

A REPORT OF THE
NATIONAL SMALL GRAIN VARIETY REVIEW BOARD



ASSOCIATION OF OFFICIAL SEED CERTIFYING AGENCIES

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NATIONAL SMALL GRAIN VARIETY REVIEW BOARD
ASSOCIATION OF OFFICIAL SEED CERTIFYING AGENCIES
May 2011

The Association of Official Seed Certifying Agencies (AOSCA), National Small Grain Variety Review Board (NSGVRB), reviewed the following varieties on March 17, 2011. The Board recommended the inclusion of these varieties for certification. Seed of these varieties may be certified, providing production meets all standards of the Seed Certifying Agency of the jurisdiction in which the seed is grown.

All variety information, including descriptions, claims, and research data to support any claim, was supplied to the National Small Grain Variety Review Board by the applicants. The National Small Grain Variety Review Board makes judgments regarding recommendation of varieties for inclusion into certification based on the data supplied. Beyond that, the National Small Grain Variety Review Board takes no position on the accuracy or truthfulness of any description or claim made by the applicants.

Further information on current procedures, application forms, and detail regarding the National Small Grain Variety Review Board can be obtained from:

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Respectfully submitted,

Lester Cannon, Chairman
National Small Grains Variety Review Board

2011 AOSCA SMALL GRAIN VARIETY REVIEW BOARD

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		Amendment Key:		
		A – Name Change		
		B – Description		
		C – Other		
		(name) name in parenthesis indicates experimental designation name		

Everest (KS970093-8-9-#1)

1. Everest is a hard red winter wheat developed by the Kansas Agricultural Experiment Station.
2. Everest was selected for yield, disease resistance and test weight using a modified bulk procedure.
3. Everest is best adapted to eastern and central Kansas and adjoining regions of other states. Its susceptibility to drought limits expansion westward.
4. Everest is resistant to leaf rust, stripe rust, soil-borne mosaic virus, spindle streak mosaic virus, barley yellow dwarf virus and Hessian fly. It is also moderately resistant to Fusarium head blight.
5. Identifying characteristics – insert the descriptive term from the Objective Description except where indicated:

- | | |
|---------------------------------------|--|
| 1. <u>Kind: Common</u> | 2. <u>Growth habit: Winter</u> |
| 3. <u>Coleoptile color: White</u> | 4. <u>Juvenile growth habit: Semi-</u> |
| 5. <u>Leaf color at boot: Green</u> | 6. <u>Flag leaf at boot:Recurved/not</u> |
| 7. <u>Auricle color: White</u> | 8. <u>Days to 50% heading: 137</u> |
| 9. <u>Anther color: Yellow</u> | 10. <u>Stem color: no anthocyanin</u> |
| 11. <u>Plant height (cm): 68</u> | 12. <u>Internodes: hollow</u> |
| 13. <u>Spike shape: tapering</u> | 14. <u>Spike density: mid-dense</u> |
| 15. <u>Spike curvature: nodding</u> | 16. <u>Awn type: awned</u> |
| 17. <u>Awn color: Tan</u> | 18. <u>Glume color: Tan</u> |
| 19. <u>Glume length: Medium</u> | 20. <u>Shoulder shape: Elevated</u> |
| 21. <u>Shoulder width: Narrow</u> | 22. <u>Beak shape: Acuminate</u> |
| 23. <u>Beak length (S, M, L, VL):</u> | 24. <u>Glume pubescence: Absent</u> |
| 25. <u>Seed color: Red</u> | 26. <u>Seed shape: Elliptical</u> |
| 27. <u>Cheeks: Rounded</u> | 28. <u>Brush size (S,M, L) S</u> |
| 29. <u>Avg 1,000 kernel wt (g):</u> | 30. <u>Phenol reaction: Dark brown</u> |
| 31. <u>Other:</u> | |

Physiological/biochemical traits:

Other characteristics (*e.g.*, herbicide tolerance):

Variants and frequency: Variants are limited to taller plants with wanting to blique shoulders and short to medium beaks that occur at a frequency of less than 1/1,000.

6. Head row, progeny row, or intensively rogued seed blocks will be used to maintain breeder seed. The Foundation seed program of the Kansas Agricultural Experiment Station will produce all foundation seed. Foundation, Registered and Certified seed classes will be used.
7. Likely first sale of Everest will occur in the Fall of 2009.
8. Application will be made for Plant Variety Protection with the Certification Option.
9. Certified seed production acreage may be published by AOSCA.



T158 (T158)

1. T158 (experimental name T158) is a hard red winter wheat developed by Trio Research, Inc. T158 is now owned and being sold and marketed by Limagrain Cereal Seeds, LLC, made possible by its acquisition of Trio Research in 2010.
2. T158 was developed to transfer the soil borne mosaic and leaf rust resistance from KS93U206 into a T81 background that has excellent adaptation and yield in the western half of the southern great plains.
3. T158 is broadly adapted to hard red winter wheat areas of the south central and southwest Great Plains, including western Kansas and is suitable for both dryland and irrigated conditions. It has good winter hardiness for this region. T158 may be grown over diverse soil types but is best suited for soils having a pH of 5.5 or higher.
4. T158 has resistance to soil borne mosaic virus, barley yellow dwarf virus and current races of stripe rust. It is moderately susceptible to leaf rust. T158 is susceptible to Russian Wheat Aphid, greenbug, and Hessian fly.

5.

- | | |
|---|---|
| 1. <u>Kind: Common</u> | 2. <u>Growth habit: Winter</u> |
| 3. <u>Coleoptile color: White</u> | 4. <u>Juvenile growth habit: Semi-Erect</u> |
| 5. <u>Leaf color at boot: Green</u> | 6. <u>Flag leaf at boot: Re-curved, not twisted, waxy</u> |
| 7. <u>Auricle color: White</u> | 8. <u>Days to 50% heading: 136</u> |
| 9. <u>Anther color: yellow</u> | 10. <u>Stem color: anthocyanin absent</u> |
| 11. <u>Plant height (cm): 73</u> | 12. <u>Internodes: hollow</u> |
| 13. <u>Spike shape: tapering</u> | 14. <u>Spike density: mid-dense</u> |
| 15. <u>Spike curvature: inclined</u> | 16. <u>Awn type: awned</u> |
| 17. <u>Awn color: white</u> | 18. <u>Glume color: white/amber</u> |
| 19. <u>Glume length: medium</u> | 20. <u>Shoulder shape: oblique</u> |
| 21. <u>Shoulder width: medium</u> | 22. <u>Beak shape: acute</u> |
| 23. <u>Beak length (S, M, L, VL): M</u> | 24. <u>Glume pubescence: glabrous</u> |
| 25. <u>Seed color: red</u> | 26. <u>Seed shape: ovate</u> |
| 27. <u>Cheeks: rounded</u> | 28. <u>Brush size (S,M, L): S</u> |
| 29. <u>Avg 1,000 kernel wt (g): 33</u> | 30. <u>Phenol reaction: dark brown to black</u> |
| 31. <u>Other: T158 has the resistance Sr2 allele as tested by SSR marker GWM533. T158 has the 1A:1R translocation as tested by the rye specific SSR marker SCM09. T158 has Rht1 as tested by gene specific STS marker for Rht1.</u> | |

Physiological/biochemical traits: none.

