NATIONAL TURFGRASS EVALUATION PROGRAM

The National Turfgrass Evaluation Program (NTEP) is designed to develop and coordinate uniform evaluation trials of turfgrass varieties and promising selections in the United States and Canada. Test results can be used by national companies and plant breeders to determine the broad picture of the adaptation of a cultivar. Results can also be used to determine if a cultivar is well adapted to a local area or level of turf maintenance.

Briefly, the NTEP is a self-supporting, non-profit program, sponsored by the Beltsville Agricultural Research Center and the National Turfgrass Federation, Inc. Program policy is made by a policy committee consisting of one member from each of the four (4) Regional Turfgrass Research Committees in the United States, one member from the Lawn Seed Division of the American Seed Trade Association, one member from the United States Golf Association (USGA) Green Section, one member from the Golf Course Superintendents Assoc. of America (GCSAA), one member for the Turfgrass Producers International (TPI), one member from the Turfgrass Breeders Association and an executive director. The program does not make variety recommendations. However, the data from tests can be used by extension specialists and others for making recommendations.

The policy committee is responsible for determining program policy including, (1) requirements for submission of entries, (2) scheduling tests, (3) evaluation methods, (4) selecting standard or control test entries, (5) setting entry fees, (6) coordinating tests in their respective regions, (7) establishing guidelines for publication and data distribution and (8) scheduling committee meetings.

Executive Director - Kevin N. Morris, National Turfgrass Evaluation Program, Inc.

CURRENT POLICY COMMITTEE MEMBERS:

Dr. Melodee Fraser, Pure-Seed Testing, Inc.
Mr. Paul Hedgpeth, Columbia River Seeds
Dr. Jeff Nus, USGA Green Section
Dr. Michael Richardson, University of Arkansas
Dr. David Kopec, University of Arizona
Mr. Warren Bell, Biograss Sod Farms
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A Guide to NTEP Turfgrass Ratings

Introduction

The quality and scientific merit of NTEP data is extremely important. However, the evaluation of turfgrass species and cultivars is a difficult and complex issue. Furthermore, turfgrass evaluation is generally a subjective process based on visual estimates of factors, like genetic color, stand density, leaf texture, uniformity and quality. These factors can not be measured in the same way as other agricultural crops. Turfgrass quality is not a measure of yield or nutritive value. Turfgrass quality is a measure of aesthetics (i.e. density, uniformity, texture, smoothness, growth habit and color), and functional use. The most common way of assessing turfgrass quality is a visual rating system that is based on the turfgrass evaluator's judgement.

General Considerations

Most visual ratings collected on NTEP trials are based on a 1 to 9 rating scale. One is the poorest or lowest and 9 is the best or highest rating. However, a few characteristics, such as winter kill or percent living ground cover, are rated on a percentage basis, again by using the evaluator's judgement. Most disease ratings found in NTEP reports will use the 1-9 scale, 9=no disease except where the evaluator made a judgement of the percentage of disease in each plot. Percent disease data will be found in separate tables and will normally not be included with disease data using the 1-9 scale.

Turfgrass Quality

Turfgrass Quality is based on 9 being outstanding or ideal turf and 1 being poorest or dead. A rating of 6 or above is generally considered acceptable. A quality rating value of 9 is reserved for a perfect or ideal grass, but it also can reflect an absolutely outstanding treatment plot. The NTEP requires quality ratings on a monthly basis. Quality ratings take into account the aesthetic and functional aspects of the turf. Quality ratings are not based on color alone, but on a combination of color, density, uniformity, texture, and disease or environmental stress.

Turfgrass quality ratings are grouped and presented by region, management level, a particular stress (shade, traffic, etc.) and in some cases, by individual location (starting with 2001 data, data from each location will be posted separately as well on the NTEP web site, *http://www.ntep.org*). Also available now is a summary table (Appendix) in the back of this report. This summary table includes various statistical measures not previously compiled for NTEP reports. For an explanation of this table and these changes, please go to the NTEP web site at *http://www.ntep.org/pdf/grandmean.mem.pdf*.

Other Ratings

More detailed information on the ratings of specific characteristics can be found on the NTEP web site at *http://www.ntep.org/reports/ratings.htm*.

