

A career in potato production includes the science of growing the perfect tuber

Potato growers are scientists that don't mind getting dirt under their nails. A far cry you're your grand father's method of farming – today's generation of growers use technology every step of the way to ensure better quality and higher crop yields.

Potatoes are no longer grown from last year's harvest (a method that perpetuated disease and contributed to the potato famine). Today a potato begins its life as a carefully nurtured plantlet in a lab. The resulting seed potatoes are purchased by growers. To prepare the seed potatoes for planting, the grower slices them into small pieces using a seed cutter. These pieces are treated with fungicides to prevent the potatoes from decaying in the damp soil. The grower then drops the seed potato pieces into furrows dug by mechanical planters pulled by a tractor. These planters also "hill" the potatoes, though this initial hilling has to be enhanced in the next stage. After planting, a cultivating machine enhances the hilling of the potatoes by adding to the hill, and removing some of the weeds. Following that, a dammer/diking machine digs pockets in the soil, which prevents soil movement and runoff between rows, and helps retain more soil moisture. Potato crops are irrigated throughout the growing season. In addition to providing moisture for the plants, irrigation also applies fertilizer, mostly in the form of Nitrogen. Potato growers conduct leaf tests throughout the growing season that tell them to apply more or less of this fertilizer.

Near the end of the growing season, potatoes are desiccated – some of the leaves are killed using chemicals or machines, forcing the plant to become mature. On a mature plant, the potatoes "bulk up" by rapidly adding water. When growth is complete, the potatoes are ready for harvesting. Mechanical harvesters dig the potatoes up and load them onto potato trucks.

To become a potato grower you need a strong interest in working the land. In high school, you should take courses in math, biology, chemistry, information technology and accounting (important in running a business). After high school, you can gain experience on a potato farm or take college courses in agriculture.

After learning about potato production, you can work on a farm, own your own farm or work in post harvest production.

Other careers related to potato production are: production of other crops, agronomy and sales/operation of farming machinery.

***This information has not been verified by Science Alberta Foundation, and is for general informative purposes only.*



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