

**A REPORT OF THE
GRASS VARIETY REVIEW BOARD**



ASSOCIATION OF OFFICIAL SEED CERTIFYING AGENCIES

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MARCH 2017



GRASS
VARIETY REVIEW BOARD

ASSOCIATION OF OFFICIAL SEED CERTIFYING AGENCIES
(MARCH 2017)

The Association of Official Seed Certifying Agencies (AOSCA), Grass Variety Review Board reviewed the following varieties on March 8, 2017 in Portland, Oregon. The Board recommended the inclusion of these varieties for certification. Seed of these varieties may be certified, providing production meets all standards of the Certifying Agency of the jurisdiction in which the seed is grown.

All variety information, including descriptions, claims and research data to support any claim was supplied to the Grass Variety Review Board by the applicants. The Grass Variety Review Board makes judgments regarding recommendation of varieties for inclusion into certification based on the data supplied. Beyond this, the Grass Variety Review Board takes no position on the accuracy or truthfulness of any description or claim made by the applicants.

Further information on current procedures, application forms and details regarding the Grass Variety Review Board can be obtained from:

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Respectfully submitted,

Dennis Lundeen, Chair
Grass Variety Review Board

2017 AOSCA GRASS VRB

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Grass

OG0703 (Exp)

1. Variety name _____ Kind: Orchardgrass
 Genus: Dactylis Species: glomerata
 Experimental designation (s): OG0703
 Date submitted: January 3, 2017

2. OG0703 orchardgrass was developed using phenotypic recurrent selection. Plants from multiple varieties and breeding lines were selected from a 3 year-old breeding nursery at Buck Creek, IN, and established in a spaced-plant nursery at Touchet, WA. Following one year of evaluation for maturity, vigor, color, plant health, and seed yield potential, 9 selected plants were allowed to intercross. Syn-1 breeder seed was bulk-harvested in 2008.

3. OG0703 is adapted to and intended for forage use in the east central United States. It has been tested in Indiana, Kentucky, Tennessee, and Virginia.

4. Growth & Morphology	Flag leaf length (cm)		Flag leaf height (cm)		Heading date (May 1 = 1)	
	Buck Creek, IN		Buck Creek, IN		Buck Creek, IN	
	2010	2011	2010	2011	2010	2011
OG0703	30.3	33.3	74.3	64.3	24.3	31.8
BENCHMARK PLUS	29.8	25.8	76.8	70.3	14.0	29.3
HAYMASTER	29.5	31.5	72.5	75.3	23.8	31.8
SECO	33.3	32.0	73.5	70.0	25.0	32.8
LSD.05	3.7	3.4	5.6	6.5	1.6	1.5
CV(%)	10.7	9.2	6.4	7.4	6.4	4.0

Data collected from: Spaced single plants _____ Plants in rows/solid seeding X

Variants to be expected and frequency: None observed

5. Primary Use	Forage Yield (tons per acre dry matter)				Persistence ^{1/}		
	Buck Creek, IN		New Castle, KY		Buck Creek, IN		New Castle, KY
	2010	2011	2010	2011	2012 ^{2/}	2013 ^{3/}	2012
OG0703	8.70	6.43	7.06	6.46	80.0	90.0	81.7
BENCHMARK PLUS	8.73	8.28	7.27	6.89	80.0	85.0	75.0
HAYMASTER	8.25	6.22	7.29	6.02	81.7	86.7	73.3
OKAY	7.78	6.22	7.35	5.67	78.3	78.3	75.0
LSD.05	0.89	0.56	0.48	0.84	7.7	5.8	7.2
CV(%)	7.8	6.3	4.8	8.8	7.1	5.0	7.0

•Scale used to report traits (if appropriate): ^{1/}1= Visual estimates of 4th year percent stands.

6. Seed increase of OG0703 is limited to two generations each of breeder (Syn-1 or Syn-2), foundation (Syn-2 or Syn-3), and certified (Syn-3 or Syn-4) classes. Breeder seed was produced in 2008 (Syn-1) at Touchet, WA, and 2015 (Syn-2) at Forest Grove, OR, and will be maintained by Allied Seed. Foundation fields may be established from breeder seed. Certified fields may be established from breeder or foundation seed. Stands of foundation and certified fields are limited to 3 and 5 years, respectively.

7. The first certified seed of OG0703 will be offered for sale in 2019. Plant variety protection will not be sought for this variety.

Date this application was submitted: Jan 4, 2017

Date recommended by the VRB: May 8, 2017



Grass

TF0904SL (Exp)

1. Variety name _____ Kind: Tall Fescue
 Genus: Festuca Species: arundinacea
 Experimental designation (s): TF0904SL
 Date submitted: January 3, 2017
2. TF0904SL tall fescue was developed using phenotypic recurrent selection. Plants from 9 varieties, and one elite breeding line were established in a spaced-plant nursery at Buck Creek, IN, and evaluated for vigor, color, regrowth, plant health, and soft leaf texture. Following two years of evaluation, 33 clones were selected and placed in an isolated crossing block. Syn-1 breeder seed was bulk harvested in 2010.
3. TF0904SL is adapted to and intended for forage use in the east central United States. It has been tested in Indiana, Kentucky, and Virginia.

4. Growth & Morphology Traits	Flag leaf width (mm)		Plant height (cm)		Heading date (May 1 = 1)	
	Buck Creek, IN		Buck Creek, IN		Buck Creek, IN	
	2013	2014	2013	2014	2013	2014
TF0904SL	6.8	6.5	118.0	106.0	21.5	26.5
KY-31	6.5	6.0	111.8	101.3	28.0	28.0
FAWN	5.8	5.0	113.8	105.3	18.0	26.0
SELECT	6.0	5.0	114.5	105.8	18.0	26.0
LSD.05	0.6	0.6	6.0	6.4	1.9	1.1
CV(%)	8.4	7.7	4.4	5.2	6.7	3.3

Data collected from: Spaced single plants _____ Plants in rows/solid seeding X

Variants to be expected and frequency: None observed

5. Primary Use Forage	Forage Yield (tons per acre dry matter)				Crown rust ^{1/}		
	Buck Creek, IN		Franklin, KY		Buck Creek, IN		
	2012	2013	2013	2014	2011	2013	2015
TF0904SL	5.29	7.24	11.35	3.96	3.7	5.0	5.0
KY-31	5.05	6.38	10.58	3.91	6.0	8.0	7.0
FAWN	4.48	6.47	10.44	4.28	9.0	8.7	9.0
SELECT	4.58	5.99	10.92	4.09	6.7	6.7	6.3
LSD.05	0.47	1.09	0.78	0.47	1.3	1.5	2.6
CV(%)	7.0	13.2	5.0	8.6	21.6	20.2	26.6

•Scale used to report traits (if appropriate): ^{1/}1=little or no disease; 9=90+% infection

6. Seed increase of TF0904SL is limited to two generations each of breeder (Syn-1 or Syn-2), foundation (Syn-2 or Syn-3), and certified (Syn-3 or Syn-4) classes. Breeder seed was produced in 2010 (Syn-1) at Buck Creek, IN, and 2015 (Syn-2) at Otterbein, IN, sufficient for the life of the variety, and will be maintained by Allied Seed. Foundation fields may be established from breeder seed. Certified fields may be established from breeder or foundation seed. Stands of foundation and certified fields are limited to 3 and 5 years, respectively.
7. The first certified seed of TF0904SL will be offered for sale in 2019. Plant variety protection will not be sought for this variety.

Date this application was submitted: Jan 4, 2017

Date recommended by the VRB: May 8, 2017



Grass

TM0803 (Exp)

1. Variety name: _____ Kind: Timothy
 Genus: Phleum Species: pratense
 Experimental designation (s): TM0803
 Date submitted: January 3, 2017

2. TM0803 timothy was developed using phenotypic recurrent selection. Plants from 10 varieties, and two elite breeding lines were selected from a 4th year spaced-plant nursery at Buck Creek, IN, and established in a spaced-plant nursery at Touchet, WA. Following one year of evaluation for color, maturity, and seed yield potential, 12 clones were selected and placed in an isolated crossing block. Syn-1 breeder seed was bulk-harvested in 2009.

3. TM0803 is adapted to and intended for forage use in the east central United States. It has been tested in Indiana, Kentucky, and Virginia.

4. Growth & Morphology Traits	Plant height (cm)		Panicle length (cm)		Heading date (May 1 = 1)	
	Buck Creek, IN		Buck Creek, IN		Buck Creek, IN	
	2013	2014	2013	2014	2013	2014
TM0803	103.8	90.3	12.0	11.0	39.0	33.5
CLAIR	115.8	99.0	11.0	10.3	29.0	31.0
CLIMAX	100.3	87.3	12.3	11.7	36.8	32.5
EXPRESS	104.8	87.8	13.0	13.3	39.0	37.0
LSD.05	5.2	7.8	1.4	2.0	2.0	2.1
CV(%)	3.9	6.8	10.0	14.5	5.2	5.4

Data collected from: Spaced single plants _____ Plants in rows/solid seeding X

Variants to be expected and frequency: Cylindrical (approx. 12%) and fusiform (approx. 29%) head shapes.

5. Primary Use Forage	Forage Yield (tons per acre dry matter)				Persistence ^{1/}		
	Buck Creek, IN		Franklin, KY		Buck Creek, IN		
	2013	2014	2013	2014	2012	2013	2014
TM0803	4.77	2.27	5.61	3.92	58.3	66.7	80.0
CLAIR	4.57	2.12	7.28	4.10	61.7	70.0	86.7
CLIMAX	4.39	2.06	5.00	3.08	61.7	66.7	81.7
CREST	4.59	2.27	5.96	3.86	65.0	55.0	71.7
LSD.05	0.59	0.22	0.44	0.38	21.7	12.2	7.7
CV(%)	9.4	7.2	5.1	7.3	24.9	13.3	6.7

•Scale used to report traits (if appropriate): ^{1/}Visual estimate of 4th year percent stands

6. Seed increase of TM0803 is limited to two generations each of breeder (Syn-1 or Syn-2), foundation (Syn-2 or Syn-3), and certified (Syn-3 or Syn-4) classes. Breeder seed was produced in 2009 (Syn-1) and 2015 (Syn-2) at Otterbein, IN, sufficient for the life of the variety, and will be maintained by Allied Seed. Foundation fields may be established from breeder seed. Certified fields may be established from breeder or foundation seed. Stands of foundation and certified fields are limited to 3 and 5 years, respectively.

7. The first certified seed of TM0803 will be offered for sale in 2019. Plant variety protection will not be sought for this variety.

Date this application was submitted: Jan 4, 2017

Date recommended by the VRB: May 8, 2017



Grass

BAR C291 (Exp)

1. Variety name: *Cultivar name pending* Kind: Bermudagrass
 Genus: Cynodon Species: dactylon
 Experimental designation (s): BAR C291
 Date submitted: 2/23/17
2. The germplasm of BAR C291 traces back to collections from naturally occurring grasslands in the Jiancheng District of Guangdong Province in China.
3. BAR C291 will primarily be used for turf, and has been trialed in the 2013 NTEP bermudagrass trial.

4. Growth & Morphology	Heading Date (Julian Days)		Plant Height (cm)		Raceme Length (cm)	
	Las Cruces, NM		Las Cruces, NM		Albany, OR	
	2015	2016	2015	2016	2015	2016
BAR C291	137	130	13.6	21.63	3.44	3.59
Common Cd	127	134	13.12	24.39	3.14	3.56
NuMex Sahara	122	130	12.29	20.52	3.26	3.71
Princess 77	150	144	12.66	20.20	3.03	3.37
Riviera	134	132	16.56	22.11	3.78	3.88
LSD (.05)	13.4	15.4	4.09	5.59	0.58	0.55
CV (%)	5.2	5.9	14.74	12.62	8.58	7.45

Data collected from: Spaced single plants Plants in rows/solid seeding

Variants to be expected and frequency: 0.7% plants with lighter color and broader leaves

5. Turf Use	Turf Quality		Genetic color		Spring Green-up		Dollar Spot	
	2015		2015		2015		Raleigh, NC	
	Jay, FL	Griffin, GA	Jay, FL	Griffin, GA	Jay, FL	Griffin, GA	2014	2015
BAR C291	5.9	5.3	6.7	5.3	3	4	8	8.3
Kashmir	5.2	5.8	6	6.5	2.3	4	6.7	9
NuMex Sahara	5.7	4.9	6	6	2.3	3	8	8.3
Riviera	5.5	5.3	6.3	6	2.7	5	7	8.3
Yukon	5.7	4.5	6.3	5.7	3	2.3	7.7	7
LSD (.05)	0.6	0.6	0.9	0.9	1.2	1.3	1.6	1.8
Variance	6.6	7	8.5	8.7	33.9	21.8	14.1	14.7

6. Breeder seed of BAR C291 was first produced in 2010. Breeder seed stock is maintained by Rubin Seeds LLC, Brawley, CA, USA. Foundation stands may only be planted from breeder seed. Registered stands may be established from either Foundation or Breeder Seed. Foundation class fields will be limited to 3 harvests of Foundation production. Registered class fields will be limited to 3 harvest years. Certified class fields will be limited to 5 years of seed production. Additional years of seed production on a field area may be approved by the breeder or the maintainer of the variety.
7. If 'BAR C291' is accepted by official seed certifying agencies, Certified seed will be first offered for sale fall of 2017. Plant Variety Protection (PVP) is also being sought at this time.

Date this application was submitted: Feb 28, 2017

Date recommended by the VRB: Apr 21, 2017



Grass

B-NIVC22 (Exp)

1. Variety name: _____ Kind: Strong creeping red fescue
 Genus: Festuca Species: rubra
 Experimental designation (s): B-NIVC22
 Date submitted: 12 Dec 2016

2. B-NIVC22 strong creeping red fescue is the result of recurrent selection with 672 plants from six sources planted in fall 2002 in a polycross for isolated pollination near Lebanon, OR. Source 1: 144 plants of a population of Boreal, constituting 21% of the variety; Source 2: 96 plants from Kent, constituting 14% of the variety; Source 3: 48 plants from FDM, constituting 7% of the variety; Source 4: 240 plants originating from collections in the New England region of the US, constituting 36% of the variety. Source 5: 24 plants from Shademaster, constituting 3.5% of the variety; Source 6: 120 plants from a group of fine fescues that were collected in France in 1998-99, constituting 17.8% of the variety. In spring 2003, approximately 10% of each source was rogued for color, presence of choke, or poor seed head production prior to pollination. At harvest, the seed was bulked by source with equal amounts of seed combined for breeders seed. Breeder seed was declared in 2003.
3. B-NIVC22 has been tested in western Oregon, and appears to be adapted to western Oregon or similar environments.

4. Growth & Morphology	Heading Date — Day of Year Lebanon, OR		Plant Height—cm Lebanon, OR		Panicle Length—cm Lebanon, OR	
	Traits	2012	2013	2012	2013	2012
B-NIVC22	133	104	74	77	10.8	12.1
Shademaster	132	96	72	80	12.4	13.5
Barcrown	143	133	73	71	11.2	9.2
Boreal	135	110	83	90	13.9	14.6
LSD (.05)	6.1	3.82	8.4	6.16	2.0	1.05
CV (%)	2.5	3.03	6.2	6.53	9.5	7.06

Data collected from: x Spaced single plants Plants in rows/solid seeding
 Variants to be expected and frequency: About 5% or less plants may be taller than most, or lighter green in color.

5. Turf Use	Turf Quality (1-9)		Spring Density (1-9)		Color (1-9)		Leaf Spot (1-9)	
	Lebanon, OR		Lebanon, OR		Lebanon, OR		Lebanon, OR	
	a)	b)	2014	2015	2014	2015	2014	2015
B-NIVC22	4.8	4.3	6.0	6.3	5.0	5.7	6.0	5.3
Salem	3.5	4.0	4.0	4.7	3.7	4.0	4.0	4.0
Boreal	3.8	3.0	4.0	3.7	5.0	4.7	4.7	2.7
Valeria	5.3	5.0	5.0	5.3	5.3	5.0	5.0	5.7
LSD (.05)	1.0	1.0	1.03	1.06	0.96	1.17	0.96	1.1
Range	3	3.3	3	4.3	4.7	5.53	5.0	5.0

Scale used to report traits: 1-9 where 9=Ideal turf; Most, Dense; Darkest color; and Least Leaf spot.

6. Breeder seed of B-NIVC22 was first produced in 2003 and is maintained by Blue Moon Farms, LLC, Lebanon, OR. Adequate breeder seed was produced to reproduce the variety for the life of the variety, and is stored in cold storage from which new seed increase may be grown. Foundation, Registered, and Certified classes are permitted. Foundation stands may be planted only from breeder seed. Foundation class fields may be harvested for Foundation seed for a maximum of three years, followed by two years of Registered, and five years as Certified. Certified class fields produced from Registered or Foundation seed will be limited to seven years of certified production. Additional years of seed production may be approved by the breeder or the breeders designee.
7. First certified seed will be available in 2017, but it is unknown if PVP will be sought.

Date this application was submitted: Dec 12, 2016

Date recommended by the VRB: Mar 8, 2017



Grass

Dipper B-14.0047 (Exp)

1. Variety name: Dipper Kind: Annual (Italian) ryegrass
 Genus: Lolium Species: multiflorum
 Experimental designation (s): B-14.0047
 Date submitted: 12 Dec 2016

2. Breeding History: In summer 2011, seed tracing to Ribeye, Gulf, King, and Bounty was placed in a gravity separator to select for extremely heavy seed of each variety. From these sources, approximately equal amounts of seed were bulked to develop a synthetic bulk to be used for proximity crossing. This seed was used to thinly seed about 5 acres near Shedd, OR. The seed was planted on heavy, acid soils (Conser series, acid pH 5.6) to eliminate those plants unadapted to saturated soils. In summer of 2012, prior to pollination, any extremely early tall types were rogued, approximately 5%. The plants were harvested at early maturity to eliminate late maturing plants. This process of seed separation, planting, and roguing was repeated in 2012-13 and 2013-14. The seed from 2014 was harvested, processed through a gravity separator, declared breeders seed, and named B-14.0047.
3. B-14.0047 has been tested in forage winter overseeding trials in Texas and Louisiana, and appears adapted in these and similar environments.

4. Growth & Morphology	Heading Date — Day of Year Lebanon, OR		Plant Height—cm Lebanon, OR		Spike Length—cm Lebanon, OR	
	2015	2016	2015	2016	2015	2016
Traits						
B-14.0047	May 1	May 8	124	99	72.1	53.7
King	April 28	May 3	126	111	74.2	58.0
Gulf	April 28	May 5	126	111	73.7	63.2
Marshall	May 4	May 8	126	110	74.6	59.3
LSD (.05)	4.3	4.1	12.8	20.2	8.2	13.5
CV (%)	2.1	1.9	6.4	11.2	6.8	13.9

Data collected from: Spaced single plants X Plants in rows/solid seeding

Variants to be expected and frequency: | About 5% or less plants may be taller than most, occasional branched spikes.

