## 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, one member from the Sports Turf Managers Association of America (STMA), 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:**

Mr. Sean Chaney, DLF North America
Mr. Micah Gould, Barenbrug USA.
Dr. Cole Thompson, USGA Green Section
Dr. Barry Stewart, Mississippi State University
Dr. Alec Kowalewski, Oregon State University
Mr. Mike Selman, Buena Vista Turf Farm
Mr. Mark Johnson, Golf Course Superintendents Assoc. of America
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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 <u>http://www.ntep.org/reports/ratings.htm</u>.

## 2018 NATIONAL LOW INPUT WARM-SEASON TEST

### LOCATIONS SUBMITTING DATA FOR 2022

State	Location	Code
Florida	Jay	FL3
Florida	Citra	FL4
Mississippi	Mississippi State	MS1
New Mexico	Las Cruces	NM1
North Carolina	Raleigh	NC1
Oklahoma	Stillwater	OK1
Texas	College Station	TX2

## 2018 National Low Input Warm-Season Test Entries and Sponsors

Entry No.	Name	Species	Seeded/ Vegetative	Sponsors
*1	Meyer	Zoysia	Vegetative	Standard Entry
*2	Tifway	Bermuda	Vegetative	Standard Entry
*3	Midiron	Bermuda	Vegetative	Standard Entry
4	16-TZ-14114	Zoysia	Vegetative	University of Georgia
*5	Habiturf	Buffalo Curly Mesquite Blue grama	Vegetative	Lady Bird Johnson Wildflower Ctr.
6	XZ 14069	Zoysia	Vegetative	North Carolina State University
*7	ASC-117	Bermuda	Seeded	Allstar Seed Co.
*8	Cody	Buffalo	Seeded	Standard Entry
9	FAES 1322	Zoysia	Vegetative	University of Florida
10	FB 1628	Bermuda	Vegetative	University of Florida

\*Commercially available in 2023 in the US or any other country

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
FL3	SANDY LOAM	5.6-6.0	61-150	0-150	$\begin{array}{c} 0.0 - 1.0 \\ 0.0 - 1.0 \\ 1.1 - 2.0 \end{array}$	FULL SUN	2.1-2.5	ONLY DURING SEVERE STRESS
FL4	SAND	5.6-6.0	0-60	0-150		FULL SUN	3.1-3.5	ONLY DURING SEVERE STRESS
MS1	SANDY LOAM	7.6-8.5	271-450	501+		FULL SUN	2.1-2.5	ONLY DURING SEVERE STRESS
NC1	SANDY LOAM	6.1-6.5	61-150	0-150	0.0-1.0	FULL SUN	2.1-2.5	TO PREVENT STRESS
NM1	SANDY LOAM	7.6-8.5	-	-		FULL SUN	1.6-2.0	NO IRRIGATION
OK1	LOAM	7.1-7.5	61-150	241-375		FULL SUN	2.6-3.0	TO PREVENT DORMANCY
TX2	-	7.6-8.5	-	-	0.0-1.0	FULL SUN	1.6-2.0	TO PREVENT DORMANCY

#### 2022 LOCATIONS, SITE DESCRIPTIONS AND MANAGEMENT PRACTICES IN THE 2018 NATIONAL LOW INPUT WARM-SEASON TEST

TABLE A.

TABLE B.

#### LOCATIONS AND DATA COLLECTED IN 2022

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
FL3			Х	Х	Х	Х	Х	Х	Х					
FL4	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х		Х
MS1				Х	Х	Х	Х	Х	Х	Х			Х	Х
NC1				Х	Х	Х	Х	Х	Х	Х	Х		Х	Х
NM1					Х	Х	Х	Х	Х	Х			Х	
OK1				Х	Х	Х	Х	Х	Х					Х
TX2				Х	Х	Х	Х	Х	Х	Х				Х

TABLE B. (CONT'D)

#### LOCATIONS AND DATA COLLECTED IN 2022

				PERCI	ENT LIVING G	ROUND COVER 1	RATINGS					
LOCATION	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
FL3 FL4 MS1	Х	Х	X X	X X X	X X X	X X	X X	X X X	X X	Х	Х	Х
NC1 NM1 OK1				X X X	X X X	X X X	X X X	X X X	X X	X X	Х	
TX2			Х		Х	Х	Х	Х	Х			

TABLE B.	(CONT'D) LOCATIONS AND DATA COLLECTED IN 2022											
	CANOPY HEIGHT MEASUREMENTS											
LOCATION	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
* FL3			Х	Х	Х		Х	Х	Х			
* FL4	Х	Х	Х	Х	Х	Х		Х	Х	Х	Х	Х
* MS1												
* NC1						Х	Х	Х	Х	Х		
* NM1				Х	Х	Х	Х	Х	Х	Х		
* OK1				Х	Х	Х	Х	Х	Х			
* TX2				Х	Х	Х	Х	Х	Х	Х		

\* MORE DATA FOR FL3, FL4, MS1, NC1, NM1, OK1 AND TX2 IN TABLE 5-11.

