

TUBER TIPS: USE ONLY CERTIFIED SEED

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When working with potatoes, we must be ever mindful that we are working with a “vegetatively propagated” crop. Vegetative propagation means that we plant a new crop by using pieces of the previous generation of plants instead of the true seeds, produced by flowers, that are used for crops like wheat, corn or beans. One downside of vegetative propagation is that many of the diseases that infect the mother plant will also infect the daughter tuber and will be passed on to the next crop. Diseases, especially virus diseases, can increase to uncomfortably high levels, sometimes within a single generation. Disease build-up in crops grown from true seed are not as likely to experience this type of disease build-up because most viruses do not transfer from mother plants to true seed. Because of the chance of disease build-up and other types of problems, use of certified potato seed is an absolute must.

Seed potatoes in Idaho, and indeed throughout North America, are produced using a “limited generation” system. In a nutshell, this means that a seed lot can only be increased for a limited number of years. Although we start out with laboratory-derived, disease-free seed stocks, each time a potato seed crop is increased in the field, there is always a chance that disease and other problems will begin to increase as well. Seed lots that reach field generation 7 (denoted as “G6” in the Idaho system, the first field generation is designated as “nuclear”) are not allowed back into the system and must be sold for commercial production. In practice, most of the seed currently being used for commercial production is G3 (fourth field generation) or G4 (fifth field generation). In the last few years we have even seen an increase in the use of G2 (third field generation) seed.

Certified seed is required to pass a number of important inspections. During the summer months, seed fields will be inspected while the crop is growing. Storage inspections are performed after the crop has been placed in storage. The storage inspection helps to ensure that seed lots are not being mixed together, among other things. A sample of tubers is taken from each seed lot during the harvesting operations for a winter grow-out inspection. In Idaho, the winter grow-out has traditionally taken place in California. These inspections look for potato viruses, variety mixes and herbicide carryover. Finally, Idaho seed potatoes also receive a “shipping point” inspection. Tuber samples are taken from every truckload of seed and examined internally and externally for tuber defects and diseases. Failure to pass any of these inspections means the seed lot cannot be certified.

Don’t take a chance on “year out” or “eliminator” seed. For vegetatively propagated crops like potatoes, certified seed is an absolute must!