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

**OBJECTIVE DESCRIPTION OF VARIETY  
Barley (*Hordeum vulgare* L.)**

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 character of this variety in the boxes below. Place a zero in the first box (i.e.,    or   ) when the number is either 99 or less or 9 or less.

**1. GROWTH HABIT**

1 = Spring    2 = Facultative Winter    3 = Winter

Early Growth:    1 = Prostrate    2 = Prostrate to Semi-Prostrate    3 = Semi-Prostrate    4 = Semi-Prostrate to Erect    5 = Erect

**2. MATURITY: (50% Flowering)**

1 = Early    2 = Early to Midseason    3 = Midseason    4 = Midseason to Late    5 = Late

No. Days Earlier Than \_\_\_\_\_ \*

Same as Check \_\_\_\_\_ \*

No. of Days Later Than \_\_\_\_\_ \*

**3. PLANT: (From Soil Level to Top of Head)**

1 = Semi-Dwarf    2 = Short    3 = Medium Tall    4 = Tall    5 = Other (specify \_\_\_\_\_)

cm Shorter Than \_\_\_\_\_ \*

Same as Check \_\_\_\_\_ \*

cm Taller Than \_\_\_\_\_ \*

**4. STEM**

Exertion (Flag to Spike at Maturity): 1 = ( 0 – 3 cm)    2 = ( 3 – 10 cm)    3 = ( 10 – 15 cm)    4 = Other (specify \_\_\_\_\_)

Anthocyanin: 1 = Absent    2 = Present

No. of Nodes (Originating from Node Above Ground)

Collar Shape: 1 = Closed    2 = V-Shaped    3 = Open    4 = Modified Closed or Open    5 = Other (specify \_\_\_\_\_)

Shape of Neck: 1 = Straight    2 = Slightly Snaky    3 = Snaky    4 = Other (Specify) \_\_\_\_\_

\* A commercial variety grown in the same trial.

**5. LEAF**

- Basal Leaf Sheath (Seedling): 1 = Glabrous 2 = Pubescent
- Position of Flag Leaf (At Boot Stage): 1 = Drooping 2 = Horizontal 3 = Upright 4 = Other (specify \_\_\_\_\_)
- Waxiness: 1 = Absent (Glossy) 2 = Slightly Waxy 3 = Waxy 4 = Other (specify \_\_\_\_\_)
- mm Width (First Leaf Below Flag Leaf)
- cm Length (First Leaf Below Flag Leaf)
- Anthocyanin in Leaf Sheath: 1 = Absent 2 = Present

**6. HEAD**

- Type: 1 = Two-Rowed 2 = Six-Rowed
- Density: 1 = Lax 2 = Erect (Not Dense) 3 = Erect (Dense) 4 = Other (specify \_\_\_\_\_)
- Head Attitude: 1 = Erect 2 = Semi-Erect 3 = Nodding 4 = Other (specify \_\_\_\_\_)
- Shape: 1 = Tapering 2 = Strap 3 = Clavate 4 = Other (specify \_\_\_\_\_)
- Waxiness 1 = Absent (Glossy) 2 = Slightly Waxy 3 = Waxy 4 = Other (specify \_\_\_\_\_)
- Lateral Kernels Overlap: 1 = None 2 = At Tip 3 = 1/4 – 1/2 of Head 4 = Other (specify \_\_\_\_\_)
- Rachis (Hair on Edge): 1 = Lacking 2 = Lacking to Few 3 = Few 4 = Few to Covered 5 = Covered
- Rachis Hair Length: 1 = Short; 2 = Midlong; 3 = Midlong to Long; 4 = Long

**7. GLUME**

- Length: 1 = 1/3 of Lemma 2 = 1/2 of Lemma 3 = More than 1/2 of Lemma 4 = Other (specify \_\_\_\_\_)
- Hairs: 1 = None 2 = Short 3 = Long 4 = Other (specify \_\_\_\_\_)
- Hair Covering: 1 = None 2 = Restricted to Middle 3 = Confined to Band 4 = Completely Covered 4 = Other (specify \_\_\_\_\_)
- Awns: 1 = Less than Equal to Length of Glumes 2 = Equal to Length of Glumes  
3 = More than Equal to Length of Glumes 4 = Other (specify \_\_\_\_\_)
- Awn Surface: 1 = Smooth 2 = Semi-Smooth 3 = Rough 4 = Other (specify \_\_\_\_\_)