#### TABLE 1. MEAN TURFGRASS QUALITY RATINGS OF WARM-SEASON CULTIVARS GROWN UNDER 1/ LOW INPUT IN LOCATION PERFORMANCE INDEX (LPI) GROUP 1 \*\*/ 2022 DATA

#### TURFGRASS QUALITY RATINGS 1-9; 9=IDEAL TURF 2/

NAME		# Entry	NC1	FL3	FL4	OK1	MEAN
XZ 14069	ZOYSIA	6	6.4	6.7	4.7	5.6	5.8
16-TZ-14114	ZOYSIA	4	6.3	6.4	5.5	5.1	5.8
* TIFWAY	BERMUDA	2	5.3	6.5	4.6	5.0	5.4
FAES 1322	ZOYSIA	9	6.2	6.7	4.2	3.9	5.2
* MEYER	ZOYSIA	1	5.5	6.7	3.4	5.0	5.1
FB 1628	BERMUDA	10	4.9	6.6	2.4	4.1	4.5
* MIDIRON	BERMUDA	3	4.2	6.4	1.0	4.9	4.1
* CODY	BUFFALO	8	4.0	5.8	1.0	4.0	3.7
* HABITURF	MIXTURE	5	3.9	6.0	1.0	3.7	3.6
* ASC-117	BERMUDA	7	2.6	6.2	1.0	1.8	2.9
LSD VALUE			0.8	0.8	0.8	0.8	0.8
C.V. (%)			10.3	7.9	17.7	11.7	10.9

\*/ COMMERCIALLY AVAILABLE IN THE USA IN 2023.

- \*\*/ ENTRIES WITHIN THIS TABLE ARE ORDERED BY THE OVERALL MEAN AND HAVE SIMILAR TURF QUALITY PERFORMANCES IN ALL TEST LOCATIONS INCLUDED IN THIS LPI GROUP. IF YOUR STATE IS NOT REPRESENTED, THEN CHOOSE A LPI GROUP THAT CONTAINS A LOCATION AND MANAGEMENT SIMILAR TO YOUR PLANTING CONDITIONS. FOR MORE INFORMATION ON LPI, GO TO WWW.NTEP.ORG/LPI Q&A.PDF
- 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 2.

#### MEAN TURFGRASS QUALITY RATINGS OF WARM-SEASON CULTIVARS GROWN UNDER 1/ LOW INPUT IN LOCATION PERFORMANCE INDEX (LPI) GROUP 2 \*/ 2022 DATA

NAME	TURFGRASS QUALITY RAI	'INGS 1-9; 9=3 # Entry	IDEAL TURF MS1	2/ TX2	NM1	MEAN
TIFWAY	BERMUDA	2	5.3	5.6	8.1	6.3
FB 1628	BERMUDA	10	5.6	4.7	7.7	6.0
XZ 14069	ZOYSIA	6	5.2	5.0	6.9	5.7
16-TZ-14114	ZOYSIA	4	5.1	4.8	6.5	5.4
MIDIRON	BERMUDA	3	4.8	4.7	5.9	5.1
FAES 1322	ZOYSIA	9	4.4	3.4	6.6	4.8
CODY	BUFFALO	8	5.2	3.8	4.6	4.5
MEYER	ZOYSIA	1	4.8	4.1	4.4	4.4
HABITURF	MIXTURE	5	5.3	3.7	4.1	4.3
ASC-117	BERMUDA	7	3.4	2.7	4.1	3.4
LSD VALUE			0.8	0.8	0.8	0.8
C.V. (%)			10.4	11.9	8.6	10.1

- \*/ ENTRIES WITHIN THIS TABLE ARE ORDERED BY THE OVERALL MEAN AND HAVE SIMILAR TURF QUALITY PERFORMANCES IN ALL TEST LOCATIONS INCLUDED IN THIS LPI GROUP. IF YOUR STATE IS NOT REPRESENTED, THEN CHOOSE A LPI GROUP THAT CONTAINS A LOCATION AND MANAGEMENT SIMILAR TO YOUR PLANTING CONDITIONS. FOR MORE INFORMATION ON LPI, GO TO WWW.NTEP.ORG/LPI Q&A.PDF
- 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.

#### GENETIC COLOR RATINGS OF WARM-SEASON CULTIVARS 1/ GROWN UNDER LOW INPUT IN THE U.S. 2022 DATA

NAME		MS1	NC1	NM1	MEAN
CODY ASC-117 FB 1628 FAES 1322 MIDIRON TIFWAY HABITURF MEYER 16-TZ-14114 XZ 14069	BUFFALO BERMUDA ZOYSIA BERMUDA BERMUDA MIXTURE ZOYSIA ZOYSIA ZOYSIA	6.0 5.7 5.3 5.7 5.7 5.0 5.0 5.0 4.7	9.0 9.0 8.0 9.0 8.7 8.0 8.7 8.0 7.7	$\begin{array}{c} 6 \cdot 0 \\ 5 \cdot 7 \\ 4 \cdot 7 \\ 6 \cdot 0 \\ 4 \cdot 0 \\ 4 \cdot 0 \\ 5 \cdot 0 \\ 5 \cdot 0 \\ 4 \cdot 7 \\ 4 \cdot 7 \end{array}$	7.0 6.6 6.4 6.2 6.2 6.2 6.0 5.9 5.7
LSD VALUE C.V. (%)		0.7 7.7	0.4 3.0	2.1 25.7	0.7 12.6

#### GENETIC COLOR RATINGS 1-9; 9=DARK GREEN 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 4.

#### SPRING GREENUP RATINGS OF WARM-SEASON CULTIVARS 1/ GROWN UNDER LOW INPUT IN THE U.S. 2022 DATA

NAME		FL4	MS1	NC1	OK1	TX2	MEAN
HABITURF CODY XZ 14069 MEYER 16-TZ-14114 MIDIRON TIFWAY FB 1628 FAES 1322 ASC-117	MIXTURE BUFFALO ZOYSIA ZOYSIA BERMUDA BERMUDA BERMUDA ZOYSIA BERMUDA	6.0 2.7 4.3 1.7 1.5 5.7	9.0 9.0 4.0 7.7 5.0 5.7 6.3 7.7 2.0 1.0	5.7 4.7 2.3 4.0 2.7 1.7 1.7 2.3 2.0 1.0	7.3 6.7 7.7 6.7 7.3 8.0 7.0 4.3 5.0 2.3	2.3 1.3 4.0 1.3 2.0 1.3 3.3 3.3 3.7 1.0	6.1 5.4 4.8 4.5 4.3 4.2 4.0 3.8 3.7 1.3
LSD VALUE C.V. (%)		1.4 22.2	1.9 20.1	1.2 26.1	1.6 16.3	1.1 27.8	0.7 21.5

