

The Danbury Reporter.

STOKES AND CAROLINA.

VOLUME XXXIII.

DANBURY, N. C., THURSDAY, AUGUST 5, 1905.

NUMBER 35

\$50 PRIZE ESSAY ON WHEAT GROWING.

The Fertilizer Manufacturers' Association some time since offered a prize of \$50 to the writer of the best essay on wheat growing. The committee has awarded the prize to the paper written by E. E. Miller, of Morristown, Tenn. The article is as follows:

Wheat may be grown successfully on a great variety of soils, but is best adapted to fertile, clayey loams. Very light soils are not, as a rule, so suitable as there is danger of the wheat freezing out during the winter; neither are tough clay soils best, as it is hard to get them in proper condition. Yet with the necessary care good crops may be grown on all of these soils. Very rich alluvial lands often pay better in other crops, but a fair degree of fertility is absolutely necessary for a good yield of wheat. Another thing that is necessary is good drainage. Wheat is sure to be a failure on water logged land, no matter how fertile. Plenty of sunshine is also required and much shade is certain to reduce the yield.

On lands adapted to its growth wheat is often sown several years in succession. This method invariably results in a steady decrease in the yield; and to it the rapidly diminishing yields per acre of the wheat lands of the Northwest are to be attributed.

Like practically all other crops, wheat should be a part of a well considered and steadily followed rotation. In such rotation, which, of course, differs with different conditions, it may follow clover or grass, corn or other hard crops, or itself.

Where wheat is the leading crop the common plan is to follow clover or grass with wheat for two or three years, then seed back to grass. More often the clover is followed by corn and other cultivated crops and these by wheat for one or two years. In the South wheat may follow cowpeas or other leguminous crops. Potatoes and other trucking crops are also excellent to precede wheat.

Whatever crop the wheat may follow the preparation of the soil is a matter of prime importance, and one that should under no circumstances be neglected. The ideal to be kept in view during this preparation is the securing of a very fine loose seed-bed two or three inches deep with the soil beneath fine but thoroughly firm. This permits of even seeding, gives the young wheat plant the best possible feeding ground, retains the soil moisture and anchors the young wheat firmly against the winter freezes and thaws.

When the land is plowed it should be done as early as practicable, so as to allow time for settling of the soil, as well as for working it down. Early plowing is especially important when vegetable matter of any kind is turned under.

To plow under a growing crop, or a large amount of dry grass or weeds just before seeding is to invite failure. In all such cases, in fact whenever any considerable quantity of vegetable matter is turned under, the land should be rolled as soon as possible with a heavy roller so as to firm the soil and aid decomposition of the crop

plowed down. After this harrows should be put to work and kept going until the top of the soil is reduced to dust mulch.

Where the land is plowed early it is a good plan to go over it every week until seeding time. This may seem to be a lot of trouble, but repeated experiments have shown that it pays handsomely, and with a good harrow several acres can be gone over in a day. The fining of the soil at once gives the young roots of the wheat a fine field for development, and renders more available the plant food locked up in the soil. It may be laid down as a general rule that for any crop the more cultivation the better when it is judiciously done, and this preparation before sowing is the only cultivation the wheat will receive.

The implements to be used in this work are those the farmer has, as any of the ones in common use can be made to do the work, if used often enough. Still there are certain tools adapted to certain soils. On sod land the disk harrow is one of the best, for breaking clods a harrow will be found to be useful, while on light and sandy soils a roller should be used frequently.

After some crops, such as corn, cowpeas and potatoes, the desired condition of the soil can be best obtained without plowing.

Often, indeed, when a corn crop is taken off it is necessary to get the wheat in with as little delay as possible. In such cases all that is necessary is to work the top of the soil into a dust with disk or other harrow and finish by smoothing it down with a drag or roller. The plowing for and cultivation of the corn crop will, if properly done, have left the soil in splendid shape. The stubble and trash on the land will also serve to protect the wheat during the winter, while if turned under they would only be a disadvantage.

Of equal importance with preparation of the soil is the selection of the seed. The question of varieties is of course, an important one, but it is impossible as an article of a general nature to give any advice on this point. Each farmer must choose for himself some variety that is known to succeed in his own locality. New kinds should certainly be tried on a small scale, but the main dependence should be placed on those that have proved best suited to local conditions.

There is often more lost than gained by bringing seed wheat from a distance, and a variety can be grown year after year on the same land and kept up, or even improved by careful seed selection.

In selecting wheat for seed many experiments have shown that it pays to have all small and imperfect grains removed by the fan or grader. In some cases the yield from seed so selected has been 25 per cent. greater than that from ungraded seed. No one can afford to sow shrivelled, immature or diseased seed, if good, plump healthy grain can be obtained at all. It should go without saying that the wheat sown should be free from cheat, cockle and other weeds.