5. Forage Use	Season Total Forage DM Yields (lb/A)				Seasonal Yield Stability—b-value (slope of line) *			
	Winnsboro, LA		Overton, TX		Winnsboro, LA		Overton, TX	
	2014-15	2015-16	2014-15	2015-16	2014-15	2015-16	2014-15	2015-16
B-14.0047	10,546	8,544	7,798	8,716	0.78	0.95	0.88	1.05
Marshall	10,993	9522	8,595	8,391	0.95	0.80	0.92	0.82
Jackson	10,108	8738	9,488	10,892	0.88	0.94	0.95	0.68
Gulf	9,411	8290	7,958	9,438	0.80	1.04	1.05	0.81
LSD (.05)	698	690	1,650	1,876	1.07	0.70	0.52	0.34
CV (%)	16	8	16	20	0.01	0.03	0.01	0.18

*b-value is the slope of the line of cutting yield for the cultivar against the cultivar mean for each cutting. The b-value is a measure of yield stability over the whole growing season, a value of 1.0 indicates a cultivar maintains yield relative to the mean of the trial for each cutting.

6. Breeder seed of B-14.0047 Italian (annual) ryegrass was first produced in 2014. A supply of breeder seed is maintained in cold storage by Blue Moon Farms, LLC, Lebanon, OR. Enough breeder seed was produced in 2014 to last the anticipated life of B-14.0047 but seed from storage may be used to regenerate the variety as needed. The Foundation, Registered, and Certified classes are permitted. Foundation seed fields may only be planted from breeder seed. Registered seed fields may be established from either Foundation or Breeder Seed. Certified fields may be established from Breeder, Foundation, or Registered Seed. Certified fields may be volunteered for five years. The breeder, or an individual designated by the breeder, may approve additional years of seed production.
7. First certified seed will be available in 2017, but it is unknown if PVP will be sought.

Date this application was submitted: Dec 12, 2016

Date recommended by the VRB: May 5, 2017



Grass

IRFL-2-11 (Exp)

1. Variety name: _____ Kind: Intermediate Ryegrass
 Genus: Lolium Species: hybridum
 Experimental designation (s): IRFL-2-11
 Date submitted: December 12, 2016

2. A breeder seed nursery was established at DLF Pickseed USA, Inc. (DLFPS) in the autumn of 2010. The nursery contained progenies of 25 families. Eleven of the families trace to an experimental line *04-1 Lh*, that had been recommended for seed certification by AOSCA's National Grass Variety Review Board (NGVRB) in 2009, but never commercialized. Six families trace to the cultivar *Fuse*. Eight families were developed from the ongoing recurrent selection program started in 1999 at DLFPS. Parental and progeny selection was based on heading without vernalization, short to medium height, erect growth habit, dark green color, fine leaf texture, and freedom from disease symptoms. The first breeder seed of IRFL-2-11 was produced in 2011.
3. IRFL-2-11 will primarily be used for lawn turf, and more specifically, as a variety for winter overseeding of dormant warm season grass turf surfaces, e.g. bermuda grass. The variety is adapted to overseeding regions of the USA, represented by southern Arizona, and eastern North Carolina.

4. Growth & Morphology/traits	Heading Date		Flag Leaf Height		Plant Height	
	Albany, OR 2012	Corvallis, OR 2016	Albany, OR 2012	Corvallis, OR 2016	Albany, OR 2012	Corvallis, OR 2016
Accession						
IRFL-2-11	May 19	May 10	52.0	43.5	77.4	92.2
Gulf	May 12	May 1	66.4	59.0	104.2	116.1
Transist 2200	May 20	May 9	51.3	42.9	81.1	97.1
Transeze	May 21	May 11	53.1	52.8	75.9	102.9
Linn	May 4	Apr 30	47.9	35.4	82.4	85.0
LSD (.05)	3d	2d	10.1	4.3	15.5	23.6
Range or CV%	17d range	11d range	6.0	23.0	6.0	56.0

Data collected from: Spaced single plants Plants in rows/solid seeding _____

Variants to be expected and frequency: Tall, lighter green, and wider leaved at 1% or less

5. Turf Use	Turf Quality (1-9)		Density (1-9)		Foliage Color (1-9)		Transition %, 1-9 score	
	2013	2014	2013	2014	2013	2014	2013	2014
	A	B	A	B	A	B	A %	B 1-9 score
Accession								
IRFL-2-11	7.1	4.4	7.0	3.7	8.0	4.0	13	6.7
Gulf	4.5	2.1	5.3	1.0	4.3	1.0	45	9.0
Quickdraw	5.3	3.2	6.0	3.0	5.8	2.7	33	9.0
Panterra	5.1	2.9	6.5	3.0	5.0	2.0	20	9.0
TXR	5.3	3.3	6.5	2.3	5.3	2.3	20	9.0
LSD (.05)	0.3	0.8	1.0	1.2	6.3	5.3	33	5.9
Range	2.5-8.1	2.1-6.8	2.3-7.8	1.0-7.3	4.3-8.0	1.0-7.3	7-94	4.0-9.0

1-9 subjective scale used; 1= lowest quality, poorest density, lightest green color. Transition was evaluated in June or early July as a % of visible bermudagrass at Tucson, AZ, and using a 1-9 scale; 1=most visible ryegrass, and 9=least visible ryegrass/most visible bermudagrass, at Rolesville, NC.

A: Tucson, AZ B: Rolesville, NC

6. Breeder seed of IRFL-2-11 was first produced in 2011 by DLFPS in Albany, OR. A record sample of this seed is maintained at DLFPS in cold, dry storage. During the life of the variety, additional breeder seed will be produced as needed to reconstitute the cultivar under the supervision of DLFPS. Foundation, Registered, and Certified classes of seed production are permitted. Foundation fields may only be established using Breeder seed. Registered fields may be established from either Breeder or Foundation seed. Certified fields may be established from Breeder, Foundation, or Registered seed. Foundation and Registered fields will be limited to one harvest of Registered/Foundation production, followed by one year of Certified production. Certified class fields will be limited to two years of production.
7. Certified seed is anticipated to be available in summer 2017. A decision for filing a PVP application has not been made.

Date this application was submitted: Dec 12, 2016

Date recommended by the VRB: Mar 21, 2017



Grass

IS-TF 269 SEL (Exp)

1. Variety name: _____ Kind: Tall Fescue
 Genus: Festuca Species: arundinacea
 Experimental designation (s): IS-TF 269 SEL
 Date submitted: Dec 9, 2016

2. IS-TF 269 SEL tall fescue (*Festuca arundinacea* Schreb.) was selected from the maternal progeny of 14 clones developed in the recurrent phenotypic selection program of DLF Pickseed USA. IS-TF 269 SEL was selected for medium-high tiller density, fine leaf texture, dark green color, and medium-late maturity. IS-TF 269 SEL was also selected for improved brown patch resistance (caused by *Rhizoctonia solani* Kuhn) in turf and stem rust (*Puccinia graminis* Pers.) and powdery mildew (*Erysiphe graminis* Speer) in nurseries. Breeder seed of IS-TF 269 SEL was first produced in 2012.
3. IS-TF 269 SEL will primarily be used for lawn turf. The final development of the variety took place in Philomath, Oregon and is adapted to Philomath, Oregon. IS-TF 269 SEL is being tested in the 2012 Tall Fescue NTEP.

4. Growth & Morphology Traits	Heading date – Calendar		Plant Height - cm		Flag Leaf Length - cm	
	2013		2013		2013	
	Corvallis, OR	Philomath, OR	Corvallis, OR	Philomath, OR	Corvallis, OR	Philomath, OR
IS-TF 269 SEL	25 May	17 May	57.113	55.970	6.745	8.060
Bullseye	17 May	18 May	60.595	56.865	6.687	10.467
Bonanza	2 June	24 May	74.150	74.970	10.644	11.406
Rebel II	20 May	12 May	81.428	86.945	9.756	14.967
KY 31	21 May	12 May	101.017	97.671	13.419	15.357
LSD (.05)	5 days	3 day	5.520	4.910	1.410	1.440
CV %	7.30	5.40	17.400	19.200	38.300	35.900

Data collected from: Spaced single plants X Plants in rows/solid seeding Varies

Variants to be expected and frequency: IS-TF 269 SEL has a small percentage (<2%) of plants that appear somewhat taller, courser and lighter green than the rest of the population when observed from breeder to foundation generations. The variants appear to be stable for generation to generation.

5. Turf Use	Turf Quality (schedule B)		Genetic Color (1-9)		Leaf texture (1-9)		Brown patch (1-9)	
	2015		2015		2015		2015	
	a) IN1	MO1	IN1	MO1	IN1	MO1	NC1	OK1
IS-TF 269 SEL	6.2	6.1	7.7	5.7	6.0	5.7	7.0	5.3
Bullseye	5.8	6.2	7.0	5.3	6.0	6.0	5.3	7.0
KY-31	4.0	3.8	4.0	3.0	3.0	3.0	7.3	8.0
LSD (.05)	0.5	0.9	0.9	0.9	0.8	0.7	1.9	1.7
CV (%)	5.5	9.0	7.9	9.4	8.6	7.7	18.7	14.0

•Scale used to report traits: 1-9, 9 = Ideal turf, most dense, no disease, or dark green

•Locations: IN1=Indiana, MO1=Missouri, NC1=North Carolina, OK1=Oklahoma

6. Breeder seed is maintained in cold storage by DLF Pickseed, USA, Halsey, Oregon. Foundation stands may only be planted from Breeder seed. Registered stands may be established from either Foundation of Breeder Seed. Certified fields may be established from Breeder, Foundation, of Registered Seed. Foundation and Registered class fields will be limited to three harvests of Foundation/Registered production followed by four additional harvests of certified production. Certified class field will be limited to seven years of seed production. Additional years of seed production may be approved by the breeder or an individual designated by the breeder.
7. If this variety is recommended as eligible for certification by official seed certifying agencies, certified class seed will likely be offered for sale in 2018. It has not been determined if plant variety protection will be sought.

Date this application was submitted: Dec 9, 2016

Date recommended by the VRB: May 2, 2017



Grass

IS-TF 308 SEL (Exp)

1. Variety name: _____ Kind: Tall Fescue
 Genus: Festuca Species: arundinacea
 Experimental designation (s): IS-TF 308 SEL
 Date submitted: Dec 9, 2016

2. IS-TF 308 SEL tall fescue (*Festuca arundinacea* Schreb.) was selected from the maternal progeny of 14 clones and the varieties 'LS 1200' (SC-1), and 'Bullseye' (TF 156) developed in the recurrent phenotypic selection program of DLF Pickseed USA. IS-TF 308 SEL was selected for medium-high tiller density, fine leaf texture, dark green color, semi-dwarf growth habit, and medium-late maturity. IS-TF 308 SEL was also selected for improved brown patch resistance (caused by *Rhizoctonia solani* Kuhn) in turf, stem rust (*Puccinia graminis*), and powdery mildew (*Erysiphe graminis*) in nurseries. Breeder seed of IS-TF 308 SEL was first produced in 2012.
3. IS-TF 308 SEL will primarily be used for lawn turf. The final development of the variety took place in Philomath, Oregon and is adapted to Philomath, Oregon. IS-TF 308 SEL is being tested in the 2012 Tall Fescue NTEP.

4. Growth & Morphology Traits	Heading date – Calendar		Plant Height - cm		Flag Leaf Length - cm	
	2013		2013		2013	
	Corvallis, OR	Philomath, OR	Corvallis, OR	Philomath, OR	Corvallis, OR	Philomath, OR
IS-TF 308 SEL	27 May	18 May	61.810	60.648	6.387	9.476
Bullseye	17 May	18 May	60.595	56.865	6.687	10.467
Bonanza	2 June	24 May	74.150	74.970	10.644	11.406
Rebel II	20 May	12 May	81.428	86.945	9.756	14.967
KY 31	21 May	12 May	101.017	97.671	13.419	15.357
LSD (.05)	5 days	3 days	5.520	4.910	1.410	1.440
CV %	7.30	5.40	17.400	19.200	38.300	35.900

Data collected from: Spaced single plants X Plants in rows/solid seeding Varies

Variants to be expected and frequency:

IS-TF 308 SEL has a small percentage (<2%) of plants that appear somewhat taller, courser and lighter green than the rest of the population when observed from breeder to foundation generations. The variants appear to be stable for generation to generation.

5. Turf Use	Turf Quality (schedule B)		Genetic Color (1-9)		Leaf texture (1-9)		Brown patch (1-9)	
	2015		2015		2015		2015	
	IN1	MO1	IN1	MO1	IN1	MO1	NC1	OK1
IS-TF 308 SEL	5.8	5.8	7.7	6.0	6.7	6.0	7.3	8.0
Bullseye	5.8	6.2	7.0	5.3	6.0	6.0	5.3	7.0
KY-31	4.0	3.8	4.0	3.0	3.0	3.0	7.3	8.0
LSD (.05)	0.5	0.9	0.9	0.9	0.8	0.7	1.9	1.7
CV (%)	5.5	9.0	7.9	9.4	8.6	7.7	18.7	14.0

•Scale used to report traits: 1-9, 9 = Ideal turf, most dense, no disease, or dark green

•Locations: IN1=Indiana, MO1=Missouri, NC1=North Carolina, OK1=Oklahoma

6. Breeder seed is maintained in cold storage by DLF Pickseed, USA, Halsey, Oregon. Foundation stands may only be planted from breeder seed. Registered stands may be established from either Foundation of Breeder Seed. Certified fields may be established from Breeder, Foundation, of Registered Seed. Foundation and Registered class fields will be limited to three harvests of Foundation/Registered production followed by four additional harvests of certified production. Certified class field will be limited to seven years of seed production. Additional years of seed production may be approved by the breeder or an individual designated by the breeder.
7. If this variety is recommended as eligible for certification by official seed certifying agencies, certified class seed will likely be offered for sale in 2018. It has not been determined if plant variety protection will be sought.

Date this application was submitted: Dec 9, 2016

Date recommended by the VRB: May 2, 2017



Grass

ORC 126 (Exp)

1. Variety name: _____ Kind: Strong Creeping Red Fescue
 Genus: Festuca Species: rubra subsp. rubra
 Experimental designation (s): ORC 126, DLFPS-FRR/3069
 Date submitted: Dec 9, 2016

2. ORC 126 was derived by crossing selections of the experimental population PSG 5OS2 with selections from Ruddy (PSG 5RM) and Oracle. Selection criteria: dark green foliage color, short growth habit, early-medium growth habit and good seed production potential. Breeder seed was first produced in 2011.
3. ORC 126 will primarily be used for lawn turf. The variety is adapted to the areas of development, including; the States of Oregon, Kentucky, and New Jersey.

4. Growth & Morphology Traits	Plant Height - cm		Flag Leaf Length - cm		Panicle Length - cm	
	Philomath		Philomath		Philomath	
	2015	2016	2015	2016	2015	2016
Chantilly	47.75	59.43	6.959	3.519	104.28	42.46
Ruddy (PSG 5RM)	40.19	50.08	5.328	3.154	99.71	39.63
Class One	50.53	60.89	6.813	4.116	132.35	49.02
FT7 SEL	34.02	45.83	4.692	2.710	77.24	35.37
ORC 126	45.70	57.31	6.373	3.880	109.16	47.63
LSD (.05)	3.55	4	0.73	.042	16.8	3
CV (%)	20.8	18.9	31.1	31.4	40.4	18.2

Data collected from: Spaced single plants x Plants in rows/solid seeding 20

Variants to be expected and frequency: Less than 5% taller plant height and lighter green foliage color.

5. Turf Use	Turf Quality (May)		% Cover Before Drought		Net Blotch		Seed Yield (g/plot)	
	Rutgers, NJ		Philomath, OR		Berry, KY		Amity, OR	
	2015	2016	2015	2016	2015	2016	2015	2016
ORC 126	5	4.3	86.6	88.5	6	6	1320	1560.8
Ruddy (PSG 5RM)			72.2	88.7	6	5	653.2	866.5
FT7 SEL	5	4.3	84.8	89.6	7.5	6	612.3	855.4
Class One	1.3	2	86.7	90.9				
Oracle					3	4.5	1378.9	1210.3
LSD (.05)	0.6	1.2	5.8	8.2	2	1.5	312	342.6
CV (%)	8.1	16.7	3.1	4.3	19.7	14.6	16.9	14.1

•Scale used to report traits (if appropriate): Scale for turf quality and net blotch; 1-9, 9 = ideal turf quality and no net blotch.

•Insert additional information for use by inspectors (if any): _____

**If necessary, identify locations in line b) by the following key - A: _____ B: _____

6. Breeder seed is maintained by DLF Pickseed, USA, Halsey, Oregon. Foundation stands may only be planted from breeder seed. Registered stands may be established from either Foundation of Breeder Seed. Certified fields may be established from Breeder, Foundation, of Registered Seed. Foundation and Registered class fields will be limited to three harvests of Foundation/Registered production followed by two additional harvests of certified production. Certified class field will be limited to five years of seed production. Additional years of seed production may be approved by the breeder or an individual designated by the breeder
7. If this variety is recommended as eligible for certification by official seed certifying agencies, certified class seed likely to be first offered for sale in 2018. PVP will not be sought.

Date this application was submitted: Dec 9, 2016

Date recommended by the VRB: May 16, 2017



Grass

PSFC09-2 (Exp)

1. Variety name: _____ Kind: Chewings Fescue
 Genus: Festuca Species: rubra subsp. commutata
 Experimental designation (s): PSFC09-2, DLFPS-FRC/3060
 Date submitted: November 18, 2016

2. PSFC09-2 was derived by crossing parental selections of the experimental population PSG 50C3 with selections from Sandpiper. Selection criteria: dark green foliage color, short and dense mature growth habit, and good seed production potential. Breeder seed was first produced in 2014.
3. PSFC09-2 will primarily be used for lawn turf. The variety is adapted to the areas of development, including; the Pacific Northwest and the transition zone as represented by the States of Oregon and Kentucky. PSFC09-2 is being tested in the 2014 National Turfgrass Evaluation Program (NTEP) as DLFPS-FRC/3060.

