

SCIENTIFIC DATA SUMMARY FOR ENDARRA 81™

‘OSU2081’ TURF BERMUDAGRASS

SOURCE: Oklahoma State University Release Document for ‘OSU2081 & OSU2082

KIND: Bermudagrass, *Cynodon transvaalensis* Burtt-Davy x *C. dactylon* Pers.

EXPERIMENTAL DESIGNATIONS: OSU2081

DESCRIPTION, ORIGIN, AND HISTORY:

OSU2081 is a vegetatively propagated F1 hybrid derived from a cross between *C. transvaalensis* Oklahoma State University (OSU) selection ‘2747’ and *C. dactylon* var. *dactylon* accession A10202. In 2018, a small crossing plot was established by planting clonal plants of the two parents in proximity at the OSU Agronomy Research Station (ARS). Mature seedheads were hand-harvested from the African parent in the crossing block in summer 2019. Seedlings from the harvested seeds of this cross along with seedlings from other crosses were screened for leaf texture and color, and rooting potential in a greenhouse at the OSU ARS in the winter between 2019 and 2020. This grass has been included in multiple tests at Stillwater, Oklahoma, and locations in California, Texas, Georgia, Florida, and North Carolina since 2020.

DNA PROFILING EXPERIMENTS:

Simple sequence repeat (SSR) marker experiments definitively indicated that OSU2081 is a unique genotype, distinct from 11 popular cultivars and 20 experimental genotypes tested (Figures 1 & 2 listed after REFERENCES).

MORPHOLOGY TESTS:

A field trial including five experimental selections (OSU2081, OKC1873, OKC1682, 16x10, and OSUBF#5), and seven cultivars (Latitude 36®, NorthBridge®, Patriot, Tahoma 31®, TifTuf®, Tifton 10, Tifway, and OKC1876) was established in 3 replications in a randomized complete block design at the OSU Turf Research Center in 2021. Twenty stems (subsamples) from each plot were randomly collected in summer 2022. Morphological traits were measured on the subsamples, and plot mean values from subsamples were used in the data analysis. Results indicated that the widths of the first and second leaf blades on the second node of OSU2081 were not different from those of Latitude 36, NorthBridge, Tahoma 31, TifTuf, Tifway, and OKC1876, but finer than Tifton 10 and Patriot (Table 1). The lengths of the two leaf blades of OSU2081 were not different from those of TifTuf and NorthBridge, but longer than those of the other cultivars. The second internode length of OSU2081 was not different from that of TifTuf, Tifway, and OKC1876, but longer than that of the other cultivars. The second internode diameter of OSU2081 was finer than that of Tifton 10, Patriot, and NorthBridge, but not different from that of the other cultivars. The raceme number per inflorescence of OSU2081 was similar to that of Latitude 36, NorthBridge, OKC1876, Tahoma 31, Tifton 10, and Tifway, but smaller than that of Patriot and TifTuf. The raceme length per inflorescence of OSU2081 was shorter than that of Tifton 10, but not different from other cultivars.

Table 1. Morphological measurements of leaf blades, stolons and racemes in turf bermudagrass in a nursery at the Oklahoma State University Turf Research Center in 2022

Entry	FLW§	FLL	SLW	SLL	SIL	SID	RN	RL
16x10	2.03	51.00	2.03	46.50	19.87	0.87	3.6	9.87
OKC1682	2.00	64.40	2.00	59.47	35.27	0.73	3.1	10.17
OKC1873	2.03	64.23	2.10	58.93	51.97	0.60	3.0	8.80
OKC1876	1.83	48.80	1.83	43.77	44.23	0.50	2.8	9.27
OSU2081	1.97	76.30	1.97	71.47	51.50	0.50	3.1	10.57
OSUBF#5	2.03	47.53	2.03	44.13	28.17	0.87	3.8	11.80
Latitude 36	1.80	43.93	1.80	40.23	19.10	0.67	3.0	8.17
NorthBridge	1.97	58.90	1.97	55.33	26.33	0.77	3.0	8.90
Patriot	2.33	45.57	2.33	42.13	16.57	1.20	3.8	10.33
Tahoma31	1.93	46.30	1.93	42.60	21.13	0.63	3.2	7.97
Tifton10	2.87	46.17	2.87	44.23	18.00	1.63	3.4	14.67
TifTuf	2.00	73.50	2.00	66.93	53.30	0.50	3.7	12.70
Tifway	1.97	52.50	1.97	48.47	40.07	0.53	3.2	10.47
LSD0.05	0.17	22.42	0.17	20.63	15.93	0.22	0.3	2.68

