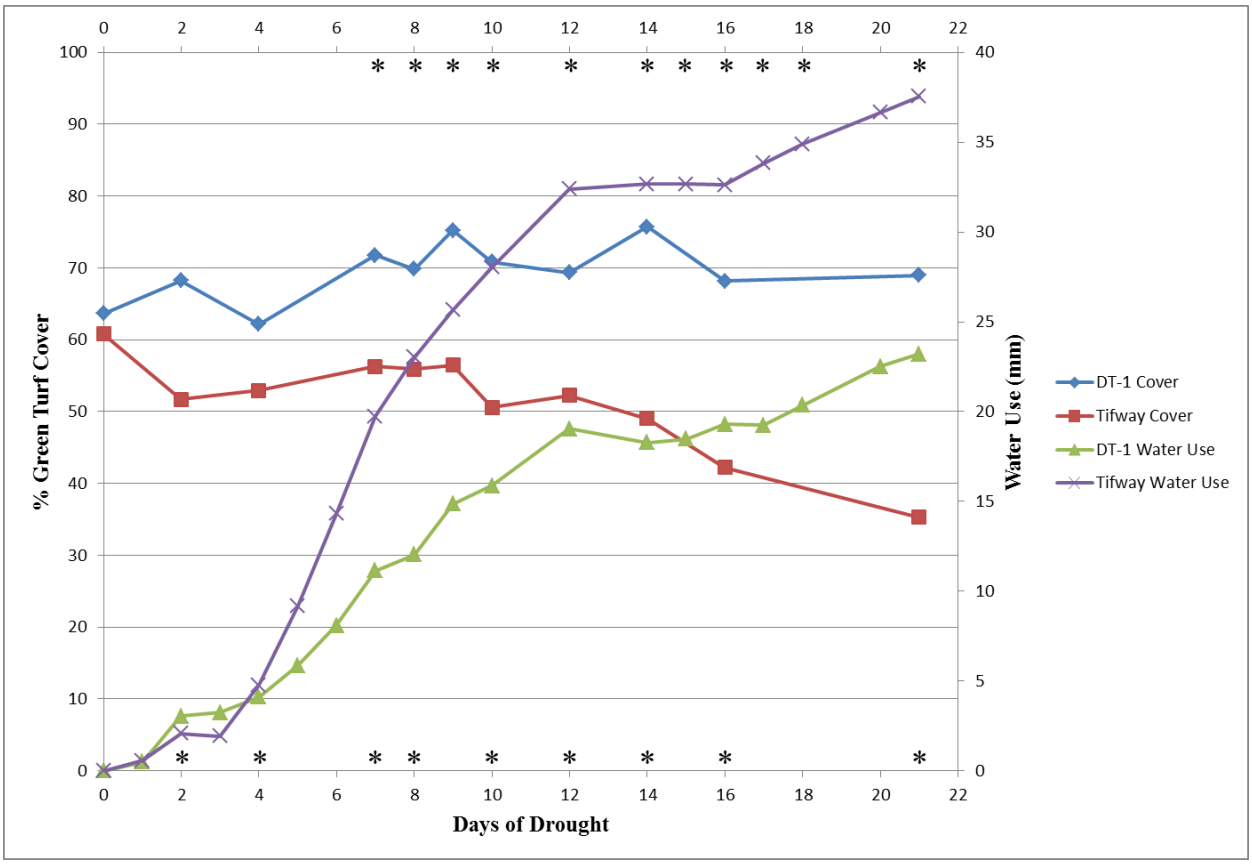

Figure 1. Mean turfgrass cover determined by digital image analysis (DIA) and cumulative water use using 50 cm soil moisture profile probes of two bermudagrasses mowed at 2.0" over 21 d without irrigation in a field trial during 2011 in Griffin, GA. Mean turfgrass cover is significantly different according to Fisher's LSD ($P \leq 0.10$) where asterisks are present on the lower X-axis. Mean cumulative water use is significantly different according to Fisher's LSD ($P \leq 0.05$) where asterisks are present on the upper X-axis. Field trial planted during 2010.

Table 1. Mean non-stressed and stressed turfgrass quality of three bermudagrasses mowed at 2.0" in field trials[1] at seven locations across the United States during 2011, 2012, and 2013.

