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TRY AN ACRE IN ALFALFA NEXT FALL.

Plow It Well, Fertilize Liberally, and Sow in Peas —Cut Alfalfa in September—General Directions for Growing the Crop.

Without apology I again call the attention of the readers of The Progressive Farmer to alfalfa, or lucerne, as a forage crop and improver of the soil; also as a money crop. In last week's issue of Farm and Ranch the statement is made that the first crop of alfalfa hay is now being readily sold in Texas at from $12 to $14 per ton. When we consider that they often get from five to seven cuttings annually in that State, making from three to five tons of hay per acre, it is easy to understand why interest in the crop is growing there. It is also easy to understand why we of the Eastern States are becoming more interested in alfalfa as we experiment with it and understand more of its requirements and of its value.

Alfalfa, being a legume, especially recommends itself to Southern agriculture, as all legumes do, because of its power of gathering nitrogen from the air through the agency of the bacteria infesting the nodules on its roots, thus through these agencies largely reducing the cost of the fertilizers necessary to supply plant foot in our soils. Legumes open a wide field for experiment to our farmers and offer to them great possibilities in crop rotation and soil improvement.

Increasing Use of Alfalfa in the South.

Interest in the crop in North Carolina is increasing. Ten years ago the plant was probably not known in more than a dozen counties in the State, and by but a few persons in those counties, while at this time it is being tried in an experimental way in probably half or more of the counties in the State. The same thing can be said of all the territory in which The Progressive Farmer circulates. In a few years I am confident the acreage in those States will be very materially increased. Many failures will be recorded in these first experiments and quite a number may quit the crop in disgust, but enough will hold on and prove that it can be profitably grown to insure an increased acreage in the near future. The changes that are bound to come in our methods of farming will make it necessary to put in crops which will not require the constant cultivation that many Southern crops now require.

Getting a Start With the Crop.

To illustrate what can be accomplished by perseverance, I will state that quite a number of acres were put in alfalfa near Goldsboro, N. C., last spring, a few farmers putting in several acres each. They had rain in abundance and the grass and weeds soon over-powered the alfalfa. Most of the experimenters there have given the crop up as unsuited to their lands, therefore unprofitable. Among the experimenters, however, was Mr. John S. Davis, who put in about one acre, prepared the land according to directions by deep plowing, liberal manuring and heavy liming. The same fate that overtook the alfalfa of others overtook his also. The crop, so far as alfalfa was concerned, was a comparative failure, but he was not discouraged to the point of quitting. In August he replowed the land, or cut it with a cutaway harrow, and resowed in alfalfa the first week in September. The land was in fine condition, and within a very few days he had a perfect stand. The alfalfa continued to grow, and Mr. Davis began to reap his reward the first of this month in a magnificent crop of fine alfalfa hay. He said it averaged two feet high, and from the acre he secured three two-horse loads of the very finest hay. To be sure, "one swallow does not make a spring," nor does one experiment establish a thing, yet it makes one feel mighty good to have things go his way, especially after an apparent failure, such as Mr. Davis had last year with his alfalfa. I simply mention this to show how one may succeed with perseverance, where with less persistence failure would be charged up against him.

Prepare Now for Fall Seeding.

Some time since in talking with an alfalfa grower of several years' experience, he said that spring is the time to begin the preparation of land intended to be put in alfalfa the coming fall. He gave it as his experience that all hands intended for alfalfa should be prepared several months in advance of the sowing so as to permit the manure to thoroughly permeate the soil and go through the changes that seem to be necessary to secure a good crop. In view of this, it will be well for those contemplating putting in alfalfa this fall to prepare the land now by plowing well, manuring liberally and liming heavily, a ton to the acre, and sow in peas. In August cut the peas off and make hay of them; disc the land well or plow shallow and sow inoculated seed. With this management the chances wil be good to get a crop of alfalfa next spring, and others to follow.

Use Lime—and Inoculate Land or Seed.

There is now before me an extensive report on alfalfa growing in New York in which every experiment shows the value of lime. Without a single exception, the crop was heavier where lime was used than where no lime was used. Lime seems to increase the chances for successful inoculation and the development of the necessary bacteria.

Unless land is very fertile or already contains bacteria peculiar to the alfalfa plant a person need not expect to grow alfalfa without inoculation. That has been thoroughly demonstrated. Notwithstanding the many failures that have been reported from the "cultures" sent out from Washington, and from those bought from manufacturers, I have great faith in them. In passing, I will say these "cultures" are not now sent out from the government on dry cotton as formerly, but in a liquid form, thereby insuring greater success in their use. I have faith in the "cultures" because I have succeeded with them, both at Hillsboro and Goldsboro. The acre in alfalfa grown by Mr. Davis, and just referred to above, was from treated seed and the inoculation is as fine as I have ever seen. In January Prof. H. H. Hume, State Horticulturist, and I visited the farm and examined the alffalfa for evidences of bacteria. We found it in abundance. Prof. Hume took a few plants to photograph. A cut of one of them appears with this article. The plat had not been sowed quite five months when the photograph was made. The nodules or tubercles on the roots show for themselves.

Soils Especially Suited to Alfalfa.

As with all other crops alfalfa will succeed in some soils better than in others. Well-drained alluvial soils, such as some of our creek bottoms that are not subject to overflow and are well above water, which will permit the long roots of alfalfa to go down into it and get nourishment from far below the reach of the roots of ordinary crops, are ideal soils for alfalfa, while soils with "hard pan" will not usually grow it successfully. These alluvial soils must be elevated, well drained, and free from acidity. Of course a great deal of alfalfa is grown on soils that do not belong to the alluvial class. Each grower can experiment and find out for himself the adaptability of his own soil to the crop.

Remember these things: Alfalfa can be grown either in spring or in the fall. I consider fall sowing preferable in the Cotton Belt proper, and spring sowing best in the more elevated and cooler sections. For fall sowing the seed should be in by the 15th of September and in many instances earlier seeding would be better. For spring sowing the land would be better if prepared in the fall or early winter and the seed put in the first of April.

Try an Acre as an Experiment.

The land must be prepared thoroughly by deep plowing, liberal manuring and liming. Of course the land must be well drained, for alfalfa cannot stand a wet soil. It is a waste of time and money to sow alfalfa in poor land, or on land not well prepared. If one succeeds the crop will well repay for all the time and money spent in preparing the land.

HOW ALFALFA STORES UP NITROGEN.

Five-months-old alfalfa plant on farm of Mr. T. B. Parker near Goldsboro, N. C., showing root growth and bacterial nodules. Spring seeding was first tried and failed, a second experiment (in fall) brought this result.

For experimental purposes an acre is enough for any one to begin with. If one can grow an acre successfully he can then enlarge as circumstances permits. If a person does not wish to risk an acre, a half acre of a quarter of an acre will suffice.

I prefer heavy seeding, not less than 30 pounds per acre, though many successful growers contend that twenty pounds of seed are sufficient. The seed should not be covered too deep. From a half inch to an inch is plenty deep to cover.

Several who have recently written asking for information concerning alfalfa will find their questions answered in this article.

The Editor of The Progressive Farmer would be glad to have letters, giving their experiences, from successful growers of alfalfa. I would likewise be glad to have the name and postoffice address of any in North Carolina who contemplate putting in alfalfa this fall. I should be glad to keep in touch with such persons and give them the benefit of any added alfalfa information I may get from the Government experiments or otherwise, that would likely be of benefit to them.

T. B. PARKER.