THE PROGRESSIVE FARMER

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

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Agriculture.

SEED AND CROP TESTING.

Correspondence of The Progressive Farmer.

It has been said that the man who makes a blade of grass grow where none grew before or two ears of corn grow where but one grew before is a greater benefactor of his race than any politician or soldier.

Agriculture is and must always remain the basis of human welfare since the two altogether indispensable requirements of civilized men are, firstly, something to eat and, secondly, something to wear. Recognizing the importance of agriculture all civilized and progressive States make some provision for helping practical farmers to increase the output and cheapen the cost of food and fiber stuffs. Improved methods and new discoveries in agriculture and related arts are the monopoly of no country or people. From every country having a climate similar to our own we may learn something new. Often we may find in other countries varieties of cultivated plants superior to ours. Practical farmers cannot usually go abroad to study foreign methods. It is therefore the duty of an active and successful State Department of Agriculture to study foreign methods and crops and to introduce and test such as promise to be of value.

The practical testing of new crops or varieties must as a rule be done by practical farmers co operating with the Department which supplies the seeds and instructions free of cost. The co-operating farmers are expected to give the new crop special attention and carry out the instructions of the Department. Those who apply for trial seeds and fail to take proper care of the crop, or fail to make a useful report to the Department are guilty of a breach of good faith. Where the Department and its co-operating farmers work together conscientiously a great deal of good can be accomplished at a small cost in introducing new and improved varieties of agricultural seeds.

The N. C. Department of Agriculture during the spring of 1900 distributed about 200 pounds of a new Japanese rice among the farmers of the eastern counties of the State. Many of the resulting crops we know to have done well despite of the unfavorable droughty season. Reports of these crops will soon be due and we shall hope that every farmer who sent for rice in the spring will make a report of some kind. Samples of good crops are desired. If the crop failed, tell why it did so.

The Department has now on hand ten varieties of new winter wheats from Australia, South America and other wheat regions with a climate like our own. We desire a few intelligent, careful and experienced wheat growers in the State to co-operate with us in testing the value of these new wheats. No one who is unable or unwilling to give the requisite care and attention to the seeds should apply.

The cost of a successful trial of new seeds is always more than the market value of the produce. We are not offering something for nothing!

Farmers and farmers' clubs who wish to test new winter wheats and oats and oats this fall are invited to correspond with the undersigned.

GERALD MCCARTHY,
Botanist, N. C. Dep't Agriculture.
Raleigh, N. C.

Hon. Wm. A. Bailey, of Advance, Davie county, has just threshed his entire wheat crop, amounting to 4,459 bushels, and heads the list in this section this season so far as heard from. Mr. Bailey has also a model threshing machine. It is automatic and cuts the bands, feeds itself, measures the wheat and stacks the straw. All you have to do is to hand the wheat to it, strike the half bushel and pour it in the sack, and place a dozen men on the straw rick to pack the straw as the machine hands it up. The capacity is 1,500 bushels a day.—Winston Republican.

CAPT. WILLIAMSON ON CRIMSON CLOVER.

Correspondence of The Progressive Farmer.

I was the second man in Wake county to plant crimson clover, and for 20 years have planted it. I agree with all Corresponding Editor Irby says about it in your issue of the 18th inst., save that he does not recommend seed enough to get a good stand. Thirty to 35 pounds of clean seed and 70 to 80 pounds in the chaff to the acre is little enough. And it will pay to divide the seed and sow one-half one way and with the other half reverse and cross sow; this will get a more even and uniform distribution of the seed. It is well to sow evenly with it one peck of winter rye to each acre. It is a great crop for feed for stock and feed for the land. B. P. WILLAMSON.

Wake Co., N. C.

COW PEAS FOR SWINE AND CATTLE.

When cow peas are planted for green manure it is an excellent practice to turn hogs into the field about the time that the first peas are ripening, writes a farmer correspondent. Young pigs thrive amazingly on the succulent foliage and well-filled pods, and the quality of pork raised on such a healthful and nutritious diet is very fine. This is a profitable method of fattening hogs or of preparing them for topping off with corn or sorghum for market. An acre of ripening cow peas will pasture from fifteen to twenty hogs for several weeks, and the gain in fertility from the droppings of the animals during that period will more than counterbalance the forage eaten. The rapid increase in weight will thus represent so much clear profit, and the farmer is richer by half a ton or more of prime pork for every acre planted. Chickens and turkeys also eat the ripe peas and do well upon them. Cattle and horses are sometimes pastured on them, but the safer and more economical way of feeding the green cow pea vines to such stock is to cut or pull and feed partially wilted. There will be less waste and destruction from tramping, and each animal is given only so much as it can eat clean, the greatest economy as well as greatest profit will result. Furthermore, cattle and sheep are liable to bloat if allowed to eat too ravenously of cow pea vines or any other rich and succulent forage, and by using it as a soiling crop the danger may be more readily controlled and the loss prevented.

