

I. PLANT: (con.)

4. _____ Coleoptile Anthocyanin:

A. Absent

B. Present

5. _____ Juvenile Plant Growth:

A. Prostrate

B. Prostrate to Semi-Erect

C. Semi-Erect

D. Semi-Erect to Erect

E. Erect

EARLY PLANT GROWTH HABIT:



Prostrate



Intermediate



Erect

6. _____ Plant Color: (Boot Stage)

A. Yellow-Green

B. Green

C. Blue-Green

D. Other (Specify) _____

7. _____ Flag Leaf Orientation: (Boot Stage)

A. Erect

B. Semi-Erect

C. Recurved

D. Other (Specify) _____

8. _____ Flag Leaf Type:

A. Not Twisted

B. Twisted

9. _____ Flag Leaf Glaucosity:

A. Wax Absent

B. Wax Present

II. EAR

1. _____ Ear Emergence (Number of Days)

2. _____ Ear Emergence (Number of Days Earlier than* _____)

3. _____ Ear Emergence (Same Number of Days as* _____)

4. _____ Ear Emergence (Number of Days Later than* _____)

* Relative to a PVPO-Approved Commercial Variety Grown in the Same Trial

III. ANTHER:

1. _____ Anther Coloration:

A. Yellow

B. Purple

C. Other (Specify) _____

V. STEM: (con.)

9. _____ Auricle Hairiness:

- A. Absent
- B. Present
- C. Other (Specify) _____

VI. HEAD:

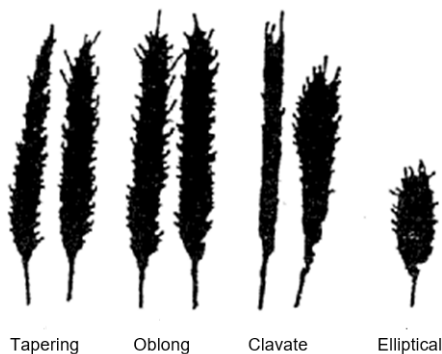
1. _____ Head Density at Maturity:

- A. Lax
- B. Middense (Laxidense)
- C. Dense
- D. Other (Specify) _____

2. _____ Head Shape at Maturity:

- A. Tapering
- B. Strap
- C. Clavate
- D. Elliptical
- E. Other (Specify) _____

SPIKE SHAPE:



3. _____ Head Curvature at Maturity:

- A. Erect
- B. Erect to Inclined
- C. Inclined
- D. Inclined to Recurve
- E. Recurved

4. _____ Head Awnedness at Maturity:

- A. Awnless
- B. Apically Awnletted
- C. Awnletted
- D. Awned
- E. Other (Specify) _____



AWNEDNESS:

- Awnless
- Apically Awnletted
- Awnletted
- Awned

VII. GLUME:

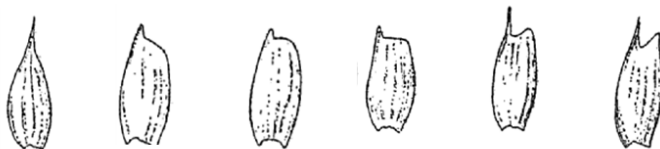
1. _____ Glume Color at Maturity:

- A. White
- B. Tan
- C. Other (Specify) _____

2. _____ Glume Shoulder at Maturity:

- A. Wanting
- B. Oblique
- C. Rounded
- D. Square
- E. Elevated
- F. Apiculate
- G. Other (Specify) _____

SHOULDER SHAPE:



Wanting Oblique Rounded Square Elevated Apiculate

3. _____ Glume Shoulder Width at Maturity:

- A. Narrow
- B. Narrow to Medium
- C. Medium
- D. Medium to Wide
- E. Wide

4. _____ Glume Beak Shape at Maturity:

- A. Obtuse
- B. Acute
- C. Acuminate
- D. Other (Specify) _____

BEAK SHAPE:



Obtuse Acute Acuminate

5. _____ Glume Beak Length at Maturity:

- A. Very Short
- B. Short
- C. Medium
- D. Long
- E. Very Long

6. _____ Glume Beak Length at Maturity (cm)

7. _____ Glume Beak Width:

- A. Narrow
- B. Narrow to Medium
- C. Medium
- D. Medium to Wide
- E. Wide

8. _____ Glume Beak Width at Maturity (cm)

VII. GLUME: (con.)

9. _____ Glume Length at Maturity:

