

Grantsville, Utah Off-Center Advanced Test Site - First Year Evaluation
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The purpose of the Grantsville Off-Center Advanced Test Site located approximately 30 miles southwest of Salt Lake City is to evaluate and demonstrate the potential of grasses and shrubs for revegetation and forage for livestock and wildlife in areas of 10-12 inch annual precipitation in northwestern Utah. Many sites within this region are heavily infested with cheatgrass. This planting is in cooperation with the Grantsville Soil Conservation District which owns the land and the Aberdeen Plant Materials Center. The test site is a semidesert alkali loam range site with very deep, loamy soil with scattered pockets of deposited blow sand.

The off-center advanced test site is composed of three components; the inter-center strain trial, row spacing trial, and a display nursery. The inter-center strain trial includes a block of 31 grass accessions and a block of 7 shrub accessions which are arranged into two separate complete randomized block designs with 4 replications. The purpose of the row spacing trial is to demonstrate the effect of row spacing on plant growth and forage production for 'Hycrest' crested wheatgrass and 'Bozoisky' Russian wildrye. The display nursery includes 48 accessions of grasses, forbs, and shrubs to allow landusers to view examples of released cultivars and promising accessions that are adapted to the general area.

The grass inter-center strain trial and display nursery were seeded in November 1994. The row spacing trial and the shrub inter-center strain trial were seeded in April 1995. Total precipitation from October 1994 to September 1995 was 19.8 inches, much above the normal 10-12 inches. The very favorable amount and timing of precipitation contributed significantly to the establishment of a majority of the plots.

Two evaluations were conducted during the year of establishment, once in May and again in September for plant height, percent stand, plant density and vigor. The following table summarizes the evaluation data collected in September for the top five performing grass accessions and the top five performing shrub accessions ranked by percent stand:

	Plant Ht. (cm)	Percent Stand	Plant Density (per ft ²)	Vigor*
Grasses				
Hycrest crested wheatgrass	63.8	59.5	4.3	1.5
Tetracan Russian wildrye	14.3	56.0	2.5	1.5
Vavilov Siberian wheatgrass	57.8	54.0	4.5	2.0
Nordan crested wheatgrass	58.8	50.3	3.5	2.8
Syn A Russian wildrye	18.8	48.3	2.8	1.3
Shrubs				
Pamirian winterfat	33.5	41.3	0.3	1.8
9067481 winterfat	34.0	34.0	0.3	1.8
Wytana fourwing saltbush	34.8	29.5	0.2	1.0
9067480 fourwing saltbush	22.3	29.3	0.1	2.8
Rincon fourwing saltbush	22.5	24.3	0.1	2.3

* Vigor rated 1-9 with 1 best, 9 worst

The row spacing trial became established, however additional data will need to be gathered to establish a trend from which some conclusions on optimum row spacing could be made. The Plant Materials Center will begin collecting forage production data in 1996. A progress report is available which describes the site and our activities. It may be obtained from the Plant Materials Center or Dan Ogle, Plant Materials Specialist, Boise, Idaho.

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