§ FLW=1st leaf blade width on 2nd node (mm)

FLL=1st leaf blade length on 2nd node (mm)

SLW=2nd leaf blade width on 2nd node (mm)

SLL=2nd leaf blade length on 2nd node (mm)

SIL=2nd internode length (mm)

SID=2nd internode diameter (mm)

RN=raceme number

RL=raceme length (cm)

SALINITY TOLERANCE TEST:

A field experiment to assess bermudagrass response to saline water was conducted at Riverside, CA. The study had 35 experimental entries, including OSU2081 and OSU2082 from Oklahoma State University, and three cultivars [Santa Ana (salt tolerant standard), TifTuf (drought resistant standard), and Tifway (a widely used commercial standard)]. Plots were planted in the center of 3 ft by 3 ft plots in a randomized complete block design with three replicates in 2020. From 2021 to 2023, the trial was irrigated from July to October (dry season) with saline water (4.4 dS m⁻¹) at 75% reference evapotranspiration (ET0) replacement. Data presented here included OSU entries and the standard cultivars.

When data were averaged across years (Table 3), OSU2081 and OSU2082 exhibited establishment cover rates (%) better than Santa Ana, but no difference from the other two standards. The response of OSU2081 to mites was similar to the three cultivars. OSU2082 was better than Tifway in mite resistance. OSU2081 had fall color retention better than Tifway, but no difference from TifTuf and Santa Ana. OSU2082's fall color retention was not different from the three standards. OSU2081 and OSU2082 produced similar amounts of inflorescence compared to Santa Ana, but more inflorescences than TifTuf and Tifway under no saline water irrigation. There is no difference in inflorescence prolificacy among the two OSU elite genotypes and the three standards under saline water irrigation. OSU2081 and OSU 2082's spring green-up was similar to the three cultivars. Their turfgrass quality ratings were better than Tifway's under no-saline water irrigation. Under saline water irrigation, their turfgrass quality was not different from the three cultivars.

Table 3. Turf bermudagrass performance in a saline-water irrigated trial at Riverside, CA for 2020-2023.

Entry	Cover (%)	Mite Injury&	Fall color	Inflorescence		Recovery	Spring green-up	Turfgrass quality#	
				No S [¥]	S			No S	S
OSU2018	70.4	5.3	5.4	4.3	3.8	5.1	6.8	5.1	6.5
OSU2022	92.1	5.3	6.7	2.8	4.8	5.1	5.9	5.6	5.3
OSU2034	88.8	6.3	6.7	1.2	3.7	6.7	6.1	6.8	5.3
OSU2035	84.2	7.0	6.0	4.3	3.1	5.4	5.9	6.5	5.9
OSU2037	53.8	6.3	2.9	1.3	3.7	3.3	4.8	5.1	4.2
OSU2039	50.4	5.7	5.0	3.1	3.1	4.1	4.8	4.7	4.4
OSU2043	87.9	4.7	6.1	5.8	3.0	4.8	6.1	5.3	5.3
OSU2066	90.0	8.0	6.8	6.8	2.9	5.4	5.3	6.1	5.3
OSU2073	91.7	5.7	7.3	7.1	3.9	5.8	5.7	6.2	5.6
OSU2074	75.8	6.0	1.6	2.9	3.6	3.0	2.6	4.4	5.2
OSU2075	93.8	4.7	4.8	7.1	3.7	4.9	5.3	5.0	5.0
OSU2081	93.3	6.0	7.8	5.8	2.8	6.0	6.0	6.2	5.8
OSU2082	98.8	6.3	7.3	5.8	3.7	5.9	5.8	6.2	5.8
OSU2088	81.3	6.0	6.9	7.7	3.3	5.3	5.1	5.4	5.4
OSU2094	97.5	4.7	5.1	7.4	3.6	5.0	5.8	5.2	4.9
OSU2101	93.8	5.7	6.7	5.8	4.2	4.8	6.2	5.6	5.1
OSU2102	65.0	4.7	5.9	3.9	3.6	5.4	6.4	5.6	5.9
SantaAna	70.0	5.3	7.4	6.0	3.6	6.7	6.7	6.2	6.0
TifTuf	92.9	6.3	8.1	4.2	3.4	6.9	6.7	6.4	6.3
Tifway	90.4	4.3	6.0	3.8	3.7	5.3	5.3	5.4	5.8
LSD0.05	9.8	1.7	1.7	1.2	2.2	1.0	1.7	0.7	0.5

