

you stop to consider that the effect of a turned-under green crop upon the soil is direct, whereas the application of manure resulting from the feeding of this same crop to an animal amounts indirectly to virtually the same thing. In both instances, you are applying or turning under a crop.

### Dense Growth Essential

In growing these green crops, there are one or two points which must be carefully considered if the maximum results are to be obtained. In the first place, do not be niggardly with the seed. A farmer planting rye for a crop of grain would sow only a bushel to the acre, but when you are planting rye for a green crop, it is much better to plant not less than three bushels per acre, and preferably, four bushels. There are two reasons for this apparently heavy seeding. First, when four bushels of seed are planted, the rye comes up thick and makes a shorter, but denser, growth, so that when plowing time comes you have the maximum amount of plant tissue to turn under. Secondly, this thick stand of rye takes possession of the soil and chokes out practically all weed growth.

The problem of choking out the weed growth is not very difficult with a green crop in the spring, but it is of the utmost importance in growing a summer green crop, such as cowpeas or buckwheat. At this period of the year, heavy growing weeds, such as pigweed and crab grass, are rampant, and unless you secure a heavy and uniform stand of cowpeas or buckwheat, the weeds will obtain a secure foothold and ripen their seeds, which is precisely the very thing you do not want. Therefore, plant three bushels of cowpeas per acre as against the usual bushel and a half of ordinary farm practice, or, if you are growing buckwheat, follow the same general plan of sowing twice as much seed as would be planted for a crop of grain.

In the same way, in growing green crops, it is necessary to fertilize much more heavily than would be the case if you were growing these crops for grain. Too much fertilizer will reduce the grain crop by throwing all the growth into the stalk, whereas, for our purpose, it is the stalk and leaf growth that we want; we are not interested in the grain. Therefore, in green-crop growing, sock on all the fertilizer you dare without burning up the crop. This fertilizer goes into the leaf and stalk of the plant, which, on rotting, fills

the soil with organic matter high in available plant food so that this soil, when skimmed off and applied to your greens, is exactly right for the growth of the fine turf grasses.

It is amazing, the amount of organic matter that is added to the soil when a properly grown green crop is turned under. Most people, when they look at a crop of rye or cowpeas being turned under, see only the crop above ground, and, of course, that part of the crop is obvious and not to be sneezed at. But not one person in 5,000 ever stops to think of the *root growth* that the crop has made. If you wish to obtain an adequate idea of the amount of organic matter added to the soil by the root growth of a green manure crop, take a spade into a field of rye ready to turn under; carefully dig up a chunk of the soil, and gently shake the soil from the roots. The amount of root exposed is truly amazing, and all the more so when you consider that every square inch of the soil to plow depth over the entire field is clogged with this same root growth.

In conclusion, it may be said that the easiest way to produce top-dressing material for greens consists in disking manure into a piece of ground, allowing the manure to rot, and then skimming off the top three inches. If manure is unobtainable, the same result can be obtained by the more extended process of turning under properly grown green crops—nature's own manure.

### P. G. A. Irons Out Tourney

All is serene now with the P. G. A. plans for the annual championship which is to be held at Hillcrest C. C., Los Angeles, December 2-7. Picture magnate Joe Schenck is underwriting the championship expense after the misunderstanding at La Cumbra, Santa Barbara, put the pros face to face with a crisis. Darsie L. Darsie, coast golf writer, is tournament director. The executive committee handling the tournament is composed of Willie Hunter, Lewis Scott and J. A. Patterson for the pros and W. W. Campbell, president of the southern California amateur body, Leo Barnett of the Hillcrest C. C. and E. R. Hearst, past president of the California C. C.

Five hundred of the prominent residents of Los Angeles are to serve on various committees. It is planned to sell at least 1,000 tickets at \$5 apiece for the entire play, prior to the qualifying round.