200400268

No.

THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

NexGen Seed Research, LLC

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 [illegible] TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR [illegible]TING IT, OR EXPORTING IT, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE [illegible]URPOSES, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT [illegible] BY THE PLANT VARIETY PROTECTION ACT. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

FESCUE, TALL

'Scorpion II'

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 seventh day of September, in the year two thousand and seven.

Attest:

Commissioner
Plant Variety Protection Office
Agricultural Marketing Service

Secre[illegible]

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: NexGen Seed Research, LLC

2. TEMPORARY DESIGNATION OR EXPERIMENTAL NAME: ATF799

3. VARIETY NAME: Scorpion II

4. ADDRESS *(Street and No., or R.F.D. No., City, State, and ZIP Code, and Country)*: 33725 Columbus St. SE, Albany, OR, 97322

5. TELEPHONE *(include area code)*: 541-967-8923

6. FAX *(include area code)*: 541-967-8223

FOR OFFICIAL USE ONLY

PVPO NUMBER: #200400268

FILING DATE: 7/2/2004

7. IF THE OWNER NAMED IS NOT A "PERSON", GIVE FORM OF ORGANIZATION *(corporation, partnership, association, etc.)*: Incorporated

8. IF INCORPORATED, GIVE STATE OF INCORPORATION: Oregon

9. DATE OF INCORPORATION: July 31, 2006

10. NAME AND ADDRESS OF OWNER REPRESENTATIVE(S) TO SERVE IN THIS APPLICATION. *(First person listed will receive all papers)*

Kenneth Hignight C/O
33725 Columbus St SE
Albany, OR
97322
USA

FEES RECEIVED

FILING AND EXAMINATION FEES: $ 3,652.00 DATE 7/2/2004

CERTIFICATION FEE: $ 768 DATE 8/13/2007

11. TELEPHONE *(Include area code)*: (541) 967-8923

12. FAX *(Include area code)*: (541) 967-8223

13. E-MAIL:

14. CROP KIND *(Common Name)*: Tall Fescue

16. FAMILY NAME *(Botanical)*: *Poaceae*

15. GENUS AND SPECIES NAME OF CROP: Festuca arundinacea

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

18. DOES THE VARIETY CONTAIN ANY TRANSGENES? (*OPTIONAL*)
☐ YES ☑ NO
IF SO, PLEASE GIVE THE ASSIGNED USDA-APHIS REFERENCE NUMBER FOR THE APPROVED PETITION TO DEREGULATE THE GENETICALLY MODIFIED PLANT FOR COMMERICALIZATION. _____

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. ☑ Voucher Sample *(2,500 viable untreated seeds or, for tuber propagated varieties, verification that tissue culture will be deposited and maintained in an approved public repository)*
- g. ☑ Filing and Examination Fee ($3,652), made payable to "Treasurer of the United States" *(Mail to the Plant Variety Protection Office)*

20. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE SOLD 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)*

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 of the variety has been furnished with application and will be replenished upon request in accordance with such regulations as may be applicable, or for a tuber propagated variety a tissue culture will be deposited in a public repository and maintained for the duration of the certificate.

The undersigned owner(s) is(are) the owner 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	
Kenneth Hignight			
NAME *(Please print or type)*		NAME *(Please print or type)*	
Kenneth Hignight			
CAPACITY OR TITLE	DATE	CAPACITY OR TITLE	DATE
Director of Research	6-11-07	Director of Research	

(See reverse for instructions and information collection burden statement)

Exhibit A:

Origin and Breeding History
'Scorpion II'
<ATF799> Tall Fescue
(BT: 10/12/2006)

1. The tall fescue (*Festuca arundinacea*) cultivar 'Scorpion II' <ATF799> (BT: 10/12/06) traces its parentage to five cultivars and one experimental line. The parentage consists of Wyatt (4/16), Reserve (1/16), Wildfire (6/16), Plantation (3/16), Cortez (1/16) and ATF020* (1/16). A long term plant selection field was established in the fall of 1995. The field design consisted of unbordered row plots with two rows per cultivar. This type of design was used to help eliminate interplot competition. The nursery was replicated four times with 20 plants per replication. The nursery was evaluated for two years for genetic color, fine leaf texture, and freedom from disease.. Sixteen clones were selected which exhibited the best visual characteristics of dark genetic color, fine leaf texture, good crown density, freedom from stem rust (*Puccinia graminis*), winter leaf spot diseases, and lack of panicle formation in regrowth. In the spring of 1998 the sixteen plants were moved together, placed in isolation, and allowed to interpollinate. The plants were harvested in bulk and designated ATF629. In the fall of 1999 a 2,068 spaced-plant nursery was established of ATF629. The plants were evaluated throughout the winter and spring. Forty eight plants were selected based on dark genetic color, fine leaf texture, good crown density, freedom from stem rust (*Puccinia graminis*) and winter leaf spot diseases. The 48 plants were moved together before anthesis to an isolated crossing block. The plants were allowed to interpollinate. The block was harvested in bulk and designated ATF799.

In the fall of 2000 a 2,062 plant breeder seed block was established in isolation in Albany, Oregon. ATF799 was also placed in turf trials to evaluate turf performance. The breeder seed block was harvested in bulk in 2001 and designated ATF799(S0) breeder seed. A morphological nursery was established in the fall of 2001 for Plant Variety Protection (PVP) measurements.

*ATF020 is a selection from the released cultivar 'Tulsa'

2. Breeder Seed Maintenance:

A multiplication was planted in isolation in 2000 in Albany, Oregon. Seed was harvested in bulk in 2000 and designated breeder seed. The seed is maintained in cold storage. Seed propagation is limited to three generations, one each of foundation, registered, and certified.

