It was pointed out that any system regardless of size is only as good as the man that operates it.

Roy Nelson, a Director of the National as well as the immediate past President of he National, presented a Special Citation in the form of a plaque to Ted Woehrle for his recognition and his profession during the 1963 Western Open Golf Tournament. The Citation reads as follows:

## SPECIAL CITATION presented by THE GOLF COURSE SUPERINTENDENTS ASSOCIATION OF AMERICA

in recognition of

outstanding public relations efforts in connection with publicity gained for the superintendents profession during

The 1963 Western Open Golf Tournament

The Beverly Country Club, Chicago, Illinois presented at the 1963 Annual Meeting

of the Association in Philadelphia, Pennsylvania. Signed: Lawrence G. Mattei, Chairman

Public Relations and Awards Committee Signed: Roy W. Nelson, President

Golf Course Superintendents Association of America

Al Johnson reported that Ray Didier is recovering from overwork and should be improving soon. Ray Murphy is also suffering from a heat stroke. We wish them both a speedy recovery and hope to see them up and around shortly. For further details contact Al Johnson, TA 5-3809, TA 3-8682.

Golf prizes went to the following: Al Pruess – Low Gross: Ed Burke, Art Benson Jr., Ed Braunsky, Alby Staudt, Doug Jabaay, Joe Dinelli, Harold Michels, Joe Canale, Harold Fredrickson, O. Ramsey.

## TROUBLES

With the excessive amounts of rainfall and temperatures here in the Chicago area this summer we are seeing extensive damage to turf from our old enemy Pythium Blight. Pythium is perhaps the most damaging of all the Fungi that attacks turf.

The following information was taken from Circular 510, "Control Turfgrass Disease" from Pennsylvania State University, College of Agriculture, Extension Service, University Park, Pennsylvania. Herbert Cole, Extension Plant Pathologist and Houston Couch, Plant Pathologist compiled and printed the Circular.

Pythium Blight first appears as small, irregularly shaped spots ranging from  $\frac{1}{2}$  to 4 inches in diameter. At first water-soaked in appearance, the leaves soon shrivel and the color of these patches fades to a light brown.

Groups of affected patches frequently join together. At times, the shape of the affected areas resembles elongate streaks. This disease development pattern is apparently the result of the fungus being washed over the surface of the soil. The presence and pattern of these streaks are determined, mostly, by the surface water drainage flow of the area.

Diseased leaves are at first water-soaked, soft, and slimy. When walked on they mat together. If the

growth of the pathogen is checked before an entire leaf is blighted, distinct, straw-colored spots of varying size develop. In general, these spots are quite similar to those produced by the Sclerotinia Dollar Spots fungus—except that the reddish margins characteristic of the latter disease are missing.

In early morning, or if high humidity exists throughout the day, diseased leaves may be covered with the white, cobwebby, mold-like growth form of the pathogen.

**Disease cycle**—Both species of **Pythium** may live for long periods as soil inhabitants. In turf with a past history of Pythium blight, plants infected the previous season serve as the chief source of infection centers.

Further disease development from the infection centers occurs by growth of the fungus from plant to plant. Under favorable conditions for disease development the rate of this movement can be very rapid.

Long distance spread occurs by movement of either diseased grass plant parts or infested soil on maintenance equipment and by surface water.

Primarily a warm, wet weather disease, turf blighting and disease development will be most rapid and severe at air temperatures of 85° to 95°F. Minimum temperature for disease development is 68°F. As the air temperature increases to 95°F, a much shorter time is required for complete destruction of a grass stand.

Disease development on highland bentgrass is greater at high nitrogen fertility or high balanced fertility and less under conditions of low fertility.

Plants grown under conditions of deficient calcium are more susceptible than when the supply is adequate. With normal or high fertility, disease development is greater at alkaline (above pH 7) soil conditions.

**Cultural control**—In Pythium blight problem areas, a cultural program that maintains satisfactory, but not "lush," plant growth through balanced fertilizer applications, and holds the soil pH in the acid range, provides the highest level of resistance on the part of the turfgrass. However, without fungicide applications, these measures will not provide satisfactory control of the disease.

Chemical control-Good control of Pythium blights requires early diagnosis.

If temperatures are in  $70^{\circ}$  to  $78^{\circ}$ F range, fungicide applications at 5 to 7 day intervals will be satisfactory. However, if air temperatures remain in the  $80^{\circ}$ -95°F range with high humidity, it may be necessary to make applications at 3 to 4 day intervals. ZINEB - 75% wettable powder at 2 oz./1000 sq. ft. or DEXON. (Use care) or DITHANE M45 at 6-8 oz. per 1000 sq. ft.

