No. 201500312

THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

DLF Pickseed USA, Inc. and Rutgers, The State University of New Jersey

Whereas, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

An application requesting a certificate of protection for an alleged distinct variety of sexually reproduced, or tuber propagated plant, the name and description of which are contained in the application and exhibits, a copy of which is hereunto annexed and made a part hereof, and the various requirements of LAW in such cases made and provided have been complied with, and the title thereto is, from the records of the PLANT VARIETY PROTECTION OFFICE, in the applicant(s) indicated in the said copy, and Whereas, upon due examination made, the said applicant(s) is (are) adjudged to be entitled to a certificate of plant variety protection under the LAW.

Now, therefore, this certificate of plant variety protection is to grant unto the said applicant(s) and the successors, heirs or assigns of the said applicant(s) for the term of TWENTY years from the date of this grant, subject to the payment of the required fees and periodic replenishment of viable basic seed of the variety in a public repository as provided by LAW, the right to exclude others from selling the variety, or offering it for sale, or reproducing it, or importing it, or exporting it, or conditioning it for propagation, or stocking it for any of the above purposes, or using it in producing a hybrid or different variety therefrom, to the extent provided by the PLANT VARIETY PROTECTION ACT. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

FESCUE, TALL

'Rowdy'

In Testimony Whereof, *I have hereunto set my hand and caused the seal of the* Plant Variety Protection Office *to be affixed at the* ***City of Washington, D.C.*** *this sixth day of July, in the year* ***two thousand and sixteen.***

Attest:

Commissioner
Plant Variety Protection Office

Secretary of Agriculture

REPRODUCE LOCALLY. *Include form number and date on all reproductions*

Form Approved - OMB No. 0581-0055

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE AND TECHNOLOGY - PLANT VARIETY PROTECTION OFFICE

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE
(Instructions and information collection burden statement on reverse)

The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a) and the Paperwork Reduction Act (PRA) of 1995.

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

1. NAME OF OWNER
DLF Pickseed USA, Inc. & Rutgers, The State University of New Jersey

2. TEMPORARY DESIGNATION OR EXPERIMENTAL NAME
SRX TPC

3. VARIETY NAME
Rowdy

4. ADDRESS *(Street and No., or R.F.D. No., City, State, and ZIP Code, and Country)*
P.O.Box 229 ,175 West H St., Halsey, OR and Cook College, 88 Lipman Dr., New Brunswick, NJ 08901

5. TELEPHONE *(include area code)*
541.929.3703

6. FAX *(include area code)*

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PVPO NUMBER
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FILING DATE
April 28, 2015

7. IF THE OWNER NAMED IS NOT A "PERSON", GIVE FORM OF ORGANIZATION *(corporation, partnership, association, etc.)*
Corporation and Public University

8. IF INCORPORATED, GIVE STATE OF INCORPORATION
Oregon

9. DATE OF INCORPORATION
Sept. 2013

10. NAME AND ADDRESS OF OWNER REPRESENTATIVE(S) TO SERVE IN THIS APPLICATION. *(First person listed will receive all papers)*
Don Floyd
DLF Pickseed USA, Inc.
P.O. Box 229, 175 West H St., Halsey, OR 97348

11. TELEPHONE (Include area code)
541.929.3703

12. FAX (Include area code)

FEES RECD

FILING AND EXAMINATION FEES:
$ 4382.00
DATE 4/28/2015

CERTIFICATION FEE:
$
DATE

13. E-MAIL
dfloyd@dlfna.com

14. CROP KIND *(Common Name)*
Tall fescue

15. GENUS AND SPECIES NAME OF CROP
Festuca arundinacea

16. FAMILY NAME *(Botanical)*
Poaceae

17. IS THE VARIETY A FIRST GENERATION HYBRID?
☐ YES ■ NO

18. DOES THE VARIETY CONTAIN ANY TRANSGENES? (OPTIONAL)
☐ YES ■ NO

IF YES, PLEASE GIVE THE ASSIGNED USDA-APHIS REFERENCE NUMBER FOR THE APPROVED PETITION TO DEREGULATE THE GENETICALLY MODIFIED PLANT FOR COMMERCIALIZATION.

20. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE SOLD ONLY AS A CLASS OF CERTIFIED SEED? *(See Section 83(a) of the Plant Variety Protection Act)*
☐ YES *(If "yes", answer items 21 and 22 below)*
■ NO *(If "no", go to item 23)*
☐ UNDECIDED

19. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED (Follow instructions on reverse)
a. ■ Exhibit A. Origin and Breeding History of the Variety
b. ■ Exhibit B. Statement of Distinctness
c. ■ Exhibit C. Objective Description of Variety
d. ☐ Exhibit D. Additional Description of the Variety *(Optional)*
e. ■ Exhibit E. Statement of the Basis of the Owner's Ownership
f. ■ Filing and Examination Fee ($4,382), make checks payable to "Treasurer of the United States" *(Mail to the Plant Variety Protection Office)* other methods of payment explained in the instructions

21. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF CLASSES?
☐ YES ☐ NO
IF YES, WHICH CLASSES? ☐ FOUNDATION ☐ REGISTERED ☐ CERTIFIED

22. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS?
☐ YES ☐ NO
IF YES, SPECIFY THE NUMBER 1,2,3, etc. FOR EACH CLASS.
___ FOUNDATION ___ REGISTERED ___ CERTIFIED
(If additional explanation is necessary, please use the space indicated on the reverse.)

23. HAS THE VARIETY (INCLUDING ANY HARVESTED MATERIAL) OR A HYBRID PRODUCED FROM THIS VARIETY BEEN SOLD, DISPOSED OF, TRANSFERRED, OR USED IN THE U. S. OR OTHER COUNTRIES?
■ YES ☐ NO
IF YES, YOU MUST PROVIDE THE DATE OF FIRST SALE, DISPOSITION, TRANSFER, OR USE FOR EACH COUNTRY AND THE CIRCUMSTANCES. *(Please use space indicated on reverse.)*

24. IS THE VARIETY OR ANY COMPONENT OF THE VARIETY PROTECTED BY INTELLECTUAL PROPERTY RIGHT *(PLANT BREEDER'S RIGHT OR PATENT)*?
☐ YES ■ NO
IF YES, PLEASE GIVE COUNTRY, DATE OF FILING OR ISSUANCE AND ASSIGNED REFERENCE NUMBER. *(Please use space indicated on reverse.)*

25. The owners declare that a viable sample of basic seed will be furnished directly to an acceptable depository in support of the variety within three months of filing. Seed will be replenished upon request in accordance with such regulations as may be applicable. For a tuber propagated variety or vegetative propagated parent of the variety, a tissue culture or vegetative sample will be deposited in a public repository within three months of the date of the certificate fee request letter. These will be maintained for the duration of the certificate."
The undersigned owner(s) is (are) the owner(s) of this sexually reproduced or tuber propagated plant variety, and believe(s) that the variety is new, distinct, uniform, and stable as required in Section 42, and is entitled to protection under the provisions of Section 42 of the Plant Variety Protection Act. Owner(s) is (are) informed that false representation herein can jeopardize protection and result in penalties.

SIGNATURE OF OWNER		SIGNATURE OF OWNER	
NAME *(Please print or type)*		NAME *(Please print or type)*	
Steve Reid		Don Floyd	
CAPACITY OR TITLE	DATE	CAPACITY OR TITLE	DATE
Research Director	April 10, 2015	Plant Breeder	April 10, 2015

22. CONTINUED FROM FRONT *(Please provide a statement as to the limitation and sequence of generations that may be certified.)*

23. CONTINUED FROM FRONT *(Please provide the date of first sale, disposition, transfer, or use for each country and the circumstances, if the variety (including any harvested material) or a hybrid produced from this variety has been sold, disposed of, transferred, or used in the U.S. or other countries.)*

USED in the USA for trials in September 2012 as part of the 2012 of the 2012 National Tall Fescue Test administered by the National Turfgrass Evaluation Program. No commercial sales as of April 10, 2015.

24. CONTINUED FROM FRONT *(Please give the country, date of filing or issuance, and assigned reference number, if the variety or any component of the variety is protected by intellectual property right (Plant Breeder's Right or Patent).)*

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EXHIBIT A – ORIGIN AND BREEDING HISTORY
** Use additional pages as needed.

