

Irrigated Perennial Pasture Test

Calvin Emerson, Extension Agent, Robert E. Dennis, Extension Agronomist,
and David Parsons, Agricultural Extension Agent, Field Testing

Raymond Endfield - Whiteriver Elevation: 5200 feet

This replicated test was established in August 1974. Observations concerning entries in this test are summarized below:

Estimated stand survival and yield as observed August 12, 1975 and August 26, 1976.

Entry ^{1/}	August 12, 1975		August 26, 1976	
	Stand (%)	Yield ^{2/} Rating	Stand (%)	Yield ^{2/} Rating
Alfalfa			2	2
Ranger	82	75		
Nomad	83	80	0	0
Vernal	88	80	1	1
Ladak	83	80	1	1
Mesilla	77	70	1	1
Lahontan	65	65	1	1
Sweet Clover				
Yellow	45	30	0	0
Madrid	42	40	0	0
White	8	8	0	0
White Clover				
Ladino	90	60	0	0
Birdsfoot Trefoil (Narrowleaf)				
Los Banos	95	80	0	0
Commercial	95	90	2	3
Birdsfoot Trefoil (Broadleaf)				
Cascade	63	50	0	0
Winnar	75	65	1	1
Sainfoin				
Remont	33	25	0	0
Eskie	35	20	0	0
Burnet	78	45	17	12
Cicer Milkvetch				
Lutana	47	30	0	0
Stream Bank				
Wheatgrass				
Sodar	89	35	0	0
Intermediate				
Wheatgrass				
Amur	88	60	47	43
Oahe	87	65	55	48
Commercial	80	65	51	47
Pubescent Wheatgrass				
Luna	80	65	80	75
Topar	85	60	65	50
Tall Wheatgrass				
Jose	90	70	73	63
Alkar	85	70	95	97
Tall Fescuegrass				
Alta	93	70	85	77
Fawn	95	75	72	63
D14941	93	75	68	60
Goar	93	65	80	72
Kenhy	93	60	73	63
Hard Fescuegrass				
Durar	95	25	37	18
Orchardgrass				
Latar	90	55	75	68
Potomac	92	40	63	58
Smooth Bromegrass				
Lincoln	56	45	48	50

Entry ^{1/}	Stand (%)	Yield ^{2/} Rating	Stand (%)	Yield ^{2/} Rating
Meadow Bromegrass				
Regar	87	55	57	47
Other Grasses				
Garrison Creeping				
Foxtail	30	25	0	0
Timothy	57	50	5	5
Hardinggrass	75	55	0	0
Reeds Canarygrass	52	35	13	15
Russian Wildrye				
Sawki	57	25	2	2
Mixtures				
Alta Tall				
Fescuegrass,				
Latar Orchardgrass &				
Sweet Clover	95	80	75	60
Alkar Tall Wheatgrass,				
Alta Tall Fescuegrass &				
Sweet Clover	83	75	80	73

^{1/}Entries that did not survive to August 12, 1975 were:

Vine Mesquite	Blue Panicgrass
Bermudagrass	Side Oats Gramma
Lovegrass	
Atherstone	
Boer	

Entries that did not survive to August 26, 1976 were:

Alfalfa	White Clover	Birdsfoot Trefoil
Nomad	Ladino	(Broadleaf)
Sweet Clover	Birdsfoot Trefoil	Cascade
Yellow	(Narrowleaf)	Sainfoin
Madrid	Los Banos	Remont
White	Other Grasses	Eskie
Cider Milkvetch	Garrison Creeping	
Lutana	Foxtail	
Stream Bank Wheatgrass	Hardinggrass	

^{2/}A rating of 100 is equal to 2000 lbs. hay equivalent per acre.

Summary for 1975

The test plots were irrigated August 26, 1974 and twice in 1975 prior to observation. Range grasses native to Arizona did not compete well in the small plots. Cattle and deer grazed the plots January-May, 1975 because they could not be fenced out. Grazing by cattle and deer was minimal after June 1 because other forage was readily available.

Alfalfa. All varieties appeared reasonably well adapted. Lahontan did not perform up to expectations.

Ladino Clover. Excellent stands. Production probably lower in pounds of dry matter/unit area, but leafiness indicated high quality.

Sweet Clover. Plants set and matured seed about August 1 and were past normal maturity for harvest when observations made.

Narrowleaf Birdsfoot Trefoil. There were good stands of plants in all narrowleaf trefoil plots. Productivity of the trefoil was probably slightly less than for the highest yielding alfalfas.

Broadleaf Trefoil. Broadleaf trefoil varieties appeared to be less productive and less well adapted than narrowleaf entries.

Sainfoin. Stands only moderately good and productivity poor.

Burnet. A low growing plant. Stands were excellent, but productivity poor.

Vine Mesquite. No plants observed.

Cicer Milkvetch. Moderately good stands but productivity inferior.

Wheatgrasses. Tall and intermediate wheatgrass varieties had excellent stands and good to excellent productivity. Jose and Alkar Tall wheatgrass seem well adapted.

Tall Fescuegrass. All fescuegrasses have excellent stands. Alta appeared superior to Goar in productivity, except in replication three.

Hard Fescuegrass. Excellent stands were obtained, but best use appears to be for other than irrigated pastures.

Orchardgrass. Stands were good but productivity was less than that of Tall fescuegrass.

Bermudagrass. Bermudagrass entries in this test did not survive.

Smooth Bromegrass. Productivity inferior to that of Tall fescuegrass, Tall wheatgrass and orchardgrass.

Lovegrass. The lovegrasses included did not survive.

Other grasses. Timothy could probably be produced profitably if good horse hay markets are available. Hardinggrass is worthy of further observation.

Summary for 1976

Legumes. Nearly all legume plants of all varieties were killed by grasshopper feeding. Also gophers selectively damaged or destroyed legume plants.

Tall Fescuegrasses. All fescuegrass varieties appear to be adapted. This grass is well suited where conditions are similar to those of the site.

Tall Wheatgrasses. Both Tall wheatgrass varieties appear to be well adapted.

Intermediate Wheatgrasses. Stands were generally good for all intermediate wheatgrasses. Forage, however, was quite dry and stemy.

Agri-File Field Crops 232.9