APPLICATION FOR RELEASE

APPLICATION FOR RELEASE OF (check one):

☐ **CULTIVAR**
☐ **ASSOCIATE CULTIVAR**
☐ **GERMPLASM**
☐ **PARENTAL LINE**
☐ **GENETIC STOCK**

1. **Crop:** The Turfgrass: Seashore Paspalum (*Paspalum vaginatum* Swartz)

2. **Experimental no. or name: UGA31**, G03-539.31, or 03-539.31

3. **Pedigree and history:** UGA31 is a vegetative clone developed from a single seed arising from the open-pollinated cross (SIPV-2 x unknown). This cross was made in the greenhouse at Griffin, Georgia in 2003 by Dr. Paul Raymer. The female parent (SIPV-2) was allowed to flower in close proximity to 34 other UGA advanced breeding lines in an open-pollinated crossing block. Since seashore paspalum is self-incompatible, the male parent is presumed to be one of the 34 other lines in the polycross.

   Originally designated as 03-539.39, the single plant was germinated from seed in the laboratory and was established in the greenhouse. The seedling was visually screened for acceptable turf quality and for salt tolerance prior to being transplanted into the field for initial turf evaluation in the spring of 2004. 03-539.31 was evaluated in un-replicated field plots (2004 single plant nursery) mowed at 1.5 inches h.o.c. along with approximately 2000 other seedlings beginning in June, 2004. 03-539.31 was one of 78 lines selected for further evaluation in the fall of 2004 based on turf superior quality, density, and color. 03-539.31 was vegatively increased, and evaluated for salt tolerance in a replicated greenhouse study in 2005. It was selected as one of 37 experimental lines to be included in a replicated preliminary turf field evaluation (0.5-inch h.o.c.) at Griffin established in June, 2005.

   Late in 2006, G03-539.39 was selected as one of three advanced lines with superior turf quality traits based on its performance in the 2005 preliminary trial. G03-539.39 was designated as UGA31 and clonally increased for inclusion in an advanced turf variety trials at Griffin and Tifton, Georgia as well as the 2007 National Turfgrass Evaluation Trials for Seashore Paspalum at eight locations. In 2008, UGA31 was one of twelve entries included in a greens trial (0.18 to .25 inch h.o.c.) at Griffin. UGA31 was also included in lawn management trial established at Tifton in 2009.

   UGA 31 was evaluated again for salt tolerance in 2010. It has been evaluated for drought tolerance in both greenhouse and field studies and for disease resistance in both growth chamber and field studies.

4. **Description of plant material:** UGA31 is a vigorous clonal line that produces excellent quality turf under a range of mowing heights (Tables 1, 2, 3, 4, 5, and 6) and is suitable for course-wide use on golf courses, athletic fields, and other recreational venues as a fine turf. UGA 31 has excellent turf color (Tables 1, 2, 3, and 7) and very good retention of color during the fall following light frost or cool temperatures (Tables 1 and 7). It has medium to fine leaf texture (Tables 1, 2, 3 and 7) and very good turf density (Tables 3, 4, 5, and 7). UGA 31 has good salt tolerance (Tables 8 and 9) and appears to have superior tolerance to short-term drought (Tables 10 and 11). UGA has good dollar spot, *Sclerotinia homoeocarpa,* resistance (Tables 1, 2, and 3) and is moderately tolerant *Rhizoctonia solina* (Table 12).

5. **Need for and potential users of plant material:** An increase in golf course developments placed on coastal venues and problems associated with salinity are increasingly more prevalent in managed turfgrass. The trend for use of more salt-laden irrigation waters on turfgrass sites is expected to continue to rise and to further increase interest in developing more salt tolerant grasses, especially halophytes such as seashore paspalum.

The University of Georgia seashore paspalum breeding program is now recognized as a major contributor to the recent success of seashore paspalum as a turfgrass species. However, our global market share of seashore paspalum plant materials has fallen dramatically due to a history of contamination problems with SI2000, and lack of access to international markets for SeaIsle Supreme. A new seashore paspalum cultivar is needed to replace SI 2000 and SI Supreme especially in the Asian market. .