	Turf quality[2]			Stress turf quality[3]		
Genotype	South[4]	North[5]	All	South	North	All
	Visual rating			Visual rating		
DT-1	**7.3 a**[6]	7.3 a	**7.3 a**	**5.9 a**	**6.0 a**	**5.9 a**
Tifway	6.2 b	7.1 a	6.7 b	4.2 b	4.3 b	4.2 b
Celebration	5.8 b	6.1 b	5.9 c	3.4 b	4.2 b	3.9 b

[1]Field trials were planted in 2011. All trials were planted again in 2012 to repeat the experiments.
[2]Turf quality was rated on a 1 to 9 scale with 1 = dead, 6 = acceptable, and 9 = excellent prior to the initiation of drought screening during year 2 in both trials.
[3]Stressed turf quality cover was rated on a 1 to 9 scale with 1 = dead, 6 = acceptable, and 9 = excellent after varying days of drought stress, depending on location and soil type, during year 2 in both trials.
[4]Testing locations were in College Station, TX, Gainesville, FL, and Tifton, GA.
[5]Testing locations were in Dallas, TX, Griffin, GA, Raleigh, NC, and Stillwater, OK.
[6]Means within columns followed by the same letter are not significantly different according to Fisher's LSD ($P \leq 0.05$).

Table 2. Mean turfgrass quality of three bermudagrasses mowed at 1.5" averaged over four dates in 2010, 2011, and 2012 after sustained droughty conditions in the Linear Gradient Irrigation System (LGIS) evaluation at the West Florida Research and Education Center (WFREC) in Jay, FL[1].

	Irrigation level (% ET_0)								
Genotype	120	105	80	54	37	25	13	3	Average
	Visual rating[2]								
DT-1	**6.8 a**[3]	**6.6 a**	**6.4 a**	**6.3 a**	**6.3 a**	**5.8 a**	**4.7 a**	**4.6 a**	5.9
Celebration	4.7 b	4.5 b	4.3 b	3.9 b	3.7 b	2.8 c	2.1 c	2.2 c	3.5
Princess-77	4.7 b	4.6 b	4.3 b	4.3 b	4.1 b	3.9 b	3.1 b	2.9 b	4.0

[1]Field trial planted during 2010.
[2]Turf quality was rated on a 1 to 9 scale with 1 = dead, 5 = acceptable, and 9 = excellent.
[3]Means within columns followed by the same letter are not significantly different according to Fisher's LSD ($P \leq 0.05$).

Figure 2. Celebration and DT-1 bermudagrasses mowed at 1.5" after sustained droughty conditions in the Linear Gradient Irrigation System (LGIS) evaluation during 2011 at the West Florida Research and Education Center (WFREC) in Jay, FL. Field trial planted from sod during 2010.

Table 3. Mean turfgrass quality before and during drought stress of two bermudagrasses mowed at 1.5" in a non-irrigated field trial during 2003 and 2004 in Tifton, GA[1].

	2003		2004	
	7 Sept	19 Sept	16 Aug	31 Aug
Genotype	TQ[2]	Stress TQ	TQ	Stress TQ
		Visual rating		
DT-1	9.0 a[3]	**7.0 a**	8.8 a	**8.0 a**
Tifway	8.5 a	5.8 b	8.3 a	6.5 b

[1]Field trial planted during 2002.
[2]Turf quality was rated on a 1 to 9 scale with 1 = dead, 5 = acceptable, and 9 = excellent.
[3]Means within columns followed by the same letter are not significantly different according to Fisher's LSD ($P \leq 0.05$).

Table 4. Mean turfgrass quality and cover of two bermudagrasses mowed at 1.5" in a non-irrigated field trial during 2009, 2010, and 2011 in Tifton, GA[1].

	Turf quality[2]			Turf cover[3]			
Genotype	Summer Rain	Summer Stress	Fall Dorm.	Green-up	Summer Rain	Summer Stress	Fall Dorm.
	Visual rating			% green cover			
DT-1	**6.6 a**[4]	**6.0 a**	**4.8 a**	**68 a**	**92 a**	**70 a**	**43 a**
Tifway	4.0 b	4.0 b	2.8 b	49 b	82 b	48 b	32 b

[1]Field trial planted during 2006.
[2]Turf quality was rated on a 1 to 9 scale with 1 = dead, 5 = acceptable, and 9 = excellent.
[3]Turf cover was determined by analyzing digital images taken in an enclosed box with a constant light source using SigmaScan Pro to measure the percentage of green pixels (0-100%) according to procedures developed by Richardson et al. (2001).
[4]Means within columns followed by the same letter are not significantly different according to Fisher's LSD ($P \leq 0.05$).

