

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 1.4 hours 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.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or part of an individual's income is derived from any public assistance program (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD).

To file a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410, or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.

**U.S. DEPARTMENT OF AGRICULTURE  
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
ADDRESS (Street and No. or RD No., City, State, Zip Code, and Country)		FOR OFFICIAL USE ONLY
		PVPO NUMBER

**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)

\_\_\_ 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:**

\_\_\_ Chromosome Number

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

\_\_\_ Transition Zone    \_\_\_ West    \_\_\_ Northeast    \_\_\_ Other (Specify) \_\_\_\_\_

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

- |                    |                |                      |                  |                |                    |
|--------------------|----------------|----------------------|------------------|----------------|--------------------|
| ___ 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 \_\_\_  
 \_\_\_ Days Later Than \_\_\_

} Comparison Variety

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

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

\_\_\_ . \_\_\_ cm Height  
 \_\_\_ . \_\_\_ cm Shorter Than \_\_\_  
 Height Same As \_\_\_  
 \_\_\_ . \_\_\_ cm Taller Than \_\_\_

} Comparison Variety

\_\_\_ . \_\_\_ cm Internode Length  
 \_\_\_ . \_\_\_ cm Shorter Than \_\_\_  
 Length Same As \_\_\_  
 \_\_\_ . \_\_\_ cm Taller Than \_\_\_

} Comparison Variety

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

\_\_\_ . \_\_\_ cm Height  
 \_\_\_ . \_\_\_ cm Shorter Than \_\_\_  
 Height Same As \_\_\_  
 \_\_\_ . \_\_\_ cm Taller Than \_\_\_

} Comparison Variety

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

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

**7. RHIZOMES:** (Pseudo)

\_\_\_ . \_\_\_ mm Length    \_\_\_ 1 = Absent    2 = Rare (Rebel)    3 = Common

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

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

\_\_\_ Specify Rating of Comparison Variety

___ Anthocyanin:	1 = Absent	9 = Present	
___ Basal Hairs:	1 = Absent	9 = Present	
___ Margins:	1 = Absent	5 = Semi-rough	9 = Rough
___ Width Class:	1 = Very Coarse	3 = Coarse	5 = Medium
	7 = Fine	9 = Very Fine	

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

**TILLER LEAF WIDTH MM:**

\_\_\_ . \_\_\_ cm Tiller Leaf Length  
 \_\_\_ . \_\_\_ cm Shorter Than \_\_\_  
 Length Same As \_\_\_  
 \_\_\_ . \_\_\_ cm Taller Than \_\_\_

} Comparison Variety

\_\_\_ . \_\_\_ mm Tiller Leaf Width  
 \_\_\_ . \_\_\_ mm Narrower Than \_\_\_  
 Width Same As \_\_\_  
 \_\_\_ . \_\_\_ mm Longer Than \_\_\_

} Comparison Variety

**8. LEAF BLADE:** (Continued)

FLAG LEAF LENGTH CM:

\_\_\_ . \_\_\_ cm Flag Leaf Length

\_\_\_ . \_\_\_ cm Shorter Than \_\_\_

Length Same As \_\_\_

\_\_\_ . \_\_\_ cm Longer Than \_\_\_

Comparison Variety

\* FLAG LEAF WIDTH MM:

\_\_\_ . \_\_\_ mm Flag Leaf Width

\_\_\_ . \_\_\_ mm Narrower Than \_\_\_

Width Same As \_\_\_

\_\_\_ . \_\_\_ mm Wider Than \_\_\_

Comparison Variety

**9. LEAF SHEATH:** (Basal Portion)

\_\_\_ Anthocyanin (Seedling): 1 = Absent (K31) 9 = Present ( )

\_\_\_ Auricle Hairiness: 1 = Absent ( ) 9 = Present ( )

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

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

\_\_\_ Type: 1 = Compact (appressed) 5 = Intermediate 7 = Open 9 = Other (Specify) \_\_\_\_\_