- A. Short (~7mm)
- B. Medium (~8mm)
- C. Long (~9mm)
- D. Other (Specify) _____

10. _____ Glume Width at Maturity:

- A. Narrow (~3mm)
- B. Medium (~3.5mm)
- C. Wide (~4mm)
- D. Other (Specify) _____
- E. Wide

11. _____ Glume Pubescence at Maturity:

- A. Not Present
- B. Present

VIII. SEED:

1. _____ Seed Shape:

- A. Ovate
- B. Oval
- C. Elliptical
- D. Other (Specify) _____

SEED SHAPE:

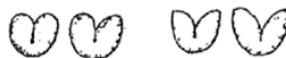


Ovate Oval Elliptical

2. _____ Seed Cheek:

- A. Rounded
- B. Angular

CHEEK SHAPE:



Rounded Angular

VIII. SEED: (con.)

3. _____ Seed Brush:

- A. Short
- B. Short to Medium
- C. Medium
- D. Medium to Long
- E. Long

BRUSH HAIR LENGTH:



Short Medium Long

4. _____ Seed Brush Collar:

- A. Not Collared
- B. Collared

BRUSH SIZE



Small Midsized Large Collared

5. _____ Seed Crease Width:

- A. 60% or Less of Kernel
- B. 80% or Less of Kernel
- C. Nearly as Wide as Kernel
- D. Other (Specify) _____

SEED CREASE WIDTH:



Narrow Mid-wide Wide

VIII. SEED: (con.)

6. _____ Seed Crease Depth:

A. 20% or Less of Kernel

B. 35% or Less of Kernel

C. 50% or Less of Kernel

D. Other (Specify) _____

SEED CREASE DEPTH:



Shallow

Mid-Deep

Deep

7. _____ Seed Color:

A. White

B. Amber

C. Red

D. Other (Specify) _____

8. _____ Seed Texture:

A. Hard

B. Soft

C. Other (Specify) _____

9. _____ Seed Phenol Reaction (See Instructions for More Information):

A. Ivory

B. Fawn

C. Light Brown

D. Dark Brown

E. Black

F. Other (Specify) _____

10. _____ Seed Weight (g per 1000 Seeds, Whole Number Only)

11. _____ Seed Germ Size

A. Small

B. Small to Medium

C. Medium

D. Medium to Large

E. Large

GERM (EMBRYO) SIZE:



Small

Midsized

Large

IX. DISEASE:

1. Disease: Please Indicate the Specific Race or Strain Tested

(0 = Not Tested, 1 = Susceptible, 2 = Resistant, 3 = Intermediate, 4 = Tolerant)

- Stem Rust (*Puccinia graminis* f. sp. tritici) Race: _____
- Leaf Rust (*Puccinia recondita* f. sp. tritici) Race: _____
- Stripe Rust (*Puccinia striiformis*) Race: _____
- Loose Smut (*Ustilago tritici*) Race: _____
- Powdery Mildew (*Erysiphe graminis* f. sp. tritici) Race: _____
- Common Bunt (*Tilletia tritici* or *T. laevis*) Race: _____
- Dwarf Bunt (*Tilletia controversa*) Race: _____
- Karnal Bunt (*Tilletia indica*) Race: _____
- Flag Smut (*Urocystis agropyri*) Race: _____
- Tan Spot (*Pyrenophora tritici-repentis*) Race: _____
- Halo Spot (*Selenophoma donacis*) Race: _____
- Septoria spp. Race: _____
- Septoria nodorum (Glume Blotch) Race: _____
- Septoria avenae (Speckled Leaf Disease) Race: _____
- Septoria tritici (Speckled Leaf Blotch) Race: _____
- Scab (*Fusarium* spp.) Race: _____
- "Snow Molds" Race: _____
- Kernel Smudge ("Black Point") Race: _____
- Common Root Rot (*Fusarium*, *Cochliobolus* and *Bipolaris* spp.) Race: _____
- Barley Yellow Dwarf Virus (BYDV) Race: _____
- Rhizoctonia Root Rot (*Rhizoctonia solani*) Race: _____
- Soilborne Mosaic Virus (SBMV) Race: _____
- Black Chaff (*Xanthomonas campestris* pv. *translucens*) Race: _____
- Wheat Yellow (Spindle Streak) Mosaic Virus Race: _____
- Bacterial Leaf Blight (*Pseudomonas syringae* pv. *syringae*) Race: _____
- Wheat Streak Mosaic Virus (WSMV) Race: _____
- Other (Specify) _____ Race: _____
- Other (Specify) _____ Race: _____
- Other (Specify) _____ Race: _____
- Other (Specify) _____ Race: _____