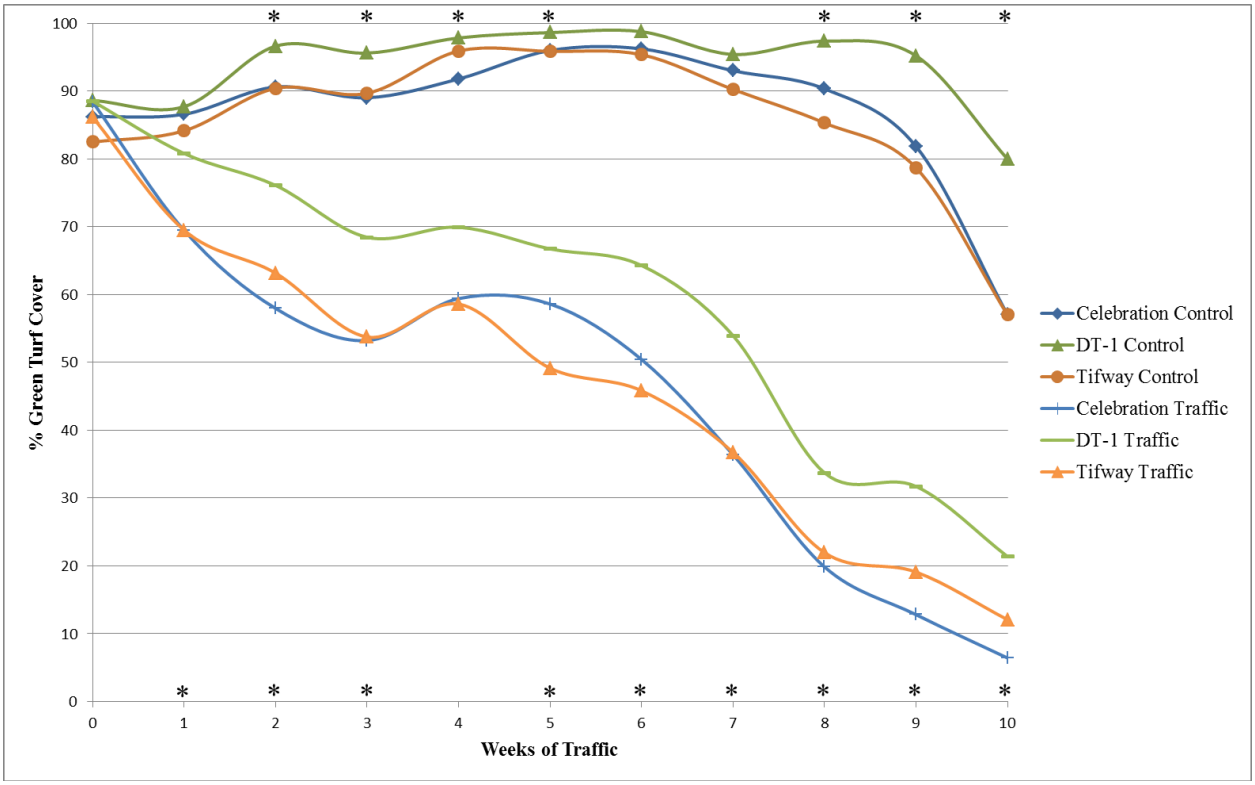

Figure 3. Mean turfgrass cover determined by digital image analysis (DIA) of three bermudagrasses mowed at 1.0" over 10 wks with and without traffic in an irrigated field trial during the fall of 2012 and 2013 in Tifton, GA. Mean turfgrass cover of DT-1 was significantly greater than all other tested cultivars within respective wear treatment according to Fisher's LSD ($P \leq 0.05$) in the week where asterisks are present on the lower X-axis (wear treatment) and upper X-axis (control treatment). Field trial planted during 2011.

Table 5. Mean turfgrass cover and color of five bermudagrasses mowed at 1.5" in an irrigated, non-stressed field trial during 2012 and 2013 in Tifton, GA[1].