3. Stability and Uniformity:

'Scorpion II' ATF799 has been a stable uniform cultivar over 2 generations. No off-type or variant plants (BT: 10/12/2006) have been observed during the multiplication or reproduction. During the breeder seed multiplication 0.15 % of the plants were removed to improve the uniformity of the population. These types were not observed during the subsequent generations. Turf plots (BT: 10/12/2006) of 'Scorpion II' ATF799 have been uniform and stable.

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Exhibit A (addendum): Statement of Stability and Uniformity for 'Scorpion II' ATF799 Tall Fescue (BT: 10/12/2006)

(BT: 10/12/2006) 'Scorpion II' ATF799 has been a stable uniform cultivar over two generations. No off-type or variant plants have been observed during the multiplication or reproduction. During the breeder seed multiplication 0.15% of the plants were removed to improve the uniformity of the population. The plants that were removed showed less vigor and had poor plant health. It is not known if the lack of vigor was due to environmental factors, genetic factors, or an environment by genetic interaction. These types were not observed during the subsequent generations. Turf plots of ATF799 have been uniform and stable.

Exhibit B:
Novelty Statement of <ATF799> 'Scorpion II' Tall Fescue
(BT:10/12/'06)

The following summary outlines the distinctive characteristics of ATF799. The novelty of ATF799 is based on the unique combination of these characteristics. ATF799 is most similar to Rebel II, but may be differentiated by using the following criteria:

1) <ATF799> 'Scorpion II' (BT:10/12/2006) has a heading date that is significantly later than Rebel II (tables 1A, 1B).

2) ATF799 has a darker genetic color compared to Rebel II (tables 1A, 1B).

3) ATF799 has a shorter panicle length than Rebel II (tables 1A, 1B).

4) The flag leaf characteristics of length, width and sheath length are all shorter for ATF799 compared to Rebel II (tables 1A, 1B).

5) The morphological characteristics of leaf blade length, width and sheath length of ATF799 are reduced compared to Rebel II (tables 1A, 1B).

6) ATF799 has a shorter awn length than Rebel II (tables 2A, 2B).

7) The length of the longest whorl on the panicle is shorter for ATF799 than Rebel II (tables 2A, 2B, illus. 1).

8) The distance between the lower most whorls of the panicle is reduced for ATF799 compared to Rebel II (tables 2A, 2B, illus. 1).

9) ATF799 has fewer spikelets per panicle than Rebel II (tables 2A, 2B).

10) The panicle length from the lower most whorl to the tip of the panicle of ATF799 is shorter compared to Rebel II (tables 2A, 2B, illus. 1).

11) ATF799 exhibit more plants with a single branch of the lower most whorl compared to Rebel II (tables ~~2~~3A, ~~2~~3B, illus. 1). (BT:7/25/2007)

12) <ATF799> 'Scorpion II' (BT:10/12/'06) produces no plants with a semi-prostrate growth habit compared to Rebel II (tables 3A, 3B).

BT:10/12/2006) Note: <ATF799> = 'Scorpion II'

REPRODUCE LOCALLY. Include form number and date on all reproductions. Form Approved - OMB No. 0581-0055

Public reporting burden for this collection of information is estimated to average 30 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Agriculture, Clearance Officer, OIRM, AG Box 7630, Jamie L. Whitten Building, Washington, D.C. 20250. When replying, refer to OMB No. 0581-0055 and form number in your letter. Under the PRA of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

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U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE AND TECHNOLOGY PROGRAM
PLANT VARIETY PROTECTION OFFICE
BELTSVILLE, MD 20705

EXHIBIT C
(TALL & MEADOW FESCUES)

OBJECTIVE DESCRIPTION OF VARIETY
TALL & MEADOW FESCUES
(*Festuca* spp.)

NAME OF APPLICANT(S)	TEMPORARY DESIGNATION	VARIETY NAME
NexGen Seed Research, LLC ~~c/o Kenneth Hignight~~ (BT:4/16/07)	ATF799	Scorpion II

ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code)	FOR OFFICIAL USE ONLY PVPO NUMBER
33725 Columbus St. SE Albany, OR 97322	#200400268

Place the appropriate number that describes the varietal characteristics of this variety in the boxes below. Use leading zeroes when necessary (e.g. 089). Characteristics described, including numerical measurements, should represent those that are typical for the variety. Measured data should be for SPACED PLANTS. Royal Horticultural Society or any recognized color fan may be used to determine plant colors. Characteristics marked with an asterisk * are characteristics which should be recorded.

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

_6__ 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)

__0__Transition Zone __2__West __2__ Northeast _____ Other (Specify):_____

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

_6___ Maturity Class 1 = Very early ( ) 2 = AU Triumph 3 = Early (Fawn) 4 = K31, Kenhy 5 = Medium (Rebel)

4. MATURITY: (continued)

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6 = Bonanza 7 = Late (Silverado) 8 = ( ) 9 = Very late

Date Headed _43.75, days after April 1,_____ Location _Albany, Oregon_____

_____ Days earlier than _____
Maturity same as _____
_2.50_ Days later than __6__
} Comparison Variety

---

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

_83.28__ cm Height

_____ cm Shorter than ___
Height same as _6_
__ __.__ cm Taller than ___
} Comparison Variety

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

_17.10_ cm Internode Length

_____ cm Shorter than ___
Length same as _6_
__ __.__ cm Longer than ___
} Comparison Variety

* HEIGHT AT EAR EMERGENCE CM: (Flag leaf height from crown to flag leaf node)

