Microclimatic Report Feature of Midwest Field Days

Over 200 persons attended the Midwest Turfgrass field days at Purdue University, Sept. 15-16 in spite of rain which delayed observations.

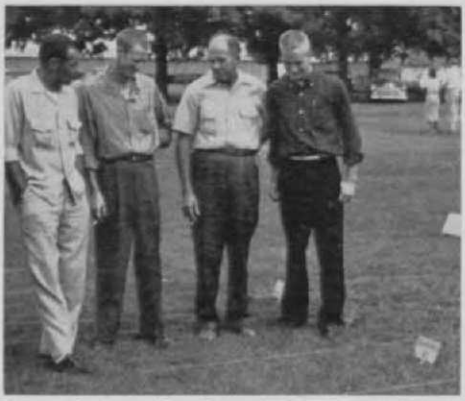
Special emphasis was placed on the intense microclimate studies being made on the experimental green by James Beard and Ed Jordan. Eleven factors have been measured since June 1. They include seven soil depth temperatures, air temperatures at three depths and relative humidity at 12 ins. Soil moisture and light accumulation were recorded for each day. Clippings taken three times weekly from three replicates of six fertilizer treatments give the yield, sugars present and NPK content. Glass-sided root observation boxes buried into the green allowed root counting and health observations. All this data will be assembled on IBM cards for machine calculations.

The utilization of nitrogen from several sources, using average for three years, was reported at the conference as follows:

Material	Rate	Average per season Lbs. N per 1,000 sq. ft.	No. of applications
Urea	light	4.2	5
	med.	6.4	4
Corn gluten	light	4.5	5
	med.	6.6	3.7
Milorganite	light	4.7	5.3
	med.	7.3	4.7
Nitroform	light	8.4	2.3
	med.	9.8	2.3
	heavy	11.4	2
Uramite	light	7.4	2
	med.	8.3	2
	heavy	11.8	2

In these tests, applications were made only after turf showed need. Many supts. would expect to use more nitrogen to maintain faster growth. Potash was applied monthly. Iron was applied 4 times as spray.

Extensive pre-emergent crabgrass control tests, using six replicates of 40 entries, showed that five different chemicals carrying arsenic used at toxic quantities were superior to non-arsenics for crabgrass prevention under conditions of test reported. Considerable experiments with new formulations, which may be on the market in 1959, were very encouraging. Calcium arsenate usually acts faster than either



Supts. observe plots showing beneficial effect of even low percentages of bluegrass in turf mixtures at Purdue field days.

PAX or lead arsenate following application. Lead arsenate lasts longer, but requires more cost and material for the initial toxicity.

See P. 104 for Ohio field day report.

Several new bluegrasses under test showed that Newport, which is being released for certification in Oregon, is resistant to stem rust and thus produces better turf in fall periods.

A new technique for isolation of individual bluegrass heads was demonstrated by a graduate student, I. Shiotani, which utilizes nutrient solutions as a media for seedhead growing.

Toro Field Day

Toro field day, annually sponsored by Toro Mfg. Corp. and Minnesota GCSA, was held Sept. 22 in Minneapolis with

Toro equipment demonstrated at field day.

about 125 persons attending the event. Supts. and others observed experiments covering the following replicated studies and demonstrations: Fertilizer system studies, leaf mulch, bluegrass strain comparisons, green strain comparisons, nitrogen rate and bluegrass fertility demonstrations.