Test Green Soil

If you're not sure of the quality of your putting green soil, it can be simply tested. That is by taking a sample, saturating it, balling it up tightly and letting it dry thoroughly. If it readily crumbles, the texture is good. If it has to be thrown against the side of a building or hit with a hammer to break it up, you have compaction.

It does no good to make a soil test if the ingredients are dry. There must be a normal degree of moisture and a normal degree of compaction because these simulate the field conditions with which you are concerned.

Drainage Test

There is a second test for soil drainage that is somewhat more complex, but you may want to try it to find out how quickly the soil on your greens is carrying off excess moisture. It requires the following apparatus:

1. A tin can with the top cut out;
2. A second can, same size, with both ends cut out;
3. A square of sash screen larger than the bottom of the can;
4. A rounded piece of sash screen, just large enough to fit in the can;
5. A beaker or coke bottle;
6. A pedestal to hold the beaker when it's upside down;
7. A funnel that is slightly larger at the mouth than the bottom of the can;

Place the tin can that has both ends out on the square of screen, with the screen resting on a table. Fill the can with the soil mix to be tested (the mix should have average moisture content).

Simulate Compaction

Then press the mix down with the thumbs until there is what should be a normal degree of compaction. Place the insert screen on top of this mixture (to prevent eroding the soil as the water pours in). Then place the can, with both screens held in place, on top of the funnel. Next place the funnel on the tumbler, with everything secured in an upright position.

Place the beaker upside down on the pedestal (holding the water in with the thumb) and allow the water to flow out slowly until the level of the water is at the beaker mouth.

Time the accumulation of water into the tumbler when the flow starts, first at a one-inch level, and at a two-inch level, if desired. This will give you a good idea of the hydraulic conductivity of the saturated mixture, and, of course, tell you approximately how fast your greens dry.

Standards of Drainage

The USGA green section has suggested standards of drainage. There are testing stations that will make very accurate tests of your soil mixtures. If you avail yourself of these, you can determine with a great degree of certainty just how dense or how porous your green soil mixture should be.

My reason for suggesting tests and experiments is because that I feel we are (Continued on page 64)