STOP 12

Robert Carrow

Nitrogen rate studies. A comparison of quality ratings for three Kentucky bluegrass varieties receiving 4 levels of nitrogen at East Lansing is given in Table 11. Delta was severely attacked by leafspot giving poor quality turf most of the season. Common Kentucky was less affected. Windsor was more aggressive against weeds at the lower nitrogen levels in 1968 than the other two bluegrasses. Similar responses have been noted in 1969.

Table 11. SUMMARY OF 1968 QUALITY RATINGS FOR NITROGEN RATES ON THREE KENTUCKY BLUEGRASSES.
East Lansing

Averages for 3 replications on 7 dates (1-best; 9-poorest)

Pounds Nitrogen per 1000 sq.ft.	Common		Delta		Windsor	
	Quality rating	Dandelions/1000 sq.ft.	Quality rating	Dandelions/1000 sq.ft.	Quality rating	Dandelions/1000 sq.ft.
2	5.3	1087	4.7	1180	5.3	876
4	4.1	847	3.9	552	3.9	505
6	3.2	334	4.0	200	2.6	314
8	3.1	200	4.1	162	1.8	162

The nitrogen requirements of Merion Kentucky bluegrass established from sod and seed are compared in Table 12. Treatments were initiated in 1967. At lower rates of nitrogen sodded Merion gives greater competition against dandelions (Table 12). Sodded Merion requires about 2 pounds less nitrogen to give a comparable response after 2 years of treatments.

Table 12. SUMMARY OF 1968 VISUAL TURFGRASS QUALITY RATINGS FOR THE MERION NITROGEN FERTILITY STUDY.
East Lansing

Averages for 3 replications on 7 dates (1-best; 9-poorest)

Pounds nitrogen per 1000 sq.ft.	Seeded		Sodded	
	Quality rating	Dandelions /1000 sq.ft.	Quality rating	Dandelions /1000 sq.ft.
0	7.0	762	5.7	447
2	4.9	476	4.1	219
4	3.5	86	3.0	114
6	2.4	29	2.1	48
8	2.0	19	1.6	57
10	1.4	10	1.4	10
12	1.2	10	1.4	19
[illegible]	1.2	0	1.3	10

Quality ratings for nitrogen treatments on Pennlawn and Wintergreen red fescues are given in Table 13. Treatments were initiated in 1967. Wintergreen was thinned by winterkill this year, but this was not apparently affected by nitrogen rate. Both varieties have had rather severe attacks of leafspot, but the higher nitrogen treated plots appear to recover from injury more rapidly than at lower rates.

Table 13. SUMMARY OF 1968 TURFGRASS QUALITY RATINGS FOR NITROGEN TREATMENTS ON TWO RED FESCUES.
East Lansing
Averages for 3 replications on 7 dates (1-best; 9-poorest)

Pounds nitrogen per 1000 sq.ft. per year	Pennlawn	Wintergreen	
	Quality rating	Quality rating	Dandelions/ 1000 sq.ft.
Check	6.3	6.7	105
1	5.1	4.5	105
2	4.0	3.5	162
3	3.5	2.4	38
4	2.0	2.1	86
6	1.3	1.8	19
2;Apr	4.0	4.0	29
2;Aug	3.9	4.6	390
2;Apr,Aug	3.6	3.3	48

Although higher rates of nitrogen can be applied to turfgrasses in Michigan, current recommendations are 5 to 8 pounds nitrogen per 1000 square feet for Merion Kentucky bluegrass and the bentgrasses, 2 to 5 pounds for other Kentucky bluegrasses, and 1 to 3 pounds for the red fescues.

STOP 13

Al Turgeon

Bentgrass Control. Several herbicides were applied to a Kentucky bluegrass turf uniformly infested with bentgrass. In addition, part of the area was cultivated with a vertical mower.

The treatments included: paraquat (1 lb/A), A67-125 (3 lb/A), silvex (6 lb/A), *dalapon (10 lb/A), and *amitrole (4 lb/A). Observations are being made to determine the extent of control of the bentgrass.

*indicates spot treatment