6. **Justification for release:**

A) UGA 31 has better dollar spot resistance than SeaIsle Supreme similar to SeaIsle 1 and SeaIsle 2000 (Tables 1, 2, and 3).

B) UGA31 produces very high quality turf over a range of mowing heights. UGA often produces turf quality better than SeaIsle 1, SeaIsle 2000, SeaIsle Supreme, and other popular cultivars (Tables 1, 2, 3, 4, 5b, and 6).

C) UGA31 has excellent color that is better than most cultivars and similar to SeaIsle 2000 (Tables 1, 2, 3, and 7). UGA31 also retains color well after light frosts or periods of low temperature. As a result, fall color ratings are similar to Aloha and better than other released cultivars (Tables 1 and 7).

D) The salt tolerance of UGA 31 is similar to that of SeaIsle 1, SeaIsle2000, and SeaIsle Supreme (Tables 8 and 9).

E) UGA 31 had a medium to fine leaf texture (Tables 1, 2, 3, and 7) and good turf density (Tables 3, 4, 5b, and 7) that are as good as or better than other released cultivars.

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7. Participating scientists: **Drs. Paul Raymer, Lee Burpee, Robert Carrow, and Brian Schwartz**

8. Location(s) at which plant material was developed: **UGA Griffin Campus**

9. Recommended form of intellectual property protection and royalty: Plant Patent with exclusive license for marketing.

Cultivar and associate cultivar applications only provide the following information:

10. Method of propagation: Vegetative (Clonal)

11. Amount of breeder seed stocks available (if applicable): N/A

12. Amount of foundation seed stocks available if applicable: N/A

13. Amount of cutting or bud material available for vegetatively propagated material for nursery distribution (if applicable): 2 acres of UGA 31 were established in July of 2010 as foundation material at the Athens Plant Sciences Farm.

14. Describe any unusual difficulty anticipated in the production of any class of seed stocks: **None.**

15. Suggest up to three names for the cultivar, if appropriate:

    Name to be determined by Licensing Committee or Licensing Group.

16. Name approved by plant cultivar and germplasm release committee:

APPLICATION FOR RELEASE

(Please keep this as a separate page)

Application for the release of (insert experimental name or number and crop)

Recommended:

A. Paul Raymer — Originating Scientist — Date 1/18/2011

B. for Glenn Stelly — Department Head — Date 1/18/2011

C. — For Griffin and Tifton, Assistant Dean — Date 1/18/11

D. _____ — Chair, GAES PCGRC — Date _____

E. _____ — Associate Dean for Research — Date _____

Approved:

F. _____ — Dean and Director — Date _____

Table 1. Performance of 12 seashore paspalum lines under greens management (0.18 - 0.25 inch h.o.c.) at Griffin, Georgia 2008-2010[1]

