

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. Effect on ammonium sulfate of water of high lime content.—

We are using a city water supply having about 22 grains hardness per gallon. Most of this hardness is due to lime and we are wondering whether this lime will offset the ammonium sulfate we are using. We have a power sprayer outfit capable of treating a green with ammonium sulfate in a very short time, and we are planning to so treat the greens every three weeks, using a light topdressing of compost and ammonium sulfate in between. We believe the statement has been made in *THE BULLETIN* that if ammonium sulfate were applied every week a soil such as found in this part of the country would be given a sufficient degree of acidity within one year. We are of course very anxious to eliminate clover in our greens and to be able to reduce weeding to a minimum. (Indiana.)

ANSWER.—Where there is lime in the water it necessarily slows up any process of acidifying the soil, but with the continued use of ammonium sulfate headway will nevertheless be made. It is impossible to tell in advance how long it will take to acidify a given soil to such a stage that white clover will disappear; but the progress being made in acidifying soils can well be watched by means of soil-testing outfits now on the market and which are not expensive. Apart from the question of acidifying your soil by the use of ammonium sulfate, the fertilizing value of the ammonium sulfate will not be decreased at all by the use of your water of high lime content.

2. Grasses for conditions of extreme dryness.—

We should be glad to receive your suggestions for turf grasses for extremely dry conditions. We have found that buffalo grass appears to be one of the most suitable grasses under our conditions, but we can not find that seed of it is on the market. (Alberta.)

ANSWER.—The turf grasses of the prairie regions of Canada and the United States are buffalo grass and grama grass. Both of these are excellent for the fairways and rough on golf courses, and for lawns, but are not well adapted for putting greens. We do not know of any grasses adapted to putting greens that will thrive in the prairie regions unless they are irrigated. Seed of neither buffalo grass nor grama grass has ever been on the market and they must be propagated by transplanting, unless arrangements can be made for gathering seed in the field. Furthermore, seed of buffalo grass is usually very low in germination.

3. A clover green.—

Would it in your opinion be practicable to attempt to grow all clover greens? We are advised that some very excellent greens in California have been obtained in this way. Our

reading of THE BULLETIN and our advice from experts have been to discourage clover wherever possible. In spite of our treatment we have one or two greens that run very strongly to clover, and we are wondering if it would not be wise to encourage them in this direction and try for a complete clover green. (Utah.)

ANSWER.—For the highest type of greens white clover is not a desirable plant. However, in regions where the soils are not acid and it is difficult to combat white clover, a good many clubs get along fairly well with putting greens made up of a mixture of bluegrass, redtop, and white clover. With good treatment these make fairly satisfactory greens, and where the soils tend to be rather strongly on the alkaline side it is perhaps wise to maintain such greens. A complete green of white clover however can not be secured. For some reason white clover will not maintain itself as a pure culture.

4. Fairway grasses for and treatment of sandy soil.—What grass would you advise for use for fairways on a very sandy soil? (Illinois.)

ANSWER.—If your sand is unusually poor it is almost impossible to get good turf. In such cases it is necessary to topdress the fairways, or at least their important parts, with a rather heavy loam. Frequent light topdressings should be made until you get a surface that will grow turf. It is well to add a little manure to the topdressing, not to exceed 25 percent. Very wonderful fairways have been made on sandy soil at the Pine Valley Golf Club, Clementon, New Jersey, in this manner. The plants that will give best results on sandy soil are bent grass and white clover.

5. Getting rid of moss.—On certain places of our course it is desirable to get rid of some moss and we have been told to lime the ground in order to sweeten it. Is it true that turf, particularly under trees, can be better cured of this trouble by fertilizing than by applying lime? (Connecticut.)

ANSWER.—Lime is not a cure for moss. Our experimental turf plots to which we have applied lime liberally have more moss than any other plots in the series. Good nitrogenous fertilizers will in most cases eliminate moss entirely or keep it decidedly in check.

6. Acidifying soil before planting.—We are building four new greens to be planted with bent stolons. Would we gain anything in the way of fertilizing and acidifying the soil of these greens by putting on ammonium sulfate in large quantities before planting? (Indiana.)

ANSWER.—You can save some time in acidifying your soil by applying ammonium sulfate to your putting greens before seed or grass is planted. We would suggest that you use at least 10 pounds to 1,000 square feet and mix it thoroughly in the top two inches of the soil, and then water thoroughly.

7. Use of creeping bent stolons from nurseries that are producing seed.—We are planning to use stolons from a creeping bent nursery planted last summer and which is now going to seed. Is the material too old for the purpose? (Massachusetts.)

ANSWER.—Information on this subject is given in THE BULLETIN, Vol. IV, pages 163 and 206. The evidence indicates that stolons from an old nursery may be used successfully but that they will need to be planted more thickly than in the case of stolons from a young nursery.

MR. GREEN-COMMITTEE CHAIRMAN:

Various methods have been suggested for the use of bichlorid and other chemicals against brown-patch.

Frequently we are asked to state the best method for applying such chemicals to greens.

This problem is like that of passing judgment on whether eggs are best when boiled, fried, scrambled, poached, or otherwise; it all depends on who is to eat them.

The best method for applying chemicals to greens depends largely on available equipment, condition of the turf, and other local circumstances; above all, on the choice of the greenkeeper.

For those greenkeepers (may their tribe increase) who topdress frequently and prefer to apply their fertilizer and bichlorid either with the heavy topdressing or with just sufficient compost to give bulk enough to spread easily, this method is best—if the application is uniform.

For those who are firm believers in proportioning machines (and can make them work) this method is best—if the application is uniform.

For those who swear by the barrel-sprinkler device, or the good old-fashioned sprinkling can, this method is best—if the application is uniform.

For those who choose elaborate spray equipment, this method is best—if the application is uniform.

For those (their ranks are growing thin) who are ever ready to argue in the cause of dust-guns, this method is best—if the application is uniform.

The important thing is to put the material on evenly, so that all parts are equally protected without any excess in spots to produce "burning."

In other words, quibbling about methods of application does not control brown-patch.

We know the fungus and grass have no preference as to method; but many greenkeepers are most decided, and frequently vociferous, in their preference.

We have tried them all. Each method has its advantages and disadvantages; but if properly used, any of the above will give good results.

The wise greenkeeper will use more than one method and will be able to choose that which at a particular time best suits his requirements.

THE GREEN SECTION.