_20.38__ cm Height

_____ cm Shorter than ___
Height same as _6_
__ __.__ cm Taller than ___
} Comparison Variety

---

* 6. GROWTH HABIT: (Mature Plants)

_9_ 1 = Prostrate ( ) 3 = Semiprostrate ( ) 5 = Horizontal ( )

7 = Semierect (Rebel) 9 = Erect (Mini Mustang)

---

* 7. RHIZOMES (Psuedo):

__ __.__ mm Length _X_1 = Absent ( ) 2 = Rare (Rebel) 3 = Common ( )

---

* 8. LEAF BLADE: (Tiller leaves/ turf color)

*_7_ Color: 1 = Light green ( ) 3 = Medium light green (1) 5 = Green ( )

7 = Medium dark green ( ) 9 = Very dark green ( )

_5__ Specify rating of comparison variety

*_1_ Anthocyanin: 1 = Absent ( ) 9 = Present ( )

*_1_ Basal Hairs: 1 = Absent ( ) 9 = Present ( )

*_5_ Margins: 1 = Smooth ( ) 5 = Semi-rough ( ) 9 = Rough ( )

8. LEAF BLADE: (continued)

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*_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)

_26.08_ cm Tiller Leaf Length

_6.67_ cm Shorter than _6_
Length same as ___
__ __.__ cm Taller than ___
} Comparison Variety

* TILLER LEAF WIDTH MM:

_8.38_ mm Tiller Leaf Width

_1.47_ mm Narrower than_6_
Width same as ___
__.__ mm Longer than ___
} Comparison Variety

FLAG LEAF LENGTH CM:

_29.08_ cm Flag Leaf Length

_8.92_ cm Shorter than _6_
Length same as ___
__.__ cm Longer than ___
} Comparison Variety

FLAG LEAF WIDTH MM:

_6.00_ mm Flag Leaf Width

_1.58 mm Narrower than _6_
Width same as ___
__.__ mm Wider than ___
} Comparison Variety

---

* 9. LEAF SHEATH: (Basal Portion)

*_1_ Anthocyanin (seedling): 1 = Absent (K31) 9 = Present ( )

*_9_ Auricle Hairiness: 1 = Absent ( ) 9 = Present ( )

---

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

*_1_ Shape: 1 = Narrow-tapering ( ) 5 = Ovate ( ) 7 = Oblong ( ) 9 = Other (specify)

*_7_ Type: 1 = Compact (appressed) 5 = Intermediate ( ) 7 = Open ( ) 9 = Other (specify)

*_9_ Orientation: 1 = Nodding ( ) 9 = Erect ( )

*_1_ 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)

*_1_ Glume Color (At anthesis): 1 = Yellowish Green 2 = Green 3 = Bluish Green
4 = Purplish 5 = Reddish 6= Other (Specify)

*_62.83__ cm Panicle Length (from base to tip, if nodding, straighten; after anthesis)

_5.62_ cm Shorter than _6_
Length same as ___
__.__ cm Longer than ___
} Comparison Variety

* 11. SEED: (With Lemma & Pelea)

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*__2345 __ mg per 1000 seeds

____ __ mg Less than ___

Weight same as _6_ } Comparison Variety

___ ___ mg More than ___

PALEA: (Keels or Margins) _5_ Hairs: 1 = Absent ( ) 5 = Short (Missouri 96) 9 = Long ( )

LEMMA: _7_ Hairs: 1 = Absent (Kenhy) 5 = Several ( ) 9 = Many (Missouri 96)

_6.55 mm Lemma Length (Mature)

_____ mm Shorter than ___

Length same as _6_ } Comparison Variety

__.__ mm Longer than ___

_1.47_ mm Lemma Width

__.__ mm Narrower than ___

Width same as _6_ } Comparison Variety

__.__ mm Wider than ___

*AWNS: _9_ AWNS: 1 = Absent ( ) 9 = Present (Falcon) _100_% Plants with awns

_0.84_ mm Awn length (Of those present.)

_0.23_ mm Shorter than _6_

Length same as ___ } 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*

_0_ Net Blotch *D. dictyoides*

_0_ Brown Patch *Rhizoctonia solani*

_0_ C. Leaf Spot *Cercospora fectucae*

_0_ Pink Snow Mold *Gerlachia nivalis*

_0_ Silver Top *F. tricinctum, F. roseum*

_0_ Blind Seed *Gloeotinia temulenta*

_0_ Dollar Spot *Lanzia, Mollerdiscus* spp.

_0_ Stem Rust *Puccinia graminis*

_0_ T. Blight *Typhula incarnata*

_0_ Pythium Blight *Pythium* spp.

_0_ Powdery Mildew *Erysiphe graminis*

_0_ Crown Rust *Puccinia coronata*

___ Other Disease _____

___ Other Insect _____

___ Other Nematode _____

13. ENVIRONMENTAL STRESS

_6_ Drought Stress 1 = Susceptible ( ) 5 = Tolerant ( ) 9 = Resistant ( )

___ Shade Stress 1 = Susceptible ( ) 5 = Tolerant ( ) 9 = Resistant ( )

13. ENVIRONMENTAL STRESS: (continued)

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_6_ 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	Rebel II	1	Leaf Color	Rebel II	3
Panicle Color	Rebel II	2	Panicle Shape	Rebel II	2
Seed Size	Rebel II	2	Cold Injury	Rebel II	2
Winter Color	Rebel II	2	Heat	Rebel II	2
Disease	Rebel II	3			

* 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.