A NEEDED CHANGE.

The Roanoke Chowan Times, which contains much matter of interest to farmers, its editor being a tiller of the soil, has this sensible article in a recent issue:

It has often occurred to us that farmers as a rule do not grade the wages paid to farm hands in a way to secure the best service. It is generally the case that if half a dozen grown men are employed by the month or year the same wages are paid each, regardless of capacity and willingness for work. Often it is soon discovered that one man earns as much as two, without getting any more for his work. Again, men are generally given the same wages for each month in the year, regardless whether they work six or fourteen hours a day. We suggest to farmers that in employing hands for the coming year they pay hands for each month somewhat according to the amount of work they can perform. For instance, if eight dollars per month is paid by the year or for six months, that only five dollars be paid in January, six in February, and an increase of one dollar per month until ten dollars per month is paid, which would be for the month of June, the most important month during the year for farm work. The same amount should be paid for July and then wages gradually decreased as the days grow shorter.

By grading the wages in this way the temptation to go to New Jersey as soon as the spring opens would be largely removed, besides being fairer to all concerned. But little farm work can be done during the first three months of the year.

LUCERNE OR ALFALFA.

Something of the Value of a Crop That Should be More Generally Grown in the South.

Correspondence of The Progressive Farmer.

We like the name Lucerne better. We became acquainted with this plant in our earliest years. Our home garden had the borders on either side of the walks marked by rows of lucerne. For a half century those rows held their own against all sorts of abuse. How long it would have continued to grow there we have no way of telling. The old home with all of its fond memories was turned over to the negro tenants, and after planting the garden in cotton for several years they succeeded in getting rid of the lucerne. Father paid sixty cents per pound for those seed. Those rows of living green are among the precious memories of childhood.

From this we are inclined to think that when we have secured a set or stand of lucerne, we have it for a lifetime, or even for succeeding generations. This is one great point in its favor. Of course it can be destroyed by neglect or abuse, but not by culture and use.

VALUE AS A FORAGE CROP.

In point of yield and feeding value, lucerne stands at the head of the list. Throughout the South it is green all winter. It begins growing early in spring, and with favorable seasons may be cut four to seven times.

It is particularly valuable as a a green forage crop. You begin cutting as soon as it is sixteen inches high. If you cut and feed day by day, by the time you have gone over a few acres it is ready to cut again where you first begun. Used in this way, you have a perpetual green field all summer and fall. Cows show an increased yield of milk and butter from the first day it is given them. Ahe they decrease as soon as you stop the ration of lucerne. This will be true no matter what other food you use. Nothing can take its place in the dairy.

GOOD FOR HAY.

If desired for hay, you begin cutting as soon as it is in full bloom. It is easily cured and makes a first-class hay. You can get from four to six cuttings as the seasons and soil may be good or bad. On good soil two tons per cutting is not an unusual yield. One and a half may be counted a safe average. So you get from six to eight tons per acre per season.

All stock are fond of it. Horses and mules keep fat and hogs grow well when fed lucerne.

It is not recommended for grazing particularly. The caps which furnish the shoots are generally above ground and hence liable to be bitten off by cattle or hogs.

WHERE WILL IT GROW?

We might say anywhere. We do not know any other forage plant that has so wide a range of climate and soil adaptation. It grows all over the United States. The South seems especially suited to its wants. Plenty of rain rejoices it, but owing to its deep rooting it has wonderful power for resisting drowth.

HOW TO PLANT LUCERNE.

The roots grow deeper than any other field crop, often penetrating from seven to twelve inches through the stiffest clays. Hence the soil should be broken very deep, and harrowed very often. Twelve to fifteen pounds of seed should then be sown broadcast per acre and covered lightly. This should be done in September or early October, or February. The fall sowing is better. It will greatly help to use four hundred pounds per acre of acid phosphate and kainit mixed in equal proportions. It will be still better if you have grown a crop of cow peas and cut them for hay. Top dressing once a year with the above or with stable manure or both will help.

Every farmer should have a lucerne patch or field. No farm is complete without it. Wherever a cow is kept, lucerne should grow for her. They should go hand and hand.