Line	Grown-in Coverage (9 ratings)		Turf Quality (15 ratings)		Turf Color (9 ratings)		Leaf Texture (2 ratings)		Seed Heads (3 ratings)		Fall Color (7 ratings)		Spring GreenUp (6 ratings)		Dollar Spot (6 ratings)		Pink Patch (3 ratings)	
	% cover		*1-9 scale*		*1-9 scale*		*1-9 scale*		*1-9 scale*				%		%		%	
GA05-1673	73.5	de[2]	**7.4**	abc	7.3	bcd	**8.1**	a	5.3	de	7.3	b	51.6	cd	8.2	bc	37.6	b
GA05-1742	72.1	e	5.9	h	7.3	cd	7.7	b	**6.9**	abc	5.0	f	23.0	f	8.3	bc	47.0	a
GA05-1743	81.2	bc	**7.3**	abc	**7.9**	a	**8.4**	a	**8.0**	abc	6.2	d	60.4	cd	9.3	b	45.4	a
ALOHA	81.9	bc	7.2	bcd	7.3	bcd	7.3	cd	4.1	f	**7.7**	ab	**74.0**	ab	**5.0**	cd	**10.5**	d
SEADWARF	81.6	bc	6.8	f	7.2	cd	7.1	d	6.5	bcd	6.4	cd	52.4	cd	7.9	bc	**14.4**	d
SEASPRAY	62.6	f	7.0	def	6.8	e	6.8	e	5.2	ef	7.5	b	63.0	bc	**4.9**	cd	22.6	c
SI-1	**88.4**	a	7.1	cde	7.2	de	7.3	cd	5.8	cde	6.7	cd	58.0	c	**2.6**	d	46.5	a
SI-2000	**75.7**	ab	**7.4**	abc	**7.7**	ab	7.3	cd	**7.4**	abc	7.4	b	50.5	cd	**3.2**	d	**11.4**	d
SI-SUPREME	**88.4**	ab	6.8	ef	7.2	de	7.3	cd	6.3	bcde	7.6	b	43.2	de	17.1	a	24.3	c
UGA-22	82.3	bc	**7.5**	a	**7.6**	abc	7.3	cd	**6.8**	abc	**8.0**	ab	**76.6**	a	**3.1**	d	**14.1**	d
UGA-31	**83.8**	ab	**7.3**	abc	**7.5**	abcd	7.5	bc	6.6	bc	**7.7**	ab	61.9	bc	**5.1**	cd	**9.7**	d
UGA-7	78.1	cd	6.4	g	7.2	e	7.5	bc	**7.4**	ab	5.5	e	31.0	ef	**5.7**	bcd	25.4	c

1. This green variety trial was originally established in May, 2008, but due to construction was relocated to another green in June, 2009.
2. Means followed by the same letter are not statistically different according to Student's t-tests.
3. Means in bold are not statistically different from the best performing line.

Table 2. Performance of 14 seashore paspalum lines under fairway management (0.5 inches h.o.c.) at Griffin, Georgia 2007-2010.

Line	Grown-in Coverage (3 ratings)		Turf Quality (15 ratings)		Turf Color (18 ratings)		Leaf Texture (8 ratings)		Seed Heads (8 ratings)		Spring GreenUp (4 ratings)		Dollar Spot (9 ratings)	
	% cover		*1-9 scale*		*1-9 scale*		*1-9 scale*		*1-9 scale*		*%*		*%*	
03-527.8	**89** [1]	abc[2]	**6.7**	abc	7.3	def	7.5	bc	**7.8**	ab	**76**	a	**10**	d
05-1673	**90**	ab	6.2	cde	7.1	f	7.6	b	7.4	bcd	45	d	**11**	cd
05-1742	84	bcd	6.6	bcd	7.6	bc	7.2	d	7.3	bcd	51	cd	**9**	d
05-1743	**89**	abc	6.5	bcd	**7.8**	a	**8.0**	a	**8.1**	a	52	cd	15	bc
Aloha	**95**	a	6.1	def	6.9	g	6.7	f	6.2	e	**76**	a	17	b
Salam	87	bcd	6.2	cd	6.9	g	6.8	ef	6.8	de	46	d	18	ab
SeaDwarf	87	bcd	6.6	bc	7.4	de	7.3	bcd	6.9	d	**77**	a	**9**	d
SeaSpray	82	d	6.5	bcd	6.8	g	7.1	de	7.1	cd	**75**	ab	**10**	cd
SI 1	88	bcd	6.6	bcd	7.3	de	7.2	d	7.0	cd	62	bc	**10**	d
SI 2000	85	bc	**6.8**	ab	7.4	cd	7.3	bcd	7.4	bcd	**80**	a	**11**	cd
Supreme	88	bc	5.4	e	6.9	g	6.8	f	7.3	bcd	55	cd	22	a
UGA 22	**89**	abc	6.5	bcd	7.2	ef	7.2	cd	7.3	bcd	**76**	a	**12**	cd
UGA 31	84	cd	**7.1**	a	**7.7**	ab	7.4	bcd	7.5	bc	**77**	a	**7**	d
UGA 7	84	cd	**6.7**	abc	7.4	d	7.3	bcd	**7.7**	ab	61	c	**11**	cd

1. Means in bold are not statistically different from the best performing line.
2. Means followed by the same letter are not statistically different according to Student's t-tests.