#### SPRING GREENUP RATINGS 1-9; 9=COMPLETELY GREEN 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).

#### PERCENT LIVING GROUND COVER AND OTHER RATINGS OF WARM-SEASON CULTIVARS GROWN UNDER LOW INPUT AT JAY, FL 1/ 2022 DATA

#### TURFGRASS QUALITY AND OTHER RATINGS 1-9; 9=BEST 2/

		PERCENT	101010101000 0	UNDIT TIND 0	111111 101111100	1 ), ) 000	1 2/			
		SPRING			PERCENT GRO	UND COVER FR	OM MARCH-SEE	PTEMBER		
NAME		GREENUP	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	MEAN
FAES 1322	ZOYSIA	6.0	96.3	99.0	99.0	99.0	96.3	99.0	99.0	98.2
XZ 14069	ZOYSIA	6.3	94.7	99.0	99.0	99.0	96.0	99.0	96.0	97.5
MEYER	ZOYSIA	6.0	91.7	94.7	99.0	99.0	96.0	99.0	99.0	96.9
FB 1628	BERMUDA	5.0	88.3	97.7	99.0	99.0	97.7	96.3	83.3	94.5
TIFWAY	BERMUDA	5.7	90.0	97.7	97.7	99.0	90.0	93.3	93.0	94.4
MIDIRON	BERMUDA	5.7	88.3	94.7	99.0	99.0	97.0	99.0	89.5	92.4
ASC-117	BERMUDA	5.7	86.7	90.0	64.5	99.0	99.0	99.0		87.2
16-TZ-14114	ZOYSIA	5.0	73.3	78.0	71.0	72.7	86.0	92.7	99.0	79.0
HABITURF	MIXTURE	5.0	63.0	69.7	51.3	79.5	69.5	69.5	59.5	63.9
CODY	BUFFALO	4.3	40.0	40.0	20.0	50.0	60.0	56.7	20.0	41.0
LSD VALUE		2.1	43.3	34.3	53.1	53.7	37.1	31.3	30.9	29.3
C.V. (%)		16.2	25.2	20.8	32.6	23.6	16.7	15.2	19.8	18.9

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).

#### PERCENT LIVING GROUND COVER AND OTHER RATINGS OF WARM-SEASON CULTIVARS GROWN UNDER LOW INPUT AT JAY, FL 1/ 2022 DATA

#### TURFGRASS QUALITY AND OTHER RATINGS 1-9; 9=BEST 2/ CANOPY HEIGHT MEASURED IN CENTIMETERS

			CANOPY	HEIGHT MEAS	URED IN cm			PERCENT WEEDS
NAME		MARCH	APRIL	MAY	JULY	AUGUST	SEPTEMBER	SEPTEMBER
FAES 1322	ZOYSIA	5.0	4.7	4.7	6.7	5.7	5.7	6.7
XZ 14069	ZOYSIA	5.7	5.7	6.3	6.0	6.0	5.7	8.3
MEYER	ZOYSIA	8.0	7.0	7.7	8.7	7.7	6.3	8.3
FB 1628	BERMUDA	5.7	5.0	4.3	6.7	6.0	5.3	33.3
TIFWAY	BERMUDA	6.0	6.7	7.7	7.7	6.3	5.3	21.7
MIDIRON	BERMUDA	6.7	6.7	5.0	6.7	4.7	4.3	20.0
ASC-117	BERMUDA	7.0	6.7	2.7	3.0	0.0	2.0	
16-TZ-14114	ZOYSIA	5.3	7.0	8.7	9.3	5.3	4.3	2.5
HABITURF	MIXTURE	5.7	6.0	5.3	7.0	6.0	4.3	45.0
CODY	BUFFALO	6.3	6.0	10.3	12.7	11.0	7.0	86.7
LSD VALUE		1.6	2.1	7.2	8.4	5.9	7.0	38.5
C.V. (%)		13.7	15.7	50.1	47.9	49.6	52.2	74.0

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).

