Growing Good Potatoes in the Pacific Northwest

Some Ideas on the Homely "Spud" by Men Who Know Whereof They Write.

Capital Photograph of the Best Type of Baking Potato, Raised Near Kennewick, Washington. Note the Even Size Common to all These Potatoes.

This is the first of a series of articles discussing potato growing.

BY O. M. MORRIS, Horticulturist; J. G. HALL, Plant Pathologist, and M. A. YOTHERS, Asst. Entomologist.

THE size of the seed piece of potato planted seems to have a direct influence over the crop of potatoes produced. This fact is founded on the fundamental principle that the large seed piece or whole potato produces larger and stronger vines than the extremely small potato or small piece of potato. Another point that some time has its influence is the fact that the eyes located nearest the bud end of the potato usually sprout earliest and are more active in their early development of plants than the eyes located nearer the stem end. In planting whole potatoes, it is commonly observed that only one or two eyes at the bud end produce sprouts, except in the case of extremely large tubers, and that it does not tend to produce too many plants in a hill, as is sometimes thought.

The Colorado Experiment Station found by actual trial that seed pieces of potato or whole potatoes weighing less than two ounces produced smaller and weaker plants and a lighter crop than seed pieces or whole potatoes weighing two ounces or more; that when the piece of seed potato weighed far in exceses of two ounces there was very little gained in vigor of plants or crop produced. Considering the value of the seed, a two-ounce piece or whole potato gave approximately the maximum returns for the money invested in seed. This has been found true in field crop work and is now generally accepted by many growers in different sections of the country. Some prefer to plant the entire tuber and never use cut seed. There appears to be some foundation for faith in this system. However, it does not prove to be equally well adapted in different localities. In localities where the soil condition is such that the seed potato decays rapidly the whole potato is better for planting, but in cases where the pieces of seed potato do not decay rapidly, the advantage is not so apparent.

Medium Potatoes Best.

In cutting potatoes for seed, the medium sized ones are ordinarily to be preferred. Split the potato lengthwise and if further cutting is desired, cut crosswise, but do not cut to a single eye, unless potato seed is very scarce, or the tubers used are extremely large. Mechanical cutters are seldom satisfactory, because they do not discriminate or select sizes. Neither do they avoid cutting directly through the eyes of the potato.

The thickness of planting varies according to locality and fertility of the soil. The general distance between rows is from 36 to 40 inches and the distance between plants or hills in the row varies from 12 to 18 inches. Early potatoes of small size can be planted more thickly than the large late growing varieties.

Cultivation.

In the non-irrigated sections, clean, shallow, level tillage should be given until the new potatoes begin to form, but from this time until the cultivation is discontinued a slight ridge should be thrown over the row. The land between the rows should be kept nearly level.

This ridge of soil will protect the potatoes from sunburn. Some varieties produce the tubers very close to the surface, or so near the surface that after a time the ends of the potatoes may extend above thesurface. The principle thing to be accomplished by tilage is to keep down weeds and conserve soil moisture.

If a crop of clover or some other vegetation has been turned under it may be found advisable to till deep early, but as soon as the roots of the plants begin to extend out into the space between the rows the cultivation must be more shallow or serious harm will be done to the plants. Cutting the roots of the plants by the last tillage will greatly reduce the possibilities of the crop.

The tillage should be continued as long as possible without direct harm to the plants. Frequent shallow tillage will maintain the best supply of moisture and help to produce a crop of smooth, even potatoes.

In Irrigated Sections.

In irrigated sections a little different system of tillage is necessary. The systems suited to localities differ more than in non-irrigated regions. The potato crop is more frequently planted on land than has had a clover or alfalfa sod turned under. In this case it is usually necessary to cultivate very deep as soon as the planting is done. The harrow can be used to great advantage to keep down weeds and to drag to the surface and break up any sods that may be lifted by the cultivator. The first cultivation is often given immediately after planting and the land should then be harrowed thoroughly and as soon as the plants are tall enough for the rows to be easily followed, shallow tillage should be continued. The soil should be gradually thrown in a ridge over the row. This facilities irrigation and produces the covering necessary for the protection of the potatoes. Deep tillage is sure to be injurious to the plants and it is, for that reason, always a good practice to ridge the land early.

Mulching.

Small fields or garden patches in non-irrigated sections can often be mulched with straw or marsh hay with good results.

The mulch should be applied just before the potato sprouts appear above ground. Four to eight inches of loose material may be used.

The plants will grow up through this without trouble, and a good mulch will conserve more moisture than any ordinary system of tillage. This practice should be resorted to only in sections where the moisture supply is difficult to maintain.

The mulch material should be free from seed or another crop will be planted and result in more harm than good. Mulching requires a good deal of time and material and is not practical in large fields.

Harvesting.

In large fields the machine diggers should be used in harvesting the crop. It is cheaper than hand digging or plowing out with an ordinary turning plow. Hand digging is especially expensive, and careless diggers cut and injure a great many potatoes.

Plowing out the crop is wasteful, as a large per cen tof the crop is left in the ground.

The crop should be dug, if possible, while the soil is drying in order to secure the potato clean and free from earth. Breaking the skin, cutting or bruising the potato in any way reduces its market value and storage quality.

Careful work will reduce this loss to less than one per cent; and there is seldom any justification for the methods of harvesting that reduce it above five per cent. The pickers should follow close after the diggers and it usually pays to have the sorting done as the pickers gather up the potatoes from the ground.

The potatoes should not be allowed to lie on the surface of the soil for more than a few hours. Those that are dug in late summer or early fall should be gathered up immediately and sacked and hauled to sheds or warehouses.

Bright sunshine will cause them to turn green and sunburn, which injures their market value.

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