& Mite injury scale: 1=100% damage, 9=no damage

¶ Inflorescence abundance scale: 1=no seedhead, 9=maximum abundance

¥ No S=no saline water irrigation, S=saline water irrigation

is a scale, 1=no wilting, 9=fully wilting

REGIONAL DROUGHT RESISTANCE TEST:

This field trial [named Approach C in the 2019-2023 USDA Specialty Crop Research Initiative (SCRI) funded project] was conducted at 8 locations in the southern states (Stillwater, OK; Dallas, TX; Riverside, CA; Tifton and Griffin, GA; Jay and Citra, FL; and Jackson Springs, NC). The test included 34 experimental entries, including OSU2081 and OSU2082, and three standards [TifTuf (drought resistant standard), Tahoma 31 (cold hardy, high water-use efficient standard), and Tifway (long-time, widely used standard)]. The nurseries were established using randomized complete block designs with 3 replications in 2020. Once the plots were fully established, the nurseries were not irrigated and managed under natural rainfall conditions. The establishment ratings were collected in 2020 and early 2021, while turf performance data were collected in 2021 to 2023.

OSU2081 had an average cover (establishment rate %) and leaf spot disease resistance similar to TifTuf and Tahoma 31, but higher than Tifway (Table 5). The fall color retention of OSU2081 was not different from that of TifTuf and Tifway but was better than Tahoma 31. Under no drought conditions, OSU2081 had an inflorescence prolificacy less than TifTuf and Tahoma 31 but was not different from Tifway. Under normal conditions, OSU2081 produces less seed heads than others tested. Under drought conditions, OSU2081, TifTuf, and Tifway produced similar amounts of seedheads, which were less than Tahoma 31. Under drought conditions, the percent green color (PGC%) estimated from drone images of OSU2081 was better than Tifway,

but similar to TifTuf and Tahoma 31. Under no drought conditions, the average turfgrass quality rating of OSU2081 was not different from TifTuf and Tahoma 31 but was better than Tifway. Under (controlled not extreme) drought stress, the turfgrass quality of OSU2081 was similar to TifTuf but better than Tahoma 31 and Tifway (Table 5). The Recovery of OSU2081 post drought stress was the same as TifTuf, which was better than Tahoma 31 and Tifway.

Table 5. Turf bermudagrass performance in a field trial at 8 locations in CA, OK, TX, GA, FL, and NC for 2020-2023.

Entry	Cover (%)	Leaf spot disease	Fall color	Inflorescence		PGC(%) Drought	Recovery	Spring green-up	Turfgrass quality#	
				No drought	Drought				No drought	Drought
OSU2015	52.8	4.7	2.6	3.6	2.7	61.4	4.8	3.9	4.8	4.1
OSU2018	62.2	3.3	4.1	3.4	1.7	71.1	5.1	4.9	5.6	4.8
OSU2021	60.9	6.0	3.0	3.4	1.0	59.9	5.0	4.5	5.0	4.1
OSU2022	66.9	6.7	3.6	4.4	2.7	51.9	4.7	4.5	5.0	3.7
OSU2026	65.0	4.0	3.9	2.8	2.0	57.3	5.1	4.4	5.2	4.1
OSU2034	62.5	5.0	4.0	1.1	1.0	58.9	5.2	3.7	5.2	4.1
OSU2035	70.6	6.3	3.9	3.7	1.0	70.2	5.3	4.0	5.4	4.6
OSU2037	46.1	6.0	2.7	1.4	1.0	46.5	4.2	4.3	4.7	3.3
OSU2039	43.9	6.0	2.5	2.2	1.0	25.2	2.7	3.4	4.2	3.1
OSU2043	65.0	7.3	3.7	5.1	4.0	51.1	5.0	4.2	5.2	4.3
OSU2066	57.2	8.0	2.6	5.7	1.0	45.2	3.8	2.4	4.0	3.3
OSU2073	72.1	7.7	4.7	4.3	2.0	94.8	6.2	4.5	5.9	5.7
OSU2074	60.3	6.0	2.1	4.4	1.7	82.6	4.9	2.3	4.8	4.5
OSU2075	65.3	5.3	3.2	5.1	2.3	88.6	5.4	4.1	5.1	4.8
OSU2081	73.6	8.7	4.8	2.5	1.3	92.8	6.1	4.6	5.9	5.6
OSU2082	70.5	8.3	4.3	4.5	1.7	94.9	5.9	4.3	5.6	5.6
OSU2088	67.0	6.0	4.3	5.7	3.3	81.1	5.6	4.5	5.3	4.9
OSU2094	67.0	8.3	2.7	4.9	6.7	90.1	5.1	4.2	5.0	4.9
OSU2101	59.2	8.0	3.9	6.3	4.0	58.3	3.9	4.6	5.5	4.6
OSU2102	53.0	5.3	3.1	4.0	1.0	43.4	4.4	4.0	5.1	3.9
Tahoma31	69.1	7.3	3.3	3.9	6.0	85.7	5.2	5.4	5.7	5.0
TifTuf	78.5	8.3	5.0	4.2	1.3	89.9	6.1	5.3	6.1	5.8
Tifway	62.4	5.7	4.0	2.7	1.0	53.1	5.0	4.3	5.6	4.7
LSD0.05	7.5	2.6	0.8	0.9	2.2	12.8	0.5	0.8	0.2	0.3

