

1987 POSTEMERGENCE CRABGRASS CONTROL RESULTS

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As of January 1987, Acclaim 1 EC herbicide has been registered for turfgrass usage. It is effective in controlling such annual grasses as crabgrass, goosegrass, and Johnsongrass. The following studies were initiated in the summer of 1987 to test Acclaim in various situations.

FENOXAPROP ALONE AND IN COMBINATION WITH PREEMERGENCE HERBICIDES

A 1986 experiment was expanded and repeated in 1987 to evaluate fenoxaprop (Acclaim) alone and in combination with preemergence herbicides. The objectives were to determine the best pre/post herbicide combinations for effective season-long crabgrass control.

This experiment was performed at the Hancock Turfgrass Research Center (HTRC), in East Lansing, MI on an area without an established turf. The site was treated with glyphosate to eliminate broadleaf weeds and undesirable grasses to allow for greater crabgrass pressure. The area was verticut .5 inches deep with a Ryan's "Ren-o-Thin" and then overseeded with large crabgrass (*Digitaria sanguinalis*) on 5-4-87 to establish a dense population. The experimental design consisted of a randomized complete block (RCB) using 4 by 6 foot plots and three replications. The preemergence herbicides used were pendimethalin, bensulide, and DCPA. Split applications of Acclaim at two rates were also evaluated for season-long control of crabgrass.

Results (Table 1) indicate that Acclaim alone effectively controlled crabgrass, but four weeks after treatment, new plants germinated throughout the area lowering the percent control ratings. Split applications of Acclaim applied on June 2 and July 1 provided excellent control throughout most of the season. Bensulide tank mixed with Acclaim (7.5 + 0.18 lb/A) provided significantly better season-long control than did Acclaim with DCPA or pendimethalin, results similar to those observed in 1986.

FENOXAPROP ON KENTUCKY BLUEGRASS VARIETIES

An experiment from 1986 was repeated this year to evaluate phytotoxicity of Kentucky bluegrass (*Poa pratensis*) caused by fenoxaprop (Acclaim). The study was performed at the HTRC to a Kentucky bluegrass variety trial established in the summer of 1981. The area was mowed at 1.75 inches and fertilizer, irrigation, and fungicides were applied as needed throughout the

TABLE 1: FENOXAPROP (ACCLAIM) ALONE AND IN COMBINATION WITH PREEMERGENCE HERBICIDES APPLIED TO VARIOUS DIGITARIA SPECIES GROWTH STAGES AT THE HANCOCK TURFGRASS RESEARCH CENTER, E. LANSING, MI. (6-2-87)

TREATMENTS #	RATE(LB/A)	"PERCENT CRABGRASS CONTROL"					
		2WAT	4WAT	6WAT	8WAT	12WAT	16WAT
1. FENOXAPROP (ACCLAIM)	0.12	91	79	65	50	4	17
2. ACC + ACC §	0.12 + 0.12	91	79	98	96	76	
3. ACC + BENSULIDE	0.12 + 7.5	92	86	87	75	60	42
4. ACC + DCPA	0.12 + 7.5	89	90	61	49	3	12
5. ACC + PEND.	0.12 + 1.5	90	92	67	53	19	27
6. ACCLAIM	0.18	99	95	93	70	10	34
7. ACC + ACC §	0.18 + 0.18	97	83	99	98	83	
8. ACC + BENSULIDE	0.18 + 7.5	99	95	91	87	63	74
9. ACC + DCPA	0.18 + 7.5	97	91	74	62	30	26
10. ACC + PEND.	0.18 + 1.5	94	97	86	72	23	30
11. ACCLAIM	0.25	95	75	79	46	11	14
12. ACCLAIM	0.35	98	93	68	51	17	19

(#1-19 APPLIED TO 2 LEAF-1 TILLER DIGITARIA ON 6-2-87.)

§ (THE SECOND TREATMENTS OF ACCLAIM IN #9 AND #14 WERE APPLIED ON 7-1-87.)