

Superintendent Chats With Champion



Elmer Border, superintendent at the Olympic Country Club, in San Francisco (left), chats with Jack Fleck, the Open Champion, as they inspect the Open Trophy. Elmer did a fine job in preparing the course for the 1955 Open Championship. He gives credit to members of the various committees for excellent teamwork and says they were a great help to him.

SAND IMPORTANT IN TOPDRESSING MATERIAL

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THERE may be a difference of opinion about topdressing greens, but when topdressing is used there is full agreement that the soil mixture be only the best. Plant growers always want a light, well-drained soil having a liberal amount of good organic material. It is sharp sand that lightens soil and makes it easy to work the material in and around the grass.

Soils high in sand not only drain readily but are less likely to bake. Such soils are less subject to compaction.

The reasons for applying topdressing on greens are to level the putting surface, to provide fresh material for the stems of the grass and often to improve the existing soil. The topdressing material, to be effec-

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tive, has to be worked down in and around the stems so that it makes contact with the soil. This is usually done with a steel mat and with rakes.

Greens having ideal soil high in sand content produce a turf with a spring and provide an ideal surface for holding the ball coming onto the green. Seldom is the turf on the green injured severely by the dropping of the golf ball if the topsoil in the green contains a high proportion of sand. Where there is injury to the turf there will be rapid growth in a sandy loam that will heal the injury.

Soils selected for the topdressing material that are classified as a silt loam are usually lacking in sand. Topdressing materials rated as good have sand readily visible.

QUESTIONS AND ANSWERS

QUESTION: We have been told that fertilizers resulting from urea-formaldehyde reaction would be valuable to turf growers. However, it seems to us that the prices are completely out of reason. Can we afford to pay from \$400 to \$500 a ton for this kind of fertilizer?

ANSWER: The answer to this question depends upon how much premium you can afford to pay for a fertilizer that releases nitrogen slowly. Urea-formaldehyde reaction products yield a fertilizer containing about 38 per cent nitrogen. Thus a ton contains 760 lbs. of nitrogen. At \$500 per ton you will pay a little more than 65 cents per pound for nitrogen. This should be compared with the cost per pound of

nitrogen in other fertilizers containing slowly available forms of this element.

This cost is considerably greater than that of the quickly available nitrogen contained in ammonium nitrate or ammonium sulfate. In this form nitrogen sells in some areas for less than 15 cents per pound. As stated in the beginning, the answer to the question depends upon the worth of slowly available nitrogen to your particular operation.

QUESTION: Are dieldrin and aldrin suitable for the treatment of soil-inhabiting insects?

ANSWER: Aldrin has been used to some extent in the control of such pests as sod webworms and cutworms. These insects live in burrows under the turf but feed on the leaves. Aldrin is a very quick acting material and is highly effective at rates of 6 oz. of 25 per cent wettable powder per 1,000 square feet.

Dieldrin is gaining favor as a residual soil insecticide for control of beetle grubs. Dieldrin has been found to be a long lasting material and it appears to retain its effectiveness even in alkaline soils. Six pounds of technical dieldrin per acre is the recommended rate of application.

QUESTION: What is chelated iron?

ANSWER: "Chelate" (pronounced keelate) means claw. The chelate, or claw, is a type of large organic molecule with a peculiar arrangement of atoms. Such a molecule is able to hold onto a metal such as iron, zinc or manganese. EDTA is the abbreviation for a compound (ethylenediamine tetraacetic acid) which is used as the claw for holding iron. Chelated iron will stay in a water soluble form in the soil and is available to the plant. Other iron compounds become insoluble in the soil and are not available to the plant.

The process of chelation is relatively new in the field of plant nutrients. Thus far chelated iron compounds work better in acid than in alkaline soils. Unfortunately most chlorosis on grass caused by iron deficiency occurs in alkaline soils. It appears likely that in the near future "claws," which will hold iron in the soluble form, even in alkaline soils, will be developed.

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QUESTION: How often are soil tests necessary?

ANSWER: Soil tests should be made by state laboratories every three or four years in order to keep up with the nutritional status of your soil. If something appears to be wrong in the growing of your turf, perhaps tests should be made more frequently. If you have a quick soil testing kit available it probably should be used much more often because it will allow you to get some indications more frequently when you may have something lacking in your soil.

QUESTION: It is practical for a superintendent to make his own quick soil tests?

ANSWER: With some practice almost anyone can become quite proficient in making soil tests. The accuracy of these tests will depend upon the freshness of reagents that the user has available and, of course, the value of the test will depend on a correct interpretation of the results obtained. It is well to send samples to a state laboratory frequently so that one may check himself and be sure that he is not being misled by his own soil tests.