

**A REPORT OF THE  
NATIONAL SMALL GRAIN VARIETY REVIEW BOARD**



**ASSOCIATION OF OFFICIAL SEED CERTIFYING AGENCIES**

**NATIONAL SMALL GRAIN VARIETY REVIEW BOARD REPORT ©2014**

Copyrighted Material of the Association of Official Seed Certifying Agencies (AOSCA)

APRIL 2014



NATIONAL SMALL GRAIN VARIETY REVIEW BOARD  
ASSOCIATION OF OFFICIAL SEED CERTIFYING AGENCIES  
April 2014

The Association of Official Seed Certifying Agencies (AOSCA), National Small Grain Variety Review Board (NSGVRB), reviewed the following varieties on March 13, 2014. 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:

Chet Boruff, Chief Executive Officer  
Association of Official Seed Certifying Agencies  
1601 52nd Ave., Suite 1  
Moline, IL 61265

Phone: 309-736-0120  
Fax: 309-736-0115  
E-Mail: [cboruff@aosca.org](mailto:cboruff@aosca.org)

Respectfully submitted,

Abed Anouti, Chairman  
National Small Grains Variety Review Board

## 2014 AOSCA SMALL GRAIN VARIETY REVIEW BOARD

### TABLE OF CONTENTS

**PLACING THE CURSOR OVER THE DESIRED VARIETY/EXPERIMENTAL DESIGNATION & CLICKING WILL TAKE YOU DIRECTLY TO THE SUMMARY DESCRIPTION.**

Company	Variety Name	Experimental Designation	Kind	Page
<b>Wheat</b>				
DuPont Pioneer	<a href="#">25W31</a>	<a href="#">XW11H</a>	Soft White Winter	1
Kansas State University Research Foundation	<a href="#">Oakley CL</a>	<a href="#">KS09H19-2-3</a>	Hard Red Winter	2
Limagrain Cereal Seeds	<a href="#">LCS Aliron</a>	<a href="#">05E2848</a>	Durum, Spring	3
Limagrain Cereal Seeds	<a href="#">LCS Star</a>	<a href="#">LG 08 SB0658-B</a>	Hard White Spring	4
Limagrain Cereal Seeds		<a href="#">LCH11-1130</a>	Hard Red Winter	5
Syngenta Seeds	<a href="#">SY 547</a>	<a href="#">M09L-9547</a>	Soft Red Winter	6
Syngenta Seeds	<a href="#">SY Basalt</a>	<a href="#">04W40240R</a>	Hard Red Spring	7
Syngenta Seeds	<a href="#">SY Cypress</a>	<a href="#">B08*0313</a>	Soft Red Winter	8
Syngenta Seeds	<a href="#">SY Ingmar</a>	<a href="#">04S0258-12</a>	Hard Red Spring	9
Syngenta Seeds	<a href="#">SY Llano</a>	<a href="#">AP09T9614</a>	Hard Red Winter	10
Syngenta Seeds	<a href="#">SY Monument</a>	<a href="#">04BC574-2</a>	Hard Red Winter	11
Syngenta Seeds	<a href="#">SY Sky</a>	<a href="#">BC98331-03S-11W</a>	Hard White Winter	12
Syngenta Seeds	<a href="#">HRS 3378</a>	<a href="#">02S0178-1</a>	Hard Red Spring	13
Syngenta Seeds	<a href="#">HRS 3361</a>	<a href="#">05S0261-10</a>	Hard Red Spring	14
Syngenta Seeds		<a href="#">BC03212-20</a>	Hard Red Winter	15
WestBred/Monsanto	<a href="#">WB1529</a>	<a href="#">BZ6W07-436</a>	Soft White Winter	16
WestBred/Monsanto	<a href="#">WB1604</a>	<a href="#">BZ6W07-458</a>	Soft White Winter	17
WestBred/Monsanto	<a href="#">WB1843</a>	<a href="#">BZ6W06-451</a>	Soft White Winter	18
WestBred/Monsanto	<a href="#">WB4614</a>	<a href="#">BZ9W07-2034</a>	Hard Red Winter	19
WestBred/Monsanto	<a href="#">WB6430</a>	<a href="#">BZ608-125</a>	Soft White Spring	20
WestBred/Monsanto	<a href="#">WB7390</a>	<a href="#">DA908-306</a>	Hard White Spring	21
WestBred/Monsanto	<a href="#">WB7618</a>	<a href="#">DA907-047</a>	Hard White Spring	22
WestBred/Monsanto	<a href="#">WB9668</a>	<a href="#">BZ908-552</a>	Hard Red Spring	23
<b>Triticale</b>				
Syngenta Seeds	<a href="#">SY TF 131</a>	<a href="#">05tf131d</a>	Winter	24
Syngenta Seeds	<a href="#">SY TF 813</a>	<a href="#">08TF13</a>	Winter	25

