

Green Manuring.

P. Crawford County, Penn., asks:

First—At what state of growth or maturity should clover be ploughed under?

Second—Will it pay to turn buckwheat under as a green manure?

Third—If the latter is answered affirmatively, may it not be profitable to sow the clover field, immediately after ploughing, to buckwheat, for the purpose of turning the latter under when the season arrives for sowing wheat?

Fourth—Will the clover rot sufficiently between the first and second ploughing to make a good mulch for the surface?

I intend to pursue this plan of green manuring the present season, which has given rise to conflicting opinions among my friends and neighbors. However, I stand pretty much alone in my advocacy of the plan, as nearly every one denounces buckwheat as worthless for green manure, and many object that the clover will not become sufficiently rotted to bring to the surface again. My opinion is that buckwheat is inferior only to clover as a green manure.

Replies.—*First*—At its period of greatest growth and succulence, which is when in full blossom and before a head has turned brown.

Second—Yes, in cases when clover cannot be grown for this purpose. For instance, if a field is to be improved this season, clover, being a biennial plant, will not mature until next year. In this case we would sow buckwheat in May, ploughing it under early in July; then sow again, ploughing the crop in September, and sow rye, with clover, next spring. There will be a crop of rye, which may be fed, and the next season a crop of clover, to be ploughed under, and the feeding of the rye and the straw will go to manure the land, in addition to the clover. In the next spring the field may be cross-ploughed for corn, when the clover will be thoroughly decomposed. A clover sod should not be cross-ploughed without an interval of several weeks. The relative value of buckwheat and clover as a green manuring crop is largely in favor of clover, both on account of the greater abundance of its roots and the nitrogen it contains.

Third—Clover cannot be thus sown for this purpose, as has already been explained.

Fourth—This depends altogether upon the length of the interval between the ploughings. We do not understand what is meant by the mulch referred to. When the clover rots it becomes mixed with the soil, as a dark, fine matter, and cannot in any way form a mulch.—*N. Y. Times.*

Buckwheat.

This species of farm produce has disappeared from among our agricultural productions for a great length of time. As it is still extensively cultivated in America and other countries, where it is maintained in high repute, I am of opinion that if farmers were more practically acquainted with this grain—which many only know by name, and others not by that—it would be extensively grown in our own country.

This buckwheat, or brank, as it was called in old times, will thrive in any soil, even on barren sands; where almost every kind of vegetation refuses to grow, it will succeed. However, light and dry upland is the most suitable for this plant, and in very inferior soil the yield will be from twenty-five to thirty bushels per acre, without the least particle of manure, and with very little attention. To those who have a desire to manure their land at a slight cost, I would say, sow a crop of buckwheat on such land, and when the crop is in full bloom plough it under. This sowing might be made in May, the crop turned under furrow by the end of July, and the land ready to receive an early autumn crop of wheat or other grain. As this plant is of a very succulent, saccharine, and tender nature, the stalks and leaves require but a very short time before they become totally decayed. A better plan can scarcely be devised than ploughing this crop under in poor sandy soils, and in parts where ordinary manures are scarce, dear, or difficult of cartage. When this grain is allowed to ripen, the straw is worthless as far as any feeding properties are concerned; but if cut in a green state it is a valuable food for milch cows and other cattle. In some ground these plants will attain the height of 3 ft., while in very poor soil they have hard work to accomplish the length of 2 ft. The leaves when young are nearly round, but in advancing to maturity resemble those of the ivy in form. The stalks are not of great strength, are hollow, of a good green color when young, though as age comes on a deep tinge of red appears. If not sown too thick, every plant will throw off several collateral branches, all of which will produce numerous flowers

of a light purple color, or nearly white. Tusser, a celebrated agriculturist of his day, thus speaks of it in his "May's L'abandry":

In May is good sowing thy buck or thy brank,
That black is as pepper, and smelleth as rank;
It is to thy land as a comfort or muck,
And all things it maketh as fat as a buck.

Sow buck after barley, or after thy wheat,
A peck to the rood (if the measure be greatly)
Three earths see ye give it, and sow it above,
And harrow it finely, if buck ye do love.

Notwithstanding old Tusser's allusion to the rank smell of this plant, it must be borne in mind that when the summer breeze passes over a field of blooming buckwheat an aromatic fragrance is imparted to it, second only to that of a field of blossoming beans, and in nowise disagreeable or rank. These blossoms are extremely attractive to bees, and we have it on good authority that, in countries where farmers cultivate buckwheat extensively, the bee-keepers are in the habit of sending their hives to that immediate neighborhood during the time these plants are in flower, when the bees work intensely in gathering sweets from the pale blossoms, making a great quantity of honey for the space of time; and that produced in this way is said to be more highly esteemed than any other, being truly transparent. The seed, when quite ripe, is of a triangular shape, almost black, greatly resembling beech nuts, but very much smaller.

In France and other countries buckwheat has for ages been considered as part of the food of man; but in our own country it never seems to have been in common use for bread. In Canada, and in the United States of America, this species of grain is cultivated to a great extent as bread food, not only for "the hewers of wood and drawers of water," but also for those in affluent circumstances; and when ground fine and made into cakes, is highly esteemed, particularly in the colder seasons of the year. The mode of making these cakes is to mix the flour with water until it forms a batter of moderate consistency, when it is left to ferment a little, but not long enough to become sour; and then it is poured upon the baking pan, nearly in the way of making pancakes, or perhaps more resembling the plan of making oat-meal cakes in Lancashire and parts of Yorkshire, where such are called "oat cake," "riddle bread," "warp and weft," &c. In what we should term the "country parts" of America, the pan for baking buckwheat cakes may be seen by the fireside throughout the day, on account of its incessant use during winter, it being customary to partake of hot cakes several times a day. The cakes should be eaten while hot, and they will be improved with a slight plaster of butter, similar to the way Lancashire people serve their "oat cake;" but I must admit this is used either hot or cold.