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1. Name of Owner	2. Temporary Designation or Experimental Name	3. Variety Name
DLF Pickseed USA, Inc. & Rutgers, The State Universit	SRX TPC	Rowdy

4. Describe the genealogy (back to and including public and commercial varieties, lines, or clones used) and the breeding method(s). **

SRX TPC 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 48 plants. SRX TPC was selected for medium-high shoot density, coarse leaf texture, dark-green color, semi-dwarf upright growth habit, and medium-late maturity.
The 48 parents of SRX TPC trace to eight different maternal sources present within the New Jersey Agricultural Experiment Station germplasm pool. Fifty-two percent trace to plants related to 'Apache' tall fescue. Twenty-seven percent trace to plants collected from an old turf area in Lexington, KY in 1979. Twenty-one percent trace to plants related to 'Coyote' tall fescue.

5. Give the details of subsequent stages of selection and multiplication. **

Year	Detail of Stage	Selection Criteria
2006	A mowed spaced planted nursery was established at Rutgers Univ., Freehold NJ.	Selection conducted for determining plants for best turf quality.
2007-2008	A total of 61 plants were selected from the above mentioned nursery. Seed was harvested from each of the 61 plants, Turf evaluation plots established from seed of the 61 separately harvested plants.	Selection primarily for plants of active summer growth.
2010-2011	Tillers were collected from the 48 best turf plots. A spaced planted nursery was established from progeny of the 48 turf plots.	Selection for good overall turf quality and dark green color.

6. Is the variety uniform? ✓ Yes ____ No

How did you test for uniformity?
Pheotypic observation of single plant progeny of the variety, and the same type of observation of seed stock multiplication of solid seeded rows.

7. Is the variety stable? ✓ Yes ____ No

How did you test for stability? Over how many generations?
Phenotypic observation of two breeder seed increase generations, and similar observation of two generations of seed stock, i.e. experimental foundation/registered multiplications.

8. Are genetic variants observed or expected during reproduction and multiplication? ____ Yes ✓ No

If yes, state how these variants may be identified, their type and frequency.

Origin and Breeding History of SRX TPC Tall Fescue
EXHIBIT A

SRX TPC 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 48 plants. SRX TPC was selected for medium-high shoot density, coarse leaf texture, dark-green color, semi-dwarf upright growth habit, and medium-late maturity.

The 48 parents of SRX TPC trace to eight different maternal sources present within the New Jersey Agricultural Experiment Station germplasm pool. Fifty-two percent trace to plants related to 'Apache' tall fescue. Twenty-seven percent trace to plants collected from an old turf area in Lexington, KY in 1979. Twenty-one percent trace to plants related to 'Coyote' tall fescue.

All of the 48 parents of TPC under went anywhere from 12 to 15 cycles of recurrent selection for improved turf characteristics prior to their selection for SRX TPC tall fescue. The germplasm was included in the pool of genes present at the New Jersey Agricultural Experiment Station. Germplasm was selected from old turfs of the United States in a germplasm collection program initiated in 1962, and used in the development of the first turf-type tall fescue cultivar 'Rebel' tall fescue (Funk et al., 1981). Attractive clones were selected from old turfs in Birmingham, AL; Athens, Atlanta, and Millegeville, GA; Preston, ID; Baltimore, MD; Bayonne, Jersey City, Elizabeth, Princeton, and Cape May, NJ; eastern North Carolina; Philadelphia, PA; Nashville, TN; Lexington, KY; Cincinnati, OH; Dallas, TX; and northern Mississippi. The tall fescue plants selected from old turfs were of unknown origin. All were large patches of turf surviving in stressful environments indicating that they had persisted and developed over a period of many years.

A few hundred attractive, turf-type plants were collected and established in spaced-plant nurseries and/or frequently mowed clonal evaluation trials at Rutgers University. All but a few dozen of the most promising plants were quickly discarded. The best selections were very different from any tall fescue variety in existence at the time of collection. They produced lower-growing turfs with finer leaves, greater density, darker color, and greater tolerance of close mowing.

