

Crabgrass Control Strategies in Home Lawns and Fairway Turf

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Crabgrass has not lost any of its popularity as the number one annual weed problem in home lawns and golf course settings. Consequently the turfgrass industry has made great strides towards developing control strategies for this pest. In Mid-Michigan, 1992 has turned out to be a very 'weak' year for crabgrass germination and development, evidenced by the sparse populations of crabgrass that have developed in traditionally problem areas.

We initiated a study in late April of 1992 which included 53 different herbicides, herbicide combinations, herbicide rates, and application timings (See Table). As of July 20th, little crabgrass growth and development had occurred. However, this is expected to change with the increased rainfall and temperatures observed so far this July.

Regardless of what control strategy will be implemented, the turf manager must be fully aware of the areas that are a problem. The days of annually treating a lawn or a golf course with the old standby 'Weed and Feed' may soon come to an end. A good IPM program requires extensive monitoring of problem areas throughout the growing season. In Mid-Michigan preemergence applications should be completed within the first two weeks of May. This application can be moved into late May if there is an unusually dry and/or cool Spring. For turfgrass managers located in Southeastern or Southwestern Michigan, the above timings may be too late due to temperature increases that traditionally come earlier in those parts of the state. Preemergence herbicides applied after June 1 will give some control of the later germinating plants, but many crabgrass seeds will have already germinated.

With the introduction of a new generation of grass herbicides which exhibit both preemergence and postemergent modes of action, DIMENSION and DRIVE, turfgrass managers have several control strategies that were never before available. Rather than building the preemergence herbicide barrier before we know what kind of pressure we have, we can wait until the grass emerges and treat only those areas that are a problem. The timing of a postemergent application is critical. The herbicide must be applied early enough to easily control the crabgrass before it has a chance to harden off. Likewise, the treatment must be late enough to extend the 'window of control' for preemergence activity as far as possible into the growing season. It is feasible with these new products to achieve acceptable season long control with one application.

Regardless of the strategy that you choose, and there are clearly many products from which to choose, spend more time monitoring the areas that are a problem and less time treating every area under your supervision.

PERCENT CRABGRASS - JULY 20, 1992

<u>HERBICIDE TREATMENT</u>	<u>RATE (lbs ai/A)</u>	<u>% CRAB.</u>
UNTREATED CONTROL		11
BALAN 2.5G	1.5 + 1.5(8 WAIT)	0
BALAN 2.5G	3.0	0
TEAM 2G	2.0	2
TEAM 2G	3.0	0
TEAM 2G	1.5 + 1.5(8 WAIT)	0
FN9064 1.09G	2.725	0
FN9064 1.09G	4.09	0
AND ¹ 19-3-8 w/TEAM	1.5 + 1.5(8 WAIT)	0
LESCO 19-3-7 w/PREM	1.5 + 1.5(8 WAIT)	0
LEBANON 19-4-6 w/Betasan	7.5	1
RONSTAR 2G-BIO.	2.0	0
RONSTAR 2G-BIO.	4.0	0
EXP 30742B	5.0	0
EXP 30742B	6.0	0
EXP 30909A	5.0	1
EXP 30910A	5.0	1
EXP 30910A	6.0	0
EXP 30910A	3.0 + 2.0(8 WAIT)	0
EXP 30925A	5.0	1
RONSTAR/DIMENSION (0.1G)	2.0 + 0.25	0
RONSTAR/DIMENSION (0.1G)	1.0 + 0.25	0
RONSTAR/DIMENSION (0.1G)	2.0 + 0.125	0
RONSTAR/DIMENSION (0.1G)	1.0 + 0.125	0
PRE-M 60WDG	3.0	0
LEBANON (Fert/Dimension)	0.125	0
LEBANON (Fert/Dimension)	0.25	0
LEBANON Fertilizer only	see above	14
LEBANON Fertilizer only	see above	3

<u>HERBICIDE TREATMENT</u>	<u>RATE (lbs ai/A)</u>	<u>% CRAB.</u>
BARRICADE 65WG	0.325	0
BARRICADE 65WG	0.65	0
GALLERY 75DF	1.5	0
GALLERY 75DF	1.5 + 1.5(8 WAIT)	0
AND 260-Dithiopyr + 18-6-15	0.165	0
AND 260-Dithiopyr + 18-6-15	0.25	0
AND 263-Dithiopyr + 18-6-15	0.1	0
AND 263-Dithiopyr + 18-6-15	0.125	1
AND 264-Prodiamine + 20-4-10	0.25	2
AND 264-Prodiamine + 20-4-10	0.375	0
AND 264-Prodiamine + 20-4-10	0.50	0
AND 267-Dithiopyr + 19-3-8	0.18	0
AND 267-Dithiopyr + 19-3-8	0.25	0
AND 269-Prodiamine + 19-3-8	0.375	0
AND 269-Prodiamine + 19-3-8	0.5	0
DIMENSION 1EC (Pre.)	0.5	0
DIMENSION (Post. 2 leaf stage)	0.5	1
DIMENSION 0.1G (Pre.)	0.125	0
DIMENSION 0.1G (Pre.)	0.25	0
DIMENSION 0.1G (Pre.)	0.38	0
DIMENSION 0.11G (Pre.)	0.25	0
DIMENSION 0.11G (Pre.)	0.38	0
DIMENSION + MSMA + 0.5% X-77 (Applied July 20)	0.38 + 1.0	2
DIMENSION+ACCLAIM + 0.5% X-77 (Applied July 20)	0.38 + 0.094	8
LSD (P=0.05)		3

¹ AND is the abbreviation for ANDERSONS