2007 NATIONAL ST. AUGUSTINEGRASS TEST

LOCATIONS SUBMITTING DATA FOR 2009

| <u>State</u> | Location | <u>Code</u> |
|----------------|-------------------|-------------|
| Florida | Gainesville | FL1 |
| Georgia | Griffin | GA1 |
| Mississippi | Mississippi State | MS1 |
| North Carolina | Raleigh | NC1 |

2007 NATIONAL ST. AUGUSTINEGRASS TEST

Entries and Sponsors

| Entry No. | Name | Sponsor |
|-----------|------------|---|
| *1 | Floratam | Standard entry |
| *2 | Raleigh | Standard entry |
| *3 | Mercedes | Standard entry |
| 4 | DALSA 0406 | Texas A&M University |
| 5 | DALSA 0602 | Texas A&M University |
| *6 | NUF-76 | Univ. of Florida/Florida Sod Growers Coop. |

* COMMERCIALLY AVAILABLE IN THE USA IN 2010.

TABLE A.

2009 LOCATIONS, SITE DESCRIPTIONS AND MANAGEMENT PRACTICES IN THE 2007 NATIONAL ST. AUGUSTINEGRASS TEST

| LOCATION | SOIL TEXTURE | SOIL PH | SOIL PHOSPHOROUS (LBS/ACRE) | SOIL POTASSIUM (LBS/ACRE) | NITROGEN (LBS/1000 SQ FT) | SUN OR SHADE | MOWING HEIGHT (IN) | IRRIGATION PRACTICED |
|----------|---------------------|------------|-----------------------------------|---------------------------------|------------------------------|--------------------|--------------------------|-------------------------|
| FL1 | SAND | 6.6-7.0 | - | - | 1.1-2.0 | FULL SUN | 2.6-3.0 | TO PREVENT STRESS |
| GA1 | LOAMY SAND | 5.6-6.0 | 61 - 150 | 151-240 | | FULL SUN | 2.6-3.0 | TO PREVENT STRESS |
| MS1 | SANDY LOAM | 6.6-7.0 | 151-270 | 241-375 | 2.1-3.0 | FULL SUN | 2.6-3.0 | TO PREVENT STRESS |
| NC1 | SILTY CLAY AND CLAY | 6.1-6.5 | 61-150 | 0-150 | 3.1-4.0 | FULL SUN | 2.1-2.5 | TO PREVENT STRESS |

LOCATIONS AND DATA COLLECTED IN 2009

| LOCATION | JANUARY QUALITY RATING | FEBRUARY QUALITY RATING | MARCH QUALITY RATING | APRIL QUALITY RATING | MAY QUALITY RATING | JUNE QUALITY RATING | JULY QUALITY RATING | AUGUST QUALITY RATING | SEPTEMBER QUALITY RATING | OCTOBER QUALITY RATING | NOVEMBER QUALITY RATING | DECEMBER QUALITY RATING | GENETIC COLOR | SPRING GREENUP | LEAF TEXTURE |
|------------|------------------------------|-------------------------------|----------------------------|----------------------------|--------------------------|---------------------------|---------------------------|-----------------------------|--------------------------------|------------------------------|-------------------------------|-------------------------------|------------------|-------------------|-----------------|
| FL1 GA1 | Х | Х | Х | х | x x | X X | X X | X X | X X | x x | x x | х | X X | X X | х |
| MS1 NC1 | | | | x x | x x | X X | X X | X X | X X | x x | X X | | X X | X X | x x |

TABLE B. (CONT'D)

LOCATIONS AND DATA COLLECTED IN 2009

| | | | | PERCENT | | PERCENT | FALL | FALL | FALL | FALL | | PER | CENT | | |
|----------|---------|---------|---------|---------|--------|---------|-----------|---------|----------|----------|-------------|------------|-------|-------|-------|
| | SPRING | SUMMER | FALL | COVER | WINTER | WINTER | COLOR | COLOR | COLOR | COLOR | SEEDHEAD N | MOLE BROWN | PATCH | BROWN | PATCH |
| LOCATION | DENSITY | DENSITY | DENSITY | SPRING | COLOR | KILL | SEPTEMBER | OCTOBER | NOVEMBER | DECEMBER | RATINGS CRI | ICKET WARM | TEMP. | NOV | DEC |
| | | | | | | | | | | | | | | | |
| FL1 | Х | Х | Х | Х | Х | | Х | Х | Х | Х | | Х | | Х | Х |
| GA1 | | | | | | | Х | Х | Х | | | 2 | κ | | |
| | | | | | | | | | | | | | | | |
| MS1 | | | | Х | | | | | | | Х | | | | |
| NC1 | | Х | | | | Х | | Х | Х | | | | | | |

TABLE 1.

