

### **Cultivars and germplasm released, 1999:**

1. 'Trego' (KS95HW62-6), Kansas State University.
2. 'Cougar' (NE93496), University of Nebraska
3. 'Millennium' (NE94479), University of Nebraska
4. 'Harding' (SD92107), South Dakota State University
5. 'Prowers 99' (CO98001-MB, reselection of Prowers), Colorado State University
6. 'Kalvesta' (G14264), Goertzen Seeds
7. 'Boundary' (A86115W-2), Idaho State University
8. 'TAM302' (TX91D6913), Texas A&M University
9. KS96WGRC34, KS96WGRC35, KS96WGRC36, rust resistant germplasm, USDA-ARS/Kansas State University
10. KS96WGRC37, powdery mildew resistant germplasm, USDA-ARS/Kansas State University
11. KS96WGRC38 and KS96WGRC39 tan-spot resistant germplasm, USDA-ARS/Kansas State University
12. KS96WGRC40 curl mite resistant germplasm, USDA-ARS/Kansas State University

### **1999 SRPN, Location notes and observations**

Bushland, Texas: Following the driest summer on record (3.55" precipitation from May through September), the growing season was abnormally wet (22.34" from October through June, compared to 30-yr average of 11.31"). In addition the winter months were abnormally warm and no major spring freeze events were recorded. Only spotty outbreaks of greenbug and Russian wheat aphid occurred, but barley yellow dwarf was widespread in the spring. No other disease epidemics were noted.

Farmington, New Mexico: Planted 9/22/98, harvested 8/10/99, fertilizer regime = 100 lbs/acre N, 52 lbs/acre P<sub>2</sub>O<sub>5</sub>, 60 lbs/acre K<sub>2</sub>O, soil type = Doak fine sandy loam, center pivot irrigation, applied as necessary.

Clovis, New Mexico: Dryland – planted 9/22/98, watered to induce germination, harvested 6/29/99. Fertilizer: 252 lbs/acre 11-52-0. Irrigated – Planted 9/23/98, irrigated 9/23/98, 1/5/99, 3/16/99, 3/17/99, fertilizer regime = 252 lbs/acre 11-52-0, 55 lbs/acre anhydrous ammonia, harvested 7/2/99. Temperature and precipitation patterns during growing season similar to 50 year averages.

Fort Collins, Colorado: Nurseries were planted into summer-fallow on 9/29/98, with 70 lbs/A N applied preplant. Nurseries received supplemental moisture by furrow-irrigation. Trace amounts of leaf rust and localized Russian wheat aphid infestations were observed. Nurseries were harvested on 7/26/99.

Akron, Colorado: Nurseries were planted into summer-fallow on 9/24/98, with 70 lbs/A N applied preplant. Planting moisture was reasonably good, as it was at the other dryland locations. Trace amounts of leaf rust were observed. Nurseries were harvested on 7/12/99.

Burlington, Colorado: Nurseries were planted into summer-fallow on 9/22/98, with 80 lbs/A N and 29 lbs/A P applied preplant. Growth was extremely lush in the spring but soil moisture became very short by heading (mid-late May). Good rains were received by early June and

significant leaf rust was observed. A storm just prior to harvest caused significant lodging and hail damage. Nurseries were harvested on 7/8/99.

Julesburg, Colorado: Nurseries were planted into summer-fallow on 9/22/98, with 40 lbs/A N and 15 lbs/A P applied preplant. No leaf disease was observed. Hot, dry winds in early June reduced yields. A storm about one week before harvest caused significant lodging. Nurseries were harvested on 7/14/99.

Walsh, Colorado: Nurseries were planted into summer-fallow on 9/23/98, with 45 lbs/A N applied preplant and 10 gallons/A 10-34-0 applied at planting. Growth in early spring was quite lush and unusually good rains occurred throughout the growing season. Trace amounts of leaf rust were observed by heading, but infection and spread did not progress significantly. Localized infestations by Bird Cherry-Oat aphids caused significant barley yellow dwarf virus damage. Nurseries were harvested on 7/5/99.

Colby, Kansas: planted 9/18/98, fertilizer regime 50-20-0, applied in spring, total rainfall = 14.68", hail on 6/11/99 caused some shattering, harvested 9/18/99.

Wichita, Kansas: water logged soils, heavy lodging, severe head shattering, severe disease pressure due to SBMV, BYDV, leaf rust.

Garden City, Kansas: Keith silt loam soil, pH = 7.8, O.M. = 1.2%, total N = 758 ppm, total P = 473 ppm, total K = 766 ppm.

Alliance, Nebraska: good moisture, good growing conditions after a dry planting, with some cheat grass problems.

Clay Center, Nebraska: above average rains and an incredible amount of diseases at finish, similar to the heavy disease pressure seen in Oklahoma and southern Kansas. Plots were damaged by late fertilizer application.

Lincoln, Nebraska: Good seeding conditions, good growing conditions, but finishing under rain leading to diseases and lodging. Good football season.

North Platte, Nebraska: Excellent moisture, plots followed corn, with resulting high fertility and lodging.

Sidney, Nebraska: Site abandoned due to hail damage.

Crawfordsville, Iowa: The SRPN was planted at Crawfordsville, IA on 10/01/98 and harvested 7/7/99.