# .. The Irish Potato..

Method of Planting,

Fertilizing

and Cultivation.

BY

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Compliments of TEXAS MIDLAND RAILROAD.

### THE IRISH POTATO

#### SOIL.

The Irish potato thrives best on a well-drained, rich, sandy loam soil.

It should be deep and contain plenty of humus. The sandy loam hill lands of Texas and Louisiana are naturally good potato lands, but the humus has been worked out of them by consecutive planting to cotton.

It can be restored by planting exclusively to cow peas the season preceding the potato crop and turning the whole under, or by the use of stable manure or partially decayed straw.

#### STIFFER SOILS.

Clay loam or clay soils should not be used for potatoes if a sandy loam can be secured. A well-drained clay loam soil may be used if it has been previously prepared by turning under green crops or where a farmer has plenty of coarse stable manure, partially rotted, which he can conveniently apply in such quantities as to make the soil friable.

## MECHANICAL CONDITION OF THE SOIL.

It is a common error to suppose that lack of fertility in soil can be overcome by adding sufficient commercial fertilizers. This may do very well for some crops but not for potatoes. The potato requires vegetable mould as above stated, and this can most economically be secured by previously plowing under a crop of cow peas.

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#### PREPARING LAND FOR THE POTATO.

Plow in November if possible, at least two inches deeper than usual and harrow or disc once in twenty days, if the weather permits, till plant-

ing time.

If the best results are to be obtained the breaking plow should be run about six inches deep and be followed by a sub-soil plow, making a total depth for both plows of ten to twelve inches. This will improve the condition of the

soil for potatoes.

In February, or at least one month before planting, harrow the field and lay off the rows, with a plow, three feet apart, running the plow about three inches deep. In this furrow distribute cottonseed meal at the rate of four hundred pounds per acre and mix it thoroughly with the soil by means of a cultivator.

The fertilizer distributor should have an attachment which runs behind the dropper and does this mixing. Just before planting, harrow thoroughly. By this time the cottonseed meal will be partially assimilated and ready to act quickly and there will be no danger of its injuring the seed. If a farmer did not sub-soil at breaking time, it is a benefit to run it in the furrow to the depth of ten inches or more before planting. Possibly a better time is when the rows are made. This subsoiling gives room for the tap roots of the potato to go deeper for moisture.

It is better to sub-soil the entire field at the time of first breaking or plowing. This later use of the sub-soil plow is only suggested in case of failure to use the sub-soiler at the proper time.

#### PLANTING.

Extensive experiment has shown that very small potatoes should not be used for seed, nor would I advise the use of very large potatoes. Select for seed precisely such potatoes as are desired at the harvest. Never cut them to the single eye and seldom to two eyes. For practical field crops cut the potato into quarters. Each quarter should contain a portion of the seed end. Plant single pieces ten inches apart in the row. This will require (when using quarters) about sixteen bushels per acre.

Preliminary to planting, clear the fertilized furrow to the depth of two and a half inches below the surface, drop the seed quarters ten inches apart and cover one inch with dirt; top of this scatter four hundred pounds of acid phosphate and sulphate of potash, mixed as follows: Three hundred and twenty pounds fourteen per cent. acid phosphate and eighty pounds suiphate of potash; then plow a furrow two and one-half inches deep on each side of the row, throwing the dirt toward the planted row and adding about two inches to the covering of the potatoes, leaving them at a total depth of three or four inches. Leave the soil without packing. These side furrows should be run with a narrow plow and should be about eight inches from the potatoes on each side. The

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on can ply rate dirt can be leveled by means of a board attached to the plow behind.

When finished the row presents a flat surface sixteen inches wide with slight drainage furrows on each side. The foregoing applies to sandy loam, rolling lands. Heavier lands may require deeper furrows on each side of the rows for increased drainage.

The instructions as to drainage are based upon the supposition that the sandy loam land selected for potatoes is old cotton land. Less fertilizer per acre can be used, but it will result generally in a smaller yield.

If the soil is virgin and has plenty of humus an application of two hundred pounds of cottonseed meal and two hundred pounds of acid phosphate and sulphate of potash is ample; or, if the soil has been filled with cow peas the preceding year, the amount of commercial fertilizers can be greatly reduced.

It may not always be practical to purchase the material for potato fertilizer and mix on the farm. In such cases buy a fertilizer showing three per cent. nitrogen, eight per cent. phosphoric acid and six per cent. potash. This corresponds closely to the first formula given.

#### BARN YARD MANURE.

Never use green barn yard manure on a potato crop. Well-rotted manure can be applied with good results. Apply broadcast, before breaking, at the rate of twenty-five two-horse loads per acre. The best way to apply barn yard manure is to use it the year previous on a crop of corn and cow peas. Sow the cow peas broadcast at the time of the last cultivation of the corn, thus covering with the cultivator. With corn rows not less than five feet apart this will give a large crop of peas for turning under.

#### CULTIVATION.

As before stated the land should be thoroughly harrowed just before planting and again as soon as the potatoes are up enough to be observed; then cultivate every week till the tops are too large.

When the potatoes are harvested plant June corn and cow peas or sorghum and cow peas for a second crop.

#### SUMMARY.

First. A rich sandy loam soil, thoroughly drained and well supplied with vegetable matter is best for the Irish potato.

Second. Potatoes should not be grown upon the same field consecutively more than two years; but should be grown in rotation with corn and cow peas. It is better to apply barn yard manure to the previous crop in the rotation, but if well rotted it may be used direct.

Third. If commercial fertilizers are used purchase one that contains three per cent. of nitrogen, eight of phosphoric acid and six of potash, or use four hundred pounds per acre of cottonseed meal placed in the soil early (one month or more before

planting) and at planting time apply three hundred and twenty pounds of fourteen per cent. phosphoric acid and eighty pounds of sulphate of potash.

Fourth. Preparation of the land should commence in the fall and it should be plowed deep and thorough.

Fifth. Planting with flat ridge as described is best on an average, but in case the land is inclined to be wet plant on ridges.

Sixth. Climate and conditions must fix the date of planting, but plant as early as safe. In Texas the range is from the middle of January to the 10th of March.

Seventh. In case there is plenty of moisture, three inches is deep enough for planting. If dry, cover a little deeper. If wet, or soils are stiffer, do not plant quite so deep.

Eighth. Use the harrow before planting and again just as the plants are coming up; follow with frequent cultivation until the vines shade the ground.

Ninth. Use Northern grown seed.

Tenth. Do not cut the potatoes long before planting. Two or three days may not injure them if stored in a damp place or covered.

Eleventh. The eyes on the seed ends are the first to germinate, hence potatoes should be quartered from seed to stem end.

Twelfth. Do not let the tubers sprout before planting.

Thirteenth. With rows three feet

apart and quarters placed ten inches apart in row it will require about sixteen bushels of potatoes per acre.

Fourteenth. The yield of merchantable potatoes increases with the size of the pieces planted up to halves. Whole potatoes give too many stalks. Halves yield more potatoes than whole tubers. I do not advise planting haives unless the cost of seed is very low, because the increase in yield is seldoin any more than the additional bushels of potatoes planted and generally less. The result of many trials shows that for one hundred bushels of merchantable potatoes obtained by planting one eye, one hundred and fourteen bushels were obtained from two-eve pieces; one hundred and thirty-one from quarters; one hundred and thirty-nine from halves, and one hundred and twentynine from whole potatoes.

If the above directions are followed a paying crop of potatoes will generally be harvested. If any one goes into the potato business and plants on any kind of land and in any sort of way he will have few potatoes but will have a full crop of costly experience.