Other characteristics (e.g., herbicide tolerance): none.

Variants and frequency: Variants have been awnless, brown glume and tall plants at a rate of 1 in 10,000.

6. Recognized classes of T158 are Breeder, Foundation, Registered and Certified. Seed of T158 may be produced and sold only through a license agreement. Limagrain Cereal Seeds will maintain Breeder seed of T158 by roguing and removal of off-types in bulk seedings.
7. Foundation seed will be available for purchase in fall, 2011.
8. T158 is not registered under PVP. Descriptive data can be supplies to the PVP database.
9. Certified seed production and acreage may be published by AOSCA and official state seed certifying agencies.



25R30 (XW07U)

1. 25R30 (Experimental number XW07U) is a soft red winter wheat developed by Pioneer Hi-Bred International, Inc.
2. The cultivar 25R30 was bred and selected using a modified pedigree selection method for any and all of the following characteristics in the field environment: disease resistance, plant type, plant height, head type, straw strength, maturity, grain yield, test weight, and milling and baking characteristics.
3. 25R30 has shown adaptation to the northern soft wheat regions based on tests conducted in Arkansas, Kentucky, Missouri, Illinois, Indiana, Ohio, Michigan, Maryland, and Ontario, Canada.
4. 25R30 has shown very good stripe rust resistance and powdery mildew resistance. It exhibits good resistance to leaf rust, soil-borne mosaic virus, and wheat spindle streak mosaic virus. It has shown slightly below average resistance to Fusarium head blight (scab).

5. Identifying characteristics – insert the descriptive term from the Objective Description except where indicated:

- | | |
|---|---|
| 1. <u>Kind:</u> Common soft red | 2. <u>Growth habit:</u> Winter |
| 3. <u>Coleoptile color:</u> Red | 4. <u>Juvenile growth habit:</u> Semi-erect |
| 5. <u>Leaf color at boot:</u> Green | 6. <u>Flag leaf at boot:</u> Wax present |
| 7. <u>Auricle color:</u> White | 8. <u>Days to 50% heading:</u> 128 |
| 9. <u>Anther color:</u> Purple | 10. <u>Stem color:</u> Absent |
| 11. <u>Plant height (cm):</u> 91 | 12. <u>Internodes:</u> Hollow |
| 13. <u>Spike shape:</u> Tapering | 14. <u>Spike density:</u> Mid-dense |
| 15. <u>Spike curvature:</u> Inclined | 16. <u>Awn type:</u> Awned |
| 17. <u>Awn color:</u> White | 18. <u>Glume color:</u> White/Amber |
| 19. <u>Glume length:</u> Medium | 20. <u>Shoulder shape:</u> Oblique |
| 21. <u>Shoulder width:</u> Narrow | 22. <u>Beak shape:</u> Acuminate |
| 23. <u>Beak length (S, M, L, VL):</u> M | 24. <u>Glume pubescence:</u> Not present |
| 25. <u>Seed color:</u> Red | 26. <u>Seed shape:</u> Oval |
| 27. <u>Cheeks:</u> Rounded | 28. <u>Brush size (S,M, L)</u> M |
| 29. <u>Avg 1,000 kernel wt (g):</u> 38 | 30. <u>Phenol reaction:</u> Fawn |
| 31. <u>Other:</u> | |

Physiological/biochemical traits:

Other characteristics (*e.g.*, herbicide tolerance):

Variants and frequency: 25R30 has shown no variants other than what would normally be expected due to environment. The maximum levels of off types allowable for foundation, registered and certified seed are 0.0067%, 0.01%, and 0.02%, respectively. Slightly taller and/or slightly later or earlier plants have been observed and rogued during seed multiplication to below 0.01% level.

6. Breeder, foundation, and registered seed classes will be maintained and controlled by the Pioneer Hi-Bred International, Inc. Parent Seed Operations and Production department. Foundation seed will be initially produced from breeders' seed, and thereafter foundation seed will be produced from foundation seed: maintaining the specific identity and purity of the variety as released by the breeding department. Registered seed will be grown from foundation or breeder seed, and maintained at a purity level satisfactory to Pioneer Parent Seed Operations, Production department, or the appropriate certifying agency. Production of certified seed by licensed producer/distributors will be controlled by the Pioneer Production department.
7. Certified seed of 25R30 will potentially first be offered for sale in the fall of 2011.
8. Application for Plant Variety Protection has been made and allowed and the certification option was not elected.
9. Certified acreage is not to be published by AOSCA and certifying agencies.



25R34 (XW08C)

1. 25R34 (Experimental number XW08C) is a soft red winter wheat developed by Pioneer Hi-Bred International, Inc.
2. The cultivar 25R34 was bred and selected using a modified pedigree selection method for any and all of the following characteristics in the field environment: disease resistance, plant type, plant height, head type, straw strength, maturity, grain yield, test weight, and milling and baking characteristics.
3. Preliminary yield testing of 25R34 began in the 2004-05 growing season and wide scale testing has been conducted from the 2005-06 growing season to the present. It has shown adaptation to the northern soft wheat regions based on tests conducted in Arkansas, Kentucky, Missouri, Illinois, Indiana, Ohio, Michigan, Maryland, and Ontario, Canada.
4. 25R34 exhibits very good stripe rust resistance and good resistance to fungal leaf blights, leaf rust and soil-borne mosaic virus. 25R34 has resistance to biotype L of Hessian fly from the H13 resistance gene.
5. Identifying characteristics – insert the descriptive term from the Objective Description except where indicated:

