

TEST SITE INFORMATION – SRPN

Clovis, NM — The irrigated nursery was planted on 9/19/90 in fallow land that was in sorghum during 1989. Plots were irrigated on 9/14/90, 11/26/90, 2/5/91, 3/20/91 4/10/91, and 5/15/91. Fertilizer rates were 120 lbs/a N and 52 lbs/a P₂O₅. Seeding rate was 90 lbs/a. There was no incidence of disease and no insect control measures were necessary. Harvested on 6/24/91. The dryland nursery was planted on 9/19/90 also in fallow land that was in sorghum during 1989. The previous summer fallow period had below normal rainfall so that moisture conditions in the soil profile were not at a level for maximum production. A very dry spring resulted in very low yields. There was no incidence of diseases and no insect control measures were necessary. Fertilizer rates were 11 lbs/a N and 52 lbs/a P₂O₅. Seeding rate was 40 lbs/a and the nursery was harvested on 6/14/91.

Farmington, NM — No additional information provided.

Bushland, TX — No additional information provided.

Chilllicothe, TX — No additional information provided.

Dallas, TX — The nursery was planted during the 3rd week of October and received 100 lbs/a N. The growing season was somewhat average except for several zero-degree days during the 3rd and 4th weeks of December. Leaf rust and powdery mildew notes were taken at approximately mid-to-late milk stage. The Dallas trials suffered early and late season bird damage.

Prosper, TX — Same conditions as reported for Dallas.

Stillwater, OK — No additional information provided.

Lahoma, OK — No additional information provided.

Altus, OK — The nursery was abandoned.

Goodwell, OK — No additional information provided.

Hutchinson, KS — Stand establishment was excellent and no winter damage was observed. Spring regrowth was slowed by unusually dry weather during double ridge formation. Rapid growth occurred during late April when cooler weather and rains dominated for 2-3 weeks. The wet, damp weather helped establish epidemics of powdery mildew, leaf rust, and septoria nodorum. Each contributed to yield loss in susceptible genotypes. High temperature stress occurred during the last 5-10 days of grain fill and reduced yields significantly in all genotypes. Lines with good disease resistance and early maturity were favored. The high temperature stress caused straw breakage and lodging in many genotypes which further reduced yields.

Manhattan, KS — Stand establishment was very good and winter damage minimal. Spring regrowth occurred normally and the nursery was not under moisture stress at any time during the growing period. Diseases developed late, but reduced yields considerably. Leaf rust was the primary disease that developed along with septoria nodorum. High temperature stress during grain fill reduced yields, especially in the later genotypes.

Hays, KS — No additional information provided.

Garden City, KS — No additional information provided.

Colby, KS — Planted on 9/25/90 on fallow land that had wheat as the previous crop in 1988. Moisture was good at planting and stands excellent. Precipitation was below normal through the entire winter and spring seasons, but above normal in May and June. The winter was mild except for a period in late December when temperatures of -20 to -24 degrees were recorded for a few nights. No severe winter damage was observed and no insect problems encountered. Follar diseases were obvious in late spring with leaf rust the most severe. Stem rust was noted late in the season.

Ft. Collins, CO — The nursery was fertilized for a yield goal of 100 bu/a and is naturally sub-irrigated. Growing conditions were excellent with much greater leaf rust infection than normal. No other significant diseases. Harvested 7/25/91.

Julesburg, CO — The nursery was fertilized for a yield goal of 60 bu/a. Normal growing conditions occurred in fall and early spring and higher than normal temperatures in May-June. Stem rust and leaf rust infections were higher than normal. Harvested 7/16/91.

Akron, CO — No additional information provided.

Walsh, CO — No additional information provided.

Burlington, CO — The nursery was lost to hail.

Lincoln, NE — A cool spring and excessive rains caused severe lodging, high levels of powdery mildew and septoria, significant scab and leaf rust infections.

Clay Center, NE — Disease levels were high with powdery mildew, septoria, tan spot, and leaf rust present. Stands were somewhat thin, due in part to some winterkilling.

North Platte, NE — Severe infection of cephalosporium stripe lowered yield levels of all entries and resulted in very low test weights and poor grain quality.

Sidney, NE — Stands were somewhat thin due to dry conditions. Leaf rust was severe late in the season. The nursery was affected by heat stress late in the grain fill period.

Allamore, NE — The nursery was lost to winterkill and severe cheat grass infestation.

Brookings, SD — Planted in fallow on 9/15/90. Moisture conditions were good. The winter was extremely mild and somewhat dry, followed by cool and wet spring. Leaf rust was present and stem rust was found late in June. Very little tan spot or septoria. Harvested on 7/17/91.

Columbia, MO — Heavy precipitation during the first week of October delayed planting until 10/18/90. Crusting after planting resulted in reduced emergence in some entries and is reflected, along with winterkill, in spring stand percentages. Above average rainfall throughout May coupled with cool to normal temperatures resulted in significant disease levels, including fusarium species (scab), *xanthomonas campestris* pv *translucens* (bacterial stripe, black chaff), and septoria species. Scab was very severe, reducing yields, test weights and grain quality. Disease pressures resulted in an early harvest on 6/15/91, about 2 weeks ahead of normal.

Crawfordsville, IA — The nursery was planted on 9/26/90 in dry soil soon after soybeans were harvested. Harsh winter conditions resulted in poor winter survival. Dry conditions during May and June lowered yields. Diseases, including powdery mildew, leaf rust, and septoria, were significant.

Lind, WA — The nursery was lost to winterkill.

Aberdeen, ID — Planted on 10/1/90 with 200 lbs/a N fertilizer and harvested on 8/16/91. Irrigation applied on the SRPN totaled 16 inches. Seeding rate was 75 lbs/a.

Preston, ID — Planted on 9/24/90 with a seeding rate of 60 lbs/a and fertilizer application of 40 lbs/a. Harvested on 7/30/91.