# Wheat

## 25W31

### XW11H (Exp)

1. 25W31 (XW11H) is a soft white winter wheat developed by DuPont Pioneer.
2. The cultivar 25W31 was bred and selected using a modified pedigree selection method for 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. 25W31 has shown adaptation to the northern U.S. and Ontario Canada soft wheat regions.
4. 25W31 has excellent yield potential and test weight. It also has very good straw lodging resistance and strong fusarium head blight (scab) resistance. 25W31 also has excellent leaf rust resistance and good leaf blight resistance.
5. Identifying characteristics –

1. Kind:	<u>Common, Soft White Winter Wheat</u>		
2. Seasonal Growth Habit:	Winter	16. Awn Type:	Awned
3. Coleoptile Color:	White	17. Awn Color:	Tan
4. Juvenile Growth Habit:	Semi-Erect	18. Glume Color:	Yellow
5. Leaf Color at Boot:	Green	19. Glume Length:	Long
6. Flag Leaf at Boot:	Recurved, Twisted, Wax Present	20. Shoulder Shape:	Oblique
7. Auricle Color:	White	21. Shoulder Width:	Narrow
8. Days to 50% Heading:	141	22. Beak Shape:	Acuminate
9. Anther Color:	Yellow	23. Beak Length (S.M.L.VL):	L
10. Stem Color:	Absent	24. Glume Pubescence:	Absent
11. Plant Height (cm):	89	25. Seed Color:	White
12. Internodes:	Hollow	26. Seed Shape:	Ovate
13. Spike Shape:	Tapered	27. Cheeks:	Rounded
14. Spike Density:	Mid-dense	28. Brush Size (S,M,L.):	M
15. Spike Curvature:	Inclined	29. Avg 1,000 Kernel Wt (g):	32

30. Physiological/Biochemical Traits:      Phenol reaction: Dark brown

Variants and Frequency:      25W31 has shown no variants other than what would normally be expected due to environment. Off types that were slightly taller 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 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. 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. No royalty fees or licensing agreements are anticipated.
7. Certified seed of 25W31 will potentially first be offered for sale in the fall of 2014.
8. Plant Variety Protection application was made in 2013 and the certification option was not elected.
9. Certified acreage is not to be published by AOSCA and certifying agencies.

Date this application was submitted: Jan 09, 2014      Date recommended by the VRB: Apr 10, 2014



# Wheat

## Oakley CL

### KS09H19-2-3 (Exp)

1. Oakley CL is a hard red winter wheat variety tested under the experimental designation KS09H19-2-3. It was developed by Dr. Guorong Zhang at the Agricultural Research Center-Hays and released by Kansas State University.
2. Oakley CL was selected for yield, baking quality, herbicide resistance, wheat streak mosaic virus resistance, and stripe rust resistance using the modified bulk method.
3. Oakley CL was tested in Kansas and it can be adapted to the semi-arid areas in western Kansas.
4. Oakley CL carries the Wsm2 gene for resistance to Wheat Streak Mosaic Virus and has a good resistance to stripe rust. Oakley CL has the Als-1 gene for tolerance to the herbicide Beyond®.
5. Identifying characteristics –

