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

Exhibit C

OBJECTIVE DESCRIPTION OF VARIETY
BLUEGRASS (*Poa* 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:

Select the number that characterizes the variety in the features described below. For measured characteristics, use leading zeros as necessary tin order to fill all blanks (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; designate the system used: _____. Describe location of test area, conditions, and number of plants used in the section below under additional description.

1. **SPECIES**:

☐ 1 = *Poa compressa* 2 = *P. pratensis* 3 = *P. trivialis* 4 = Others (Please Specify) _____

☐☐☐ Chromosome Number

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

☐ Northeast ☐ Transitional Zone ☐ Southeast ☐ North Central ☐ Pacific N.W.

☐ Intermountain ☐ Southwest (CA, AZ) ☐ Other (Specify) _____

3. **MATURITY**: (At first anthesis) Give test area _____

☐

1 = Very Early
2 = Early (Delta, Mystic)
3 = Medium Early (Fylking, Nugget)
4 = Medium Late (Newport, Adelphi, Aquila)
5 = Late (Merion, Baron, Enmundi)
6 = Very Late (Pacific)

_____ Date at First Anthesis

☐☐ Number of days earlier than ☐
Maturity same as ☐
☐☐ Number of days later than ☐

1 = Nugget 2 = Fylking 3 = Delta
4 = Merion 5 = Newport 6 = Baron
7 = Mystic 8 = Sabre 9 = Reubens

4. **PLANT HEIGHT**: (At maturity – Average of longest shoot of 10 plants from soil surface to top of panicle): Test Area _____

☐

1 = Short
2 = Medium short (Baron, Fylking, Mystic)
3 = Medium tall (Merion, Adelphi)
4 = Tall (Delta)
5 = Very Tall

☐☐☐ cm Height.

4. **PLANT HEIGHT**: (continued)

☐☐ cm Shorter than	☐	1 = Nugget	2 = Fylking	3 = Delta
Height same as	☐	4 = Merion	5 = Newport	6 = Baron
☐☐ cm Taller than	☐	7 = Mystic	8 = Sabre	9 = Reubens

5. **GROWTH HABIT**:

☐ Habit: 1 = Prostrate (Nugget) 2 = Semiprostrate (Merion) 3 = Erect (Delta)

☐☐☐ cm Amount of spread by rhizomes in 1 year (give test area _____)

6. **LEAF BLADE**:

☐ Green color: 1 = Light green (Mystic) 2 = Medium green (Fylking, Bonnieblue) 3 = Moderately dark green (Merion, Adelphi) 4 = Very dark green (Nugget, Glade, Enmundi)

☐ Bluegreen color: 1 = Not bluegreen (Mystic, Touchdown, Parade) 2 = Moderately bluegreen (Merion, A-34) 3 = Bluegreen (Nugget, Enmundi, Adelphi) 4 = Strongly bluegreen (Majestic)

☐ Winter color: 1 = Light green 2 = Dark green 3 = Light purple 4 = Dark purple 5 = Not purple 6 = Not green or purple

☐ Hairs upper side: 1 = Absent (Nugget) 2 = Sparse (Merion) 3 = Dense (Park)

☐ Hairs lower side: 1 = Absent (Fylking, Merion) 2 = Sparse 3 = Dense (Nugget)

☐ Luster upper side: 1 = Shiny (Eclipse, Enmundi) 2 = Dull (Aquila, Parade)

☐ Luster lower side: 1 = Shiny (Mystic, Enmundi) 2 = Dull (Barbie, Eclipse)

☐ Margin hairs: (Fringe on Margin or Base) 1 = Absent (Delta) 2 = Present (Fylking, Merion)

☐ Width: 1 = Very fine (Mystic) 2 = Fine (Nugget) 3 = Medium (Merion, Fylking) 4 = Broad (Adelphi, Baron) 5 = Very broad (Monopoly)

☐☐ mm Width (flag leaf)