- | | |
|---|--|
| 1. <u>Kind:</u> Common soft red | 2. <u>Growth habit:</u> Winter |
| 3. <u>Coleoptile color:</u> Red | 4. <u>Juvenile growth habit:</u> Prostrate |
| 5. <u>Leaf color at boot:</u> Green | 6. <u>Flag leaf at boot:</u> Wax present |
| 7. <u>Auricle color:</u> White | 8. <u>Days to 50% heading:</u> 131 |
| 9. <u>Anther color:</u> Yellow | 10. <u>Stem color:</u> Absent |
| 11. <u>Plant height (cm):</u> 91 | 12. <u>Internodes:</u> Hollow |
| 13. <u>Spike shape:</u> Tapering | 14. <u>Spike density:</u> Mid-dense |
| 15. <u>Spike curvature:</u> Inclined | 16. <u>Awn type:</u> Awned |
| 17. <u>Awn color:</u> White | 18. <u>Glume color:</u> White/Amber |
| 19. <u>Glume length:</u> Medium | 20. <u>Shoulder shape:</u> Oblique |
| 21. <u>Shoulder width:</u> Medium | 22. <u>Beak shape:</u> Acuminate |
| 23. <u>Beak length (S, M, L, VL):</u> M | 24. <u>Glume pubescence:</u> Absent |
| 25. <u>Seed color:</u> Red | 26. <u>Seed shape:</u> Ovate |
| 27. <u>Cheeks:</u> Rounded | 28. <u>Brush size (S,M, L)</u> M |
| 29. <u>Avg 1,000 kernel wt (g):</u> 40 | 30. <u>Phenol reaction:</u> Fawn |
| 31. <u>Other:</u> | |

Physiological/biochemical traits:

Other characteristics (*e.g.*, herbicide tolerance):

Variants and frequency: 25R34 has shown no variants other than what would normally be expected due to environment. The maximum levels of off types allowable for foundation, registered and certified seed are 0.0067%, 0.01%, and 0.02%, respectively. Awnless plants, slightly taller and/or slightly later or earlier plants have been observed and rogued during seed multiplication to below 0.01% level.

6. Breeder, foundation, and registered seed classes will be maintained and controlled by the Pioneer Hi-Bred International, Inc. Parent Seed Operations and Production department. Foundation seed will be initially produced from breeders seed, and thereafter foundation seed will be produced from foundation seed: maintaining the specific identity and purity of the variety as released by the breeding department. Registered seed will be grown from foundation or breeder seed, and maintained at a purity level satisfactory to Pioneer Parent Seed Operations, Production department, or the appropriate certifying agency. Production of certified seed by licensed producer/distributors will be controlled by the Pioneer Production department.
7. Certified seed of 25R34 will potentially first be offered for sale in the fall of 2011.
8. Application for Plant Variety Protection has been made and allowed and the certification option was not elected.
9. Certified acreage is not to be published by AOSCA and certifying agencies.



25R40 (XW07W)

1. 25R40 (Experimental number XW07W) is a soft red winter wheat developed by Pioneer Hi-Bred International, Inc.
2. The cultivar 25R40 was bred and selected using a modified pedigree selection method for any and all of the following characteristics in the field environment: disease resistance, plant type, plant height, head type, straw strength, maturity, grain yield, test weight, and milling and baking characteristics.
3. 25R40 has shown adaptation to the northern soft wheat regions based on tests conducted in Arkansas, Kentucky, Missouri, Illinois, Indiana, Ohio, Michigan, Maryland, and Ontario, Canada.
4. 25R40 has shown very good leaf rust resistance, stripe rust resistance and powdery mildew resistance. It exhibits good resistance levels to fungal leaf blights, soil-borne mosaic virus, and wheat spindle streak mosaic virus. 25R40 has shown slightly below average resistance to Fusarium head blight (scab).
5. Identifying characteristics – insert the descriptive term from the Objective Description except where indicated:

- | | |
|--|--|
| 1. <u>Kind</u> : Common soft red | 2. <u>Growth habit</u> : Winter |
| 3. <u>Coleoptile color</u> : Red | 4. <u>Juvenile growth habit</u> : Semi-erect |
| 5. <u>Leaf color at boot</u> : Green | 6. <u>Flag leaf at boot</u> : Wax present |
| 7. <u>Auricle color</u> : White | 8. <u>Days to 50% heading</u> : 130 |
| 9. <u>Anther color</u> : Purple | 10. <u>Stem color</u> : Absent |
| 11. <u>Plant height (cm)</u> : 84 | 12. <u>Internodes</u> : Hollow |
| 13. <u>Spike shape</u> : Tapering | 14. <u>Spike density</u> : Mid-dense |
| 15. <u>Spike curvature</u> : Inclined | 16. <u>Awn type</u> : Awned |
| 17. <u>Awn color</u> : White | 18. <u>Glume color</u> : White/Amber |
| 19. <u>Glume length</u> : Medium | 20. <u>Shoulder shape</u> : Wanting |
| 21. <u>Shoulder width</u> : Narrow | 22. <u>Beak shape</u> : Acuminate |
| 23. <u>Beak length (S, M, L, VL)</u> : M | 24. <u>Glume pubescence</u> : Not present |
| 25. <u>Seed color</u> : Red | 26. <u>Seed shape</u> : Elliptical |
| 27. <u>Cheeks</u> : Rounded | 28. <u>Brush size (S, M, L)</u> : M |
| 29. <u>Avg 1,000 kernel wt (g)</u> : 38 | 30. <u>Phenol reaction</u> : Fawn |
| 31. <u>Other</u> : | |

Physiological/biochemical traits:

Other characteristics (*e.g.*, herbicide tolerance):

Variants and frequency: 25R40 has shown no variants other than what would normally be expected due to environment. The maximum levels of off types allowable for foundation, registered and certified seed are 0.0067%, 0.01%, and 0.02%, respectively. Slightly taller and/or slightly later or earlier plants have been observed and rogued during seed multiplication to below 0.01% level.

6. Breeder, foundation, and registered seed classes will be maintained and controlled by the Pioneer Hi-Bred International, Inc. Parent Seed Operations and Production department. Foundation seed will be initially produced from breeders' seed, and thereafter foundation seed will be produced from foundation seed: maintaining the specific identity and purity of the variety as released by the breeding department. Registered seed will be grown from foundation or breeder seed, and maintained at a purity level satisfactory to Pioneer Parent Seed Operations, Production department, or the appropriate certifying agency. Production of certified seed by licensed producer/distributors will be controlled by the Pioneer Production department.
7. Certified seed of 25R40 will potentially first be offered for sale in the fall of 2011.
8. Application for Plant Variety Protection has been made and allowed and the certification option was not elected.
9. Certified acreage is not to be published by AOSCA and certifying agencies.