Table 3. Performance of 10 seashore paspalum lines under fairway management (0.5 inches h.o.c.) at Tifton, Georgia 2007-2010.

Line	Grown-in Coverage (2 ratings)		Turf Quality (12 ratings)		Turf Color (4 ratings)		Leaf Texture (1 rating)		Turf Density (2 rating)		Seed Heads (2 ratings)		Dollar Spot (6 ratings)	
	% cover		*1-9 scale*		*1-9 scale*		*1-9 scale*				*1-9 scale*		*%*	
Aloha	**89** [1]	a [2]	5.9	bc	6.5	b	6.3	d	7.0	bc	6.4	de	8	b
Salam	**87**	a	5.8	bc	6.5	b	6.5	cd	6.7	c	6.7	cde	10	ab
SeaDwarf	**88**	a	**6.5**	a	**7.4**	a	**7.0**	abc	**8.2**	a	5.9	e	**2**	c
SeaSpray	**77**	a	5.8	bc	6.4	b	6.3	d	6.8	c	6.9	bcde	**4**	c
SI 1	**87**	a	5.9	bc	6.7	b	6.8	bcd	7.2	bc	6.0	e	**2**	c
SI 2000	**77**	a	6.1	b	**7.3**	a	**7.0**	abc	**7.6**	ab	**7.7**	abc	**3**	c
Supreme	**87**	a	5.5	c	6.5	b	6.5	cd	7.0	bc	**7.9**	ab	13	ab
UGA 22	**81**	a	5.8	bc	6.7	b	6.5	cd	7.6	ab	6.5	de	**4**	c
UGA 31	**80**	a	**6.9**	a	**7.7**	a	**7.5**	a	**8.2**	a	**8.1**	a	**1**	c
UGA 7	**80**	a	5.9	b	6.8	b	**7.2**	ab	7.1	bc	**7.2**	abcd	**4**	c

Data Collected by Dr. Paul Raymer.

1. Means in bold are not statistically different from the best performing line.
2. Means followed by the same letter are not statistically different according to Student's t-tests.

Table 4. Summary of 2007-2010 Seashore Paspalum Test in Tifton, GA mowed at 0.5". (Schwartz Data)

	Turf Quality		Green Cover		Density		Seedhead Density	
	2009 Average	2010 Average	2009 Average	2010 Average	2009 Average	2010 Average	6.10.2009	7.9.2010
No. Ratings	9	6	9	7	9	6	1	1
	visual rating[1]		*% coverage*		*visual rating*[1]		*no. per M*^{2}	
UGA31	**7.2** a[2]	**6.8**[3] a	**83** ab	**84** abc	**7.1** a	**6.8** a	**319** d	**2479** bc
Aloha	4.7 f	4.1 d	**84** a	**83** abcd	5.0 g	5.2 cde	**721** cd	**2400** bc
Salam	4.0 g	4.1 d	**82** ab	**82** abcd	4.2 h	4.9 de	1733 b	**2763** bc
SeaDwarf	**6.9** ab	5.6 b	**83** ab	**80** abcde	**7.0** ab	5.9 bc	3104 a	**3258** abc
SeaIsle1	5.6 cd	4.5 cd	**85** a	79 bcde	6.0 de	5.1 de	1489 bc	4801 a
SeaIsle2000	6.5 b	**6.4** a	**85** a	78 cde	6.6 bc	**6.3** ab	**219** d	3520 ab
SeaIsleSupreme	4.6 f	4.0 d	**84** a	**86** a	5.0 g	5.1 de	**151** d	**1338** c
SeaSpray	4.9 ef	4.9 bc	**82** ab	**84** ab	5.1 fg	5.6 bcd	**413** d	**2336** bc
UGA7	5.3 de	4.5 cd	80 b	77 de	5.6 ef	4.8 e	**47** d	**2809** bc
UGA22	6.0 c	4.6 cd	**85** a	75 e	6.3 cd	5.4 cde	**36** d	3717 ab

Data Collected by Dr. Brian Schwartz.

