Hard Red Winter Wheat

Survival was good in the 1987-88 winter wheat comparison trials on both summer-fallow and recrop. Stands were seriously reduced by wheat streak mosaic, and the crop was damaged further by the severe drought and high temperatures prevailing throughout the growing season. A heavy weed invasion of kochia and Russian thistle rendered the trials useless for purposes of variety comparison.

Long term yield data are given in Table 9. Yields recorded in 1988 at several other branch stations are summarized in Tables 10 and 11.

Table 9. Long Term Yields – Hard Red Winter Wheat, Dickinson

| Variety | 1984 | 1985 | 1986 | 1987 | 1988 | Average | |
|---|------|------|------|------|------|---------|--|
| Roughrider | 44.1 | 52.1 | 46.5 | 20.8 | 0.0 | 32.7 | |
| Winoka | 45.4 | 44.6 | 48.4 | 24.2 | 0.0 | 32.5 | |
| Agassiz | 45.9 | 50.0 | 50.6 | 17.3 | 0.0 | 32.8 | |
| Siouxland | | | 59.4 | 11.8 | 0.0 | 23.7 | |
| Seward | | | | 24.4 | 0.0 | 12.2 | |
| İ | | | | | | | |
| LSD .05 | 7.3 | 2.5 | 3.8 | 4.8 | | 4.9 | |
| | | | | | | | |
| Yield averages include value of 0 for 1988. | | | | | | | |

Table 10. 1988 Variety Trial – Conventional Tillage (Fallow or Recrop)
Summary of Grain Yields by Location

| | | | | | 4-Location | | |
|----------------|-----------|-----------|-------|-----------|------------|----------|--|
| Entry | Casselton | Hettinger | Minot | Williston | Yield | Survival | |
| | Bu/A | | | | | | |
| Agassiz | 28.4 | 4.4 | 3.4 | 6.9 | 9.6 | 89.1 | |
| Roughrider | 23.1 | 4.1 | 4.4 | 7.7 | 8.9 | 89.5 | |
| Seward | 25.7 | 5.5 | 3.4 | 8.0 | 9.7 | 86.6 | |
| Norstar | 19.2 | 4.8 | 4.4 | 4.3 | 7.5 | 92.7 | |
| Rose | 14.9 | 6.5 | 2.9 | 7.9 | 7.6 | 69.5 | |
| Winoka | 14.3 | | 5.9 | 7.6 | 8.8 | 63.6 | |
| Siouxland | 13.5 | 8.0 | 3.8 | 9.3 | 8.3 | 58.6 | |
| Thunderbird | 1.4 | 5.1 | 1.5 | 8.3 | 4.3 | 38.9 | |
| Abilene | 3.6 | | 2.9 | 10.1 | 5.7 | 11.4 | |
| Norwin | 13.0 | | 2.3 | 7.7 | 7.0 | 69.2 | |
| ND8212 | 20.0 | 4.7 | 4.3 | 6.8 | 8.2 | 82.7 | |
| ND8215 | 15.9 | 5.5 | 8.4 | 7.2 | 8.8 | 84.5 | |
| ND8286 | 20.1 | 4.3 | 6.3 | 7.6 | 8.9 | 89.1 | |
| ND8407 | 16.2 | 6.9 | 5.0 | 7.7 | 8.5 | 86.4 | |
| ND8460 | 14.6 | 4.7 | 1.9 | 6.4 | 6.4 | 67.7 | |
| | | | | | | | |
| \overline{X} | 16.3 | 5.2 | 4.0 | 7.7 | 7.9 | 73.9 | |
| C.V. | 32.8 | 33.4 | 34.2 | 7.9 | 37.2 | 16.8 | |
| LSD 0.05 | 8.9 | 2.5 | 2.0 | 0.9 | 2.1 | 8.7 | |

Table 11. 1988 Variety Trial – No Till Summary of Grain Yields by Location

| | | | | | 4-Location | | |
|-------------|-----------|---------|-------|-----------|------------|----------|--|
| Entry | Casselton | Langdon | Minot | Williston | Yield | Survival | |
| | Bu/A | | | | | | |
| Agassiz | 9.2 | 33.2 | 0.3 | 5.6 | 10.8 | 96.4 | |
| Roughrider | 9.1 | 30.6 | 0.4 | 5.6 | 10.2 | 97.5 | |
| Seward | 8.7 | 39.1 | 0.2 | 6.8 | 12.3 | 98.2 | |
| Norstar | 9.5 | 34.3 | 0.2 | 3.8 | 10.5 | 98.9 | |
| Rose | 7.1 | 30.3 | 0.2 | 6.3 | 9.9 | 95.7 | |
| Winoka | 6.5 | 26.9 | 0.4 | 4.0 | 8.4 | 95.4 | |
| Siouxland | 7.1 | 25.7 | 1.4 | 6.9 | 9.4 | 90.7 | |
| Thunderbird | 9.7 | 38.7 | 0.6 | 7.1 | 12.6 | 93.2 | |
| Abilene | 8.0 | 34.0 | 0.7 | 8.7 | 11.7 | 92.9 | |
| Norwin | 5.3 | 30.9 | 0.3 | 3.8 | 9.0 | 95.7 | |
| ND8212 | 8.6 | 31.9 | 0.5 | 6.1 | 10.6 | 95.7 | |
| ND8215 | 9.9 | 31.0 | 1.2 | 5.1 | 10.6 | 98.6 | |
| ND8286 | 10.9 | 29.4 | 0.2 | 6.7 | 10.6 | 91.9 | |
| ND8407 | 8.0 | 27.2 | 0.2 | 5.9 | 9.3 | 96.4 | |
| ND8460 | 11.3 | 26.4 | 0.2 | 5.3 | 9.7 | 95.4 | |
| | | | | | | | |
| X | 8.5 | 31.3 | 0.5 | 5.9 | 10.4 | 95.5 | |
| C.V. | 33.6 | 17.4 | 72.8 | 16.9 | 27.2 | 8.0 | |
| LSD 0.05 | NS | NS | 0.5 | 1.4 | 2.0 | 5.4 | |