MEAN TURFGRASS QUALITY RATINGS OF ST. AUGUSTINEGRASS CULTIVARS AT GAINESVILLE, FL 1/ 2009 DATA

TURFGRASS QUALITY RATINGS 1-9; 9=BEST 2/

| NAME | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | MEAN |
|--------------------|------|------|------|-----|------|------|------|------|------|------|------|------|------|
| * FLORATAM | 5.0 | 2.0 | 4.7 | 5.7 | 6.0 | 6.7 | 7.0 | 6.3 | 5.3 | 5.7 | 5.7 | 6.3 | 5.5 |
| * CAPTIVA (NUF-76) | 5.0 | 2.7 | 4.7 | 5.0 | 5.7 | 6.0 | 6.7 | 6.7 | 6.3 | 6.7 | 4.3 | 3.7 | 5.3 |
| DALSA 0406 | 5.0 | 2.0 | 4.7 | 6.0 | 5.7 | 5.7 | 6.3 | 6.7 | 6.7 | 4.3 | 3.3 | 3.3 | 5.0 |
| * MERCEDES | 4.3 | 2.7 | 4.7 | 5.0 | 5.0 | 4.7 | 5.7 | 5.7 | 5.3 | 4.0 | 4.7 | 4.3 | 4.7 |
| * RALEIGH | 4.3 | 2.0 | 3.3 | 4.7 | 5.7 | 5.7 | 6.0 | 5.7 | 5.7 | 5.0 | 4.0 | 4.3 | 4.7 |
| DALSA 0602 | 5.3 | 2.0 | 4.0 | 5.7 | 5.7 | 5.7 | 6.3 | 4.7 | 3.0 | 4.0 | 2.7 | 2.7 | 4.3 |
| LSD VALUE | 2.0 | 0.7 | 1.4 | 0.8 | 1.6 | 2.1 | 1.5 | 1.2 | 1.6 | 2.1 | 1.9 | 1.3 | 0.9 |
| C.V. (%) | 16.9 | 15.7 | 15.2 | 7.7 | 12.0 | 16.2 | 10.4 | 10.5 | 16.1 | 20.4 | 22.9 | 17.6 | 8.6 |

TABLE 2. MEAN TURFGRASS QUALITY RATINGS OF ST. AUGUSTINEGRASS CULTIVARS AT GRIFFIN, GA 1/ 2009 DATA

TURFGRASS QUALITY RATINGS 1-9; 9=BEST 2/

| NAME | MAY | JUN | JUL | AUG | SEP | ОСТ | NOV | MEAN |
|------------------|------|------|------|-----|-----|------|------|------|
| MERCEDES | 6.7 | 7.3 | 7.3 | 7.3 | 6.7 | 6.7 | 7.0 | 7.0 |
| FLORATAM | 5.0 | 6.7 | 6.3 | 6.7 | 6.7 | 6.3 | 7.0 | 6.4 |
| DALSA 0602 | 5.7 | 6.0 | 7.0 | 7.3 | 6.0 | 5.3 | 5.7 | 6.1 |
| RALEIGH | 4.7 | 7.0 | 7.0 | 6.7 | 7.0 | 5.0 | 5.3 | 6.1 |
| DALSA 0406 | 4.7 | 5.7 | 6.7 | 7.3 | 6.3 | 5.0 | 6.0 | 6.0 |
| CAPTIVA (NUF-76) | 2.7 | 5.0 | 6.3 | 7.3 | 7.0 | 6.3 | 6.7 | 5.9 |
| LSD VALUE | 1.0 | 2.2 | 1.8 | 1.2 | 1.4 | 1.8 | 1.6 | 0.7 |
| C.V. (%) | 11.6 | 16.4 | 11.3 | 7.1 | 9.4 | 14.4 | 12.2 | 5.6 |

* COMMERCIALLY AVAILABLE IN THE USA IN 2010.

1/ TO DETERMINE STATISTICAL DIFFERENCES AMONG ENTRIES, SUBTRACT ONE ENTRY'S MEAN FROM ANOTHER ENTRY'S MEAN. STATISTICAL DIFFERENCES OCCUR WHEN THIS VALUE IS LARGER THAN THE CORRESPONDING LSD VALUE (LSD 0.05).

