

Crimson Clover in a Nut-shell.

It is Time Right Now to Sow This Great Soil Improver and Here Are the Very Facts You Want to Know About It.

Messrs. Editors: Crimson clover is useful (1) for soil improvement, (2) for hay, and (3) for grazing in March and April. Crimson clover is an annual plant, making its entire growth in about seven or eight months, from September to May. Seed, either purchased or home-grown, must be sown every year.

Crimson clover thrives on a great variety of soils, including some of the poorest. It is much more apt to succeed on soils poor in lime than is red clover. It does especially well on a mixture of clay and sand, that is, on loam or clay loam soil. On strongly acid soils its success is doubtful, unless lime is used as fertilizer.

September Sowing is Best.

Sow fifteen to twenty pounds of seed per acre broadcast when the soil is moist between September 10 and October 10. September sowing being generally preferable. The land should be free from much litter. There is no better place for crimson clover seed than a clean cotton field, where the seed may be sown among the growing cotton plants immediately after the first or second picking. Cover with a one-horse cultivator, or scrape, etc.

Unplowed cowpea stubble land, disced, often makes a good seed bed. If the land must be plowed, pulverize and compact it by the use of harrow, drag or roller. On most soils 200 to 400 pounds of acid phosphate would be helpful. On acid soils 6 to 8 barrels of lime per acre, first slaking it, may be desirable. When crimson clover is sown among growing cotton plants, we use no fertilizer.

How to Inoculate.

Do not waste any money on crimson clover seed unless you can inoculate them with suitable soil. Without inoculation this crop is generally an entire failure. Inoculation consists in sowing with the seed certain germs that will cause enlargements on the roots of certain plants. These enlargements or tubercles are fertilizer factories changing the useless nitrogen of the air into the form of nitrogen useful for fertilizer, or for food, and costing, if bought in fertilizer, fully 15 cents per pound.

The surest means of inoculating the seed consists in sowing with the seed some soil from a spot where any true clover, as red, white or crimson, has recently grown successfully. Soil from around the roots of Japan ("wild") clover will not serve. Careful search in most old lawns and pastures will often reveal the presence of one of the small white clovers. This is distinguishable in the fall by its roundish, small heart-shaped leaves and by small roundish enlargements (tubercles) on the roots. Mix a little water with soil from this spot. Then moisten the crimson clover seed in this dirty water. Now mix the wet seed with some of the same soil in dry, powdered condition. If the inoculating soil is abundant, sow broadcast, in addition, from a few hundred pounds to one ton of it per acre. Otherwise, omit this latter step.

Promptly cover seed and inoculat-

ing earth with a harrow. Much sunlight may kill the germs. Inoculation with soil is many times surer than reliance on "pure cultures," or inoculating material prepared in the laboratory. Do not pay extra for seed said to be inoculated. It will pay to have soil from some clover field shipped you. None can be shipped from Auburn because our soil contains germs of disease.

How to Use Crimson Clover.

Crimson clover can be cut for hay about April 20 to May 1. The stubble has considerable fertilizing value, and will greatly increase the yield of any late crop that follows the clover, such as corn, sweet potatoes, sorghum, etc.

By April 1st the crimson clover, about half grown, may be plowed under in time for a cotton crop, thus improving the land while it grows cotton every year. Crimson clover takes the place of cottonseed meal or nitrate of soda in the fertilizer, but doesn't diminish the need for fertilizing cotton with phosphate or potash. To get maximum fertilizing effects, stock should be kept off until just before plowing under the half grown crimson clover, when it may be grazed.

The growing of crimson clover (or vetch or burr clover) constitutes the most practical method of immediately adding 25 to 50 per cent to the fertility of most of the land devoted to cotton. Let no man expect to succeed without inoculation. Failing to find suitable soil, grow as a sample a patch of crimson clover so small that you can cover the ground with stable manure. But inoculated plants do not need stable manure.

J. F. DUGGAR,

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The General and the Boy.

On the Atlanta campaign General Sherman made his headquarters for a time at the house of a farmer, where a tin basin and a roller towel on the back porch sufficed for the family's ablutions. For two morn-

Fertilizer for Wheat.

In some parts of the East farmers are giving up wheat growing. Many of them think it useless to try and compete with the newer and richer soils of the West. Many argue that wheat growing is profitable only on new and rich soil. Mr. C. R. McKenzie, of Westfield, New Brunswick, undertook to see if by the use of chemical fertilizer on poor soil he could not compete with Western grain fields.

He selected a piece of dark loam, slightly gravelly soil which had had no fertilizer for ten years. It had been in grass, and farmers can readily understand its poor condition for grain. In order to test the soil, Mr. McKenzie used nothing on one part of the field. On another part he used Thomas Phosphate to supply phosphoric acid and nitrate of soda to supply nitrogen. On another part he used the phosphate and the nitrate and in addition, muriate of potash. The object of this was to see which element was the key to a wheat crop on that soil.

Potash gave the yield. The answer was clear, as the following figures show:

Plot	Yield of grain per acre	Increase over no fertilizer
1 No Fertilizer.....	10 bu.	
2 { 600 lbs. Thomas Phosphate 180 lbs. Nit. of Soda }	25 bu.	15 bu
3 { 600 lbs. Thomas Phos 180 lbs. Nit. of Soda 120 lbs. Mu. of Potash }	40 bu.	30 bu.

The natural soil gave only 10 bushels. The phosphate and the nitrate brought the yield to 25 bushels, but when the potash was added there was an increased yield of 15 bushels per acre. It is evident that this increase was directly due to the potash, and when we compare the cost of the potash with the price received for 15 bushels of wheat we see that few other farm investments could have paid so well. Consider the price of wheat and straw on an Eastern farm and it is plain that no Western wheat fields can compare acre for acre with such a yield as 40 bushels. The main reason why some Eastern farmers say that wheat will not pay is because they use the wrong kind of fertilizer. They use a small of nitrogen, a peck of phosphoric acid and a pinch of potash. No wonder their yield is poor. Mr. McKenzie's experiment shows why. The wheat crop demands potash. If the soil will not supply it the fertilizer must do so.

ings the small boy of the household watched in silence the visitor's efforts at making a toilet under the unfavorable aspices, but when on the third day the toothbrush, nail file, whiskbroom, etc., had been duly used

and returned to their places in the traveler's grip he could suppress his curiosity no longer, so boldly put up question, "Say, mister, air you always that much trouble to yo'se'f?" —Lippincott's.



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