For profit and for beauty, nothing equals lucerne. Fields of living green beautify and enrich the farm, and help to keep the boys and girls happy and content upon the old farm home.

It absolutely prevents all washing, and leaves the soil rich.

JAMES B. HUNNICUTT.

Atlanta, Ga.

VALUE OF THOROUGH TILLAGE.

As The Progressive Farmer published Prof. Hunnicutt's article in the Southern Cultivator referred to, the following correspondence may interest our readers:

Ed. Cultivator:—In your issue of the 15th of June, in an editorial "How to prevent and destroy clods," you recount an experiment of yours as follows: "We once selected one acre in a twenty-acre field, average spot, and plowed and harrowed this acre fourteen times right along before we quit. We then planted and cultivated this acre just as we did the rest of the field, running the rows right along through it. The yield was much more than double any other acre. This has continued to be true for five years in all kinds of crops." Now, what I want to ask is, did you repeat that extra plowing and harrowing on that acre each year? or did that acre show that marvelous increase for five years from the one extra thorough plowing and harrowing? I mean to increase my horse power, but not my cultivated area.

Yours truly,
W. S. WHEELER.

To this letter Mr. Hunnicutt replies as follows:

Our correspondent raises a question of great importance. It is in fact the most important point in the article referred to. The extra plowing and harrowing was done only once. The difference in crops was all due to the one pulverizing.

We desire to add that the difference did not cease at the end of five years. But as we sold or left that farm we have not been able to keep exact accounts since. But I have been told it still shows.

We desire to say further that the rest of the field was plowed with heavy two-horse turner and followed by subsoil, and thoroughly harrowed, as we usually consider thoroughness. This was done not only once, but from year to year.

DON'T FORGET THAT—

1. It takes more labor to farm two acres for the crop that ought to be raised on one.

2. It takes double the capital in land to farm two acres for a return that ought to be got from one.

3. It calls for double the wear in machinery to run over two acres for what should be got from one.

THE FERTILIZER REPORT.

The concluding paragraph of the report on fertilizers as adopted at the recent meeting of Commissioners of Agriculture was inadvertently omited from our report. It is worthy of publication and is as follows:

"Where tankage is used, the kind should be specified, as animal or slaughter-house tankage, garbage tankage, etc., and the manufacturer of fertilizers should be held as strictly accountable for the statement referred to above in regard to the materials out of which fertilizers are made as he is concerning the guarantee of the percentage of nitrogen, phosphoric acid and potash, and no change should be made in them without notification and permission any more than the composition of a brand of fertilizer would be changed without the consent of the department having the work in charge; and, further, commissioners of agriculture should suspend or prohibit, the sale of any brand of fertilizer he may have evidence to show is not made from the materials certified to in the statements filed with the department or officers having the work in charge."

Twenty barrels of unleached wood ashes would usually weigh about 2400 pounds. This amount would supply as much potash as would be furnished by from 250 to 300 pounds muriate of potash. Double this quantity of ashes might be used if the soil were quite seriously in need of lime, although such an amount would furnish more potash than would be required immediately. Better results would be secured by harrowing in the ashes than by plowing them under.—Prof. H. J. Wheeler, Rhode Island

Horticulture.

FRUIT GROWERS SHOULD ORGANIZE.

Prof. McCarthy Tells What Others Have Done and What North Carolina Fruit Growers Should Do.

The Progressive Farmer last week referred to and heartily endorsed the efforts of Prof. Gerald McCarthy to organize the fruit growers of the State. His address appears in full below:

To the Fruit Growers of North Carolina:

Manufacturers, transportation companies and merchants generally have organizations for fixing prices, for preventing discrimination and imposition by middlemen; and for obviating the wastefulness inevitable by many small, separate and unorganized efforts.

As now conducted, fruit growers of this State and the Atlantic Coast generally are at the mercy of the transportation companies and commission men, over whose actions they have no control and for whose honesty nobody vouches. This is not a rational way of conducting any business; nor is it inevitable. The fruit growers of California have had for some ten years past, a very perrect organization. The inundation of the Eastern markets by California green fruits dates from the time of the organization of the California Fruit Growers' Union. The success of this invasion of our markets is undoubtedly due to this organization. The result has been disastrous to us. By means of this organization the California fruit grower is able to secure refrigerator express service from San Francisco to New York for little or nothing above what the North Carolina fruit grower pays for similar or poorer service between Raleigh and New York.

We must organize or cease to compete with California fruit in Northern markets. It is not proposed to restrict consumption by raising prices to the consumer, but to secure for the producer a larger and more just share of the retail price of the fruit.

