

Grau Answers Turfgrass Questions

From many courses Dr. Fred F. Grau gets and answers the problems handled in this monthly department of **GOLFDOM**. Superintendents and club officials can avail themselves of this valuable service without charge or obligation. Address your question to **Grau Queries, GOLFDOM, 407 S. Dearborn, Chicago 5, Ill.**

IDENTIFICATION — that is a familiar word. Most of us have had to identify ourselves at one time or another — when cashing a check, obtaining a passport, applying for hospitalization or when exceeding the speed limit. A person usually has no difficulty in identifying himself.

When it comes to identifying others, that is something else. Errors in identifying other persons are all too common among witnesses.

When the identification is of a thing like turf disease, where differences are even less distinct, the chances for error are very great indeed.

Few of us have been trained to observe carefully. Much time can be saved if we know what to look for. The family doctor does not have to conduct complete diagnostic tests for many common ills, because he knows a few definite symptoms which will provide a pretty positive identification. Superintendents, too, can learn the distinct differences to look for in identifying grasses and weeds, insects and diseases.

Proper identification of these things is very important.

Know how to recognize seed and planting material to be sure you get what you pay for. Proper identification of disease is essential because different treatments are used for different diseases. Learn to recognize injury by insects; insect damage often is hidden from the surface so we are likely to identify it incorrectly.

For instance, a friend of ours was applying a new specific weedkiller on crabgrass. His complaint was that the crabgrass just kept on growing. When properly identified, the weed was quackgrass which requires an entirely different chemical and technique.

On many occasions over the years I have seen turf being treated with fungicides for dollarspot. The trouble kept on getting

worse until it looked like the turf was getting dry. Water was poured on but the turf kept on going downhill.

When properly identified, the trouble was sod webworms and cutworms. The application of a good insecticide cleared up the trouble and in a week the turf was beautiful again. Many more similar examples could be cited.

In addition to these things the superintendent must learn to identify the materials he buys to apply on the turf. Many chemicals are weed-killers, but every weed-killer does not kill every weed. In fact, most of our modern chemicals are selective. We must learn to look at not only the brand name, but also at the ingredients. There are many formulations of 2, 4-D, di sodium methyl arsonate, phenyl mercury, all sold under different brand names. It is the chemical, not the brand name, that tells you for what purpose the product should be used.

A superintendent learns to identify equipment, too. There are different makes of tractors, and greens mowers and aerating tools. The superintendent must learn which one is best suited to his needs and to specify that particular brand when he buys.

A knowledge of equipment and supplies is as necessary as a knowledge of the basic principles of turfgrass culture. Publications like **GOLFDOM**, exhibits at the Golf Course Superintendents' annual conference and show render a valuable service in acquainting superintendents and officials with what is available for course maintenance.

Proper identification is important not only to superintendents, but also to Green Committee chairmen and club officials. These people must learn to identify the causes for turf failures. It is not wise to attribute every turf failure to the charge that "the superintendent doesn't know his

job." There are various causes for turf failure over which the superintendent has no control.

Severe extremes of weather may be more than any man can cope with. This was so true in 1955.

There may be "built-in" problems, mistakes in design and construction that must be corrected before it is possible to maintain grass.

Sometimes the superintendent knows what should be done but cannot do it because of lack of money, equipment, materials or labor.

Before blaming any one person it is well to study the situation to be sure the cause for failure has been identified correctly. Almost as good as knowing all the answers yourself is to know someone who can help you find the answers and to help you identify troubles in time.

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Q — We have one green that goes out every summer. We can't seem to hold it because all the drainage is to the center and all the water spills out into the center of the approach. We've been advised to rebuild but the members don't like to play on temporary greens. What would you suggest? (Pa.)

A — I would say — "Rebuild." The temporary inconvenience to the members would be tempered by the lasting pleasure of having a good green all year long. Your chairman can help you put this across.

Be sure to build good drainage into the new green. Use tile or a rock base. The subgrade should be contoured to avoid pockets that hold water. The topsoil should be removed from the old green and mixed off the site with sand and other needed materials while the base is being remade.

Then replace the top and contour so the surface drainage operates in at least two to three directions with no pockets to hold water and "scald" the turf.

To put the green into play in the shortest time, prepare in advance a sod nursery of a good strain of bent so that the sod can be transferred as soon as the green is ready. Consult local authorities for specific details on lime and fertilizer in the seedbed and other points not covered here.

Q — We lost a considerable amount of bent after using 2,4-D to control silver crab on greens. Is it possible that the 2,4-D injured the bent? We had exceptionally heavy rain shortly after the material had been applied. (N.J.)

A — 2,4-D is not one of the materials I would recommend for controlling silver

crab (goosegrass) on bent greens. It is quite possible that the use of this material weakened the bent.

Damage is particularly likely to occur when the 2,4-D is washed down to the bent-grass roots. Under other circumstances the damage might not have been so severe.

Since the weather can be so unpredictable it is less risky to use one of the newer and safer chemicals such as di sodium methyl arsonate. This, too, must be used with care but the margin of safety is much greater.

Q — This past summer we had a great deal of trouble with disease. There is quite a heavy mat on the greens. However, the grass seems to be recovering and making new growth this fall so I wondered if we should go to the trouble and expense of removing the mat. (Ill.)

A — It is possible that the grass will recover in spite of the mat, but the new growth will have two strikes against it for the next year because it will be growing on top of trouble which will hide the potential trouble and give a false sense of security.

It would be much better to remove the mat either by multiple aerifying, hand raking or vertical mowing.

Set plugs of new grass close-together in areas destroyed by disease, and follow with a light topdressing to smooth the surface. In the future it would be well to modify your management practices to include treatment to keep thatch and mat under control.

Q — I have heard that not all kinds of sand are good to use in topdressing. What is the proper kind of sand to use? (Canada)

A — You should use a fairly coarse grade of sand; not the fine plaster sand which sometimes is used. The sand should be as coarse as possible without the individual grains interfering with the putting quality of the green.

The quantity of sand used in topdressing is just as important as the quality. There should be a substantial proportion of sand to provide porosity—about 50 per cent to 60 per cent sand by volume is good for topdressing.

The total clay content of the finished material should be below 10 per cent.

Q — We have very sandy soil in our greens. Could we improve the situation by topdressing with peat? (Mich.)

A — The good drainage provided by sandy soil is considered very desirable. If you wish to add organic matter in the form