

2020 Washington State Commercial Seed Lot Profile and Field Visitation Information

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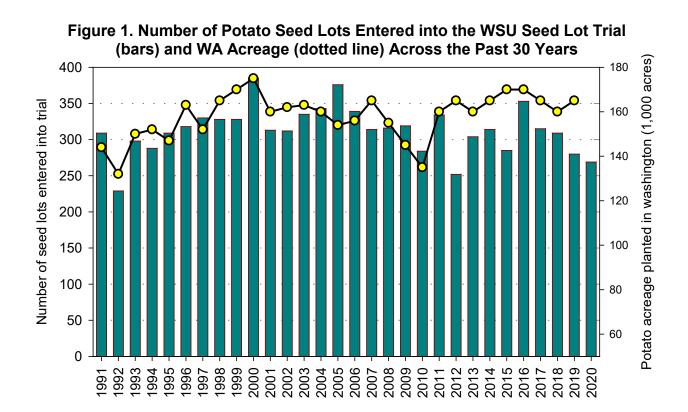
The 2020 WSU-Othello potato field day has been cancelled; however, planted and disease-rated seed lot samples may be viewed onsite at the WSU-Othello Research Center, 1471 W. Cox Rd between June 22 and July 2, from 8 am to 5 pm each day. Seed lot booklets and location directions will be provided onsite. Electronic seed lot booklets will be available at <u>www.potatoes.wsu.edu</u> on June 22. For more information, please email Mark Pavek (<u>mjpavek@wsu.edu</u>).

Washington State University has conducted the Commercial Seed Lot Trial in cooperation with the Washington State Potato Commission and industry for 57 years (1961-78, 1982-2020). We incorporate a virus/disease reading training session into our program as a routine requirement prior to the first field reading. The goal of the training session is to improve our plant-reading accuracy by training the unexperienced and fine-tuning the expert. Plant disease experts from across the NW, including the Washington, Montana, and Oregon potato seed certification teams, continue to assist in the seed lot readings as well as the proof-readings. The results will be available under "2020 Washington Commercial Seed Lot Trials" at www.potatoes.wsu.edu.

Poor quality potato seed will impact commercial grower income. Major quality factors are disease, virus, herbicide damage, frost damage, and seed-piece handling. Commercial potato growers in Washington State typically purchase their seed potatoes from seed-growing regions that typically lie outside of Washington. For quality control, it is essential that each seed lot be grown under controlled conditions for approximately 70 days and evaluated by professionals. The Seed Lot Trial provides Washington potato growers, seed suppliers and handlers a side-by-side comparison of seed lots utilized by Washington commercial potato producers. The associated potato field day provides potato buyers and sellers an opportunity to observe performance of seed lots of common interest and discuss result. To improve field disease diagnostic skills, WSU, USDA, and potato industry personnel from across the western U.S. exchange ideas and share expertise on field diagnosis of disease symptoms and other seed tuber quality factors.

WA growers submitted 269 seed lots into the 2020 WA Commercial Seed Lot Trial, compared with 280 in 2019 (Figure bars). WA acreage for 2020 has yet to be published, but it typically fluctuates between 155,000 and 170,000 (Figure 1, dotted line). The 2020 acreage has been reduced due to a decline in restaurant demand as a result of COVID restrictions and concerns.

Montana and Idaho provide WA growers with the majority of seed potatoes, followed by WA, Canada, and OR (Figure 2). The composition of the 2020 Seed Lot Trial included 24% Clearwater Russet, 16% "Other" (newer and/or non-mainstream varieties), 14% Umatilla Russet, 14% Ranger Russet, 12% Russet Burbank, 9% Alturas, 6% Shepody, and 4% Russet Norkotah and RN strains (Figure 3). The 2020 "Other" category was composed of 33 (compared with 38 in 2019 and 43 in 2018) new, non-mainstream varieties, or specialty varieties, ranging from newly released varieties like Castle Russet to older specialty varieties like Chieftain. Clearwater Russet seed lots continue to increase as McDonalds® has accepted this variety for its French fries. Clearwater surpassed Russet Burbank and all other varieties this year and accounted for 24% of seed lots in 2020, 17% in 2019, 12% in 2018, 7% in 2017, 6% in 2016, and 4% in 2015 (Figure 3). Russet Burbank seed lot numbers have declined for 7 straight years (Figure 3). Tri-State developed varieties like Clearwater Russet, Umatilla Russet, and Ranger Russet are slowly replacing Russet Burbank for French-fry processing.



Eight percent of all seed lots were of non-U.S. developed potato varieties (data not shown). Varieties developed by the Northwest Potato Variety Development Program/PVMI accounted for 63% (56% in 2019) of the seed lots entered into the 2020 trial and included: Alturas, Castle Russet, Clearwater Russet, Modoc, Ranger Russet, and Umatilla Russet. The most significant change in the WA seed lot profile in the past 50 plus years has been the increase in the number varieties WA growers are planting. In 1962, 8 varieties were entered into the seed lot trial; in 2020, there were 33 (Figure 4).