In the countries where buckwheat supplies so great a portion of food for the inhabitants, it is also used in vast quantities for feeding cattle, pigs, and poultry. Although pigs eat buckwheat meal greedily, and fatten quickly on it, this food should be stopped for at least three weeks before they are killed, when maize (Indian corn) should be supplied, which will make the pork or bacon harder, and of a superior flavor. If fed entirely on buckwheat, the pork would be soft, and of an oily nature.—*Cor. Field.*

A Talk About Plaster.

At a late meeting of the Ottawa, Michigan, Farmer's Club, the subject of the use of plaster was introduced by the President, Mr. Wild.

Mr. DeWitt had used plaster very freely, and always with good effect.

Mr. Wild, and also Mr. Ferguson, agreed that the use of plaster adds one-third to the clover crop.

Mr. McNaughton had experienced great benefit from its use on clover, more on sandy land than on clay. He always got a good catch when he used plaster on the land with the seed.

Mr. Lillie thought we used too little, and recommended to double the quantity now used.

Mr. Wild thought we should sow more clover than we do, and use more plaster.

Mr. McNaughton believed that the best way to keep up our land was to sow clover and plaster. He also gave some instances of the good effects of ashes on wheat.

Mr. Hall said that plaster prolonged the growth of wheat, but was no benefit to it. It would do good on clover three years.

Mr. Randall recommended sowing plaster on the snow. Clover sometimes failed to grow when not plastered.

Mr. T. B. Lillie used clover, but thinks barnyard manure the main stay to keep up the fertility of the farm.

Early or Late Ploughing.

The success of any crop greatly depends upon the proper preparation of the ground. The proper preparation of the soil consists as much in the time as in the manner of ploughing. Many fields are rendered almost barren for a series of years by unseasonable ploughing. A heavy clay soil has frequently been so injured by ploughing while wet, that twenty years afterward it had not recovered its previous fertile condition. At this season of the year there is greater danger of this mistake than at any other. The desire to be ahead of one's work leads many to plough their fields before the soil is sufficiently dry. The mechanical effect of the pressure and the peculiar plastering action of the mold-board is to render the clay tough and plastic, so that when it becomes dry, it breaks into lumps or clods which cannot be disintegrated, and remain in their solid state with only their rough edges worn off, at the most, for many years. No after cultivation can reduce the soil to a mellow condition, and a large portion of its fertility is locked up in these clods, where the roots of the crop cannot reach it. In the proportion in which the roots are prevented from entirely occupying the fertile layer of surface soil, the crop is reduced below its proper yield. Besides, a soil in such a condition suffers excessively from heat and drought. It neither receives nor holds nearly the same quantity of moisture that a mellow soil does, and it parts with what it has with the greatest facility. Here is another immense loss, which, added to that already mentioned, becomes ruinous. Lighter soils are subject to the same ill effects, but in a less degree, until they may become sandy, when the existence of a considerable degree of moisture in them becomes desirable rather than otherwise, because it gives the requisite cohesion. It becomes a matter of judicious consideration to select the best time to plough in the spring. Our rule has been to dig up a spadeful of soil and throw it upon the ground. If it breaks apart, loses its cohesion, and becomes a loose heap of mellow soil, the ground is fit for the plough. If, on the other hand, the earth retains its form, and the surface which has been in contact with the spade is full of water, sodden, and is smoothed as though it had been plastered with a trowel, the ground is not as yet fit to be ploughed. This last will apply to clay, loamy, and gravelly soils. Sandy soils are difficult to injure in this way, and in some the water may follow the plough in the furrow without injury.—*N. Y. Times.*

LEANING GATE POSTS.—F. M. C. Birmingham, Oakland Co., Mich., writes: "I have been bothered some with gate posts leaning and letting the gate sag. I have now learned that this evil can be remedied by placing the posts in the ground and tramping the ground solid on the back side (or opposite the gate); then place a scantling or round pole, cut so as to fit closely between the posts, a few inches under the ground, or even with the top thereof. This will entirely prevent the gate from sagging."

THE manufacture of beet-root sugar in France may be regarded as terminated for the present season. The season has not been favorable upon the whole, and the yield of sugar has been below that of last season. This falling off, added to the deficit in the crop of beet-root, explains the relative mediocrity of the production of beet-root sugar this year. Manufacturers, although much discouraged by the continued low price of sugar, do not lose hopes of a better season in 1874-5.

FRED THE SOIL WELL.—A correspondent of the *Vermont Farmer* says: The Lord loveth a cheerful giver, and so does the soil; and just in proportion to our generosity to it, will it reward us at the harvest time. Then let us feed it well, give it liberal costs of manure, stir it often and mix it fine. I would not buy commercial fertilizers until I had used up all that is made around our own buildings. There is more plant food wasted in the kitchen slops in one year than can be bought in a ton of the best commercial fertilizer.

NEW SEED POTATOES.—Mr. Ralph Robinson, nurseryman, Hexham, has just introduced a new species of potato, which he calls Robinson's Challenge Early Rough White Potato. The potato has been well tested before being sent to the trade, and has been found to answer every expectation formed of it. It is well adapted for either the garden or field, and being an extremely early and productive cropper, it is admirably suited for the early markets. In quality it has been found to be extremely good, and to be extremely free from the much-dreaded potato disease.—*N. B. A.*