☐☐ mm Narrower than	☐	1 = Nugget	2 = Fylking	3 = Delta
Width same as	☐	4 = Merion	5 = Newport	6 = Baron
☐☐ mm Wider than	☐	7 = Mystic	8 = Sabre	9 = Reubens

☐☐ mm Length (flag leaf)

☐☐ mm Shorter than	☐	1 = Nugget	2 = Fylking	3 = Delta
Length same as	☐	4 = Merion	5 = Newport	6 = Baron
☐☐ mm Longer than	☐	7 = Mystic	8 = Sabre	9 = Reubens

☐ Position of flag leaf (angle to stem): 1 = Appressed 2 = Open angle, yet stiff 3 = Nodding

7. **LEAF SHEATH**:

☐☐ mm sheath length

☐ Seedling Color (base of sheath): 1 = Green (Nugget, Merion) 2 = Red (Delta)

☐ Hairs on Margin: 1 = Absent (Fylking) 2 = Present (Nugget)

☐ Margin Roughness (to touch): 1 = Smooth (Delta) 2 = Rough (Sabre)

☐ Hairs on Surface: 1 = Absent 2 = Present (Nugget)

☐ Surface Roughness (to touch): 1 = Smooth (Fylking) 2 = Rough (Ram 1)

☐ Hairs on both sides just beneath leaf blade (under collar): 1 = Absent (Merion) 2 = Present (Nugget)

7. **LEAF SHEATH**: (continued)

☐ Hairs on ligule: 1 = Absent (Fylking) 2 = Short (Baron) 3 = Long (Nugget)

☐ Glaucosity: 1 = Absent (Mystic, Enmundi) 2 = Present (Birka)

☐ Keel: 1 = Absent (Ram 1) 2 = Present (Adelphi)

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8. **PANICLE**: (Mature Plant)

☐☐☐ mm Length (Lowest branch whorl to top, for 10 plants) Test Area: _____

☐☐☐ mm Shorter than ☐ 1 = Nugget 2 = Fylking 3 = Delta

Panicle same as ☐ 4 = Merion 5 = Newport 6 = Baron

☐☐☐ mm Longer than ☐ 7 = Mystic 8 = Sabre 9 = Reubens

☐ Color (at 50% flowering): 1 = Not red (Fylking) 2 = Red (Nugget)

☐ Shape of Rachis (opposite lower side branches): 1 = No bend (Nugget) 2 = Bend (Merion)

☐ Collar: 1 = Opened (Nugget) 2 = Closed (Merion)

☐ Branches attitude (lowest whorl): 1 = Drooping (America, Prato) 2 = Horizontal (Merion) 3 = Ascending (Tundra)

☐ Number of main branches in lowest whorl.

☐ Panicle habit: 1 = Nodding (Newport) 2 = Upright (Nugget)

☐ Panicle type: 1 = Open 2 = Intermediate 3 = Compact

☐ Anther color (anthesis): 1 = Purple 2 = Yellow 3 = Brown

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9. **LEMMA**:

☐ Keel 1 = Glabrous 2 = Slightly pubescent 3 = Pubescent

☐ Marginal Nerves

☐ Intermediate Nerves: 1 = Distinct 2 = Obscure

☐ Basal Webbing: 1 = Absent 2 = Scant (Baron) 3 = Copious (Merion)

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10. **SEED**: (Floret–not dehulled)

☐ Apomixis Percentage: 1 = more than 95 2 = 85 to 95 3 = less than 85

☐ Phenol Reaction: 1 = none-lemma removed (Merion) 2 = Beige (Cougar) 3 = Brown (Windsor)
4 = Black (Mystic - 2hrs) 5 = Black (-24hrs)

☐☐☐ mm Width (average of 10) ☐☐☐ mm Length

☐☐☐☐ Milligrams per 10,000 seeds

☐☐☐ Milligrams less than ☐ 1 = Nugget 2 = Fylking 3 = Delta

Weight same as ☐ 4 = Merion 5 = Newport 6 = Baron

☐☐☐ Milligrams more than ☐ 7 = Mystic 8 = Sabre 9 = Reubens

☐ Weight Class (g/10,000 seeds): 1 = Light (< 3 g Sydsport, Merion)
2 = Medium (3 g - 4 g Adelphi, Parade)
3 = Heavy (> 4 g Fylking, Nugget)