4. Growth & Morphology Traits	Plant Height - cm Corvallis		Flag Leaf Width - mm Corvallis		Panicle Length - cm Corvallis	
	2015	2016	2015	2016	2015	2016
PSFC09-2	62.171	67.032	2.79	2.72	10.993	10.195
Sandpiper	57.993	67.157	2.40	2.23	10.166	9.978
Windward	59.052	68.365	2.52	2.32	9.372	7.920
SR 5130	60.115	65.421	2.38	2.37	10.084	9.956
Longfellow 3	56.387	58.611	2.44	2.35	9.092	7.763
LSD (.05)	3.36	3.51	0.2	0.3	0.88	1.19
CV(%)	14.7	14.3	25	32.8	22.9	20.4

Data collected from: Spaced single plants x Plants in rows/solid seeding 20

Variants to be expected and frequency: Less than 5% lighter green color

5. Turf Use	Turf Quality		% Cover Last Drought		Establishment		Color	
	Philomath, OR		Philomath, OR		Philomath, OR		Philomath, OR	
	a)	b)	2015	2016	2014	2015	2015	2016
PSFC09-2	5	6	16.7	69.3	5	7	4.5	5.5
Longfellow 3	5	6.5	13.4	77.7	4.5	5	4.5	6
Sandpiper	2.5	3	21.7	77.7	1	6	3	3
Windward	4	5	18.6	76.1	4.5	5	5	5
SR 5130	5	4.5	23.2	72.7	6	6.5	4	4
LSD (.05)	2.9	2.3	26.4	29.7	1.2	2	1.2	1.6
CV (%)	26.2	17.4	61.2	18.7	10.7	14	11	14

•Scale used to report traits (if appropriate): Scale for turf quality, establishment, and color; 1-9, 9 = ideal turf quality, most established, and darkest green color.

6. Breeder seed is maintained by DLF Pickseed, USA, Halsey, Oregon. Foundation stands may only be planted from breeder seed. Registered stands may be established from either Foundation of Breeder Seed. Certified fields may be established from Breeder, Foundation, of Registered Seed. Foundation and Registered class fields will be limited to three harvests of Foundation/Registered production followed by two additional harvests of certified production. Certified class field will be limited to five years of seed production. Additional years of seed production may be approved by the breeder or an individual designated by the breeder
7. If this variety is recommended as eligible for certification by official seed certifying agencies, certified class seed likely to be first offered for sale in 2018. PVP will not be sought.

Date this application was submitted: Dec 9, 2016

Date recommended by the VRB: Mar 28, 2017



Grass

TM0704DT (Exp)

1. Variety name: _____ Kind: Timothy
 Genus: Phleum Species: pratense
 Experimental designation (s): TM0704DT
 Date submitted: January 3, 2017

2. TM0704DT timothy was developed using phenotypic recurrent selection. Plants were selected from a 2nd year nursery managed for drought stress via irrigation at Touchet, WA for drought tolerance, vigor, regrowth, plant health, and seed yield potential and placed in an isolated crossing block. Syn-1 breeder seed was bulk harvested in 2008.

3. TM0704DT is adapted to and intended for forage use in the east central United States. It has been tested in Indiana, Kentucky, and Virginia.

4. Growth and Morphology Traits	Plant height (cm)		Panicle length (cm)		Heading Date (Calendar)	
	Buck Creek, IN		Buck Creek, IN		Buck Creek, IN	
	<u>2010</u>	<u>2011</u>	<u>2010</u>	<u>2011</u>	<u>2010</u>	<u>2011</u>
TM0704DT	114.3	100.3	13.3	15.3	8 June	9 June
Clair	105.8	94.8	12.8	12.8	5 June	8 June
Climax	106.8	85.5	13.3	14.0	15 June	21 June
Talon	112.5	92.5	13.3	12.8	5 June	9 June
LSD (.05)	5.9	9.0	1.8	2.6	2 days	3 days
CV (%)	4.4	8.1	11.4	16.4	3.9	5.0

Data collected from: Spaced single plants _____ Plants in rows/solid seeding X

Variants to be expected and frequency: None observed.

5. Primary Use <u>Forage</u>	Forage Yields T/A Dry Matter				Persistence: 4th year % stand		
	Buck Creek, IN		New Castle, KY		Buck Creek IN	New Castle KY	
	<u>2009</u>	<u>2010</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>		<u>2012</u>
TM0704DT	2.96	5.73	5.92	6.86	73.3		55.0
Richmond	3.04	5.40	6.03	7.19	58.3		36.7
Climax	2.91	5.07	5.78	5.44	61.7		28.3
LSD (.05)	0.50	0.61	0.60	0.84	21.7		27.4
CV (%)	12.3	7.9	7.6	8.9	24.9		43.0

6. Seed increase of TM0704DT is limited to two generations each of breeder (syn-1 or syn-2). Breeder seed was produced in 2008 (syn-1) at Touchet, WA and a breeder seed increase in 2013 (syn-2) at Otterbein, IN, and will be maintained by DLF Pickseed USA. Foundation fields may be established from breeder seed. Registered fields may be established from breeder or foundation seed. Certified fields may be established from breeder, foundation, or registered seed. Stands of foundation and registered fields are limited to 3 years, and stands of certified fields are limited to 5 years. Additional years of seed production may be approved by the breeder or an individual designated by the breeder.

7. The first certified seed of TM0704DT will be offered for sale in 2017. Plant variety protection will not be sought for this variety.

Date this application was submitted: Jan 3, 2017

Date recommended by the VRB: May 8, 2017



Grass

JT-338 (Exp)

- Variety name:** _____ Kind: Tall fescue
Genus: Festuca **Species:** arundinacea
Experimental designation (s): JT-338
Date submitted: January 6, 2017
- The maternal parentage of JT-338 derives from 13% Silverado X Pixie (paired cross), 8% Quest, 5% Coronado, 4% Falcon IV and the remaining 70% to Jacklin non-released materials (13% JT-26, 12% 05-8015, 15% JT-29, 7% 03-8017, 7% JT-27, 5% JT-25, 4% JT-24, 3% JT-6, and 3% JT-4). The Jacklin non-released materials included material from polycrosses and experimental test varieties that have not been publicly released. Breeding techniques in the population improvement program included selection, paired crosses and polycrosses. In 2013, a 2740-plant tall fescue isolation block was planted near Rathdrum, ID. This block was rogued before anthesis for uniformity, removing plants with lighter color, wide leaves, large plant size, reduced seedhead initiation, and or maturity earlier or later than the majority of the field. The remaining 549 plants (20%) were bulk harvested as Breeder seed for JT-338 in July 2014.
- JT-338 will be primarily used for turf. It has been tested in company trials since 2014 in ID, MD, and OH. JT-338 is adapted to use in ID, MD, and OH.

4. Growth & Morphology	Plant Height (cm)		Panicle Length (cm)		Flagleaf Width (mm)	
	2016		2016		2016	
	Moses Lake,		Post Falls, ID	Moses Lake, WA	Post Falls, ID	Moses Lake, WA
Post Falls, ID	WA					
JT-338	84.0	89.7	15.7	19.7	4.3	5.3
Pixie	103.0	116.0	20.2	26.6	5.2	6.3
Quest	93.7	100.2	18.0	21.8	4.6	5.4
Jaguar 4G	89.2	93.7	16.3	19.6	4.7	4.7
Kentucky 31	121.7	128.2	25.1	28.4	5.5	7.0
LSD (.05)	5.8	5.1	1.4	1.4	0.5	0.6
Variance	15.0	14.5	18.4	18	23.7	25.8

Data collected from: Spaced single plants Plants in rows/solid seeding _____

Variants to be expected and frequency: Less than 5% variants have been found and they can be identified as having reduced seedhead initiation, maturity earlier or later than the majority of the field, or larger plant size compared to the JT-338 plants.

5. Turf Use	Turf Quality		Brown Patch		Texture		Seedling Vigor	
	2014-2015		2015		2015		2014	
	ID	MD	MD	OH	ID	OH	ID	OH
JT-338	4.3	5.2	6.3	6.3	5.3	6.7	4.0	2.7
Pixie	4.1	4.8	5.5	5.7	5.0	4.3	5.0	5.3
Quest	5.2	4.5	4.2	4.7	5.3	4.7	6.0	6.7
Jaguar 4G	4.6	4.7	5.0	4.7	5.7	5.3	3.7	4.3
Kentucky 31	2.3	2.3	4.5	7.0	2.0	3.0	4.5	3.0
LSD (.05)	2.1	2.5	2.8	3.2	1.5	1.3	2.0	4.2
Variance	20.5	22.2	24.1	24.6	11.7	9.8	18.7	29.5

●Scale used to report traits (if appropriate): 1-9 where 9=best

●Insert additional information for use by inspectors (if any): _____

**If necessary, identify locations in line b) by the following key - A: _____ B: _____

- Jacklin Seed by Simplot®, Liberty Lake, WA, maintains Breeder seed of JT-338. Seed classes recognized are Foundation, Registered and Certified and the length of stand on each is 3, 3, and 6 years, respectively. Original Breeder seed is maintained in cold storage and if/when new Breeder seed is needed this will be planted, rogued by the plant breeder and harvested as Breeder seed.
- If JT-338 is recommended for certification, first certified seed of JT-338 will likely be available for sale in 2018 or 2019. PVP will not be sought.

Date this application was submitted: Jan 6, 2017

Date recommended by the VRB: May 2, 2017



Grass

Armor

14-8000 (Exp)

1. Variety name: Armor Kind: Creeping bentgrass
 Genus: Agrostis Species: stolonifera
 Experimental designation (s): 14-8000
 Date submitted: January 6, 2017

2. Armor creeping bentgrass (*Agrostis stolonifera* L.) is a medium-fine leaved, dark green creeping bentgrass recommended for use on golf course tees, putting greens, and fairways. The origins of Armor trace to: (1) Selections of segregated patches from old putting greens in Massachusetts, Rhode Island, Connecticut, North Carolina, and South Carolina chosen for darker green color, and (2) Selections of low growing plants from an herbicide-damaged Foundation field of 'Putter' creeping bentgrass in Oregon's Willamette Valley. Armor was bred by evaluating promising clones under close mowing and *Poa annua* competition in a grid pattern (spot-plots) on a *Poa annua* green. Attractive plants were periodically pulled and planted into polycross blocks. Progeny were re-established into new grid plots. First breeder seed was harvested in 2014.

3. Armor will be primarily used for turf and is adapted for use on fairways/tees in AR, CA, IL, IN, IA, KS, KY, MA, MD, MI, MO, NJ, ND, UT, VA, and WA. It is adapted for use on putting greens in AR, CA, IL, IN, IA, KS, KY, MA, MI, MN, MO, NJ, NC, OK, UT, and VA.

4. Growth & Morphology Traits	Mature Plant Height (cm)		Mature Flagleaf Width (mm)		Mature Panicle Length (cm)	
	2016		2016		2016	
	Post Falls, ID	Moses Lake, WA	Post Falls, ID	Moses Lake, WA	Post Falls, ID	Moses Lake, WA
Armor	42.1	54.4	2.6	2.7	6.9	9.1
Penn A4	51.1	55.8	2.7	3.1	7.9	9.1
Penncross	51.7	55.9	2.7	2.7	8.3	9.8
T-1	41.7	61.7	2.2	3.0	7.2	10.6
L-93	52.1	63.3	3.1	3.9	8.4	11.4
LSD (.05)	3.9	3.6	0.4	0.4	0.9	0.9
C.V.%	15.9	12.6	26.2	25.1	23.1	18.6

Data collected from: Spaced single plants X Plants in rows/solid seeding _____

Variants to be expected and frequency: Less than 5% variants have been found and they can be identified as having reduced seedhead initiation, maturity earlier or later than the majority of the field, or larger plant size compared to the Armor plants.

5. Turf Use	Turf Quality		Genetic Color		Seedling Vigor		Leaf Texture	
	2015		2015		2015		2015	
	WA	KY	WA	KY	AR	WA	IN	NJ
Armor	7.0	7.0	8.0	8.0	6.0	7.3	7.3	6.3
007	6.0	7.3	7.0	7.0	7.0	8.3	7.7	8.3
Crystal Blue Links	6.3	6.8	7.3	7.0	7.7	7.7	6.7	7.7
Penncross	5.9	6.3	6.7	7.0	7.3	7.7	4.3	3.3
LSD (.05)	0.4	0.3	0.8	0.4	2.4	2.0	1.2	1.3
C.V.%	4.1	2.5	6.4	3.3	12.7	9.0	10.0	11.7

•Scale used to report traits (if appropriate): 1-9 scale where 1 is poorest or dead turf and 9 is outstanding or ideal turf.

•Insert additional information for use by inspectors (if any): _____

**If necessary, identify locations in line b) by the following key - A: _____ B: _____

6. Jacklin Seed by Simplot®, Liberty Lake, WA, maintains Breeder seed of Armor. Seed classes recognized are Foundation, Registered and Certified and the length of stand on each is 3, 3, and 6 years, respectively. Original Breeder seed is maintained in cold storage and if/when new Breeder seed is needed this will be planted, rogued by the plant breeder and harvested as Breeder seed.
7. Experimental certified seed has been produced but not sold at this time. Certified seed will be offered for sale upon AOSCA/GVRB variety approval. PVP will not be sought.

Date this application was submitted: Jan 6, 2017

Date recommended by the VRB: May 2, 2017



Grass

Kingdom

10-8000 (Exp)

1. **Variety name:** Kingdom Kind: Creeping bentgrass
 Genus: Agrostis Species: stolonifera
 Experimental designation (s): 10-8000
 Date submitted: January 6, 2017

2. Kingdom creeping bentgrass (*Agrostis stolonifera* L.) is a medium-fine leafed, dark green creeping bentgrass recommended for use on golf course tees, putting greens, and fairways. The origins of Kingdom trace to: (1) Selections of segregated patches from old putting greens in Massachusetts, Rhode Island, Connecticut, North Carolina, and South Carolina chosen for dark green color. (2) Selections of low growing plants from an herbicide-damaged Foundation field of ‘Putter’ creeping bentgrass in Oregon’s Willamette Valley. (3) Selections of desirable off-type plants from a 2002 ‘T-1’ commercial production field. Kingdom was bred by evaluating promising clones under close mowing and *Poa annua* competition in a grid pattern on a *Poa annua* green. Attractive plants were periodically pulled and planted into polycross blocks. Progeny were re-established into new grid plots. A Kingdom breeder block was planted in 2009 and consisted of 980 plants from 10 breeding lines. Approximately 7% of plants were removed before anthesis due to non-uniformity. The seed from the remaining plants was bulked as first breeder seed and used to plant a larger breeder seed field near Albany, OR, in 2014. This field was rogued for uniformity, removing less than 1% of off-types. First breeder seed was harvested in 2010.
3. Kingdom will be primarily used for turf and is adapted for use on fairways/tees in AR, CA, IL, IN, IA, KS, KY, MA, MD, MI, MO, NJ, ND, UT, VA, and WA. It is adapted for use on putting greens in AR, CA, IL, IN, IA, KS, KY, MA, MI, MN, MO, NJ, NC, OK, UT, and VA.

4. Growth & Morphology	Mature Plant Height (cm)		Mature Flagleaf Width (mm)		Mature Panicle Length (cm)	
	2016		2016		2016	
	Moses Lake,					
Traits	Post Falls, ID	WA	Post Falls, ID	Moses Lake, WA	Post Falls, ID	Moses Lake, WA
Kingdom	48.8	48.5	2.6	2.5	7.2	7.4
Penn A4	51.1	55.8	2.7	3.1	7.9	9.1
Penncross	51.7	55.9	2.7	2.7	8.3	9.8
T-1	41.7	61.7	2.2	3.0	7.2	10.6
L-93	52.1	63.3	3.1	3.9	8.4	11.4
LSD (.05)	3.9	3.6	0.4	0.4	0.9	0.9
C.V.%	15.9	12.6	26.2	25.1	23.1	18.6

Data collected from: Spaced single plants X Plants in rows/solid seeding

Variants to be expected and frequency: Less than 5% variants have been found and they can be identified as having reduced seedhead initiation, maturity earlier or later than the majority of the field, or larger plant size compared to the Kingdom plants.

5. Turf Use	Turf Quality		Genetic Color		Seedling Vigor		Leaf Texture	
	2015		2015		2015		2015	
	WA	KY	WA	KY	AR	WA	IN	NJ
Kingdom	7.4	7.0	8.0	8.0	6.7	8.0	8.0	5.7
007	6.0	7.3	7.0	7.0	7.0	8.3	7.7	8.3
Crystal Blue Links	6.3	6.8	7.3	7.0	7.7	7.7	6.7	7.7
Penncross	5.9	6.3	6.7	7.0	7.3	7.7	4.3	3.3
LSD (.05)	0.4	0.3	0.8	0.4	2.4	2.0	1.2	1.3
C.V.%	4.1	2.5	6.4	3.3	12.7	9.0	10.0	11.7

•Scale used to report traits (if appropriate): 1-9 scale where 1 is poorest or dead turf and 9 is outstanding or ideal turf.

6. Jacklin Seed by Simplot®, Liberty Lake, WA, maintains Breeder seed of Kingdom. Seed classes recognized are Foundation, Registered and Certified and the length of stand on each is 3, 3, and 6 years, respectively. Original Breeder seed is maintained in cold storage and if/when new Breeder seed is needed this will be planted, rogued by the plant breeder and harvested as Breeder seed.
7. Experimental certified seed has been produced but not sold at this time. Certified seed will be offered for sale upon AOSCA/GVRB variety approval. PVP will not be sought.

Date this application was submitted: Jan 6, 2017

Date recommended by the VRB: May 2, 2017



Grass

L-93 XD

CAS-2 (Exp)

1. Variety name: L-93 XD Kind: Creeping bentgrass
 Genus: Agrostis Species: stolonifera
 Experimental designation (s): CAS-2
 Date submitted: January 6, 2017

2. L-93 XD creeping bentgrass (*Agrostis stolonifera* L.) is a medium-fine-leaved, medium green creeping bentgrass selected from the maternal progenies of 13 lines with the following origins: 38% trace to segregating clones from the border of a bentgrass trial established in 1988; 23% from individual selections on old golf courses in Arizona in 1996; 15% trace to plants related to L-93; 8% from southwestern Europe golf courses between 2000 and 2002; 8% from Piping Rock Golf Course in Locust Valley, NY in 1996; 8% from Spring Lake Country Club in Spring Lake, NJ in 1996. A putting green turf trial was established under high disease pressure in fall of 2009 containing 600 single plant progeny turf plots. In the summer of 2011, tillers from thirteen plots with very good turf quality, freedom from disease, prostrate aggressive growth habit and seed yield potential were sent to Jacklin Seed and planted in a 2011 breeder block. The 2011 breeder block was over-run by weeds and not harvested. In the summer of 2012 the Jacklin Seed breeder obtained the thirteen single plant progeny again and planted a 2012 breeder block with 1155 plants. Approximately 5% of the plants were removed before anthesis due to non-uniformity. The seed from the remaining plants was bulked as breeder seed and used to plant a larger 1-ha breeder seed field near Albany, OR, in 2014. This field was rogued for uniformity, removing less than 1% of off-types. First breeder seed was harvested in 2013.
3. L-93 XD will be primarily used for turf and is adapted for use on fairways/tees in AR, CA, IL, IN, IA, KS, KY, MA, MD, MI, MO, NJ, ND, UT, VA, and WA. It is adapted for use on putting greens in AR, CA, IL, IN, IA, KS, KY, MA, MI, MN, MO, NJ, NC, OK, UT, and VA.

