

TABLE 1.

TURFGRASS QUALITY RATINGS FOR 2003 IN FT. LAUDERDALE, FL  
FOLLOWING THE APPLICATION OF WETTING AGENTS.

TURFGRASS QUALITY RATINGS <sup>a</sup>										
NAME	1 WEEK <sup>b</sup>	3 WEEKS	5 WEEKS	7 WEEKS	9 WEEKS	11 WEEKS	13 WEEKS	15 WEEKS	17 WEEKS	AVE.
AQUEDUCT	7.5	6.7	6.5	6.2	6.2	5.0	5.5	6.5	5.8	6.2
BRILLIANCE	7.3	6.8	6.8	6.2	6.2	5.3	5.8	6.7	5.3	6.3
CASCADE PLUS	7.8	6.5	7.2	6.3	6.0	5.3	5.5	6.5	5.7	6.3
CONTROL	7.8	7.0	6.5	5.7	7.0	5.8	6.3	6.7	6.2	6.6
HYDRO-WET	7.8	6.8	6.8	6.3	6.0	5.3	5.8	6.5	6.5	6.4
LESCOFLO	7.8	6.5	6.8	6.5	6.2	5.5	6.3	7.0	6.0	6.5
NAIAD	7.3	6.8	7.0	6.3	6.5	5.5	6.0	6.7	6.2	6.5
PRIMER SELECT	7.7	7.2	6.8	6.7	6.0	5.3	6.2	6.5	6.3	6.5
RESPOND 2	7.8	7.0	6.8	6.7	6.2	5.3	6.0	6.8	6.0	6.5
SURFSIDE 37	7.8	6.7	7.2	7.2	6.3	5.3	6.2	6.8	6.2	6.6
TRICURE	7.5	7.0	7.0	6.2	6.3	5.5	6.2	6.7	6.0	6.5
LSD <sup>c</sup>	0.8	0.7	0.8	1.0	0.9	1.5	0.8	1.1	1.6	0.5
CV <sup>d</sup> (%)	6.2	6.0	6.7	10.2	9.2	12.5	9.0	7.8	13.6	4.3

- a) Turfgrass quality was visually rated using a scale of 1=poor quality, 5=acceptable quality and 9=excellent quality.
- b) Turfgrass quality ratings were taken every two weeks beginning one week after the initial wetting agent application which was made on April 22, 2003 .
- c) LSD is the least significant difference among the treatment means. To determine if one treatment is significantly different from another, subtract the mean of one treatment from the mean of another treatment. A statistically significant difference occurs when this value is larger than the LSD value given at the bottom of the column. Treatment means should be compared only within a column (LSD 0.05).
- d) CV is the coefficient of variation and indicates the percent variation of the treatment means in each column.

TABLE 2.

PHYTOTOXICITY RATINGS FOR 2003 IN FT. LAUDERDALE, FL  
 FOLLOWING THE APPLICATION OF WETTING AGENTS.  
 THE INITIAL APPLICATION OF WETTING AGENTS WAS MADE ON APRIL 22, 2003.

PHYTOTOXICITY RATINGS<sup>a</sup>

NAME	APP 1-1 <sup>b</sup>	APP 1-3	APP 1-7	APP 2-1	APP 2-3	APP 2-7	APP 3-1	APP 3-3	APP 3-7	APP 4-1	APP 4-3	APP 4-7	APP 5-1	APP 5-3	APP 5-7
AQUEDUCT	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
BRILLIANCE	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
CASCADE PLUS	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
CONTROL	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
HYDRO-WET	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
LESCOFLO	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
NAIAD	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
PRIMER SELECT	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
RESPOND 2	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
SURFSIDE 37	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
TRICURE	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
LSD <sup>c</sup>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CV <sup>d</sup> (%)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

a) Phytotoxicity was visually rated using a scale of 1=brown or discolored turf, 7=acceptable damage and 9=green turf, no damage.

b) Phytotoxicity ratings were taken one, three and seven days after each application of any wetting agent. App 1-1 refers to application number one, the ratings were taken one day after application.

c) LSD is the least significant difference among the treatment means. To determine if one treatment is significantly different from another, subtract the mean of one treatment from the mean of another treatment. A statistically significant difference occurs when this value is larger than the LSD value given at the bottom of the column. Treatment means should be compared only within a column (LSD 0.05).

d) CV is the coefficient of variation and indicates the percent variation of the treatment means in each column.

TABLE 2. (CONTINUED)

PHYTOTOXICITY RATINGS FOR 2003 IN FT. LAUDERDALE, FL  
 FOLLOWING THE APPLICATION OF WETTING AGENTS.  
 THE INITIAL APPLICATION OF WETTING AGENTS WAS MADE ON APRIL 22, 2003.

