

Curlew ICST - 1995 Forage Production Summary
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The Aberdeen Plant Materials Center planted a new Inter-Center Strain Trial (ICST) on the Curlew National Grasslands southwest of Pocatello, Idaho in November, 1992. The purpose of the ICST is to evaluate grasses for livestock and wildlife forage on sagebrush-grass range sites in southeast Idaho. This planting is in cooperation with the U.S. Forest Service which manages the Curlew National Grasslands, Oneida Soil Conservation District, and the Bureau of Land Management. The test site is located on a loamy range site in a 12-16 inch precipitation zone. The soil is a brown silt loam, very deep and well-drained with moderate permeability.

The ICST includes replicated plots of 13 intermediate and 7 thickspike wheatgrass accessions, and 6 alfalfa varieties. A display nursery including 91 accessions of grasses, forbs, and shrubs was also planted.

Precipitation was above normal during 1995, estimated to be 16 to 18 inches. Precipitation during 1994 was approximately 6 inches. On July 18, 1995 we evaluated the replicated plots in the ICST for plant density, vigor, plant height, and forage production. Here is a summary of the forage production data in comparison to last years data:

Accession	Source	1994	1995
		Forage Production (pounds per acre)	Forage Production (pounds per acre)
Intermediate Wheatgrass (<i>Elytrigia intermedia</i>)			
Slate	ARS-Nebraska	583 a	1425 a
Manska	ARS-North Dakota	629 a	1351 a
Luna	Los Lunas PMC	324 ab	1203 ab
Rush	Aberdeen PMC	592 a	1148 ab
Reliant	ARS-North Dakota	629 a	1129 abc
Mandan	ARS-North Dakota	241 b	824 abc
Greenleaf	Canada	278 b	546 abc
Oahe	AES South Dakota	342 ab	453 bc
Greenar	Pullman PMC	139 b	352 bc
Tegmar	Aberdeen PMC	84 b	315 bc
Topar	Aberdeen PMC	102 b	306 bc
AI Hybrid	ARS-Utah	176 b	231 c
Amur	Los Lunas PMC	0	0
Thickspike Wheatgrass (<i>Elymus lanceolatus</i>)			
Critana	Bridger PMC	157	861 a
Schwendimar	Pullman PMC	130	389 ab
SL Hybrid	ARS-Utah	148	343 b
Bannock	Aberdeen PMC	185	333 b
PI-236664	Pullman PMC	102	241 b
Sodar	Aberdeen PMC	93	194 b
PI-236663	Pullman PMC	157	120 b

One-way analysis of variance and means separation tests were performed on the forage production data from the intermediate wheatgrass and thickspike wheatgrass accessions. Forage production data followed by the same letter are not significantly different. There were significant differences in forage production among the intermediate wheatgrasses and among the thickspike accessions during 1995. There were no significant differences among the thickspike accessions during 1994. Because the alfalfa accessions have performed rather poorly, their data is not presented.

We plan to evaluate the ICST for two more growing seasons. It will be interesting to see which accessions perform the best over the long term. For more details on the ICST, please contact me. A progress report is available which describes the site and our activities which you may also obtain from me or Dan Ogle, Plant Materials Specialist.

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