2/ C.V. (COEFFICIENT OF VARIATION) INDICATES THE PERCENT VARIATION OF THE MEAN IN EACH COLUMN.

TABLE 3. MEAN TURFGRASS QUALITY RATINGS OF ST. AUGUSTINEGRASS CULTIVARS

AT MISS. ST., MS $\,$ 1/ $\,$

2009 DATA

TURFGRASS QUALITY RATINGS 1-9; 9=BEST 2/

| NAME | APR | MAY | JUN | JUL | AUG | SEP | ОСТ | NOV | MEAN |
|------------------|------|------|------|-----|-----|-----|-----|-----|------|
| MERCEDES | 5.3 | 5.7 | 7.0 | 7.3 | 7.3 | 7.3 | 7.0 | 7.0 | 6.8 |
| RALEIGH | 5.3 | 5.7 | 6.7 | 6.7 | 6.7 | 7.3 | 6.7 | 6.7 | 6.5 |
| DALSA 0406 | 4.0 | 4.7 | 6.3 | 6.7 | 7.0 | 7.3 | 7.0 | 7.0 | 6.3 |
| DALSA 0602 | 3.7 | 4.3 | 6.0 | 6.7 | 6.7 | 7.0 | 6.0 | 6.0 | 5.8 |
| CAPTIVA (NUF-76) | 3.0 | 3.3 | 4.3 | 4.7 | 5.3 | 6.7 | 6.7 | 6.3 | 5.0 |
| FLORATAM | 2.3 | 3.3 | 4.3 | 5.7 | 6.0 | 6.0 | 5.0 | 5.3 | 4.8 |
| LSD VALUE | 1.6 | 1.4 | 1.2 | 1.2 | 1.1 | 0.6 | 0.5 | 1.2 | 0.9 |
| C.V. (%) | 21.5 | 16.7 | 11.2 | 9.9 | 8.9 | 5.0 | 4.7 | 9.3 | 8.1 |

TABLE 4. MEAN TURFGRASS QUALITY RATINGS OF ST. AUGUSTINEGRASS CULTIVARS AT RALEIGH, NC $\,$ 1/

2009 DATA

TURFGRASS QUALITY RATINGS 1-9; 9=BEST 2/

| NAME | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | MEAN |
|------------------|------|------|------|------|------|------|------|------|------|
| MERCEDES | 5.3 | 5.7 | 8.0 | 7.3 | 7.7 | 6.7 | 7.0 | 7.0 | 6.8 |
| CAPTIVA (NUF-76) | 4.3 | 4.7 | 7.3 | 7.0 | 7.7 | 7.7 | 7.3 | 7.3 | 6.7 |
| DALSA 0602 | 3.3 | 3.7 | 6.7 | 6.3 | 6.3 | 5.0 | 6.3 | 4.3 | 5.3 |
| RALEIGH | 4.3 | 4.3 | 6.3 | 5.0 | 5.3 | 6.0 | 5.3 | 4.3 | 5.1 |
| DALSA 0406 | 2.0 | 2.3 | 4.3 | 4.3 | 5.7 | 6.3 | 5.0 | 4.7 | 4.3 |
| FLORATAM | 1.0 | 1.0 | 4.0 | 3.3 | 5.3 | 4.0 | 5.3 | 3.7 | 3.5 |
| LSD VALUE | 1.5 | 1.7 | 1.5 | 1.3 | 1.3 | 1.0 | 1.5 | 1.7 | 1.0 |
| C.V. (%) | 25.1 | 25.6 | 13.9 | 13.0 | 10.8 | 10.0 | 13.0 | 17.7 | 10.6 |

1/ TO DETERMINE STATISTICAL DIFFERENCES AMONG ENTRIES, SUBTRACT ONE ENTRY'S MEAN FROM ANOTHER ENTRY'S MEAN. STATISTICAL DIFFERENCES OCCUR WHEN THIS VALUE IS LARGER THAN THE CORRESPONDING LSD VALUE (LSD 0.05).

