

Grantsville, Utah Off-Center Advanced Test Site -
 Second Year Evaluation
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The purpose of the Grantsville Off-Center 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 and the Aberdeen Plant Materials Center. The test site is a semidesert alkali loam range site with very deep, loamy soil and scattered pockets of deposited blow sand.

The off-center advanced test site is composed of three components; the inter-center strain trial of grasses and shrubs, row spacing trial, and a display nursery. The grass trial and display nursery were seeded in November, 1994 and the shrub trial and row spacing trial were seeded in April, 1995. Total precipitation from October, 1995 to September, 1996 was 9.84 inches.

Two evaluations were conducted during 1996, the second year of evaluation. In early May, data was collected on plant height, percent stand, plant density and vigor. In July, the grass trial was clipped for forage production data in addition to collection of plant height and vigor data. The following table summarizes the evaluation data collected in 1996 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)	Forage (lbs. / ac.)
Grasses				
Tetracan Russian wildrye	41.3	67.3	2.0	340
Hycrest crested wheatgrass	42.0	65.3	3.0	753
Vavilov Siberian wheatgrass	47.8	61.0	3.3	957
Nordan crested wheatgrass	43.0	54.8	3.3	846
Syn A Russian wildrye	57.0	54.5	2.3	423
Shrubs				
				<u>Vigor*</u>
Pamirian winterfat	43.3	53.0	0.17	2.0
Wytana fourwing saltbush	43.3	40.8	0.15	2.3
9067481 winterfat	42.8	37.8	0.17	2.0
9067480 fourwing saltbush	45.3	37.5	0.11	1.8
Rincon fourwing saltbush	45.5	28.3	0.10	3.8

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

The row spacing trial which demonstrates the effect of row spacing on 'Bozoisky' Russian wildrye and 'Hycrest' crested wheatgrass was also evaluated in 1996. Maximum plant height for Bozoisky was at the 18 inch row spacing but maximum forage production was from the 6 inch row spacing. Hycrest produced the most forage at the 18 inch row spacing and maximum plant height was at the 36 inch row spacing. It appears that at wider row spacings plants tend to grow taller but wider row spacings may not result in greater forage production.

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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