(XW09H)

1. XW09H is a soft red winter wheat developed by Pioneer Hi-Bred International, Inc.
2. The cultivar XW09H was bred and selected using a modified pedigree selection method for any and all of the following characteristics in the field environment: disease resistance, plant type, plant height, head type, straw strength, maturity, grain yield, test weight, and milling and baking characteristics.
3. XW09H has shown adaptation to the soft red winter wheat growing regions of the southeastern and mid-southern U.S., approximately south of the Ohio river.
4. XW09H has shown very good stripe rust resistance. It exhibits good resistance to leaf rust, soil-borne mosaic virus, and wheat spindle streak mosaic virus. It has shown slightly below average resistance to Fusarium head blight (scab). XW09H has resistance to biotype L of Hessian fly from the H13 resistance gene.
5. Identifying characteristics – insert the descriptive term from the Objective Description except where indicated:

- | | |
|--|--|
| 1. <u>Kind</u> : Common soft red | 2. <u>Growth habit</u> : Winter |
| 3. <u>Coleoptile color</u> : Red | 4. <u>Juvenile growth habit</u> : Semi-erect |
| 5. <u>Leaf color at boot</u> : Green | 6. <u>Flag leaf at boot</u> : Wax present |
| 7. <u>Auricle color</u> : Purple | 8. <u>Days to 50% heading</u> : 122 |
| 9. <u>Anther color</u> : Purple | 10. <u>Stem color</u> : Present |
| 11. <u>Plant height (cm)</u> : 84 | 12. <u>Internodes</u> : Hollow |
| 13. <u>Spike shape</u> : Oblong | 14. <u>Spike density</u> : Mid-dense |
| 15. <u>Spike curvature</u> : Inclined | 16. <u>Awn type</u> : Awned |
| 17. <u>Awn color</u> : White | 18. <u>Glume color</u> : White/Amber |
| 19. <u>Glume length</u> : Long | 20. <u>Shoulder shape</u> : Wanting |
| 21. <u>Shoulder width</u> : Medium | 22. <u>Beak shape</u> : Acuminate |
| 23. <u>Beak length (S, M, L, VL)</u> : M | 24. <u>Glume pubescence</u> : Absent |
| 25. <u>Seed color</u> : Red | 26. <u>Seed shape</u> : Ovate |
| 27. <u>Cheeks</u> : Rounded | 28. <u>Brush size (S, M, L)</u> : M |
| 29. <u>Avg 1,000 kernel wt (g)</u> : 37 | 30. <u>Phenol reaction</u> : Lt. Brown |
| 31. <u>Other</u> : | |

Physiological/biochemical traits:

Other characteristics (e.g., herbicide tolerance):

Variants and frequency: XW09H has shown no variants other than what would normally be expected due to environment. The maximum levels of off types allowable for foundation, registered and certified seed are 0.0067%, 0.01%, and 0.02%, respectively.

6. Breeder, foundation, and registered seed classes will be maintained and controlled by the Pioneer Hi-Bred International, Inc. Parent Seed Operations and Production department. Foundation seed will be initially produced from breeders' seed, and thereafter foundation seed will be produced from foundation seed: maintaining the specific identity and purity of the variety as released by the breeding department. Registered seed will be grown from foundation or breeder seed, and maintained at a purity level satisfactory to Pioneer Parent Seed Operations, Production department, or the appropriate certifying agency. Production of certified seed by licensed producer/distributors will be controlled by the Pioneer Production department.
7. Certified seed of XW09H will potentially first be offered for sale in the fall of 2012.
8. Application for Plant Variety Protection will be made in 2011 and the certification option will not be elected.
9. Certified acreage is not to be published by AOSCA and certifying agencies.



Arcadia (D05*6441)

1. Arcadia is a soft red winter wheat bred and developed by Syngenta Seeds, Inc.
2. Arcadia is the result of a cross made in 1999 by Syngenta Seeds, Inc. in Brookston, IN. Arcadia was selected for height, appearance, maturity, and kernel soundness.
3. Arcadia has been tested regionally since 2006 by Syngenta in Arkansas, Mississippi, Louisiana, Georgia, South Carolina, Missouri, North Carolina, Virginia, and Tennessee. It appears to be best adapted to Southern Arkansas, Louisiana, Mississippi, South Carolina and Georgia.
4. It has moderate resistance to moderate susceptibility to prevalent races of leaf rust and stripe rusts. Arcadia is susceptible to powdery mildew and Hessian Fly. Arcadia is moderately susceptible to Septoria tritici.
5. Identifying characteristics – insert the descriptive term from the Objective Description except where indicated:

- | | |
|--|---|
| 1. <u>Kind: soft red winter wheat</u> | 2. <u>Growth habit: winter</u> |
| 3. <u>Coleoptile color: red</u> | 4. <u>Juvenile growth habit:</u> |
| 5. <u>Leaf color at boot: dark green</u> | 6. <u>Flag leaf at boot: erect & twisted and waxy</u> |
| 7. <u>Auricle color: purple</u> | 8. <u>Days to 50% heading: 102</u> |
| 9. <u>Anther color: yellow</u> | 10. <u>Stem color: white</u> |
| 11. <u>Plant height (cm): 88</u> | 12. <u>Internodes: hollow</u> |
| 13. <u>Spike shape: tapering</u> | 14. <u>Spike density: middense</u> |
| 15. <u>Spike curvature: inclined</u> | 16. <u>Awn type: awned</u> |
| 17. <u>Awn color: white</u> | 18. <u>Glume color: white</u> |
| 19. <u>Glume length: long</u> | 20. <u>Shoulder shape: wanting</u> |
| 21. <u>Shoulder width: narrow</u> | 22. <u>Beak shape: acuminate</u> |
| 23. <u>Beak length (S, M, L, VL):</u> | 24. <u>Glume pubescence: absent</u> |
| 25. <u>Seed color: red</u> | 26. <u>Seed shape: ovate</u> |
| 27. <u>Cheeks: rounded</u> | 28. <u>Brush size (S,M, L) long &</u> |
| 29. <u>Avg 1,000 kernel wt (g):</u> | 30. <u>Phenol reaction: not tested</u> |
| 31. <u>Other:</u> | |

Physiological/biochemical traits:

Other characteristics (*e.g.*, herbicide tolerance):

Variants and frequency: Arcadia has been uniform and stable since 2008. Less than 0.8% of the plants were rogued from the breeder and foundation seed increases. Ninety five percent of the variant plants were taller height wheat plants (8 to 15 cm), and 5% were awnletted wheat plants. Up to 1.0% variant plants may be encountered in subsequent generations.