1. Visual turf quality and density ratings are based on a 1 to 9 scale (1 = poor, 5 = acceptable, and 9 = excellent).
2. Means followed by the same letter are not considered statistically different according to Fisher's LSD (alpha = 0.05).
3. Means in bold are not statistically different from the best performing line.

Table 5a. 2009 Seashore Paspalum Test in Tifton, GA mowed at 1.5"

Genotype	Date				
	7.2.2009	7.21.2009	9.5.2009	10.7.2009	11.18.2009
	Establishment				
	%coverage				
UGA 31	**23** a	**53** a	**91** a	**99** a	**99** a
SeaIsle 1	**8** a	36 b	83 b	**97** a	**97** a

Table 5b. 2009 Seashore Paspalum Test in Tifton, GA mowed at 1.5"

Genotype	Date					2010 Average
	5.3.2010	6.18.2010	7.13.2010	8.24.2010	11.16.2010	
	Lawn Quality					
	visual rating[1]					
UGA 31	**6.3** a	**8.0** a	**7.3** a	**7.7** a	**5.0** a	**6.9** a
SeaIsle 1	**6.0** a	**7.3** a	**6.3** a	**6.0** a	**3.3** a	**5.8** b
	Green Cover					
	% coverage					
UGA31	**96** a	**97** a	85 a	**88** a	**63** a	**86** a
SeaIsle1	**98** a	**97** a	77 b	71 b	**61** a	81 b
	Density					
	visual rating[1]					
UGA31	6.3 a	**6.3** a	**7.7** a	6.7 a	**5.7** a	**6.5** a
SeaIsle1	**6.0** a	**7.0** a	**7.0** a	6.0 a	3.3 b	5.9 b

Data Collected by Dr. Brian Schwartz.

1. Visual turf quality and density ratings are based on a 1 to 9 scale (1 = poor, 5 = acceptable, and 9 = excellent).
2. Means followed by the same letter are not considered statistically different according to Fisher's LSD (alpha = 0.05).
3. Means in bold are not statistically different from the best performing line.

Table 6. National Turfgrass Evaluation 2007 - 2009 Seashore Paspalum Trial - Summary of Turf Quality Ratings Over Eight Test Locations

Location	Tucson, AZ		Riverside, CA		Gainesville, FL		Jay, FL		Griffin, GA		Baton Rouge, LA		Fayetteville, AR		Las Cruces, NM		Mean		Times in
Year	2008	2009	2008	2009	2008	2009	2008	2009	2008	2009	2008	2009	2008	2009	2008	2009	2008	2009	Top Group[2]
								rating on 1 to 9 scale with 9 = excellent											(no. / 16)
Salam	**6.8** [1]	6.1	**6.5**	**6.6**	6.1	**5.4**	**4.5**	**6.0**	**6.9**	**7.3**	**6.3**	**6.3**	6.2	**5.8**	6.4	5.0	6.4	6.1	11 of 16
Sea Isle 1	6.6	6.5	**6.4**	**6.8**	**6.5**	**5.5**	**4.7**	**6.0**	**7.3**	**7.2**	**6.2**	**6.4**	**7.2**	**6.1**	**7.6**	**6.6**	6.6	6.4	14 of 16
SRX 9HSCP	**7.0**	6.1	**6.4**	**7.2**	**7.0**	**5.8**	3.8	**5.4**	**7.1**	**7.3**	**5.9**	6.1	**6.8**	**6.1**	**7.5**	**6.3**	6.4	6.3	13 of 16
UGA 22	**7.2**	**6.9**	**6.4**	**7.0**	**6.9**	**5.7**	**4.8**	**6.1**	**7.0**	**7.6**	**6.0**	**6.3**	**7.2**	**6.5**	**7.6**	**6.2**	6.6	6.5	16 of 16
UGA 31	**7.0**	**7.2**	**6.1**	6.1	**6.7**	**5.8**	**4.2**	**5.8**	**7.3**	**7.7**	**6.3**	**6.3**	**6.8**	**6.7**	**7.5**	**6.3**	6.5	6.5	15 of 16
UGA 7	**7.0**	**7.4**	**6.3**	**6.7**	**6.3**	**4.8**	**4.4**	**5.4**	**7.3**	7.1	**5.9**	**6.3**	**7.8**	**6.7**	**7.6**	**7.4**	6.6	6.5	15 of 16
LSD Value	0.5	0.7	N.S.	0.6	0.7	N.S.	0.9	N.S.	N.S.	0.5	N.S.	0.2	1.1	N.S.	0.9	1.6			
C.V. (%)	4.9	5.7	4.3	4.6	6.2	8.0	12.4	9.4	7.4	2.8	4.9	1.7	7.8	8.1	6.2	12.1			

