

Farm and Home.

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All Around the Farm.

MAKING THE BEST OF CROPS.

It is one thing to know that thorough and frequent cultivation will materially add to the growth and consequently the profit in a crop, but it is another thing to be so thoroughly convinced of the importance of the matter as to put one's knowledge into practice. It is not simply knowing how to set to work that insures success in any undertaking; it is knowing how and putting that knowledge intelligently and persistently into practice that produces satisfactory results. Many causes work together to bring about poor crops, such as poor seeds, poor soil, poor fertilizing, but above all poor cultivation is responsible for most of the failures to produce a good paying crop. A poor market may cut down the resulting profit from a well-grown crop, but it seldom will wipe it out altogether, for the extra quantity as well as quality will almost surely bring the balance out on the right side.

The price of seeds is so small compared to the value of a crop grown from them that it is the height of folly to buy seeds because they are cheap. Utmost care must be taken to get the best variety suitable to the market must be considered. Except for experiment in a small way, only well-known standard sorts should be used. When possible, buy seeds in time to try a sample, not only as to germinating powers but quality, before sowing for crops. This may sometimes save serious loss. Buying from a reliable seedsman and at high prices will not always insure the best. Accidents and mistakes will occur. Last year \$1 worth of seed, grown by the introducer, and at double the price of any other in the market, was ordered. The seedsman happened to be out of that variety and bought from a wholesale house. The seed proved not

to be true to name and a loss of over \$300 was the result.

Good, deep, fertile, well-worked soil suitable for the crop grown is necessary for best results. Heavy fertilizing will, other things being right, give better quality, greater quantity, earlier maturity and consequently better prices and profit. Fifty loads of well-rotted manure and 1000 lbs of good phosphate to the acre are none too much. The best of cultivation from start to finish should be given to develop all the possibilities of the foregoing good conditions. Good and frequent cultivation, with proper labor-saving tools, not only to kill weeds that never should be there, but by constant stirring keep a fine mulch of earth 1 or 2 in deep to retain the natural moisture as well as the rainfall in the soil, and giving air, to some extent, access to the roots of plants will do more to promote the growth of the crop than many times the amount the work cost would if applied in manure or chemical fertilizers.

The best tools for this purpose are the Planet Jr horse and hand tools, and a good weeder. With a two-wheel hoe a great deal of work can be done in a short time. An acre of closely planted stuff can be gone over in half a day, leaving very little to be done by hand hoe or hand weeding, and generally it is as cheap or cheaper to wheel hoe once a week than hand hoe once a month. After growing good crops do not give them away. Grade and pack carefully, study your market, and if you know your business you will have as much to say about the prices as the man at the other end of the line.—[Thomas Slack, Shefford Co, Que.

THE VALUE OF FERTILIZERS.

The law of most states compels manufacturers of fertilizers to print the analysis of their goods on the bag, but to how many farmers do they convey any intelligent ideas? The three fertilizing elements the farmer has to pay for are nitrogen, worth 14c per lb, available phosphoric acid 42c, insoluble phosphoric acid 2c and potash 44c. The following is the analysis of a well-known brand as printed on the bag: Ammonia 2 1/2 to 4 per cent, phosphoric acid (available) 7 to 8, total phosphoric acid 9 to 10, actual potash 7 to 8. The nitrogen we want is contained in the ammonia, but of 17 parts of ammonia only 14 are nitrogen, so we must change the ammonia supply to read 2.87 to 3.28. In every case the lower figures are all manufacturers' guarantees and by multiplying these by their several values we find the nitrogen in the above 100-lb bag to be worth 40c, phosphoric acid 35 1/2c and potash 29 1/2c; total \$1.05 1/2. The above figures are based on the retail value of the raw material. Of course the manufacturer buys at wholesale, but he must mix, provide barrels and bags, pay freight to the agent or consumer and probably wait 6 mos for pay. Then, again, all reliable brands generally exceed the lowest figures given in the analysis. Using the above figures as a basis, the manufacturer would seem to be giving the farmer fair value for his money. Let the farmer look to it that by careful and judicious application he also secures a fair profit on the money thus invested.—[A. R. Hay, Carleton Co, N B.

TRAPPING CUTWORMS.

Cutworms develop in grass lands and in spring cut off at the surface of the ground, all manner of plants and even climb the stems. Cabbage, tomato, tobacco, strawberry and other plants are sometimes completely cleaned out by them. Plow early in fall and keep the land thoroughly cultivated. If soil land is plowed in spring, cutworms will support themselves for a few days on the vegetation that has been turned under, but when fresh food is placed within their reach they attack it at once. After land has been prepared for two or three days, or after corn or potatoes have been planted, cutworms can be cleared from a field by spreading at intervals little heaps of grass or clover thoroughly poisoned with paris green. The hungry cutworms will attack this green food and will be killed off before corn or potatoes have sprouted. Even if the piles of poisoned vegetation are pretty well scattered, all the cutworms will find one or the other of them in the course of two or three nights and the field will be clean. Where growing plants are set out, this green-

bait trap is not always satisfactory unless it is put on at least three or four days before the setting, and in such cases a trap of poisoned bran is better. This consists of one part by weight of paris green to 25 parts by weight of wheat bran, thoroughly mixed so that the poison will be distributed to every particle of bran. Sugar water should be added until the mixture is thoroughly moist and can be ladled out with a spoon without dripping. A spoonful to every hill of tomatoes, melons, sweet potatoes or the like will protect plants, because cutworms prefer bran and will fill themselves with it to their certain destruction. Climbing cutworms will sometimes ascend the trunks of trees in orchards and cut out the buds or young shoots. Where this is noticed a sprinkling of poisoned bran around the trunks of the trees will serve to protect them.—[Dr J. B. Smith, N J Exper Sta.

