

PROJECT TITLE: Western Regional Soft White Winter Wheat Evaluation

PROJECT LEADERS: Bob Stougaard and Todd Keener, NWARC, Kalispell, MT
Phil Bruckner/Rhoda Burrows, Plant and Soil Science,
Bozeman, MT.

OBJECTIVE: To evaluate soft white winter wheats for adaptability, yield, quality, and disease resistance.

RESULTS: Yields were drastically reduced in many varieties of the Soft White Winter Wheat nursery due to a combination of winter injury and snow mold. Most severe in the Oregon entries, the winter kill complex in some cases thinned stands by 90%. Apparently however, regrowth combined with spring and summer tillering enabled some varieties to produce a fair yield in spite of considerable stand reduction. Besides the Oregon entries suffering from the winter kill, there were also large plot losses in the varieties of Nugaines, Moro, Elgin and Kharkof. The high yield was 138.9 bu/A (WA 7756) while the mean for the nursery was 92 bu/A. Eighteen varieties had yields in excess of 100 bu/A. Test weights were less than normal due mainly to environmental conditions throughout the growing season. The mean test weight was 49.07 lb/bu and the high was 54.55 lb/bu (OR 851139). TCK smut (dwarf bunt) was observed in the nursery at low levels with only seven varieties having greater than 1% infection. There were twelve varieties that had no TCK infection.

FUTURE PLANS: Continued evaluation of new and introduced lines is planned in the future through cooperative state-wide testing.