1. Kind:	Common, Hard Red Winter Wheat		
2. Seasonal Growth Habit:	Winter	16. Awn Type:	Awned
3. Coleoptile Color:	White	17. Awn Color:	White
4. Juvenile Growth Habit:	Prostrate	18. Glume Color:	White
5. Leaf Color at Boot:	Green	19. Glume Length:	Medium
6. Flag Leaf at Boot:	Erect, Twisted, Waxy	20. Shoulder Shape:	Oblique
7. Auricle Color:	White	21. Shoulder Width:	Medium
8. Days to 50% Heading:	132	22. Beak Shape:	Acuminate
9. Anther Color:	Yellow	23. Beak Length (S.M.L.VL):	Medium
10. Stem Color:	Anthocyanin Absent	24. Glume Pubescence:	Absent
11. Plant Height (cm):	82	25. Seed Color:	Red
12. Internodes:	Hollow	26. Seed Shape:	Ovate
13. Spike Shape:	Tapering	27. Cheeks:	Angular
14. Spike Density:	Mid dense	28. Brush Size (S,M,L.):	Medium
15. Spike Curvature:	Inclined	29. Avg 1,000 Kernel Wt (g):	29

30. Physiological/Biochemical Traits: Oakley CL is low in polyphenol oxidase activity.

Variants and Frequency: Variants are limited to: slightly taller plants that occur at a frequency of less than 1 in 1,000 plants, plants with purple auricle that occur at a frequency of less than 1 in 100 plants, and plants that produce seeds with white seed coats that occur at a frequency of less than 1 in 1000 plants.

6. Recognized classes of Oakley CL are breeder, foundation, registered, and certified seed. Kansas State University will maintain the variety by the head-row purification method to produce breeder seed as needed.
7. Certified seed will likely be available for planting in fall of 2014.
8. An application will be submitted for protection under the U.S. Plant Variety Protection Act for Oakley CL and the “Certification Option” will be elected (to be sold by variety name only as a class of certified seed).
9. Certified seed production acreage may be published by AOSCA and certifying agencies.

Date this application was submitted: Jan 06, 2014      Date recommended by the VRB: Mar 20, 2014



# Wheat

## LCS Aliron 05E2848 (Exp)

1. LCS Aliron (experimental designation 05E2848) is a durum wheat developed by Limagrain Europe and marketed by Limagrain Cereal Seeds, LLC in the U.S.
2. LCS Aliron was bred for high yield in Spain using doubled haploid techniques, followed by headrowing and yield trialing.
3. The area of probable adaptation for LCS Aliron is the San Joaquin Valley of California, U.S. LCS Aliron was tested in 3 locations within the San Joaquin Valley in 2012, and 2 locations within the San Joaquin Valley in 2013.
4. LCS Aliron has been produced commercially in Spain for two years where it has demonstrated high tolerance to Septoria, moderate tolerance to mildew, and susceptibility to leaf rust. No claims are made in this application relative to disease reactions in the U.S.

### 5. Identifying characteristics –

1. Kind:	<u>Durum, Spring Wheat</u>	16. Awn Type:	<u>Awned</u>
2. Seasonal Growth Habit:	<u>Spring</u>	17. Awn Color:	<u>White</u>
3. Coleoptile Color:	<u>White</u>	18. Glume Color:	<u>White/Amber</u>
4. Juvenile Growth Habit:	<u>Semi-erect</u>	19. Glume Length:	<u>Short</u>
5. Leaf Color at Boot:	<u>Green</u>	20. Shoulder Shape:	<u>Elevated</u>
6. Flag Leaf at Boot:	<u>Erect, Not Twisted, Wax Present</u>	21. Shoulder Width:	<u>Medium</u>
7. Auricle Color:	<u>Green</u>	22. Beak Shape:	<u>Acuminate</u>
8. Days to 50% Heading:	<u>44d from 3/1 at Davis, CA</u>	23. Beak Length (S.M.L.VL):	<u>Short</u>
9. Anther Color:	<u>Yellow</u>	24. Glume Pubescence:	<u>Absent</u>
10. Stem Color:	<u>Anthocyanin Absent</u>	25. Seed Color:	<u>Amber</u>
11. Plant Height (cm):	<u>90 cm</u>	26. Seed Shape:	<u>Elliptical</u>
12. Internodes:	<u>Hollow</u>	27. Cheeks:	<u>Angular</u>
13. Spike Shape:	<u>Tapering</u>	28. Brush Size (S,M,L.):	<u>Short</u>
14. Spike Density:	<u>Dense</u>	29. Avg 1,000 Kernel Wt (g):	<u>47 g</u>
15. Spike Curvature:	<u>Erect</u>		

30. Physiological/Biochemical Traits: None at this time

Variants and Frequency: LCS Aliron may contain up to 3 per 1,000 taller (1-3 spike lengths) and/or later plants, in combination.

