

For the Farmers' Advocate.

POTATO CULTURE.

CAUSES OF DISEASE—PALLIATIVES OF DISEASE,
&C. WITH NOTES ON NEW VARIETIES OF SEED
POTATOES, RECENTLY PRODUCED FROM THE
SEED BALL, BY GOODERICH, HEFFSON, BREEZE
AND OTHERS.

In preparing this article for the "press," I don't aim at perfection, but am content to reproduce the opinions of the best of modern writers on this subject, such as Johnson, Dawson and others, whose authority has never been questioned. The cause and palliatives of the Potato Disease are known to but very few of the more enlightened farmers at the present day.

PREPARING THE SOIL.

The soil best suited for Potato Culture, is a rich, sandy loam; but every one cannot have that choice, and will often have to plant on heavy clay soils. When this is the case, it should be thoroughly underdrained, if possible, as potatoes grown on wet soils are more subject to disease, and the flavor is also much inferior than when grown on a dry, warm soil. The soil should be broken to a good depth, and made fine and mellow. A liberal supply of old manure should be used when it is at all attainable. On rich pasture lands, the decaying sod answers sufficiently well for a year or two, in place of manure. Ashes are very valuable, and as the supply is generally small, they may be applied alone or mixed with plaster in the proportion of one bushel of plaster to four or five of ashes, dropping a handful on each hill after the potatoes are up and have made a few inches growth. And I have succeeded well in cultivating potatoes, by dropping a handful of ashes in each hill at the time of planting the potatoes, and I approve of both plans being adopted.

PREPARING SEED.

There has been considerable discussion concerning the relative merits of planting whole or cut potatoes but as yet undecided which is the best way. I have planted potatoes cut in one, two, or more pieces, down to a single eye. Usually I get the best results from potatoes cut into two or three eyes, when well cultivated. The only good objection to cutting seed so small, is that the plants don't grow as luxuriantly when small, especially if the weather is cold and wet, as if the sets were larger; but if they get a good start and are properly cultivated, I find no difficulty in growing a heavy crop of large, sound potatoes. When whole potatoes are planted, I would select those of a medium size, not very small, neither the largest ones and plant one in a hill. Whole potatoes grow very luxuriantly and yield well, but there will be a great many small tubers.

The best yield I have ever seen, was in 1868, from potatoes cut into small eyes and two pieces put into each hill; with ordinary cultivation 810 bushels per acre was produced. The potatoes that produced this large yield, was the "Harrison."

The following is my plan of cultivating the potato, which I have found to produce good results. If the land is in good condition I plow as soon as it is in good working order, usually about the last of April, and harrow until the surface is fine and mellow. Some soils will be in much better condition if

plowed in the fall, allowing the frost to mellow the hard lumps and kill the roots of perennial weeds, and cross-plow and harrow in the spring.

If potatoes are to be cultivated in hills, I strike furrows about two feet eight inches apart, both ways, dropping two sets or one whole potato in each hill. If cultivated in drills, I strike the furrows a little farther apart and the sets from twelve to fifteen inches apart, according to the vigor of the kind. If the soil is mellow, the seed may be covered with a one-horse plow, covering about four inches deep. As soon as the first sprouts break through the soil, go over the field with a light harrow, turn top side down or with the top of a small tree, dragging it across the rows. This operation destroys nearly all the young weeds, and leaves the ground in excellent condition for the cultivator, which should be set to work in a few days after harrowing, and no matter if the potatoes are not all up, run the cultivator through the rows every few days, till the potatoes have a good start. If weeds are allowed to cover the ground, they are very difficult to kill and will greatly injure the crop thereby. Continue to plow until the vines have covered the ground or until they have done blossoming, but do not run the plow very deep towards the last as it will injure the roots. The old way of hilling up potatoes is worse than labor lost, as I have found by experience.

If any weeds appear after the last plowing, they must be hoed or pulled up, as the crop will be greatly injured, besides most of them will go to seed and will fill the ground and make trouble in future.