6. Recognized classes of Arcadia are breeder, foundation, registered and certified. Syngenta Seeds, Inc. will maintain the variety by the headrow method. Arcadia may only be sold as a class of certified seed and all seed sales are royalty bearing.
7. Certified seed sales of Arcadia will be available in the fall of 2011.
8. Plant Variety Protection will be submitted in 2010 and Arcadia may only be sold as a class of certified seed.
9. Certified acreage is not to be published by AOSCA and certifying agencies



SY 1526 (M05-1526)

1. SY 1526 is a soft red winter wheat bred and developed by Syngenta Seeds, Inc.
2. SY 1526 was selected for height, maturity, appearance, and kernel soundness using a modified bulk breeding method.
3. SY 1526 has been tested throughout the Midwest and is best adapted to the soft wheat growing regions of Illinois, Indiana, Ohio, and Kentucky. In Illinois, Indiana, and Ohio it appears to perform best in the area south of Interstate 70, and it has shown early enough heading and maturity to be suitable for double-cropping with soybeans in this region.
4. SY 1526 has shown moderate resistance to the current field races of leaf rust in the Midwest, has shown moderate susceptibility to current Midwest races of powdery mildew, and moderate susceptibility to the complex of wheat soil borne mosaic and wheat spindle streak mosaic viruses. SY 1526 may be moderately resistant to wheat spindle streak mosaic virus if soil borne mosaic virus is not present as shown by its 2009 data from central Illinois.
5. Identifying characteristics – insert the descriptive term from the Objective Description except where indicated:

- | | |
|---|---|
| 1. <u>Kind: common</u> | 2. <u>Growth habit: winter</u> |
| 3. <u>Coleoptile color: red</u> | 4. <u>Juvenile growth habit: semi-erect</u> |
| 5. <u>Leaf color at boot: green</u> | 6. <u>Flag leaf : waxy, recurved, twisted</u> |
| 7. <u>Auricle color: absent</u> | 8. <u>Days to 50% heading: 134.4</u> |
| 9. <u>Anther color: yellow</u> | 10. <u>Stem color: absent</u> |
| 11. <u>Plant height (cm): 93.6</u> | 12. <u>Internodes: hollow</u> |
| 13. <u>Spike shape: tapering</u> | 14. <u>Spike density: middense</u> |
| 15. <u>Spike curvature: inclined</u> | 16. <u>Awn type: apically awnletted</u> |
| 17. <u>Awn color: white</u> | 18. <u>Glume color: white/amber</u> |
| 19. <u>Glume length: midlong</u> | 20. <u>Shoulder shape: square</u> |
| 21. <u>Shoulder width: wide</u> | 22. <u>Beak shape: obtuse</u> |
| 23. <u>Beak length (S, M, L, VL): S</u> | 24. <u>Glume pubescence: absent</u> |
| 25. <u>Seed color: red</u> | 26. <u>Seed shape: ovate</u> |
| 27. <u>Cheeks: rounded</u> | 28. <u>Brush size (S, M, L) L</u> |
| 29. <u>Avg 1,000 kernel wt (g): 35</u> | 30. <u>Phenol reaction:</u> |
| 31. <u>Other:</u> | |

Variants and frequency:

SY 1526 has been uniform and stable since 2009. Approximately 0.8% of the plants were rogued from the Breeder's seed increase in 2009. Approximately 95% of the rogued variant plants were taller height wheat plants (8 to 15 cm) and 5% were awnless. Up to 1.0% variant plants may be encountered in subsequent generations.

6. Syngenta Seeds, Inc. maintains seed stock and certified classes of Foundation, Registered and Certified. Syngenta Seeds, Inc. will maintain the variety by the head row method to produce breeder seed if needed.
7. Certified seed available will be available in the fall of 2012.
8. Plant Variety Protection is anticipated in the fall of 2011 and SY 1526 may only be sold as a class of certified seed.
9. Certified acreage is not to be published by AOSCA and certifying agencies.



SY Ovation (03PN108-21)

1. SY Ovation (03PN108-21) is a soft white winter wheat bred and developed by Syngenta Seeds, Inc.
2. SY Ovation originated from the cross ORH010837 (OR 0845/E81FR) / OR2001611 and was made in 2003. This line was selected on the basis of the absence of Stripe Rust, short plant height, and medium maturity
3. SY Ovation has shown good adaptation in the high to moderate rainfall regions of western Idaho, eastern Washington, north-central and northeastern Oregon and irrigated production in the southern Snake River region of Idaho and the irrigated production areas of Washington.
4. SY Ovation is resistant to current predominant races of stripe rust.
5. Identifying characteristics – insert the descriptive term from the Objective Description except where indicated:

- | | |
|--|--|
| 1. <u>Kind:</u> common | 2. <u>Growth habit:</u> winter |
| 3. <u>Coleoptile color:</u> white | 4. <u>Juvenile growth habit:</u> semi-erect |
| 5. <u>Leaf color at boot:</u> blue green | 6. <u>Flag leaf:</u> waxy, recurved, twisted |
| 7. <u>Auricle color:</u> absent | 8. <u>Days to 50% heading:</u> 163 |
| 9. <u>Anther color:</u> yellow | 10. <u>Stem color:</u> absent |
| 11. <u>Plant height (cm):</u> 98 | 12. <u>Internodes:</u> hollow |
| 13. <u>Spike shape:</u> strap, oblong | 14. <u>Spike density:</u> middense |
| 15. <u>Spike curvature:</u> inclined | 16. <u>Awn type:</u> awned |
| 17. <u>Awn color:</u> white | 18. <u>Glume color:</u> white |
| 19. <u>Glume length:</u> long | 20. <u>Shoulder shape:</u> oblique |
| 21. <u>Shoulder width:</u> midwide | 22. <u>Beak shape:</u> acuminate |
| 23. <u>Beak length (S, M, L, VL):</u> L | 24. <u>Glume pubescence:</u> absent |
| 25. <u>Seed color:</u> white | 26. <u>Seed shape:</u> elliptical |
| 27. <u>Cheeks:</u> rounded | 28. <u>Brush size (S, M, L):</u> L |
| 29. <u>Avg 1,000 kernel wt (g):</u> 40 | 30. <u>Phenol reaction:</u> |
| 31. <u>Other:</u> | |

Physiological/biochemical traits:

Other characteristics (e.g., herbicide tolerance):

Variants and frequency:

SY Ovation has been uniform and stable since 2004. Less than 0.8% of the plants were rogued from the foundation seed increase in 2009/10. All of the variant plants were taller height wheat plants, ranging from 3 to 6 inches taller than the canopy. Up to 0.5% red seed may be encountered in registered and certified seed production. Up to 1.0% variant plants may be encountered in subsequent generations.