A morphological nursery designated 01PVPFA was established in September 2001, in Albany, Oregon. Experimental design consisted of 20 entries; 4 replications per entry; 20 plants per replication; for a total of 80 plants per entry for tables 1A, 1B. Experimental design consisted of 20 entries; 3 replications per entry; 20 plants per replication; for a total of 60 plants per entry for tables 2 - 4. KY-31, Rebel II, Plantation and Tulsa were used as standards. Plants were established on 2.5 foot centers with a skip row between replications and between entries.

The nursery received 30 pounds of nitrogen per acre rate following establishment and 50 pounds of nitrogen per acre per year in 2001 and 2002. The fertilizer source was 15 - 15 - 15 and was applied as a split application with ½ applied in the spring and ½ in the autumn. The nursery was sprayed twice each spring, 3 weeks between applications, with Tilt (2oz/acre rate), to prevent stem rust. One pound of Karmex per acre rate was applied during the late summer to prevent emergence of volunteer seedlings.

Data was analyzed using analysis of variance for a randomized complete block design. Means were calculated for each replication and then analyzed.

Exhibit D:

Additional Description
'Scorpion II'
(ATF799) Tall Fescue
(BT:10/12/2006)

'Scorpion II'
(ATF799) is an improved turf-type tall fescue. It has a shorter growth habit (tables 1A, 1B) than previously released tall fescue cultivars, such as KY-31, Plantation and Tulsa. ATF799 has a late maturity with a heading date later than KY-31, Rebel II, Plantation and Tulsa (tables 1A, 1B). ATF799 exhibits a darker genetic color compared to the cultivars KY-31, Rebel II and Tulsa (tables 1A, 1B). The length of the panicle from the first node subtending the flag leaf to the apex for ATF799 is shorter than KY-31, Rebel II, Tulsa and Plantation (tables 1A, 1B). The length of the flag leaf is shorter for ATF799 compared to KY-31, Rebel II, Tulsa and Plantation (tables 1A, 1B). ATF799 has a narrower flag leaf width compared to KY-31, Rebel II and Plantation (tables 1A, 1B). ATF799 has a shortened sheath length of the flag leaf compared to KY-31, Rebel II, Plantation and Tulsa (tables 1A, 1B). The leaf blade characteristics of blade length and sheath length are shorter for ATF799 than KY-31, Rebel II, Plantation and Tulsa (tables 1A, 1B). The leaf blade width of ATF799 is shorter compared to KY-31, Rebel II and Plantation (tables 1A, 1B). The length of the panicle from the lower most whorl to the apex is shorter for ATF799 compared to KY-31, Rebel II, Plantation and Tulsa (tables 2A, 2B). The length of longest branch of the lower most whorl is shorter for ATF799 compared to KY-31, Rebel II, Plantation and Tulsa (tables 2A, 2B, illus. 1). The distance between the lower most whorls is shorter for ATF799 than KY-31, Rebel II, Plantation and Tulsa (tables 2A, 2B, illus. 1).

Visual characteristics can also differentiate ATF799 from previously released cultivars. The number of branches of the lower most whorl is fewer for ATF799 compared to KY-31, Rebel II and Plantation (tables 3A, 3B, illus, 1). ATF799 produces a lower frequency of plants with a semi-prostrate growth habit compared to KY-31 and Rebel II, but more horizontal plants than Plantation (tables 3A, 3B). The presence of dark pigmentation at the nodes is less frequent in ATF799 than KY-31 and Tulsa, but more than Plantation (tables 4A, 4B).

Note: <ATF799> = 'Scorpion II'
(BT:10/12/2006 per applicant's authorization)

Table 1A

2002 Morphological Data

Cultivar	Genetic Color (Scales 1-9, 9= darkest green)	Heading Date (days after April 1)	Anthesis Date (days after April 1)	Mature Plant Height (cm)	Plant Width (cm)	Panicle Length (cm)	Flag Leaf Length (cm)	Flag Leaf Width (mm)	Flag Leaf Height (cm)	Flag Leaf Sheath Length (cm)	Flag Leaf Internode Length (cm)	Leaf Blade Length (cm)	Leaf Blade Width (mm)	Leaf Blade Height (cm)	Leaf Sheath Length (cm)
'Scorpion II'															
:10/12/06) <ATF799>	5.89	43.75	66.75	83.28	10.45	62.83	29.08	6.00	20.38	19.05	17.10	26.08	8.38	14.13	10.85
SBL	5.71	36.25	64.75	95.18	11.03	73.18	35.28	6.70	21.93	21.83	17.25	30.05	8.85	16.48	11.73
SBM	5.58	39.00	65.25	88.85	11.00	67.83	32.45	6.03	21.05	20.85	17.35	35.08	8.60	15.40	11.63
RB3	6.21	38.25	65.00	86.90	10.83	69.03	32.35	6.98	17.88	20.33	15.15	27.65	9.23	13.90	11.03
RB2	5.90	35.50	64.50	89.40	10.40	68.85	33.45	6.78	19.45	21.00	16.68	28.25	8.93	15.03	11.25
ATF800	5.61	42.50	67.25	93.05	10.78	68.63	33.65	6.00	24.75	22.25	20.48	29.40	8.30	17.05	12.10
ATF802	5.66	40.00	65.75	91.48	11.13	72.38	34.15	5.98	18.75	22.18	16.48	27.85	8.70	13.58	10.98
ATF704S1	5.43	38.00	65.75	97.10	11.18	70.98	35.03	6.38	25.05	22.70	20.35	29.88	8.38	17.63	12.33
ATF803	5.59	39.50	66.75	92.48	10.60	72.73	36.48	7.45	19.63	22.10	16.65	31.48	9.35	15.10	11.83
ATF805	6.13	45.75	69.75	73.20	8.75	58.40	28.48	5.78	14.68	18.38	13.38	23.53	8.03	10.95	9.60
KY-31	3.86	35.25	65.25	122.95	11.23	83.73	48.43	7.68	37.30	32.63	26.38	44.10	11.05	31.05	18.65
Rebel II	5.04	41.25	66.50	88.18	10.60	68.45	38.00	7.58	19.35	23.10	16.70	32.75	9.85	15.63	12.48
Plantation	5.69	40.25	66.00	89.23	11.03	68.00	35.28	6.73	20.95	22.15	17.13	31.20	9.25	16.35	12.55
Tulsa	5.09	40.50	66.50	97.98	11.00	72.35	37.35	6.48	24.53	23.40	19.78	32.40	8.63	18.78	13.00
018	6.06	40.50	66.00	88.15	11.15	68.08	33.43	6.73	20.28	20.98	16.90	28.40	8.80	14.85	11.45
(BT:8/8/06) LSD(0.05)	0.21	2.01	1.42	5.38	0.90	4.02	2.49	0.63	2.47	1.31	1.56	3.65	0.60	1.94	0.94
CV	3.31	4.32	1.82	4.89	7.02	4.83	5.97	8.27	9.33	4.96	7.18	10.05	5.81	9.83	6.54