To secure this end a strong organization incorporated and capitalized is necessary. The following program is suggested for the consideration of the proposed organization:

1. Organization of a fruit growers' exchange to secure uniform grading, packing and labelling of fruit grown by members.

2. Auction sales of graded fruit by agents of the association at both producing and consuming centers.

3. Control of shipments by the association for the purpose of preventing gluts in some centers and insufficient supply in others.

4. To contract with carriers and dealers or otherwise control sales as to secure for the producer the highest possible percentage of the retail price of the fruit.

5. To establish or control fruit evaporators and canneries at fruit growing centers with capacity sufficient to take care of the surplus crop and prevent waste.

6. To secure better transportation facilities and lower rates than we now have.

7. To purchase fertilizers, crates, spraying goods and other necessaries at wholesale prices and furnish the same to members at net cost.

8. To collect and disseminate among members statistical and technical information calculated to increase the profits of fruit growing.

It is proposed to organize a non-political business association of fruit growers on the lines which have proved so successful on the Pacific coast. All fruit and truck growers in North Carolina are eligible and are invited to attend a meeting to be held in Raleigh during the week of the State Fair. To insure the successful launching of the new asseciation, it is desirable that every commercial fruit and truck grower in North Carolina shall be represented in person or by proxy at the initial meeting.

Those who approve the plan here outlined and desire to join the proposed association, are requested to at once send their names and acreage and kind of fruit to Gerald McCarthy, Raleigh, N. C.

STRAWBERRY CULTURE—PROTECTION.

Correspondence of The Progressive Farmer.

That in cold climates where the thermometer falls much below zero, the strawberry plant needs winter protection is a well-established fact. There it is the custom to apply mulching over the plants as soon as the ground freezes hard enough to drive on without much breaking of the crust. The date of application will depend on the latitude and the earliness or lateness with which winter sets in.

An almost endless variety of material can be used for this purpose. Pine straw, wheat, oat or rye straw, forest leaves, marsh grass and stalks of many kinds. What is desired is to cover the plants just deep enough to greatly lessen, but not entirely prevent freezing. The harm that freezing or rather alternate freezing and thawing does is chiefly mechanical—the heaving of the soil and the attendant breaking of the roots as the plant is raised upward with the soil. This can be attained by using more or less of the mulching material in proportion as its nature is to lie close or open and as the climate is more or less severe. Thus a much thicker mulch of corn stalks than of straw will be required to attain the desired results.

The objection to long light material like the straw of small grain is that it is liable to be blown off. Forest leaves are also objectionable for this reason. This difficulty is partly obviated in the case of straw by cutting up the material short. Probably the most effective prevention of this trouble with both grain straw and forest leaves is to anchor them down with earth or small stones judiciously placed at intervals.

How far south it pays to use winter mulch is a mooted point. It is doubtful whether as a rule it pays south of the Mason and Dixon line, except in the mountains. Some winters it pays in North Carolina. Often it does not. The objection to winter mulch at the South is that it harbors crickets and other insects harmful to the strawberry plant.

But for one purpose winter mulch is beneficial wherever the ground freezes as deep as two inches. That is to protect plants set in winter on wet, stiff soil. This soil is much given to heaving, and plants set on it in the depth of winter are apt to be lifted out of the ground by the alternate freezing and thawing. A handful of pine straw thrown over each plant prevents harm. On nearly all soil, or in fact on any except wet, stiff fields or parts of fields this protection of newly-set plants is not necessary south of the Mason and Dixon line. We do most of our planting in late November, December, January and February, and get a perfect stand without this protection except on a few wet spots. But at the North it renders practicable planting at a much later time in the fall than would be advisable without it.

The use of straw of various kinds to protect blooms from late spring frosts has now become pretty general. The straw is strewn along the middles in advance and on the plants when frost threatens, and off when the danger passes.

The use of mulch to keep the berries clean is imperative. We apply it about blooming time.

For several years, beginning in 1887, I used cloth largely to protect strawberry blooms from frost. The kind used was a thin muslin, sold at the South for use on tobacco plant beds, where it is found equally valuable as a protection from frost and from a destructive species of fly. I found that the tarred or chemically treated cloth was much the best.

My object in using this protection was to protect the strawberry blooms from frost and also to promote earliness in the ripening of the fruit. The cloth was put on about a month before the blooming period and not removed till the berries were ready to be picked. Small, low stakes provided with wire hooks were driven in the ground at short intervals. These held the cloth securely against

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