, NO₃-N 41 lb/A.
 Fertilizer: 30-0-0 February 12, 1980

Table 5. PERKINS small grain variety test, forage production (lbs/acre) 1979-80 season. Teller loam.

Variety	Harvest Dates				1979-80 Total
	12-13	3-18	4-18	5-14	
RYE					
Bonel	664	1982	1846	548	5040
NF 74	777	1984	1572	659	4992
NF 72	724	1819	1457	550	4550
NF 214	615	2046	1425	434	4520
Maton	561	1534	1550	430	4075
Ath. Abruzzi	639	1770	1205	410	4024
WHEAT					
Triumph 64	623	750	2118	457	3948
Osage	227	664	2002	771	3664
OK 78047	454	837	1757	573	3621
OK 78058	303	926	1771	556	3556
Newton	334	933	1748	499	3514
OK 78014	338	829	1677	595	3439
Pion. HR915A	303	702	1873	554	3432
OK 78002	178	866	1461	581	3086
Tam 101	279	1129	1320	345	3073
NF 21	584	846	532	492	2454
BARLEY					
Kerr	401	684	1773	1138	3996
Post	601	488	1412	1436	3937
Wintermalt	523	474	1683	931	3611
Volbar	594	485	1450	1038	3567
OATS					
Walken	350	532	1263	2485	4630
Okay	561	470	1207	1909	4147
NF 121	154	403	1251	2044	3852
Coker 234	448	415	1113	1454	3430
Bob	862	220	643	1585	3110
TRITICALE					
NF 185	693	804	1007	570	3074
LSD (lb/A)	145	234	183	186	432
CV (%)	21	18	9	15	8

Seeded: August 24, 1979
 Soil Test: pH 5.5, P 29 lb/A, K 230 lb/A, NO₃-N 16 lb/A
 Fertilizer: 52-40-0 August 23, 1979
 60-0-0 November 29, 1979
 60-0-0 March 20, 1980

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