PHYTOTOXICITY RATINGS <sup>a</sup>															
NAME	APP 6-1 <sup>b</sup>	APP 6-3	APP 6-7	APP 7-1	APP 7-3	APP 7-7	APP 8-1	APP 8-3	APP 8-7	APP 9-1	APP 9-3	APP 9-7	APP 10-1	APP 10-3	APP 10-7
AQUEDUCT	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
BRILLIANCE	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
CASCADE PLUS	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
CONTROL	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
HYDRO-WET	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
LESCOFLO	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
NAIAD	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
PRIMER SELECT	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
RESPOND 2	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
SURFSIDE 37	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
TRICURE	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
LSD <sup>c</sup>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CV <sup>d</sup> (%)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

- a) Phytotoxicity was visually rated using a scale of 1=brown or discolored turf, 7=acceptable damage and 9=green turf, no damage.
- b) Phytotoxicity ratings were taken one, three and seven days after each application of any wetting agent. App 6-1 refers to application number six, the ratings were taken one day after application.
- c) LSD is the least significant difference among the treatment means. To determine if one treatment is significantly different from another, subtract the mean of one treatment from the mean of another treatment. A statistically significant difference occurs when this value is larger than the LSD value given at the bottom of the column. Treatment means should be compared only within a column (LSD 0.05).
- d) CV is the coefficient of variation and indicates the percent variation of the treatment means in each column.

TABLE 2. (CONTINUED)

PHYTOTOXICITY RATINGS FOR 2003 IN FT. LAUDERDALE, FL  
 FOLLOWING THE APPLICATION OF WETTING AGENTS.  
 THE INITIAL APPLICATION OF WETTING AGENTS WAS MADE ON APRIL 22, 2003.

PHYTOTOXICITY RATINGS<sup>a</sup>

NAME	APP 11-1 <sup>b</sup>	APP 11-3	APP 11-7	APP 12-1	APP 12-3	APP 12-7	APP 13-1	APP 13-3	APP 13-7	APP 14-1	APP 14-3	APP 14-7	APP 15-1	APP 15-3	APP 15-7
AQUEDUCT	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
BRILLIANCE	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
CASCADE PLUS	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
CONTROL	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
HYDRO-WET	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
LESCOFLO	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
NAIAD	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
PRIMER SELECT	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
RESPOND 2	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
SURFSIDE 37	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
TRICURE	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
LSD <sup>c</sup>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CV <sup>d</sup> (%)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

a) Phytotoxicity was visually rated using a scale of 1=brown or discolored turf, 7=acceptable damage and 9=green turf, no damage.

b) Phytotoxicity ratings were taken one, three and seven days after each application of any wetting agent. App 11-1 refers to application number 11, the ratings were taken one day after application.

c) LSD is the least significant difference among the treatment means. To determine if one treatment is significantly different from another, subtract the mean of one treatment from the mean of another treatment. A statistically significant difference occurs when this value is larger than the LSD value given at the bottom of the column. Treatment means should be compared only within a column (LSD 0.05).

d) CV is the coefficient of variation and indicates the percent variation of the treatment means in each column.

TABLE 3. WATER DROPLET PENETRATION TIMES BY DEPTH FOR 2003 IN FT. LAUDERDALE, FL  
TWO WEEKS AFTER THE INITIAL APPLICATION OF WETTING AGENTS.  
THE INITIAL APPLICATION OF WETTING AGENTS WAS MADE ON APRIL 22, 2003.

WATER DROPLET PENETRATION MEASURED IN SECONDS <sup>a</sup>						
NAME	0.5 CM <sup>b</sup>	1.5 CM	2.5 CM	3.5 CM	4.5 CM	5.5 CM
AQUEDUCT	2.2	0.0	0.0	0.0	0.2	0.0
BRILLIANCE	5.7	0.5	0.0	0.0	0.0	0.0
CASCADE PLUS	7.0	1.2	1.0	0.2	0.2	0.2
CONTROL	106.7	47.2	21.3	6.2	1.2	1.0
HYDRO-WET	21.5	8.7	4.0	0.8	0.5	0.3
LESCOFLO	7.3	4.5	1.8	0.5	0.2	0.0
NAIAD	69.8	26.5	13.8	2.8	0.8	0.2
PRIMER SELECT	12.8	4.2	1.8	1.2	0.5	1.0
RESPOND 2	67.5	17.2	6.0	1.2	0.0	0.0
SURFSIDE 37	27.5	4.0	1.3	0.2	0.2	0.2
TRICURE	3.5	2.0	0.3	0.2	0.0	0.2
LSD <sup>c</sup>	30.1	12.5	8.3	2.4	0.9	1.4
CV <sup>d</sup> (%)	91.8	109.4	153.7	172.3	187.4	296.4