In 2021 and 2022, the trials at Riverside, CA, Dallas, TX, and Stillwater, OK experienced more lengthy and severe drought conditions than other sites. Turf performance data pulled together over the two years at the three sites are given in Table 6. Results indicated that **under severe drought stress, OSU2081 was the best performer of all currently released grasses, with a better turfgrass quality rating than TifTuf, Tahoma 31, and Tifway.**

Table 6. Turfgrass performance at Riverside, CA, Dallas, TX, Stillwater, OK in 2021 and 2022

Entry	Inflorescences	PGC(%)	Recovery	Turfgrass quality	
	Drought	Drought		No drought	Drought
OSU2015	2.67	47.50	4.51	4.90	3.93
OSU2018	1.67	64.63	4.75	5.71	4.46
OSU2021	1.00	40.27	4.80	5.31	3.96
OSU2022	2.67	34.84	4.35	5.02	2.85
OSU2026	2.00	44.69	5.00	5.54	3.78
OSU2034	1.00	37.58	5.10	6.08	3.81
OSU2035	1.00	46.10	5.20	5.69	4.28
OSU2037	1.00	25.53	4.00	5.27	2.64
OSU2039	1.00	4.01	1.98	4.48	2.26
OSU2043	4.00	22.75	4.78	5.53	3.65
OSU2066	1.00	35.49	3.43	3.90	2.90
OSU2073	2.00	93.46	6.32	5.93	5.70
OSU2074	1.67	84.69	4.87	5.18	4.77
OSU2075	2.33	92.57	5.55	5.49	4.83
OSU2081	1.33	95.67	6.24	6.24	5.66
OSU2082	1.67	93.51	6.29	6.15	5.81
OSU2088	3.33	78.51	5.75	5.98	5.43
OSU2094	6.67	93.11	4.94	5.57	5.03
OSU2101	4.00	28.23	3.10	5.04	3.49
OSU2102	1.00	23.33	3.98	4.94	2.88
Tahoma31	6.00	84.78	4.86	5.65	4.94
TifTuf	1.33	84.09	6.11	6.28	5.43
Tifway	1.00	29.38	4.75	5.69	3.95
LSD0.05	2.17	22.21	0.62	0.54	0.43
LSD0.10	1.81	18.62	0.52	0.45	0.36

SHADE TOLERANCE TEST:

Approximately 40 bermudagrasses were evaluated at two locations (Stillwater, OK and College Station, TX) over four years (2020 – 2023). Grasses were planted as plugs in mid-July 2020 in Stillwater and mid-August in College Station. Shade was applied in the form of a neutral density polywoven fabric nominally rated to reduce irradiance by 50% (Stillwater) or 63% (College Station) beginning 3 weeks after planting (Stillwater) or 10 weeks after planting (College Station). Turfgrass quality and green coverage were measured monthly during the growing season in 2021 – 2023 to assess the spread and persistence of plant materials under shade. Data pooled across locations and years indicated Tahoma 31 (shade tolerant standard) was the best-performing commercial standard, resulting in a mean quality score of 5.0, while elite lines OSU2081 and OSU2082 were considered less well-adapted to shade, although comparable to other bermudagrasses in the trial (Table 7). Results suggest that OSU2081 would perform better than Tifway (shade susceptible standard) and that 2082 would perform similarly to Tifway under shaded conditions.