The most promising plants were identified by their persistence and appearance in old turfs and their performance in spaced-plant nurseries, mowed clonal evaluation tests, and single-plant progeny trails under turf maintenance. Intercrosses of the best performing plants were subjected to varying cycles of phenotypic and genotypic selection depending on their date of collection. New sources of germplasm were added to the breeding program as it became available from the continuing collection program. Each cycle of selection showed continued progress in producing lower-growing, darker green, attractive plants with improved turf performance scores. Selection was also effective in maintaining high seed yields, and good stress tolerance. Substantial progress was made in developing tall fescues with finer leaves, a lower growth profile, increased persistence under close mowing, and increased density.

In the spring of 2006, a mowed spaced-plant nursery was established at the Rutgers Plant Biology Research and Extension Farm in Freehold, NJ containing 24,096 plants selected from the best performing tall fescue plots planted in turf trials established from 2002-2005 at the same farm mentioned above. The next fall (2007) 60 plants with bright active summer performance and coarse leaf blades were moved to an isolated crossing block. The following spring (2008) eight plants were eliminated and nine plants were replaced due to non-uniform maturity with the other plants in the crossing block. Seed from each of these plants were harvested individually and used to plant a turf plot in the fall of 2008.

Forty-eight single plot progeny turf plots from this population were selected and established in a spaced-plant nursery in the spring of 2010 containing 960 plants. The next spring five percent of the nursery was rogued for poor seed yield, non-uniformity, and disease susceptibility. The remaining ninety-five percent of the nursery was harvested for seed. Bulked seed was identified as breeder seed of SRX TPC tall fescue. Forty-five pounds of breeder seed was sent to Pickseed USA, Inc.(PS) in the summer of 2011. In the autumn of 2011 a one tenth acre, direct seeded row planting was established at PS. Additionally a spaced planted nursery comprised of 450 plants of SRX TPC progeny was established at PS. During the spring of 2012 less than one percent of the plants in the direct seeded field were rogued, i.e. considered off-types for the variety. Three percent of the spaced planted progeny were removed from the nursery, prior to pollination. These were considered off-types for the variety.

Diagram of Origin and Breeding History of TPC Tall Fescue

1. 1962 to 2006

Germplasm collection, evaluation, and genetic improvement.

2. 2006

In the spring of 2006, a mowed spaced-plant nursery was established at the Rutgers Plant Biology Research and Extension Farm in Freehold, NJ containing 24,096 plants selected from the best performing tall fescue plots planted in turf trials established from 2002-2005 at the same farm mentioned above.

3. 2007-2008

The next fall (2007) 60 plants with bright active summer performance and coarse leaf blades were moved to an isolated crossing block. The following spring (2008) eight plants were eliminated and nine plants were replaced due to non-uniform maturity with the other plants in the crossing block. Seed from each of these plants were harvested individually and used to plant a turf plot in the fall of 2008.

4. 2010-2011

Forty-eight single plot progeny turf plots from this population were selected and established in a spaced-plant nursery in the spring of 2010 containing 960 plants. The next spring five percent of the nursery was rogued for poor seed yield, non-uniformity, and disease susceptibility. Ninety-five of the seed left was harvested, bulked and identified as breeder seed of TPC tall fescue. Forty-five pounds of breeder seed was sent to Pickseed USA, Inc. (PS) in the summer of 2011.

dbc 02/09/2016

5. 2011-2012

A one-tenth acre direct seeded field was planted at PS using breeder seed harvested in 2011. The field was established in the autumn of 2011, and seed stock was harvested in summer 2012.

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EXHIBIT B – STATEMENT OF DISTINCTNESS

**** Use additional tables to present clear differences for additional comparison varieties. Use additional pages to present supporting evidence.***

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DLF Pickseed USA, Inc. & Rutgersm The State Univer:	SRX TPC	Rowdy

Based on overall morphology, Rowdy (*Applicant's new variety*) is most similar to Mustang 4 (*Most similar comparison variety(ies)*). Rowdy (*Applicant's new variety*) most clearly differs from Mustang 4 (*Most similar comparison variety(ies)*) in the following traits Name the specific trait. Then list the value of that trait for each variety in the comparison. Submit appropriate supporting evidence (see the Guidelines for Presenting Evidence in Support of Variety Distinctness in the instructions):