■ Cultivar under evaluation
■ Significant difference over two years one location.
■ Significant difference over one year one location.
Measurements taken in Albany, Oregon
4 reps; 20 plants/rep = 80 data points

2004026 3

Table 1B

2003 Morphological Data

Cultivar	Genetic Color (Scale: 1-9, 9= darkest green)	Heading Date (days after April 1)	Anthesis Date (days after April 1)	Mature Plant Height (cm)	Plant Width (cm)	Panicle Length (cm)	Flag Leaf Length (cm)	Flag Leaf Width (mm)	Flag Leaf Height (cm)	Flag Leaf Sheath Length (cm)	Flag Leaf Internode Length (cm)	Leaf Blade Length (cm)	Leaf Blade Width (mm)	Leaf Blade Height (cm)	Leaf Sheath Length (cm)
'Scorpion II' (T:10/12/'06) <ATF799>	5.90	60.75	61.98	107.50	27.25	67.68	38.88	4.40	38.75	23.28	25.20	38.25	5.18	28.65	16.28
SBL	5.58	51.25	56.65	115.93	28.25	77.35	46.50	5.10	37.90	28.90	24.98	42.50	5.85	31.43	17.50
SBM	5.64	57.25	59.65	111.50	27.25	71.43	43.60	5.10	38.95	26.53	24.98	40.60	6.15	31.45	16.68
RB3	5.96	55.50	58.35	115.60	27.75	76.43	44.40	5.38	38.13	27.10	24.75	43.63	6.05	29.58	17.10
RB2	6.06	52.00	56.48	113.75	28.00	73.23	44.68	5.00	39.88	26.63	24.70	41.95	5.38	30.45	17.50
ATF800	5.76	58.50	59.83	118.05	28.50	76.53	42.60	4.85	39.60	27.40	27.35	41.48	5.40	28.30	17.78
ATF802	5.71	58.50	60.60	120.35	27.50	80.30	48.10	5.15	38.65	29.05	25.75	42.88	5.88	29.43	17.73
ATF704S1	5.43	51.25	56.50	118.13	27.50	76.93	45.05	5.10	39.85	27.65	26.45	40.13	5.70	28.73	17.38
ATF803	5.53	58.00	60.30	120.65	27.00	78.18	46.43	5.25	42.98	28.08	24.80	45.03	6.00	33.50	18.43
ATF805	6.34	58.50	60.83	110.10	25.75	75.38	42.53	5.15	34.83	25.80	22.85	39.85	5.90	26.30	16.43
KY-31	2.99	46.00	54.28	145.90	27.50	89.48	59.13	7.18	37.30	37.18	28.05	61.03	9.05	51.40	24.68
Rebel II	5.11	57.75	59.08	118.63	27.75	82.08	50.90	6.03	36.43	28.98	24.58	48.60	6.33	28.58	18.98
Plantation	5.71	57.75	60.28	118.68	27.75	77.60	46.80	5.68	40.40	27.85	24.75	44.43	6.78	31.53	18.33
Tulsa	5.10	57.25	59.98	118.65	27.00	79.68	47.78	5.18	39.13	28.55	25.48	43.20	5.45	29.28	17.85
018	6.10	59.50	60.73	108.98	27.00	70.58	44.63	5.25	38.13	26.70	23.83	42.80	6.25	29.10	16.83
LSD(0.05) (BT:8/8/'06)	0.25	2.47	1.15	4.51	1.77	3.91	2.13	0.78	3.57	1.44	1.16	2.42	0.92	3.55	1.06
CV	3.90	3.74	1.65	3.25	5.47	4.33	3.90	12.72	7.51	4.34	3.86	4.67	12.97	9.61	4.99

■ Cultivar under evaluation
■ Significant difference over two years one location.
■ Significant difference over one year one location.
Measurements taken in Albany, Oregon
4 reps; 20 plants/rep = 80 data points