4. Growth & Morphology	Mature Plant Height (cm)		Mature Flagleaf Width (mm)		Mature Panicle Length (cm)	
	2016		2016		2016	
	Moses Lake, WA		Moses Lake, WA		Moses Lake, WA	
Traits	Post Falls, ID	WA	Post Falls, ID	Moses Lake, WA	Post Falls, ID	Moses Lake, WA
L-93 XD	45.8	52.6	2.7	2.8	8.4	9.1
Penn A4	51.1	55.8	2.7	3.1	7.9	9.1
Penncross	51.7	55.9	2.7	2.7	8.3	9.8
T-1	41.7	61.7	2.2	3.0	7.2	10.6
L-93	52.1	63.3	3.1	3.9	8.4	11.4
LSD (.05)	3.9	3.6	0.4	0.4	0.9	0.9
C.V.%	15.9	12.6	26.2	25.1	23.1	18.6

Data collected from: Spaced single plants Plants in rows/solid seeding

Variants to be expected and frequency: Less than 5% variants have been found and they can be identified as having reduced seedhead initiation, maturity earlier or later than the majority of the field, or larger plant size compared to the L-93 XD plants.

5. Turf Use	Turf Quality		Genetic Color		Seedling Vigor		Leaf Texture	
	2015		2015		2015		2015	
	WA	KY	WA	KY	AR	WA	IN	NJ
L-93 XD	6.0	7.1	6.7	6.7	6.7	7.3	6.3	8.0
007	6.0	7.3	7.0	7.0	7.0	8.3	7.7	8.3
Crystal Blue Links	6.3	6.8	7.3	7.0	7.7	7.7	6.7	7.7
Penncross	5.9	6.3	6.7	7.0	7.3	7.7	4.3	3.3
LSD (.05)	0.4	0.3	0.8	0.4	2.4	2.0	1.2	1.3
C.V.%	4.1	2.5	6.4	3.3	12.7	9.0	10.1	11.7

• Scale used to report traits (if appropriate): 1-9 scale where 1 is poorest or dead turf and 9 is outstanding or ideal turf.

6. Jacklin Seed by Simplot®, Liberty Lake, WA, maintains Breeder seed of L-93 XD. Seed classes recognized are Foundation, Registered and Certified and the length of stand on each is 3, 3, and 6 years, respectively. Original Breeder seed is maintained in cold storage and if/when new Breeder seed is needed this will be planted, rogued by the plant breeder and harvested as Breeder seed.
7. Experimental certified seed has been produced but not sold at this time. Certified seed will be offered for sale upon AOSCA/GVRB variety approval. PVP will not be sought.

Date this application was submitted: Jan 6, 2017

Date recommended by the VRB: May 2, 2017



Grass

Nightlife

09-8000 (Exp)

1. Variety name: Nightlife Kind: Creeping bentgrass
 Genus: Agrostis Species: stolonifera
 Experimental designation (s): 09-8000
 Date submitted: January 6, 2017

2. Nightlife creeping bentgrass (*Agrostis stolonifera* L.) is a medium-fine leaved, dark green creeping bentgrass recommended for use on golf course tees, putting greens, and fairways. In 1994 a 1-ha annual bluegrass green was established as a proving ground for competitive bentgrass breeding. The origins of Nightlife trace to: (1) Selections of segregated patches from old putting greens in Massachusetts, Rhode Island, Connecticut, North Carolina, and South Carolina; (2) Selections of low growing plants from an herbicide-damaged Foundation field of 'Putter' creeping bentgrass in Oregon's Willamette Valley; (3) Clonal selections of desirable off-types from a 2002 'T-1' commercial production field. Nightlife was bred by evaluating promising clones brought in from *in situ* grass collections, under close mowing and *Poa annua* competition. Attractive plants were periodically pulled and planted into polycross blocks. Progeny were re-established into new grid plots.

After 1 to 3 cycles of hybridization and progeny selection, a polycross was planted in 2008 consisting of 66 plants x 2 replicates from 33 breeding lines, randomized in the polycross. Approximately 2% of plants were removed before anthesis due to non-uniformity. The seed from the remaining plants was bulked and drill-seeded into a 2009 breeder block. Approximately 5% of plants were chemically removed prior to anthesis based mainly on variation in maturity and leaf width. First breeder seed was harvested in 2010.

3. Nightlife will be primarily used for turf and is adapted for use on fairways/tees in AR, CA, IL, IN, IA, KS, KY, MA, MD, MI, MO, NJ, ND, UT, VA, and WA. It is adapted for use on putting greens in AR, CA, IL, IN, IA, KS, KY, MA, MI, MN, MO, NJ, NC, OK, UT, and VA.

4. Growth & Morphology	Mature Plant Height (cm)		Mature Flagleaf Width (mm)		Mature Panicle Length (cm)	
	2016		2016		2016	
	Post Falls, ID	Moses Lake, WA	Post Falls, ID	Moses Lake, WA	Post Falls, ID	Moses Lake, WA
Nightlife	47.5	53.9	2.6	3.1	7.2	8.9
Penn A4	51.1	55.8	2.7	3.1	7.9	9.1
Penncross	51.7	55.9	2.7	2.7	8.3	9.8
T-1	41.7	61.7	2.2	3.0	7.2	10.6
L-93	52.1	63.3	3.1	3.9	8.4	11.4
LSD (.05)	3.9	3.6	0.4	0.4	0.9	0.9
C.V.%	15.9	12.6	26.2	25.1	23.1	18.6

Data collected from: Spaced single plants X Plants in rows/solid seeding _____

Variants to be expected and frequency: Less than 5% variants have been found and they can be identified as having maturity earlier or later than the majority of the field, or wider leaves compared to the Nightlife plants.

5. Turf Use	Turf Quality		Genetic Color		Seedling Vigor		Leaf Texture	
	2015		2015		2015		2015	
	WA	KY	WA	KY	AR	WA	IN	NJ
Nightlife	7.0	7.3	8.0	8.0	6.0	7.7	7.3	6.7
007	6.0	7.3	7.0	7.0	7.0	8.3	7.7	8.3
Crystal Blue Links	6.3	6.8	7.3	7.0	7.7	7.7	6.7	7.7
Penncross	5.9	6.3	6.7	7.0	7.3	7.7	4.3	3.3
LSD (.05)	0.4	0.3	0.8	0.4	2.4	2.0	1.2	1.3
C.V.%	4.1	2.5	6.4	3.3	12.7	9.0	10.0	11.7

•Scale used to report traits (if appropriate): 1-9 scale where 1 is poorest or dead turf and 9 is outstanding or ideal turf.

6. Jacklin Seed by Simplot®, Liberty Lake, WA, maintains Breeder seed of Nightlife. Seed classes recognized are Foundation, Registered and Certified and the length of stand on each is 3, 3, and 6 years, respectively. Original Breeder seed is maintained in cold storage and if/when new Breeder seed is needed this will be planted, rogued by the plant breeder and harvested as Breeder seed.
7. Experimental certified seed has been produced but not sold at this time. Certified seed will be offered for sale upon AOSCA/GVRB variety approval. PVP will not be sought.

Date this application was submitted: Jan 6, 2017

Date recommended by the VRB: May 2, 2017



Grass

Siesta JT-107 (Exp)

1. Variety name: Siesta Kind: Tall fescue
 Genus: Festuca Species: arundinacea
 Experimental designation (s): JT-107
 Date submitted: January 6, 2017

2. The maternal parentage of Siesta derives from: 11% Pixie, 11% Shenandoah, 8% Coronado, 5% Quest, 3% Alamo, 2% Arid 3, 2% Jaguar 4G, 1% Falcon IV and 57% Jacklin experimental lines and non-released materials (13% JT-22, 8% JT-19, 6% JT-10, 5% JT-24, 4% each JT-25 and JT-30, and 2% or less each JT-37, JT-13, JT-12, JT-23, JT-16, JT-3, 05-8003, 05-8005, 05-8020, and 99-8006). The Jacklin experimental lines included material from polycrosses, single plant selections and advanced test varieties that have not been publicly released. Breeding techniques in the population improvement program included selection, paired crosses and polycrosses. Plants with superior characteristics were advanced to the next cycle of breeding and inferior material discarded. Siesta was developed from the half-sib progenies from 50 plants with short stature and good quality. The lines were replicated in a spaced planted 4349-plant isolation block in Connell, WA in 2009. The block was rogued for uniformity removing 79% of plants prior to anthesis based on color, texture, density and quality. The remaining 915 plants were bulk harvested as pre-Breeder Seed. In 2011, this seed was planted in isolation and was minimally rogued removing less than 5% of the plants and harvested as the first Breeder seed of Siesta in July, 2012.

3. Siesta will be primarily used for turf. It has been tested in company trials since 2010 in ID, MD, and OH. Siesta is adapted to use in ID, MD, and OH.

4. Growth & Morphology Traits	Plant Height (cm)		Panicle Length (cm)		Flagleaf Width (mm)	
	2016		2016		2016	
	Post Falls, ID	Moses Lake, WA	Post Falls, ID	Moses Lake, WA	Post Falls, ID	Moses Lake, WA
Siesta	82.4	90.9	15.7	18.8	4.7	5.0
Pixie	103.0	116.0	20.2	26.6	5.2	6.3
Quest	93.7	100.2	18.0	21.8	4.6	5.4
Kentucky 31	121.7	128.2	25.1	28.4	5.5	7.0
Jaguar 4G	89.2	93.7	16.3	19.6	4.7	4.7
LSD (.05)	5.8	5.1	1.4	1.4	0.5	0.6
Variance	15.0	14.5	18.4	18	23.7	25.8

Data collected from: Spaced single plants Plants in rows/solid seeding

Variants to be expected and frequency: Less than 5% variants have been found and they can be identified as having reduced seedhead initiation, maturity earlier or later than the majority of the field, or larger plant size compared to the Siesta plants.

5. Turf Use	Turf Quality		Brown Patch		Texture		Seedling Vigor	
	2014-2015		2015		2015		2014	
	ID	MD	MD	OH	ID	OH	ID	OH
Siesta	5.1	4.0	4.5	6.3	6.0	6.7	5.0	5.7
Pixie	4.1	4.8	5.5	5.7	5.0	4.3	5.0	5.3
Quest	5.2	4.5	4.2	4.7	5.3	4.7	6.0	6.7
Kentucky 31	2.3	2.3	4.5	7.0	2.0	3.0	3.0	3.0
Jaguar 4G	4.6	4.7	5.0	4.7	5.7	5.3	3.7	4.3
LSD (.05)	2.1	2.5	2.8	3.2	1.5	1.3	2.0	4.2
Variance	20.5	22.2	24.1	24.6	11.7	9.8	18.7	29.5

•Scale used to report traits (if appropriate): 1-9 where 9=best

6. Jacklin Seed by Simplot®, Liberty Lake, WA, maintains Breeder seed of Siesta. Seed classes recognized are Foundation, Registered and Certified and the length of stand on each is 3, 3, and 6 years, respectively. Original Breeder seed is maintained in cold storage and if/when new Breeder seed is needed this will be planted, rogued by the plant breeder and harvested as Breeder seed.

7. Experimental certified seed has been produced but not sold at this time. Certified seed will be offered for sale upon AOSCA/GVRB variety approval. PVP will not be sought.

Date this application was submitted: Jan 6, 2017

Date recommended by the VRB: May 2, 2017



Grass
Navy
04-1775, J-1775 (Exp)
Amended (Name Change)

Variety Name Navy Kind: Kentucky Bluegrass
 Genus: Poa Species: pratensis

Experimental Designation(s) 04-1775, J-1775

Date GVRB first recommended this variety Mar 25, 2016

Date(s) previous amendments were recommended _____

Date amendment submitted November 29, 2016

- 93-1704 was a selection from a field hybridization where Midnight was used to pollinate plants of Limousine. 01-1075 was later selected as being unique from spaced plants of 93-1704 by their foliage prior to seedhead expression. 04-1775 was a naturally occurring open pollinated hybrid harvested from a spaced plant block of 01-1075. Breeder blocks of 04-1775 were planted in June 2008 and 2009. The breeder blocks were rogued for uniformity, removing less than 5% off types. Apomixis is 99.5 percent.
- J-1775 will be used primarily for turf and was tested in turf trials in Idaho and Ohio.

4. Growth & Morphology Traits	Plant Height (cm)		Flag Leaf Height (cm)		Panicle Length (cm)	
	2014		2014		2014	
	Rathdrum, ID	Post Falls, ID	Rathdrum, ID	Post Falls, ID	Rathdrum, ID	Post Falls, ID
04-1775	48.3	59.7	29.0	23.4	10.5	9.3
Midnight	43.2	44.6	24.6	18.2	8.9	6.5
Limousine	39.4	51.0	22.7	20.7	8.5	6.5
Shamrock	56.9	59.8	37.8	29.4	12.1	8.6
Chicago II	40.5	45.7	22.7	19.5	8.4	6.7
LSD (.05)	2.1	2.7	2.5	3.0	0.8	0.7
CV%	7.0	8.6	14.4	21.2	13.0	16.5

Data collected from: Spaced single plants Plants in rows/solid seeding _____

Variants to be expected and frequency: 5% or less, most of which were shorter

5. Turf Use	Turf Quality (1-9)		Greenup (1-9)		Rust Resistance (1-9)		Seedling Vigor (1-9)	
	2013	2010	2013	2010	2013	2010	2013	2010
a)								
b)	Ohio	Idaho	Ohio	Idaho	Ohio	Idaho	Ohio	Idaho
04-1775	8.0	8.0	5.0	3.0	7.0	8.0	5.0	8.0
Liberator	5.0	8.3	6.5	3.0	5.0	6.3	8.0	6.0
Limousine	5.0	5.5	5.0	2.0	3.0	4.0	8.0	6.0
Midnight	5.3	8.3	4.3	2.5	4.0	6.5	7.3	6.0
Award	5.0	5.0	5.0	2.7	4.0	6.3	7.5	7.3
LSD (.05)	4.3	2.0	4.2	2.8	5.2	2.8	4.6	4.4
CV%	35.7	12.0	32.0	42.6	45.5	17.2	21.5	27.7

• Scale used to report traits (if appropriate): 1 to 9 rating scale, where 9 = most desirable
 The date listed is the year the trial was established. Ratings taken through 2015.

- Jacklin Seed by Simplot®, Liberty Lake, WA, maintains the Breeder seed of J-1775. Seed classes recognized are Foundation, Registered, and Certified with stand lengths of 3, 3, and 6 years, respectively. Original Breeder seed is maintained in cold storage and if/when new Breeder seed is needed this will be planted, rogued by a plant breeder and harvested as Breeder seed.
- If this variety is recommended as eligible for certification by official seed certifying agencies, certified class seed will first be offered for sale from the 2015 crop in 2016. PVP will not be sought.

Date this application was submitted: Nov 29, 2016

Date recommended by the VRB: Mar 8, 2017



Grass

Veracruz SD-2.CH (Exp)

1. Variety name: Veracruz Kind: Perennial Ryegrass
 Genus: Lolium Species: perenne
 Experimental designation (s): SD-2.CH
 Date submitted: 1/5/2017

2. Veracruz is a semi-upright, medium-green colored perennial ryegrass with early maturity. It has been selected primarily for its distinctive compound seed spike. Veracruz heads significantly earlier than Mensa (SD-2) and has significantly longer spikes than Mensa (SD-2). Veracruz is distinctly different from any known perennial ryegrass varieties due to its distinctive compound spike development. No other known perennial ryegrass varieties have this characteristic.
3. Veracruz is well adapted in Western Oregon for turf use. It exhibits medium color and good resistance to winter leaf spot disease in turf.

4. Growth & Morphology	Heading Date-Julian days		Plant Height (cm)		Flag Leaf Height (cm)	
	Aurora, OR		Aurora, OR		Aurora, OR	
	2014	2015	2014	2015	2014	2015
Veracruz	124	126	63.1	60.2	34.0	33.1
Mensa	151	153	94.3	95.4	59.4	61.7
Savant	147	146	98.9	99.6	64.3	66.2
Covet	148	147	72.6	75.2	37.9	39.5
LSD (.05)	6.2	5.9	17.9	19.1	18.2	18.7
C.V. %	1.3	1.3	3.7	3.9	3.3	3.4

Data collected from: Spaced single plants x Plants in rows/solid seeding

Variants to be expected and frequency: <.05% normal seed heads

5. Turf	Turf Quality (1-9)		Genetic Color (1-9)		Winter Leaf Spot (1-9)		Live Tillers (100-sq.cm)	
	Aurora, OR		Aurora, OR		Aurora, OR		Aurora, OR	
	2014	2015	2014	2015	2014	2015	2014	2015
Veracruz	7.6	7.5	7.5	7.5	7.1	7.5	892	694
Mensa	8.3	8.2	8.3	8.3	8.1	8.3	1115	1114
Savant	8.2	8.1	8.0	8.0	7.5	7.5	1297	1378
Covet	7.1	6.9	7.5	7.5	7.4	7.3	514	561
LSD (.05)	0.6	0.6	0.8	0.8	1.1	1.2	183.2	191.4
C.V. %	1.3	1.4	1.4	1.4	3.6	3.9	67.4	73.9

- Scale used to report traits (if appropriate): 1-9 with 9 being ideal quality/no disease/darkest color

Continued on next page (21)



Continued from previous page (20)

Grass

Veracruz SD-2.CH (Exp)

6. Breeder seed of Veracruz was first produced in 2013. Breeder seed is maintained by Ledebouer Seed LLC, Aurora, OR. Current inventory of breeder seed is enough to maintain the anticipated life of the variety. Foundation, Registered and Certified classes of seed are permitted. Foundation class seed stands may only be planted from breeder seed. Registered and Certified class seed stands may be planted from breeder and/or Foundation class seed. Certified class seed stands may be planted from breeder, Foundation and Registered class seed. Maximum number of harvests from Foundation and Registered stands is two years. Maximum number of harvests from Certified stands is five years. Additional years of seed production must be approved by the breeder or an individual designated by the breeder.
7. Certified seed will be available in 2018. PVP has been approved. PVP certificate number: 201400385. PVP certificate does not require Veracruz seed to be sold as certified seed.

Date this application was submitted: Jan 5, 2017

Date recommended by the VRB: Mar 8, 2017



Grass

A-4G (Exp)

1. Variety name: Not Yet Named Kind: Perennial ryegrass
 Genus: Lolium Species: perenne L.
 Experimental designation (s): A-4G
 Date submitted: December 26, 2016

2. A-4G was developed by McCarthy Research Farm LLC beginning with the selection of plants from nurseries at Verboort, Oregon. Selected plants were derived from the following varieties: PNW, Singular, ASP1001GL, Frontier and Wilmington. Plants were grown as spaced plants in an isolated nursery. Turf performance was evaluated using plots at Verboort, Oregon and Pipersville, Pennsylvania. Subsequently, four cycles of selections were conducted to produce the first breeder seed in 2014.

3. A-4G was tested for turf use in western Oregon and in eastern Pennsylvania. It has shown adaptation to those climatic conditions and will be made available for sale in climates represented by those localities.