2/ C.V. (COEFFICIENT OF VARIATION) INDICATES THE PERCENT VARIATION OF THE MEAN IN EACH COLUMN.

| NAME | FL1 | GA1 | MS1 | NC1 | MEAN |
|---|--|--|--|--|---------------------------------|
| CAPTIVA (NUF-76) FLORATAM MERCEDES RALEIGH DALSA 0406 DALSA 0602 | 7.7 6.0 6.0 7.0 6.3 6.3 | 7.3 6.7 7.7 7.0 7.0 7.0 | 7.3 6.3 6.3 6.3 6.3 5.0 | 7.0 8.0 6.3 6.0 5.7 4.3 | 7.3 6.8 6.6 6.3 5.7 |
| LSD VALUE C.V. (%) | 0.9 8.8 | 0.9 8.1 | 0.8 8.4 | 0.9 9.3 | 0.5 8.6 |

GENETIC COLOR RATINGS 1-9; 9=DARK GREEN 2/

TABLE 5. GENETIC COLOR RATINGS OF ST. AUGUSTINEGRASS CULTIVARS 1/ 2009 DATA

TABLE 6. SPRING GREENUP RATINGS OF ST. AUGUSTINEGRASS CULTIVARS 1/ 2009 DATA

SPRING GREENUP RATINGS 1-9; 9=COMPLETELY GREEN 2/

| NAME | FL1 | GA1 | MS1 | NC1 | MEAN |
|------------------------------|-------------|-------------|-------------|-------------|-------------|
| MERCEDES CAPTIVA (NUF-76) | 3.7 4.7 | 7.3 4.7 | 4.3 | 5.0 3.0 | 5.1 3.8 |
| RALEIGH DALSA 0406 | 2.0 | 5.7 5.0 | 3.7 | 3.0 | 3.6 3.0 |
| DALSA 0602 FLORATAM | 3.0 3.0 | 5.0 5.3 | 2.3 | 1.7 | 3.0 |
| | | | - | | |
| LSD VALUE C.V. (%) | 0.8 16.4 | 1.7 18.7 | 0.9 20.4 | 1.6 38.9 | 0.6 23.0 |

1/ TO DETERMINE STATISTICAL DIFFERENCES AMONG ENTRIES, SUBTRACT ONE ENTRY'S MEAN FROM ANOTHER ENTRY'S MEAN. STATISTICAL DIFFERENCES OCCUR WHEN THIS VALUE IS LARGER THAN THE CORRESPONDING LSD VALUE (LSD 0.05).

2/ C.V. (COEFFICIENT OF VARIATION) INDICATES THE PERCENT VARIATION OF THE MEAN IN EACH COLUMN.

TABLE 7. LEAF TEXTURE RATINGS OF ST. AUGUSTINEGRASS CULTIVARS 1/ 2009 DATA

LEAF TEXTURE RATINGS 1-9; 9=VERY FINE 2/

| NAME | FL1 | MS1 | NC1 | MEAN |
|------------------|-----|-----|-----|------|
| CAPTIVA (NUF-76) | 7.7 | 7.0 | 7.7 | 7.4 |
| MERCEDES | 6.0 | 6.7 | 7.3 | 6.7 |
| RALEIGH | 6.0 | 6.0 | 6.3 | 6.1 |
| DALSA 0406 | 5.7 | 6.3 | 6.0 | 6.0 |
| DALSA 0602 | 5.0 | 5.0 | 5.0 | 5.0 |
| FLORATAM | 5.0 | 4.0 | 3.0 | 4.0 |
| LSD VALUE | 0.5 | 0.5 | 0.7 | 0.3 |
| C.V. (%) | 5.7 | 5.7 | 6.9 | 6.1 |

TABLE 8. SPRING DENSITY RATINGS OF ST. AUGUSTINEGRASS CULTIVARS 1/ 2009 DATA

DENSITY RATINGS 1-9; 9=MAXIMUM DENSITY 2/

| NAME | FL1 |
|------------------|------|
| CAPTIVA (NUF-76) | 7.3 |
| DALSA 0406 | 6.7 |
| DALSA 0602 | 6.3 |
| FLORATAM | 6.3 |
| RALEIGH | 6.0 |
| MERCEDES | 5.3 |
| LSD VALUE | 1.1 |
| C.V. (%) | 10.5 |

- 1/ TO DETERMINE STATISTICAL DIFFERENCES AMONG ENTRIES, SUBTRACT ONE ENTRY'S MEAN FROM ANOTHER ENTRY'S MEAN. STATISTICAL DIFFERENCES OCCUR WHEN THIS VALUE IS LARGER THAN THE CORRESPONDING LSD VALUE (LSD 0.05).
- 2/ C.V. (COEFFICIENT OF VARIATION) INDICATES THE PERCENT VARIATION OF THE MEAN IN EACH COLUMN.