6. Recognized seed classes will be Breeder, Foundation, Registered, and Certified. Registered, and Certified seed of LCS Aliron may be produced and sold only through a license agreement with LCS. Limagrain Cereal Seeds will maintain Breeder and Foundation seed by roguing and removal of off-types in bulk seedings and headrowing if necessary.
7. Certified seed of LCS Aliron will likely be available in Spring 2015.
8. Plant Variety Protection will be applied for without the Title V option in late 2014.
9. Certified seed production and acreage may be published by AOSCA and official state seed certifying agencies.

Date this application was submitted: Dec 31, 2013      Date recommended by the VRB: Apr 04, 2014



# Wheat

## LCS Star LG 08 SB0658-B (ExpP)

1. LCS Star (experimental number 08 SB0658-B) is a Hard White Spring wheat developed by Limagrain in Spain, marketed by Limagrain Cereal Seeds in the U.S.
2. LCS Star was selected for resistance to yellow rust, quality (gluten strength), and yield potential in Spain using individual head selections from population bulks, and headrowing for purifications. No claims are made in this application for disease resistance or quality reactions in the U.S.
3. The areas of probable adaptation for LCS Star are the Sacramento Valley and San Joaquin Valley of California. LCS Star has been tested for 3 years in in both locations in the UC Davis Regional Performance Tests. Primary use will be for whole wheat or high flour extraction applications.
4. No claims are made in this application for disease resistance or insect reactions in the U.S.
5. Identifying characteristics –

1. Kind:	Common: Hard White Spring Wheat		
2. Seasonal Growth Habit:	<u>Spring</u>	16. Awn Type:	<u>Awned</u>
3. Coleoptile Color:	<u>Red</u>	17. Awn Color:	<u>White</u>
4. Juvenile Growth Habit:	<u>Semi-Erect</u>	18. Glume Color:	<u>White/Amber</u>
5. Leaf Color at Boot:	<u>Blue-Green</u>	19. Glume Length:	<u>Long</u>
6. Flag Leaf at Boot:	<u>Erect, Not Twisted, Wax Present</u>	20. Shoulder Shape:	<u>Elevated</u>
7. Auricle Color:	<u>White</u>	21. Shoulder Width:	<u>Medium</u>
8. Days to 50% Heading:	<u>40 days from 3/1</u>	22. Beak Shape:	<u>Acuminate</u>
9. Anther Color:	<u>Yellow</u>	23. Beak Length (S.M.L.VL):	<u>Long</u>
10. Stem Color:	<u>Absent</u>	24. Glume Pubescence:	<u>Absent</u>
11. Plant Height (cm):	<u>91</u>	25. Seed Color:	<u>White</u>
12. Internodes:	<u>Hollow</u>	26. Seed Shape:	<u>Ovate</u>
13. Spike Shape:	<u>Tapering</u>	27. Cheeks:	<u>Angular</u>
14. Spike Density:	<u>Mid-dense</u>	28. Brush Size (S,M,L.):	<u>Medium</u>
15. Spike Curvature:	<u>Inclined</u>	29. Avg 1,000 Kernel Wt (g):	<u>40</u>

30. Physiological/Biochemical Traits: None at this time

Variants and Frequency: LCS Star may contain taller plants (1-3 spike lengths), earlier plants, and red/brown glumed plants up to 1% in combination in the field. Seed of LCS Star may contain up to 20 red kernels per pound.

6. Recognized seed classes will be Breeder, Foundation, Registered, and Certified. Registered, and Certified seed of LCS Star may be produced and sold only through a license agreement with LCS. Limagrain Cereal Seeds will maintain Breeder and Foundation seed by roguing and removal of off-types in bulk seedings and headrowing when necessary.
7. Certified seed of LCS Star will likely be available in Spring 2015.
8. Plant Variety Protection will be applied for without the Title V option in late 2014.
9. Certified seed production and acreage may be published by AOSCA and official state seed certifying agencies.

Date this application was submitted: Dec 31, 2013

Date recommended by the VRB: Apr 04, 2014



# Wheat

## LCH11-1130 (Exp)

1. LCH11-1130 is a Hard Red Winter wheat developed by Limagrain Cereal Seeds, LLC.
2. LCH11-1130 was selected on the basis of absence of obvious disease, short straw and desirable head shape and size using a modified bulk breeding procedure.
3. LCH11-1130 was tested in North-Central Oklahoma, Kansas, Southwestern Nebraska and Eastern Colorado. The area of probable adaptation is Central and Western Kansas. The primary purpose of the variety will be for milling and baking of breads using processed and whole wheat flour.
4. No claim is made in this application for disease or insect resistance.

