

season. The experiment was designed as a two factor factorial with a split, and each treatment replicated three times.

Table 2 contains the Kentucky bluegrass varieties ranked in order from least injured to most damaged. Phytotoxicity evaluations were recorded at one week intervals until four weeks after treatment. Enmundi, in both years, was the only variety unaffected by Acclaim at the 0.25 lb/A rate. The variety America has shown the most phytotoxicity from Acclaim over both years. The results obtained in 1987 show much less injury to the Kentucky bluegrass, all with acceptable injury (above 6.0 on a scale of 9 to 1), possibly indicating the influence of environmental conditions at the time of application and one month thereafter. In general, all plots recovered after four weeks from the date of application.

TOLERANCE OF CREEPING BENTGRASS TO FENOXAPROP

Fenoxaprop (Acclaim) has been shown to severely injure creeping bentgrass (*Agrostis palustris*). This study was initiated to evaluate the phytotoxic effects of three rates of fenoxaprop on a creeping bentgrass variety trial. The bentgrass trial was established in 1981 at the HTRC and has been managed as a golf green, mowed at .19 inches, and treated with fertilizer and fungicides as needed. The experimental design was a two factor factorial with a split, and treatments were replicated three times. The applications were made on July 31st using a single 8002 nozzle delivering 51 gallons per acre, and each bentgrass plot (2 X 3 meters) was divided into four subplots to receive the herbicide treatments.

Table 3 ranks the bentgrass varieties in order from least affected to most damaged. Phytotoxicity ratings were taken at one week intervals until four weeks after treatment. Carmen, Penncross, and Penneagle were the least injured while Toronto was severely damaged. The 0.08 and 0.12 lb/A rates generally produced phytotoxicity considered to be acceptable (6.0 and above on a 9 to 1 scale) while 0.18 lb/A was unacceptable and caused injury far beyond four weeks after treatment.

TABLE 3: PHYTOTOXICITY EVALUATIONS OF FENOXAPROP (ACCLAIM) APPLIED TO A CREEPING BENTGRASS VARIETY TRIAL. (HTRC, E. LANSING, MI 7-1-87).

BENTGRASS VARIETY	FENOXAPROP RATE (LB/A)	PHYTOTOXICITY RATINGS #				
		0WAT	1WAT	2WAT	3WAT	4WAT
1. CARMEN	0.08	9.0	7.3	7.3	7.7	9.0
	0.12	9.0	6.3	6.3	7.0	9.0
	0.18	9.0	6.0	5.7	7.0	9.0
	CHECK	9.0	9.0	9.0	9.0	9.0
2. PENNCROSS	0.08	9.0	7.3	7.3	7.7	9.0
	0.12	9.0	6.3	6.3	7.0	9.0
	0.18	9.0	6.0	5.7	6.7	9.0
	CHECK	9.0	9.0	9.0	9.0	9.0
3. PENNEAGLE	0.08	9.0	7.0	7.0	8.0	9.0
	0.12	9.0	6.0	6.0	8.0	9.0
	0.18	9.0	5.7	5.7	6.7	8.7
	CHECK	9.0	9.0	9.0	9.0	9.0
4. PROMINENT	0.08	9.0	7.3	7.0	7.7	8.7
	0.12	8.7	6.7	6.3	6.7	8.7
	0.18	9.0	6.0	5.3	6.0	8.3
	CHECK	9.0	9.0	9.0	8.7	9.0
5. EMERALD	0.08	9.0	7.0	7.0	7.3	8.0
	0.12	9.0	6.7	6.3	6.7	8.0
	0.18	9.0	5.7	4.3	5.0	7.3
	CHECK	9.0	9.0	9.0	9.0	9.0
6. SEASIDE	0.08	9.0	7.0	7.3	7.3	8.0
	0.12	9.0	6.0	6.0	6.7	8.0
	0.18	9.0	5.7	5.0	5.7	8.0
	CHECK	9.0	9.0	9.0	8.0	8.0
7. TORONTO	0.08	9.0	5.7	5.7	5.7	7.3
	0.12	9.0	5.3	4.7	5.3	7.0
	0.18	9.0	4.3	3.0	4.7	5.7
	CHECK	9.0	8.7	8.3	7.7	8.3
LSD(0.05)=		NS	0.8	0.9	1.0	0.7

PHYTOTOXICITY RATING SCALE= 9 TO 1, 9=HEALTHY GREEN TURFGRASS,
1= DEAD TURF.