

forward the introduction of new crops into this country. I should have sown some seed I imported from England last year, but the harvest was rather delayed owing to the wet season, and I preferred putting it off to another summer rather than run the risk of a complete failure. The trifolium must be in the ground by the 12th August, in this district, to get a chance of obtaining a good root-hold before winter. It must be sown on stubble, unploughed, but well harrowed, and rolled with a heavy roller, at the rate of 14 lbs. to the acre, broadcast. As for ploughing in the earliest of all our clovers, if that is a wise plan I am very stupid, for it seems to me to be the excess of folly. The only fault is that it only gives one cut; but, then, it is very early, and leaves plenty of time when consumed to prepare the land for roots or silage-corn. It strikes me that, if the crimson-clover succeeds here, it, with sainfoin and the perennial clover or cow-grass, will fill up the gap in *soiling* between rye and red-clover; as thus: rye, crimson-clover, sainfoin, perennial-red-clover, common red-clover. The introduction of lucerne would make the succession perfect, as that is fit to mow for green-meat, in the neighbourhood of Montreal, as early as May 30th, at least so says Mr. Stephens of St. Lambert; see Journal of Agriculture, vol. I, p. 47.

#### Crimson Clover.

EDS COUNTRY GENTLEMAN — There can be no doubt that this clover (*Trifolium incarnatum*) is one of the most valuable of crops in any climate and soil where it succeeds. Here in, Central Delaware, it is becoming very popular. Every one who gives it a trial increases his acreage of it largely the next season. Hundreds who have watched the success of their friends with it, will sow it this fall for the first time. We feel that it will go far towards solving the fertilizer question for us, and that it will keep in our pockets for other uses the hundreds of hard earned dollars which we have been in the habit of paying out every year for "phosphate."

I propose to give a few reasons *why* we think so highly of this plant, and state a few of its uses. As a crop for green manuring it seems to stand at the head of the list. We sow it in August in our orchards, in fields of growing corn, or in open ground after some other crop has been harvested. It germinates quickly, grows fast, and makes a thick green carpet by the time winter sets in, and not only this, but it stays green all winter, even when the ground is frozen, and starts growing every time the frost comes out during winter. It makes remarkably rapid growth in spring, and by the first week in May it stands two to three and a half feet high, and is in full bloom, ready to turn under as green manure in time for almost any spring crop. It makes grand ensilage, and comes just when the silo is getting empty of corn, thus furnishing ensilage the year round. Some of our most progressive dairymen have already adopted this plan with most satisfactory results. It may be cured for hay about as easily, as any clover, and is the earliest of all crops for this purpose.

One of our successful dairymen, who has raised it for years, and who this year had some seventy acres of it on his farm, told me he firmly believed that the growing of this clover would put more dollars into the hands of the farmers of Kent county during the next ten years than the peach crop had during the last ten years.

This clover roots deeply and firmly. Our Delaware experiment station has been investigating this plant very thoroughly this season, and Prof. Beckwith, our horticulturist, informs me that he has traced the roots very distinctly *over four feet*.

The chemical analysis of crimson clover also demonstrates

its great value. The one I have before me was made by the celebrated English chemist, Prof. Way. It has an analysis of red clover also for comparison; it is as follows of the green plant:

	Water.	Albuminoids.	Carbo-hydrates.	Woody Fibre.	Fat.	Mineral Matter or Ash.
Red clover.....	81.01	4.27	8.34	3.76	0.69	1.82
Crimson clover.....	82.14	2.96	6.70	5.78	0.67	1.75
Same dried at 212° F :						
Red clover.....	—	22.55	44.47	19.75	3.67	8.56
Crimson clover.....	—	16.60	37.50	32.39	3.73	9.78

The digestible nutrients in these analyses, in pounds are as follows:

Green State.	Albuminoids.	Carbo-hydrates.	Fat.
Red clover.....	2.81	7.21	0.44
Crimson clover.....	1.98	7.44	0.42
Dried at 212° F :			
Red clover.....	15.10	40.61	2.31
Crimson clover.....	12.28	42.79	2.35

Thus it will be seen that crimson clover is quite equal to red clover in all the digestible elements except albuminoids. The amount of mineral matter or ash also shows its great value for green manuring. We sow eight to ten pounds of seed per acre. Its habit is very branching. Without any great search I have pulled plants in my field this season, the product of one single seed, bearing forty-seven full-height flower stalks, besides numerous short ones. This plant certainly deserves extensive trial.

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#### Curtis on Butter vs. Cheese.

Mr. Curtis' statement of the relative loss of plant food in selling cheese or butter off the farm will astonish many people. It is quite correct, however. As well as I can gather from the lectures and discussions at the meeting of the Dairy men's Association at Arthabaskaville, last December, the usual make of butter in the province is one pound from 23½ to 25 lbs. of milk. This is precisely what we used to reckon it to be in my part of England, viz., 2½ gallons of milk should produce 1 quart of cream, and from that quantity of cream should be made 1 pound of butter.

"What causes the inequality in the price of butter and cheese, when it takes nearly three times as much milk to produce a pound of butter as a pound of cheese?" The supply and demand. It should not take more than two and a half times as much milk to make a pound of butter as one of cheese. The value of the skim milk must also be taken into the account, and the greatly diminished loss of nitrogen from the farm. In a ton of butter, 26 cents will cover the loss of fertility; while in a ton of cheese the amount of nitrogen, phosphoric acid and potash is equal to about \$21. With so many poor cows, it may take three times as much milk for butter as for cheese, but this should not be. It is this large amount of milk required to produce dairy products that loads down the business. We must base the dairying of the future on more economic conditions. Another thing which affects the butter market. In proportion, there is more poor butter than cheese, and this poor butter drags the market down. It is the poor butter that makes the market price. Buyers say, "We can get butter at such a price," way down; and the good butter is pulled down, not the poor butter pulled up.