4. Growth & Morphology Traits	Heading Date (Julian Days)		Plant Height (cm)		Flag Leaf Length (cm)	
	Verboort OR		Verboort OR		Verboort OR	
	2015	2016	2015	2016	2015	2016
A-4G	129.2	133.1	47.2	48.1	11.2	14.7
Elka	150.1	154.1	39.9	36.3	12.8	14.8
Fiesta 4	132.0	139.7	41.2	43.4	12.0	13.6
Linn	112.6	125.0	71.4	80.2	18.8	21.2
LSD @ 0.05	3.1	4.3	4.2	4.7	2.3	1.3
CV (%)	1.4	1.9	5.0	5.3	10.9	5.2

Data collected from: Spaced single plants Plants in rows/solid seeding

Variants to be expected and frequency: None have been observed or documented

5. Turf Use	2015		2015		2015		2015	
	Turf Quality		Genetic Color		Leaf Density		Leaf Texture	
	OR	PA	OR	PA	OR	PA	OR	PA
A-4G	7.2	7.0	7.7	7.4	6.1	6.0	7.8	7.4
Mach I	6.8	6.4	6.0	5.7	6.2	5.7	6.0	5.8
Gator 3	5.8	5.4	6.3	5.8	5.5	4.9	6.5	5.3
Pinnacle	4.2	3.6	3.6	3.2	3.5	3.1	5.0	3.3
Linn	2.3	2.0	1.6	1.5	1.6	1.3	2.1	1.2
LSD @ 0.05	0.8	0.8	1.0	0.9	0.7	0.7	1.2	0.8
CV (%)	7.9	8.8	9.8	9.8	7.4	7.5	11.3	9.7

Scale: 1 – 9 with 9 ideal quality or darkest green or most dense or finest texture
 Trial Locations: Verboort, Oregon & Pipersville, Pennsylvania.

6. A supply of A-4G breeder seed will be kept in cold storage by McCarthy Research Farm LLC located in Verboort, Oregon. Foundation stands may only be planted from Breeder Seed. Registered stands may be established from either Foundation or Breeder Seed. Certified fields may be established from Breeder, Registered or Foundation Seed. Foundation and Registered class fields will be limited to four harvests of Foundation/Registered production followed by four additional harvests of Certified production. Certified class fields will be limited to ten years of seed production. Additional years of seed production may be approved by the breeder.

7. Certified seed is anticipated to be available in the fall of 2017. PVP will be sought with the certification option.

Date this application was submitted: Dec 26, 2016

Date recommended by the VRB: Mar 8, 2017



Grass

A-6D (Exp)

1. Variety name: Not Yet Named Kind: Perennial ryegrass
 Genus: Lolium Species: perenne L.
 Experimental designation (s): A-6D
 Date submitted: December 26, 2016
2. A-6D was developed by McCarthy Research Farm LLC beginning with the selection of plants from nurseries at Verboort, Oregon. Selected plants were derived from the following varieties: ASP0113, Fireball, Nexus XR, Singular, and Fiji 2. Plants were grown as spaced plants in an isolated nursery. Turf performance was evaluated using plots at Verboort, Oregon and Pipersville, Pennsylvania. Subsequently, four cycles of selections were conducted to produce the first breeder seed in 2014.
3. A-6D was tested for turf use in western Oregon and in eastern Pennsylvania. It has shown adaptation to those climatic conditions and will be made available for sale in climates represented by those localities.

4. Growth & Morphology Traits	Heading Date (Julian Days)		Plant Height (cm)		Flag Leaf Length (cm)	
	Verboort OR		Verboort OR		Verboort OR	
	2015	2016	2015	2016	2015	2016
A-6D	120.5	129.8	43.7	46.8	11.6	10.6
Calypso 3	132.1	133.2	52.0	52.6	14.7	15.8
Elka	150.1	154.1	39.9	36.3	12.8	14.8
Linn	112.6	125.0	71.4	80.2	18.8	21.2
LSD @ 0.05	3.1	4.3	4.2	4.7	2.3	1.3
CV (%)	1.4	1.9	5.0	5.3	10.9	5.2

Data collected from: Spaced single plants Plants in rows/solid seeding

Variants to be expected and frequency: None have been observed or documented

5. Turf Use	2015		2015		2015		2015	
	Turf Quality		Genetic Color		Leaf Density		Leaf Texture	
	OR	PA	OR	PA	OR	PA	OR	PA
A-6D	7.5	7.2	8.1	7.7	6.5	6.1	8.1	7.5
Mach I	6.8	6.4	6.0	5.7	6.2	5.7	6.0	5.8
Gator 3	5.8	5.4	6.3	5.8	5.5	4.9	6.5	5.3
Pinnacle	4.2	3.6	3.6	3.2	3.5	3.1	5.0	3.3
Manhattan II	3.1	2.4	4.6	4.0	3.2	2.4	4.8	3.5
LSD @ 0.05	0.8	0.8	1.0	0.9	0.7	0.7	1.2	0.8
CV (%)	7.9	8.8	9.8	9.8	7.4	7.5	11.3	9.7

Scale: 1 – 9 with 9 ideal quality or darkest green or most dense or finest texture

Trial Locations: Verboort, Oregon & Pipersville, Pennsylvania.

6. A supply of A-6D breeder seed will be kept in cold storage by McCarthy Research Farm LLC located in Verboort, Oregon. Foundation stands may only be planted from Breeder Seed. Registered stands may be established from either Foundation or Breeder Seed. Certified fields may be established from Breeder, Registered or Foundation Seed. Foundation and Registered class fields will be limited to four harvests of Foundation/Registered production followed by four additional harvests of Certified production. Certified class fields will be limited to ten years of seed production. Additional years of seed production may be approved by the breeder.
7. Certified seed is anticipated to be available in the fall of 2017. PVP will be sought with the certification option.

Date this application was submitted: Dec 26, 2016

Date recommended by the VRB: Mar 8, 2017



Grass

AMP-R1 (Exp)

1. Variety name: Not Yet Named Kind: Perennial ryegrass
 Genus: Lolium Species: perenne L.
 Experimental designation (s): AMP-R1
 Date submitted: December 26, 2016

2. AMP-R1 was developed by McCarthy Research Farm LLC beginning with the selection of plants from nurseries at Verboort, Oregon. Selected plants were derived from the following varieties: Wind Dance II, PNW, Prominent, Fireball and Singular. Plants were grown as spaced plants in an isolated nursery. Turf performance was evaluated using plots at Verboort, Oregon and Pipersville, Pennsylvania. Subsequently, four cycles of selections were conducted to produce the first breeder seed in 2014.
3. AMP-R1 was tested for turf use in western Oregon and in eastern Pennsylvania. It has shown adaptation to those climatic conditions and will be made available for sale in climates represented by those localities.

4. Growth & Morphology Traits	Heading Date (Julian Days)		Plant Height (cm)		Flag Leaf Length (cm)	
	Verboort OR		Verboort OR		Verboort OR	
	2015	2016	2015	2016	2015	2016
AMP-R1	135.1	138.4	43.0	45.0	10.3	14.2
Calypso 3	132.1	133.2	52.0	52.6	14.7	15.8
Elka	150.1	154.1	39.9	36.3	12.8	14.8
Linn	112.6	125.0	71.4	80.2	18.8	21.2
LSD @ 0.05	3.1	4.3	4.2	4.7	2.3	1.3
CV (%)	1.4	1.9	5.0	5.3	10.9	5.2

Data collected from: Spaced single plants Plants in rows/solid seeding

Variants to be expected and frequency: None have been observed or documented

5. Turf Use	2015		2015		2015		2015	
	Turf Quality		Genetic Color		Leaf Density		Leaf Texture	
	OR	PA	OR	PA	OR	PA	OR	PA
AMP-R1	7.2	7.5	7.1	7.0	6.7	5.7	8.2	7.3
Mach I	6.8	6.4	6.0	5.7	6.2	5.7	6.0	5.8
Gator 3	5.8	5.4	6.3	5.8	5.5	4.9	6.5	5.3
Pinnacle	4.2	3.6	3.6	3.2	3.5	3.1	5.0	3.3
Manhattan II	3.1	2.4	4.6	4.0	3.2	2.4	4.8	3.5
LSD @ 0.05	0.8	0.8	1.0	0.9	0.7	0.7	1.2	0.8
CV (%)	7.9	8.8	9.8	9.8	7.4	7.5	11.3	9.7

Scale: 1 – 9 with 9 ideal quality or darkest green or most dense or finest texture
 Trial Locations: Verboort, Oregon & Pipersville, Pennsylvania.

6. A supply of AMP-R1 breeder seed will be kept in cold storage by McCarthy Research Farm LLC located in Verboort, Oregon. Foundation stands may only be planted from Breeder Seed. Registered stands may be established from either Foundation or Breeder Seed. Certified fields may be established from Breeder, Registered or Foundation Seed. Foundation and Registered class fields will be limited to four harvests of Foundation/Registered production followed by four additional harvests of Certified production. Certified class fields will be limited to ten years of seed production. Additional years of seed production may be approved by the breeder.
7. Certified seed is anticipated to be available in the fall of 2017. PVP will be sought with the certification option.

Date this application was submitted: Dec 26, 2016

Date recommended by the VRB: Mar 8, 2017



Grass

AMP-T1 (Exp)

1. Variety name: Not Yet Named Kind: Tall fescue
 Genus: Festuca Species: arundinacea
 Experimental designation (s): AMP-T1
 Date submitted: December 26, 2016

2. AMP-T1 was developed by McCarthy Research Farm LLC beginning with the selection of plants from nurseries at Verboort, Oregon. Selected plants were derived from the following varieties: AST5112, Hudson, Frontline, AST9003 and XtremeGreen. Plants were grown as spaced plants in an isolated nursery. Turf performance was evaluated using plots at Verboort, Oregon and Pipersville, Pennsylvania. Subsequently, four cycles of selections were conducted to produce the first breeder seed in 2014.
3. AMP-T1 was tested for turf use in western Oregon and in eastern Pennsylvania. It has shown adaptation to those climatic conditions and will be made available for sale in climates represented by those localities.

4. Growth & Morphology Traits	Heading Date (Julian Days)		Plant Height (cm)		Flag Leaf Length (cm)	
	Verboort OR		Verboort OR		Verboort OR	
	2015	2016	2015	2016	2015	2016
AMP-T1	131.7	136.2	70.6	68.0	10.0	11.5
Bonsai	135.9	138.9	61.8	65.2	6.8	11.0
KY-31	119.1	128.3	113.1	123.2	18.5	19.6
Rebel II	125.3	129.8	95.6	100.3	17.6	17.2
LSD @ 0.05	4.1	3.5	5.6	5.5	1.8	1.6
CV (%)	1.9	1.5	4.1	3.9	8.4	6.5

Data collected from: Spaced single plants Plants in rows/solid seeding

Variants to be expected and frequency: None have been observed or documented

5. Turf Use	2015		2015		2015		2015	
	Turf Quality		Genetic Color		Leaf Density		Leaf Texture	
	OR	PA	OR	PA	OR	PA	OR	PA
AMP-T1	7.6	7.5	7.7	7.3	7.4	7.3	7.6	7.5
Bonsai	5.8	4.8	5.3	4.6	5.6	4.5	6.2	4.6
Rebel II	4.3	4.2	3.7	3.8	4.0	4.3	4.1	4.2
Bonanza	4.1	3.8	5.1	3.5	3.9	3.4	4.0	3.5
K-31	2.3	2.4	2.0	1.9	1.7	2.2	1.7	2.6
LSD @ 0.05	0.8	0.7	1.0	1.0	1.0	1.2	1.1	1.0
CV (%)	7.8	7.4	9.6	10.1	10.1	12.6	10.6	10.5

Scale: 1 – 9 with 9 ideal quality or darkest green or most dense or finest texture

Trial Locations: Verboort, Oregon & Pipersville, Pennsylvania.

6. A supply of AMP-T1 breeder seed will be kept in cold storage by McCarthy Research Farm LLC located in Verboort, Oregon. Foundation stands may only be planted from Breeder Seed. Registered stands may be established from either Foundation or Breeder Seed. Certified fields may be established from Breeder, Registered or Foundation Seed. Foundation and Registered class fields will be limited to four harvests of Foundation/Registered production followed by four additional harvests of Certified production. Certified class fields will be limited to ten years of seed production. Additional years of seed production may be approved by the breeder.
7. Certified seed is anticipated to be available in the fall of 2017. PVP will be sought with the certification option.

Date this application was submitted: Dec 26, 2016

Date recommended by the VRB: Mar 8, 2017



Grass

A-TF31 (Exp)

1. Variety name: Not Yet Named Kind: Tall fescue
 Genus: Festuca Species: arundinacea
 Experimental designation (s): A-TF31
 Date submitted: December 26, 2016

2. A-TF31 was developed by McCarthy Research Farm LLC beginning with the selection of plants from nurseries at Verboort, Oregon. Selected plants were derived from the following varieties: AST5118, Dakota, Horizon, Reunion and Corona. Plants were grown as spaced plants in an isolated nursery. Turf performance was evaluated using plots at Verboort, Oregon and Pipersville, Pennsylvania. Subsequently, four cycles of selections were conducted to produce the first breeder seed in 2014.
3. A-TF31 was tested for turf use in western Oregon and in eastern Pennsylvania. It has shown adaptation to those climatic conditions and will be made available for sale in climates represented by those localities.

4. Growth & Morphology Traits	Heading Date (Julian Days)		Plant Height (cm)		Flag Leaf Length (cm)	
	Verboort OR		Verboort OR		Verboort OR	
	2015	2016	2015	2016	2015	2016
A-TF31	129.0	134.2	72.6	71.2	11.2	12.4
Bonsai	135.9	138.9	61.8	65.2	6.8	11.0
KY-31	119.1	128.3	113.1	123.2	18.5	19.6
Silverado	127.6	135.3	71.2	76.4	11.4	13.5
LSD @ 0.05	4.1	3.5	5.6	5.5	1.8	1.6
CV	1.9	1.5	4.1	3.9	8.4	6.5

Data collected from: Spaced single plants Plants in rows/solid seeding

Variants to be expected and frequency: None have been observed or documented

5. Turf Use	2015		2015		2015		2015	
	Turf Quality		Genetic Color		Leaf Density		Leaf Texture	
	OR	PA	OR	PA	OR	PA	OR	PA
A-TF31	7.8	7.6	7.6	7.3	7.7	7.5	7.8	7.9
Bonsai	5.8	4.8	5.3	4.6	5.6	4.5	6.2	4.6
Rebel II	4.3	4.2	3.7	3.8	4.0	4.3	4.1	4.2
Bonanza	4.1	3.8	5.1	3.5	3.9	3.4	4.0	3.5
K-31	2.3	2.4	2.0	1.9	1.7	2.2	1.7	2.6
LSD @ 0.05	0.8	0.7	1.0	1.0	1.0	1.2	1.1	1.0
CV (%)	7.8	7.4	9.6	10.1	10.1	12.6	10.6	10.5

Scale: 1 – 9 with 9 ideal quality or darkest green or most dense or finest texture

Trial Locations: Verboort, Oregon & Pipersville, Pennsylvania.

6. A supply of A-TF31 breeder seed will be kept in cold storage by McCarthy Research Farm LLC located in Verboort, Oregon. Foundation stands may only be planted from Breeder Seed. Registered stands may be established from either Foundation or Breeder Seed. Certified fields may be established from Breeder, Registered or Foundation Seed. Foundation and Registered class fields will be limited to four harvests of Foundation/Registered production followed by four additional harvests of Certified production. Certified class fields will be limited to ten years of seed production. Additional years of seed production may be approved by the breeder.
7. Certified seed is anticipated to be available in the fall of 2017. PVP will be sought with the certification option.

Date this application was submitted: Dec 26, 2016

Date recommended by the VRB: Mar 8, 2017



Grass

CS-6 (Exp)

1. Variety name: Not Yet Named Kind: Perennial ryegrass
 Genus: Lolium Species: perenne L.
 Experimental designation (s): CS-6
 Date submitted: December 26, 2016

2. CS-6 was developed by McCarthy Research Farm LLC beginning with the selection of plants from nurseries at Verboort, Oregon. Selected plants were derived from the following varieties: Majesty II, Presidio, Frontier, ASP0112, Prominent and Fireball. Plants were grown as spaced plants in an isolated nursery. Turf performance was evaluated using plots at Verboort, Oregon and Pipersville, Pennsylvania. Subsequently, four cycles of selections were conducted to produce the first breeder seed in 2014.
3. CS-6 was tested for turf use in western Oregon and in eastern Pennsylvania. It has shown adaptation to those climatic conditions and will be made available for sale in climates represented by those localities.

4. Growth & Morphology Traits	Heading Date (Julian Days)		Plant Height (cm)		Flag Leaf Length (cm)	
	Verboort OR		Verboort OR		Verboort OR	
	2015	2016	2015	2016	2015	2016
CS-6	133.0	137.2	46.9	48.8	11.5	12.6
Elka	150.1	154.1	39.9	36.3	12.8	14.8
Linn	112.6	125.0	71.4	80.2	18.8	21.2
Pinnacle	127.7	134.6	46.5	59.9	12.5	14.5
LSD @ 0.05	3.1	4.3	4.2	4.7	2.3	1.3
CV (%)	1.4	1.9	5.0	5.3	10.9	5.2

Data collected from: Spaced single plants Plants in rows/solid seeding

Variants to be expected and frequency: None have been observed or documented

5. Turf Use	2015		2015		2015		2015	
	Turf Quality		Genetic Color		Leaf Density		Leaf Texture	
	OR	PA	OR	PA	OR	PA	OR	PA
CS-6	7.1	7.0	7.2	7.3	6.6	6.3	7.8	6.8
Mach I	6.8	6.4	6.0	5.7	6.2	5.7	6.0	5.8
Blazer 4	6.3	5.9	5.4	4.8	5.3	4.7	6.3	5.0
Seville 3	4.1	3.4	4.0	3.8	4.4	3.9	5.0	3.7
Manhattan II	3.1	2.4	4.6	4.0	3.2	2.4	4.8	3.5
LSD @ 0.05	0.8	0.8	1.0	0.9	0.7	0.7	1.2	0.8
CV (%)	7.9	8.8	9.8	9.8	7.4	7.5	11.3	9.7

Scale: 1 – 9 with 9 ideal quality or darkest green or most dense or finest texture
 Trial Locations: Verboort, Oregon & Pipersville, Pennsylvania.

6. A supply of CS-6 breeder seed will be kept in cold storage by McCarthy Research Farm LLC located in Verboort, Oregon. Foundation stands may only be planted from Breeder Seed. Registered stands may be established from either Foundation or Breeder Seed. Certified fields may be established from Breeder, Registered or Foundation Seed. Foundation and Registered class fields will be limited to four harvests of Foundation/Registered production followed by four additional harvests of Certified production. Certified class fields will be limited to ten years of seed production. Additional years of seed production may be approved by the breeder.
7. Certified seed is anticipated to be available in the fall of 2017. PVP will be sought with the certification option.