- a) The maximum time for water droplet penetration was 600 seconds. Any water droplet remaining after 600 seconds was recorded as 600 seconds.
- b) Depth in centimeters below the soil surface.
- c) LSD is the least significant difference among the treatment means. To determine if one treatment is significantly different from another, subtract the mean of one treatment from the mean of another treatment. A statistically significant difference occurs when this value is larger than the LSD value given at the bottom of the column. Treatment means should be compared only within a column (LSD 0.05).
- d) CV is the coefficient of variation and indicates the percent variation of the treatment means in each column.

TABLE 4. WATER DROPLET PENETRATION TIMES BY DEPTH FOR 2003 IN FT. LAUDERDALE, FL  
FOUR WEEKS AFTER THE INITIAL APPLICATION OF WETTING AGENTS.  
THE INITIAL APPLICATION OF WETTING AGENTS WAS MADE ON APRIL 22, 2003.

WATER DROPLET PENETRATION MEASURED IN SECONDS <sup>a</sup>						
NAME	0.5 CM <sup>b</sup>	1.5 CM	2.5 CM	3.5 CM	4.5 CM	5.5 CM
AQUEDUCT	18.0	11.5	4.7	3.0	0.8	1.0
BRILLIANCE	47.7	9.2	2.5	1.2	0.3	0.0
CASCADE PLUS	34.5	9.5	4.8	2.2	1.8	1.5
CONTROL	322.7	82.0	51.2	88.2	16.2	7.8
HYDRO-WET	25.2	15.0	10.2	3.7	1.7	0.8
LESCOFLO	37.8	17.7	11.2	5.0	1.7	1.0
NAIAD	110.0	38.7	17.7	4.0	1.2	0.5
PRIMER SELECT	85.5	26.8	13.2	6.0	2.2	0.8
RESPOND 2	85.5	40.8	20.8	6.2	1.8	1.0
SURFSIDE 37	68.5	37.7	18.8	6.5	2.5	1.0
TRICURE	68.8	12.5	8.3	3.8	1.5	0.3
LSD <sup>c</sup>	46.9	18.5	9.6	77.0	5.7	2.3
CV <sup>d</sup> (%)	54.3	62.2	60.4	409.8	169.2	140.8

- a) The maximum time for water droplet penetration was 600 seconds. Any water droplet remaining after 600 seconds was recorded as 600 seconds.
- b) Depth in centimeters below the soil surface.
- c) LSD is the least significant difference among the treatment means. To determine if one treatment is significantly different from another, subtract the mean of one treatment from the mean of another treatment. A statistically significant difference occurs when this value is larger than the LSD value given at the bottom of the column. Treatment means should be compared only within a column (LSD 0.05).
- d) CV is the coefficient of variation and indicates the percent variation of the treatment means in each column.

TABLE 5. WATER DROPLET PENETRATION TIMES BY DEPTH FOR 2003 IN FT. LAUDERDALE, FL  
EIGHT WEEKS AFTER THE INITIAL APPLICATION OF WETTING AGENTS.  
THE INITIAL APPLICATION OF WETTING AGENTS WAS MADE ON APRIL 22, 2003.

WATER DROPLET PENETRATION MEASURED IN SECONDS <sup>a</sup>						
NAME	0.5 CM <sup>b</sup>	1.5 CM	2.5 CM	3.5 CM	4.5 CM	5.5 CM
AQUEDUCT	6.0	2.2	0.8	0.2	0.2	0.2
BRILLIANCE	72.7	36.2	9.8	2.8	0.3	0.0
CASCADE PLUS	21.5	10.0	7.8	0.2	0.0	0.2
CONTROL	166.8	63.7	24.2	8.2	0.5	0.2
HYDRO-WET	48.3	18.3	7.7	1.2	0.2	0.2
LESCOFLO	28.3	15.7	10.8	0.7	0.0	0.0
NAIAD	66.3	22.3	6.8	1.7	0.3	0.0
PRIMER SELECT	85.3	56.3	28.0	3.3	0.5	0.2
RESPOND 2	46.2	23.3	18.2	1.7	0.7	0.0
SURFSIDE 37	70.3	39.2	17.7	6.8	1.0	0.2
TRICURE	55.2	28.0	16.2	3.5	1.7	0.3
LSD <sup>c</sup>	48.5	37.7	25.9	7.2	1.5	0.7
CV <sup>d</sup> (%)	70.5	98.3	118.2	172.4	194.4	264.0