5. Identifying characteristics –

1. Kind:	Common, Hard Red Winter Wheat		
2. Seasonal Growth Habit:	Winter	16. Awn Type:	Awned
3. Coleoptile Color:	White	17. Awn Color:	White
4. Juvenile Growth Habit:	Semi-Erect	18. Glume Color:	White/Amber
5. Leaf Color at Boot:	Blue-Green	19. Glume Length:	Medium
6. Flag Leaf at Boot:	Erect, Not Twisted, Wax Present	20. Shoulder Shape:	Rounded
7. Auricle Color:	Green	21. Shoulder Width:	Medium
8. Days to 50% Heading:	126	22. Beak Shape:	Acuminate
9. Anther Color:	Yellow	23. Beak Length (S.M.L.VL):	Medium
10. Stem Color:	Absent	24. Glume Pubescence:	Absent
11. Plant Height (cm):	77	25. Seed Color:	Red
12. Internodes:	Hollow	26. Seed Shape:	Oval
13. Spike Shape:	Tapering	27. Cheeks:	Angular
14. Spike Density:	Mid-dense	28. Brush Size (S,M,L.):	Short
15. Spike Curvature:	Erect	29. Avg 1,000 Kernel Wt (g):	30

30. Physiological/biochemical Traits: None.

Variants and frequency: LCH11-1130 may contain up to 1/1000 awnless plants, up to 1/1000 red/brown chaffed plants, and up to 5/1000 taller (one to three spike lengths) plants.

6. Recognized seed classes will be Breeder, Foundation, Registered, and Certified. Registered, and Certified seed of LCH11-1130 may be produced and sold only through a license agreement with LCS. Limagrain Cereal Seeds will maintain Breeder and Foundation seed by roguing and removal of off-types in bulk seedings and headrowing if necessary.
7. Foundation seed will likely be available for sale in Fall 2014.
8. If the variety is released, Plant Variety Protection will be applied for within one year from the date of first sale without the Title V option.
9. Certified seed production and acreage may be published by AOSCA and official state seed certifying agencies.

Date this application was submitted: Jan 06, 2014

Date recommended by the VRB: Apr 04, 2014





# Wheat

## SY 547

### M09L-9547 (Exp)

1. SY 547 is a soft red winter wheat bred and developed by Syngenta Seeds, Inc.
2. SY 547 was selected for average height, earlier than average maturity, above average appearance and average kernel soundness using a modified bulk breeding method.
3. SY 547 has shown a medium maturity, above average test weight, and is medium in height. SY 547 has shown a wide adaptation with above average check performance in the Great Lakes Region, Midwest, Mid-South, North East and Mid-Atlantic. The highest yield advantage has been in the double crop region of Southern IL.
4. SY 547 has tested above average resistance to powdery mildew, soilborne mosaic virus and *Septoria nodorum*. It has tested average tolerance to current races of stripe & leaf rust and *Fusarium* head blight. It is known to be moderately susceptible to barley yellow dwarf virus.
5. Identifying characteristics –

1. Kind:	Common, Soft Red Winter Wheat		
2. Seasonal Growth Habit:	Winter	16. Awn Type:	Awnless
3. Coleoptile Color:	White	17. Awn Color:	White
4. Juvenile Growth Habit:	Semi-erect	18. Glume Color:	White
5. Leaf Color at Boot:	Blue-green	19. Glume Length:	Long
6. Flag Leaf at Boot:	Erect, Twisted, Waxy	20. Shoulder Shape:	Oblique
7. Auricle Color:	White	21. Shoulder Width:	Medium
8. Days to 50% Heading:	130.7	22. Beak Shape:	Acute
9. Anther Color:	Yellow	23. Beak Length (S.M.L.VL):	Short
10. Stem Color:	Anthocyanin Absent	24. Glume Pubescence:	Absent
11. Plant Height (cm):	83.2	25. Seed Color:	Red
12. Internodes:	Hollow	26. Seed Shape:	Ovate
13. Spike Shape:	Tapering	27. Cheeks:	Rounded
14. Spike Density:	Mid-dense	28. Brush Size (S,M,L.):	Medium
15. Spike Curvature:	Inclined	29. Avg 1,000 Kernel Wt (g):	39