	Eg. Leaf Pubescence *Eg. Leaf Color* *Eg. Plant Height*	*heavy pubescence* *Dark Green (5GY 3/4)* *200 cm +/- 10 cm (N=25)*	*glabrous* *Light Green (2.5GY 8/10)* *250 cm +/- 15 cm (N=25)*	*photograph attached* *Munsell Color Chart* *statistics attached*
	1. Qualitative traits:	**2. Color traits:**	**3. Quantitative traits:**	**4. Other traits:**
Application Variety	Rowdy		Has shown an average mature plant height of 85.1cm Has shown an average flag leaf length of 9.9 cm	Panicle length = 15.9 cm
Comparison Variety 1	Mustang 4		Has shown an average mature plant height of 100.7cm Has shown an average flag leaf length of 13.3 cm.	Panicle length = 21.0 cm
Comparison Variety 2				
Comparison Variety 3				

***** Use additional tables to present clear differences for additional comparison varieties. Use additional pages to present supporting evidence.***

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AGRICULTURAL MARKETING SERVICE
SCIENCE AND TECHNOLOGY
PLANT VARIETY PROTECTION OFFICE
BELTSVILLE, MD 20705

Exhibit C

OBJECTIVE DESCRIPTION OF VARIETY
Tall and Meadow Fescues (*Festuca* spp.)

NAME OF APPLICANT (S)	TEMPORARY OR EXPERIMENTAL DESIGNATION	VARIETY NAME
DLF Pickseed USA, Inc. and Rutgers, The State Unversity of New Jersey	SRX TPC	Rowdy

ADDRESS *(Street and No. or RD No., City, State, Zip Code, and Country)*
P.O. Box 229, 175 West h St.,
Halsey, OR 97348 and
Cook College, 88 Lipman Dr.
New Brunswick, NJ 08901-8252

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PLEASE READ ALL INSTRUCTIONS CAREFULLY:

Place the appropriate number that describes the varietal characteristics of this variety in the spaces below. Use leading zeros when necessary (e.g., 089 or 09) when number is either 99 or less or 9 or less. Characteristics described, including numerical measurements, should represent those that are typical for the variety. Measured data should be for SPACED PLANTS. Give additional description for all characteristics that cannot be adequately described in the form below. Cultural conditions must be stated in the comment section and plant number/data points shown in all tables.

1. SPECIES: (With comparison varieties, use varieties within the species of the application variety)

__X_ 1= *F. arundinacea* (Tall)

Turf Types

1 = Kentucky 31 2= Rebel 3 = Olympic 4 = Bonanza 5 = Arid 6 = Rebel II

7 = Shortstop 8= Silverado 9= Rebel Jr. 10 = Mini Mustang 11 = Crewcut 12 = Bonsai

Forage Types

20 = Kentucky 31 21 = Martin 22 = Forager 23 = Mozark

24 = Kenhy 25 = AU Triumph 26 = Fawn 27 = Cajun

____ 2= *F. pratensis* (Meadow)

30 = Admira 31 = Beaumont 32 = Comtessa 33 = Ensign 34 = Trader

2. CYTOLOGY:

_42_ Chromosome Number

3. ADAPTATION: (0 = Not Tested; 1 = Not Adapted; 2 = Adapted)

X__ Transition Zone ___X_ West ___X_ Northeast ____ Other (Specify) _____

4. MATURITY: (Date First Headed, 10% of Panicle Emergence)

_5__ Maturity Class 1 = Very Early 2= AU Triumph 3= Early (Fawn) 4 = K31, Kenhy 5 = Medium (Rebel)

6 = Bonanza 7= Late (Silverado) 8= Very Late

Date Headed _____ Location _____

Avg. No. days to heading _____

4. **MATURITY**: (continued)

____ Days Earlier Than _____
Maturity Same As _____ } Comparison Variety
_5___ Days Later Than _1____

5. **MATURE PLANT HEIGHT cm**: (Average of 100 culms from crown to top of panicle, if panicle is nodding, straighten)

__85_•8_ cm Height

_ 12_•2__ cm Shorter Than __4_
Height Same As __8__ } Comparison Variety
__ __•__ cm Taller Than ____

* INTERNODE LENGTH cm: (First internode subtending the flag leaf)

