THE PROGRESSIVE FARMER.

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

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AGRICULTURE

Green Manurial Plants for the Southern States.

Editor of The Progressive Farmer:

The great value of green manures for the light and humus-lacking soils of the cotton region is now generally appreciated by all the more intelligent farmers. It is well known that soils lacking in humus burn out in dry summer weather,—rarely giving over half the crop that similar soil well stocked with humus affords, when both soils get the same amount of fertilizer and tillage. There is an unfortunate tendency among cotton growers to depend too much upon commercial fertilizer for making the crop. Commercial fertilizer is always profitable when applied to soil rich in humus, but on humus-lacking, and therefore *droughty*, soils neither commercial fertilizer nor anything else can insure a good yield in dry seasons. Owing to the mild winters of the cotton region, there is no reason why all cotton fields should not carry a winter crop of some legumine, which will furnish a good supply of vegetable matter to turn under in spring in plenty time to prepare the land for either cotton or corn or almost any crop grown in the Southern States.

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Of the many legumines available for winter growth in the cotton region, probably the best is Crimson Clover,—trifolium incarnatum. This clover is perfectly hardy and adapted to the soils of the cotton region. It generally does best when sown in early fall. The seed in the hull or chaff is more desirable than the cleaned seed sold by seedsmen. Native grown seed is far superior to imported seed. The seed in chaff may be sown on surface of ground if there is a growing crop of any kind upon the land. If cleaned seed is used it must be covered in. The seed in hull sown on a Bermuda grass or crab grass sod never fails to make a good catch. It is usual to sow 45 pounds of seed in chaff or 15 pounds of seed cleaned per acre.

When the crop is left upon the land, until it is ready to cut for hay, or until it is in full bloom, which is the proper condition for cutting—the yield is from 1½ to 2 tons of cured hay per acre. The feeding value is equal to the best red clover hay—but is not quite so palatable. If the clover is allowed to stand until the heads turn brown or until the seed is nearly ripe, the feeding value is deteriorated and at the same time an element of danger is introduced. The stiff prickly hairs of the ripe seed hull are liable to stick in the mouths or stomachs of animals, and this has caused the death of a few horses and mules. But when cut when in full bloom, there is no danger of injury and almost every species of stock relish the hay.

When the crop is cut for hay the roots and stubble remain to furnish humus, but on most sandy soils this is not sufficient to replace the humus annually burned up in making a crop of cotton. Therefore the manure made by the stock fed upon the clover hay should be carefully saved and used upon the subsequent crop.

There is among many cotton growers an idea that clover turned under causes "rust" in the succeeding cotton crop. This can not be true, because "rust" is due to fungoid or mite parasites.

Neither will a crop of clover turned under in early spring or late fall "sour" the land as many imagine.

All typical cotton soils are deficient in lime and potash—two minerals which are necessary foods for clover as well as for cotton plants. Before sowing clover, it will be profitable to top-dress the land with 500 pounds of lime and 100 pounds of muriate of potash or 400 pounds of kainit per acre. These minerals do not easily wash away and will remain until all are taken up by the clover or following crops.

The cotton grower who will intelligently use crimson clover as a "between season" crop can make cotton pay handsomely at much lower prices than the staple now commands, because for the same amount of land, labor and fertilizer he can obtain a more than average yield.

GERALD McCARTHY,
N. C. Dept. of Agriculture.

Some farmers in the county will make fully $100 an acre on tobacco, in spite of the low prices, though many have barely made expenses. The man who made 1,500 pounds of tobacco to the acre will have to get only 6 2-3 cents a pound to get $100. —Lumberton Argus.

Nursery Grown Trees.

Editor of The Progressive Farmer:

Loss both to the purchaser and grower of nursery trees is very common through ignorance or carelessness. Quite a large percentage of nursery trees fail to grow either because they have not been taken up properly, packed carefully for long shipment, or badly planted and cared for by the purchaser. This loss could and should be almost entirely eliminated. It is possible to do this with a little more co-operation between nurserymen and purchasers. The former should at least understand their business to the extent of knowing how to take up and ship their trees. Any nurserymen guilty of ignorance or carelessness in either respect should not longer be patronized. Nursery growing should be an exact science. There is no excuse for guesswork or slipshop methods. As an illustration of what some would-be nurserymen will do, I once ordered a lot of LeConte pear trees. There was shipped to me a mixture of LeConte, Bartlett and Sheldon pear trees. The excuse the nurseryman gave was that his men thought they were all LeConte. If a man is not sure of getting the variety he he orders from the nurseryman it is much better to raise the trees in a home nursery when you can be sure of your stock.

There are nurserymen who are unreliable in shipping their stock in such a way that if the weather happens to be dry and the goods delayed on the road, the trees will arrive practically dead and worthless. It is common to lay the blame on the railroads, and purchaser and shipper generally share the loss between them. Now, a nurseryman who is at all reliable should ship his trees in such a way that nothing but an extended delay on the road or accident could permanently injure them. In that event the transportation company would be liable for damages, and in most cases would pay if the facts were properly presented. The reform, however, should begin with the nurserymen. There are plenty who raise and pack and ship their trees so that injury rarely happens to them, but it is not always possible to distinguish the reliable from the unreliable grower of trees until one has suffered some sad experience. There is one precaution that should be observed. Be very careful about changing from one grower to another if the first has proved reliable in his dealings. As a matter of self-protection the honest, reliable nurseryman should always send printed instructions about handling the trees when received. Plain, simple rules should be printed in large type, telling the farmer what to do in any possible emergency. In this way the loss would be greatly reuced. Many times receivers of trees hardly understand the first principles of handling them, and they are just as likely to kill them as to make them grow.

SAMUEL BUDD.

Sow Wheat Late and Escape the Fly.

Editor of The Progressive Farmer:

Farmers troughout the Piedmont section should take warning from the past and sow their wheat late this year so as to escape injury by the Hessian fly. We gave such a complete account of the insect in The Progressive Farmer for June 2, this year, that we will not repeat it here. Let me, however, lay down a few guiding rules for dodging the fly this fall.

If there is no wheat up when the fall brood of flies emerges, they must either die without depositing eggs, or must lay them elsewhere than on the wheat. No eggs no fly,—and the field in which none of the eggs are laid will not be hurt, for the maggots which hatch from the eggs cannot go from one field to another. All the fields in a community may be seriously damaged year after year if they be sown in September or October, while the one farmer who does not sow until the middle of November will escape injury in nine years out of ten. We should say, therefore, that as a general rule wheat should be sown not earlier than the first of November in order to escape injury.

It may be argued in objection to this that in some sections November is too late. In such cases, we would advise that the sowing be delayed two or three weeks later than is usually done; or, if this would still throw it too late in the season, then sow just as late as can be done safely.

If the Hessian fly does the usual amount of damage this year it will not be upon the farms of those who follow this advice.

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"We are ever prone to forget that usefulness is the only true greatness. Only he that serves others is great. You can measure yourself by the good you have done."