

THE PROGRESSIVE FARMER.

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AGRICULTURE

SUGGESTIONS TO WHEAT GROWERS.

Cowpeas Will Store up \$15 Worth of Nitrogen Per Acre—Plans to Remove Cheat and Cockle.

Editor of The Progressive Farmer:

Land intended for wheat should be frequently plowed prior to seeding. Wheat will succeed best on a clover or cow pea sod, but these crops, or any other green crop, should invariably mature before they are turned down. The ranker the growth the better will be the results. Consequently, when seeding clover or cow peas it usually pays well to supply them liberally with potash and phosphoric acid. A bountiful supply of nitrogen will be drawn from the air, which is a clear gain, being virtually grown. A good crop of clover or pea vines will easily draw, per acre, from the air, \$15 worth or more of nitrogen. The New Jersey Experiment Station claims that an acre of crimson clover will mature \$30 worth of nitrogen. But we will be moderate and put the average value of nitrogen that can be practically drawn from the air by an acre of clover or cow peas, at \$15, which is more than most corn crops would sell for. Said nitrogen, with the potash and phosphoric acid that may have been applied direct, will be stored in the plants and, when turned down, will serve the wheat crop that follows.

When practical a clover or cow pea crop should be turned down several weeks before the wheat is seeded. Time will thus be given for the vegetable matter to at least partially decompose before the wheat is seeded, during which time important chemical changes will take place. But as the vegetable matter cannot decompose in time to fully meet the requirements of the wheat a half dose, say 200 to 400 pounds per acre of a fertilizer containing nitrogen two per cent, potash $7\frac{1}{2}$ per cent and available phosphoric acid 9 per cent, may be used.

TO REMOVE CHEAT AND COCKLE FROM SEED WHEAT.

There are at least two plans for doing this. I will first give what appears to be the most practical plan, and then the other.

Make a strong brine by adding salt to water. This brine will float cheat, either the Georgia or common kind,

and a portion of the cockle, but not all.

If molasses or the ordinary cane (sorghum) syrup be added in proper quantities and well stirred, the specific gravity of the brine will be sufficiently increased to float the residue of the cockle.

When the brine is made it will be necessary to use a proper quantity of salt above the capacity of the water to dissolve. Then when the molasses or syrup is added an additional quantity of salt will be dissolved, thus increasing the specific gravity of the liquid sufficiently to answer the desired purpose. The necessary quantity of molasses or syrup to be added can be ascertained by testing.

In the above test I used ordinary molasses, but presume that syrup of cane or sorghum will answer equally well.

A liquid prepared as above will float all the cheat and cockle and from 25 to 30 per cent of the lighter grains of wheat.

The skimmings should be immediately removed and then the wheat that has settled to the bottom, taken out and washed with fresh water. Proper tests have shown that the germinating power of wheat thus treated will not be injured in the least.

The above plan will not only clean the wheat of all filth but will also vastly improve the quality of the wheat by retaining the heavier grains only.

ANOTHER PLAN

Prepare a brine with nitrate of soda. Then add salt, using of each all that the water will dissolve. Then treat as above.

Saltpetre may be substituted for the nitrate of soda, but as the latter is cheaper it is preferable when it can be commanded.

Light grains of wheat may for the present yield fairly well, but their continual use will surely cause a deterioration of the wheat, both in quantity and quality. Hence the necessity for selecting the heavier grains only, at least a sufficiency to grow seed for the following year.

BRYAN TYSON:

Carthage, N. C.

News and Observer: Yesterday a cotton firm in Raleigh sold one hundred bales of cotton to a cotton mill in interior North Carolina for thirteen and a half cents delivered. A few months ago that mill could have bought its cotton for nine cents.

Potato Growing in Michigan.