SOD HARVESTABILITY TEST:

Approximately 40 bermudagrasses were evaluated in Stillwater, OK from 2021 to 2022. Grasses were planted 8 July 2021 from sprigs at 450 bu/acre. Spring green-up and green coverage were measured the year after planting to assess spread. Sod was harvested using a walk-behind sod cutter fitted with an 18-inch blade and 1.5-inch depth setting. Sod tensile strength was measured using the device described by Segars et al. (2022)

in the horizontal orientation and a digital force meter (Chatillon brand, digital force instrument, Model DFIS, John Chatillon & Sons, Inc., Greensboro, NC) operated in peak weight mode to determine the maximum force at the time of tearing. Raw data were converted using the sod pad width and depth information to reflect the point of sod tensile failure per unit area (kg dm⁻²). Sod handling quality was assessed on a 1 to 5 visual scale where 1 = very poor quality, sod falls apart easily, 2 = substantial cracking of sod strip, 3 = some cracking of sod pad, this is the suggested minimum quality for harvest of an existing commercial available product, 4 = very little cracking, suggested minimum quality for commercialization of new experimental varieties, 5 = excellent quality, no cracking of pad (Han, 2009). Data indicate that Tahoma 31 and TifTuf had better spring green-up than OSU 2081 and OSU 2082; however, each genotype grew well and filled in the block at the rating time (Table 8). Sod tensile strength was acceptable for each genotype at 12 months after planting, although sod handling quality varied with OSU 2081 and OSU 2082 having inferior quality than Tahoma 31. When harvested at 15 months after planting, OSU 2082 exhibited inferior sod tensile strength compared to Tahoma 31 but was similar to TifTuf. There were no differences at this date for sod handling quality. **Endarra 81, tested as OSU2081, demonstrated excellent tensile strength. It is as strong as TifTuf.**

Table 8. Summary results of selected entries from SCRI sod strength trial in Stillwater, OK.

	Spring Green-up 11 Apr 2022	Green Cover 7 Jun 2022	Sod Tensile Strength 14 Jul 2022	Sod Handling Quality 14 Jul 2022	STS – 6 Oct 2022	SHQ – 6 Oct 2022
	1 to 9	%	kg dm ⁻²	1 to 5	kg dm ⁻²	1 to 5
OSU2021	5.0b	70b	15.1b	2.7bc	19.5a	5.0a
OSU2073	4.0b	99a	27.8ab	3.0ab	19.3a	4.7a
OSU2081	2.3c	94a	34.2a	2.0c	15.2ab	4.7a
OSU2082	2.7c	98a	13.7b	2.3bc	7.7b	4.7a
Tahoma31	7.3a	99a	20.8ab	3.7a	16.7a	5.0a
TifTuf	6.7a	99a	18.3ab	2.7bc	10.7ab	5.0a

SOD HARVESTABILITY ON-FARM TESTS:

OSU2081 was planted in an approximately 20' by 20' plot on Bethel Turf Farms at Arcadia, FL in fall 2021. The plot was harvested with a KWMI sod harvester on June 14, 2022. The harvest showed that OSU2081 had excellent harvestability in the sandy soil. In addition, OSU2081 and OSU 2082 were planted on Sod by Sherry Sod Farm at Yukon, OK in summer 2023. In early December 2023, both OSU2081 and OSU2082 exhibited adequate sod strength despite the stands being young (observed by the sod farmer). But OSU2081 sod harvestability was not as good as Tahoma 31 and OSU2082. The sod farmer indicated that the OSU2081 plot was in a lower area and had not grown as thick as OSU2082 and Tahoma 31 in the growing season.

SHARED SPACE PLANTED NURSERY (SSPN)TEST:

This regional field trial was carried out at 7 locations in the southern states (Stillwater, OK; Dallas, TX; Riverside, CA; Tifton and Griffin, GA; Citra, FL; and Jackson Springs, NC). The test included 190 experimental entries (OSU2081 and OSU2082 included) and three standards (TifTuf, Tahoma 31, and Tifway). The nurseries were established using randomized complete block designs with 2 replications in 2020. Since the plots were fully established, the nurseries were not irrigated and managed under natural rainfall conditions. The establishment ratings were collected in 2020 and early 2021, while turf performance data were collected from 2021 to 2023. Data analysis results include selected OSU entries and standard cultivars are presented in Table 9.

