

'Magnar' Basin Wildrye Breeder Block  
Field 424 U of I Brewington Farm  
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In May, 1997 a Breeder block of 'Magnar' basin wildrye *Leymus cinereus* was established in field 424 at the University of Idaho, Brewington Farm located northeast of Aberdeen. One seed was planted in each "Jiffy-pellet" in the PMC Greenhouse in late February, 1997. The seed used was from lot number SBR-79-16B2. The plants were transplanted to the field on May 16, 1997.

The Breeders block is composed of 625 spaced plants on 3 x 3 foot centers with a border row around the block. During 1997 and 1998, the block was irrigated and weeds were hand rogued.

On July 27-28, 1998 the plants were evaluated. A stratified random sample of 5 plants from each row were evaluated for total plant height, leaf width, leaf length, spike length, and vigor. The data from the sample was analyzed to determine means for each of the attributes sampled. The following table illustrates the mean and standard deviation for each attribute:

Total	Plant Height		Leaf Width		Leaf Length	Spike Length	Vigor
	(cm)	(mm)	(cm)	(cm)	*		
Mean	172.0	14.9	42.6	20.8	3.1		
Sd De	16.8	2.6	7.1	3.2	2.0		

\* vigor is a subjective rating of plant health; 1=excellent, 9=poor or dead

Based upon this data, the following criteria was used to determine which plants to maintain in the block:

Total Plant Height 152 cm + (5 ft +)  
Spike Length 20 cm + (8 in. +)  
good vigor and leafiness  
bluish-green color

The entire block was then evaluated to determine which plants to remove. Seventy nine plants (12.6 percent) which did not meet the criteria will be removed in the spring of 1999 prior to flowering. The goal is to remove 10 - 15 percent of the plants with the poorest attributes prior to flowering. Seed will be harvested beginning in 1999.

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