#### TABLE 6.

# PERCENT LIVING GROUND COVER AND OTHER RATINGS OF WARM-SEASON CULTIVARS GROWN UNDER LOW INPUT AT CITRA, FL 1/ 2022 DATA

#### TURFGRASS QUALITY AND OTHER RATINGS 1-9; 9=BEST 2/ CANOPY HEIGHT MEASURED IN CENTIMETERS

				PERC	ENT LIVIN	G GROUND	COVER JAN	UARY-DECEI	MBER					
NAME		JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	MEAN
16-TZ-14114 XZ 14069 TIFWAY FAES 1322 MEYER FB 1628 ASC-117 CODY HABITURF MIDIRON	ZOYSIA ZOYSIA BERMUDA ZOYSIA BERMUDA BUFFALO MIXTURE BERMUDA	97.7 93.0 61.7 88.3 63.3 36.7 0.0 0.0 0.0 0.0	96.3 84.7 48.3 73.3 41.7 20.0 0.0 0.0 0.0 0.0 0.0	96.3 93.0 58.3 86.7 31.7 16.7 0.0 0.0 0.0 0.0 0.0	90.0 86.3 83.3 45.0 31.7 0.0 0.0 0.0 0.0 0.0	88.3 84.7 81.7 86.7 20.0 8.3 0.0 0.0 0.0 0.0 0.0	91.7 81.7 76.7 83.3 16.7 8.3 0.0 0.0 0.0 0.0 0.0	94.7 76.7 86.7 63.3 46.7 0.0 0.0 0.0 0.0 0.0	93.0 80.0 93.0 89.7 56.7 46.7 0.0 0.0 0.0 0.0	96.0 76.7 89.7 56.7 30.0 0.0 0.0 0.0 0.0 0.0	91.7 56.7 76.7 26.7 63.3 20.0 0.0 0.0 0.0 0.0	99.080.083.353.370.040.00.00.00.00.00.0	93.0 86.7 73.3 46.7 50.0 20.0 0.0 0.0 0.0 0.0 0.0	94.0 81.7 76.1 71.8 49.0 27.1 0.0 0.0 0.0 0.0
LSD VALUE C.V. (%)		22.1 31.9	20.3 35.5	14.3 24.0	20.8 31.6	9.5 16.7	8.1 14.8	21.9 30.7	22.1 30.6	18.8 28.9	18.3 34.7	21.8 32.5	21.2 36.4	12.9 20.9

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).

#### PERCENT LIVING GROUND COVER AND OTHER RATINGS OF WARM-SEASON CULTIVARS GROWN UNDER LOW INPUT AT CITRA, FL 1/ 2022 DATA

#### TURFGRASS QUALITY AND OTHER RATINGS 1-9; 9=BEST 2/ CANOPY HEIGHT MEASURED IN CENTIMETERS

NAME		JANUARY	MARCH	CANC APRIL	)PY HEIGHT MAY	JANUARY-D JUNE	ECEMBER AUGUST	SEPTEMBER	OCTOBEF	NOVEMBER	DECEMBER	PERCEN APRIL	IT WEEDS DECEMBER
111111		0111011111	1			00112	1100001	021120000	0010221		220212211		220212211
16-TZ-14114	ZOYSIA	5.3	4.5	5.5	5.5	7.0	7.0	6.0	6.5	5.5	5.0	25.0	8.3
XZ 14069	ZOYSIA	4.0	7.0	6.0	6.0	6.0	7.0	5.0	6.0	7.0	7.0	23.3	13.3
TIFWAY	BERMUDA	7.0	6.5	6.0	5.5	8.0	8.0	7.0	7.0	6.0	6.0	31.7	23.3
FAES 1322	ZOYSIA	2.7	7.0	9.0	7.0	16.0	11.0	8.0	10.0	9.0	9.0	36.7	53.3
MEYER	ZOYSIA	4.3	6.7	7.5	5.7	10.7	7.3	7.0	8.3	9.0	7.7	66.7	50.0
FB 1628	BERMUDA	4.5	4.0	4.0	4.5	5.0	4.0	3.5	3.5	3.0	3.5	55.0	70.0
ASC-117	BERMUDA		5.3	5.0	6.0	10.3	7.0	7.3	7.0	6.0	7.3	47.5	•
CODY	BUFFALO		6.0	7.0	6.5	9.0	7.0	8.0	8.5	7.5	7.0	75.0	•
HABITURF	MIXTURE		6.0	5.0	5.5	5.5	8.5	5.5	5.5	8.0	7.0	57.5	•
MIDIRON	BERMUDA	•	5.0	•	•	•	5.0	5.0	6.0	3.0	5.0	57.5	•
LSD VALUE		1.5	6.8	6.3	6.5	13.7	9.2	6.7	6.9	10.4	9.3	33.9	29.0
C.V. (%)		17.4	33.7	33.2	33.7	50.8	38.1	31.7	31.3	47.3	41.3	32.9	43.0

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).

#### TABLE 7.

#### PERCENT LIVING GROUND COVER RATINGS OF WARM-SEASON CULTIVARS 1/ GROWN UNDER LOW INPUT AT MISS. ST., MS 2/ 2022 DATA

NAME		PERCEN APRIL 22	NT GROUND C MAY 16	OVER AUGUST	MEAN
MEYER CODY HABITURF FB 1628 TIFWAY MIDIRON XZ 14069 16-TZ-14114 FAES 1322 ASC-117	ZOYSIA BUFFALO MIXTURE BERMUDA BERMUDA ZOYSIA ZOYSIA ZOYSIA BERMUDA	99.0 86.3 89.3 63.3 63.3 56.7 50.0 53.3 23.3 46.7	96.0 99.0 99.0 99.0 93.0 99.0 93.0 99.0 89.7 40.0 43.3	99.0 97.7 99.0 99.0 96.0 96.0 99.0 99.0 93.0 60.0	98.0 94.3 94.3 87.1 87.1 81.9 81.7 80.7 52.1 50.0
LSD VALUE C.V. (%)		18.3 17.9	10.0 7.4	15.7 9.6	9.7 7.6

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).

