Oregon State Agricultural College, United States Department of Agriculture, and State Department of Education, cooperating

BOYS' AND GIRLS' INDUSTRIAL CLUBS

POTATO GROWING

Project Circular No. 3 Corvallis, Oregon 1914

OREGON AGRICULTURAL COLLEGE EXTENSION SERVICE

R. D. HETZEL, Director.

THE HARVESTING AND SCORING OF POTATOES

By

GEORGE R. HYSLOP, Professor of Farm Crops

With the approach of autumn the potato grower is confronted with the problem of securing the very best seed for next year's crop. Any grower of potatoes should go through the field before the vines have begun to die down and mark those hills that have shown the best type and the most remarkable vigor, and that have been disease-resistant throughout the summer. No hills which are growing by themselves should be selected, because such hills have had the advantage of more fertility, moisture, air, and sunlight and necessarily should make a larger growth. Select only such hills as have made a good growth under conditions similar to those which the potatoes will meet in good cultural conditions in the field next year; that is, where there is a full stand of For this reason, select only the vigorous, healthy plants in that part of the field where there is a full stand. These hills that are selected may be marked with a lath or stake. When ripe, the potatoes should be dug with a fork. If any one of these plants which has done well above ground shows that it has also produced a large yield of marketable tubers, such tubers should then be put in a sack and kept by themselves for next year's use. Do not select hills which produce only two or three large potatoes, or hills which produce a large number of small ones; but select the type which produces six to ten or a dozen or more potatoes that are of good marketable size.

The Bulletins of the Oregon Agricultural College are free to all residents of Oregon who request them.

Each of the hills selected this way should be kept separate and planted in a row the following year, each hill to a row or to a portion of a row.

Another very good method is simply to dig the field or a portion of it with a fork, and select the hills which have produced a large number of smooth, marketable potatoes.

The main crop of potatoes is ready for digging when the vines have been dead for a few weeks. It is always a good plan to delay digging until the potatoes have had a good opportunity to mature in the soil, if this can be done without throwing the harvest time into an excessively wet period. Digging of potatoes should usually take place sometime between September 15 and October 15, although in many cases this is delayed until quite late in the fall and sometimes even until spring. In sections where there is a good deal of freezing during the winter months the harvesting must, of course, take place before the freezing weather of the fall. The harvesting is done either by means of forks or with ordinary potato-digging machinery such as may be had on the market.

The potatoes should be allowed to cure on the soil for a few hours in order to toughen them so that there will be less peeling when they are picked and handled in the sacks. They are usually picked in buckets and put in sacks or crates. The sacks or crates are allowed to remain in the field over night so that they will be thoroughly cooled out, after which time the potatoes are ready to be transported to market or to the potato warehouse. Before being taken to market the potatoes must be sorted. In some cases this is done by hand at the time of picking up. In most progressive potato-growing communities, however, the machine sorter is used. This is a machine having meshes or openings of sufficient size to allow the potatoes to pass through. The mesh may vary with the different markets, being from 1% to 2 inches square. For special markets careful hand sorting must be used.

In the preparation of potatoes for exhibit, it is always well to bear in mind that potatoes are grown for market purposes, and that the best potato for exhibit purposes is also the best potato for market purposes, and, also, a potato which is not valuable for market cannot score well under the conditions of the ordinary exhibit. The following score card is a guide towards the selection of potatoes for exhibit or for seed or for market purposes:

SCORE CARD FOR POTATOES

	Score	Exhibit Score
Trueness of Type-Variety characteristics	. 10	
Uniformity of Exhibit—In size, shape, color, surface, etc	. 10	
Shape of Tuber—Symmetrical and free from depressions or protuberances	10	
large, 9 points if too small)	. 15	
Skin—Firm, smooth, and free from sunburn, discoloration scab, and other blemishes	. 20	
etc. Even in texture, of a clear color and free from sogginess or discoloration of any kind	25	
according to variety	,	
	100	

Trueness of Type. This item simply covers variety characteristics. The potato must be true to the type of the variety whose name it bears.

Uniformity of Exhibit. No potato is valuable for market purposes or for seed purposes unless it carries considerable uniformity. If there is lack of uniformity, it shows that the type of potato is not a very constant one—that there is evidence of mixing. The potatoes must be uniform in size, shape, color, appearance of the surface, texture, etc. In selecting potatoes for exhibit, uniformity is one of the most important points.

Shape of the Tuber. The shape of the tuber is in part determined by the variety of the potato, but, aside from this, the tuber must be symmetrical and pleasing, and of a shape that will peel satisfactorily. There must be no depressions or protuberances and the potato itself must not be crooked or deeply pitted. Potatoes that have deep depressions, pits, protuberances, or that are badly crooked do not look well and do not peel economically.

Size. Market demands are for a medium-sized potato that weighs approximately five to eight ounces. In most sections of Western Oregon a five to seven ounce potato is satisfactory. Large potatoes are less objectionable than small ones, but the ideal-sized potato is one that suits the hotel trade—a potato that when baked will make a satisfactory meal for one person.

Skin. The skin is the portion of the potato that is observed by the buyer, and it also serves as a protective cover for the food that is stored within. It should be firm and not readily broken, but, on the other hand, it should not be wilted and leathery. The skin should be smooth and free from any sunburn, discoloration, scab, or other blemish, because such things indicate poor quality and a high percentage of peeling.

Flesh. The flesh of the potato should be solid, of even texture, and of a good clear color. There should be no indication of sogginess or discoloration of any kind. The texture of the flesh should be uniform throughout, without any worm holes or mechanical injury.

Eyes. The number and character of the eyes depend a good deal on the variety. But the ideal from the standpoint of the market is a type which has relatively few eyes and these not very broad or deep. A potato which has numerous, deep eyes will not peel satisfactorily, so that with any variety the ideal is approached when we choose a type that has the medium number of eyes and those not broad or deep.

In selecting potatoes for exhibit purposes, under no condition select the larger sizes, and whatever size is decided upon as best should be used throughout the entire exhibit. Do not put in any large ones in an exhibit of medium-sized potatoes, because such potatoes are likely to injure the entire exhibit. Avoid bruised, cut, or diseased potatoes and all tubers that are misshapen in any way.

There is a good market for hill-selected, disease-free potatoes that are true to name. Such potatoes command fancy prices for seed.