

PROGRESSIVE FARMER

THE INDUSTRIAL AND EDUCATIONAL INTERESTS OF OUR PEOPLE PARAMOUNT TO ALL OTHER CONSIDERATIONS OF STATE POLICY.

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Agriculture.

CULLING THE CROP.

The Survival of the Fittest in Plant Production—Selection for Seed Necessary with Plants as well as Animals—How to Get Good Seed Corn.

Cor. of The Progressive Farmer.

A mysterious and but dimly understood, yet withal an economical law of Nature, decrees that only the fittest of all animals and plants that are annually born shall survive and wax strong in the struggle of life. Statistics show that more than half of mankind even, die before attaining the age of 20 years. And how many that Nature permits to live, prove dismal failure in the battle of life, burdens on the fittest in society!

In the organic evolution of wild nature, where the struggle of life is fierce and pitiless, the weak, sick, helpless, and the unfit in any way, are crowded down or perish, because this is Nature's most efficient way of enhancing the physical vigor of the variety.

In every variety of each species of cultivated plant, there exists certain naturally endowed individuals, which, owing to the favors shown them through progressive hereditary tendencies, possess the power of appropriating to their growth uses, maximum nutrition. Such favored individuals also seemingly possess the power to originate progressive attributes not possessed by their ancestors. Accelerated growth force seems to center in such individuals, to the neglect of the weaker individuals of the same variety, because the progressive individuals have been endowed with the power of attracting such force. It then, as a natural consequence, that such endowed individuals excel the weaklings in the successful use of their advantages, and thus in the struggle of life grow better and produce better. Thus all the positions in Nature's economy are filled, and the surplus plants either neglected or entirely destroyed. This is styled the "survival of the fittest."

The writer is convinced that the term of certain individual kernels of grain has been endowed by Nature, through the variations of preceding generations, with a peculiarly vigorous, progressive propensity, with the ability to produce strong plants which absorb maximum nutrition and (if not hampered with degenerate pollenization or association with Nature's weaklings), to produce the maximum quantity and the highest quality. Yet other individual kernels from the same ear (clearly Nature's weaklings), through inherited incapacity, not only make poor growth and unsatisfactory yield, but if permitted to the farmer to have free pollenization with Nature's endowed stalks, reduce the yield and breeding standard of every productively inclined stalk in the field.

When left to their own devices, animals and birds kill off their weak and diseased individuals. But when man is in control of them he does not permit this, but protects the weak among farm animals and poultry, and in human society. That is the humanitarian way, but not Nature's way.

Not more than one in ten of the vegetable seeds which are annually planted ever give mature plants, from the fact that the professional market gardener understands the great importance of purposely planting his seeds very thickly, and of subsequently thinning out Nature's weaklings for the final good of the strong ones which he leaves.

"Poor Patrick" in his home on the Emerald Isle always plants his turnip seed very much thicker than he would have it mature, subsequently destroying the weakest plants, and leaving a normal stand of only the most vigorous and promising plants to produce bulbs.

The breeder of live stock and poultry gradually eliminates the weak and inferior by a system of mating and selection, in which the culls, or Nature's weaklings, are used for food or are sold in the produce markets, and only the very choicest kept for breeding stock.

In the cotton-growing districts of Dixie the farmers learned years ago to plant their cotton seed very much thicker than it should be allowed to mature. Then after the plants attain sufficient size to be readily judged, they go through the fields and cut out the weakest ones, leaving the stronger ones properly distributed to make the crop.

The progress of organic evolution favors or represses certain individual plants, depending on their degree of natural endowment. Therefore the scrubs, or Nature's weaklings, are merely repressed companions of the higher. They are so used by Nature's law of retardation, and if the best yield be secured, these weaklings should not be accorded the privilege of pollenization association with the endowed individuals, for the reason that they thereby exert a barren or otherwise yield-lowering influence, as well as lowering the future breeding standard of the variety. As the greater or less perfect development of a stalk of corn, for instance, depends on the degree of fitness of at least 100 of its neighboring stalks in a field, how very important it is then that at least the weakest of Nature's weaklings be destroyed before they can exert their baleful influence in the process of pollenization.

Even if the farmer plants seed of the very highest germinating power, and of highly bred varieties, and which generally results in good even stands, yet there are many stalks in such growth which are Nature's weaklings, or thoroughbred scrubs, which not only produce inferior yields themselves, but through their pollenizing influence, they decrease the productivity of even nature's endowed stalks.