#### PERCENT LIVING GROUND COVER AND OTHER RATINGS OF WARM-SEASON CULTIVARS GROWN UNDER LOW INPUT AT RALEIGH, NC 1/ 2022 DATA

#### TURFGRASS QUALITY AND OTHER RATINGS 1-9; 9=BEST 2/ CANOPY HEIGHT MEASURED IN CENTIMETERS

					CANOLI II.	DIGIT PIDAG								
		PERCENT SPRING	1	DOLLAR SPOI	RATINGS			PF	RCENT GROU	ND COVER 1	FROM APRIL-	NOVEMBER		
NAME		GREENUP	JULY 5	AUGUST 11		OCT 11	APRIL	MAY	JUNE	JULY	AUGUST	OCTOBER	NOVEMBER	MEAN
NAME		GREENUF	0011 0	AUGUSI II	SEFI 0	OCI II	ALVIT	MAI	JONE	0011	AUGUSI	OCIOBER	NOVEMBER	MEAN
FB 1628	BERMUDA	20.0	8.7	9.0	9.0	9.0	4.3	58.0	90.3	91.3	99.0	99.0	98.3	77.2
MEYER	ZOYSIA	50.0	8.0	9.0	9.0	9.0	22.0	64.7	96.7	94.3	98.3	95.3	61.0	76.0
HABITURF	MIXTURE	60.0	9.0	8.0	9.0	9.0	27.3	59.0	78.3	66.7	99.0	99.0	99.0	75.5
16-TZ-14114	ZOYSIA	24.0	7.3	7.3	8.0	7.3	3.3	80.0	99.0	98.7	93.3	94.0	44.7	73.3
TIFWAY	BERMUDA	8.3	8.0	8.3	9.0	9.0	0.0	58.0	93.0	95.0	96.0	95.7	44.3	68.9
CODY	BUFFALO	63.3	9.0	7.0	8.7	9.0	32.3	81.0	93.3	85.0	71.3	67.7	38.0	67.0
XZ 14069	ZOYSIA	21.7	9.0	8.7	8.7	8.7	3.0	77.7	96.0	92.3	84.3	84.7	26.3	66.3
MIDIRON	BERMUDA	6.7	9.0	8.7	9.0	9.0	0.0	36.0	85.3	85.0	97.7	95.0	46.3	63.6
FAES 1322	ZOYSIA	25.0	7.3	8.0	9.0	8.7	1.7	54.3	97.0	90.0	64.0	56.3	9.0	53.2
ASC-117	BERMUDA	5.0	9.0	9.0	9.0	9.0	0.0	5.3	15.0	41.7	93.3	92.7	65.7	44.8
LSD VALUE		17.7	0.9	0.8	0.4	0.5	7.6	17.6	14.7	22.6	36.8	46.6	69.2	15.5
C.V. (%)		38.3	6.3	5.7	2.8	3.3	51.2	19.0	11.1	15.3	18.2	22.8	61.7	12.9

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 8.

#### PERCENT LIVING GROUND COVER AND OTHER RATINGS OF WARM-SEASON CULTIVARS GROWN UNDER LOW INPUT AT RALEIGH, NC 1/ 2022 DATA

#### TURFGRASS QUALITY AND OTHER RATINGS 1-9; 9=BEST 2/ CANOPY HEIGHT MEASURED IN CENTIMETERS

		CANOPY	HEIGHT MEAS	SUREMENT IN cm	JUNE-OCTOBE	R
NAME		JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER
<b>FR</b> 1.000	55510051		<b>C D</b>	0 7		
FB 1628	BERMUDA	5.3	6.3	8.7	7.7	7.0
MEYER	ZOYSIA	8.7	7.0	8.7	8.0	8.7
HABITURF	MIXTURE	20.7	13.0	16.0	16.7	14.7
16-TZ-14114	ZOYSIA	11.0	10.3	11.7	12.0	10.7
TIFWAY	BERMUDA	8.0	7.3	7.3	7.7	6.7
CODY	BUFFALO	19.0	11.7	14.3	14.7	12.0
XZ 14069	ZOYSIA	8.0	6.3	7.3	7.0	6.0
MIDIRON	BERMUDA	11.0	8.7	13.7	8.0	7.0
FAES 1322	ZOYSIA	7.0	6.7	7.3	7.7	7.7
ASC-117	BERMUDA	17.0	9.0	20.0	10.7	16.7
LSD VALUE		3.9	2.1	1.4	2.0	2.7
C.V. (%)		21.1	14.8	7.8	12.6	17.6

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).

#### PERCENT LIVING GROUND COVER AND OTHER RATINGS OF WARM-SEASON CULTIVARS GROWN UNDER LOW INPUT AT RALEIGH, NC 1/ 2022 DATA

#### TURFGRASS QUALITY AND OTHER RATINGS 1-9; 9=BEST 2/ CANOPY HEIGHT MEASURED IN CENTIMETERS

NAME		JULY	COLOR RATINGS SEPTEMBER	JULY-NOVEM OCTOBER	IBER NOVEMBER	PERCENT APRIL	WEEDS MAY	PERCEI FEBRUARY	NT GRASSY JUNE	WEEDS NOVEMBER	PERCEN MAY	NT SEEDHEAI AUGUST	O RATINGS OCTOBER
FB 1628 MEYER HABITURF 16-TZ-14114 TIFWAY CODY XZ 14069 MIDIRON FAES 1322	BERMUDA ZOYSIA MIXTURE ZOYSIA BERMUDA BUFFALO ZOYSIA ZOYSIA	7.7 6.3 7.0 6.0 8.0 5.7 4.7 7.0 5.0	9.0 8.0 8.7 8.0 9.0 9.0 7.7 9.0 8.0	8.0 5.7 7.7 7.3 3.7 6.3 4.3 6.7	3.3 3.3 1.3 6.3 2.7 1.0 6.0 2.0 6.3	35.7 45.3 34.0 19.3 38.7 48.7 40.7 25.3 35.3	40.7 52.7 27.7 22.7 42.0 41.7 32.3 24.3 35.0	1.7 0.7 2.0 0.7 1.7 1.5 1.3 1.7 1.0	2.7 0.7 1.0 0.3 1.3 2.0 0.3 1.3 0.3	0.3 4.3 2.0 2.0 2.0 1.0 1.3 3.7 0.0	0.0 26.7 23.3 3.3 0.0 30.0 0.0 0.0 0.0	53.3 0.0 9.0 3.0 0.0 8.3 0.0 31.0 3.3	28.3 0.0 13.3 8.3 0.0 9.3 0.0 0.0 4.0
ASC-117	BERMUDA	7.7	9.0	4.0	2.0	34.3	37.0	1.3	5.0	1.0	0.0	10.0	11.7
LSD VALUE C.V. (%)		0.8 7.7	0.4 3.1	1.7 17.0	1.4 24.9	94.9 87.1	72.6 69.7	2.2 58.9	1.4 54.6	1.8 56.9	8.7 65.6	11.4 60.6	8.9 71.1