OSU2081 grew as fast as the three standard cultivars in the establishment stage. Its fall color rating was as good as that of TifTuf, which was better than that of Tahoma 31 and Tifway. OSU2081 and the three cultivars were not different in inflorescence prolificacy and spring green-up. **Under drought conditions, the PGC (%) of**

OSU2081 was similar to that of TifTuf and Tahoma 31, but better than Tifway. Under no drought stress, OSU2081 had a turfgrass quality rating similar to TifTuf, but better than Tahoma 31 and Tifway. Under drought stress conditions, OSU2081 was the top performer for turfgrass quality.

Table 9. Turf bermudagrass performance of OSU selections and three standard cultivars at seven locations over four years (2020-2023).

Entry	Cover (%)	Leaf spot disease	Fall color	Inflorescences	PGC(%) Drought	Recovery	Spring green-up	Turfgrass quality	
								No drought	Drought
OSU2035	47.0	6.5	4.0	3.6	61.8	5.4	4.6	5.4	4.2
OSU2050	46.2	8.5	4.4	2.5	55.7	6.0	4.2	5.2	4.6
OSU2052	45.4	9.0	4.1	2.6	47.7	5.0	4.2	5.2	4.4
OSU2053	55.9	7.5	4.9	3.8	73.4	5.9	4.8	5.6	4.8
OSU2055	38.1	7.5	3.0	2.0	61.5	6.3	2.7	5.5	5.2
OSU2056	44.3	9.0	3.6	4.5	50.9	5.3	3.9	5.2	4.2
OSU2061	40.7	8.0	1.9	2.0	49.3	5.4	2.2	4.8	4.3
OSU2069	56.5	9.0	4.1	3.2	62.8	5.9	4.3	5.5	4.7
OSU2071	42.9	9.0	3.0	5.0	48.2	5.7	3.7	4.8	4.5
OSU2072	51.4	8.0	3.8	5.3	64.4	5.3	3.3	5.1	4.2
OSU2077	51.2	8.0	5.0	2.0	67.1	5.9	4.4	5.8	5.2
OSU2079	54.8	9.0	4.5	2.6	62.4	5.9	4.3	5.7	4.7
OSU2081	57.6	9.0	5.6	2.6	73.2	6.5	4.9	6.2	5.7
OSU2082	56.2	9.0	4.5	3.4	55.1	5.2	4.0	5.4	4.6
OSU2085	43.4	8.5	1.9	1.7	55.2	5.0	2.3	4.3	4.0
OSU2087	49.4	8.5	5.0	3.6	68.0	5.9	4.2	5.5	4.6
OSU2090	47.5	9.0	3.2	4.1	60.4	5.4	3.5	4.9	4.1
OSU2093	50.6	8.0	3.7	4.5	55.4	5.6	4.1	5.1	4.2
OSU2100	45.4	9.0	4.3	2.9	64.3	5.5	4.4	5.1	4.6
Tahoma31	50.4	8.0	3.0	3.7	56.8	5.1	5.3	5.8	4.1
TifTuf	66.8	9.0	5.6	4.1	79.3	5.9	5.1	6.3	5.6
Tifway	49.9	4.5	3.6	3.4	46.6	5.0	4.3	5.1	3.8
LSD0.05	10.6	2.3	0.9	1.8	16.7	0.8	1.0	0.3	0.6

MAJOR STRENGTHS AND COMPARATIVE PERFORMANCE:

OSU2081 is a new, high-quality, interspecific hybrid turf bermudagrass. It has exhibited a significantly improved drought resistance as good as TifTuf in a wide range of the southern United States. It has excellent fall color retention like TifTuf. It produces few seedheads, which is better than some popular drought-resistant varieties. It has demonstrated excellent establishment characteristics and leaf spot disease resistance, fine leaf texture, high density, dark green color, and sufficient sod tensile strength for reliable, large-scale commercial production on farms.

RECOMMENDED AREA AND USE:

Data from field trials and observational plantings indicate that both OSU2081 and OSU2082 are well adapted to Oklahoma, Texas, California, North Carolina, and other southern states. It is recommended that the two grasses be used in locations with the USDA plant cold hardiness zone 7a and warmer climates. The two grasses may be planted for use on lawns, sports fields, golf course fairways, tees and rough areas, and utility turf.

VARIETY PROTECTION:

US Plant Patents and Trademarks filed by OSU.

PERSONNEL INVOLVED:

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