\_\_\_ Orientation: 1 = Nodding 9 = Erect

\_\_\_ Branch Pubescence: 1 = Glabrous 9 = Pubescent

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

\_\_\_ . \_\_\_ cm Panicle Length (From base to tip, if nodding, straighten; after anthesis)

\_\_\_ . \_\_\_ cm Shorter Than \_\_\_

Length Same As \_\_\_

\_\_\_ . \_\_\_ cm Longer Than \_\_\_

Comparison Variety

**11. SEED:** (With Lemma and Pelea)

\_\_\_ \_\_\_ mg per 1000 seeds

\_\_\_ mm Less Than \_\_\_

Weight Same As \_\_\_

\_\_\_ mm More Than \_\_\_

Comparison Variety

Palea: (Keels or Margins) \_\_\_ Hairs: 1 = Absent 5 = Short (Missouri 96) 9 = Long

Lemma: \_\_\_ Hairs: 1 = Absent 5 = Several 9 = Many

\_\_\_ . \_\_\_ mm Lemma Length (Mature) \_\_\_ . \_\_\_ mm Lemma Width

\_\_\_ . \_\_\_ cm Shorter Than \_\_\_

Length Same As \_\_\_

\_\_\_ . \_\_\_ cm Longer Than \_\_\_

Comparison Variety

\_\_\_ . \_\_\_ mm Narrower Than \_\_\_

Width Same As \_\_\_

\_\_\_ . \_\_\_ mm Wider Than \_\_\_

Comparison Variety

**11. SEED:** (continued)

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

\_\_\_ • \_\_\_ mm Awn Length (of those present)

\_\_\_ • \_\_\_ mm Shorter Than \_\_\_\_\_

Length Same As \_\_\_\_\_

\_\_\_ • \_\_\_ mm Longer Than \_\_\_\_\_

} Comparison Variety

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

\_\_\_ Melting-out (*Drechslera poae*)

\_\_\_ Blind Seed (*Gloeotinia temulenta*)

\_\_\_ Leaf Spot (*D. siccans*)

\_\_\_ Dollar Spot (*Lanzia, Mollerdiscus* spp.)

\_\_\_ Net Blotch (*D. dictyoides*)

\_\_\_ Stem Rust (*Puccinia graminis*)

\_\_\_ Brown Patch (*Rhizoctonia solani*)

\_\_\_ T. Blight (*Typhula incarnata*)

\_\_\_ C. Leaf Spot (*Cercospora festucae*)

\_\_\_ Pythium Blight (*Pythium* spp.)

\_\_\_ Pink Snow Mold (*Gerlachia nivalis*)

\_\_\_ Powdery Mildew (*Erysiphe graminis*)

\_\_\_ Silver Top (*F. tricinctum, F. roseum*)

\_\_\_ Crown Rust (*Puccinia coronata*)

\_\_\_ Other Disease \_\_\_\_\_

\_\_\_ Other Insect \_\_\_\_\_

\_\_\_ Other Nematode \_\_\_\_\_

**13. ENVIRONMENTAL STRESS:**

\_\_\_ Drought Stress 1 = Susceptible 5 = Tolerant 9 = Resistant

\_\_\_ Shade Stress 1 = Susceptible 5 = Tolerant 9 = Resistant

\_\_\_ 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			Leaf Color		
Panicle Color			Panicle Shape		
Seed Size			Cold Injury		
Winter Color			Heat		
Disease					

**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.

**16. ADDITIONAL DESCRIPTION:** (Use additional sheets as required).

Describe all characteristics that cannot be adequately described in the form above in Exhibit D. Varieties used for comparison should be used as may be appropriate, such as for disease reactions. Append all comparative trial and evaluation data, including measured characters, environmental, and disease tests results. Providing such information may aid in conducting a more thorough review of the applicants claims of distinctness.