- a) The maximum time for water droplet penetration was 600 seconds. Any water droplet remaining after 600 seconds was recorded as 600 seconds.
- b) Depth in centimeters below the soil surface.
- c) LSD is the least significant difference among the treatment means. To determine if one treatment is significantly different from another, subtract the mean of one treatment from the mean of another treatment. A statistically significant difference occurs when this value is larger than the LSD value given at the bottom of the column. Treatment means should be compared only within a column (LSD 0.05).
- d) CV is the coefficient of variation and indicates the percent variation of the treatment means in each column.

TABLE 6. WATER DROPLET PENETRATION TIMES BY DEPTH FOR 2003 IN FT. LAUDERDALE, FL  
 12 WEEKS AFTER THE INITIAL APPLICATION OF WETTING AGENTS.  
 THE INITIAL APPLICATION OF WETTING AGENTS WAS MADE ON APRIL 22, 2003.

WATER DROPLET PENETRATION MEASURED IN SECONDS <sup>a</sup>						
NAME	0.5 CM <sup>b</sup>	1.5 CM	2.5 CM	3.5 CM	4.5 CM	5.5 CM
AQUEDUCT	1.3	0.0	0.0	0.0	0.0	0.0
BRILLIANCE	30.8	5.8	3.5	0.8	0.0	0.0
CASCADE PLUS	29.0	7.8	3.7	1.0	0.0	0.2
CONTROL	38.8	13.2	5.7	2.8	0.7	0.2
HYDRO-WET	26.5	9.8	4.7	1.5	0.3	0.2
LESCOFLO	25.3	7.8	3.7	1.2	0.3	0.0
NAIAD	42.3	17.0	5.3	1.7	1.0	0.2
PRIMER SELECT	30.0	9.3	6.2	2.5	1.0	0.0
RESPOND 2	38.2	10.8	5.8	2.3	0.5	0.2
SURFSIDE 37	32.0	9.2	5.3	1.2	0.3	0.0
TRICURE	52.3	15.3	10.3	3.5	1.0	0.7
LSD <sup>c</sup>	25.1	7.4	3.5	1.4	1.1	0.5
CV <sup>d</sup> (%)	59.9	62.0	59.4	72.1	153.1	236.1

- a) The maximum time for water droplet penetration was 600 seconds. Any water droplet remaining after 600 seconds was recorded as 600 seconds.
- b) Depth in centimeters below the soil surface.
- c) LSD is the least significant difference among the treatment means. To determine if one treatment is significantly different from another, subtract the mean of one treatment from the mean of another treatment. A statistically significant difference occurs when this value is larger than the LSD value given at the bottom of the column. Treatment means should be compared only within a column (LSD 0.05).
- d) CV is the coefficient of variation and indicates the percent variation of the treatment means in each column.

TABLE 7. WATER DROPLET PENETRATION TIMES BY DEPTH FOR 2003 IN FT. LAUDERDALE, FL  
 16 WEEKS AFTER THE INITIAL APPLICATION OF WETTING AGENTS.  
 THE INITIAL APPLICATION OF WETTING AGENTS WAS MADE ON APRIL 22, 2003.

WATER DROPLET PENETRATION MEASURED IN SECONDS <sup>a</sup>						
NAME	0.5 CM <sup>b</sup>	1.5 CM	2.5 CM	3.5 CM	4.5 CM	5.5 CM
AQUEDUCT	4.8	1.0	0.2	0.0	0.0	0.0
BRILLIANCE	13.2	3.2	1.2	0.0	0.0	0.0
CASCADE PLUS	66.8	22.0	13.2	5.2	0.8	0.0
CONTROL	120.8	49.0	35.5	15.3	9.2	3.7
HYDRO-WET	52.5	34.0	21.0	7.8	2.0	1.2
LESCOFLO	50.3	16.8	9.0	2.5	1.0	0.2
NAIAD	121.3	44.0	33.7	10.3	4.0	1.2
PRIMER SELECT	62.7	29.3	23.7	4.5	0.8	0.5
RESPOND 2	74.5	22.8	11.0	4.7	1.3	0.5
SURFSIDE 37	84.7	46.7	19.7	4.5	2.0	0.0
TRICURE	24.8	8.8	5.2	2.0	0.0	0.0
LSD <sup>c</sup>	72.3	51.1	28.9	15.2	8.3	3.4
CV <sup>d</sup> (%)	90.1	127.6	127.5	177.6	268.7	325.8

- a) The maximum time for water droplet penetration was 600 seconds. Any water droplet remaining after 600 seconds was recorded as 600 seconds.
- b) Depth in centimeters below the soil surface.
- c) LSD is the least significant difference among the treatment means. To determine if one treatment is significantly different from another, subtract the mean of one treatment from the mean of another treatment. A statistically significant difference occurs when this value is larger than the LSD value given at the bottom of the column. Treatment means should be compared only within a column (LSD 0.05).
- d) CV is the coefficient of variation and indicates the percent variation of the treatment means in each column.