**8. LEMMA**

- Awn: 1 = Awnless  
2 = Awnlets on Central Rows, Awnless on Lateral Rows  
3 = Short on Central Rows, Awnlets on Lateral Rows  
4 = Short (Less than Equal to Length of Spike)  
5 = Long (Longer than Spike)  
6 = Hooded  
7 = Other (specify \_\_\_\_\_)
- Awn Surface: 1 = Awnless 2 = Smooth 3 = Semi-Smooth 4 = Rough
- Teeth: 1 = Absent 2 = Few 3 = Numerous 4 = Other (specify \_\_\_\_\_)
- Hair: 1 = Absent 2 = Present
- Shape of Base: 1 = Depression 2 = Depression to Slight Crease 3 = Slight Crease  
4 = Slight Crease to Transverse Crease 5 = Transverse Crease
- Rachilla Hairs: 1 = Short 2 = Long 3 = Other (specify \_\_\_\_\_)
- Rachilla Length: 1 = Short 2 = Medium 3 = Long 4 = Other (specify \_\_\_\_\_)

**9. STIGMA**

Hairs: 1 = Few 2 = Many 3 = Other (specify \_\_\_\_\_)

**10. USE**

1 = Malting 2 = Non-malting 3 = Feed (animal) 4 = Forage 5 = Human consumption 6 = Other (specify \_\_\_\_\_)

**11. SEED:**

Type: 1 = Naked 2 = Covered

Hairs on Ventral Furrow: 1 = Absent 2 = Present 3 = Other (specify \_\_\_\_\_)

Length: 1 = Short (8.0 mm)  
2 = Short to Mid-Long (7.5 – 9.0 mm)  
3 = Mid-Long (8.5 – 9.5 mm)  
4 = Mid-Long to Long (9.0 – 10.5 mm)  
5 = Long (10.0 mm)  
6 = Other (specify \_\_\_\_\_)

Wrinkling of Hull: 1 = Naked 2 = Slightly Wrinkled 3 = Semi-Wrinkled 4 = Wrinkled 5 = Other (specify \_\_\_\_\_)

Aleurone Color: 1 = Colorless (White or Yellow)  2 = Blue 3 = Mixed

Percent Abortive   GMS. per 1000 Seeds

**12. DISEASE:** (0 = Not Tested, 1 = Susceptible, 2 = Resistant, 3 = Intermediate, 4 = Tolerant, 5 = Mixed)

Septoria  Net Blotch  Spot Blotch  Powdery Mildew

Loose Smut  Bacterial Blight  Covered Smut  False Loose Smut

Stem Rust  Leaf Rust  Scab  Scald

Aster Yellows Virus  BSMV  BYDV  Other (Specify) \_\_\_\_\_

**13. INSECT:** (0 = Not Tested, 1 = Susceptible, 2 = Resistant, 3 = Intermediate, 4 = Tolerant, 5 = Mixed)

Green Bug  English Grain Aphid  Chinch Bug  Armyworm

Grasshoppers  Cerial Leaf Beetle  Other (Specify) \_\_\_\_\_

Hessian Fly Races {  GP  A  B  C  Other Specify \_\_\_\_\_  
 D  E  F  G

**14. CHEMICAL:** (0 = Not Tested, 1 = Susceptible, 2 = Resistant, 3 = Intermediate, 4 = Tolerant, 5 = Mixed)

Other (Specify) \_\_\_\_\_

**15. INDICATE WHICH VAREITY MOST CLOSELY RESEMBLES THAT SUBMITTED:**

CHARACTER	NAME OF VARIETY	CHARACTER	NAME OF VARIETY
Plant Tillering		Seed Size	
Leaf Size		Coleoptile Elongation	
Leaf Color		Seedling Pigmentation	
Leaf Carriage			

**REFERENCES:**

The following publications may be used as a reference aid for the standardization of character descriptions and terms used in this form:

1. Wiebe, G.A., and D.A. Reid, 1961, Classifications of Barley Varieties Grown in the United States and Canada in 1958, Technical Bulletin No. 1224, U.S. Department of Agriculture.
2. Reid, D.A., and G.A. Wiebe, 1968, Barley: Origin, Botany, Culture, Winter Hardiness, Genetics, Utilization, Pests, Agriculture Handbook No. 338, U.S. Department of Agriculture, pp. 61-84.
3. Malting Barley Improvement Association, Milwaukee, Wisconsin, 1971, Barley Variety Dictionary.

**COLOR:** Royal Horticultural Society Colour Chart; Munsell book of color or any recognized color fan may be used to determine color of the described variety.