TABLE 9. SUMMER DENSITY RATINGS OF ST. AUGUSTINEGRASS CULTIVARS 1/ 2009 DATA

DENSITY RATINGS 1-9; 9=MAXIMUM DENSITY 2/

| NAME | FL1 | NC1 | MEAN |
|------------------|------|------|------|
| CAPTIVA (NUF-76) | 8.0 | 7.0 | 7.5 |
| MERCEDES | 6.7 | 8.0 | 7.3 |
| DALSA 0602 | 7.3 | 7.0 | 7.2 |
| RALEIGH | 6.7 | 6.3 | 6.5 |
| FLORATAM | 7.0 | 4.3 | 5.7 |
| DALSA 0406 | 6.7 | 3.3 | 5.0 |
| LSD VALUE | 1.2 | 1.3 | 0.9 |
| C.V. (%) | 10.6 | 13.6 | 12.0 |

TABLE 10. FALL DENSITY RATINGS OF ST. AUGUSTINEGRASS CULTIVARS 1/ 2009 DATA

DENSITY RATINGS 1-9; 9=MAXIMUM DENSITY 2/

| NAME | FL1 |
|------------------|------|
| CAPTIVA (NUF-76) | 7.0 |
| FLORATAM | 6.0 |
| MERCEDES | 6.0 |
| RALEIGH | 5.7 |
| DALSA 0406 | 5.3 |
| DALSA 0602 | 4.7 |
| LSD VALUE | 1.6 |
| C.V. (%) | 17.3 |

- 1/ TO DETERMINE STATISTICAL DIFFERENCES AMONG ENTRIES, SUBTRACT ONE ENTRY'S MEAN FROM ANOTHER ENTRY'S MEAN. STATISTICAL DIFFERENCES OCCUR WHEN THIS VALUE IS LARGER THAN THE CORRESPONDING LSD VALUE (LSD 0.05).
- 2/ C.V. (COEFFICIENT OF VARIATION) INDICATES THE PERCENT VARIATION OF THE MEAN IN EACH COLUMN.

TABLE 11. PERCENT LIVING GROUND COVER (SPRING) RATINGS OF ST. AUGUSTINEGRASS CULTIVARS 1/ 2009 DATA

| NAME | FL1 | MS1 | MEAN |
|------------------|------|------|------|
| MERCEDES | 46.7 | 84.7 | 65.7 |
| DALSA 0406 | 38.3 | 71.7 | 55.0 |
| RALEIGH | 21.7 | 86.7 | 54.2 |
| DALSA 0602 | 36.7 | 70.0 | 53.3 |
| CAPTIVA (NUF-76) | 51.7 | 45.0 | 48.3 |
| FLORATAM | 33.3 | 46.7 | 40.0 |
| LSD VALUE | 13.5 | 18.1 | 11.3 |
| C.V. (%) | 22.1 | 16.7 | 18.8 |

PERCENT LIVING GROUND COVER IN SPRING: LOCATIONS 2/

TABLE 12. WINTER COLOR RATINGS OF ST. AUGUSTINEGRASS CULTIVARS 1/ 2009 DATA

WINTER COLOR RATINGS 1-9; 9=COMPLETE COLOR RETENTION 2/

| NAME | FL1 |
|------------------|------|
| FLORATAM | 6.3 |
| MERCEDES | 5.7 |
| RALEIGH | 4.7 |
| DALSA 0406 | 4.3 |
| CAPTIVA (NUF-76) | 3.7 |
| DALSA 0602 | 3.3 |
| LSD VALUE | 1.1 |
| C.V. (%) | 15.2 |

- 1/ TO DETERMINE STATISTICAL DIFFERENCES AMONG ENTRIES, SUBTRACT ONE ENTRY'S MEAN FROM ANOTHER ENTRY'S MEAN. STATISTICAL DIFFERENCES OCCUR WHEN THIS VALUE IS LARGER THAN THE CORRESPONDING LSD VALUE (LSD 0.05).
- 2/ C.V. (COEFFICIENT OF VARIATION) INDICATES THE PERCENT VARIATION OF THE MEAN IN EACH COLUMN.