IX. DISEASE: (con.)

2. Homozygous For Specific Disease Resistance Gene

(0 = Not Tested, 1 = Susceptible, 2 = Resistant, 3 = Intermediate, 4 = Tolerant)

_____ Stem rust _____

- 0. Not Tested
- 1. Susceptible
- 2. Resistant
- 3. Intermediate
- 4. Tolerant

_____ Stripe rust _____

- 0. Not Tested
- 1. Susceptible
- 2. Resistant
- 3. Intermediate
- 4. Tolerant

_____ Leaf rust _____

- 0. Not Tested
- 1. Susceptible
- 2. Resistant
- 3. Intermediate
- 4. Tolerant

_____ Other (Specify) _____

- 0. Not Tested
- 1. Susceptible
- 2. Resistant
- 3. Intermediate
- 4. Tolerant

X. PESTS:

1. INSECT: PLEASE SPECIFY BIOTYPE (Where Needed)

(0 = Not Tested, 1 = Susceptible, 2 = Resistant, 3 = Intermediate, 4 = Tolerant)

Stem Sawfly (*Cephus* spp.) (Specify) _____

Cereal Leaf Beetle (*Oulema melanopa*) (Specify) _____

Russian Aphid 1 (*Diuraphis noxia*) _____

Russian Aphid 2 (*Diuraphis noxia*) _____

Greenbug (*Schizaphis graminum*) (General) _____

Greenbug (*Schizaphis graminum*) Biotype A _____

Greenbug (*Schizaphis graminum*) Biotype B _____

Greenbug (*Schizaphis graminum*) Biotype C _____

Greenbug (*Schizaphis graminum*) Biotype E _____

Greenbug (*Schizaphis graminum*) Other (Specify) _____

Aphids (Specify) _____

Other (Specify) _____

Hessian Fly (*Mayetiola destructor*) Biotype A _____

Hessian Fly (*Mayetiola destructor*) Biotype B _____

Hessian Fly (*Mayetiola destructor*) Biotype C _____

Hessian Fly (*Mayetiola destructor*) Biotype D _____

Hessian Fly (*Mayetiola destructor*) Biotype E _____

Hessian Fly (*Mayetiola destructor*) Biotype F _____

Hessian Fly (*Mayetiola destructor*) Biotype G _____

Hessian Fly (*Mayetiola destructor*) Biotype GP _____

Hessian Fly (*Mayetiola destructor*) Biotype H _____

Hessian Fly (*Mayetiola destructor*) Biotype I _____

Hessian Fly (*Mayetiola destructor*) Biotype J _____

Hessian Fly (*Mayetiola destructor*) Biotype L _____

Hessian Fly (*Mayetiola destructor*) Biotype M _____

Hessian Fly (*Mayetiola destructor*) Biotype N _____

Hessian Fly (*Mayetiola destructor*) Biotype O _____

Hessian Fly (*Mayetiola destructor*) (specify) _____

XI. ADDITIONAL INFORMATION:

1. High Molecular Weight Glutenin Subunit Profile (Check those that apply):

Glu-A1	Glu-B1	Glu-D1
1	6+8	2+11
2*	7+8	2+12
null	7+9	3+12
1*	13+16	5+10
	13+19	null
	17+18	

2. Translocations

(1=Present, 2=Absent, 3=Heterogeneous, 4= Not Tested):

___ 1BL/1RS	___ 1A/1R	___ 2NS/2AS	___ 4DL/4AgS
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4

3. Imidazolinone Herbicide Tolerance:

___ Als-1	___ Als-2	___ Als-3
1. Present	1. Present	1. Present
2. Absent	2. Absent	2. Absent
3. Not Tested	3. Not Tested	3. Not Tested

4. End Use Quality:

Grain Protein	_____
Flour Protein	_____
SDS	_____
Farniograph	_____
Other	_____

[PLEASE ENTER ADDITIONAL VARIETY TRAITS ON NEXT PAGE]

XII. COMMENTS:

References:

(a) L.W. Briggles and L.P. Reitz. 1963. Classification of Triticum Species and Wheat Varieties Grown in the United States. Technical Bulletin 1278. United States Department of Agriculture.

(b) W.E. Walls. 1965. A Standardized Phenol Method for Testing Wheat Seeds for Varietal Purity. Contribution No. 28 to the handbook of seed testing prepared by the Association of Official Seed Analysts.