Activities and Accomplishments
From
USDA-ARS National Small Grains Germplasm Research Facility
Aberdeen, Idaho
June, 2006

National Small Grains Collection
NSGC presently holds 128,931 accessions of the small grains (wheat, barley, oat, rye, triticale, rice, and related wild species). This is an increase of about 500 in the past year.

NSGC distributed more than 21,300 accession samples in 654 separate requests in the past 12 months. One-third of the distributions were to foreign scientists.

For the past year we have been using the Foss GrainCheck 2312 instrument to more quickly and accurately measure seed weights and colors. The instrument counts and weighs seeds to quickly determine 1000-kernel weight. Most importantly it utilizes a sensitive RGB camera to accurately determine seed color, which removes the subjective nature of color classification by the human eye.

Dedication of the new Advanced Genetics Laboratory will be held in August. This facility (which connects to the existing National Small Grains Germplasm Research Facility) provides much-needed space for conducting state-of-the-art molecular genetics research. This will provide NSGC will new opportunities for molecular evaluations of the small grains accessions.
(H.E. Bockelman)

Barley and Wheat Genetic Stock Collections
The Barley Genetic Stock (GSHO) and the Wheat Stock Collection (GSTR) distributed 511 samples from 40 requests in the past 12 months.

Over 390 barley and wheat genetic stocks were planted in the fields and in the greenhouse for evaluation and for seed increase in 2005-06.

One hundred fifty four hulless barley lines were planted in replicated plots at different locations in Idaho for evaluation of quality and agronomic characteristics. Results were presented to the Idaho Barley Commission, February 2006. An abstract and poster entitled " Cytological and seed morphological investigation of 250 accessions from the W. J. Sando collection" was presented at the 2005 ASA meeting in Salt Lake City.
(An Hang)