TABLE 13. PERCENT WINTER KILL RATINGS OF ST. AUGUSTINEGRASS CULTIVARS 1/ 2009 DATA

PERCENT WINTER KILL RATINGS: LOCATIONS 2/

| NAME | NC1 |
|-----------------------------|--------------|
| FLORATAM | 90.0 |
| DALSA 0406 | 73.3 |
| CAPTIVA (NUF-76) BALFIGH | 18.3 |
| DALSA 0602 | 18.3 11.7 |
| MERCEDES | 3.7 |
| MERCEDES | 5.7 |
| LSD VALUE | 14.1 |
| C.V. (%) | 24.5 |

TABLE 14. FALL COLOR (SEPTEMBER) RATINGS OF ST. AUGUSTINEGRASS CULTIVARS 1/ 2009 DATA

FALL COLOR RATINGS 1-9; 9=COMPLETE COLOR RETENTION 2/

| NAME | FL1 | GA1 | MEAN |
|--------------------------------|------------|------------|------------|
| CAPTIVA (NUF-76) DALSA 0406 | 8.0 7.0 | 8.0 6.7 | 8.0 6.8 |
| FLORATAM | 6.3 | 7.0 | 6.7 |
| RALEIGH MERCEDES | 6.3 5.3 | 7.0 6.7 | 6.7 6.0 |
| DALSA 0602 | 3.7 | 6.0 | 4.8 |
| LSD VALUE | 1.4 | 1.4 | 1.0 |
| C.V. (%) | 13.9 | 12.8 | 13.3 |

- 1/ TO DETERMINE STATISTICAL DIFFERENCES AMONG ENTRIES, SUBTRACT ONE ENTRY'S MEAN FROM ANOTHER ENTRY'S MEAN. STATISTICAL DIFFERENCES OCCUR WHEN THIS VALUE IS LARGER THAN THE CORRESPONDING LSD VALUE (LSD 0.05).
- 2/ C.V. (COEFFICIENT OF VARIATION) INDICATES THE PERCENT VARIATION OF THE MEAN IN EACH COLUMN.

TABLE 15. FALL COLOR (OCTOBER) RATINGS OF ST. AUGUSTINEGRASS CULTIVARS 1/ 2009 DATA

| NAME | FL1 | GA1 | NC1 | MEAN |
|------------------|------|------|------|------|
| CAPTIVA (NUF-76) | 6.0 | 6.0 | 6.7 | 6.2 |
| FLORATAM | 5.0 | 6.7 | 6.7 | 6.1 |
| MERCEDES | 4.3 | 6.3 | 6.7 | 5.8 |
| DALSA 0602 | 3.3 | 5.0 | 7.7 | 5.3 |
| DALSA 0406 | 3.7 | 4.7 | 6.0 | 4.8 |
| RALEIGH | 4.7 | 5.3 | 4.3 | 4.8 |
| LSD VALUE | 1.5 | 1.7 | 1.3 | 0.9 |
| C.V. (%) | 21.0 | 18.1 | 12.3 | 16.8 |

FALL COLOR RATINGS 1-9; 9=COMPLETE COLOR RETENTION 2/

TABLE 16. FALL COLOR (NOVEMBER) RATINGS OF ST. AUGUSTINEGRASS CULTIVARS 1/ 2009 DATA

| FALL C | OLOR | RATINGS | 1-9; | 9=COMPLETE | COLOR | RETENTION | 2/ |
|--------|------|---------|------|------------|-------|-----------|----|
| | | | , | | | | -, |

| NAME | FL1 | GA1 | NC1 | MEAN |
|------------------------------|------|------|-----|------|
| CAPTIVA (NUF-76) MERCEDES | 5.7 | 6.3 | 6.7 | 6.2 |
| FLORATAM | 5.0 | 5.7 | 7.0 | 5.9 |
| | 5.0 | 6.3 | 6.0 | 5.8 |
| DALSA 0602 | 2.7 | 6.0 | 7.3 | 5.3 |
| DALSA 0406 | 3.3 | 5.3 | 6.3 | 5.0 |
| RALEIGH | 4.7 | 5.7 | 4.0 | 4.8 |
| LSD VALUE | 1.4 | 1.4 | 0.9 | 0.7 |
| C.V. (%) | 19.4 | 15.0 | 9.3 | 14.2 |

^{1/} TO DETERMINE STATISTICAL DIFFERENCES AMONG ENTRIES, SUBTRACT ONE ENTRY'S MEAN FROM ANOTHER ENTRY'S MEAN. STATISTICAL DIFFERENCES OCCUR WHEN THIS VALUE IS LARGER THAN THE CORRESPONDING LSD VALUE (LSD 0.05).

