

face is removed at each time. Grasses that are allowed to grow taller, that is two inches or more, may be allowed to go for a considerable length of time between mowings. No more than one inch of leaf surface may be removed from a two-inch turf without severe damage. On the other hand, a one-inch turf will make about as much growth as a two-inch turf but in the case of a one-inch turf not more than about 1/2 inch of leaf surface may be removed without shock to the plant. Therefore, on closely clipped turf it is necessary to mow more frequently than on turf that is allowed to grow taller.

This principle is illustrated in golf course maintenance by the frequency of mowing greens and fairways. The golf course may have either bentgrass or bermuda greens, and the fairways may be exactly the same grass but maintained by different standards. Everyone knows that the putting green must be mowed at least three times a week, and preferably every day. On the other hand, fairways are sel-

dom mowed oftener than three times a week, and on many golf courses they are mowed only once a week.

For Frequent Mowing

It is believed that frequent mowing adds to the quality of the turf. It causes the grass to stool more readily and, therefore, there is a denser population of grass leaves making up the turf. In turn, there is a greater amount of leaf surface available for the manufacture of food. If a turf is mowed less frequently, the grass has a tendency to grow taller before branching to form more leaves, and when it is cut, a relatively large portion of these leaves is removed. Only stems with relatively few leaves remain, the turf is thinned out, and is not so dense nor compact. Height of mowing is important, but if one speaks of height without taking into consideration the frequency of mowing, then his reasoning is apt to be in error because the two factors go together in the formation of a good, healthy turf.

Nematodes in Greens in Rhode Island

J. Troll and Dr. A. C. Tarjan reported on the presence of root parasitic nematodes in golf-course greens in Rhode Island in the May 15, 1954, issue of *Plant Disease Reporter*. They have found that a number of samples of turf submitted to the Rhode Island Experiment Station for disease diagnosis during the last two years contained large populations of nematodes considered to be plant parasites.

Following these findings, they made a survey of forty-one putting greens from seventeen golf courses in Rhode Island. Both root and soil samples were selected from sections of greens where definite symptoms of chlorosis and/or dieback of grass blades occurred. Some of the patches contained bare areas where plants had died, while others were not dead but were somewhat chlorotic. Close examination showed that there were dead blades of grass interspersed with living, healthy blades. This condition could not be attributed to any

of the known fungi which attack grasses in the New England area.

Tylenchorhinchus

Thirty-one genera of nematodes were found in the samples from these forty-one greens; ten of these genera are known plant parasites, while eight more of the genera are suspected plant parasites. The most widely distributed plant parasitic nematodes which were found in this survey were the stunt nematodes of the genus *Tylenchorhinchus*.

This survey is significant in that it demonstrates that many plant parasitic nematodes do exist in golf greens, and the conclusion may be drawn that they are responsible for many of the unhealthy symptoms frequently observed on golf greens and which cannot be attributed to diseases. It has been assumed that nematodes were of no great importance on grasses. The results of this survey indicate that this assumption may be false.