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).

## PERCENT LIVING GROUND COVER AND OTHER RATINGS OF WARM-SEASON CULTIVARS GROWN UNDER LOW INPUT AT LAS CRUCES, NM 1/ 2022 DATA

#### TURFGRASS QUALITY AND OTHER RATINGS 1-9; 9=BEST 2/ CANOPY HEIGHT MEASURED IN CENTIMETERS

			SPRING GR	EENUP		PE	RCENT GROUNI	O COVER FROM	APRIL-OCTOBE	R	
NAME		MARCH	APRIL	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	MEAN
FB 1628	BERMUDA	2.7	2.8	54.7	82.0	80.0	72.3	59.7	51.0	55.0	65.0
TIFWAY MIDIRON	BERMUDA BERMUDA	2.3 2.3	2.4 2.4	62.3 51.3	50.3 85.7	78.0 85.0	75.0 67.7	61.7 53.3	53.0 41.7	60.0 37.3	62.9 60.3
FAES 1322 ASC-117	ZOYSIA BERMUDA	3.0 2.3	3.0 2.4	53.7 64.0	56.7 71.7	75.7 66.0	66.3 57.7	56.7 47.7	47.3 38.7	51.0 40.3	58.2 55.1
16-TZ-14114	ZOYSIA	3.0	3.0	51.7	38.7	66.0	62.3	52.7	43.0	52.7	52.4
MEYER CODY	ZOYSIA BUFFALO	3.3 3.0	3.4 3.0	63.0 74.7	55.3 50.7	46.7 49.7	55.0 47.0	49.7 33.3	40.3 23.7	38.0 22.0	49.7 43.0
XZ 14069	ZOYSIA	3.3	3.4	39.7	42.7	54.3	49.0	37.3	24.0	33.0	40.0
HABITURF	MIXTURE	3.3	3.4	79.3	33.7	20.0	44.3	31.3	21.7	24.7	36.4
LSD VALUE C.V. (%)		0.9 16.0	1.0 16.0	54.8 35.4	35.2 31.5	20.8 19.9	17.5 15.8	14.1 16.6	13.2 20.1	11.9 17.4	12.5 13.7

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).

## PERCENT LIVING GROUND COVER AND OTHER RATINGS OF WARM-SEASON CULTIVARS GROWN UNDER LOW INPUT AT LAS CRUCES, NM 1/ 2022 DATA

#### TURFGRASS QUALITY AND OTHER RATINGS 1-9; 9=BEST 2/ CANOPY HEIGHT MEASURED IN CENTIMETERS

NAME		APRIL	CANOPY I MAY	HEIGHT MEASU JUNE	REMENTS IN cr JULY	n FROM APRIL AUGUST	-OCTOBER SEPTEMBER	OCTOBER
FB 1628 TIFWAY MIDIRON FAES 1322 ASC-117 16-TZ-14114 MEYER CODY XZ 14069 HABITURF	BERMUDA BERMUDA ZOYSIA BERMUDA ZOYSIA ZOYSIA BUFFALO ZOYSIA MIXTURE	5.3 6.3 5.7 5.7 6.3 5.7 6.0 6.0 5.3 6.3	5.0 5.7 5.0 6.0 6.0 6.0 6.0 5.7 6.0	5.0 6.0 5.3 6.3 6.0 5.7 6.0 5.7 6.3	5.0 6.3 6.0 5.7 6.3 5.7 6.3 6.0 6.0 6.7	5.0 5.7 6.3 5.7 6.0 5.3 6.0 5.7 6.0	5.3 6.0 5.7 5.7 5.7 6.0 5.7 5.3 6.0	5.0 6.0 5.3 5.7 6.0 6.3 5.3 5.7 5.7 6.0
LSD VALUE C.V. (%)		1.1 8.3	0.9 7.6	0.9 7.9	0.8 7.3	0.9 7.5	1.5 9.5	1.7 11.5

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).