Date this application was submitted: Dec 26, 2016

Date recommended by the VRB: Mar 8, 2017



Grass

SNX (Exp)

1. Variety name: Not Yet Named Kind: Perennial ryegrass
 Genus: Lolium Species: perenne L.
 Experimental designation (s): SNX
 Date submitted: December 26, 2016
2. SNX was developed by McCarthy Research Farm LLC beginning with the selection of plants from nurseries at Verboort, Oregon. Selected plants were derived from the following varieties: Darklink, Nexus XD, Frontier, Fireball, ASP0113 and Wind Dance II. Plants were grown as spaced plants in an isolated nursery. Turf performance was evaluated using plots at Verboort, Oregon and Pipersville, Pennsylvania. Subsequently, four cycles of selections were conducted to produce the first breeder seed in 2014.
3. SNX was tested for turf use in western Oregon and in eastern Pennsylvania. It has shown adaptation to those climatic conditions and will be made available for sale in climates represented by those localities.

4. Growth & Morphology Traits	Heading Date (Julian Days)		Plant Height (cm)		Flag Leaf Length (cm)	
	Verboort OR		Verboort OR		Verboort OR	
	2015	2016	2015	2016	2015	2016
SNX	134.6	139.9	49.5	54.2	12.9	15.1
Fiesta 4	132.0	139.7	41.2	43.4	12.0	13.6
Linn	112.6	125.0	71.4	80.2	18.8	21.2
Manhattan	142.6	146.7	56.7	64.8	12.6	21.6
LSD @ 0.05	3.1	4.3	4.2	4.7	2.3	1.3
CV (%)	1.4	1.9	5.0	5.3	10.9	5.2

Data collected from: Spaced single plants Plants in rows/solid seeding

Variants to be expected and frequency: None have been observed or documented

5. Turf Use	2015		2015		2015		2015	
	Turf Quality		Genetic Color		Leaf Density		Leaf Texture	
	OR	PA	OR	PA	OR	PA	OR	PA
SNX	7.3	7.5	7.4	7.2	6.7	6.2	6.8	6.2
Mach I	6.8	6.4	6.0	5.7	6.2	5.7	6.0	5.8
Gator 3	5.8	5.4	6.3	5.8	5.5	4.9	6.5	5.3
Pinnacle	4.2	3.6	3.6	3.2	3.5	3.1	5.0	3.3
Manhattan II	3.1	2.4	4.6	4.0	3.2	2.4	4.8	3.5
LSD @ 0.05	0.8	0.8	1.0	0.9	0.7	0.7	1.2	0.8
CV (%)	7.9	8.8	9.8	9.8	7.4	7.5	11.3	9.7

Scale: 1 – 9 with 9 ideal quality or darkest green or most dense or finest texture

Trial Locations: Verboort, Oregon & Pipersville, Pennsylvania.

6. A supply of SNX breeder seed will be kept in cold storage by McCarthy Research Farm LLC located in Verboort, Oregon. Foundation stands may only be planted from Breeder Seed. Registered stands may be established from either Foundation or Breeder Seed. Certified fields may be established from Breeder, Registered or Foundation Seed. Foundation and Registered class fields will be limited to four harvests of Foundation/Registered production followed by four additional harvests of Certified production. Certified class fields will be limited to ten years of seed production. Additional years of seed production may be approved by the breeder.
7. Certified seed is anticipated to be available in the fall of 2017. PVP will be sought with the certification option.

Date this application was submitted: Dec 26, 2016

Date recommended by the VRB: Mar 8, 2017



Grass

MRS�-TF16 (Exp)

1. Variety name: _____ Kind: Tall fescue
 Genus: Festuca Species: arundinacea
 Experimental designation (s): MRS�-TF16
 Date submitted: December 26, 2016

2. MRS�-TF16 was developed by McCarthy Research Farm LLC beginning with the selection of plants from nurseries at Verboort, Oregon. Selected plants were derived from the following varieties: Corona, Roman, AST5118, Integrity, RNP and Hudson. Plants were grown as spaced plants in an isolated nursery. Turf performance was evaluated using plots at Verboort, Oregon and Pipersville, Pennsylvania. Subsequently, four cycles of selections were conducted to produce the first breeder seed in 2014.

3. MRS�-TF16 was tested for turf use in western Oregon and in eastern Pennsylvania. It has shown adaptation to those climatic conditions and will be made available for sale in climates represented by those localities.

4. Growth & Morphology Traits	Heading Date (Julian Days)		Plant Height (cm)		Flag Leaf Length (cm)	
	Verboort OR		Verboort OR		Verboort OR	
	2015	2016	2015	2016	2015	2016
MRS�-TF16	130.7	135.1	71.9	74.7	11.4	12.5
Bonsai	135.9	138.9	61.8	65.2	6.8	11.0
KY-31	119.1	128.3	113.1	123.2	18.5	19.6
Rebel II	125.3	129.8	95.6	100.3	17.6	17.2
LSD @ 0.05	4.1	3.5	5.6	5.5	1.8	1.6
CV	1.9	1.5	4.1	3.9	8.4	6.5

Data collected from: Spaced single plants Plants in rows/solid seeding _____
 Variants to be expected and frequency: None have been observed or documented

5. Turf Use	2015		2015		2015		2015	
	Turf Quality		Genetic Color		Leaf Density		Leaf Texture	
	OR	PA	OR	PA	OR	PA	OR	PA
MRS�-TF16	7.9	7.8	7.7	7.6	7.9	7.6	8.2	7.8
Bonanza	4.1	3.8	5.1	3.5	3.9	3.4	4.0	3.5
Bonsai	5.8	4.8	5.3	4.6	5.6	4.5	6.2	4.6
K-31	2.3	2.4	2.0	1.9	1.7	2.2	1.7	2.6
Rebel II	4.3	4.2	3.7	3.8	4.0	4.3	4.1	4.2
LSD @ 0.05	0.8	0.7	1.0	1.0	1.0	1.2	1.1	1.0
CV (%)	7.8	7.4	9.6	10.1	10.1	12.6	10.6	10.5

Scale: 1 – 9 with 9 ideal quality or darkest green or most dense or finest texture
 Trial Locations: Verboort, Oregon & Pipersville, Pennsylvania.

6. A supply of MRS�-TF16 breeder seed will be kept in cold storage by McCarthy Research Farm LLC located in Verboort, Oregon. Foundation stands may only be planted from Breeder Seed. Registered stands may be established from either Foundation or Breeder Seed. Certified fields may be established from Breeder, Registered or Foundation Seed. Foundation and Registered class fields will be limited to four harvests of Foundation/Registered production followed by four additional harvests of Certified production. Certified class fields will be limited to ten years of seed production. Additional years of seed production may be approved by the breeder.

7. Certified seed is anticipated to be available in the fall of 2017. PVP will be sought with the certification option.

Date this application was submitted: Dec 26, 2016

Date recommended by the VRB: Mar 8, 2017



Grass

MRS�-PR16 (Exp)

1. Variety name: _____ Kind: Perennial ryegrass
 Genus: Lolium _____ Species: perenne L.
 Experimental designation (s): MRS�-PR16
 Date submitted: December 26, 2016

2. MRS�-PR16 was developed by McCarthy Research Farm LLC beginning with the selection of plants from nurseries at Verboort, Oregon. Selected plants were derived from the following varieties: PNW, Prominent, Align, Line Drive and Frontier. Plants were grown as spaced plants in an isolated nursery. Turf performance was evaluated using plots at Verboort, Oregon and Pipersville, Pennsylvania. Subsequently, four cycles of selections were conducted to produce the first breeder seed in 2014.
3. MRS�-PR16 was tested for turf use in western Oregon and in eastern Pennsylvania. It has shown adaptation to those climatic conditions and will be made available for sale in climates represented by those localities.

4. Growth & Morphology Traits	Heading Date (Julian Days)		Plant Height (cm)		Flag Leaf Length (cm)	
	Verboort OR		Verboort OR		Verboort OR	
	2015	2016	2015	2016	2015	2016
MRS�-PR16	129.6	134.4	43.6	46.1	10.6	13.2
Linn	112.6	125.0	71.4	80.2	18.8	21.2
Calypso 3	132.1	133.2	52.0	52.6	14.7	15.8
Manhattan	142.6	146.7	56.7	64.8	12.6	21.6
LSD @ 0.05	3.1	4.3	4.2	4.7	2.3	1.3
CV (%)	1.4	1.9	5.0	5.3	10.9	5.2

Data collected from: Spaced single plants Plants in rows/solid seeding _____

Variants to be expected and frequency: None have been observed or documented

5. Turf Use	2015		2015		2015		2015	
	Turf Quality		Genetic Color		Leaf Density		Leaf Texture	
	OR	PA	OR	PA	OR	PA	OR	PA
MRS�-PR16	7.8	7.6	7.9	7.7	7.9	7.7	8.2	7.6
Mach I	6.8	6.4	6.0	5.7	6.2	5.7	6.0	5.8
Blazer 4	6.3	5.9	5.4	4.8	5.3	4.7	6.3	5.0
Pinnacle	4.2	3.6	3.6	3.2	3.5	3.1	5.0	3.3
Manhattan II	3.1	2.4	4.6	4.0	3.2	2.4	4.8	3.5
LSD @ 0.05	0.8	0.8	1.0	0.9	0.7	0.7	1.2	0.8
CV (%)	7.9	8.8	9.8	9.8	7.4	7.5	11.3	9.7

Scale: 1 – 9 with 9 ideal quality or darkest green or most dense or finest texture

Trial Locations: Verboort, Oregon & Pipersville, Pennsylvania.

6. A supply of MRS�-PR16 breeder seed will be kept in cold storage by McCarthy Research Farm LLC located in Verboort, Oregon. Foundation stands may only be planted from Breeder Seed. Registered stands may be established from either Foundation or Breeder Seed. Certified fields may be established from Breeder, Registered or Foundation Seed. Foundation and Registered class fields will be limited to four harvests of Foundation/Registered production followed by four additional harvests of Certified production. Certified class fields will be limited to ten years of seed production. Additional years of seed production may be approved by the breeder.
7. Certified seed is anticipated to be available in the fall of 2017. PVP will be sought with the certification option.

Date this application was submitted: Dec 26, 2016

Date recommended by the VRB: Mar 8, 2017



Grass

MBG002 (Exp)

1. Variety name: _____ Kind: Bermudagrass
 Genus: Cynodon Species: dactylon
 Experimental designation (s): MBG002
 Date submitted: 18 November 2016
2. MBG002 traces its parentage to three vegetative parents: 1) collection from Casa Grande, AZ; 2) collection from Casa Grande, AZ; and 3) selection out of the cultivar 'Panama' for seed head number and narrower leaf width. F1 seed of MBG002 is produced by planting sprigs from the original clones (CG-6, CG-10 and PN-21) of MBG002. Breeder seed of MBG002 was first produced in 2004.
3. The primary use for MBG002 Bermudagrass will be for turf. MBG002 has been trialed and shown good adaptation in AZ.

4. Growth & Morphology Traits	Heading Date Maricopa, AZ		Mature Plant Height (cm) Maricopa, AZ		Flag Leaf Height (cm) Maricopa, AZ	
	2015	2016	2015	2016	2015	2016
	MBG002	5-May	13-May	18.4	17.9	15.6
Princess 77	8-May	20-May	17.4	16.3	14.8	13.1
NuMex SAHARA	28-Apr	9-May	35.9	26.9	30.8	22.1
Common	26-Apr	8-May	33.4	27.1	29.1	22.5
LSD (.05)	2	3	2.2	2.4	2.2	2.4
Variance	6	6	9.4	11.8	10.8	14.6

Data collected from: Spaced single plants X Plants in rows/solid seeding

Variants to be expected and frequency: 1.7% plants with a higher plant flag leaf height, 24-27 cm; <1% with flag length to 13 mm.

5. Turf Use	Turf Quality (1-9)		Cover (1-9)		Genetic Color (1-9)		Density (1-9)	
	Maricopa, AZ		Maricopa, AZ		Maricopa, AZ		Maricopa, AZ	
	2012	2013	2012	2013	2012	2013	2012	2013
MBG002	5.8	5.7	8.9	8.5	6.3	5.1	3.7	3.6
Princess 77	5.4	5.3	8.8	8.0	6.1	4.7	3.4	3.9
NuMex SAHARA	4.6	4.6	8.1	7.2	5.1	4.7	3.5	3.3
Panama	4.7	4.9	8.6	7.6	4.8	4.7	3.7	3.6
Mohawk	4.8	4.7	5.4	7.7	5.2	4.6	3.7	3.4
LSD (.05)	0.3	0.4	0.2	0.5	0.4	0.4	0.3	0.4
CV	3.7	4.9	2.0	4.6	4.6	5.8	5.8	7.2

●Scale used to report traits (1-9) 9=best.

6. Sprigs from the original clones of MBG002 (CG-6, CG-10 and PN-21) are used to establish seed production fields. F1 seed of MBG002 is produced by planting sprigs from the original clones of MBG002 (CG-6, CG-10 and PN-2) in alternating parent rows. The parental sprigs are harvested from parent clones nurseries maintained by NexGen Turf Research, Albany, Oregon. F1 seed production of Certified Class seed will be limited to eight years. Additional years of seed production may be approved by the breeder or an individual designated by the Director of Research, NexGen Turf Research, LLC.
7. If this variety is recommended as eligible for certification by official seed certifying agencies, certified class seed likely will be first offered for sale in spring 2017. PVP will not be sought.

Date this application was submitted: Nov 18, 2016

Date recommended by the VRB: Mar 8, 2017



Grass

SWI 1113 (Exp)

1. Variety name: _____ Kind: Bermudagrass
 Genus: Cynodon Species: dactylon
 Experimental designation (s): SWI 1113
 Date submitted: 18 November 2016

2. SWI 111 traces its parentage to two vegetative parents, selected out a bulked, 5 clone polycross. SWI 1113 was developed from four ecotype collections from Australia, two from Virginia (cold tolerant selections), Oklahoma (cold tolerant selection), and a cold tolerant selection from the released cultivar 'Quickstand'. Breeder seed of SWI 1113 was first produced in 2004.
3. The primary use for SWI 1113 Bermudagrass will be for turf. SWI 1113 has been trialed and shown good adaptation in AR, AZ, KY, GA, and NC.

4. Growth & Morphology Traits	Heading Date Maricopa, AZ		Mature Plant Height (cm) Maricopa, AZ		Flag Leaf Height (cm) Maricopa, AZ	
	2015	2016	2015	2016	2015	2016
	SWI 1113	4-May	13-May	18.6	17.5	15.5
Princess 77	8-May	20-May	17.4	16.3	14.8	13.1
NuMex SAHARA	28-Apr	9-May	35.9	26.9	30.8	22.1
Common	26-Apr	8-May	33.4	27.1	29.1	22.5
LSD (.05)	2	3	2.2	2.4	2.2	2.4
Variance	6	6	9.4	11.8	10.8	14.6

Data collected from: Spaced single plants Plants in rows/solid seeding _____

Variants to be expected and frequency: ~1% plants with a higher mature plant height, reaching 36-39 cm; and 2% plants with longer flag leaf length, reaching to 16 mm long.

5. Turf Use 2007-2012 NTEP Trials	Turf Quality		Genetic Color		Leaf Texture		Summer Density	
	(1-9)		(1-9)		(1-9)		(1-9)	
	2010		2012		2012		2012	
	FL	KY	AR	AZ	AR	AZ	AR	AZ
SWI 1113	5.6	6.8	7	7.1	6.8	6.7	6.4	7.2
YUKON	5.8	7	6.9	6.4	6	6.8	5.5	7.6
RIVIERA	5.8	6.9	6.8	6.3	6.3	6.2	5.8	6.2
PRINCESS 77	5.4	6.7	6.9	6.3	6.4	6.8	6	7.2
LSD (.05)	0.7	0.7	1	1	1	0.9	1.2	1.2
CV	7.7	6.3	9.5	10	11	8.8	15	11

•Scale used to report traits (1-9) 9=best.

AR=Fayetteville, AR; AZ=Tucson, AZ; FL = Jay, FL; KY=Lexington, KY.

6. Sprigs from the original clones of SWI 1113 (64-1011 and 74-1011) are used to establish seed production fields. F1 seed of SWI 1113 is produced by planting sprigs from the original clones of SWI 1113 (64-1011 and 74-1011) alternating parent rows. The parental sprigs are harvested from parent clones nurseries maintained by NexGen Turf Research, Albany, Oregon. F1 seed production of Certified Class seed will be limited to eight years. Additional years of seed production may be approved by the breeder or an individual designated by the Director of Research, NexGen Turf Research, LLC.
7. If this variety is recommended as eligible for certification by official seed certifying agencies, certified class seed likely will be first offered for sale in spring 2017. PVP will not be sought.

Date this application was submitted: Nov 18, 2016

Date recommended by the VRB: Mar 22, 2017



Grass

SWI 1130 (Exp)

1. Variety name: _____ Kind: Bermudagrass
 Genus: Cynodon Species: dactylon
 Experimental designation (s): SWI 1130
 Date submitted: 18 November 2016
2. SWI 1130 traces its parentage to two vegetative parents: 1) collection from Casa Grande, AZ; and 2) selection out of the cultivar Princess 77 for seed head number. F1 seed of SWI 1130 is produced by planting sprigs from the original clones (CG-2 and 97-25) of SWI 1130. Breeder seed of SWI 1130 was first produced in 2004.
3. The primary use for SWI 1130 Bermudagrass will be for turf. SWI 1130 has been trialed and shown good adaptation in AZ.

4. Growth & Morphology Traits	Heading Date Maricopa, AZ		Mature Plant Height (cm) Maricopa, AZ		Flag Leaf Height (cm) Maricopa, AZ	
	2015	2016	2015	2016	2015	2016
	SWI 1130	8-May	16-May	19.5	16.9	16.9
Princess 77	8-May	20-May	17.4	16.3	14.8	13.1
NuMex SAHARA	28-Apr	9-May	35.9	26.9	30.8	22.1
Common	26-Apr	8-May	33.4	27.1	29.1	22.5
LSD (.05)	2	3	2.2	2.4	2.2	2.4
Variance	6	6	9.4	11.8	10.8	14.6

Data collected from: Spaced single plants Plants in rows/solid seeding

Variants to be expected and frequency: <1% plants with a higher plant height, reaching 38 cm.

