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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.