Editor of The Progressive Farmer:

We are on the 43rd degree, north latitude. The difference between here and North Carolina in climate, customs and crop culture must be so striking as to be instructive to Progressive Farmer readers. Take potatoes, for example. Early potatoes are not grown for market to any extent. Most farmers plant a few for home use, some time in April or May. Seldom that the ground warms up enough to bring them up before May, plant when you will. Usually they are not relished for winter use.

For main crop the market demands a round potato with few eyes and not deep. Rural New Yorker, No. 2, is much grown here. There is a wide diversity of opinion and practice in regard to seed. Some plant small potatoes whole—and get seed elsewhere in a few years. Some cut medium size in two to four pieces. The best growers cut to two and three eyes to the piece—and one piece to the hill. The ground being well fitted with plow, disk pulverizer, spring tooth harrow or drag, is rolled and marked each way, usually with a three legs marker, with legs 30 inches apart. But fashions change. Not so very long ago they were planted three feet apart and with a hoe. Then came the drill system. A shovel plow, or cultivator with broad tooth, was run in rows two and a half to three feet apart one way. Men with sacks of seed followed, dropping a seed piece one and a half to two feet apart, stepping on each piece to firm it in the soil. A horse with cultivator rigged to turn two furrows in over the seed, followed. In a few days a roller, or drag, was run over these ridged rows levelling them somewhat and killing the weeds in the seed leaf.

Now, the style is to plant the seed with a hand and foot planter; the seed carried in a sack over the shoulder, one piece put in the planter tube and thrust four or five inches in the soil by foot pressure. Hard work! If weather is suitable, a drag, ordinary 45 to 60-tooth peg tooth drag, is run over the field once or twice before the crop comes up, to break the crust and kill the weeds,—makes much easier the subsequent culture. Often a farmer will drag the field after the potatoes are up. The seed deep thrust in the earth remains undisturbed and the tops suffer but little. Later the crop is well cultivated both ways, say twice, two times in a

row each way. The cultivator teeth will be set to throw the dirt to the row the last time giving a slight hilling of the earth. Practically it is level culture. Various ways of digging are in use. The favorite method is for two to six men with hooks, or forks, working together. Two rows as dug are thrown together. Usually they'll dig about as much in the forenoon as they can pick up in the afternoon. A horse and stone boat with eight to twelve bushel crates is taken to the field. Some farmers have women and children to pick and the richest of them will turn out in an emergency and help and don't feel disgraced either. The horse is driven or led up the wide row where the vines are thrown and the potatoes picked and thrown into the crates from each side. When the crates are full the load is taken to a pit centrally located usually, though some load into wagon and put in cellar at once. Others think best to pit and let the potatoes sweat out until cold weather, when they are sorted and moved to cellar or permanent pits. These are piles of potatoes, 50 to 100 bushels in a heap about two and a half feet wide, and two to two and a half high, on top the ground, covered with a coat of straw, about a foot of earth and a finish of litter from the horse stable, when steady freezing begins.

Paris green applied with a hand sprayer, is relied on to keep bugs in check.

Last year potatoes were struck with blight in September, and rotted badly. Some hadn't enough for family eating. One farmer sold less than \$10 worth from three acres which yielded heavy enough so he and one man dug and pitted 100 bushels the first day, though one-quarter were left on the ground, rotten. When they were cellared, about half the pits were left in the field, and a large per cent decayed in the cellar. Two years ago a field of four acres yielded about 700 bushels of marketable potatoes for him. Part sold at 80 cents a bushel, so that the crop averaged over \$90 per acre from sales. Can't always win!

Notwithstanding the rot, prices kept at 50 cents, or lower, a drop to 35 cents in May, but jumped suddenly to \$1 in mid June. This coming just at planting time, coupled with last year's disaster and the scarcity of seed has diminished the area planted. No potatoes were shipped from here this season, where usually many car lots are sold both fall and spring. Looks now like high prices for potatoes another season, for planting is not yet finished owing to heavy rains since the 17th, and those planted fare badly in the sodder soil.

H.

Davison, Mich.