__ __•__ cm Internode Length

__ __•__ cm Shorter Than ____
Length Same As ____ } Comparison Variety
__ __•__ cm Taller Than ____

HEIGHT AT EAR EMERGENCE cm: (Flag leaf height from crown to flag leaf collar)

___40_•8 cm Height

__ _10_•9_ cm Shorter Than _4___
Height Same As _8___ } Comparison Variety
__ __•__ cm Taller Than ____

6. **GROWTH HABIT**: (Mature Plants)

9__
_ 1 = Prostrate 3 = Semiprostrate 5 = Horizontal
7 = Semierect (Rebel) 9 = Erect (Mini Mustang)

7. **RHIZOMES**: (Pseudo)

__ __•__ mm Length _2___ 1 = Absent 2 = Rare (Rebel) 3 = Common

8. **LEAF BLADE**: (Tiller Leaves/Turf Color)

___7_ Color 1 = Light Green 3 = Medium Light Green 5 = Green
7 = Medium Dark Green 9 = Very Dark Green

____ Specify Rating of Comparison Variety

_ 1 _ Anthocyanin: 1 = Absent 9 = Present

____ Basal Hairs: 1 = Absent 9 = Present

__5__ Margins: 1 = Absent 5 = Semi-rough 9 = Rough

__7__ Width Class: 1 = Very Coarse 3 = Coarse 5 = Medium
7 = Fine 9 = Very Fine

TILLER LEAF LENGTH CM: (First leaf subtending the flag leaf)

___15_•0__ cm Tiller Leaf Length

____3•_6_ cm Shorter Than 4____
Length Same As _8___ } Comparison Variety
__ __•__ cm Taller Than ____

TILLER LEAF WIDTH MM: **2014 data only**

__ __3•_6_ mm Tiller Leaf Width

_0_•5__ mm Narrower Than _1___
Width Same As 8____ } Comparison Variety
__ __•__ mm Longer Than ____

8. LEAF BLADE: (Continued)

FLAG LEAF LENGTH CM:

_11 • 3_ cm Flag Leaf Length

03. 1_cm Shorter Than _4_

Length Same As

__ __ • __ cm Longer Than___

Comparison Variety

* FLAG LEAF WIDTH MM:

03 • 1__ mm Flag Leaf Width

__0 • _4_ mm Narrower Than __4__

Width Same As 8_

__ __ • __ mm Wider Than ____

Comparison Variety

9. LEAF SHEATH: (Basal Portion)

__1__ Anthocyanin (Seedling): 1 = Absent (K31) 9 = Present ( )

____ Auricle Hairiness: 1 = Absent ( ) 9 = Present ( )

10. PANICLE: (At seed maturity except where noted.)

_3___ Shape: 1 = Narrow-tapering 5 = Ovate 7 = Oblong 9 = Other (Specify) _____

__5__ Type: 1 = Compact (appressed) 5 = Intermediate 7 = Open 9 = Other (Specify) _____

__3__ Orientation: 1 = Nodding 9 = Erect

9_ Branch Pubescence: 1 = Glabrous 9 = Pubescent

_1___ Anther Color (At Anthesis): 1 = Yellowish Green 2 = Green 3 = Bluish Green 4 = Purplish 5 = Reddish 6 = Other (Specify) _____

__2__ Glume Color (At Anthesis): 1 = Yellowish Green 2 = Green 3 = Bluish Green 4 = Purplish 5 = Reddish 6 = Other (Specify) _____

__ 16 • _2_ cm Panicle Length (From base to tip, if nodding, straighten; after anthesis)

__05 • 9_ cm Shorter Than _4___

Length Same As ____

__ • __ cm Longer Than ____

Comparison Variety

11. SEED: (With Lemma and Pelea)

__ __ __2463 __ mg per 1000 seeds

__ 514____ mm Less Than __4__

Weight Same As ____

__ __ __ mm More Than ____

Comparison Variety

Pelea: (Keels or Margins) ___ Hairs: 1 = Absent 5 = Short (Missouri 96) 9 = Long

Lemma: ___ Hairs: 1 = Absent (Kenhy) 5 = Several 9 = Long (Missouri 96)

_5_ • _8_ mm Lemma Length (Mature)

