

THE PROGRESSIVE FARMER.

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

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AGRICULTURE

HARRY FARMER'S TALKS.

CXXVIII.

Editor of The Progressive Farmer:

Coming down the Atlantic Coast Line from Weldon to Wilmington we were more impressed than ever with the importance of intensive farming. We noticed before we reached the berry section that most of the crops of corn and cotton were poor. It was a rare thing to see cotton that would yield one-half bale per acre; the average would not exceed more than one-half that quantity.

But as soon as we reached the berry region there was quite a difference. You could see fields that would yield a bale to the acre. The heavy manuring required to make a large crop of fine strawberries enriched the land so that any crop planted on the land when properly worked would yield heavily. What a contrast there is in the profits! One bale of cotton at present prices would be \$50. One-fourth of a bale would be only \$12.50 to the acre.

U. S. Deputy Marshal Council Meares, of Cumberland County, gave us the following bit of news along the same line. He took one acre of land and manured it some and bought one bushel of improved cottonseed for which he paid \$1.40. He planted his crop and gave it good attention and gathered two bales of cotton. Let us see if it paid.

Let us put down the cost of manure, seed and extra work at \$25. Now two bales at \$50 per bale would be \$100; deduct extra cost of \$25, which leaves \$75. Compare that amount with \$12.50 per acre.

Now we want to ask a question—did you ever have much trouble in getting cotton picked on land that yielded from three-fourths of a bale and upward per acre? The picker could always make satisfactory wages, while on lands where the yield was small, and you had to stoop down and part the grass to get the cotton, it was almost impossible to get pickers.

Some of the readers of The Progressive Farmer may be a little surprised at our mentioning this matter at this season of the year; but friends, the man who waits till February or March to lay his plans will not likely improve much. Now we want to suggest that every farmer who has never tried it, take one acre for each staple crop that he plants and improve it as much as he can,

and keep a careful account of the extra labor and manure used, and compare results with those from old methods. Then he can see whether it pays or not. It will be necessary to begin early so that you can have a plenty of time. This is one way to solve the labor question.

HARRY FARMER.

The Two Kinds of Tobacco Wilt.

Editor of The Progressive Farmer:

I see that some misapprehension exists as to the nature of the Granville tobacco wilt, regarding which I sent you a communication some weeks ago. Tobacco growers in some parts of the State are confounding this wilt, which is a highly contagious disease, leading to the death of the plant, and which, when it has once gained a foot-hold in the field, prohibits the culture of tobacco in that field for several years, with a more ordinary and comparatively harmless wilt due to local changes in climate and moisture.

Every tobacco grower notes that under certain conditions of climate, the leaves of the tobacco will suddenly droop, but this condition of wilt is not maintained for a long time, and the plant rapidly recovers when proper conditions are restored. Another kind of wilt is caused by the sore-skin, by bruises of the stalk near the surface of the ground, and by the attack of any animal which cuts off the plant. In such cases the plant dies. This, however, is a local disease, affecting single scattered plants in the field. The Granville tobacco wilt differs from any of these, in that the disease remains in the soil from year to year, growing worse each year.

It is not single isolated plants that die, but it is great numbers of them; from fifty to ninety or one hundred per cent of the plants in the field. It is not a temporary wilting. A plant once attacked very rarely recovers. It usually dies within a few days after the wilting appears. Any one who has visited the fields in Granville County suffering from the true Granville wilt, will never confound this disease with the local diseases mentioned above, or with the wilt due to improper climatic or soil conditions.

Very truly yours,
F. L. STEVENS.

Every carpenter who shaves with a fore plane borrows the genius of a forgotten inventor.—Ralph Waldo Emerson.

Black Rot of the Cabbage.

Editor of The Progressive Farmer:

For more than fifteen years there has existed in North Carolina a very serious disease of cabbage and other crops of the cabbage family. The annual damage in this State from this disease is probably more than \$10,000. Besides cabbage upon which it most frequently operates, this disease attacks turnips, kale, cauliflower, mustard, rape, and in fact, all crops and weeds of the cabbage tribe.

The disease in cabbage is characterized by the outermost leaves of the plants, near the edges, turning first yellow, then brown and finally black. The disease spreads downward into the main stem and through this into the inner leaves of the head. While no plant of the cabbage kind is wholly exempt, those of a loose or spreading habit like the collard are less damaged than those which form close heads, like the flat Dutch type. The disease is very contagious, spreading from plant to plant in the field. Frequently large patches of cabbage apparently healthy one day are found soft and rotten the next. The disease is always most virulent in hot, moist weather.

CAUSE OF THE DISEASE.

Black rot of the cabbage and other plants of the same family, is caused by a germ or microbe (*Bacillus campestris*). This germ lives from year to year in the soil, attacking with increasing virulence successive crops of the cabbage kind, until at length it becomes practically impossible to grow these crops except upon fresh or virgin soil. The germ increases rapidly only during the warmer months of the year, or while the temperature is above 80 degrees F.

TREATMENT.

The treatment for black rot must be preventive. Spraying is of no value in this case. Rotation of crops so that no crop of the cabbage family shall come upon the same field oftener than once in three or four years is the first and most essential precaution. The seed-bed should be made upon fresh ground each year, or the bed should be burned over as is done for tobacco beds, to kill possible germs in the soil. Cabbage, turnip and all other crops of this family should be grown only during the cooler months, or while the temperature is below 80 degrees F. If only a few scattered plants in field

show the characteristic yellowing or blackening of the leaves, such plants should be pulled up and burned. Do not throw diseased cabbage leaves or plants upon the manure pile. The germ can live an indefinite period in the manure, and will be scattered over the fields with the manure. In cultivating a field which contains diseased cabbage or other plants of this family, before going into another field clean all tools carefully and thoroughly to avoid carrying the germs into fields as yet free from them. Wage a vigorous war against shepherd's purse, pepper grass, and all other weeds of the cabbage family, as these may serve to propagate the disease during years in which other crops occupy the land.

Except as stated above, no particular variety of cabbage is exempted, and no special brand of seed will insure freedom from the pest.

GERALD McCARTHY,
Biologist North Carolina Department of Agriculture.

"I am sending you by express a small basket of Japanese persimmons of the Hyakume variety," writes Mr. A. D. McNair, of Southern Pines. "They are hard now, and therefore not fit to eat, but will soften within the next two or three weeks. I am to leave this place next week for Nacogdoches, Texas, where I enter the employ of the Angelina Orchard Company, and I would be pleased to receive The Progressive Farmer at my new address." Mr. McNair has made many friends in North Carolina while acting as superintendent of the Southern Pines Experimental Farm. We regret that he is to leave the State, but trust that we shall not lose him as a correspondent. The persimmons are the finest we have ever seen.

Danville, Va., dispatch: The farmers of Spring Garden and vicinity will sell no more tobacco until the prevailing prices are greatly increased, and not more than 50 per cent of the crop of 1903 will be planted by them next season.

Such is the decision reached by the planters who gathered at Spring Garden recently and perfected an organization, to be known as the Spring Garden Tobacco Growers' Club. The farmers realize that the over-production should be decreased in order to increase the price.

In addition to this the club pledges itself to encourage diversified farming in order to render the growers more independent in the future.