Every farmer should annually set aside at least an acre of his most fertile land upon which he should plant his best seed corn. This acre should be planted much thicker than he intends it to mature. Then when the individual stalks have attained a sufficient size to be readily judged, he should destroy the naturally weak stalks. And just before the remaining stalks form their pollen, he should go through the patch and destroy all barren and diseased stalks, and also all stalks which in their more mature growth have developed weak traits. In the second thinning he can leave a normal stand of the endowed ones. The writer has noticed that by such practice most of the premium yields of corn have been produced. And he has demonstrated to his own great satisfaction the great value of such practice with all of his crops.

J. C. SUFFERN.

Piatt Co., Ill.

According to the best estimates obtainable, Mecklenburg County last year produced 23,000 bales of cotton, and it was considered a short year. All the farmers who have been interviewed this year agree in the opinion that the outlook at present is for a big crop of cotton. As a general thing the stand is fine all over the county, with the exception of a few spotty farms. The growing cotton looks promising and the prediction is made that Mecklenburg's crop the coming season will not be less than 25,000 bales.—Charlotte Observer.

HARRY FARMER'S TALKS.

LXXXIV.

Cor. of The Progressive Farmer.

We recently visited a large farm which had 182 acres in growing crops, consisting of corn, cotton, tobacco, sugar cane, oats, sweet potatoes and peanuts. There were only five mules and horses to cultivate the whole farm. The crops looked fairly well, considering the dry weather; we think they are better than if the weather had been wet. General Green would have soon ruined this small army of plows.

EXTENSIVE VS INTENSIVE FARMING.

Now, this farmer is a hustling young man that works his men and teams for all they are worth. We told him to change his system of farming by sowing one-third of his land to oats instead of one twenty-fifth as now practiced. He said that he would have to change and that one horse to every twenty acres was about right. One of his neighbors uses all of his manure on oats followed by cow peas and makes three times as much per acre as he does, and the crops getting larger every year. He admitted that he could make more clear money on a small place well worked than on a large place half worked, and thinks now that he will change.

A TELLING ILLUSTRATION.

Brother farmer, suppose a merchant should build four or five large store houses in a small neighborhood and only fill the shelves about one-fourth to one-half full and just put clerks enough to attend to it just average days, not preparing for the rush on public days like Saturdays and holidays; would you regard him a wise merchant? Well, there is just as much business in a farmer planting two or three times as much as he could cultivate well as there would be in a merchant following the course just mentioned. But this system is changing rapidly and before many years North Carolina farmers will be "up-to-date" and the most successful in the whole country.

MAKING MONEY ON TURNIPS

It is a little late, but "better late than never;" I want to call the attention of farmers to the turnip crop. Here is what an experienced commission merchant said to me a few days ago about rutabagas: "I have sold a great many turnips in this (Wilmington, N. C.). The native turnips sell very well till Christmas, then the Northern turnip takes the lead and it is almost impossible to sell any other kinds. The Northern turnips are good till June. The worst objection to them is their large size. They cost about \$1.50 per 100 pounds. I have tried some from the mountains or some that came from Mount Airy, and the tops were too long and were tough. I mean the necks or the part just above the ground. I cannot tell what the trouble is about growing the native turnip but they are inferior to the Northern turnip."

LET'S RAISE THE TURNIPS NEEDED BY OUR OWN MARKETS

Here is a chance for some enterprising young farmer to make money. There are hundreds of bags of turnips sold every year and at one and a half cent per pound (which is 90 cents a bushel less the freight) it does look like an opening to be desired. Go to work and experiment a little and see what you can do. For turnips to do best, the soil should be a deep sandy loam with the clay two to four feet below the surface. New land is best or land full of vegetable matter. Potash is one of the requirements of the turnip, and if the soil does not contain it in large quantities it should be supplied. We mentioned in a former article our experiment with kaint which more than doubled our crop. Turnips should not be planted early, but late in August is about right for this section. Just as soon as the second leaves appear thin out and stir the soil. The crust should be broken after every rain and a little earth drawn up around the plant. In order to make them good it is necessary to work them until the roots are as large as a tea cup. If you let them

get stunted they will never be good. A continuous, vigorous growth is what they need to make them perfect. Just before hard freezing weather sets in, take them up and put in small piles and throw a little straw and earth over them so that they will not freeze and they will be all right.

A WORD TO JACK JOHNSON.

