

It is pointed out in the summary of the results that an interesting feature is the striking uniformity obtained in the two years trials. This year the produce in most cases is somewhat lower, and the percentage of disease a trifle higher than in 1891. But in all respects, alike as to weight of sound produce, percentage of disease, and quality when cooked, the four varieties selected for experiment stand in, as near as might be, the same order of merit in 1892 as they did in 1891. This order is as shown below:—

**Weight of produce.**—In weight of produce the Farmer comes first in both years by about 15 cwt. per acre. In 1891 the Champion stood second, but in 1892 the Bruce beats it by a fraction. The Colonel ranks lowest in both years. It will be noticed that the average produce of the Bruce and the Colonel is almost precisely the same this year as in 1891—a somewhat peculiar result from so many trials. The Bruce is the only variety that shows an increase over 1891—in gross yield of sound potatoes. This increase, however, is entirely in "small" potatoes. It will be observed that the Antrim (which was not tried in 1891) stands fourth—before the Colonel—in weight of produce.

**Disease.**—Reckoned by their power of resisting disease, the four varieties tried in the two years stand as follows:—First, the Bruce; second, the Colonel; third, the Farmer; and last, the Champion. In all the four varieties there is rather more disease this year than last. The greatest increase is in the Champion, a fact which affords another indication of the declining vitality of this much-valued potato. It will be observed that in ten trials in the province of Munster the percentage of diseased potatoes in the Champion was no less than 12.34. It is interesting to note that the Antrim, the newest potato of the five tried this year, comes out with the lowest percentage of disease.

**Quality when cooked.**—The uniformity in the results for the two years are just as striking in regard to quality as to weight of produce and percentage disease. The Champion still maintains a long lead in respect of quality. The Bruce, Colonel, and Farmer follow in the same order in both years. The Antrim just beats the Bruce for the second place.

### SWISS AGRICULTURE.

The article on Brown Swiss cattle and the extent of dairying in Switzerland, which recently appeared in the *Farmer's Advocate*, has occasioned further enquiry into the status of agriculture in that wonderful little republic. At a convention held in connection with the visit of the British Dairy Farmers' Association to Switzerland, Herr Mettler, medical officer of health at Zurich, imparted some interesting information which our readers will appreciate. He said the Swiss farmers were not troubled very much with the rent question, most of the land being in the hands of the owners; in fact, not more than five per cent. of the cultivated land in Switzerland is rented. The average value of agricultural land in rural districts is £60 per English acre. The value increases, of course, according to proximity to a town, rising in the immediate neighborhood of large towns to £500 or £600 per acre. What little land is in the hands of tenant farmers bears an average rent of 35s per English acre. Judging from the extensive practice of house-feeding in the valleys, we expected to hear that

labor is cheap, but this is hardly the case so far as continuous work is concerned. The Swiss farmers recognise the fact that if they are to keep the laborers on the land they must pay wages equivalent to those which the laborers could earn in the towns. There seems no difficulty about the extra labor required in hay-making, though the Swiss farmers very rarely co-operate. At such times there is less difficulty in getting occasional laborers than permanent ones.

Agricultural laborers are of two classes—(1) Those receiving board and lodging and from 8s to 20 per week in addition, according to the quality of the men. (2) Those which are not boarded or lodged. These receive more near towns than they would in the country, the minimum daily wage being 2s in the country and the maximum 4s around Zurich. Farm rates are altogether unknown in Switzerland. All the taxes are massed together and take the form of an income tax, every man being taxed according to his ability to pay.

This Utopian state of agricultural bliss caused much discussion, and some surprise was exhibited when Mr. Jesse Collings, M. P., asked if a laborer getting 15s a week would be required to pay income tax. To this Herr Mettler replied that ever man had to pay. A reduction of £20 is allowed to every one, and every Swiss who has a yearly income exceeding this amount has to pay tax on that excess. In some cantons (Zurich, for example) the tax is a progressive one, the rate of taxation increasing with the income. The announcement of this fact was received by the British dairy farmers with prolonged cheers.

*Farmer's Advocate.*

### CLEANING LAND.

The colder and drier winds, which have checked superabundant growth in some quarters, and caused disappointment in others, have been favorable for cleaning operations. Light lands are not difficult to clean, but are unfortunately only too liable to fall back into a foul condition. The plan we find best in order to destroy couch is to carry out the various operations somewhat in the following order:

	£	s.	d.
1 Ploughing before winter..	0	10	0
1 Cross ploughing in winter or early spring.....	0	8	0
2 Heavy harrowings in dry weather.....	0	1	6
1 Rolling.....	0	1	0
2 Harrowings.....	0	1	0
2 Chain-harrowings.....	0	1	0
Collecting and burning couch on the ground or in larger heaps.....	0	5	0
1 Cultivation or thorough dragging.....	0	5	0
1 or 2 heavy harrowing....	0	1	0
1 Rolling.....	0	1	0
2 Harrowings.....	0	1	0
2 Chain-harrowings.....	0	1	0
Collecting and burning couch.....	0	3	6
1 Ploughing.....	0	6	0
2 Harrowings.....	0	1	0
1 Roll.....	0	1	0
1 Drill.....	0	5	0
1 Harrow.....	0	0	6
	£2	13	0

This should be a sufficient preparation of the land. In looking over it we think that the last ploughing might, in the case of light, dry soil, be omitted in which, case we should

drill, and pick up the last coat of couch after drilling. We are not in favour of working light land too much, as it produces a dry and hollow condition, unfavourable for germination and rapid growth.—*Eng. Ag. Gazette.*

### GREEN MANURING AGAIN

Corn Cultivation in New England.