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11. **ENVIRONMENTAL RESISTANCE**:
(0 = Not Tested; 1 = Very Susceptible; 2 = Moderately Susceptible; 3 = Moderately Resistant; 4 = Highly Resistant)

☐ Cool Temperature (Winter color) ☐ Cold (injury) ☐ Heat ☐ Drought

11. **ENVIRONMENTAL RESISTANCE**: (continued)
(0 = Not Tested; 1 = Very Susceptible; 2 = Moderately Susceptible; 3 = Moderately Resistant; 4 = Highly Resistant)

- ☐ Shade
- ☐ Low Fertility
- ☐ Acid Soil (< pH 5.5)
- ☐ Alkalinity (pH > 7.5)
- ☐ Salinity
- ☐ Soil Compaction
- ☐ Poor Drainage
- ☐ Air Pollution
- ☐ Other (Please Specify): _____

12. **DISEASE RESISTANCE**:
(0 = Not Tested; 1 = Very Susceptible; 2 = Moderately Susceptible; 3 = Moderately Resistant; 4 = Highly Resistant)

- ☐ Melting-Out *Drechslera poae* (*Helminthosporium vagans*)
- ☐ Helminthosporium Leaf Spot *Bipolaris sorokiniana*
- ☐ Brown Patch *Rhizoctonia solani*
- ☐ Powdery Mildew *Erysiphe graminis*
- ☐ Stripe Smut *Ustilago striiformis*
- ☐ Flag Smut *Urocystis agropyri*
- ☐ Pink Snow Mold *Fusarium nivale*
- ☐ Ergot *Claviceps purpurea*
- ☐ Fusarium Blight *Fusarium roseum, F. tricinctum*
- ☐ Typhula Blight *Typhula* spp.
- ☐ Dollar Spot *Sclerotinia homoeocarpa*
- ☐ Sclerotina *S. borealis*
- ☐ Stem Rust *Puccinia graminis*
- ☐ Stripe Rust *P. striiformis*
- ☐ Leaf Rust *P. poae-nemoralis*
- ☐ Orange Stripe Rust *P. poarum*
- ☐ Pythium Blight *Pythium* spp.
- ☐ Red Thread *Corticium fujciforme*
- ☐ Other (Please Specify): _____
- ☐ Other (Please Specify): _____

13. **INSECTS, NEMATODES, RESISTANCE**:
(0 = Not Tested; 1 = Very Susceptible; 2 = Moderately Susceptible; 3 = Moderately Resistant; 4 = Highly Resistant)

- ☐ Chinch Bug *Blissus* spp. (give species: _____)
- ☐ Sod Webworm *Crambus* spp. (give species: _____)
- ☐ Bluegrass Billbug (*Sphenophorus parvulus*)
- ☐ White Grub: Japanese Beetle, Chafers (give species: _____)
- ☐ Greenbug Aphid (*Schizaphis graminum*)
- ☐ Other (Please Specify: _____)
- ☐ Other (Please Specify: _____)

14. Give variety or varieties that most closely resemble the application variety. For the following characteristics indicate Degree of Resemblance by placing in the column marked D.R., one of the following numbers: 1 = Application variety is less than comparison variety, 2 = Same as, 3 = More than, better, darker, more disease resistant, etc.

CHARACTER	VARIETY	D.R.	CHARACTER	VARIETY	D.R.
Maturity-heading			Leaf Width		
Height			Leaf Color Spring		
Seed Size			Leaf Color Summer		
Seed Weight			Leaf Color Winter		
Cold Injury			Drought		
Heat			Disease**		
Shade					

** Specify each disease evaluated

15. **ADDITIONAL DESCRIPTION**:

Describe all characteristics and conditions that cannot be adequately described in this form in Exhibit D.