No, Jack, we do not get mad, but we have done just what we write for: we have made a successful farmer give some of his experience which will be helpful to others. We agree with the editor that there was something between the lines that portrayed Jack Johnson's true character. As to the meat that the oats make, we mentioned the very smallest number of pounds that might be expected. You know that some years it does not require as much feed to make the same number of pounds per pig as it does when the weather is favorable. We are proud to know that we were champion enough to knock out two good ideas out of you, and we have a mind to hit you another telling blow to see if we can't get something still better.

HARRY FARMER.

Columbus Co., N. C.

GOOD CROPS IN THE GREAT NORTHWEST.

The latest number of the Chicago Rural-Voice contains the following editorial regarding the bright outlook for Western farmers:

Minnesota, North Dakota and South Dakota are now in the midst of harvest, and reports from the three States indicate that total yields of wheat, oats, barley and flax will be very large, a fact not so much due to the size of the yield per acre as to the large area devoted to those cereals. The estimated wheat yield for the three States is 178,000,000 bushels, divided between them as follows: Minnesota, 85,000,000; North Dakota, 55,000,000; South Dakota, 38,000,000. The estimate for oats is 100,000,000 bushels, allowing to Minnesota 60,000,000 bushels and 20,000,000 each to the two Dakotas. A yield of 44,000,000 bushels of flax confidently is predicted, of which 10,000,000 is credited to Minnesota, 25,000,000 to North Dakota and to South Dakota 9,000,000 bushels. If South Dakota runs comparatively low in wheat and flax that State makes it up in her great corn crop. Of a total estimated yield of 67,000,000 bushels for the three States, South Dakota is credited with 40,000,000, Minnesota with 25,000,000 and North Dakota 2,000,000. The barley yield for the three States is estimated at 10,000,000 bushels, and the aggregate value of all five of the crops named is placed approximately at \$192,000,000, to which are to be added hay and vegetables, fruit, dairy and live stock products sufficient to make the grand total output of the farms of these Northwestern States reach the enormous value of \$300,000,000.

Now the talk is of a bumper crop of corn, and not merely a bumper crop, but the bumper crop, the estimates going as high as 2,600,000,000 bushels, or 315,000,000 bushels above the great crop of 1896. We think it is rather early to get our hopes so high, though it is encouraging to look into a future so promising, and we may be sure that, no unforeseen calamity occurring, the crop will be a large one and will do much to restore more normal conditions. The cold spring, dry in some sections and wet in others, has given way to a summer of moderate temperatures, under which the corn appears to be making a strong growth. How large an influence the long-continued rainy season may have had upon the corn which survived it and now appears to be doing well only the harvest can positively determine, either as to quantity or quality. But with the magnificent yields of wheat and other small grains in the Northwest now practically assured the splendid outlook for corn must give hope and courage to the farmer, while it promises to all lines of legitimate business continued activity and a large degree of prosperity.

CALL FOR MEETING OF THE NORTH CAROLINA FARMERS' STATE ASSOCIATION.

Township Meetings to be Held August 23d, County Meetings August 30th, State Meeting at Raleigh September 3d.

To the Farmers of North Carolina:

At the January meeting of the North Carolina Farmers' State Association, a resolution was adopted that the annual meeting of the Association be held the third Tuesday in August. Commissioner S. L. Patterson, who is a member of the Executive Committee of the Association, informs us that he will be away, engaged in Institute work at that time, and the following week will be in attendance at the meeting of the Cotton States Association of Commissioners of Agriculture, in Nashville, Tenn. Therefore, it is thought best to hold the annual meeting of the State Farmers Association on Wednesday, September 3, in the Auditorium of the Agricultural Building in the City of Raleigh, beginning at 11 o'clock a. m. It is to be hoped that every county in the State will be represented at that meeting. We hope to secure reduced rates over the different railroads for the occasion.

When this Association first met in September, 1901, to take in consideration the cotton-seed situation, and devise plans by which a better price could be obtained for them, and by resolution declared that under existing conditions cotton-seed should not be sold for less than 5 cents per bushel for cash, nor exchanged for cotton-seed meal for less than 1,333 pounds of meal for one ton of seed, it demonstrated the power of concert of action; for by that resolution it established a price that resulted in untold benefit to the cotton farmers of the South. While some derided the action of the Convention, and said that it was composed of people who did not know what they were doing, others had confidence in their judgment and stood by the action of the Association. The farmers who refused to take part in the meetings, and continued to sell their cotton-seed as fast as ginned, received from 18 to 21 cents per bushel for them, while those who abided by the action of the Association, received from 25 cents to 27 cents per bushel for theirs. This very fact should give the farmers of the State confidence in the Association, and cause them to take an active part in its workings.