	Turf cover[2]			
Genotype	Estab.	Green-up	Summer	Dormancy
	% green cover			
DT-1	**44 b**[3]	**75 a**	91 a	**65 a**
Celebration	55 a	62 b	89 a	26 b

[1]Field trial planted during 2009.
[2]Turf cover was determined by analyzing digital images taken in an enclosed box with a constant light source using SigmaScan Pro to measure the percentage of green pixels (0-100%) according to procedures developed by Richardson et al. (2001).
[3]Means within columns followed by the same letter are not significantly different according to Fisher's LSD ($P \leq 0.05$).

Table 6. Mean turfgrass quality, cover, and color of two bermudagrasses mowed at 1.5" in an irrigated, non-stressed[1] field trial during 2010 and 2011 in Tifton, GA[2].

	Turf quality[3]			Turf cover[4]		
Genotype	April	June	Oct.[1]	April	June	Oct.
	Visual rating			% green cover		
DT-1	6.3 a[5]	7.5 a	**8.3 a**	89 a	85 a	**63 a**
Tifway	5.8 a	6.0 a	6.0 b	80 a	83 a	25 b

[1]Field trial was irrigated to prevent stress from April 2010 through June 2011. The October ratings and measurements represent unirrigated field conditions from July 2011 through October 2011 in which the trial received 15.8" of rain.
[2]Field trial planted during 2008.
[3]Turf quality was rated on a 1 to 9 scale with 1 = dead, 5 = acceptable, and 9 = excellent.
[4]Turf cover was determined by analyzing digital images taken in an enclosed box with a constant light source using SigmaScan Pro to measure the percentage of green pixels (0-100%) according to procedures developed by Richardson et al. (2001).
[5]Means within columns followed by the same letter at each HOC are not significantly different according to Fisher's LSD ($P \leq 0.05$).

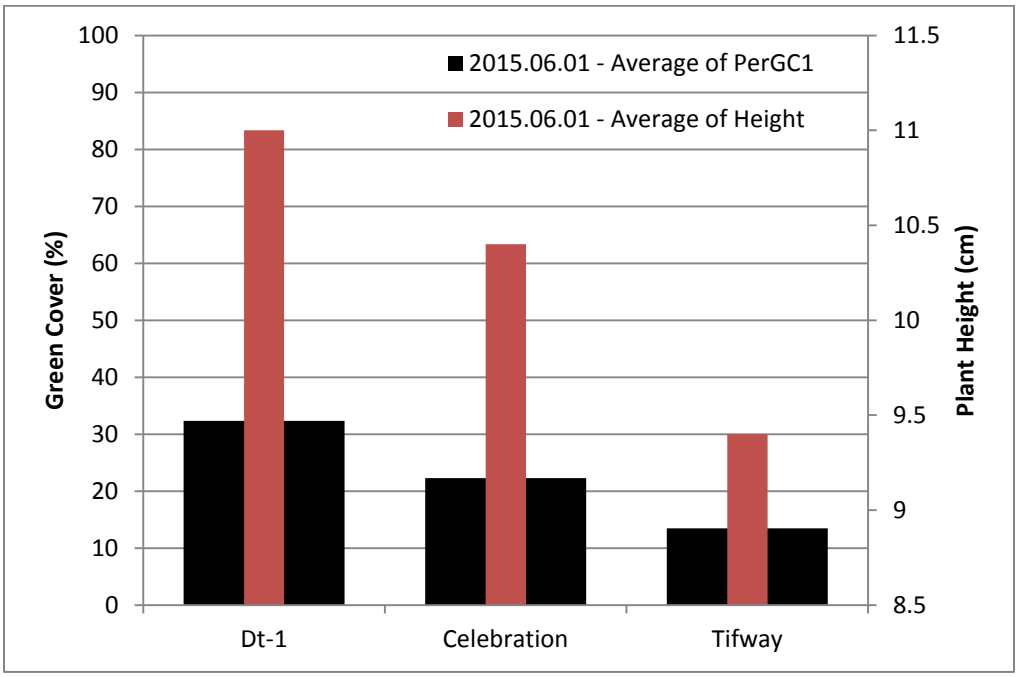

Figure 4. Mean turfgrass cover determined by digital image analysis (DIA) and canopy height of three bermudagrasses mowed at 2.0" in an irrigated field trial covered with a shade cloth intercepting 70% of the available sunlight in Tifton, GA. Field trial planted during 2014.

Figure 5. DT-1 bermudagrass mowed at 2.0" in an unirrigated lawn during 2014 in Tifton, GA. Lawn planted from sprigs during 2012.