

1997 'Nezpar' Indian Ricegrass Breeder Block Seed Production
Field 424 U of I Brewington Farm
Loren St. John, PMC Team Leader

In May, 1997 a Breeder block of 'Nezpar' Indian ricegrass *Achnatherum hymenoides* was established in field 424 at the University of Idaho, Brewington Farm located northeast of Aberdeen. Seed was moist-stratified at 40ø F for 30 days prior to planting. The stratified seed was then planted one each into "Jiffy-pellets" in the PMC Greenhouse in late February, 1997. The seed used was from Lot number SFD-86-424. 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 29-30, 1998 the plants were evaluated. There were 101 plants (16 percent) that did not survive establishment. A stratified random sample of 5 plants from each row were evaluated for total plant height, canopy width, leafiness, seed abundance, 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 Canopy Plant Height (cm)	Width (cm)	Leafiness *	Seed Abundance *	Vigor *
Mean	40.2	52.7	3.2	3.8	3.9
Sd De	17.5	28.0	2.6	2.6	2.6

* leafiness, seed abundance, and vigor are subjective ratings; 1=excellent, 9=poor

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

Total Plant Height: 40 cm + (16 in. +)
 Canopy Width: 40 cm + (16 in. +)
 good vigor, seed abundance and leafiness

The entire block was then evaluated to determine which plants to remove. One hundred twenty one plants which did not meet the criteria will be removed in the spring of 1999 prior to flowering. The total number of plants dead at time of evaluation and plants removed was 222 (35 percent). Seed will be harvested beginning in 1999.