It is probably the best to procure new seed potatoes as often as practicable, as I find that seed potatoes procured at a distance will always produce the best results for the first few years. Still I think by good culture and the selection of the best seed, a variety may be kept perfect and often make a decided improvement in the quality, at least, if not in the quantity.

VARIETIES—EARLY GOODRICH.

The late Rev. C. E. Goodrich, of Utica, N. Y., raised over 16,000 different seedlings, and this, in the opinion of competent judges, is best of all. It was raised from the seed of the Cuzco, which is itself a seedling of the wild Peruvian potato.

It has been thoroughly tested, and all bear unvarying testimony in describing it as one of the earliest, most productive and equal in quality to any variety in cultivation. It is a large, white, oblong, smooth potato, yielding at the rate of 250 to 300 bushels per acre, with good cultivation. With me, this variety kept perfectly sound, when all the old varieties rotted badly, and I find it vastly superior to the White Sprout in earliness, good quality and productiveness.

HARRISON.

This was raised from the same seed ball as the Early Goodrich. It is a large, white, oblong, full potato of excellent quality and very productive, yielding at the rate of 350 bushels to the acre under good cultivation. It is the most solid of the large potatoes, keeps well, and like the Early Goodrich, is free from disease.

Mr. Editor, the Harrison yielded far better with me than it did with the correspondent of the "American Farmer," as quoted above. With me, the Harrison, last season, 1868, yielded at the rate of 614 bushels to the acre, and with my brother it yielded at

the rate of 810 bushels to the acre, and in both cases without extra cultivation. I also saw an account of a yield of the Harrison, by a correspondent of the "Rural New Yorker," in Minnesota, which was at the rate of 839 bushels to the acre.

CALICO.

White, with irregular splashes of red, rather long, flat and smooth. It is of good quality, a strong grower, very productive, yielding at the rate of 300 bushels per acre. It should be planted farther apart than the early varieties.

AMERICAN PEACHBLOW.

A variety extensively grown for market, but there is hardly a doubt but that it will be superceded by the Harrison and Early Goodrich, just as soon as these varieties get plenty enough for general cultivation.

GLEASON.

This potato is a Goodrich seedling, recently introduced and promises to be valuable. It is a long, smooth potato, somewhat rusty, with pink eyes and of good quality. Yield, 250 bushels to the acre.

JACKSON WHITE.

A comparatively new variety of first quality; large, yellowish white, and well flavored.

CUZCO.

A large, long, white potato, with deep eyes and of second quality. Yield, about 300 bushels per acre.

GARNET CHILI.

A large, red, round potato with deep eyes and of fair quality, yielding about 250 bushels per acre.

SHAKER FANCY.

A large, white, nearly round potato, of good quality, early and productive.

But from what I know of the above varieties I prefer the Harrison as a late potato; it excels all other varieties in productiveness, and the Early Goodrich as an early potato.

I don't fancy too many varieties of potatoes; have decided for the present, at least, not to cultivate more than three varieties, viz: Early Goodrich, Harrison, and Early Rose. These varieties combine productiveness, earliness and good quality, free from disease. Now this is all that can be desired.

EARLY ROSE.

A seedling of the Garnet Chili, originated in 1861, by Albert Breeze, an intelligent farmer of Vermont, who, being convinced of its decided superiority over all other varieties placed the entire stock in the hands of D. S. Heffson, Esq. the well-known disseminator of the Goodrich seedling potatoes, and is described as follows; skin, thin, tough and of a dull bluish color; flesh white, solid and brittle, boils through quickly, and is very meshy. It is claimed to be superior to the Early Goodrich. Dawson says the potato contains in its tuber, a larger proportion of nutriment than the turnip or carrot, chiefly in the form of starch with a little albumen. It requires the presence in the soil, of potash and lime, in considerable quantity. Much more than one-half of the Ash of the stem of the potato, consists of these substances, and potash forms nearly one-half of the ashes of the root or tuber. Potash is contained in the stable manure usually applied to the potato, and on soils containing lime it thrives well and is less liable to disease than in others. Some persons suppose that the application of lime and wood ashes, causes the potato to be scabbed. This, I