1. Means in bold are not statistically different from the best performing line.
2. Top statisical group based on LSD (0.05).

Table 7. National Turfgrass Evaluation Seashore Paspalum Trial - Summary of Turf Color, Texture, and Density Ratings Over Eight Test Locations, 2008-2009.

	Color		Texture		Density							Fall Color									Winter Color		Times in
					Spring		Summer		Fall			September		October		November		December					Top Rated.
Year	2008	2009	2008	2009	2008	2009	2008	2009	2008	2009	Mean	2008	2009	2008	2009	2008	2009	2008	2009	Mean	2008	2009	Group[2]
No. of Loc.	5	6	3	4	3	5	3	5	3	5	24	2	3	3	4	4	5	2	3	26	1	2	(no. / 20)
										rating on 1 to 9 scale with 9 = excellent													
Salam	6.5	6.4	**6.2** [1]	6.7	6.4	**5.8**	6.6	6.7	**6.8**	7.0	6.6	**6.8**	6.6	**5.8**	**7.3**	**6.0**	**6.5**	**6.2**	**6.2**	6.4	**6.3**	**4.7**	12 of 20
Sea Isle 1	**6.8**	6.8	6.0	7.1	6.3	**5.9**	6.4	**7.1**	**6.2**	6.8	6.5	**7.4**	6.7	**5.9**	**7.2**	**5.8**	**6.1**	**6.2**	**5.9**	6.4	**6.0**	**4.3**	13 of 20
SRX 9HSCP	**6.7**	6.4	6.1	7.1	**6.9**	**6.0**	**7.4**	6.8	**7.0**	7.0	6.9	**6.8**	6.4	**5.8**	6.6	5.2	5.7	5.2	5.1	5.9	**6.5**	3.7	8 of 20
UGA 22	6.5	6.8	6.1	**7.4**	**6.8**	**6.1**	**6.9**	**7.1**	**6.8**	**7.4**	6.9	**6.8**	6.4	**5.8**	**7.2**	5.5	**6.1**	5.7	**5.9**	6.2	**6.3**	**4.2**	14 of 20
UGA 31	**7.1**	**7.5**	**6.2**	**7.8**	5.8	**5.8**	**6.9**	**7.5**	**6.3**	**7.1**	6.6	**7.5**	**7.4**	**6.3**	**7.4**	**6.2**	**6.5**	**6.7**	**6.3**	6.8	**6.0**	**4.3**	19 of 20
UGA 7	**6.8**	**7.2**	**6.6**	7.2	6.1	**5.7**	6.6	**7.1**	**6.3**	6.7	6.4	**7.3**	**6.8**	**5.9**	**7.0**	**5.9**	**6.1**	**5.8**	**5.9**	6.3	**6.0**	**4.2**	16 of 20
LSD Value	0.5	0.5	0.4	0.5	0.4	0.5	0.5	0.4	NS	0.6		NS	0.6	NS	0.6	0.6	0.4	0.9	0.9		NS	1.3	
C.V. (%)	10.4	10.4	7.6	8.2	6.7	11.9	8.3	8.0	14.5	11.3		11.1	10.1	13.9	10.6	13.9	10.1	12.8	16.3		13.6	27.6	

1. Means in bold are not statistically different from the best performing line.
2. Top statisical group based on LSD (0.05).