6. Syngenta Seeds, Inc. maintains seed stock and certified classes of Foundation, Registered and Certified. Syngenta Seeds, Inc. will maintain the variety by the head row method to produce Breeders seed if needed.
7. Foundation and small quantities of Certified seed stocks of SY Ovation will be available in the fall of 2011
8. Plant Variety Protection is anticipated in the fall of 2011 and SY Ovation may only be sold as a class of Certified seed.
9. Certified acreage is not to be published by AOSCA and certifying agencies



SY Soren (01S0263-28)

1. SY Soren (Experimental designation - 01S0263-28) is a hard red spring wheat bred and developed by Syngenta Seeds, Inc.
2. SY Soren originated from the cross “Norpro/Kelby” and was developed using a modified single seed descent breeding method. SY Soren was selected for high yield, good agronomics, general disease resistance and good overall breadmaking characteristics.
3. SY Soren has been primarily tested across North Dakota and surrounding states since 2005. It has yielded very well across the region relative to popular checks. It has good breadmaking quality is intended for grain production.
4. SY Soren has moderate resistance to the prevalent races of leaf rust. It has shown good tolerance to foliar disease complex.
5. Identifying characteristics – insert the descriptive term from the Objective Description except where indicated:

- | | |
|---|--|
| 1. <u>Kind: common</u> | 2. <u>Growth habit: spring</u> |
| 3. <u>Coleoptile color: White</u> | 4. <u>Juvenile growth habit: erect</u> |
| 5. <u>Leaf color at boot: green</u> | 6. <u>Flag leaf: waxy, recurved, twisted</u> |
| 7. <u>Auricle color: white</u> | 8. <u>Days to 50% heading: 57</u> |
| 9. <u>Anther color: yellow</u> | 10. <u>Stem color: absent</u> |
| 11. <u>Plant height (cm): 74</u> | 12. <u>Internodes: hollow</u> |
| 13. <u>Spike shape: tapering</u> | 14. <u>Spike density: middense</u> |
| 15. <u>Spike curvature: inclined</u> | 16. <u>Awn type: awned</u> |
| 17. <u>Awn color: white</u> | 18. <u>Glume color: white/amber</u> |
| 19. <u>Glume length: short</u> | 20. <u>Shoulder shape: oblique</u> |
| 21. <u>Shoulder width: midwide</u> | 22. <u>Beak shape: acuminate</u> |
| 23. <u>Beak length (S, M, L, VL): M</u> | 24. <u>Glume pubescence: absent</u> |
| 25. <u>Seed color: red</u> | 26. <u>Seed shape: ovate</u> |
| 27. <u>Cheeks: angular</u> | 28. <u>Brush size (S, M, L) M</u> |
| 29. <u>Avg 1,000 kernel wt (g): 34</u> | 30. <u>Phenol reaction:</u> |
| 31. <u>Other:</u> | |

Physiological/biochemical traits:

Other characteristics (e.g., herbicide tolerance):

Variants and frequency: About 0.8% of the plants were rogued from the Breeder seed increase in 2009. Approximately 95% of the variant plants were taller height wheat plants (8 to 15 cm.) and 5% were awnless wheat plants. Up to 1.0% variant plants may be encountered in subsequent generations.

6. Syngenta Seeds, Inc. maintains seed stock and certified classes of Foundation, Registered and Certified. Syngenta Seeds, Inc. will maintain the variety by the head row method to produce Breeder seed if needed.
7. Certified seed sales of SY Soren will be available in the spring of 2012.
8. Plant Variety Protection is anticipated in the fall of 2011 and SY Soren may only be sold as a class of certified seed.
9. Certified acreage is not to be published by AOSCA and certifying agencies



SY Tyra (04S0515-2-2)

1. SY Tyra is a hard red spring wheat bred and developed jointly by Montana State University and Syngenta Seeds, Inc.
2. SY Tyra was developed from the cross “Choteau/4*Norpro” using a marker assisted backcross system. It was primarily selected for having solid stem characteristic for wheat stem sawfly tolerance. Additionally, SY Tyra was selected on yield performance, good agronomics and disease tolerance.
3. SY Tyra has been extensively tested in Montana State trials and in western N. Dakota Syngenta trials over the past two seasons. It has yielded very well across these areas relative to popular checks. It has good breadmaking quality and is intended for grain production.
4. SY Tyra has some stem solidness which confers some tolerance to the wheat stem sawfly.
5. Identifying characteristics – insert the descriptive term from the Objective Description except where indicated:

- | | |
|---|---|
| 1. <u>Kind: common</u> | 2. <u>Growth habit: spring</u> |
| 3. <u>Coleoptile color: white</u> | 4. <u>Juvenile growth habit: erect</u> |
| 5. <u>Leaf color at boot: green</u> | 6. <u>Flag leaf: waxy, erect, twisted</u> |
| 7. <u>Auricle color: purple</u> | 8. <u>Days to 50% heading: 58</u> |
| 9. <u>Anther color: yellow</u> | 10. <u>Stem color: absent</u> |
| 11. <u>Plant height (cm): 69</u> | 12. <u>Internodes: semi-solid</u> |
| 13. <u>Spike shape: tapering</u> | 14. <u>Spike density: middense</u> |
| 15. <u>Spike curvature: erect</u> | 16. <u>Awn type: awned</u> |
| 17. <u>Awn color: white</u> | 18. <u>Glume color: white/amber</u> |
| 19. <u>Glume length: midlong</u> | 20. <u>Shoulder shape: square</u> |
| 21. <u>Shoulder width: midwide</u> | 22. <u>Beak shape: acute</u> |
| 23. <u>Beak length (S, M, L, VL): S</u> | 24. <u>Glume pubescence: absent</u> |
| 25. <u>Seed color: red</u> | 26. <u>Seed shape: ovate</u> |
| 27. <u>Cheeks: angular</u> | 28. <u>Brush size (S, M, L) M</u> |
| 29. <u>Avg 1,000 kernel wt (g): 36</u> | 30. <u>Phenol reaction:</u> |
| 31. <u>Other:</u> | |

Physiological/biochemical traits:

Other characteristics (e.g., herbicide tolerance):

Variants and frequency:

SY Tyra has been uniform and stable since 2008. About 0.8% of the plants were rogued from the initial Breeder’s seed increase in 2009. Approximately 95% of the variant plants were taller height wheat plants (8 to 15 cm.) and 5% were awnless wheat plants. Up to 1.0% variant plants may be encountered in subsequent generations.