TABLE 8. YEARLY AVERAGE WATER DROPLET PENETRATION TIMES BY DEPTH FOR 2003 IN FT. LAUDERDALE, FL AFTER THE APPLICATION OF WETTING AGENTS.

WATER DROPLET PENETRATION MEASURED IN SECONDS <sup>a</sup>						
NAME	0.5 CM <sup>b</sup>	1.5 CM	2.5 CM	3.5 CM	4.5 CM	5.5 CM
AQUEDUCT	6.5	2.9	1.1	0.6	0.2	0.2
BRILLIANCE	34.0	11.0	3.4	1.0	0.1	0.0
CASCADE PLUS	31.8	10.1	6.1	1.7	0.6	0.4
CONTROL	151.2	51.0	27.6	24.1	5.5	2.6
HYDRO-WET	34.8	17.2	9.5	3.0	0.9	0.5
LESCOFLO	29.8	12.5	7.3	2.0	0.6	0.2
NAIAD	82.0	29.7	15.5	4.1	1.5	0.4
PRIMER SELECT	55.3	25.2	14.6	3.5	1.0	0.5
RESPOND 2	62.4	23.0	12.4	3.2	0.9	0.3
SURFSIDE 37	56.6	27.3	12.6	3.8	1.2	0.3
TRICURE	40.9	13.3	8.1	2.6	0.8	0.3
LSD <sup>c</sup>	23.1	11.2	6.7	13.5	1.7	0.8
CV <sup>d</sup> (%)	41.1	50.6	57.0	221.6	120.3	135.5

- a) The maximum time for water droplet penetration was 600 seconds. Any water droplet remaining after 600 seconds was recorded as 600 seconds.
- b) Depth in centimeters below the soil surface.
- c) LSD is the least significant difference among the treatment means. To determine if one treatment is significantly different from another, subtract the mean of one treatment from the mean of another treatment. A statistically significant difference occurs when this value is larger than the LSD value given at the bottom of the column. Treatment means should be compared only within a column (LSD 0.05).
- d) CV is the coefficient of variation and indicates the percent variation of the treatment means in each column.

TABLE 9. DEW FORMATION/CONTROL FOR 2003 IN FT. LAUDERDALE, FL  
FOLLOWING THE APPLICATION OF WETTING AGENTS.

DEW FORMATION/CONTROL <sup>a</sup>					
NAME	DEW 1 <sup>b</sup>	DEW 2	DEW 3	DEW 4	YEARLY AVE.
AQUEDUCT	7.7	6.0	9.0	5.3	6.9
BRILLIANCE	9.0	6.5	1.0	1.0	4.4
CASCADE PLUS	9.0	6.3	1.0	1.0	4.3
CONTROL	2.3	1.0	1.0	1.0	1.3
HYDRO-WET	8.0	7.2	7.0	8.3	7.6
LESCOFLO	9.0	6.0	1.0	1.0	4.5
NAIAD	5.7	2.0	6.2	1.0	3.5
PRIMER SELECT	9.0	2.2	1.0	7.0	4.8
RESPOND 2	4.7	1.0	1.0	1.0	1.9
SURFSIDE 37	8.7	1.7	6.2	3.0	4.9
TRICURE	9.0	1.7	1.0	9.0	5.2
LSD <sup>c</sup>	2.3	2.3	0.6	1.4	1.0
CV <sup>d</sup> (%)	28.0	56.0	18.4	38.3	20.7

- a) Dew formation/control was visually rated using a scale of 1=heavy dew present and 9=no dew present.
- b) Dew formation/control ratings were taken on various dates following the application of wetting agents.
- c) LSD is the least significant difference among the treatment means. To determine if one treatment is significantly different from another, subtract the mean of one treatment from the mean of another treatment. A statistically significant difference occurs when this value is larger than the LSD value given at the bottom of the column. Treatment means should be compared only within a column (LSD 0.05).
- d) CV is the coefficient of variation and indicates the percent variation of the treatment means in each column.