

up the hole with the remainder of the mould; cut the vine down to the two bottom buds, and the operation will be completed.

In the fall of 1855, I bought of Wm. Course, grape plants two years old, at twenty-five cents each, and planted them in borders prepared as described, and cut them down to the second bud from the ground. In 1856 I pinched off all the fruit on first appearance, and in the fall cut them back to about seven feet. In 1857 allowed them to bear about ten bunches each, and in the fall, cut away about one-half the new wood.

This year (1858) I have sold the grapes of five vines for \$15 (each vine occupying 8 feet each way, making 64 feet) which is equal to \$2,041,87½ per acre, per annum.

### CLOVER.

Clover has an importance to farmers which can scarcely be over-estimated, and we fear it does not receive a sufficient consideration. As furnishing a large amount of excellent pasture and fodder for domestic animals, and as a means of keeping up the fertility of our farms when ploughed under, it deserves a prominent place in the system of rotation adopted by those who follow either a mixed or a grain growing husbandry. As a general rule every acre of winter grain should be "seeded down," as it is termed, to clover in the spring, to remain for at least one, and not more than three years as a meadow pasture.

The soil best adapted to the clover plant is that of a somewhat clayey character—such as will produce the best wheat crops. Any soil which will grow wheat will also produce clover. A deep well drained loam suits it well—on all ill drained soils it suffers much from winter killing, especially if the spring proves one of little snow and variable temperature. On light soils it needs the assistance of manure to prove profitable.

Clover is usually sown early in spring upon winter grains, and occasionally with oats and barley. With the latter it generally does well, especially if sown in good season. Upon wheat we sow in March, when the season is sufficiently advanced to do so. While the light frosts continue, the slight cracking and heaving of the soil through their action, will generally furnish a sufficient covering for the seed, though some recommend sowing later and harrowing in, arguing that this process not only covers the clover more perfectly, but benefits the wheat crop. When seeding with spring grains, it is usually sufficient to pass over with the rollers, sowing the clover seed after the last harrowing.

The benefit which clover derives from plaster seems a "fixed fact in agriculture," not needing special remark in this connection. Hence they have been associated in the minds of most of our farmers as partners in the product desired, and the one usually accompanies the other. We think, however, that the sowing of plaster upon wheat fields seeded to clover is frequently deferred too late. The clover needs its aid, when it first comes up, besides if sown late, the wheat is injured by its causing too rank a growth of straw at the time when the grain is forming. We should sow plaster as early as April, if possible, upon wheat, and upon spring grain seeding as soon as it fairly appeared above the ground.

The amount of seed necessary for an acre depends upon the character of the soil, but there seems no disposition to seed too heavily. Loamy soils need less than clayey, and the growth of the crop with which it is seeded, whether large or small, have considerable influence. A peck to the acre is little enough—some use more, but many less. It is poor economy to sow but half enough to cover the surface—the pasture and hay are of less value, and the saving of five dollars in seed often entails a loss of five times that amount in the product.

There are many varieties of the clover plant, but those most grown are the common red, or Northern clover, of which we believe there are two varieties—the large, or pea-vine clover and the medium—as it is called, perhaps from its lying between that and the Southern or small variety. The medium kind makes the best hay and is equally valuable as a green manure.