Along with seed selection and

soil preparation comes the question of fertilization. The use of commercial fertilizers on the wheat crop has become the rule over large areas of the country, and is yearly becoming more general. This is sufficient evidence that fertilizers pay, yet it is evident that the large sums annually spent for them are not expended to the best advantage. Too many farmers use fertilizers without any regard to the special needs of their soils, often buying the cheapest grades, using very small quantities, and using these impartially on lands of different types. That such unscientific use of fertilizers has proved profitable is some indication of what they would do for wheat growers if used more carefully and intelligently.

To use them intelligently it is necessary for the farmer to know something of the nature and needs of his soil, something of the demands made upon it by the various crops, and something of the composition of the fertilizers he uses.

Practically all fertilizers are used to supply one or more of the three elements of plant food in which soils are most commonly deficient, phosphoric acid, nitrogen and potash.

Of these the phosphoric acid promotes the growth and development of the grain and hastens maturity; nitrogen, or ammonia, increases the growth of leaves and stalk, and potash gives strength to the stalk and assists in the development of the grain. It will thus be seen that each has a necessary function to perform, and that a deficiency of either will inevitably reduce the yield. The crop is limited not by the most abundant, but by the scarcest element of plant food, and no excess of one element can remedy the lack of another. A good supply of each must be maintained if good crops are secured. As twenty bushels of wheat take from the soil approximately 14 pounds of phosphoric acid, 35 pounds of nitrogen and 14 pounds (18 per cent.) of potash, the necessity of using fertilizers of some kind is obvious. Green and stable manures can sometimes be profitably used on wheat, but they are usually poorly balanced and on some soils, those very rich in nitrogen for example, would be positively injurious. Commercial fertilizers, on the contrary, can be adapted in composition and quantity to almost any soil.

Perhaps the most commonly used fertilizers are those containing 8 or 10 per cent. phosphoric acid, 2 or 3 per cent. nitrogen and 2 to 4 per cent. potash, and on some soils, particularly some clays, these furnish a well balanced ration for wheat. On some clays and most sandy lands, however, fully twice this per cent. of potash should be used, while many soils need more nitrogen. On rich alluvial lands and where wheat follows a leguminous crop, less nitrogen, often none at all, should be used. The only way for a farmer to learn just what fertilizers will pay him best, is to make comparative tests with different grades on similar soils. These tests should, of course, be on a small scale, and if carefully made, will soon show what kinds and amounts of fertilizer will be most profitable on his land. As to the amount to use there can be no hard and fast rules laid down, but it has been shown by many trials that from

200 to 500 pounds per acre may be considered a fair quantity. Many farmers use much less, but the increased yield from the larger amounts will usually more than offset the difference in the cost. It is worth noting, too, that more fertilizers can be used profitably on good than on poor land. With fairly good land in good condition fertilizers, if judiciously used, will invariably pay well and can be used with a generous hand. Heavy fertilization is one of the best safeguards against the wheat freezing out, as the increased growth and vitality render it better able to resist sudden changes of temperature and to keep a firm hold on the soil. They also give it more power to resist or to recover from the injuries of insects and diseases. Then, too, any excess of phosphoric acid or potash will not be lost from the soil, but will be held for the use of succeeding crops. This is not true of nitrogen, however, and that the element should be used only in such quantities as the crop demands.

The most common method of applying fertilizers for wheat is through the drill when the wheat is sown, and the convenience and economy of this practice makes it likely that it will be continued.

A better understanding, and a more rational use of fertilizers, with close attention to the details of soil preparation and seed selection, would undoubtedly increase not only the average yield of wheat, but also the wheat growers' profit.

Donation For Danbury School Library.

Monday's Winston Sentinel contains the following:

One of the most beautiful of the many tributes of love that have been bestowed on Miss Claytor Candler, whose memory is so deeply enshrined in the hearts of her many friends in this city, is the very touching memorial which Mrs. Lindsay Patterson is preparing to send to the Danbury school library. She will give a shelf of books to this school, in which she is especially interested, in each of which is to be inscribed "Claytor Candler Memorial, presented by Mrs. Lindsay Patterson."

DALTON ROURE ONE.

Dalton Route One, Sept. 20.—If you will allow me space in your valuable paper I will give you a few items from our section

Miss Elcie Gordon visited Miss Daisy Lawson Sunday. Come again, Miss Elcie, we are glad to have you with us.

Mr. Willie Boyles and brother, of King, visited Mr. John Southern Sunday.

Miss Daisy Lawson is all smiles this week as her best fellow called Sunday.

Mr. J. H. Gordon called on his cousin, Miss Myra Turpin, last Sunday.

HORNY.

Finding health is like finding money—so think those who are sick. When you have a cough, cold, sore throat, or chest irritation, better act promptly like W. C. Barber, of Sandy Level, Va. He says: "I had a terrible chest trouble, caused by smoke and coal dust on my lungs; but, after finding no relief in other remedies, I was cured by Dr. King's New Discovery for Consumption, Coughs and Colds." Greatest sale of any cough or lung medicine in the world. At all druggists; 50¢ and \$1.00; guaranteed. Trial bottle free.

