Small Grain Simulated Pasture Forage Plus Grain Evaluations
The University of Arizona Mesa Experiment Farm
R. K. Thompson and B. J. Emery

Table 1. Performance of barley, oats and wheat varieties grown for simulated pasture forage[1/] plus grain[2/] for three years, 1978-81.

	Total forage dry weight lbs/A				Total grain yield lbs/A				Forage + [3/] grain lbs/A
	1979[4/]	1980[4/]	1981[4/]	Average	1979	1980	1981	Average	3 yr. ave.
Gus barley	4703	4183	3367	4084	6320	4186	7139	5882	9966
Harlan II barley	5719	4677	4760	5052	5092	2870	5571	4511	9563
1000 D wheat	4528	3209	2904	3547	5912	3696	6097	5235	8800
Zaragoza wheat	4351	3717	3057	3708	5945	3423	5315	4894	8602
Mesa oats	5143	4120	3649	4304	3245	3444	3903	3531	7835

[1/] Clipped with sickle mower near jointing stage of growth when height was 12-18".
[2/] Four center rows of 6-row plots were harvested with plot combine after three clippings in 1979 and 1980 and two clippings in 1981. Final clipping was February 10 or before.
[3/] Assumption was made that high quality pasture forage dry matter is equal to grain in nutritive value.
[4/] Planting dates were October 19 in 1978 and 1979 and October 27 in 1980.

Table 2. Simulated pasture forage plus grain evaluation of barley, oats and wheat varieties and selections seeded October 27, 1980.

	Total Forage dry matter			Total forage		Total grain			Forage[1/] + grain
	12-29	1-19	2-18	lbs/A	Rank	lbs/A	Rank	lbs/bu	lbs/A
Two replications of two vegetative clippings simulating pasture conditions:									
Prato barley	2602	1248		3850	(4)	7162	(1)	50	11,012
Gus barley	1843	1524		3367	(7)	7139	(2)	49	10,506
Harlan II barley	2376	2384		4760	(1)	5571	(6)	43	10,331
BFP-20 barley	2175	1505		3680	(5)	6512	(4)	51	10,192
BFP-40 barley	1530	1670		3200	(10)	6540	(3)	48	9,740
1000 D wheat	1502	1402		2904	(12)	6097	(5)	59	9,001
Mesa-40 oats	2259	2111		4370	(2)	4190	(9)	37	8,560
Zaragoza wheat	1505	1552		3057	(11)	5315	(7)	58	8,372
Mesa-13 oats	2019	1865		3884	(3)	3933	(10)	35	7,817
Mesa oats	1728	1921		3649	(6)	3903	(11)	35	7,552
906 R wheat	2474	866		3340	(8)	4193	(8)	60	7,533
OHP-18 oats	1522	1731		3253	(9)	3731	(12)	32	6,984
Three replications of three vegetative clippings simulating pasture conditions:[2/]									
Prato barley	2440	1391	1893	5724	(2)	5063	(1)	48	10,787
Gus barley	1821	1468	1897	5186	(6)	4773	(2)	46	9,959
BFP-20 barley	1763	1596	1778	5137	(7)	4386	(3)	46	9,523
BFP-40 barley	1380	1516	2115	5011	(10)	4057	(4)	43	9,068
Mesa-13 oats	1890	1760	1663	5313	(5)	2677	(7)	32	7,990
Mesa oats	1786	1851	1756	5393	(4)	2376	(9)	33	7,769
Zaragoza wheat	1683	1732	1620	5035	(9)	2707	(6)	56	7,742
Mesa-40 oats	1696	1914	1881	5491	(3)	2218	(10)	32	7,709
OHP-18 oats	1951	1592	1497	5040	(8)	2619	(8)	34	7,659
1000 D wheat	1562	1332	1728	4622	(11)	2878	(5)	54	7,500
Harlan II barley	2215	2275	1741	6231	(1)	625	(12)	41	6,856
906 R wheat	2145	915	1523	4583	(12)	841	(11)	56	5,424

[1/] Assumption was made that high quality pasture forage dry matter is equal in nutritive value to grain.
[2/] Clipping beyond early February resulted in considerable reduction in grain yield and quality.