

Friday, January 7, 1927, 2.00 P. M.

Parasites of the Japanese Beetle.....Mr. J. L. King, Riverton, N. J.  
 Why the Green Section?.....  
 .....Mr. Alex Pirie, President, Professional Golfers Association of America  
 Course Conditions in the Northern Latitudes.....  
 .....Major C. A. Tregillus, Green Section of the Royal Canadian Golf Assn.  
 Some Observations on Construction and Maintenance Problems.....  
 .....Mr. H. K. Read, Philadelphia, Pa.  
 Observations on Turf Grass Experiments at Gainesville, Fla...Mr. H. L. Westover

Saturday, January 8, 1927, 10.00 A. M.

Progress in Brown-Patch Control.....Dr. John Monteith, Jr., Washington, D. C.  
 Southern Conditions.....Dr. Thomas P. Hinman, Atlanta, Ga.

### QUESTIONS AND ANSWERS

All questions sent to the Green Section will be answered in a letter to the writer as promptly as possible. The more interesting of these questions, with concise answers, will appear in this column each month. If your experience leads you to disagree with any answer given in this column, it is your privilege and duty to write to the Green Section.

While most of the answers are of general application, please bear in mind that each recommendation is intended specifically for the locality designated at the end of the question.

**1. Relative value of commercial humus and other forms of humus.**  
 —Our attention has been called to your caution against the use of commercial humus. We have tried humus on our turf for years with great success, and have come to consider that commercial humus of good quality is one of the most valuable fertilizers obtainable. In our judgment it has no superior when mixed with a little ammonium sulfate and used on turf. Will you be kind enough to indicate to us your objections to the use of commercial humus? (Ohio.)

**ANSWER.**—Our experiments and the experience of golf clubs indicate that one ton of well-rotted manure is worth about five tons of commercial humus, measured by the effect produced on turf. Furthermore, in many cases commercial humus has been found to be injurious to turf. By commercial humus we mean the more or less well-aerated peat such as the surface soil on peat farms. This commercial humus is often reinforced with chemicals. There are various other sources of humus besides peat, namely, decayed sod, decayed roots in the soil, leaf mold and, most important of all, barnyard manure. The only case where we can see that a golf club can afford to use muck or peat is where it has deposits of it on its course then they can well afford to use this material in the making of compost. As for the benefits you have experienced from the combined use of commercial humus and ammonium sulfate, it would of course be impossible to determine whether the benefits were due to the ammonium sulfate or to the humus unless these two materials were used separate from each other and on adjoining pieces of turf.

**2. Fertilizers for putting greens and fairways.**—Kindly give us your experience, if any, with \* \* \* Fertilizer, made by \* \* \* Co. Their salesman advises that it is far superior to any other fertilizer, being better even than bone meal. (Pennsylvania.)

ANSWER.—There are countless mixed fertilizers on the market and it is simply out of the question for us to experiment with all of them. The net result of an enormous amount of work that we have done on putting greens is that the best of all fertilizers is either ammonium sulfate or ammonium phosphate combined with topdressing. For fairways, barnyard manure, everything considered, is usually the best fertilizer. In the absence of barnyard manure we should prefer organic fertilizers such as bone meal, cottonseed meal, fish scrap, and tankage, although good results may be expected with many of the commercial mixed fertilizers.

**3. Can brown-patch be spread by mowers?**—From this season's experience with brown-patch I am convinced that it is very contagious and can be carried from one green to another by mowers. Is this true? (Illinois.)

ANSWER.—On page 137 of the June, 1926, number of THE BULLETIN there is a diagram of the fungus growing within the leaf tissue. If such an infected grass blade is placed on healthy grass under favorable conditions the fungus will grow out from it and attack near-by grass blades and in this way start a new brown-patch. Such blades are used in our experimental work to make artificial inoculations. Under golf course conditions such infested grass undoubtedly accounts for the spread of the disease to some extent. It may be carried on mowers or other machinery or even on the feet of players. The success of attempts to prevent the spread of the disease by control of these means of inoculation will probably always be difficult. Daily inspection of all greens for evidence of infection is imperative and will not be neglected by any club desiring to reduce damage to a minimum. Delay of even a half day in the application of proper fungicides may be disastrous.

**4. Depth of top soil necessary for a sandy subsoil.**—Our ground is very sandy. Would you advise building a green over more than 3 inches of top soil? (Minnesota.)

ANSWER.—We think you will get entirely satisfactory results with 3 inches of a moderately heavy loam on top of sandy soil. The sand ought to provide ample drainage, and you can control the fertilizing of the grass entirely from the top.

**5. Tile drainage for built-up greens.**—A question has arisen as to whether it is necessary to use tile drainage with a built-up green. Our soil is rather heavy. (Louisiana.)

ANSWER.—We do not consider tile drainage necessary for a built-up green—that is, a green which is elevated both in front and rear above the surface level. Where the natural soil drainage is ample, it is the best drainage obtainable, even on relatively heavy soil.

## **MR. SOUTHERN GREEN COMMITTEE CHAIRMAN:**

One of the criticisms that the Green Section has met with during past years is that it is not doing much for the South. This criticism, however, is not entirely justified. It is true that, with funds available, the Green Section has not been able to conduct as extensive experiments with Southern turf grasses as it desired, but much of value is being accomplished along this line. So far as The Bulletin is concerned the South has come in for its full share of attention, as indicated by the following statistics:

During the past year 46 signed articles were published. Of these articles 34 were of general interest, 5 of interest to the North only, and 7 of interest to the South only.

Of the 55 short paragraphs, news items, and editorials published, 6 were of interest to the North; 46 of general interest, and 3 of interest to the South.

The Meditations of A Peripatetic Golfer and Letters to Mr. Green Committee Chairman have all contained meat for those who were looking for it.

Four Southerners who are exceptionally able green committee chairmen were asked to deliver addresses at the Annual Meeting of the Green Section.

Of the 86 Questions and Answers published in The Bulletin during the past year, 37 applied to the North; 5 to the South, and 44 to all alike, but as the Green Section has over 800 Northern members and only just over 100 Southern ones, this ratio will be found to be proportionate to the membership figures.

The Green Section has long wished to help you more than it has so far been able to. These statistics from The Bulletin are only the expression of a determination to help you to the fullest extent possible.

It is almost certain that our experimental work in the South will soon be much more extensive and of greater value than in the past.

The South has not been forgotten by the Green Section.

**THE GREEN SECTION.**