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Timely Farm Suggestions

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More Attention Should Be Given to Red Clover

RED clover is the most generally grown legume for soil improvement in the Northern states; but in the South it has not been largely used, taking the Cotton Belt as a whole. Where it has been grown successfully in the South the results have been uniformly good, here as elsewhere. Indeed, the crop is such a good one that it should receive more attention, if by a little closer study it can be grown more successfully and the acreage increased.

The chief advantage of Red clover over crimson clover and the summer legumes generally grown in the South is that it forms a good cover for the land for nearly two years without rebreaking the land or re-seeding. It grows late in the fall and early in the spring and in mild winters remains green the greater part of the time. Its root system and habits of growth make it a valuable soil-improving plant, as demonstrated through long years of extensive use over much of the agricultural world.

The fact that we grow row crops almost exclusively reduces greatly the acreage we can cultivate. We produce crops of more money value per acre than does the Northern farmer, but the fact that we cultivate only about one-fourth as many acres per worker greatly reduces our incomes. Moreover, having relatively very little meadow and pasture land, and consequently few cattle, sheep and hogs working for us, our incomes suffer still further when compared with the Northern farmer. Red clover, if successfully grown, would reduce our cultivated acreage, lessen our labor cost, and furnish hay and grazing for livestock, while building up our soils for larger crops of corn, oats and cotton.

We do not advise farmers in the coastal plain or sandy land sections of the Cotton Belt to attempt to grow much red clover, but in the clay and loam land sections it is a crop which might be more carefully studied and tried out with much profit. Of course, those who have not demonstrated their ability to grow it successfully should confine their trials to a small area of an acre or two. The experience of the past indicates clearly that it should not be put on the poorest, worn or washed soils. Lespedeza and cowpeas are probably our best poor-land legume crops. In other words, red clover requires a clay or loam soil of at least moderate fertility. It will do well on the black prairie soils of the South, on the alluvial soils of the Mississippi valley, and the loess soils which already contain considerable quantities of lime. On other clay and clay loam soils throughout the South it will usually do fairly well if they are not too badly worn and an application of as much as one to two tons of ground limestone is made per acre. It will pay to make this application of lime if by so doing red clover can be successfully grown, as it usually can; because, not only will the lime usually enable one to grow red clover but also better and larger crops of all other legumes.

Prof. H. A. Morgan, of the Tennessee Experiment Station recommends this liming and the growing of red clover as a preparation for growing alfalfa. He sows a small amount of alfalfa seed with the clover seed at the time of sowing the latter and in that way is usually able to secure the inoculation of the soil for alfalfa by the time he wishes to seed the land to

that crop. Of course, two or three other conditions are almost as essential as lime for the growing of red clover. The seeding should be done early in the fall and the soil inoculated and well drained.

The South, especially the northern half of the Cotton Belt, can well afford to give more attention to red clover, but unless one gives it conditions approaching those outlined above it is probably useless to spend time and money on the crop.

DESTROYING COTTON STALKS IN BOLL WEEVIL TERRITORY

Plowing Under Better Than Burning Because of Humus and Plant Food Saved—Do the Work Early

A READER who has suffered severely from the boll weevil this year, for the first time, asks: "What is the approved method of handling the cotton fields to lessen boll-weevil infestation next year, burn the stalks or plow them under?"

The object sought is to destroy the food of the weevils. It is true that some importance has been attached to the destruction of boll weevils at the time the stalks are burned, but we think it will be agreed that this effect, be it much or little, is of less importance than the destruction of the food supply of the weevils and forcing them into hibernation earlier, or forcing them to migrate in search of food.

In the worst weevil infested sections, or where most injury has been done by weevils and wet weather, only an early crop was made and it can be picked out by the end of September or early in October. Every effort should be made to pick out the cotton as early as possible and then promptly destroy the stalks. There can be no doubt but burning is an effective means of destroying the stalks, but it also unnecessarily destroys the humus-forming properties of the stalks and drives the nitrogen they contain off into the air.

Cotton stalks contain nearly as much nitrogen as legume hays and this, having come from the soil, should not be wasted if the objects sought can be attained without causing the losses of humus and nitrogen, which occurs when the stalks are burned.

If the stalks are plowed under the destruction of the food supply of the weevils will have been attained, or the chief purpose in destroying the stalks accomplished. With large stalks, large plows will be necessary to turn them under even when cut up with stalk cutter or disk harrow. With stalks of medium or small size there will be less trouble in plowing them under. We think, however, that it will pay better to make considerable extra effort to plow the stalks under rather than burn them.

On those farms where there are sufficient numbers of cattle the grazing of the cotton fields before attempting to plow the stalks under is good practice. If the cattle can be confined to a small area and then the stalks plowed under while the cattle are grazing another small area best results will probably be obtained. Others again, have advised cutting the stalks while green, curing them as hay, stacking and feeding them to cattle during the winter. Green cotton stalks when cured no doubt have considerable feeding value, and when forage is scarce this plan is worth careful consideration.