For the purpose of a complete organization and thorough representation at the State meeting, we suggest that township meetings be held on Saturday, August 23, at the usual place for holding township meetings, and that county meetings be held Saturday, August 30, at the court house, at 12 o'clock, and then select delegates to attend the State meeting.

This Association is of too much importance to the farmers of the State for its meetings to be neglected by them. Let them show their interest in the work, and their determination to succeed by attending these meetings in large numbers. The Secretary will gladly furnish constitutions and membership rolls to any one desiring them. Remember this Association is in the interest of all classes of farmers, whether cotton, tobacco, grain or truck farmers, therefore all are cordially invited and urged to attend.

Respectfully,

T. B. PARKER, Sec.

Hillsboro, N. C.

R. H. SPEIGHT, President.

Commenting on Editor Green's article on the rural telephone, the Charlotte Observer says:

"This is an excellent showing for Union. It will have a fine educational effect, too, this bringing of the rural districts in touch with the business and news centres. It will quicken in the farmers and their children a desire to know what is daily transpiring in the world, it will lead them to taking daily papers, which the rural free delivery will enable them to receive in good time, and will remove the isolation and loneliness of the country—about the only drawbacks there are to rural life which is otherwise largely ideal."

COMPLETE AND INCOMPLETE FERTILIZERS.

Cor. of The Progressive Farmer.

A complete fertilizer is one which contains the three essential plant food ingredients, nitrogen, phosphoric acid and potash. Correspondingly, every fertilizer which is lacking in any one of these ingredients is of necessity an incomplete fertilizer. A complete fertilizer is made by mixing together certain raw materials which contain phosphoric acid, nitrogen and potash. The most common of the raw materials used as sources of plant food are nitrate of soda, sulphate of ammonia, tankage, fish scrap, dried blood and cotton-seed meal as sources of nitrogen. The phosphoric acid is obtained most from acid phosphate, dissolved bone or bone meal. For potash we have to look to Germany, from which country are exported great quantities of potash salts, these salts most commonly appearing on the market in the form of muriate of potash, sulphate of potash, sulphate of potash-magnesia, and kainit.

Some farmers buy their fertilizers already compounded, while others purchase the materials separately and mix them at home. In either case it is equally essential that the fertilizer applied should be properly balanced; most of the bad results obtained are due either to an inequality in the composition of the fertilizer, or else to an injudicious application of the manure. No farmer can tell exactly what fertilizer will give the best results upon his particular soil unless he has made some experiments and observations on his own account. It is true that experimenting requires care and attention, but nevertheless, after the farmer has once ascertained what proportion of plant food ingredients will produce the most profitable returns, the increased yields will more than compensate him for the time and trouble involved.

No special rules can be laid down for applying the fertilizers, though it is a generally recognized fact that manures for fruits and vegetables should contain a liberal percentage of potash. The potash exercises a marked influence on both the quantity and quality of the produce; this ingredient, however, should be well backed up with phosphoric acid in order to produce the best results. As for the nitrogen, much study should be given to the amount of this ingredient to be used, for, if an excess is applied, it is liable to produce a rank growth of foliage at the expense of the fruit or grain, whichever the case may be.

It often happens that the physical condition of the soil is such that the fertilizers will not produce paying results, and in some cases an application of lime at the rate of 2,000 pounds per acre will prove quite beneficial.

It will pay the farmer to keep his soil well supplied with organic matter through the cultivation of one or the other of the leguminous crops. Clover or peas, for every well informed farmer nowadays know that as these crops possess the property of absorbing nitrogen from the air, the soil on which they are grown needs only to be fertilized with potash and phosphate, thus saving the expense of applying nitrogen, the most costly ingredient of all.

GEORGE K. WILSON.

The convenience and value of the telephone system and free rural delivery are seen and felt in about half of Wake County, but in the other half it is easier to get the result of a primary from Oregon on the day after than the full returns from Wake. With the extension of the telephone system, all this delay and inconvenience will be a thing of the past. If it is a good thing for Swift Creek, Middle Creek, Panther Branch, White Oak, Wake Forest, St. Mary's and Wake Forest Townships, why isn't it a good thing for Little River, Oak Grove and New Light? If it pays to have Union County honeycombed with telephone wires, will it not pay in the metropolitan county of the State?—News and Observer.