30. Physiological/Biochemical Traits:

Variants and Frequency:      Approximately 0.8% of the plants were rogued from the Breeder's seed increase in 2013. Approximately 71% of the rogued variant plants were awned plants and the remaining 29% were taller height wheat plants (8 to 15 cm). 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 will be available in the fall of 2015.
8. Plant Variety Protection is anticipated in 2014 and SY 547 may only be sold as a class of certified seed.
9. Certified acreage is not to be published by AOSCA and certifying agencies.

Date this application was submitted: Jan 06, 2014      Date recommended by the VRB: Apr 04, 2014



# Wheat

## SY Basalt 04W40240R (Exp)

1. SY Basalt is a hard red spring wheat bred and developed by Syngenta Seeds, Inc.
2. SY Basalt is the result of a cross made in 2001 by Syngenta Seeds, Inc. in Woodland, CA. SY Basalt was selected for height, good yield performance and absence of stripe rust.
3. SY Basalt is best adapted to the spring wheat growing areas in the Basin of Washington.
4. SY Basalt has medium maturity.
5. Identifying characteristics –

1. Kind:	Common, Hard Red Spring Wheat		
2. Seasonal Growth Habit:	Spring	16. Awn Type:	Awne
3. Coleoptile Color:	White	17. Awn Color:	White
4. Juvenile Growth Habit:	Erect	18. Glume Color:	White/Amber
5. Leaf Color at Boot:	Green	19. Glume Length:	Long
6. Flag Leaf at Boot:	Erect, Twisted, Wax Absent	20. Shoulder Shape:	Oblique
7. Auricle Color:	White	21. Shoulder Width:	Medium
8. Days to 50% Heading:	163	22. Beak Shape:	Acuminate
9. Anther Color:	Yellow	23. Beak Length (S.M.L.VL):	M
10. Stem Color:	Anthocyanin Absent	24. Glume Pubescence:	Absent
11. Plant Height (cm):	84	25. Seed Color:	Red
12. Internodes:	Hollow	26. Seed Shape:	Ovate
13. Spike Shape:	Tapering	27. Cheeks:	Rounded
14. Spike Density:	Mid dense	28. Brush Size (S,M,L.):	M
15. Spike Curvature:	Erect	29. Avg 1,000 Kernel Wt (g):	38

### 30. Physiological/Biochemical Traits:

Variants and Frequency: Less than 0.1% of the plants were rogued from the Breeder and Foundation seed increases. Fifty percent of the variant plants were taller height wheat plants (5 to 10 cm). Twenty-five percent of the variants were later maturity (2 to 3 days) and a white seeded variant of approximately 0.5% has also been identified in the Foundation 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 breeder seed if needed.
7. Certified seed will be available in the spring of 2015.
8. Plant Variety Protection is anticipated in 2014 and SY Basalt may only be sold as a class of certified seed.
9. Certified acreage is not to be published by AOSCA and certifying agencies

Date this application was submitted: Jan 10, 2014      Date recommended by the VRB: Apr 04, 2014



# Wheat

## SY Cypress B08\*0313 (Exp)

1. SY Cypress is a soft red winter wheat bred and developed by Syngenta Seeds, Inc.
2. SY Cypress is the result of a cross made in 2002 by Syngenta Seeds, Inc. in Brookston, IN. SY Cypress was selected for height, maturity, appearance, and kernel soundness.
3. SY Cypress is best adapted to the wheat growing areas Louisiana, southern Georgia, and eastern South Carolina.
4. SY Cypress has moderate resistance to races of powdery mildew and leaf rust in the areas. SY Cypress has shown a moderate resistance/moderate susceptibility reaction to the current race of stripe rust in Louisiana.
5. Identifying characteristics –