We think that special effort should be made in the northern part of the

infested areas, at least, to destroy the food of the weevils as early as possible; for this will deprive them of food one to two months earlier than would be done by freezing weather. That should mean much in the northern half of the Cotton Belt, where weather conditions are unfavorable to the weevils living through the winter. The value of this will be more fully appreciated if it be remembered that in experiments in Louisiana, where the conditions were made as near natural as possible, over 90 per cent of the weevils failed to come from hibernation, or in other words, died during the winter. This being the case, it is easy to see that prolonging the period of the absence of food, and the colder weather farther north, might easily cause the greater part of the remaining 10 per cent to die.

TRY A SMALL AREA IN ALFALFA

By Meeting Certain Definite Conditions Most Farmers in the South Can Successfully Grow This Great Crop

MANY farmers are asking if it will pay them to grow a small acreage of alfalfa. Of course, in those sections where the soil is abundantly supplied with lime or where alfalfa "naturally" does well, there is no question but it should be grown on every farm. The question as being asked however, applies to the farmers of the South who do not live where the lands are "naturally" suitable for the growing of alfalfa, average Southern lands.

Very frequently it is stated that, since our soils are very generally adapted to the growing of other legumes like cowpeas, soy beans and lespedeza, the average farmer should confine his efforts to the growing of these for hay, and leave alfalfa alone.

This is no doubt true as to large areas or for the production of large supplies of hay, but we believe every farmer should grow a small acreage of alfalfa for the educational as well as for the forage value of the results. The area should probably be from one to ten acres, according to means and size of farm. However, we do not advise any man to attempt to grow alfalfa in the South unless he intelligently meets the following conditions:

1. The land must be naturally well supplied with lime or have applied to it from two to four tons of ground limestone per acre.

2. The land must be well drained so that water does not stand for any considerable time within four feet of the surface.

3. The land must be of fair fertility, and in most cases it will pay to apply a liberal amount of commercial fertilizer, especially phosphorus and, in some sections, potash.

The soil must be inoculated. If it is already inoculated by the growing of alfalfa, melilotus or bur clover, it will not be necessary to inoculate the seed, but unless one is reasonably certain the soil is already inoculated, the artificial inoculation of seed or soil had better be practiced.

5. A good seed bed, well settled, and fall seeding are of the highest advantage.

But, says some one, why go to all this expense and trouble when we can grow cowpeas, soy beans, lespedeza and vetches on our lands as they are now?

In the first place, alfalfa will give three to five cuttings or yield twice as much hay as any of the legume hay plants mentioned. But that is only one of several reasons, although a 100 per cent increase in yield is certainly an advantage justifying considerable expense. There are other im-

portant advantages of a small area in alfalfa. The fact that yearly seeding is not necessary is of great importance. Moreover, the educational value of any man's doing the things mentioned to grow alfalfa is great. If the farmers of the South can in this way be taught the value of lime and the necessity for it on most of our soils before the best crops can be grown, the results would amply pay from this one lesson alone. But there are still other advantages. The value of the lesson derived from the presence of a green cover crop on the land for the year round may lead to other areas being covered with a carpet of green.

On the whole, we are inclined to answer our friend's inquiries to the effect that it will pay any man in the South to try a small area in alfalfa, if he will do the things which we have mentioned as being necessary to grow the crop successfully. But remember this condition or proviso: It is useless to sow alfalfa unless you will do those things which experience has shown are necessary to grow it successfully.

Possibility of Weevil Damage in the Northern Part of the Cotton Belt

A FRIEND from north Mississippi, where the boll weevils have been particularly destructive this season, wants my opinion as to the probability of the weevils continuing to be destructive next year in, say, the three northern tiers of counties "in that state."

The writer once heard Prof. Conradi of South Carolina, who had considerable experience with the weevils in Texas, say, in reply to a somewhat similar question, that he had decided to quit predicting what the boll weevils would do, unless it were possible to get the Lord to certify to the weather.

On the same basis we cannot make a prediction as to what the weevils will do in north Mississippi next season, or any other particular season, without knowing what the weather, particularly the winter temperature, is going to be.

We have, however, considerable evidence which leads us to believe that only in exceptional seasons, mild winters and favorable summers, will the weevils be especially destructive in Tennessee and the northern tiers of counties in Mississippi. But, say some, "It has always been thus. Those just outside the infested area or those visited for the first time, think they will not be seriously injured or that the next season the weevils will be less destructive." That is undoubtedly true, but we have more than the optimism of human nature on which to base the opinion that the weevils will not generally be destructive year after year as far north as northern Mississippi and Tennessee. We have the fact that they have not been generally destructive so far north, for instance, in Arkansas. Furthermore, we have the fact that the cold winter of 1911-12 gave the weevils such a setback in northwestern Mississippi that they scarcely regained the lost ground until the favorable season of 1916.

We wish to avoid misleading anyone and at best can only give an opinion; therefore, the only safe plan is to adopt a sane or rational system of farming, involving increased soil fertility. Any such system will effectively curtail the acreage planted to cotton.

Some years ago in Minneapolis at a meeting of the Board of Education it was suggested that the Bible be taught in the schools. One member of the board was a big Swede who objected, so they gave him a Bible to look over, and action was postponed until the next meeting. When the Swede was called upon for his opinion, he said: "I don't like it—there's a whole lot in there about St. Paul, but not a word about Minneapolis." And the motion was lost.—Exchange.