

Stop #9a: All Star Preemergence Crabgrass Trial

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Objectives:

1. Compare efficacy of Specticle (indaziflam) for preemergence crabgrass control against the top three (authors' opinion) turf preemergence herbicides: Barricade (prodiamine); Dimension (dithiopyr); and Pendulum (pendimethalin).
2. Evaluate single vs. split/sequential application strategies.
3. Evaluate preemergence broadleaf control among these herbicides.

Soil: Hanford fine sandy loam

Species: 'GN-1' Hybrid Bermudagrass
Smooth crabgrass (*Digitaria ischaemum*)

Height: 0.625 inches; 3 times/wk

Spray Information: CO₂-powered bicycle sprayer
TeeJet 8003VS nozzles; 19-inch spacing
1 gal/M

Design: Randomized complete block; 4 replications

Plot size: 7 ft x 10 ft; 4-ft alleys

Application Dates: 3 March 2015 (initial treatment)
14 April 2015 (6 WAIT)

Preliminary Results:

- ✓ Despite a later than desired initial application, all of the herbicides significantly reduced crabgrass cover in comparison to untreated control.
- ✓ Although not statistically significant, this study demonstrated that split/sequential applications of preemergence herbicides generally result in better weed control.
- ✓ Sequential applications of Barricade prevented crabgrass emergence into July and only 1% mean cover was observed in September.
- ✓ Specticle demonstrated that it deserves to be among this group of preemergence crabgrass herbicides. Furthermore, in this particular study and contrary to the other herbicides, Specticle provided postemergence control of persistent perennial ryegrass leftover from overseeding in 2013 in addition to *Poa annua*. Hence, plots appeared cleaner (data not shown).
- ✓ Wild parsley, *Oxalis*, and swinecress have been observed in plots but populations were sporadic and less than 5% in cover. Consequently, it was difficult to summarize herbicide efficacy against these species.

Table 1. Effects of preemergence herbicides on crabgrass cover (0-100%) in bermudagrass turf. Riverside, CA.

No.	Treatment	Company	Rate	Timing (wks)	6/20/15	7/13/15	8/12/15	9/2/15
1	Control	--	--	--	46 a	70 a	86 a	91 a
2	Specticle FLO	Bayer	9 oz/A	0	3 bc	5 bc	18 bc	21 bc
3	Specticle FLO	Bayer	4.5 oz/A	0, 6	1.2 bc	2.2 cd	6 cde	9 cd
4	Specticle FLO	Bayer	6 oz/A 3 oz/A	0 6	1.0 bc	3.5 bcd	10 cde	12 cd
5	Barricade 65WG	Syngenta	1.5 lb/A	0	0.2 bc	0.5 cd	2 e	2 d
6	Barricade 65WG	Syngenta	0.75 lb/A	0, 6	0 c	0 d	0.2 e	1 d
7	Dimension 2EW	DowAgro	2 pt/A	0	0.8 bc	2.8 cd	6 cde	11 cd
8	Dimension 2EW	DowAgro	1 pt/A	0, 6	0 c	0.8 cd	4 de	8 cd
9	Pendulum AquaCap	BASF	4.2 pt/A	0	4.8 b	7.8 b	24 b	34 b
10	Pendulum AquaCap	BASF	2.1 pt/A	0, 6	0.5 bc	2.2 cd	13 bcd	16 c

Means followed by the same letter in a column are not significantly different (P = 0.05). Herbicides were applied on March 3 and April 15, 2015.

Plot Plan (Field 12G-1):

West ↑

1	2	3	4	5	6	7	8
9	10	6	1	3	4	8	10
2	5	7	9	5	9	8	2
1	6	3	10	4	7	10	6
9	2	7	8	3	5	1	4

Stop #9b: Postemergence Control of Crabgrass and Broadleaf Weeds in Tall Fescue

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Objectives:

Evaluate new and existing herbicides and combinations for postemergence control of mature smooth crabgrass (*Digitaria ischaemum*) in tall fescue turf.

Spray Information: CO₂-powered bicycle sprayer
TeeJet 8003VS nozzles; 19-inch spacing
1 gal/M

Design: Randomized complete block; 4 replications

Plot size: 7 ft x 10 ft; 4 ft alleys

Application Dates: 18 August 2015 (initial treatment)
10 September 2015 (3 WAIT)

Results:

- ✓ Crabgrass was mature (tillering) and pressure was high at the beginning of the study.
- ✓ Two WAIT, no treatments appeared to significantly decrease crabgrass populations.
- ✓ Pylex + MSO, Tenacity + NIS, and Tenacity + Dismiss injured crabgrass the most following initial application. Nevertheless injury didn't lead to decrease of crabgrass in the plots.
- ✓ Results of repeat herbicide applications will be evident at Field Day.

2015 Postemergence Crabgrass Control in Tall Fescue

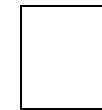
No.	Treatment	Company	Rate	Timing (wks)	Crabgrass % Cover (08/24/15)	Crabgrass % Injury (08/24/15)
1	Control				61 abc	0 e
2	Last Call	Nufarm	4 pts/A	0, 3	51 cd	13 cde
3	Last call	Nufarm	4 pts/A	0, 3	44 d	20 cd
3	NIS		0.25% v/v	0, 3		
4	Drive XLR8	BASF	1.45 oz/M	0, 3	54 bcd	4 de
4	MSO		0.5% v/v	0, 3		
5	Last Call	Nufarm	4 pts/A	0, 3	46 cd	30 bc
5	SureGuard		0.67oz/A	0, 3		
6	F7214-3 6.6%	FMC	4 oz/M	0, 3	50 cd	4 de
7	F7214-3 6.6%	FMC	5 oz/M	0, 3	55 bcd	4 de
8	SOLITARE 75DF	FMC	0.367 oz/M	0, 3	53 bcd	4 de
9	SOLITARE 75DF	FMC	0.478 oz/M	0, 3	53 bcd	5 de
10	Pylex	BASF	1.45 oz/A	0, 3	68 ab	56 a
10	MSO		0.5% v/v	0, 3		
11	Tenacity	Syngenta	5 oz/A	0, 3	74 a	55 a
11	NIS		0.25% v/v	0, 3		
12	Tenacity	Syngenta	5 oz/A	0, 3	58 abcd	8 de
12	Turflon Ester	Dow	16 oz/A	0, 3		
13	Tenacity	Syngenta	5 oz/A	0, 3	61 abc	51 a
13	Dismiss	FMC	4 oz/A	0, 3		
14	Tenacity	Syngenta	5 oz/A	0, 3	57 bcd	44 ab
14	Dismiss	FMC	8 oz/A	0, 3		

Means followed by the same letter in a column are not significantly different ($P = 0.05$).
Herbicides were applied on 18 August and 10 September 2015.

Plot plan for the study area

-	1	2	3	4	5	6	7	8	9	10	-	-	11	-	12	13	-	14	-	
-	-	6	9	-	1	-	-	11	4	-	14	5	2	12	7	8	3	13	10	

N↑



CIMIS station

-	10	2	6	9	-	-	3	14	12	-	-	5	-	1	11	7	4	13	8	
9	-	6	2	4	11	14	-	-	-	-	-	7	10	3	8	13	5	1	12	