5. Turf Use	Turf Quality		Cover		Genetic Color		Density	
	(1-9)		(1-9)		(1-9)		(1-9)	
	Maricopa, AZ		Maricopa, AZ		Maricopa, AZ		Maricopa, AZ	
	2012	2013	2012	2013	2012	2013	2012	2013
SWI 1130	6.1	5.7	8.9	8.2	6.9	5.6	3.8	3.5
Princess 77	5.4	5.3	8.8	8.0	6.1	4.7	3.4	3.9
NuMex SAHARA	4.6	4.6	8.1	7.2	5.1	4.7	3.5	3.3
Panama	4.7	4.9	8.6	7.6	4.8	4.7	3.7	3.6
Mohawk	4.8	4.7	5.4	7.7	5.2	4.6	3.7	3.4
LSD (.05)	0.3	0.4	0.2	0.5	0.4	0.4	0.3	0.4
CV	3.7	4.9	2.0	4.6	4.6	5.8	5.8	7.2

●Scale used to report traits (1-9) 9=best.

6. Sprigs from the original clones of SWI 1130 (CG-2 and 97-25) are used to establish seed production fields. F1 seed of SWI 1130 is produced by planting sprigs from the original clones of SWI 1130 (CG-2 and 97-25) in alternating parent rows. The parental sprigs are harvested from parent clones nurseries maintained by NexGen Turf Research, Albany, Oregon. F1 seed production of Certified Class seed will be limited to eight years. Additional years of seed production may be approved by the breeder or an individual designated by the Director of Research, NexGen Turf Research, LLC.
7. If this variety is recommended as eligible for certification by official seed certifying agencies, certified class seed likely will be first offered for sale in spring 2017. PVP will not be sought.

Date this application was submitted: Nov 18, 2016

Date recommended by the VRB: Mar 8, 2017



Grass

Expedite CL 307 (Exp)

1. Variety name: Expedite Kind: Perennial ryegrass
 Genus: Lolium Species: Perenne
 Experimental designation (s): CL 307
 Date submitted: January 7, 2016

2. Expedite (CL 307) perennial ryegrass (*Lolium perenne* L.) is a turf-type perennial ryegrass selected from the maternal progenies of 7 parental lines. Expedite was selected for upright growth habit, medium maturity, high seed yield, medium dark green color and tolerance to gray leaf spot (caused by *Pyricularia grisea*), brown patch (caused by *Rhizoctonia solani* Kuhn) and stem rust (caused by *Puccinia graminis*) diseases.

In the late fall of 2009, a spaced-plant nursery was established at the Plant Biology Research and Extension farm of Rutgers University, Freehold, NJ consisting of 720 plants. The plants were intercrossed from maternal clones selected from progeny planted in the 2009 perennial ryegrass test at the Plant Biology Research and Extension farm of Rutgers University, Freehold, NJ (planted in the summer of 2009) that had suffered from gray leaf spot in the fall of 2009. Seven clones with uniform upright growth habit and medium maturity were vegetatively replicated and split into 48 plants. These 336 plants were planted in a randomized complete block design with six replicates and eight clones per replication.

In the spring of 2010, seed was harvested from all 7 clones for a total of 336 plants. This harvested seed was pronounced the first Breeder seed of Expedite (CL 307).

3. EXPEDITE has been developed for use as a turfgrass and was tested in St. Paul, Oregon during the years of 2015 and 2016.

4. Growth & Morphology Traits	Heading Date/Calendar St. Paul, OR		Plant Height cm St. Paul, OR		Panicle Length cm St. Paul, OR	
	2015	2016	2015	2016	2015	2016
	Expedite	May 22	May 19	48.2	64.5	14.2
Greenville	May 19	May 14	55.3	73.2	15.1	23.1
Playfast	May 11	May 10	67.4	78.5	18.2	18.6
Linn	May 8	May 5	68.9	84.3	18.7	25.9
LSD (.05)	2.2	3.3	4.3	3.1	2.7	1.3
S.E	1.1	1.6	2.2	1.6	1.9	0.7

Data collected from: Spaced single plants XX Plants in rows/solid seeding _____

Variants to be expected and frequency: None observed, Less than 1% possible

5. Turf Use	Turf Quality		Genetic Color		Establishment		Density	
	St. Paul, OR		St. Paul, OR		St. Paul, OR		St. Paul, OR	
	2015	2016	2015	2016	2015	2016	2015	2016
Expedite	6.7	7.0	6.7	6.3	6.3	5.7	7.3	6.7
Greenville	6.4	6.7	7.0	5.7	7.3	6.3	6.7	5.7
Playfast	6.1	6.8	6.3	6.3	6.6	8.3	5.5	6.7
Pinnacle	5.1	4	4.0	3.7	6.0	6.3	4.7	4.7
Linn	4.6	3.7	3.0	2	6.7	7	4.0	2.7
LSD (.05)	3.1	0.8	1.1	1.02	1.2	1.3	0.8	1.2
S.E	1.6	0.4	0.5	0.5	0.6	0.6	0.4	0.6

•Scale used to report traits (if appropriate):1-9, 9=best, darkest, finest, most dense

6. Breeder seed of Expedite was first produced in 2010. Breeder seed is being maintained in frozen storage by Novel AG, Inc. in St. Paul, Oregon. Foundation stands may only be established from breeder seed. Registered stands may be established from breeder or foundation seed. Certified stands may be established from breeder, foundation, or registered seed. Foundation, registered and certified stands will be limited to 4 years of seed production. Additional years of seed production may be approved by Novel AG, Inc.

7. If Expedite is accepted by AOSCA, Certified seed will first be offered for sale spring of 2017. Application for PVP will be made.

Date this application was submitted: Jan 9, 2017

Date recommended by the VRB: May 2, 2017



Grass

Gladiator TH456 (Exp)

1. **Variety name:** Gladiator Kind: Hard fescue
Genus: Festuca Species: trachyphylla
Experimental designation (s): TH456
Date submitted: January 8, 2017

2. Gladiator (TH456) hard fescue (*Festuca trachyphylla* Tracey) is an advanced generation synthetic cultivar selected from 12 maternal lines. TH456 was developed for improved seed yield and turf performance, dark bright green color, leafy, upright growth habit, freedom from disease and medium maturity. Approximately 90 percent of the parental germplasm trace to plants used in a cross between A85-STE x CV. STE was an endophyte source that underwent evaluation at the New Jersey Agricultural Experiment Station since 1978 and was the endophyte source used to develop Reliant hard fescue. CV is a completely different source than Reliant and traces to selections first made and cycled in the 1980's by Dr. Reed Funk and came from European germplasm sources. These were evaluated and eventually cross pollinated with A85-STE to combine improved heat and drought performance (from C) with a source of endophyte (A85-STE). Gladiator is (at the most) 45% related to Reliant (and only maternally). The other 45% traces to CV. Ten percent traces to plants related to 'Waldina' hard fescue.
3. Gladiator has been developed for use as a turfgrass and was tested in locations reported in the NTEP Turf Trial established in 2014. The NTEP reports participation of 20 locations in North America.

4. Growth & Morphology Traits	Heading Date/Calendar St. Paul, OR		Plant Height cm St. Paul, OR		Panicle Length cm St. Paul, OR	
	2015	2016	2015	2016	2015	2016
	Gladiator	May 10	May 14	50.2	62.5	7.3
Resolute	May 11	May 13	60.3	73.1	9.7	8.2
SR3000	May 9	May 10	76.4	69.7	8.8	8.6
Spartan	May 3	May 8	72.8	88.1	8.4	9.6
Aurora	May 10	May 12	76.	78.1	8.1	8.9
LSD (.05)	3	2	2.9	2.2	0.9	0.9
S.E.	1.4	1.0	1.5	1.1	.47	.45

Data collected from: Spaced single plants XX Plants in rows/solid seeding _____

Variants to be expected and frequency: None observed. May occur at less than 1% as taller or lighter green.

5. Turf Use	Turf Quality		Genetic Turf Color		Dollar Spot Ratings		Spring Density	
	2015 NTEP		2015 NTEP		2015 NTEP		2015 NTEP	
	NJI	MNI	NJI	MNI	NCI	MNI	NCI	NDI
Gladiator	5	6.5	7.0	6.0	8.3	7.7	7.0	5.7
Beacon	5.7	7	5.3	5.7	8.3	8.3	5.7	5.3
Resolute	5.2	7.3	8.7	6.7	8.3	8.0	6.3	6
Minimus	6.1	7	6.7	5.7	8.7	7.3	7.3	5
Sword	4.4	6.5	7.3	6.3	8.3	8.0	5.7	4.7
LSD (.05)	0.8	0.8	1.2	1.3	1.1	1.2	0.9	0.8
C.V.	9.9	7.7	10.3	14	7.9	9.1	9.2	9.8

•Scale used to report traits (if appropriate): 1-9, 9= Best

6. Breeder seed of Gladiator was first produced in 2014. Breeder seed is being maintained in frozen storage by Novel AG, Inc. in St. Paul, Oregon. Foundation stands may only be established from breeder seed. Registered stands may be established from breeder or foundation seed. Certified stands may be established from breeder, foundation, or registered seed. Foundation, registered and certified stands will be limited to 4 years of seed production. Additional years of seed production may be approved by Novel AG, Inc.
7. If Gladiator is accepted by AOSCA, Certified seed will first be offered for sale spring of 2017. Application for PVP will be made.

Date this application was submitted: Jan 9, 2017

Date recommended by the VRB: Aug 3, 2017



Grass

Greenville 4 GV4 (Exp)

- Variety name: Greenville 4 Kind: Perennial ryegrass
 Genus: Lolium Species: perenne
 Experimental designation (s): GV4
 Date submitted: January 7, 2016
- Greenville 4 was developed from Greenville (35%), Playfast (35%), Slugger (10%) Prospert 2 (10%) and Confetti 2 (10%). Plants were selected to improve genetic color, freedom from seasonal disease and distress, high floret appearance/head, and a uniform medium plant height.
- Greenville 4 has been developed for use as a turfgrass and was tested in St. Paul, Oregon during the years of 2015 and 2016.

4. Growth & Morphology Traits	Heading Date/Calendar St. Paul, OR		Plant Height cm St. Paul, OR		Panicle Length cm St. Paul, OR	
	2015	2016	2015	2016	2015	2016
	Greenville 4	May 14	May 13	72.5	86.7	17.4
Greenville	May 19	May 14	55.3	73.2	15.1	23.1
Playfast	May 11	May 10	67.4	78.5	18.2	18.6
Linn	May 8	May 5	68.9	84.3	18.7	25.9
LSD (.05)	2.2	3.3	4.3	3.1	2.7	1.3
S.E	1.1	1.6	2.2	1.6	1.9	0.7

Data collected from: Spaced single plants XX Plants in rows/solid seeding _____

Variants to be expected and frequency: Taller, wider bladed and/or lighter green, frequency less than 3%

5. Turf Use	Turf Quality		Genetic Color		Establishment		Density	
	St. Paul, OR		St. Paul, OR		St. Paul, OR		St. Paul, OR	
	2015	2016	2015	2016	2015	2016	2015	2016
Greenville 4	6.3	7	6.7	6.3	7.3	8.3	5.5	6.3
Greenville	6.4	6.7	7.0	5.7	7.3	6.0	6.7	5.7
Playfast	6.1	6.8	6.3	6.3	6.6	8.3	5.5	6.7
Pinnacle	5.1	4	4.0	3.7	6.0	6.3	4.7	4.7
Linn	4.6	3.7	3.0	2	6.3	6.7	4.0	2.7
LSD (.05)	3.1	0.8	1.1	1.02	1.2	1.3	0.8	1.2
S.E	1.6	0.4	0.5	0.5	0.6	0.6	0.4	0.6

•Scale used to report traits (if appropriate):1-9, 9=best, darkest, finest, most dense

- Breeder seed of Greenville 4 was first produced in 2014. Breeder seed is being maintained in frozen storage by Novel AG, Inc. in St. Paul, Oregon. Foundation stands may only be established from breeder seed. Registered stands may be established from breeder or foundation seed. Certified stands may be established from breeder, foundation, or registered seed. Foundation, registered and certified stands will be limited to 4 years of seed production. Additional years of seed production may be approved by Novel AG, Inc.
- If Greenville 4 is accepted by AOSCA, Certified seed will first be offered for sale spring of 2017. Application for PVP will not be made.

Date this application was submitted: Jan 9, 2017

Date recommended by the VRB: Mar 8, 2017



Grass

GTO

MET2 (Exp)

1. **Variety name:** GTO Kind: Tall Fescue
Genus: Festuca **Species:** arundinacea
Experimental designation (s): MET2
Date submitted: January 4, 2017

2. GTO tall fescue (*Festuca arundinacea* Schreb.) is a medium low-growing, dark green, medium-fine-leaved, turf-type tall fescue selected from the maternal progenies of 20 clones. GTO traces to five different maternal sources within the New Jersey Agricultural Experiment Station germplasm pool. The most promising plants identified during many cycles of recurrent selection and progress was apparent in producing lower-growing, darker green, plants with improved performance scores. In the spring of 2011, forty plants exhibiting medium-early maturity, dense semi-dwarf growth habit and bright green color were selected from this nursery and moved to an isolated crossing block. Twenty of the plants with excellent floret fertility were harvested from this crossing block. Seed harvested from each of these 20 lines were sent to Novel Ag in the summer of 2011. A final nursery established in 2011 was allowed to intercross and was harvested in 2012 as the breeder seed of GTO (MET2) tall fescue.
3. GTO has been developed for use as a turfgrass and currently being tested in 27 locations in North America in the National Turf Evaluation Program.

4. Growth & Morphology Traits	Heading Date/Calendar St. Paul, OR		Plant Height cm St. Paul, OR		Panicle Length cm St. Paul, OR	
	2014	2015	2014	2015	2014	2015
	GTO	May 15	May 12	65.1	95.7	12.4
KY31	May 8	May 2	83.2	144	17.5	22.8
Rebel 2	May 15	May 6	68	85	14.0	18.5
Silverado	May 17	May 15	63.8	79.2	13.6	18.5
LSD (.05)	3.2	3.6	5.5	4.2	1.8	2.1
S.E	1.6	1.8	2.7	2.1	0.9	1.1

Data collected from: Spaced single plants XX Plants in rows/solid seeding _____

Variants to be expected and frequency: Taller, wider bladed and/or lighter green, frequency less than 2%

5. Turf Use 2012 NTEP PLANTING Location	Turf Quality		Genetic Color		Leaf Texture		Density	
	NTEP 2015 Transition Zone Data		NTEP 2015 GENETIC COLOR REPORT		NTEP 2015 LT DATA REPORT		NTEP 2015 SUMMER DENSITY REPORT	
	MD1	VA1	NC1	NJ1	NC1	OK1	CA3	OK1
GTO	6.6	6.8	7.7	6.0	7.0	5.7	6.7	5.7
Falcon V	6.3	6.2	8.0	4.3	7.0	5.3	6.7	5.7
Falcon IV	5.2	6.1	8.0	5.3	7.0	5.3	6.3	5.0
KY31	2.8	5.5	4.0	1.0	5.0	4.0	3.0	3.0
LSD (.05)	0.6	1.0	0.5	1.5	0.6	0.8	1.2	1.4
C.V	6.8	9.2	4.3	16.1	5.6	8.5	11.6	15.9

•Scale used to report traits (if appropriate):1-9, 9=best, darkest, finest, most dense

6. Breeder seed of GTO was first produced in 2012. Breeder seed of GTO is being maintained in frozen storage by Novel AG, Inc. in St. Paul, Oregon. Foundation stands may only be established from breeder seed. Registered stands may be established from breeder or foundation seed. Certified stands may be established from breeder, foundation, or registered seed. Foundation, registered and certified stands will be limited to 4 years of seed production. Additional years of seed production may be approved by Novel AG, Inc.
7. If GTO is accepted by for Certification, Certified seed will first be offered for sale spring of 2017. PVP will be applied for.

Date this application was submitted: Jan 9, 2017

Date recommended by the VRB: Mar 28, 2017



Grass

Resolute 7H7 (Exp)

1. Variety name: Resolute Kind: Hard fescue
 Genus: Festuca Species: trachyphylla
 Experimental designation (s): 7H7
 Date submitted: January 8, 2017

2. Resolute (7H7) hard fescue (*Festuca brevipila* Tracey) is cultivar selected from 25 maternal lines. Resolute was developed to improve seed yield and turf performance, dark bright green color, leafy, short stature but broad-based growth habit, freedom from disease and medium-late maturity.

Approximately 50 percent of the parental germplasm trace to plants used in a cross between A85-STE x CV. STE was an endophyte source that underwent evaluation at the New Jersey Agricultural Experiment Station since 1978 and became Reliant hard fescue. Twenty-nine percent trace to plants collected in Europe in 2002 and 2003. Eight percent trace to a clone selected from the 1987 fine fescue trial planted in North Brunswick, NJ. Five percent trace to plants related to ‘Scaldis’ hard fescue. Four percent trace to plants related to ‘Waldina’ hard fescue. The remaining four percent trace to plants selected from the border of the 1976 fine fescue trial at North Brunswick, NJ. Breeder seed was declared in 2014.

3. Resolute has been developed for use as a turfgrass and was tested in locations reported in the NTEP Turf Trial established in 2014. The NTEP reports participation of 20 locations in North America.

4. Growth & Morphology Traits	Heading Date/Calendar St. Paul, OR		Plant Height cm St. Paul, OR		Panicle Length cm St. Paul, OR	
	2015	2016	2015	2016	2015	2016
	Resolute	May 11	May 13	60.3	73.1	9.7
SR3000	May 9	May 10	76.4	69.7	8.8	8.6
Spartan	May 3	May 8	72.8	88.1	8.4	9.6
Aurora	May 10	May 12	76.	78.1	8.1	8.9
LSD (.05)	3	2	2.9	2.2	0.9	0.9
S.E.	1.4	1.0	1.5	1.1	.47	.45

Data collected from: Spaced single plants XX Plants in rows/solid seeding _____

Variants to be expected and frequency: None observed. May occur at less than 1% as taller or lighter green.

5. Turf Use 2015 NTEP REPORT Location:	Turf Quality		Genetic Turf Color		Dollar Spot Ratings		Spring Density	
	2015 NTEP		2015 NTEP		2015 NTEP		2015 NTEP	
	NJ1	MN1	NJ1	MN1	NC1	MN1	NC1	ND1
Resolute	5.2	7.3	8.7	6.7	8.3	8.0	6.3	6
Gladiator	5	6.5	7.0	6.0	8.3	7.7	7.0	5.7
Beacon	5.7	7	5.3	5.7	8.3	8.3	5.7	5.3
Minimus	6.1	7	6.7	5.7	8.7	7.3	7.3	5
Sword	4.4	6.5	7.3	6.3	8.3	8.0	5.7	4.7
LSD (.05)	0.8	0.8	1.2	1.3	1.1	1.2	0.9	0.8
C.V.	9.9	7.7	10.3	14	7.9	9.1	9.2	9.8

•Scale used to report traits (if appropriate):1-9, 9= Best

6. Breeder seed of Resolute was first produced in 2014. Breeder seed is being maintained in frozen storage by Novel AG, Inc. in St. Paul, Oregon. Foundation stands may only be established from breeder seed. Registered stands may be established from breeder or foundation seed. Certified stands may be established from breeder, foundation, or registered seed. Foundation, registered and certified stands will be limited to 4 years of seed production. Additional years of seed production may be approved by Novel AG, Inc.

