

BARLEY YIELD TRIALS

Varietal field plot trials:

Fifteen varieties of barley were seeded in triplicate field plots in the 1949 yield trials at this station. Yields were very poor throughout, the highest yield being 12.0 bushels per acre from Hannchen, followed by Tregal, Vantage, Titan and Steigum, all with averages of better than 10.0 bushels per acre. Titan and Vantage were included in the Dickinson trials for the first time this year. Lowest yield was obtained from Manchuria which averaged 3.9 bushels per acre.

Comparison of averages for the past several years shows Trebi to have the highest yield, 31.6 bushels per acre for a 10 year period, which is 115% of the yield for Manchuria, used here as a comparison standard. Other varieties in the Dickinson trials which have outyielded Manchuria are Tregal, 109%; Steigum, 108% and Hannchen, 104%, over a 10 year period. Feebar, 114% for the last 3 years and Montcalm, 107% over the last 4 years. Varieties which have failed to outyield Manchuria include Kindred, Compana, Spartan and Plains.

Uniform Great Plains Barley Nursery: 20 varieties or crosses-triplicate single rows.

Yields in this nursery were considerably better than the field plot yields, as would be expected, but were far below the record yields of 1948. Top yield was from Munsing with an average of 17.9 bushels per acre, followed by C.I. 7557, a Munsing x Spartan cross, which averaged 15.1 bushels per acre. Lowest yield was 9.8 bushels per acre from C.I. 7008, an Aberdeen, Idaho selection.

Test weights were very poor throughout the entire nursery, with only one entry, Munsing, weighing better than 48.0 pounds per bushel, and with 12 out of the 20 entries weighing less than 43.0 pounds per bushel.

Station Barley Nursery: 50 varieties, crosses and selections-triplicate single rows.

This nursery, made up of named varieties, several numbered selections from the Aberdeen, Idaho Experiment Station, and selections made at the Dickinson Experiment Station in 1944 and 1945 from Composite Cross IIX, C.I. 6725, contained several strains which yielded more than the highest yielding strains in the Uniform nursery. Trebi averaged 17.6 bushels per acre in this nursery and was exceeded in yield by the following: Ab. 6109, 18.7 bushels per acre; Ab. 6246, 18.1 bushels per acre; Dickinson selection 44-33, 23.4 bushels per acre; Dickinson selection 45-15, 22.9 bushels per acre; Dickinson selection 45-29, 18.2 bushels per acre and Dickinson selection 45-297, 18.0 bushels per acre.

As was the case in the Uniform Barley nursery, test weights ranged from very poor to good, with the majority of the entries being in the 42.0 to 46.0 pound per bushel range.