6. Syngenta Seeds, Inc. maintains seed stock and certified classes of Foundation, Registered and Certified. Syngenta Seeds, Inc. will maintain the variety by the head row method to produce breeder seed if needed.
7. Certified seed sales of SY Tyra will be available in the spring of 2012.
8. Plant Variety Protection is anticipated in 2011 and SY Tyra may only be sold as a class of certified seed.
9. Certified acreage is not to be published by AOSCA and certifying agencies



SY Wolf (BC01007-7)

1. SY Wolf is a hard red winter wheat bred and developed by Syngenta Seeds, Inc.
2. SY Wolf is the result of a cross W99-331/97x0906-8 made in the spring of 2001 by Syngenta Seeds, Inc.
3. SY Wolf is best adapted to North and South Dakota, Western Nebraska.
4. SY Wolf is moderately resistance to leaf rust, powdery mildew, septoria and tan spot.
5. Identifying characteristics – insert the descriptive term from the Objective Description except where indicated:

- | | |
|---|--|
| 1. <u>Kind: common</u> | 2. <u>Growth habit: winter</u> |
| 3. <u>Coleoptile color: red</u> | 4. <u>Juvenile growth habit: semi-erect</u> |
| 5. <u>Leaf color at boot: green</u> | 6. <u>Flag leaf: waxy, recurved, twisted</u> |
| 7. <u>Auricle color: purple</u> | 8. <u>Days to 50% heading: 125</u> |
| 9. <u>Anther color: yellow</u> | 10. <u>Stem color: absent</u> |
| 11. <u>Plant height (cm): 87</u> | 12. <u>Internodes: hollow</u> |
| 13. <u>Spike shape: tapering</u> | 14. <u>Spike density: middense</u> |
| 15. <u>Spike curvature: inclined</u> | 16. <u>Awn type: awned</u> |
| 17. <u>Awn color: white</u> | 18. <u>Glume color: white/amber</u> |
| 19. <u>Glume length: midlong</u> | 20. <u>Shoulder shape: square</u> |
| 21. <u>Shoulder width: midwide</u> | 22. <u>Beak shape: acuminate</u> |
| 23. <u>Beak length (S, M, L, VL): L</u> | 24. <u>Glume pubescence: absent</u> |
| 25. <u>Seed color: red</u> | 26. <u>Seed shape: ovate</u> |
| 27. <u>Cheeks: rounded</u> | 28. <u>Brush size (S, M, L) M</u> |
| 29. <u>Avg 1,000 kernel wt (g): 36</u> | 30. <u>Phenol reaction:</u> |
| 31. <u>Other:</u> | |

Physiological/biochemical traits:

Other characteristics (e.g., herbicide tolerance):

Variants and frequency:

SY Wolf has been uniform and stable since 2009. Approximately 0.8% of the plants were rogued from the Breeder's seed increase in 2010. Approximately 90% of the rogued variant plants were taller height wheat plants (8 to 15 cm) and 5% were awnless and 5% were red chaffed. Up to 0.8% variant plants may be encountered in subsequent generations.

6. Syngenta Seeds, Inc. maintains seed stock and certified classes of Foundation, Registered and Certified. Syngenta Seeds, Inc. will maintain the variety by the head row method to produce breeder seed if needed.
7. Foundation seed will be available in the Fall of 2011 with certified seed available in 2012.
8. Plant Variety Protection is anticipated in the fall of 2011 and SY Wolf may only be sold as a class of certified seed.
9. Certified acreage is not to be published by AOSCA and certifying agencies



Kopious (B00-219)

1. 'Kopious' barley (Experimental designation B00-219) is a six-row spring growth habit feed barley developed and owned by Arizona Plant Breeders, Inc. (APB).
2. 'Kopious' was derived from an F₂ plant resulting from selected crosses to a male sterile facilitated recurrent selection population that had been developed to produce high-yielding 6-row feed barley lines that were adapted to irrigated production environment in the low deserts of Arizona. The line was selected for yield and agronomic traits uniformity by APB, the University of Arizona, and cooperating private breeding trials in Arizona. The first breeder seed was produced from the F₈ generation in 2005.
3. 'Kopious' has been tested in various locations in central Arizona and is adapted for feed barley production in that region. We intend to market 'Kopious' in Arizona.
4. 'Kopious' has not been tested for reaction to specific insect and disease pests.
5. Identifying characteristics – insert the descriptive term from the Objective Description except where indicated:

- | | |
|--|---|
| 1. <u>Growth Habit:</u> Spring | 2. <u>Spike:</u> 6-row |
| 3. <u>Coleoptile color:</u> Green | 4. <u>Juvenile growth habit:</u> Prostrate |
| 5. <u>Plant tillering:</u> Intermediate | 6. <u>Leaf color at boot:</u> Dark green |
| 7. <u>Flag leaf at boot:</u> Recurved, no waxy bloom | 8. <u>Pubescence on leaf blade:</u> Present |
| 9. <u>Pubescence on leaf sheath:</u> Present | 10. <u>Auricle color:</u> White |
| 11. <u>Heading date:</u> (See below): | 12. <u>Stem color:</u> White |
| 13. <u>Neck shape:</u> Straight | 14. <u>Collar shape :</u> Open |
| 15. <u>Spike exertion:</u> Slight | 16. <u>Plant height:</u> (See below) |
| 17. <u>Spike shape:</u> Oblong | 18. <u>Spike density:</u> Mid-dense |
| 19. <u>Spike position at maturity:</u> Nodding | 20. <u>Hairiness of rachis edge:</u> Few hairs |
| 21. <u>Rachilla hair length:</u> Short | 22. <u>Lemma awns:</u> Straight |
| 23. <u>Length of lemma awns:</u> Longer than spike | 24. <u>Lemma awn surface:</u> Rough |
| 25. <u>Glume hairiness:</u> None | 26. <u>Glume awn surface:</u> Semi-wrinkled |
| 27. <u>Glume/lemma adherence:</u> Covered | 28. <u>Texture (if covered):</u> |
| 29. <u>Aleurone color:</u> Colorless | 30. <u>Avg. 1,000-kernel wt:</u> Heavier than Baretta |

Heading date: _____ which is: 7 days (EARLIER) than: Baretta

Plant height: _____ cm, which is 6 cm (SHORTER) than: Nebula

Physiological or biochemical traits:

Variants and their frequency: Tall plants may occur at a frequency of 1 per 20,000.