"ED. HOARD'S DAIRYMAN.—Since writing the note on "Green Manuring," which appeared in your issue of May 11th, I have seen in the Experiment Station Record (Vol. 5, No. 8) a brief report of the result of plowing under a heavy crop of crimson clover as a fertiliser for corn as compared with a top dressing of nitrate of soda. The result noted is that "Eight tons 600 lbs. of crimson clover, from seed which cost one dollar per acre, added 24 bushels to the corn crop. One dollar invested in nitrate of soda and used as a top dressing added 6 bushels to the corn crop." Apparently the conclusions to be drawn is that in this case green manuring was profitable. Actually, no such conclusion is warranted. To obtain any valuable results, the value of a leguminous crop, as green manure, should be compared with its value as a food crop, crediting to the last term of the comparison the full manural value of the residuum of the crop after it has served as a food.

Farmers' Bulletin No. 16, (United States Department of Agriculture) gives a very complete resume of the entire subject. Its conclusions are fully in harmony with the views previously presented in your columns. As pertinent hereto I quote: "The leguminous crop is best utilized when it is fed out on the farm and the manure saved and applied to the soil; the greatest profit is thus secured and nearly the same fertility is maintained as in green manuring. \* \* \* The practice of green manuring on medium and better classes of soils is irrational and wasteful."

We fully agree with every word of the last paragraph. *Ed.*

### PLANTS AND FLOWERS.

#### Varieties of Phlox Paniculata.

Prominent among hardy perennials are the garden varieties of Phlox paniculata in their many brilliant colors. Phlox paniculata itself is a native American plant, but the skill of the gardener has brought its fine varieties far above the wild one in beauty both in size and shape of flower as well as in brilliant coloring. These phloxes bloom from midsummer through the fall and their perfumed broad, clean and delicately tinted flowers are seen in their prime during the months of August and September. The following standard varieties can be easily procured from any one dealing in hardy plants, and they will be found hardy in almost every portion of the states excepting the extreme North.

Of the red varieties, Isaby has a clear, bright color, termed a fiery salmon. The center is of deep, purplish carmine. Triumph de Twickle, a little less brilliant than Isaby, the florets having more of a lilac coloring in the red. The centre is dark crimson. It stands the sun very well and holds a good truss. Miss Buckner, another step darker than the last, the color throughout being guided by a purplish tendency. Lothair, very much of the same color as Triumph de Twickle, but several shades lighter,

and having a faint suggestion of salmon pink, centre bright crimson. Flora McNab, a clear, pleasing pinkish lilac colored floret with a scarlet centre. The truss is compact and perfect, an excellent sort. Mme P. Languiet, color same as of Flora McNab, a pinkish lilac, but without the darker center. A pretty color and a good flower.

Among other colors Maid of Kent has a pure white ground and shows a beautiful pale lilac coloring extending through the center of each petal, leaving a broad white margin on both sides and meeting at the centre. It is a handsome variety. The Pearl is pure white without a blotch or stain, is dwarf, compact, perfect, and the best white. Bridesmaid, pure white with a deep clear carmine centre, has a perfect floret and fine truss. Josephine Geobeaux, white with bright pink centre, is not nearly as striking as the last, yet very tasty and refined in effect. Queen Victoria, coloring much the same as in Bridesmaid, but the white, instead of being pure as in the other sort, is suffused with pink. This lessens the effect of the carmine centre, but does not reduce the value of the variety. The Bride is of the same type as Josephine Geobeaux, only a little paler in the centre and having a tendency to fade to almost pure white as the floret grows older. It is very neat. Adolph Wick is the same color as Bride, but the florets are smaller and truss more compact.—*[E. H. Michel.]*

**Gladiolus.**—For profuse blooming plant strong bulbs. Set them about three inches deep in light soil and manure well. Deep planting makes stronger plants, finer blossoms and borne on longer spikes, and will sometimes render staking unnecessary. Plant them from ten days to two weeks in succession until the middle of June, for an all summer and autumn bloom.

**Clematis** (1) should now be trimmed to insure strong vines and plenty of bloom. Cut off a few of the side shoots. Give them a good deep loam and give only enough water to sustain life during the dry season, as excessive wetness is apt to bring on diseases. The Jackmanii variety is probably the most popular of any kind; it bears large purple flowers and is an unequalled bloomer. For white flowers plant the Henryi.

**Abutilons** for winter flowering must be started from cuttings now. Set them out in the open ground when warm enough and apply strong cow manure water occasionally. If you want them for late blooming head back a few times during the summer. Treated thus you will be rewarded by their bloom a long time.

**Asters.**—By all means plant some of the Comet variety, they attain a large size and are very beautiful. They resemble chrysanthemums very much with their long, wavy petals of delicate pink and white. The German quilled variety is also very pretty.

To distribute Seeds Evenly a salt shaker is just the thing.

For Transplanting Seedlings a teaspoon is much better than a trowel.

(1) The accent on the first syllable please. *Ed.*