_1_ • 3__ mm Lemma Width

_0_ • _7_ cm Shorter Than _4___

Length Same As ____

__ • __ cm Longer Than ____

Comparison Variety

__ • __ mm Narrower Than ____

Width Same As __4__

__ • __ mm Wider Than ____

Comparison Variety

11. SEED: (continued)

AWNS: 1 = Absent ( ) 9 = Present (Falcon) _100___ % Plants with Awns

_1.20__ mm Awn Length (of those present)

__.__ mm Shorter Than ____

Length Same As 6____ } Comparison Variety

__.__ mm Longer Than ____

12. DISEASE, INSECT, AND NEMATODE REACTION: (0 = Not Tested 1 = Least Resistant 9 = Most Resistant)

__0_ Melting-out (*Drechslera poae*)

__0_ Leaf Spot (*D. siccans*)

__6 Net Blotch (*D. dictyoides*)

_8__ Brown Patch (*Rhizoctonia solani*)

__0_ C. Leaf Spot (*Cercospora fectucae*)

_0__ Pink Snow Mold (*Gerlachia nivalis*)

__0_ Silver Tip (*F. tricinctum, F. roseum*)

__0__ Blind Seed (*Gloeotinia temulenta*)

__0__ Dollar Spot (*Lanzia, mollerdiscus* spp.)

__0__ Stem Rust (*Puccinia graminis*)

__5__ T. Blight (*Typhula incarnata*)

__9_ Pythium Blight (*Pythium* spp.)

__0__ Powdery Mildew (*Erysiphe graminis*)

_0__ Crown Rust (*Puccinia coronata*)

___ Other Disease _____

___ Other Insect _____

___ Other Nematode _____

13. ENVIRONMENTAL STRESS:

___ Drought Stress	1 = Susceptible	5 = Tolerant	9 = Resistant
__5_ Shade Stress	1 = Susceptible	5 = Tolerant	9 = Resistant
_5__ Winter Stress	1 = Susceptible	5 = Tolerant	9 = Resistant

14. GIVE VARIETY OR VARIETIES THAT MOST CLOSELY RESEMBLE THE APPLICATION VARIETY. For the following characteristics, indicate the degree of resemblance with the following scale:

1 = Application Variety is Less Than Comparison Variety. 2 = Same as 3 = More Than, Better, Greater, Darker, etc.

Character	Varieties	Rating	Character	Varieties	Rating
Leaf Width	Falcon IV	3	Leaf Color	Falcon IV	2
Panicle Color			Panicle Shape		
Seed Size--Width	Bonanza	2	Cold Injury	Kentucky 31	2
Winter Color	Kentucky 31	3	Heat		
Disease—Brown patch	Falcon IV	2			

15. EXPERIMENTAL : Give a brief summary of the experimental design utilized to collect the data used on this form. Cultural conditions, number of plants measured and plant spacing must be specified. **Botanical measurements given are from data obtained from spaced planted progenies of each variety reported. Progenies were established in a RCB design trial at the research facility of DLF Pickseed USA, Inc.,. Sixty progenies of each variety were used for data collection; three replications and 20 progenies per replication. Progenies were spaced 54 cm apart within and between rows. The test was grown on Chehalis clay loam, with a pH of 5.8.** in Albany, OR? dbc 02/17/2016

Data presented for turf performance quality, or turf quality characters, and turf disease tolerances, are taken from the 2013 data of the 2012 established National Turfgrass Evaluation Program test for tall fescue accessions: http://www.ntep.org/reports/tf12/tf12_14-1/tf12_14-1.htm.

Table 1.

