

OAT YIELD TRIALS

Varietal field plot trials:

A total of 13 varieties of oats were seeded in 4 field plots each in the 1949 trials at this station. Yields were low for all varieties, the highest yielder, Rainbow, averaging 23.5 bushels per acre. Marida, highest yielding variety in 1948 and highest average yielding variety over the past 10 years, was one of the lowest in yield this year, ranking 10th out of 13 varieties. Both Rainbow and Marida are Midseason varieties. Gopher early oats, which is perhaps the variety most widely grown in this area, ranked 5th in yield with an average of 21.4 bushels per acre. Lowest yielding variety in the trials this year was Benton with an average of 16.1 bushels per acre. Andrew, included in the Dickinson trials for the first time this year, ranked 6th with a 4 plot average of 19.8 bushels per acre.

Test weights in this trial were good, with only two varieties weighing less than 34.0 pounds per bushel, Rainbow which weighed 33.5 pounds and Ajax which weighed 32.5 pounds per bushel.

Comparison of average yields for the past several years shows that Gopher has out yielded all early varieties at this station, averaging 50.6 bushels per acre for the last 10 years. In the midseason group only Mission has failed to equal or exceed Gopher in yield, averaging 99% of that standard for 3 years. Midseason varieties equalling or exceeding the yield of Gopher over the past 10 years include: Marida, 111%; Bannock, 107%; Victory, 105%; and Rainbow and Vanguard both 101%. Over the past 8 years Bridger has averaged 104% of that yield of Gopher for the same period.

Uniform Early Oat Nursery: 30 varieties or selections-triplicate single rows.

Top yielding entry in this nursery was Tama which averaged 30.0 bushels per acre and weighed 32.0 pounds per bushel, which was the lowest test weight recorded in this trial. Second highest in yield was C.I. 5325 (Clinton x Marion) which averaged 27.2 bushels per acre. Ten entries averaged over 20.0 bushels per acre, 15 entries yielded between 15.0 and 20.0 bushels per acre with the rest of the nursery yielding below 15.0 bushels. Lowest yielder was C.I. 4997, a Clinton reselection which averaged 13.7 bushels per acre.

Uniform Midseason Oat Nursery: 30 varieties or selections-triplicate single rows.

Yields were higher in the Midseason nursery than was the case in the Early Oat nursery this year, with 2 entries yielding over 30.0 bushels per acre, 4 entries between 25.0 and 30.0 bushels per acre and 10 entries between 20.0 and 25.0 bushels per acre. The highest yielding entry was C.I. 5013, a (Forward x Victoria-Richland) x Forward cross which averaged 33.5 bushels per acre. Lowest yielder was Beaver with an average of only 8.9 bushels per acre.

Test weights were generally lower in the Midseason nursery, with approximately one-third of the entries weighing less than 32.0 pounds per bushel. Lowest test weight was from Zephyr which weighed 29.5 pounds per bushel.

Station Oat Nursery: 30 entries-triplicate single rows.

Yields in this nursery were generally higher than in either the Uniform Early or Uniform Midseason nurseries with the differences at least partly due to placement effect. Highest yielder was Ajax with an average of 46.3 bushels per acre followed closely by Exeter and Bannock with respective yields of 45.5 and 44.1 bushels per acre. Only 6 of the 30 entries fell below the 25.0 bushel per acre mark, the lowest yielder being Garry with an average of 20.1 bushels per acre. As was the case in the two foregoing nurseries, test weights were not outstanding. Three entries, Vanguard, Ajax and Ab. 4508, weighed less than 32.0 pounds per bushel. Shelby, the heaviest, weighed 36.0 pounds per bushel and the balance weighing in the 32.0 to 35.0 bracket.