

2005 POTATO VARIETY RESEARCH TRIAL RESULTS

Jeff Stark, Melvin Chappell, and Peggy Bain

The tables on the following pages summarize research results from our Tri-State, Western Regional, and Advanced trials grown in Idaho.

The Tri-State, Western Regional (dual purpose russet and long white processing), Western Regional Chip and Western Regional Specialty trials were planted in Aberdeen, ID using an Iron Age assist-feed plate planter and harvested using a one-row Grimme harvester. Plots in the Tri-State, Western Regional Russet and Western Regional Chip trials at Aberdeen were vine killed mechanically and with Reglone[®].

The Western Regional trial at Kimberly also was planted and harvested using similar equipment. Vine kill at Kimberly was by beating. The advanced trials at Shelley and Rexburg also were planted using an Iron Age assist-feed plate planter, but harvested using a level bed digger and hand picked into burlap bags.

Planting, vine kill and harvest dates are shown in the table below.

Trial	Planting	Vine Kill	Harvest
Aberdeen Western Regional	April 27	September 26	September 23
Aberdeen Western Regional Chip	April 28	September 6	September 29
Aberdeen Tri-State	April 27	September 6	September 23
Aberdeen Western Regional Specialty	April 29	August 18	August 22
Kimberly Western Regional	May 5	September 14	October 11
Shelley Advanced Variety	June 1	NA	October 12
Rexburg Advanced Variety	June 2	NA	September 10

Weather in the Aberdeen area was characterized by a cool, wetter than normal spring and mild conditions throughout the growing season. Total rainfall for April and May was 4.85 inches. On June 8, 9, and 10 morning low temperatures were 2-3 degrees below freezing causing 20% of the leaves to show some frost damage. The cool spring saw only two days with temperatures reaching above 80°F and a light frost on May 25 and 26. The months of June, July and August were fairly dry with only 0.79 inches of rain during those months. Summer was relatively warm with temperatures reaching over 90°F on 25 days and no days over 100°F. These conditions resulted in a low potential for late blight

hence only two fungicide applications were made on July 11 and 25. This year's trial returned good results with relatively high percentages of U.S. No. 1 tubers for some varieties.

Weather in the Kimberly area was similar to the weather in Aberdeen with slightly higher temperatures. Overall, the trial returned good results, however there were some problems with greening and rodent damage to the tubers.

The Shelley advanced variety trial was conducted on a grower field east of Shelley, ID. Weather conditions were similar to Aberdeen. No major problems were encountered at Shelley with good results considering the late planting date.

The Rexburg advanced variety trial was conducted on a grower field on the Rexburg bench. Weather conditions were milder than those at Aberdeen. The late planting date did not affect trial results and yields, which were typical of the area.