RAISING SWEET POTATOES.

A fairly rich soil, not too light, will suit the sweet potato. The soil should be plowed deep and thoroughly pulverized. Slight ridges should then be thrown up, say about 6 inches in height and 12 to 18 in at the base. Some writers say don't ridge, but we have found from practical experience that it pays to make the ridges. It gives tubers of a more uniform size and shape and they are smoother than when planted on a level. Once a week the ridges should be scraped lightly with the hoe or other sharp tool to kill all weeds; the middles can be cultivated the same as corn. Cultivation should be kept up until the vines are matted on the ridge after which nothing more need be done to them but pull out any large weed that may have the temerity to grow.

Plants should be set in May for best results, but may be set up to June 15 and a fair crop of tubers harvested. The plants should be set about a foot apart in the row. In setting, the plant remember to always firm, the soil around the roots and then put a little loose soil over this. We usually set them in this way: Grip the plant near the middle with the right hand, with the left make a small hole for it, place the roots in the hole with the right hand and with the left scrape a little dirt over them, then with each hand firmly compress the soil around it, scrape in a little more loose dirt and the work is done. This is the way we set all plants and we are uniformly successful in having them grow.—[A. N. Springer, Tipton Co, Ind.

NITROGEN FERTILIZERS.

C. R. L. of O wants to know the difference as a fertilizing property, or rather the results, of nitrate of soda, as a nitrogen or ammonia fertilizer. Are they the same except in strength? What is the value of saltpeter and also potash? The O exper sta at Wooster, Wayne Co, has raised crops in a 5 yr rotation of corn, oats and wheat one year each, and clover and timothy mixed 2 yrs and the total value of the increase from all the crops of the average rotation was as follows: From nitrate of soda \$19.10, sulphate of ammonia 16.48, dried blood 15.62 and linseed oilmeal 15.03. Taking nitrate of soda as 100, these figures would give the following as the relative effectiveness of these nitrogen carriers: Nitrate of soda 100, sulphate of ammonia 86, dried blood 82 and linseed oilmeal 79. It will be understood that these are all carriers of nitrogen, or in the terms of the trade, of ammonia, ammonia being about 82 per cent nitrogen. Saltpeter, which is chemically nitrate of potash is not used in ordinary fertilizers to carry either nitrogen or potash because of its cost. It is cheaper to carry the nitrogen in nitrate of soda and the potash in muriate of potash.—[Director C. E. Thorne.

Foreign Cabbage Seed—Last summer I planted 1/2 a cabbages, much less than usual. The seed was of the Solid Emperor strain of the Holland type and was purchased of one of our leading seedsmen as his very best. Season and soil favored them, but I gathered the crop in one bushel basket, about a dozen small heads. The seed proved to be foreign grown and entirely unfit for our climate, so that the warm, dry weather which we always have, not a severe drought, caused hundreds of them actually to die when half grown, and to-day the stumps stand with a little

bunch of dried leaves the size of one's fist. Other gardeners have complained of similar results, and of heavy use by frosts which the Flat Dutch and other varieties of American growth would not have suffered from at all. A few years ago I lost half my crop of Holland cabbage by a moderate frost in October. Only American grown, acclimated seed should be used.—[S. W. Gibson, Eaton Co, Mich.

Weeds must be fought when young. Do not trust to plowing your weeds down, to add to the fertility of the soil. The amount of added fertility is not enough to compensate for the danger of plowing in ripe seeds. Clean your land of weeds early and put in some other fertilizer.

The Early Trumbull Potato is a white variety of recent introduction. It stands at the head of a long list in variety tests for productiveness of early sorts at the O exper sta for 3 yrs, giving an average of 271 bu p a. It has been given a trial in various localities, and while it is not alike successful in all, it appears to have given general satisfaction. Its season of ripening is with the Early Rose and Early Harvest. Heretofore Bovee and Early Harvest have stood at the head of early varieties. In the station trials, but the Early Trumbull must now be accorded first place.

Wheat Injury by Hessian Fly is serious this year. Infested fields should be plowed under 4 to 6 in deep, harrowed and rolled, to prevent the flies just coming out laying eggs. As wheat has to withstand an attack of the pest between now and harvest, each grower must decide for himself what the crop will be worth if left to mature. Hessian flies do not lay eggs on or attack grass, oats or potatoes.

A Valuable Fertilizer, but one often allowed to go to waste, is the refuse from fish packing factories. Where this can be obtained along sidewater at a reasonable price it will be found one of the best to be obtained. Fish pomace, packed in barrels dry and solid, sells in Me at about \$8 per ton for use on grass lands.

In Setting Strawberries, avoid a meadow sod on account of the white grub. Potato ground rich enough to produce 100 bu corn p a is best. Plow deeply with a subsoil plow, manure on top with well-rotted manure and drag in thoroughly. The plants should be set so that the crown is even with the surface of the ground. Hoe and cultivate each week if you want best results. Pick off all blossom stems the first season after planting. Cover runners at the first joint with a little earth and train the rows 2 ft wide and the plants 4 in apart. At the beginning, set the plants 2x4 ft.—[G. J. Kellogg, Rock Co, Wis.

To prevent wire worms on potatoes, sprinkle flour of sulphur over the tubers after curing for planting.—[A. L. Flagg, N H.

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