Table 8. Response of seashore paspalum lines after 60 days exposure to three levels of salt water in a replicated greenhouse experiment conducted in 2005.

	Leaf Firing					
	Salt Level (dS/m)[1]					
Line	0.0		20.0		40.0	
	0 - 9 scale (9=excellent)					
UGA 31	**8.0** [2]	ab	**8.0**	a	**6.0**	ab
Adalayd	**7.5**	ab	6.5	bc	5.2	b
Kim1	**7.5**	ab	5.5	c	**5.7**	ab
Parish	6.0	b	1.8	e	1.3	c
PI 299042	6.2	b	2.3	de	1.8	c
Q37956	6.2	b	2.5	de	1.5	c
Sealsle 1	**8.2**	a	**7.5**	ab	**6.3**	a
Sealsle Supreme	**8.7**	a	**7.7**	ab	**6.7**	a
Tropic Shore	**6.7**	ab	3.2	d	1.7	c

1. Ocean water is approximately 54 dS/m.
2. Means in bold are not statistically different from the best performing line.
3. Means followed by the same letter are not statistically different according to Student's t-tests.

Table 9. Response of seashore paspalum lines after 60 days exposure to four levels of salt water in a replicated greenhouse experiment conducted in 2010.

	Leaf Firing							
	Salt Level (dS/m)[1]							
Line	0.0		15.0		30.0		45.0	
	1 - 9 scale (9=excellent)							
03-019F.10	8.1	bcde[2]	8.2	bcd	5.7	bcde	**2.8** [3]	abcde
03-043C.9	6.4	h	6.6	fg	6.0	bcde	1.7	bcde
03-067B.7	8.7	bcde	**9.0**	a	**6.2**	abcde	**2.8**	abcde
03-093A.3	7.1	fg	7.7	de	4.8	de	1.6	cde
03-103D.8	7.9	de	7.2	ef	5.1	cde	**3.1**	abcd
03-106B.1	7.1	fg	7.2	ef	5.1	cde	**3.2**	abcd
03-106I.6	6.7	gh	6.5	g	4.5	e	1.1	e
03-106L.1	7.8	def	8.2	bcd	**8.6**	abcde	**3.0**	abcde
03-111D.2	**8.4**	abcde	**8.9**	ab	**9.0**	abcde	**4.3**	a
03-134J.2	7.9	de	8.1	cd	**7.2**	abcd	**3.5**	abc
03-137A.10	7.7	ef	**8.5**	abc	**7.5**	abc	1.3	de
SI 1	**8.2**	abcde	**8.5**	abc	**7.2**	abcd	**3.6**	ab
SI 2000	**8.9**	a	**8.7**	abc	**8.2**	ab	2.1	bcde
Supreme	**8.6**	abc	**8.7**	abc	**7.2**	abcd	2.1	bcde
UGA 1673	**8.5**	abcd	7.7	de	**8.2**	ab	2.0	bcde
UGA 1742	**8.2**	abcde	**8.5**	abc	**7.4**	abcd	**3.0**	abcde
UGA 1743	**8.6**	abc	**9.0**	a	**7.0**	abcde	1.8	bcde
UGA 31	**8.7**	ab	**9.0**	a	**8.7**	a	**3.2**	abcd
UGA 529.7	8.0	cde	8.2	bcd	**7.2**	abcd	**3.0**	abcde

1. Ocean water is approximately 54 dS/m.
2. Means followed by the same letter are not statistically different according to Student's t-tests.
3. Means in bold are not statistically different from the best performing line.