MADISON TO THE FRONT.

A Write-Up of the Citizens and Resources of a Leading Town of Rockingham.

Madison, Sept. 18.—Brick kilns are burning at edge of town, and the new era of building Madison is evident in the center thereof, where Vaughn & Webster are causing the erection of a two story brick double store.

West Busick is adding progress with a two story general merchant building and G. W. Martin is building likewise.

Dr. C. B. McAnally has ordered some of the material for a two story brick structure and all those buildings will be substantial and commodious.

The J. A. Pratt planning mill is busy and the capacity will be greatly increased and the admirably constructed box factory owned by Ben M. Cahill is receiving additional machinery for chair manufacture.

The two tobacco houses are open and have commenced business for the season.

The Bank of Madison has a satisfactory increase of deposits and the railways bear out the fact that Madison is on the up grade commercially. Madison has two railroads, the N. & W. main line, and the Madison & Greensboro branch of the Southern system.

By the N. & W. go about 20 car loads of lumber per month, also furniture which is hauled here from Shelton, 15 miles away, and stacks are shipped to Winston, also tobacco, and groceries go to small stations from the Madison wholesale houses. By the Southern 500 to 600 car loads of shale are shipped annually to Pomona and yarns hauled here from Avalon and Madison are forwarded, and tobacco goes chiefly to Durham, Danville and Reidsville.

Madison has ten stores and merchandise comes by car loads and by local freight.

M. W. Gant, the agent for the Southern, is also express agent and possesses 15 years railway experience. He was born 7 miles from here at Rocky Spring and it would be difficult to find a more popular man in business. He is cheery with everybody and not afraid to take hold. Mr. Gant was married at Stokesdale where he was agent for 8 years and will build a love of a cottage in Madison.

T. J. Teague, agent for the N. & W. has been at his post here for fifteen years with the exception of a few days taken to recuperate. Mr. Teague is also manager of the Western Union and punctilions to duty.

The Madison postoffice is a busy one receiving 5 daily mails by rail and 4 R. F. D. and two star routes and it has a first class postmaster in P. A. Peatross, who for 14 years was connected with "The Art Preservative." He was proof reader when Stuart Bros. had the State printing and he edited the Madison News and other papers and has been successful in insurance business and he is an able man and cultured gentleman.

R. L. and W. T. Ledbetter, Bros. have put a five horse-power gasoline engine in their blacksmith shop, which measures 75x75 feet and have added planer, band saw, rip saw, and turning lathe, for the manufacture of building material. The Ledbetter Bros. are young men, who own farms

and other property in Mayodan, where they formerly sounded the anvil chous.

J. A. Pratt has been turning vot building material here for 10 years and will require to double the capacity, although he has two planers, moulding and matching machinery, turning lathes and numerous saws. Mr. Pratt owns also a grist mill (four foot burr) good residence, four tenant houses, stock in tobacco warehouses and a farm of 150 acres, and he is an indefatigable worker and enterprising goahead citizen.

Ben M. Cahill is putting the machinery in place for chair manufacture capacity 300 chairs per day. At the plant by R. R. track he owns 17 acres and his main factory building is 114x60 feet, two stories, wherein are chair and box shock machinery from McKnight, Thomasville and from New York and other states, specially chosen by or made for himself. He, being a fine machinist and practical wood worker. With engine of 50 and boiler of 80 horse power, the machinery will soon be in motion and many families will have work at home during all kinds of weather, bottoming the chairs. Mr. Cahill has invested about \$2,000 in buildings and machinery and stock, and he gets the cut from many mills and he will make the Cahill chair from the log to the finish.

Madison should have furniture factories; it has the material shipped out and brick and tile factories should burn here as shown in nearly two car loads of shale a day going away.

It is evidently however, that Madison's Rip Van Winkle-like sleep is over, and energy with pull together will make a live and prosperous community.

JAMES CARSWELL.

Central Carolina Fair.

We are in receipt of complimentary tickets to the Central Carolina Fair, which is to be held at Greensboro Oct. 10-13. Secretary Cook informs us that the fair this date is the Sixth Annual of this Association and every indication points to the greatest yet held. The speed ring and live stock exhibit, including the famed chicken show will be of more interest this time than ever. All manner of attractions have been secured. Railroad rates will be reduced and Greensboro will sustain her reputation in taking care of all visitors.

ARE YOU ENGAGED?

Engaged people should remember, that, after marriage, many quarrels can be avoided, by keeping their digestions in good condition with Electric Bitters. S. A. Brown, of Bennettsville, S. C., says: "For years, my wife suffered intensely from dyspepsia, complicated with a torpid liver, until she lost her strength and vigor, and became a mere wreck of her former self. Then she tried Electric Bitters, which helped her at once, and finally made her entirely well. She is now strong and healthy." All druggists sell and guarantee them, at 50¢ a bottle.

Chamberlain's Colic, Cholera and Diarrhoea Remedy. Never fails. Buy it now. It may save life.