

**Forage Research Update**

**North Dakota - New Intermediate Wheatgrass on the Horizon**

by John Hendrickson, John Berdahl and Mark Liebig, USDA-ARS and Wayne Duckwitz, USDA-NRCS

Intermediate wheatgrass (IWG) is an easily-established, high-quality perennial grass for the northern Great Plains. However, persistence of IWG is limited, especially under grazing. The Northern Great Plains Research Laboratory and the Bismarck Plant

**Table 1.** Yield, quality and stand persistence of Manifest compared to 3 common IWG varieties.

Entry	Yield Mean	Mandan, ND		Meade, NE		Shoot Replacement Ratio
		IVDMD	CP	IVDMD	CP	
Manifest	4611	62	6.9	65	9.1	0.85
Reliant	4214	63	8.1	66	9.5	0.77
Manska	3931	64	7.5	66	9.7	0.75
Oahe	4405	61	7.5	64	8.9	0.59
<b>Average</b>	<b>4290</b>	<b>63</b>	<b>7.5</b>	<b>65</b>	<b>9.3</b>	<b>0.74</b>

Materials Center are releasing a new variety called 'Manifest.' Manifest has shown greater ability to withstand grazing while maintaining the yield and quality desirable in IWG.

In a 19-location variety trial, Manifest had the greatest yield while maintaining relatively good quality (Table 1). The shoot replacement ratio provides an estimate of persistence under grazing. Higher ratios confer greater persistence under grazing. The shoot replacement ratio for Manifest was greater than that of the other three common IWG varieties, indicating better grazing persistence. The Bismarck Plant Materials Center harvested foundation seed of Manifest in 2007 and is currently looking for growers for seed increase fields.