6. Recognized classes of 'Kopious' are breeder, foundation, registered, and certified. Arizona Plant Breeders will maintain the variety by the head-row method to produce breeder seed as needed. APB will also produce all foundation seed.
7. Certified seed will likely first be offered for sale in the fall of 2012.
8. Application for Plant Variety Protection will be filed with the Title V certification option.
9. Certified seed acreage may be published by AOSCA and certifying agencies



Corral (IL00-7267)

1. Corral oat (experimental designation IL00-7267) is a spring oat variety that was developed by the University of Illinois Agricultural Experiment Station and is a joint release with the New York State Agricultural Experiment Station at Cornell University.

2. Corral was developed by modified single seed descent method from the cross IL95-4774/IL95-8346, whose parentages include the varieties Blaze, Brawn, Clintford, Coker 227, Don, Hazel, Ogle, and Portal. The variety is derived from an F₅ plant row selected in 2000. Selection criteria included yield, test weight, crown rust resistance, and tolerance to barley yellow dwarf virus. The first large breeder seed increase was produced in 2010 after several generations of roguing for variants.

3. Corral has been evaluated in Illinois, Minnesota, and New York. It is intended for production in New York, Pennsylvania and similar northeastern environments.

4. Corral is tolerant to barley yellow dwarf virus. It is susceptible to moderately susceptible to crown rust, depending on prevalent local races, and is susceptible to loose smut.

5. Identifying characteristics

Seasonal plant growth habit: Spring

Flag leaf attitude at booting: Erect

Leaf margin texture: Glabrous

Ligules: Present

Stem (culm) color at maturity: Yellow

Pubescence at stem nodes: None

Panicle shape: Equilateral

Relative Panicle width: Mid-broad

Rachis flexuousness: Erect

Branch position: Ascending

Floret separation mechanism: heterofracture

Number of florets per spikelet: 2

Relative length of glumes: Mid-long

Mature glume color: Yellow

Mature lemma color: Yellow

Awn frequency on 1st floret: Infrequent

Seed fluorescence: Fluorescent

Seed basal hairs: Numerous, 2.0 mm

Seeds are most similar to (known variety): Ogle

Variants: Up to 0.5% tall variants are allowed and up to 0.5% non-fluorescent seeds are allowed.

Juvenile Growth habit: Erect

Leaf color at booting: Yellow-green

Relative time of heading: Mid-season

Relative width first leaf below flag: Mid-wide

Leaf sheath texture: Glabrous

Relative stem (culm) diameter: Medium

Relative total plant height: Short

Relative panicle size: Medium

Relative panicle length: Mid-long

Average number of branch whorls: about 5

Spikelet separation mechanism: Semi-abscission

2nd floret rachilla segment pubescence: None

Average number of veins on glumes: about 9

Relative lemma length: Short

Pubescence on lemma dorsal surface: None

Awn type, if present: Non-twisted

Seed shape: Mid-plump

Average weight/1,000 seeds: 23 g

6. Seed classes to be produced are foundation and certified. Breeder seed may be produced from foundation seed and there is no limit on the number of generations of foundation to foundation production. Only one generation of certified seed may be produced from foundation seed. New York Seed Improvement Project is responsible for producing breeder and foundation seed.

7. Certified class seed will first be offered to produce the 2013 crop.

8. A Plant Variety Protection application has been submitted requesting that seed be sold by variety name only as a class of certified seed.

9. Certified seed acreage may be published by AOSCA and its member agencies.



Saber (IL02-8658)

1. Saber oat (experimental designation IL02-8658) is a spring oat variety that was developed by the University of Illinois Agricultural Experiment Station.
2. Saber was developed by modified single seed descent method from the cross Tack/Spurs, both of which were developed and released by the University of Illinois. The variety is derived from an F₅ plant row selected in 2002. Selection criteria included early-maturity yield, test weight, crown rust resistance, and tolerance to barley yellow dwarf virus. The first large breeder seed increase was produced in 2008 after several generations of roguing for variants.
3. Saber has been evaluated in Illinois, Indiana, Iowa, Minnesota, South Dakota, and Wisconsin and is intended for production in mid-western spring oat-growing environments.
4. Saber is tolerant to barley yellow dwarf virus. It is moderately resistant to moderately susceptible to crown rust, depending on prevalent local races, and is susceptible to loose smut.
5. Identifying characteristics

Seasonal plant growth habit: Spring

Flag leaf attitude at booting: Drooping

Leaf margin texture: Glabrous

Ligules: Present

Stem (culm) color at maturity: Yellow

Pubescence at stem nodes: Occasional

Panicle shape: Equilateral

Relative Panicle width: Mid-broad

Rachis flexuousness: Erect

Branch position: Ascending

Floret separation mechanism: heterofracture

Number of florets per spikelet: 2 to 3

Relative length of glumes: Mid-long

Mature glume color:

Mature lemma color: Yellow

Awn frequency on 1st floret: Common

Seed fluorescence: Heterogeneous for fluorescence

Seed basal hairs: Absent

Seeds are most similar to (known variety): Ogle

Variants: Up to 0.5% tall variants are allowed

Juvenile Growth habit: Erect

Leaf color at booting: Yellow-green

Relative time of heading: Early

Relative width first leaf below flag: Wide

Leaf sheath texture: Glabrous

Relative stem (culm) diameter: Medium

Relative total plant height: Short

Relative panicle size: Medium

Relative panicle length: Mid-long

Average number of branch whorls: about 5

Spikelet separation mechanism: Semi-abscission

2nd floret rachilla segment pubescence: None

Average number of veins on glumes: about 6

Relative lemma length: Short

Pubescence on lemma dorsal surface: None

Awn type, if present: Non-twisted

Seed shape: Mid-plump

Average weight/1,000 seeds: 25 g

6. Seed classes to be produced are foundation and certified. Breeder seed may be produced from foundation seed and there is no limit on the number of generations of foundation to foundation production. Only one generation of certified seed may be produced from foundation seed. Agricultural Alumni Seed Improvement Association, Inc. is responsible for producing breeder and foundation seed.
7. It is unknown when certified class seed will first be offered.
8. A Plant Variety Protection application has been submitted requesting that seed be sold by variety name only as a class of certified seed.
9. Certified seed acreage may be published by AOSCA and its member agencies.