^{2/} C.V. (COEFFICIENT OF VARIATION) INDICATES THE PERCENT VARIATION OF THE MEAN IN EACH COLUMN.

TABLE 17. FALL COLOR (DECEMBER) RATINGS OF ST. AUGUSTINEGRASS CULTIVARS 1/ 2009 DATA

FALL COLOR RATINGS 1-9; 9=COMPLETE COLOR RETENTION 2/

| NAME | FL1 |
|------------------|------|
| FLORATAM | 7.3 |
| MERCEDES | 4.7 |
| RALEIGH | 4.3 |
| DALSA 0406 | 4.0 |
| DALSA 0602 | 4.0 |
| CAPTIVA (NUF-76) | 3.3 |
| LSD VALUE | 1.4 |
| C.V. (%) | 18.4 |

TABLE 18. SEEDHEAD RATINGS OF ST. AUGUSTINEGRASS CULTIVARS 1/ 2009 DATA

SEEDHEAD RATINGS 1-9; 9=NONE 2/

| NAME | MS1 |
|------------------|-----|
| CAPTIVA (NUF-76) | 8.0 |
| FLORATAM | 8.0 |
| DALSA 0406 | 7.0 |
| DALSA 0602 | 6.7 |
| MERCEDES | 6.0 |
| RALEIGH | 4.7 |
| LSD VALUE | 0.8 |
| C.V. (%) | 7.8 |

1/ TO DETERMINE STATISTICAL DIFFERENCES AMONG ENTRIES, SUBTRACT ONE ENTRY'S MEAN FROM ANOTHER ENTRY'S MEAN. STATISTICAL DIFFERENCES OCCUR WHEN THIS VALUE IS LARGER THAN THE CORRESPONDING LSD VALUE (LSD 0.05).

2/ C.V. (COEFFICIENT OF VARIATION) INDICATES THE PERCENT VARIATION OF THE MEAN IN EACH COLUMN.

TABLE 19. MOLE CRICKET RATINGS OF ST. AUGUSTINEGRASS CULTIVARS 1/ 2009 DATA

MOLE CRICKET RATINGS 1-9; 9=NO DAMAGE 2/

| NAME | FL1 |
|---|---|
| RALEIGH CAPTIVA (NUF-76) DALSA 0406 DALSA 0602 FLORATAM MERCEDES | 9.0 8.7 8.7 8.7 8.7 8.7 8.3 |
| LSD VALUE C.V. (%) | 0.8 6.1 |

TABLE 20. BROWN PATCH RATINGS OF ST. AUGUSTINEGRASS CULTIVARS AT GAINESVILLE, FL 1/ 2009 DATA

| NAME | NOVEMBER | DECEMBER | MEAN |
|------------------|----------|----------|------|
| FLORATAM | 8.3 | 7.3 | 7.8 |
| MERCEDES | 4.7 | 5.3 | 5.0 |
| RALEIGH | 4.0 | 5.3 | 4.7 |
| DALSA 0602 | 3.0 | 4.3 | 3.7 |
| DALSA 0406 | 3.0 | 4.0 | 3.5 |
| CAPTIVA (NUF-76) | 3.3 | 3.0 | 3.2 |
| LSD VALUE | 1.8 | 1.5 | 1.0 |
| C.V. (%) | 22.7 | 16.6 | 12.4 |

BROWN PATCH RATINGS 1-9; 9=NO DISEASE 2/

1/ TO DETERMINE STATISTICAL DIFFERENCES AMONG ENTRIES, SUBTRACT ONE ENTRY'S MEAN FROM ANOTHER ENTRY'S MEAN. STATISTICAL DIFFERENCES OCCUR WHEN THIS VALUE IS LARGER THAN THE CORRESPONDING LSD VALUE (LSD 0.05).

^{2/} C.V. (COEFFICIENT OF VARIATION) INDICATES THE PERCENT VARIATION OF THE MEAN IN EACH COLUMN.