

Stop 14 Continued

Harlan Stoin

Internal Nitrogen Metabolism Studies - Bentgrass has been selected for studies involving the biochemical mechanism of indirect high temperature growth stoppage. Work is to be concentrated on the influence of high temperatures on bentgrass and bermudagrass nitrogen fractions including the amides, keto acids, and amino acids.

STOP 15

Tom Duff

Management Factors in Putting Quality - A device has been designed and constructed for use in determining the speed of bentgrass putting surfaces. Comparisons of bentgrass varieties and effects of several management practices have been made during the 1963 and 1964 seasons. Results, to date, show that most cultivation practices increase ball velocity. Heavy topdressing or mowing frequencies of less than 1 day reduce ball velocity.

Effects of Mid-day Watering Practices on the Micro-Climate, Soil, and Plant - The amount, frequency, and timing of mid-day watering are being compared for their effects on plant and soil cooling and plant moisture relationships. Measurements taken include air and soil temperatures, light intensity, relative humidity and wind speed.

STOP 16

Dr. Paul Rieke

Nitrogen Carriers - There are many different nitrogen carriers which can be used in fertilizing turfgrass. Ammonium nitrate, ammonium sulfate and the various sources of urea are perhaps the most widely used. Many other sources are also available. Factors which should be considered in selecting a nitrogen carrier include availability of the nitrogen to the plant, season of the year, kind of soil, cost of application, cost per pound of nitrogen, ease of handling, and acidifying effects of the carrier. Some carriers are acid-forming, such as ammonium nitrate and ammonium sulfate. Others are basic in their effect on soil pH. One pound of nitrogen as calcium nitrate is equivalent to adding 1.3 pounds of lime to the soil. One pound of nitrogen as ammonium nitrate or ammonium sulfate requires 1.8 and 5.5 pounds of lime, respectively, to correct for the acidifying effects of these nitrogen carriers.