2004 0263

Table 2A 2002 Laboratory Morphological Data

Cultivar	Lemma Length (mm)	Lemma Width (mm)	Lemma Awn Length (mm)	Palea Length (mm)	Palea Width (mm)	Glume Length (mm)	Length of Panicle from Lower Most Whorl to Tip (cm)	Spikelets per Panicle	Florets per Spikelet	Spikelet Length (mm)	Length of Longest Whorl (mm)	Distance Between Lower Most Whorls	Number of Spikelets on the Longest Whorl
ATF799	6.55	1.47	0.84	6.19	1.15	5.00	17.23	72.33	7.50	12.87	74.47	42.80	13.80
SBL	6.85	1.46	1.06	6.45	1.15	5.36	20.53	80.00	7.10	13.00	89.57	51.30	14.83
SBM	6.83	1.55	1.08	6.41	1.17	5.08	19.60	80.00	7.20	13.07	86.10	47.60	14.50
RB3	6.80	1.55	0.91	6.32	1.19	5.15	18.47	76.67	7.53	13.17	76.40	46.43	13.50
RB2	6.46	1.56	0.86	6.08	1.22	5.12	17.87	76.67	7.17	12.47	76.33	45.23	12.83
ATF800	7.17	1.46	0.94	6.65	1.13	4.98	18.77	70.00	7.33	13.20	80.07	46.87	11.73
ATF802	7.00	1.55	0.83	6.34	1.21	5.31	20.60	82.67	8.20	13.50	92.07	52.87	15.27
ATF704S1	7.14	1.46	0.94	6.61	1.14	5.57	19.07	73.67	7.47	13.13	79.70	47.17	12.10
ATF803	6.77	1.49	0.82	6.28	1.10	5.31	21.73	85.33	7.67	13.07	101.13	54.20	13.80
ATF805	6.73	1.51	0.88	6.37	1.11	5.29	16.93	80.67	8.10	13.50	71.93	41.53	13.97
KY-31	7.74	1.62	0.98	7.25	1.26	5.77	29.33	116.33	8.07	15.13	111.17	67.90	16.33
Rebel II	6.77	1.45	1.07	6.35	1.09	5.35	21.67	98.00	6.90	12.53	91.77	53.83	14.57
Plantation	6.72	1.45	0.80	6.33	1.14	4.83	20.43	97.33	7.17	12.63	87.10	48.40	15.50
Tulsa	6.72	1.48	0.78	6.25	1.14	4.87	21.60	93.67	7.27	12.50	89.80	50.77	13.87
018	7.11	1.49	0.92	6.45	1.12	5.00	20.43	85.00	7.63	13.53	86.83	48.17	16.30
LSD (0.05)	0.31	0.08	0.17	0.23	0.08	0.34	2.31	11.18	0.85	0.91	13.15	5.49	2.95
CV	3.25	3.94	12.97	2.64	5.23	4.83	8.32	9.84	8.43	5.08	11.21	8.11	15.44

■ Cultivar under evaluation
■ Significant difference over two years one location.
■ Significant difference over one year one location.
Measurements taken in Albany, Oregon
3 reps; 20 plants/rep = 60 data points

2004002663

Table 2B

2003 Laboratory Morphological Data

Cultivar	Lemma Length (mm)	Lemma Width (mm)	Lemma Awn Length (mm)	Palea Length (mm)	Palea Width (mm)	Glume Length (mm)	Length of Panicle from Lower Most Whorl to Tip (cm)	Spikelets per Panicle	Florets per Spikelet	Spikelet Length (mm)	Length of Longest Whorl (mm)	Distance Between Lower Most Whorls	Number of Spikelets on the Longest Whorl
ATF799	6.52	1.46	1.15	6.10	1.17	4.72	22.50	85.33	5.23	10.50	89.47	55.83	15.93
SBL	7.06	1.49	1.47	6.39	1.20	5.17	26.13	92.00	5.63	11.43	101.40	67.87	16.83
SBM	7.15	1.48	1.51	6.53	1.18	4.98	25.67	89.67	5.57	11.47	108.50	63.93	17.07
RB3	7.16	1.45	1.48	6.50	1.22	5.07	26.23	92.67	5.27	11.27	100.10	66.67	17.93
RB2	6.88	1.43	1.21	6.22	1.19	4.95	25.87	99.33	5.13	10.73	104.77	63.30	19.57
ATF800	6.30	1.42	1.15	6.16	1.18	4.44	23.10	77.67	4.87	10.43	81.70	57.10	11.37
ATF802	6.47	1.37	1.37	6.07	1.17	4.80	27.43	92.33	5.60	10.53	111.00	68.57	18.27
ATF704S1	6.92	1.57	1.55	6.59	1.29	5.17	26.37	82.67	5.60	11.40	104.23	68.03	15.40
ATF803	6.20	1.60	1.35	6.18	1.20	4.98	28.83	97.67	4.97	10.47	126.50	69.93	17.30
ATF805	6.06	1.42	1.55	6.08	1.09	4.79	24.57	103.00	5.53	10.50	85.17	58.53	16.57
KY-31	7.28	1.55	1.59	7.13	1.32	5.41	34.67	122.67	6.23	13.23	123.40	80.83	17.93
Rebel II	6.75	1.47	1.80	6.21	1.18	5.00	29.47	108.00	4.53	10.63	117.07	71.40	18.47
Plantation	6.41	1.45	1.31	6.14	1.19	4.40	27.30	105.33	4.80	10.13	106.87	65.43	17.37
Tulsa	6.33	1.42	1.39	5.97	1.24	4.51	27.67	100.67	4.77	9.87	101.97	68.40	16.97
018	6.45	1.41	1.52	6.08	1.15	4.51	25.93	92.33	5.37	10.60	96.53	63.23	16.90
LSD(0.05)	0.70	0.10	0.27	0.31	0.10	0.37	1.81	8.48	0.47	0.79	11.74	5.46	2.80
CV	7.74	4.86	13.52	3.64	6.31	5.60	4.93	6.51	6.53	5.28	8.27	6.05	12.18

■ Cultivar under evaluation
■ Significant difference over two years one location.
■ Significant difference over one year one location.
Measurements taken in Albany, Oregon
3 reps; 20 plants/rep = 60 data points

