

Brown-Patch Is With Us

When we contemplate the brown-patch we say with the poet "the melancholy days have come." Surely we are in for it for a few months, and apparently all we can do about it is to be on the job and use the few means we have at hand to keep the damage down to the minimum. Bordeaux still seems to be our stand-by. At least we feel a little more comfortable with it than without it when it comes to the control of the large brown-patch. Since the Green Section has been to a considerable degree responsible for suggesting the use of Bordeaux for the treatment of large brown-patch, it feels it a duty to urge the conservative use of this fungicide. A light dusting or spraying of the greens at times when experience indicates that the disease may be expected is all that can possibly be helpful. Of course the occurrence of brown-patch can not always be successfully forecast, but an observant greenkeeper will hit it a large percentage of the time. Bordeaux must be on the leaves of the grass to be effective, but only a small quantity is required. When applied with an efficient duster, $\frac{1}{2}$ pound to 1,000 square feet is ample. Heavy and frequent applications of Bordeaux are very likely to cause copper-poisoning of the turf, and this is much worse than brown-patch itself. So please consider this the Green Section's warning, and be sure to heed it.

There is little real evidence that Bordeaux is useful in the control of the small brown-patch—certainly there is none from the work done at Arlington—but there are two important things to do in case either the large or the small brown-patch attacks the greens. (1) Water liberally, early in the morning if you can, but water anyway. (2) Apply a light dressing of well-screened compost, not to exceed 1 cubic yard to 5,000 square feet of turf, and add to this, before applying, 5 to 7 pounds of ammonium sulfate. After applying the compost-ammonium sulfate mixture, water in thoroughly to avoid burning. The reason for this treatment is to stimulate the development of the dormant grass buds to replace the plants killed by the disease. If new leaves are not brought into evidence soon after the brown-patch kills the old ones, the stems and roots will die. Creeping bent responds more quickly to restorative treatments than do the other turf grasses that are susceptible to brown-patch. This is because it has an abundant supply of buds on its submerged stems or runners, and all these need is a little stimulating to bring them into growth.

In a nutshell, we have only the above suggestions to offer for the treatment of brown-patch. There is being much said regarding certain organic mercury compounds, but as yet the Green Section lacks evidence of their efficacy. It wishes all of them success but must withhold judgment until more data are available.

An Inexpensive Drainage System.—"An interesting problem in drainage was taken care of on our No. 5 hole. On the fairway just in front of the green a portion located at the foot of a small rise was so saturated with moisture that in walking across one sank into the soggy soil to the depth of an ordinary low shoe. We dug a ditch 2 feet across and 2 feet deep along the upper edge of the fairway, which we filled with stone. The total length of the ditch was about 50 feet. Starting at the middle of this ditch, and using it as a T, we laid a 4-inch land-tile drain across the

fairway. The stone drain catches the water and seepage. The tile across the fairway carries off the water. The effect produced was so cheering that we put in three systems across that particular fairway. We have had such a success that all of the players have congratulated me, and the work done has made them very happy. The system has been tested out by several very hard storms, and the drains are working splendidly. This is a comparatively inexpensive way of doing it, and it certainly brings results."—*Elliot D. Pierce, Greenkeeper, Kittansett Club, Marion, Mass., May 21, 1924.*

Suggestions for Making Compost

By R. A. Oakley

Regardless of whether you are contemplating any unusual work on your greens this summer or fall, you will need a liberal supply of compost to put and keep them in first-class condition. If you are to do much new sowing, or if you intend to use the vegetative method of planting creeping bent this fall, you will need a very considerable quantity of compost. The time to start with your preparation is now. Don't put it off because you do not have just the kind of manure or other organic matter you think should be used. Don't put off the making of a compost pile just because you think the only manure you can get at a reasonable price is coarse and full of straw and weed seeds. Both weed seeds and straw will decay in a relatively short time, if properly treated. The kind of treatment to give compost is important. In some respects quite as much so as the materials included in it.

If a supply of good manure or mushroom soil is available, the question of making compost is a simple one. If neither of these materials can be had, then the problem is, How can a good quality of compost be made without them? Straw and coarse manure are commonly available where well-rotted manure or mushroom soil are difficult to obtain. It is intended here to suggest a means of treating straw and coarse manure so that they may be converted into very valuable material for top-dressing greens or covering bent stolons at the time of planting. THE BULLETIN for February, 1922 (page 36), contains a brief discussion of a method of rotting straw quickly and thereby rendering it suitable as an ingredient of compost. The method was devised by the Rothamsted Experiment Station and may be described briefly as follows: To each ton of dry straw used in the making of compost add 100 pounds of ammonium sulfate and moisten thoroughly. Keep the straw moistened until the fermentation or rotting is well under way, and then mix with loam or clay loam as in the making of compost with manure. The whole mixture then should be kept moist and worked over occasionally. The Rothamsted investigators advise the addition of lime to the ammonium sulfate and straw, but experiments conducted here in a crude way indicate that lime is not necessary, and where compost is to be used on putting greens, especially on bents or fescue, it is not desirable. Since the publication by the Rothamsted Experiment Station of this method of converting straw and similar vegetable matter into a form approximating barnyard manure, at least one concern in England has attempted to commercialize it. Doubtless the method used by this concern involves some modifications of the simple one here described.