## LOCALIZED DRY SPOT

This was a two-year study established and maintained on a creeping bentgrass green at the Hancock Turfgrass Research Center, East Lansing, MI. Plots measured 6' x 9' with four replicates set up in a randomized complete block design. The Nature Safe was applied by hand and watered in. The Surf Side 37A treatment was sprayed on using a CO<sub>2</sub> backpack sprayer with two 8002E flat fan nozzles at 34 psi and 48 GPA. These treatments were drenched in with water following each application. Treatments were applied as indicated in Table 11 with Nature Safe being applied on 5/16 (1/2 # N), 5/30 (1/2 # N), 6/13, 7/10, 8/7, and 9/5 and Surf Side 37A being applied on 6/27, 7/27, and 8/29. Fertilizer was applied to the control and the Surf Side 37A treatments on the following dates so that they received the same amount of nitrogen as the treatment which only received Nature Safe: 5/22, 6/13, 7/10, and 8/7. Plots were rated for percent area with localized dry spot symptoms including wilting and thinning of turf. Data were analyzed using ANOVA and means separated with LSD (p = 0.05).

None of the treatments tested here provided significant control of localized dry spot compared to the fertilized control. The plots treated with the wetting agent, Surf Side 37A, did have the least amount of localized dry spot of all of the plots, but this difference was not statistically significant. No phytotoxicity was observed during the course of this study.

Hancock Turfgrass Research Center, East Lansing, MI Rating Scale: Percent plot area affected by localized dry spot.											
Treatment Rate/1000 ft <sup>2</sup>	Interval (Days)	Mean <sup>a</sup> 7/9	Mean 7/19	Mean 7/25	Mean 8/1	Mean 9/5					
Surf Side 37A 6oz	28	33.3 a	25.0 a	16.6 a	7.5 a	18.3 a					
Nature Safe 1/2#N (2 apps. Apr, 1 app. May-Sep)	28	60.0 a	43.3 a	43.3 a	20.0 a	25.0 a					
Control (Fertilized)		50.0 a	43.3 a	20.0 a	13.8 a	31.7 a					

## Table 11.Localized Dry Spot 2001.

<sup>a</sup>Treatment means followed by the same letter within the same rating date are not significantly different (LSD, p = 0.05).

## MOSS

This study was established and maintained on a creeping bentgrass green. Plots measured 2' x 3'. Treatments were applied as indicated in Table 12 with the 7 day treatment applied on 6/22, 6/29, 7/3, 7/13, 7/19, 7/27, 8/3, 8/9, 8/15, and 8/29; and the 14 day interval treatments on 6/22, 7/3, 7/19, 8/3, 8/15, and 8/29. Fertilizer was applied on 5/28 (1/2 # N), 7/20 (1/8 # N), and 8/17 (1/8 # N). Plots were rated for percent plot area with moss (Table 12). Data were analyzed using ANOVA and means separated with LSD (p = 0.05).

The moss that was in most of the plots was not totally eradicated by the treatments tested. Throughout the study, the moss would go off-color (turn brown) only to return to its green color again. This happened in various treatments as well as in some of the controls and seemed to be independent of treatment. Although, based on the data in Table 12, some of the treatments provided significant moss reduction compared to the control, none of the treatments totally eradicated the moss. In addition, some phytotoxicity was observed over the course of the study. Spotrete exhibited mild phytotoxicity as a slight darkening of the turf. The high rate of Junction showed no damage early in the trial, but by the end of July, some slight browning was visible. In early September, moderate phytotoxicity was observed in the plots treated with the high rate of Junction only.

Hancock Turfgrass Research Center, East Lansing, MI Rating Scale: Percent plot area with moss.										
Treatment Rate/1000 ft <sup>2</sup>	Interval (Days)	Mean <sup>a</sup> 6/14	Mean 7/9	Mean 7/17	Mean 8/17	Mean 8/29	Mean 9/5			
Spotrete 7.5 fl oz	7	0.8 a	0.4 b	0.4 b	0.5 b	0.2 b	0.2 b			
Junction 2 oz	14	1.4 a	1.4 ab	0.6 b	1.3 ab	0.8 ab	0.7 b			
Junction 4 oz	14	1.0 a	1.3 ab	0.9 ab	1.1 b	0.9 ab	0.9 b			
Junction 6 oz	14	1.6 a	2.1 a	1.9 ab	1.5 ab	1.3 ab	1.1 ab			
Control (Fertilized)		1.9 a	2.4 a	2.3 a	2.5 a	2.2 a	2.1 a			

<sup>a</sup>Treatment means followed by the same letter within the same rating date are not significantly different (LSD, p = 0.05).

## TAKE ALL PATCH (GAEUMANNOMYCES GRAMINIS)

Because disease activity occurred in the spring this year, Take All Patch (*Gaeumannomyces graminis*) studies were conducted curatively on a diseased creeping bentgrass fairway at the Golf Club of Michigan, Brighton, MI. The study was set out in four replications of a randomized complete block design utilizing 6' x 9' plots, each of which displayed one or more active take-all patches. Applications were made with a small plot, CO<sub>2</sub> sprayer with two flat fan nozzles at 35 PSI and 96 GPA. Treatments were not watered in. Fertilizer treatments, except urea, were pre-weighed and hand-applied. A pre-treatment disease rating was taken on 5/17, prior to the initial application on 5/17. Treatments were re-applied at the interval cited in the data table (Table 13). The ratings (percent recovery) were taken on 7/11/01 as disease pressure peaked in the study area. Because the study area was lean at the time of treatment initiation, supplemental fertility was applied to all non-fertilizer treatments as follows:  $\frac{1}{4} \# N$  (18-3-18) on 5/17, 1/8 # N (urea) on 5/22,  $\frac{1}{4} \# N$  (18-3-18) on 6/14, and  $\frac{1}{4} \# N$  (18-3-18) on 6/19. Additionally, Daconil Ultrex (3 oz/1000 sq ft) and Subdue Maxx (1 oz/1000 sq ft) were applied to the entire study on 6/28 for dollar spot and Pythium blight control.

Disease pressure in this study peaked in early July and gradually decreased throughout August. No fall disease activity was observed.