## PERCENT LIVING GROUND COVER AND OTHER RATINGS OF WARM-SEASON CULTIVARS GROWN UNDER LOW INPUT AT LAS CRUCES, NM 1/ 2022 DATA

#### TURFGRASS QUALITY AND OTHER RATINGS 1-9; 9=BEST 2/ CANOPY HEIGHT MEASURED IN CENTIMETERS

		PERCENT WEEDS % BROADLEAF WEEDS			AF WEEDS							
NAME		SPRING	SUMMER	APRIL 19	JULY 26	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER
FB 1628	BERMUDA	3.3	6.7	3.3	6.7	5.7	6.7	7.0	6.7	7.3	8.0	8.7
TIFWAY	BERMUDA	0.0	0.0	0.0	0.0	6.3	5.7	7.7	5.7	6.7	7.3	6.0
MIDIRON	BERMUDA	3.3	3.3	1.7	3.3	4.7	7.3	7.3	5.0	6.3	7.7	8.0
FAES 1322	ZOYSIA	1.7	5.0	1.7	5.0	4.0	3.0	4.3	5.3	5.0	4.0	5.7
ASC-117	BERMUDA	26.7	46.7	11.7	28.3	5.7	5.7	5.0	6.3	6.7	7.3	6.7
16-TZ-14114	ZOYSIA	0.0	3.3	0.0	3.3	3.7	3.0	4.3	5.0	4.3	3.3	5.3
MEYER	ZOYSIA	6.7	26.7	3.3	20.0	5.3	4.0	4.3	7.7	7.0	6.0	6.7
CODY	BUFFALO	13.3	23.3	8.3	18.3	5.7	4.7	4.3	7.3	7.3	8.0	7.3
XZ 14069	ZOYSIA	3.3	5.0	1.7	5.0	3.0	2.7	3.0	3.7	3.3	2.7	3.0
HABITURF	MIXTURE	6.7	21.7	3.3	13.3	5.3	5.0	4.7	7.7	7.0	6.3	7.0
LSD VALUE		8.9	19.4	5.1	16.5	2.1	1.6	1.5	2.7	1.4	1.1	1.2
C.V. (%)		80.5	78.3	82.0	83.8	21.6	20.0	17.0	22.5	13.4	11.5	11.5

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).

#### TABLE 10.

#### PERCENT LIVING GROUND COVER AND OTHER RATINGS OF WARM-SEASON CULTIVARS GROWN UNDER LOW INPUT AT STILLWATER, OK 1/ 2022 DATA

#### TURFGRASS QUALITY AND OTHER RATINGS 1-9; 9=BEST 2/ CANOPY HEIGHT MEASURED IN CENTIMETERS

NAME		APRIL	PER MAY	CENT GROUND ( JUNE	COVER FROM A JULY	PRIL-SEPTEME AUGUST	3ER SEPTEMBER	MEAN
XZ 14069 MEYER 16-TZ-14114 MIDIRON TIFWAY FB 1628 FAES 1322 CODY HABITURF ASC-117	ZOYSIA ZOYSIA BERMUDA BERMUDA BERMUDA ZOYSIA BUFFALO MIXTURE BERMUDA	94.3 93.3 93.3 95.0 90.0 78.3 58.3 66.7 88.3 6.7	97.0 97.7 96.0 97.3 97.7 93.3 69.0 90.0 86.7 36.7	98.0 97.0 97.3 98.0 96.7 80.0 86.7 70.7 25.0	97.7 96.7 93.7 95.0 92.3 78.3 66.7 68.3 30.7	98.0 96.3 95.0 91.7 91.0 90.0 84.7 43.3 26.7 4.3	98.3 97.0 97.0 89.3 92.0 88.3 79.0 41.0 35.0 8.0	97.2 96.5 95.8 94.1 93.9 89.8 74.9 65.7 62.6 18.6
LSD VALUE C.V. (%)		20.3 16.5	21.9 14.9	24.7 17.3	25.6 18.2	22.2 19.4	32.7 27.0	19.9 15.6

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).

## PERCENT LIVING GROUND COVER AND OTHER RATINGS OF WARM-SEASON CULTIVARS GROWN UNDER LOW INPUT AT STILLWATER, OK 1/ 2022 DATA

#### TURFGRASS QUALITY AND OTHER RATINGS 1-9; 9=BEST 2/ CANOPY HEIGHT MEASURED IN CENTIMETERS

		CANOPY	HEIGHT IN	cm APRIL-SEP	TEMBER				PERCI	ENT WEEDS
NAME		APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	JULY	AUGUST	SEPTEMBER
XZ 14069	ZOYSIA	4.0	3.3	2.7	3.7	2.7	2.7	0.3	0.3	0.3
MEYER	ZOYSIA	6.0	5.3	4.7	5.7	4.7	4.7	2.7	2.0	4.3
16-TZ-14114	ZOYSIA	5.0	4.7	4.7	4.7	4.7	4.7	1.0	2.0	2.3
MIDIRON	BERMUDA	6.3	5.0	5.0	5.0	4.7	4.0	4.3	7.0	16.0
TIFWAY	BERMUDA	5.3	4.7	4.3	4.7	3.3	3.7	2.3	5.0	5.7
FB 1628	BERMUDA	5.3	4.0	3.3	3.0	2.7	3.7	6.7	11.7	14.7
FAES 1322	ZOYSIA	3.7	3.7	3.0	3.0	3.0	3.3	19.3	14.7	20.0
CODY	BUFFALO	7.3	6.7	5.7	7.3	5.7	5.3	24.3	52.3	54.0
HABITURF	MIXTURE	6.3	6.3	5.3	7.7	6.7	6.0	23.3	36.7	61.7
ASC-117	BERMUDA	6.7	6.0	5.7	5.3	4.7	4.7	53.3	86.7	90.0
LSD VALUE		1.5	1.2	1.2	1.3	1.6	0.8	21.6	25.3	29.2
C.V. (%)		15.1	14.1	16.4	15.8	21.5	12.2	89.8	70.5	65.7

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).