ACCESSION	HEADDAT-2013	HEADDAT-2014	HEADDAT-Mean	JULIAN DAY-Mean	PH-2013	PH-2014	PH-Mean	FLH-2013	FLH-2014	FLH-Mean	FLL 2013	FLL-2014	FLL-Mean	FLW-2013	FLW-2014	FLW-Mean	PL-2013	PL-2014	PL-Mean
Bonanza	120.7	129.9	125.3	5-May	97.96	89.4	93.68	51.66	43.8	47.7	12.27	14.4	13.3	4.13	3.5	3.82	21.31	22.1	21.71
Mustang 4	115.2	127.2	121.2	1-May	100.49	100.8	100.65	48.7	48.9	48.8	12.18	14.4	13.3	3.81	3.6	3.71	19.03	23	21.02
Silverado	116.5	129.2	122.85	3-May	92.43	86.7	89.57	45.88	41.4	43.6	10.28	14.3	12.3	3.62	3.2	3.41	18.4	20.9	19.65
BladeRunner	115.5	126.8	121.15	1-May	99.58	87.9	93.74	51.8	44.3	48.1	11.92	13.2	12.6	3.77	3.2	3.49	20.13	20	20.07
Rebel II	118.2	128.3	123.25	3-May	101.82	100.8	101.31	49.88	47.1	48.5	12.2	13.7	13	3.88	3.3	3.59	19.47	18.3	18.89
Grande II	117.5	129.1	123.3	3-May	101.48	90.3	95.89	49.47	48.1	48.8	11.6	13.9	12.8	3.59	3.2	3.4	19.98	22.6	21.29
Kentucky 31	112.4	125.7	119.05	29-Apr	112.04	100	106.02	61.77	51.9	56.8	11.65	13.7	12.7	3.94	3.6	3.77	22.29	32.2	27.25
Rowdy	119.8	128.5	124.15	4-May	85.77	84.4	85.09	40.82	45.4	43.1	8.45	11.3	9.9	3.35	3.1	3.23	15.5	16.2	15.85
Grand Mean	118	128.6			94.18	87.9		46.27	43.9		10.26	13.1		3.5	3.3		18.11	20.5	
LSD (0.05)	1.7	1.3			11.72	4.3		8.32	4.1		3.22	1.4		0.78	0.3		2.89	2.2	
CV (%)	3.6	2.6			4.07	12.9		5.88	24.4		10.26	27.3		7.32	23.4		5.23	28	

Data generated from a nursery of spaced planted progenies for each accession. The nursery was initiated in October 2012, and traits measured in spring 2013 and 2014. Total entries in the trial = 17. The trial was conducted using randomized complete block design. Sixty progeny of each accession were established in three replications of 20 progeny for each replication. Progeny were spaced 54 cm apart within and between rows. The test was grown on Chehalis clay loam, with a pH of 5.8.
Plant height (PH), Flag leaf height (FLH), Flag leaf length (FLL), and Panicle length (PL) measured in cm. Flag leaf width (FLW) measured in mm.

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE AND TECHNOLOGY - PLANT VARIETY PROTECTION OFFICE
APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

EXHIBIT E - STATEMENT OF THE BASIS OF OWNERSHIP

FOR OFFICIAL USE ONLY
PVPO NUMBER
201500312

1. Name of Owner	2. Temporary Designation or Experimental Name	3. Variety Name
DLF Pickseed USA, Inc. & Rutgersm The State University of New Jersey	SRX TPC	Rowdy

4. Does the applicant own all rights to the variety? Mark an "X" in the appropriate block. **If no, please explain.** ☑ YES ☐ NO

5. Is the applicant a U.S. national or a U.S. based entity? **If no, give name of country.** ☑ YES ☐ NO

6. Is the applicant the original owner? ☑ YES ☐ NO **If no, please answer one of the following:**

a. If the original rights to variety were owned by individual(s), is (are) the original owner(s) a U.S. National(s)?
☐ YES ☐ NO **If no, give name of country**

b. If the original rights to variety were owned by a company(ies), is (are) the original owner(s) a U.S. based company?
☐ YES ☐ NO **If no, give name of country**

7. Additional explanation on ownership *(Trace ownership from original breeder to current owner. Use the reverse for extra space if needed)*:

PLEASE NOTE:

Plant variety protection can only be afforded to the owners (not licensees) who meet the following criteria:

1. If the rights to the variety are owned by the original breeder, that person must be a U.S. national, national of a UPOV member country, or national of a country which affords similar protection to nationals of the U.S. for the same genus and species.
2. If the rights to the variety are owned by the company which employed the original breeder(s), the company must be U.S. based, owned by nationals of a UPOV member country, or owned by nationals of a country which affords similar protection to nationals of the U.S. for the same genus and species.
3. If the applicant is an owner who is not the original owner, both the original owner and the applicant must meet one of the above criteria.

The original breeder/owner may be the individual or company who directed the final breeding. See Section 41(a)(2) of the Plant Variety Protection Act for definitions.