Panicle Type Inflorescence

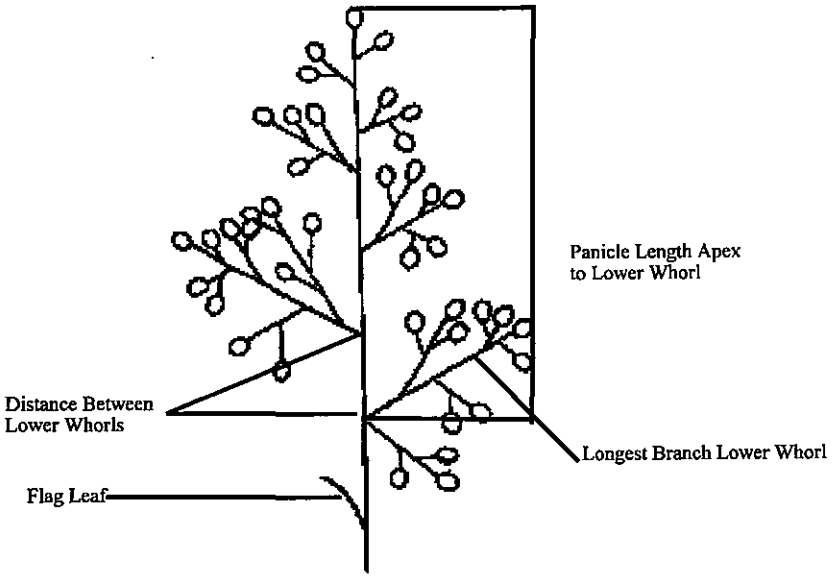

Illustration 1.

Table 3A

2002 Additional Morphological Measurements of the Panicle

Cultivar	Growth Habit at Anthesis % Semi-Prostrate	Growth Habit at Anthesis % Horizontal	Growth Habit at Anthesis % Semi-Erect	Growth Habit at Anthesis % Erect	Anther Color % Purple	Panicle Color % Purple	Lemma Awn % Present	Glume Color % Purple	Panicle Orientation % Nodding	Panicle Shape % Ovate	Panicle Type % Open	Panicle Branch Lower Whorl =1	Panicle Branch Lower Whorl =2	Panicle Branch Lower Whorl >3	Panicle Branch Pubescence % Present
ATF799	0	17	58	25	10	43	100	0	0	38	38	40	55	5	12
SBL	0	20	45	35	5	20	100	2	3	60	60	30	65	5	3
SBM	0	2	56	42	5	27	100	3	2	65	65	20	75	5	8
RB3	0	28	42	30	2	18	100	0	0	72	72	30	67	3	7
RB2	0	12	55	33	10	20	100	2	0	67	67	20	75	5	2
ATF800	0	32	53	15	3	45	100	5	0	43	43	18	78	2	0
ATF802	3	25	58	14	7	50	100	3	0	53	53	23	75	2	2
ATF704S1	0	22	71	7	3	20	100	3	0	47	47	23	75	2	5
ATF803	2	50	45	3	0	32	100	2	5	30	30	8	83	9	3
ATF805	0	20	62	18	3	23	100	2	0	27	27	15	82	3	3
KY-31	10	62	28	0	3	7	100	0	15	23	23	8	87	5	18
Rebel II	3	17	48	32	3	40	100	0	0	48	48	9	80	11	3
Plantation	0	8	64	28	5	35	100	0	0	50	50	13	85	2	12
Tulsa	2	34	57	7	3	32	100	3	3	45	45	10	88	2	2
018	0	5	57	38	5	25	100	0	0	45	45	40	60	0	7

■ Cultivar under evaluation
Measurements taken in Albany, Oregon
3 reps; 20 plants/rep = 60 data points

Table 3B 2003 Additional Morphological Measurements of the Panicle

Cultivar	Growth Habit at Anthesis % Semi-Prostrate	Growth Habit at Anthesis % Horizontal	Growth Habit at Anthesis % Semi-Erect	Growth Habit at Anthesis % Erect	Anther Color % Purple	Panicle Color % Purple	Lemma Awn % Present	Glume Color % Purple	Panicle Orientation % Nodding	Panicle Shape % Ovate	Panicle Type % Open	Panicle Branch Lower Whorl =1	Panicle Branch Lower Whorl =2	Panicle Branch Lower Whorl >3	Panicle Branch Pubescence % Present
Scorpion II ATF799	0	33	54	13	3	12	100	3	0	66	66	36	54	10	1
SBL	0	22	45	33	2	12	100	3	0	65	65	34	59	7	4
SBM	0	4	55	41	2	7	100	2	0	62	62	24	68	9	2
RB3	0	25	47	28	2	3	100	0	0	66	66	39	49	13	0
RB2	0	11	57	32	2	3	100	0	0	72	72	54	44	2	1
ATF800	0	41	52	7	18	0	100	3	0	70	70	21	68	11	5
ATF802	5	36	53	6	2	17	100	8	0	77	77	38	60	3	1
ATF704S1	0	25	70	5	2	5	100	5	0	81	81	25	71	4	2
ATF803	6	49	43	2	2	12	100	5	0	70	70	24	71	6	1
ATF805	0	17	67	16	0	5	100	0	0	55	55	31	59	10	2
KY-31	12	55	33	0	0	0	100	7	0	100	100	15	75	10	5
Rebel II	3	20	42	35	3	8	100	0	0	80	80	19	64	18	0
Plantation	0	3	72	25	0	13	100	3	2	72	72	15	76	9	6
Tulsa	4	33	60	3	3	10	100	0	0	80	80	35	59	6	1
018	0	2	75	23	0	3	100	0	0	69	69	33	59	9	0