## TABLE 11. PERCENT LIVING GROUND COVER AND OTHER RATINGS OF WARM-SEASON CULTIVARS GROWN UNDER LOW INPUT AT COLLEGE STATION, TX 1/ 2022 DATA

#### TURFGRASS QUALITY AND OTHER RATINGS 1-9; 9=BEST 2/ CANOPY HEIGHT MEASURED IN CENTIMETERS

NAME		MARCH	PERCEN MAY	F GROUND COVE: JUNE	R FROM MARC JULY	H-SEPTEMBER AUGUST	SEPTEMBER	MEAN
TIFWAY XZ 14069 MIDIRON FB 1628 MEYER 16-TZ-14114 CODY FAES 1322 HABITURF ASC-117	BERMUDA ZOYSIA BERMUDA ZOYSIA ZOYSIA BUFFALO ZOYSIA MIXTURE BERMUDA	80.0 80.0 68.3 48.3 61.7 76.7 50.0 78.3 20.0	88.3 86.7 66.7 63.3 68.3 66.7 66.7 61.7 81.7 16.7	88.3 60.0 73.3 65.0 53.3 23.3 13.3 31.7 13.3	91.7 66.7 71.7 81.7 70.0 41.7 50.0 45.0 36.7 40.0	91.7 86.7 85.0 88.3 76.7 91.7 68.3 76.7 58.3 63.3	88.3 86.7 75.0 58.3 83.3 90.0 21.7 60.0 15.0 48.3	88.1 77.8 75.3 70.6 68.6 67.5 51.1 51.1 50.3 33.6
LSD VALUE C.V. (%)		31.3 26.4	31.0 25.4	38.9 44.4	30.0 27.5	17.0 12.1	14.0 14.3	14.7 14.1

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).

#### PERCENT LIVING GROUND COVER AND OTHER RATINGS OF WARM-SEASON CULTIVARS GROWN UNDER LOW INPUT AT COLLEGE STATION, TX 1/ 2022 DATA

#### TURFGRASS QUALITY AND OTHER RATINGS 1-9; 9=BEST 2/ CANOPY HEIGHT MEASURED IN CENTIMETERS

		CANOPY HEIGHT MEASUREMENTS IN CM FROM APRIL-OCTOBER					PERCENT WEEDS FROM APRIL-OCTOBER								
NAME		APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER
TIFWAY	BERMUDA	6.0	3.0	3.0	3.0	3.0	3.0	4.7	6.7	5.0	5.0	1.7	3.3	3.3	3.3
XZ 14069	ZOYSIA	2.3	2.0	1.7	3.0	1.3	1.7	3.7	5.0	6.7	3.3	3.3	8.3	10.0	6.7
MIDIRON	BERMUDA	3.3	3.0	3.7	3.3	3.7	2.7	5.7	16.7	16.7	15.0	10.0	8.3	8.3	11.7
FB 1628	BERMUDA	2.7	2.0	2.0	3.3	1.3	1.7	3.0	3.3	5.0	5.0	3.3	3.3	3.3	6.7
MEYER	ZOYSIA	2.3	2.0	2.3	2.3	2.0	2.0	5.0	13.3	16.7	16.7	25.0	25.0	11.7	18.3
16-TZ-14114	ZOYSIA	2.7	2.3	2.7	3.0	2.3	2.7	6.0	10.0	13.3	10.0	10.0	13.3	8.3	5.0
CODY	BUFFALO	3.0	3.3	5.3	2.7	5.3	3.0	5.7	13.3	13.3	13.3	13.3	10.0	15.0	13.3
FAES 1322	ZOYSIA	1.7	1.7	1.0	3.0	2.0	1.7	3.3	3.3	5.0	5.0	6.7	16.7	13.3	11.7
HABITURF	MIXTURE	3.3	3.7	5.3	4.0	6.7	3.0	5.7	6.7	10.0	6.7	10.0	10.0	16.7	16.7
ASC-117	BERMUDA	3.7	3.3	4.7	3.3	5.0	4.3	6.0	28.3	38.3	50.0	41.7	41.7	33.3	40.0
LSD VALUE		2.6	1.6	0.9	3.9	0.8	1.2	1.4	13.6	12.5	7.2	9.4	12.0	13.8	7.5
C.V. (%)		40.6	30.0	18.8	42.3	16.3	26.2	16.7	67.1	55.3	35.4	46.8	51.1	60.5	35.0

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).

#### APPENDIX TABLE. SUMMARY OF TURFGRASS QUALITY RATINGS FOR WARM-SEASON CULTIVARS GROWN UNDER LOW INPUT 2022 DATA

NAME		QUALITY MEAN 1/	MAXIMUM IN TOP 25% 2/
16-TZ-14114 ASC-117 CODY FAES 1322 FB 1628 HABITURF MEYER MIDIRON TIFWAY XZ 14069	ZOYSIA BERMUDA BUFFALO ZOYSIA BERMUDA BERMUDA BERMUDA ZOYSIA	5.7 3.1 4.1 5.1 3.9 4.8 4.6 5.8 5.8	$\begin{array}{c} 42.9\\ 0.0\\ 28.6\\ 28.6\\ 0.0\\ 14.3\\ 0.0\\ 28.6\\ 71.4 \end{array}$
LSD VALUE C.V. (%)		0.3 10.6	

#### TURFGRASS QUALITY RATINGS 1-9; 9=IDEAL TURF

- \*/ 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).
- \*\*/ C.V. (COEFFICIENT OF VARIATION) INDICATES THE PERCENT VARIATION OF THE MEAN IN EACH COLUMN.
- 1/ MEAN AN AVERAGE OF ALL THE TURFGRASS QUALITY RATINGS FROM ALL LOCATIONS.
- 2/ MAXIMUM IN TOP 25%. THE PERCENTAGE OF LOCATIONS WHERE THAT ENTRY FINISHED IN THE TOP 25% OF ALL ENTRIES.