LUNCH

Lunch facilities are available on campus at the Crossroads Cafeteria (International Building), on Shaw Lane, Kellogg Center on Harrison Road, and the Student Union on East Circle Drive

AFTERNOON PROGRAM

1:30 P. M.
Crop Science Field Lab.

STOP 9

Dr. Robert E. Lucas

Watering and Water Sources for Turf - Recommendations for irrigation call for as infrequent watering as is feasible. Water should be applied to wet the soil to a depth of 6 inches with each irrigation to encourage deep rooting. Very high maintenance level turf, such as putting greens, may require a light watering under very high transpiration conditions.

Water source for irrigations is important. Water from most wells in Michigan contains dissolved calcium carbonate. Over a period of years this may cause soil pH to rise above 7.0 which could induce micronutrient deficiency, particularly iron. Sodium, sulfates, chlorides, and sulfides also can be present in undesireable concentrations, especially from ponds and certain deep wells. It is best to have a prospective water source tested for its desirability for use on turf.

A. Total hardness of water x 0.23 equals pounds of limestone produced per one inch of water.
   Example 5 inches of water applied which contained 300 ppm. of hardness.
   5 inches x 300 ppm. x 0.23 factor = 345 pounds of limestone equivalent.
   On a 1000 sq. ft. area this example amounts to 7.9 pounds of limestone.

B. Limestone needed to correct acidity produced by one pounds of nitrogen from:
   ammonium sulfate = 5.5 pounds
   ammonium nitrate = 1.8 "
   urea = 1.9 "