## Weed Garden

In 1998 a weed garden was established at the south end of the turf center property. This display has been very useful for learning the identification of broadleaf and grassy weeds of turf. Proper identification is the first step to control. Although very labor intensive, the garden has been very useful during training sessions with extension agents, and visits from lawncare operators. The garden is a major component of the Weed ID workshop held on the afternoon of field day and has served as a ready source of plant material for the Turfgrass Pest Management class and Turfgrass Short Course, which are taught each fall.

With the help of the MTF, exceptional progress was made in 2001. The number of specimens was increased and the quality of specimens was also improved. Due to the success of the weed garden, permanent plastic signs have been made to identify the plots year-round. Enough plant material has been generated that live plant samples were used for the Turfgrass Weed ID and Management Workshop at the 2005 MTF Conference.



The weed garden has resulted in the development of a weed ID website based off of the images generated from the garden. The new website is <a href="https://www.msuturfweeds.net">www.msuturfweeds.net</a>. The website design was created during the winter of 2004. Pictures and descriptions were added during the summer and fall of 2004. Students were able to use the website during fall semester. Over 300 pictures are included on the site. Users can search by common or scientific name and can also search by other known names. The dossier for each weed include information on habit, key identification features, look-a-likes, and cultural management recommendations.

## 2004 Preemergence Crabgrass Trial

The 2004 General Preemergence Crabgrass Trial was conducted at the Evergreen Cemetery in Lansing, Michigan. This site is located approximately two miles west of the Hancock Turfgrass Research Center and has a history or extremely heavy crabgrass pressure.

The preemergence crabgrass treatments were applied on April 23, 2004. Commercially available products such as Pendulum 3.3EC, Pendulum 3.8CS, Dimension Ultra WSP, and Barricade were included in this trial as a stand alone treatments. This year, for the first time, there were several generic formulations of the previously mentioned products included in our trial. Record rainfall in May and June of this year facilitated excellent germination of crabgrass. Below average temperatures at the beginning of the summer delayed development of these plants. Warmer temperatures and additional rainfall in late July and August made for a nice finish to the season and yielded a very respectable crabgrass

crop for 2004. Crabgrass populations were measured June 16 and August 25, 2004. The commercial standards included in this trial provided very good to excellent crabgrass control at both evaluation dates (Table 1). Most of the treatments provided acceptable control for 2004.

**Table 1**: 2004 General Preemergence Crabgrass Trial Evergreen Cemetery, Lansing, Michigan, Michigan State University

Evergreen Cemetery, Lansing, Michigan, Michigan State University										
TRT	Description	Rate	Per	Percent Crabgrass Cover						
		lb ai/A	16-J	16-Jun		25-Aug				
			54 D	AT	124	DAT				
1	UNTREATED		11	ab	49	ab				
2	DIMENSION ULTRA WSP	0.25+0.25	0	d	1	f				
3	DIMENSION ULTRA WSP	0.5	0	d	1	f				
4	PENDULUM	2.0	0	d	10	ef				
5	PENDULUM	1.0+1.0	2	cd	9	ef				
6	PENDULUM	2.0	0	d	2	f				
7	PENDULUM	1.0+1.0	1	d	2	f				
8	MANA-PRO	0.5	0	d	3	f				
9	MANA-PRO	1.0	0	d	1	f				
10	MANA-PRO	1.5	0	d	0	f				
11		0.5	1	d	5	f				
	BARRICADE				5 7	ı f				
12	BARRICADE	1.0	0	d						
13	BARRICADE	1.5	0	d	1	f				
14	MANA-PRO	0.33	1	d	0	f				
15	MANA-PRO	0.5	1	d	0	f				
16	MANA-PRO	1.0	0	d	0	f				
17	PENDIMETHALIN	1.0	0	d	7	f				
18	PENDIMETHALIN	1.5	0	d	0	f				
19	PENDIMETHALIN	2.0	0	d	0	f				
20	MANA-PRO	0.33	0	d	0	f				
	PENDIMETHALIN	1.0								
21	MANA-PRO	0.33	0	d	0	f				
	PENDIMETHALIN	1.5								
22	MANA-PRO	0.33	0	d	0	f				
	PENDIMETHALIN	2.0	Ū	<b>-</b>	Ŭ	•				
23	MANA-PRO	0.5	0	d	0	f				
20	PENDIMETHALIN	1.0	U	u	U	•				
24	MANA-PRO	0.5	0	d	0	f				
2 <del>4</del>	PENDIMETHALIN	1.5	U	u	U	1				
25	MANA-PRO		0	۵	0	f				
25		0.5	0	d	U	ı				
00	PENDIMETHALIN	2.0	40		00	1 1				
26	INTER PLUS II	1.0	13	a <sub>.</sub>	36	bcd				
27	INTER PLUS II	2.0	10	abc	44	abc				
28	MANA-PRO	0.33	0	d	14	ef				
	INTER PLUS II	1.0								
29	MANA-PRO	0.33	0	d	3	f				
	INTER PLUS II	2.0								
30	MANA-PRO	0.5	0	d	0	f				
	INTER PLUS II	1.0								
31	MANA-PRO	0.5	0	d	7	f				
	INTER PLUS II	2.0	-							
32	TRIFLURALIN	1.0	14	а	44	abc				
33	TRIFLURALIN	2.0	0	d	9	ef				
34	MANA-PRO	0.33	0	d	2	f				
J <del>-1</del>	MIZINZ-LIVO	0.00	U	u	_	1				

	TRIFLURALIN	1.0				
35	MANA-PRO	0.33	0	d	6	f
	TRIFLURALIN	2.0				
36	MANA-PRO	0.5	0	d	0	f
	TRIFLURALIN	1.0				
37	MANA-PRO	0.5	4	bcd	19	def
	TRIFLURALIN	2.0				
38	UNTREATED		18	а	62	а
39	UNTREATED		10	abc	46	abc
40	UNTREATED		12	ab	28	cde
	LSD (P=0.05)		8.5		20.6	

Means followed by same letter do not significantly differ (P=.05, LSD).