Table 10. Leaf firing response of seashore paspalum lines to dry down in a replicated greenhouse lysimeter study conducted in 2007.[1]

Ecotype	Days from Initiation of Dry Down[2]			
	17	24	28	38
	Leaf Firing (%)			
Sea Isle 1	**14.00[3] abc[4]**	**17.00 bc**	**9.33 d**	**18.33 bc**
G 529.7	**8.00 c**	**11.67 bc**	**10.67 cd**	**17.33 bc**
Sea Isle Supreme	**11.67 bc**	34.33 ab	**31.67 abcd**	**32.67 abc**
G 506.6	27.67 ab	40.33 ab	45.00 abc	**24.33 abc**
UGA 31	**3.33 c**	**2.00 c**	**3.00 d**	**7.33 c**
G 527.8	**16.33 abc**	**20.00 bc**	**24.00 abcd**	**24.33 abc**
Sea Dwarf	**16.00 abc**	**27.67 abc**	**18.67 bcd**	**22.67 abc**
Temple	**13.33 abc**	**25.67 abc**	57.67 a	53.33 a
SI 2000	**11.33 bc**	**10.67 bc**	**8.33 d**	**16.00 c**
Tifway	31.00 a	51.67 a	53.33 ab	48.33 ab
Adalayd	**7.67 c**	**10.33 bc**	**14.00 cd**	**23.33 abc**
G 525.22	**2.33 c**	**3.00 c**	**30.67 abcd**	**29.67 abc**
LSD (0.05)	18.83	30.94	35.48	32.29
F-test	0.11	0.07	0.04	0.23
CV (%)	82	84	82	72

1. Turf was grown in 12-inch diameter x 36-inch deep lysimeters filled with 90:10 greens-mix sand.
2. Dry down was initiated on March 6.
3. Means in bold are not statistically different from the best performing line.
4. Means followed by the same letter are not statistically different according to Student's t-tests.

Data collected by Dr. Bob Carrow and Marisa Griffin, UGA Griffin Campus, Griffin GA.

Table 11. Summary of results of a turfgrass field drought study conducted under the Griffin rainout shelter, 29 July – 28 Oct., 2008.

	Average Across All Dates				Times in Top Ranking[1]				
Grass	Leaf Firing	NDVI	Turf Quality	Turf Color	Leaf Firing	NDVI	Turf Quality	Turf Color	All Ratings
	%	1 – ideal	9- ideal	9 = ideal	(8)[2]	(18)	(8)	(8)	(42)
SI 2000	**16.1**[3]	**0.704**	**6.15**	**6.62**	7	13	7	8	35
UGA 31	**16.2**	**0.697**	**5.79**	**6.15**	8	13	7	8	36
Sea Dwarf	**18.7**	**0.716**	**6.24**	**6.40**	7	13	8	7	35
SI 1	**19.1**	**0.680**	**5.93**	**6.19**	7	13	7	8	35
Salam	**20.9**	**0.675**	5.23	5.70	7	13	1	5	26
Aloha	30.0	0.642	4.69	4.97	1	1	0	0	2
Tifway	34.9	0.653	5.17	5.13	2	4	2	0	8
SI Supreme	41.7	0.619	4.49	4.78	0	1	0	1	2
LSD (0.05)	14.8	0.070	1.04	1.00					
F-test	<0.001	0.02	0.001	0.001					
CV (%)	51.0	7.2	13.0	12.0					

1. Top ranking is the top (best) statistical group based on LSD (0.05).
2. Number of ratings across all three dry-down periods.
3. Means in bold are not statistically different from the best performing line.

Data collected by Dr. Bob Carrow, UGA Griffin Campus, Griffin, GA.

Table 12. Susceptibility of Paspalum cultivars to *Rhizoctonia solani* AG 2-2 LP (large patch) – Growth Chamber - May/June 2009.

	% large patch			
Cultivar	**5/21**	**5/28**	**6/04**	**6/11**
UGA 31	**7.0 b**[1]	**32.0**[2] **b**	45.3 b	50.0 b
Salam	43.0 a	71.9 a	85.9 a	83.6 a
SI 2000	**6.4 b**	**30.9 b**	45.3 b	45.3 b
SI Supreme	**2.9 b**	**7.6 b**	**10.5 c**	**14.1 c**

1. Within a column, values followed by the same letter are not significantly different at $\alpha = 0.05$ according to the Duncan's Multiple Range Test.
2. Means in bold are not statistically different from the best performing line.

Data collected by Dr. Lee Burpee, Plant Pathologist, UGA Griffin Campus, Griffin, GA.