■ Cultivar under evaluation
Measurements taken in Albany, Oregon
3 reps; 20 plants/rep = 60 data points

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Table 4A

2002 Additional Morphological Measurements

Cultivar	Anthocyanin Present in the Leaf Blade % Purple	Leaf Blade Margin Roughness to the Touch % Smooth	Leaf Blade Margin Roughness to the Touch % Semi-Rough	Leaf Blade Margin Roughness to the Touch % Rough	Leaf Blade Margin Hairs % Present	Leaf Sheath Auricle Hairs % Present	Rhizomes % Present	Lemma Hairs % Present	Palea Hairs % Present	Node Color % Distinct	Seed Weight (mg/1,000 seeds)
ATF799>	0	25	22	53	100	97	0	100	100	7	2350
SBL	0	35	33	32	97	93	0	100	100	15	2578
SBM	0	35	23	42	98	98	0	95	100	2	3194
RB3	0	18	35	47	100	97	0	98	100	5	3977
RB2	0	28	22	48	98	95	0	97	100	3	2103
ATF800	0	7	22	71	100	100	0	100	100	32	3080
ATF802	0	33	24	43	100	98	0	98	100	30	2638
ATF704S1	0	30	32	38	100	97	0	100	100	17	2562
ATF803	0	15	18	67	100	97	0	100	100	28	3195
ATF805	0	10	12	78	100	95	0	100	100	12	3006
KY-31	0	58	22	18	100	95	0	100	100	30	2924
Rebel II	0	12	15	73	100	98	0	100	100	10	2334
Plantation	0	15	25	60	100	100	0	100	100	3	2458
Tulsa	0	47	16	37	100	98	0	100	100	15	2347
018	0	13	12	75	100	100	0	100	100	5	2338

■ Cultivar under evaluation
Measurements taken in Albany, Oregon
3 reps; 20 plants/rep = 60 data points

Table 4B

2003 Additional Morphological Measurements

Cultivar	Anthocyanin Present in the Leaf Blade % Purple	Leaf Blade Margin Roughness to the Touch % Smooth	Leaf Blade Margin Roughness to the Touch % Semi-Rough	Leaf Blade Margin Roughness to the Touch % Rough	Leaf Blade Margin Hairs % Present	Leaf Sheath Auricle Hairs % Present	Rhizomes % Present	Lemma Hairs % Present	Palea Hairs % Present	Node Color % Distinct	Seed Weight (mg/1,000 seeds)
■ ATF799	0	72	18	10	92	91	0	100	100	5	2345
SBL	0	85	15	0	99	90	0	100	100	10	2580
SBM	0	78	17	5	100	92	0	100	100	5	3190
RB3	0	78	20	2	95	92	0	99	100	2	3973
RB2	0	88	12	0	96	97	0	100	100	3	2109
ATF800	0	55	43	2	92	90	0	100	100	5	3114
ATF802	0	83	17	0	99	90	0	100	100	18	2702
ATF704S1	0	77	18	5	95	92	0	99	100	20	2564
ATF803	0	70	23	7	99	95	0	100	100	10	3139
ATF805	0	82	15	3	96	90	0	99	100	0	3070
KY-31	0	55	37	8	96	94	0	100	100	32	2937
Rebel II	0	85	12	3	97	91	0	99	100	5	2310
Plantation	0	72	20	8	97	92	0	100	100	2	2463
Tulsa	0	90	7	3	97	96	0	100	100	8	2352
018	0	77	22	2	96	91	0	99	100	2	2345

■ Cultivar under evaluation
Measurements taken in Albany, Oregon
3 reps; 20 plants/rep = 60 data points

'orpionII' (11/10/12/06)

20.

2004 0026

2002 Brown Patch Data

Cultivar	New Jersey Langlois Enterprises Brown Patch 2001 Trial - 2002 Data	Arkansas University of Arkansas Brown Patch 2001 Trial - 2002 Data	New Jersey Rutgers University Brown Patch 2001 Trial - 2002 Data
Tuxedo	4.00	3.20	2.70
Scorpion II	7.67	4.50	4.80
Focus	5.36	4.75	4.50
Forte	5.33	4.75	6.00
Rebel Exeda	7.67	5.25	6.70
LSD (5%)	1.55	1.26	1.50
C.V.	22.96	17.98	

1-9 scale; 9=most resistant

■ Cultivar under evaluation

■ Significant difference over two locations one year.

■ Significant difference over one location one year.

Langlois Enterprises, Salem, NJ: full data sets available www.nexgenresearch.net.

University of Arkansas, Fayeteville, AR: full data sets available www.nexgenresearch.net.

Rutgers University, Adelphi, NJ; full data sets available 2002 Rutgers Turfgrass Proceedings.

#2004002268

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE

EXHIBIT E
STATEMENT OF THE BASIS OF OWNERSHIP

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

1. NAME OF APPLICANT(S)	2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER	3. VARIETY NAME
NexGen Seed Research, LLC	ATF799	Scorpion II
4. ADDRESS *(Street and No., or R.F.D. No., City, State, and ZIP, and Country)*	5. TELEPHONE *(Include area code)*	6. FAX *(Include area code)*
33725 Columbus St. SE Albany, OR 97322 USA	(541) 967-8923	(541) 967-8223
	7. PVPO NUMBER #200400268	

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

9. Is the applicant (individual or company) a U.S. national or a U.S. based company? **If no, give name of country.** ☑ YES ☐ NO

10. 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**

11. 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.

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0581-0055. The time required to complete this information collection is estimated to average 0.1 hour per response, including the time for reviewing the instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

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