7. If Resolute is accepted by AOSCA, Certified seed will first be offered for sale spring of 2017. Application for PVP will be made.

Date this application was submitted: Jan 9, 2017

Date recommended by the VRB: Mar 28, 2017



Grass

Technique RZ2 (Exp)

1. Variety name: Technique Kind: Tall Fescue
 Genus: Festuca Species: arundinacea
 Experimental designation (s): RZ2
 Date submitted: January 4, 2017

2. TECHNIQUE tall fescue (*Festuca arundinacea* Schreb.) is a medium low-growing, dark green, medium-fine-leaved, turf-type tall fescue selected from the maternal progenies of 17 parental lines. TECHNIQUE was selected to improve shoot density, dark-green color, semi-dwarf growth habit, medium early maturity, and brown patch tolerance.

The 17 parental lines of TECHNIQUE trace to six different maternal sources present within the New Jersey Agricultural Experiment Station germplasm pool. All of these lines underwent many cycles of selection for improved characteristics. The most promising plants were identified in spaced-plant nurseries, mowed clonal evaluation tests, and single-plant progeny trails. In the spring of 2010, 57 plants, were selected and moved to an isolated crossing block. Seed was harvested from these plants and planted into turf plots in the fall of 2010. Tillers from the 17 best performing lines with good combining ability were sent to Novel Ag for further evaluation in the summer of 2011. All of these tillers were established to create a 3,400-plant nursery in the fall of 2011. This nursery was rogued to increase uniformity and seed was harvested from the 3,230 remaining plants and was combined in 2012 as the breeder seed of RZ2/Technique tall fescue.

3. Technique has been developed for use as a turfgrass and is under evaluation in the National Turf Evaluation Program which lists 27 testing locations in North America.

4. Growth & Morphology	Heading Date/Calendar		Plant Height cm		Panicle Length cm	
	St. Paul, OR		St. Paul, OR		St. Paul, OR	
	2014	2015	2014	2015	2014	2015
Technique	May 17	May 14	59.9	105.0	11.5	20.0
KY31	May 8	May 2	83.2	144.0	17.5	22.8
Rebel 2	May 15	May 6	68.0	85.0	14.0	18.5
Silverado	May 17	May 15	63.8	79.2	13.6	18.5
LSD (.05)	3.2	3.6	5.5	4.2	1.8	2.1
S.E	1.6	1.8	2.7	2.1	0.9	1.1

Data collected from: Spaced single plants Plants in rows/solid seeding
 Variants to be expected and frequency: Taller, wider bladed and/or lighter green, frequency less than 2%

5. Turf Use	Turf Quality		Genetic Color		Leaf Texture		Density	
	NTEP 2015 Transition Zone Data		NTEP 2015 GENETIC COLOR REPORT		NTEP 2015 LT DATA REPORT		NTEP 2015 SUMMER DENSITY REPORT	
	MD1	VA1	NC1	NJ1	NC1	OK1	CA3	OK1
Technique	7.0	6.8	7.3	4.0	7.7	6.0	7.0	5.7
GTO	6.6	6.8	7.7	6.0	7.0	5.7	6.7	5.7
Falcon IV	5.2	6.1	8.0	5.3	7.0	5.3	6.3	5.0
KY31	2.8	5.5	4.0	1.0	5.0	4.0	3.0	3.0
LSD (.05)	0.6	1.0	0.5	1.5	0.6	0.8	1.2	1.4
C.V	6.8	9.2	4.3	16.1	5.6	8.5	11.6	15.9

•Scale used to report traits (if appropriate):1-9, 9=best, darkest, finest, most dense

6. Breeder seed of Technique was first produced in 2012. Breeder seed of Technique is being maintained in frozen storage by Novel AG, Inc. in St. Paul, Oregon. Foundation stands may only be established from breeder seed. Registered stands may be established from breeder or foundation seed. Certified stands may be established from breeder, foundation, or registered seed. Foundation, registered and certified stands will be limited to 4 years of seed production. Additional years of seed production may be approved by Novel AG, Inc.

7. If Technique is accepted for Certification, Certified seed will first be offered for sale spring of 2017. PVP will be applied for.

Date this application was submitted: Jan 9, 2017

Date recommended by the VRB: Mar 28, 2017



Grass

PPG-TAR 108 (Exp)

1. Variety name: N/A Kind: Annual ryegrass
 Genus: Lolium Species: multiflorum
 Experimental designation (s): PPG-TAR 108
 Date submitted: December 15, 2016

2. The germplasm used to develop PPG-TAR 108 turf-type annual ryegrass traces 35% to material related to the variety Panterra and 65% to material related to the variety Axcella 2. Selection criteria included shorter plants, darker green color, and resistance to stem rust. Breeder seed was first produced in 2013.

3. PPG-TAR 108 has been tested for turf use under turf management in western Oregon. The data indicate that PPG-TAR 108 is suitable for turf use in this area.

4. Growth & Morphology Traits	Heading Date (Day of Year)		Plant Height (cm)		Flag Leaf Height (cm)	
	Albany, OR		Albany, OR		Albany, OR	
	2015	2016	2015	2016	2015	2016
PPG-TAR 108	144.37	140.68	86.86	86.32	48.27	51.77
Gulf	141.17	130.90	133.85	144.50	79.56	96.06
Panterra	141.86	136.90	107.22	103.38	60.67	65.17
Axcella 2	142.18	136.37	99.22	103.76	54.60	63.87
LSD @ 0.05	1.65	2.46	7.99	5.33	5.98	5.30
CV (%)	0.68	1.08	4.83	3.14	6.22	5.10

Data collected from: Spaced single plants Plants in rows/solid seeding

Variants to be expected and frequency: A small percentage (<0.5%) of the plants are taller, coarser bladed and lighter green than the rest of the population.

5. Turf Use	Turf Quality Albany, OR		Winter Growth Albany, OR		Leaf Spot Albany, OR		Genetic Color Albany, OR	
	2014	2015	2014	2015	2014	2015	2014	2015
	PPG-TAR 108	5.3	5.9	6.0	5.5	6.0	6.0	6.0
Attitude	5.0	5.8	8.5	5.5	4.5	6.0	5.5	6.5
Breakout	4.3	4.9	5.0	4.5	4.5	6.0	4.0	5.5
Gulf	1.8	1.2	1.0	1.0	3.5	5.0	1.0	1.0
LSD @ 0.05	1.1	0.6	1.9	1.2	1.5	1.3	1.2	1.6
CV (%)	13.1	5.7	18.7	11.1	17.3	11.4	13.6	14.5

●Scale used to report traits: 1-9; 9= high quality, very little growth, no disease, dark green color.

6. A supply of Breeder seed is maintained under controlled conditions by Peak Plant Genetics, Albany, Oregon. Breeder seed will be used to establish Foundation and/or Registered seed. Foundation and/or Registered seed will be used to establish Certified seed. Foundation, Registered, and Certified class fields will be limited to one harvest. Additional years of seed production may be approved by the breeder or an individual designated by the breeder.

7. PPG-TAR 108 certified seed will first be available in the spring of 2017. Plant Variety Protection has not been applied for at this time.

Date this application was submitted: Jan 9, 2017

Date recommended by the VRB: Apr 10, 2017



Grass

Gamechanger PPG-Transrye 107 (Exp)

- Variety name: Gamechanger Kind: Annual ryegrass
 Genus: Lolium Species: multiflorum
 Experimental designation (s): PPG-Transrye 107
 Date submitted: December 15, 2016
- The germplasm used to develop Gamechanger annual ryegrass traces 65% to selections from the variety Axcella 2 and 35% to selections from the variety Harbour. Selection criteria included shorter plants, darker green color, finer leaf texture, and resistance to leaf spot. Breeder seed was first produced in 2011
- Gamechanger has been tested for turf use under turf management in western Oregon. The data indicate that Gamechanger is suitable for turf use in this area.

4. Growth & Morphology Traits	Heading Date (Day of Year)		Plant Height (cm)		Flag Leaf Height (cm)	
	Albany, OR		Albany, OR		Albany, OR	
	2014	2015	2014	2015	2014	2015
Gamechanger	153.65	145.95	61.73	87.27	28.59	49.60
Axcella 2	150.51	142.18	76.53	99.22	34.81	54.60
Panterra	145.65	141.86	89.13	107.22	46.48	60.67
Gulf	142.91	141.17	99.94	133.85	52.20	79.56
LSD @ 0.05	2.02	1.65	8.00	7.99	4.76	5.98
CV (%)	0.74	0.68	5.79	4.83	7.02	6.22

Data collected from: Spaced single plants Plants in rows/solid seeding

Variants to be expected and frequency: A small percentage (<0.5%) of the plants are taller, coarser bladed and lighter green than the rest of the population.

5. Turf Use	Turf Quality Albany, OR		Winter Growth Albany, OR		Leaf Spot Albany, OR		Genetic Color Albany, OR	
	2014	2015	2014	2015	2014	2015	2014	2015
Gamechanger	5.3	5.7	6.0	6.0	5.5	6.5	5.0	6.0
Attitude	5.0	5.8	8.5	5.5	4.5	6.0	5.5	6.5
Breakout	4.3	4.9	5.0	4.5	4.5	6.0	4.0	5.5
Gulf	1.8	1.2	1.0	1.0	3.5	5.0	1.0	1.0
LSD @ 0.05	1.1	0.6	1.9	1.2	1.5	1.3	1.2	1.6
CV (%)	13.1	5.7	18.7	11.1	17.3	11.4	13.6	14.5

•Scale used to report traits: 1-9; 9= high quality, very little growth, no disease, dark green color.

- A supply of Breeder seed is maintained under controlled conditions by Peak Plant Genetics, Albany, Oregon. Breeder seed will be used to establish Foundation and/or Registered seed. Foundation and/or Registered seed will be used to establish Certified seed. Foundation, Registered, and Certified class fields will be limited to one harvest. Additional years of seed production may be approved by the breeder or an individual designated by the breeder.
- Gamechanger certified seed will first be available in the spring of 2017. Plant Variety Protection has not been applied for at this time.

Date this application was submitted: Jan 9, 2017

Date recommended by the VRB: Apr 10, 2017



Grass

Madrone PPG-TAR 109 (Exp)

1. Variety name: Madrone Kind: Annual ryegrass
 Genus: Lolium Species: multiflorum
 Experimental designation (s): PPG-TAR 109
 Date submitted: December 15, 2016

2. The germplasm used to develop Madrone turf-type annual ryegrass traces 25% to material related to the variety Panterra and 75% to material related to the variety Axcella 2. Selection criteria included shorter plants, darker green color, resistance to stem rust and medium-early maturity. Breeder seed was first produced in 2013.
3. Madrone has been tested for turf use under turf management in western Oregon. The data indicate that Madrone is suitable for turf use in this area.

4. Growth & Morphology Traits	Heading Date (Day of Year)		Plant Height (cm)		Flag Leaf Height (cm)	
	Albany, OR		Albany, OR		Albany, OR	
	2015	2016	2015	2016	2015	2016
Madrone	142.38	137.88	80.33	85.88	43.27	49.85
Gulf	141.17	130.90	133.85	144.50	79.56	96.06
Panterra	141.86	136.90	107.22	103.38	60.67	65.17
Axcella 2	142.18	136.37	99.22	103.76	54.60	63.87
LSD @ 0.05	1.65	2.46	7.99	5.33	5.98	5.30
CV (%)	0.68	1.08	4.83	3.14	6.22	5.10

Data collected from: Spaced single plants Plants in rows/solid seeding

Variants to be expected and frequency: A small percentage (<0.5%) of the plants are taller, coarser bladed and lighter green than the rest of the population.

5. Turf Use	Turf Quality Albany, OR		Winter Growth Albany, OR		Leaf Spot Albany, OR		Genetic Color Albany, OR	
	2014	2015	2014	2015	2014	2015	2014	2015
Madrone	6.0	5.1	6.5	5.5	5.5	5.5	5.5	6.0
Attitude	5.0	5.8	8.5	5.5	4.5	6.0	5.5	6.5
Breakout	4.3	4.9	5.0	4.5	4.5	6.0	4.0	5.5
Gulf	1.8	1.2	1.0	1.0	3.5	5.0	1.0	1.0
LSD @ 0.05	1.1	0.6	1.9	1.2	1.5	1.3	1.2	1.6
CV (%)	13.1	5.7	18.7	11.1	17.3	11.4	13.6	14.5

•Scale used to report traits: 1-9; 9= high quality, very little growth, no disease, dark green color.

6. A supply of Breeder seed is maintained under controlled conditions by Peak Plant Genetics, Albany, Oregon. Breeder seed will be used to establish Foundation and/or Registered seed. Foundation and/or Registered seed will be used to establish Certified seed. Foundation, Registered, and Certified class fields will be limited to one harvest. Additional years of seed production may be approved by the breeder or an individual designated by the breeder.
7. Madrone certified seed will first be available in the spring of 2017. Plant Variety Protection has not been applied for at this time.

Date this application was submitted: Jan 9, 2017

Date recommended by the VRB: May 2, 2017



Grass
Rogue
PPG-TIR 109 (Exp)

1. Variety name: Rogue Kind: Intermediate Ryegrass
 Genus: Lolium Species: hybridum
 Experimental designation (s): PPG-TIR 109
 Date submitted: December 15, 2016

2. The germplasm used to develop Rogue turf-type intermediate ryegrass traces 100% to the variety Solstice II. Selection criteria included a high number of reproductive tillers, shorter mature plants, darker green color, and finer leaf texture. Breeder seed was first produced in 2013.
3. Rogue has been tested for turf use under turf management in western Oregon. The data indicate that Rogue is suitable for turf use in this area.

4. Growth & Morphology Traits	Heading Date (Day of Year) Albany, OR		Plant Height (cm) Albany, OR		Flag Leaf Height (cm) Albany, OR	
	2015	2016	2015	2016	2015	2016
	Rogue	145.50	138.80	84.23	80.62	46.26
Solstice II	144.77	138.49	104.67	107.64	63.78	64.50
TransAm	145.60	140.01	103.63	109.88	65.25	67.42
Midway	146.18	137.68	126.51	129.30	82.93	86.28
LSD @ 0.05	1.65	2.46	7.99	5.33	5.98	5.30
CV (%)	0.68	1.08	4.83	3.14	6.22	5.10

Data collected from: Spaced single plants Plants in rows/solid seeding

Variants to be expected and frequency: A small percentage (<0.5%) of the plants are taller, coarser bladed and lighter green than the rest of the population.

5. Turf Use	Turf Quality Albany, OR		Winter Growth Albany, OR		Leaf Spot Albany, OR		Genetic Color Albany, OR	
	2014	2015	March 2014	Feb. 2015	2014	2015	2014	2015
Rogue	6.3	6.4	8.0	7.5	5.0	6.0	7.0	6.5
Solstice II	3.8	4.5	4.0	4.5	4.0	6.0	3.0	4.0
TransAm	3.2	3.5	3.0	4.5	3.5	5.5	3.0	2.0
Midway	1.7	2.1	2.0	3.0	3.0	4.5	1.5	1.0
LSD @ 0.05	1.1	0.6	1.9	1.2	1.5	1.3	1.2	1.6
CV (%)	13.1	5.7	18.7	11.1	17.3	11.4	13.6	14.5

- Scale used to report traits: 1-9; 9= high quality, very little growth, no disease, dark green color.
6. A supply of Breeder seed is maintained under controlled conditions by Peak Plant Genetics, Albany, Oregon. Breeder seed will be used to establish Foundation and/or Registered seed. Foundation and/or Registered seed will be used to establish Certified seed. Foundation, Registered, and Certified class fields will be limited to one harvest. Additional years of seed production may be approved by the breeder or an individual designated by the breeder.
7. Rogue certified seed will first be available in the spring of 2017. Plant Variety Protection has not been applied for at this time.

Date this application was submitted: Jan 9, 2017

Date recommended by the VRB: Mar 8, 2017



Grass

Upstart PPG-TAR 113 (Exp)

- Variety name: Upstart Kind: Annual ryegrass
Genus: Lolium Species: multiflorum
Experimental designation (s): PPG-TAR 113
Date submitted: December 15, 2016
- The germplasm used to develop Upstart turf-type annual ryegrass traces maternally 44.5% to Attitude and 55.5% to Breakout. Selection criteria included a high number of reproductive tillers, shorter plants, fine leaf texture, and resistance to stem rust. Breeder seed was first produced in 2014.
- Upstart has been tested for turf use under turf management in western Oregon. The data indicate that Upstart is suitable for turf use in this area.

4. Growth & Morphology Traits	Heading Date (Day of Year)		Plant Height (cm)		Flag Leaf Height (cm)	
	Albany, OR		Albany, OR		Albany, OR	
	2015	2016	2015	2016	2015	2016
Upstart	142.57	139.34	88.73	88.43	49.52	53.11
Gulf	141.17	130.90	133.85	144.50	79.56	96.06
Panterra	141.86	136.90	107.22	103.38	60.67	65.17
Axcella 2	142.18	136.37	99.22	103.76	54.60	63.87
LSD @ 0.05	1.65	2.46	7.99	5.33	5.98	5.30
CV (%)	0.68	1.08	4.83	3.14	6.22	5.10

Data collected from: Spaced single plants Plants in rows/solid seeding

Variants to be expected and frequency: A small percentage (<0.5%) of the plants are taller, coarser bladed and lighter green than the rest of the population.

5. Turf Use	Turf Quality Albany, OR		Winter Growth Albany, OR		Leaf Spot Albany, OR		Genetic Color Albany, OR	
	2015	2016	2015	2016	2015	2016	2015	2016
Upstart	5.8	5.0	5.0	5.5	7.0	4.0	7.0	5.5
Attitude	5.8	4.8	5.5	5.0	6.0	5.5	6.5	5.5
Breakout	4.9	4.3	4.5	4.5	6.0	4.0	5.5	4.5
Gulf	1.2	1.5	1.0	1.0	5.0	1.5	1.0	1.0
LSD @ 0.05	0.6	1.2	1.2	1.5	1.3	1.8	1.6	1.4
CV (%)	5.7	11.1	11.1	13.6	11.4	20.8	14.5	13.5

•Scale used to report traits: 1-9; 9= high quality, very little growth, no disease, dark green color.

- A supply of Breeder seed is maintained under controlled conditions by Peak Plant Genetics, Albany, Oregon. Breeder seed will be used to establish Foundation and/or Registered seed. Foundation and/or Registered seed will be used to establish Certified seed. Foundation, Registered, and Certified class fields will be limited to one harvest. Additional years of seed production may be approved by the breeder or an individual designated by the breeder.
- Upstart certified seed will first be available in the spring of 2017. Plant Variety Protection has not been applied for at this time.

Date this application was submitted: Jan 9, 2017

Date recommended by the VRB: Apr 210, 2017

