Microdochium Patch (*Microdochium nivale*)

A curative Microdochium patch (*Microdochium nivale*) study was established on an annual bluegrass fairway at the Hancock Turfgrass Research Center on the MSU campus in a location where Microdochium patch was beginning to develop. This study included 4 replicate 6' x 6' plots arranged in a randomized complete block design. Sprayable treatments were applied using a CO_2 –powered backpack sprayer with a double-nozzle boom (8002E TeeJet flat fan nozzles) at 36 PSI and 48 GPA. Granular treatments were applied by hand. Treatments were applied on 14-May and on 28-May. The entire plot area was inoculated with *Microdochium nivale* growing on sand/cornmeal on 23-May and covered with a vinyl tarp to induce disease. A pretreatment rating of percent plot area infected with disease was taken on 13 May. Percent recovery was calculated for each treatment on each of several rating dates. The mean percent recovery data are reported in Table 3. Data were analyzed using ANOVA and means were separated with LSD (p=0.05).

Disease pressure in the study area was light initially (with the control having an average of 14% disease), but disease pressure continued to build as the study progressed. The untreated control plots peaked at an average of 25% disease. The only two rating dates that provided any statistical separation between treatment percent recovery means were the first (21-May) and the last (6-Jun). Standard products such as Heritage, Compass, and Chipco 26GT all performed as expected and provided good curative disease control, as did many of the treatments tested (see Table 3.) All treatments tested provided significant disease control compared to the untreated control throughout the entire study. No phytotoxicity or significant turf quality differences were observed.

Table 3. Microdochium Patch HTRC 2003
Location: Hancock Turfgrass Research Center, E. Lansing, MI
Rating Scale: Mean percent recovery from pre-treatment rating on 13 May, 2003

		21-May		23-May		30-May		2-Jun		6-Jun	
Treatment and Rate/1000 sq ft	Interval (Days)	Mean	LSD (5%)	Mean	LSD (5%)	Mean	LSD (5%)	Mean	LSD (5%)	Mean	LSD (5%)
Heritage 0.2 oz	14	72.1	ab	86.8	a	90.4	a	74.6	a	82.1	a
Compass 50WG 0.25 oz	14	82.9	a	97.5	a	100.0	a	81.4	a	80.0	a
AND3056 5 lbs	14	22.6	b-d	67.9	a	81.0	a	61.0	a	79.5	a
Compass 50WG 0.2 oz	14	72.7	ab	81.0	a	93.3	a	83.8	a	77.4	a
Chipco 26GT 4 fl oz	14	66.3	a-c	83.8	a	86.3	a	61.7	a	74.6	a
Compass 50WG 0.125 oz	14	15.0	cd	48.3	a	93.3	a	60.0	a	71.7	ab
Compass 50WG 0.0625 oz	14	41.3	a-d	63.5	a	83.9	a	-7.1	a	62.0	ab
Compass G 0.39% 0.125 oz ai	14	-6.0	d	46.1	a	62.2	a	30.7	a	50.9	ab
AND3054 5 lbs	14	35.9	a-d	55.5	a	75.4	a	11.8	a	43.8	ab
AND3057 5 lbs	14	60.2	a-c	89.3	a	93.8	a	22.3	a	42.6	ab
Cleary 3336 4 fl oz	14	72.3	ab	89.3	a	76.7	a	30.0	a	36.2	ab
Compass G 0.179% 0.125 oz ai	14	61.3	a-c	82.9	a	92.3	a	49.2	a	35.6	ab
AND3053 5 lbs	14	45.8	a-d	71.7	a	72.1	a	45.8	a	22.9	ab
AND3055 5 lbs	14	61.3	a-c	78.0	a	73.0	a	-8.9	a	-55.2	bc
Control	---	-83.9	e	-101.8	b	-129.2	b	-142.0	b	-148.6	c

*Treatment means followed by the same letter are not significantly different from each other (LSD, 5%).