1. Kind:	Common, Soft Red Winter Wheat		
2. Seasonal Growth Habit:	Winter (facultative)	16. Awn Type:	Awned
3. Coleoptile Color:	Red	17. Awn Color:	White
4. Juvenile Growth Habit:	Erect	18. Glume Color:	White/Amber
5. Leaf Color at Boot:	Blue-green	19. Glume Length:	Medium
6. Flag Leaf at Boot:	Erect, Twisted, Wax Present	20. Shoulder Shape:	Elevated
7. Auricle Color:	White	21. Shoulder Width:	Narrow
8. Days to 50% Heading:	82.4	22. Beak Shape:	Acuminate
9. Anther Color:	Yellow	23. Beak Length (S.M.L.VL):	Medium
10. Stem Color:	Anthocyanin Absent	24. Glume Pubescence:	Present
11. Plant Height (cm):	90	25. Seed Color:	Red
12. Internodes:	Hollow	26. Seed Shape:	Ovate
13. Spike Shape:	Tapering	27. Cheeks:	Rounded
14. Spike Density:	Mid dense	28. Brush Size (S,M,L.):	Medium
15. Spike Curvature:	Inclined	29. Avg 1,000 Kernel Wt (g):	40

### 30. Physiological/Biochemical Traits:

Variants and Frequency: Approximately 0.11 % of the plants were rogued from the Breeder's seed increase in 2013. Approximately 72 % of these rogued variant plants were taller plants ( $\geq 3$  inches) and the remainders were Awnless 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. Limited amounts of certified seed may be available in the fall of 2014.
8. Plant Variety Protection is anticipated in 2014 and SY Cypress may only be sold as a class of certified seed.
9. Certified acreage is not to be published by AOSCA and certifying agencies.

Date this application was submitted: Jan 10, 2014      Date recommended by the VRB: Apr 04, 2014



# Wheat

## SY Ingmar 04S0258-12 (Exp)

1. SY Ingmar is a hard red spring wheat bred and developed by Syngenta Seeds, Inc.
2. SY Ingmar is the result of a cross made in 2004 by Syngenta Seeds, Inc. in Berthoud, Colorado. SY Ingmar was selected for height, straw strength, bread making quality, resistance to leaf and stem rust.
3. SY Ingmar is best adapted to the spring wheat growing areas of North Dakota and Minnesota.
4. SY Ingmar is resistant to stem rust. SY Ingmar is moderately resistant to leaf spotting disease.
5. Identifying characteristics –

1. Kind:	Common, Hard Red Spring Wheat		
2. Seasonal Growth Habit:	Spring	16. Awn Type:	Awned
3. Coleoptile Color:	White	17. Awn Color:	White
4. Juvenile Growth Habit:	Erect	18. Glume Color:	White/Amber
5. Leaf Color at Boot:	Green	19. Glume Length:	Medium
6. Flag Leaf at Boot:	Recurved, Twisted, Wax Absent	20. Shoulder Shape:	Square
7. Auricle Color:	White	21. Shoulder Width:	Medium
8. Days to 50% Heading:	58.2	22. Beak Shape:	Acuminate
9. Anther Color:	Yellow	23. Beak Length (S.M.L.VL):	Medium
10. Anthocyanin:	Anthocyanin Absent	24. Glume Pubescence:	Absent
11. Plant Height (cm):	78	25. Seed Color:	Red
12. Internodes:	Hollow	26. Seed Shape:	Ovate
13. Spike Shape:	Tapering	27. Cheeks:	Rounded
14. Spike Density:	Mid Dense	28. Brush Size (S,M,L.):	Medium
15. Spike Curvature:	Inclined	29. Avg 1,000 Kernel Wt (g):	27.9

### 30. Physiological/Biochemical Traits:

Variants and Frequency: Less than 0.8% of the plants were rogued from the Breeder seed increase in Yuma, Arizona. Approximately 95% of the rogued variant plants were taller height wheat plants (8 to 15 cm). 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 will be available in the Spring of 2015.
8. Plant Variety Protection is anticipated in 2014 and SY Ingmar may only be sold as a class of certified seed.
9. Certified acreage is not to be published by AOSCA and certifying agencies.

Date this application was submitted: Jan 09, 2014      Date recommended by the VRB: Mar 13, 2014



# Wheat

## SY Llano AP09T9614 (Exp)

1. SY Llano is a hard red winter wheat bred and developed by Syngenta Seeds, Inc.
2. SY Llano is the result of a cross made in 2006-by Syngenta Seeds, Inc. in Vernon, Texas. SY Llano was selected for its early maturity and resistance to endemic races of leaf rust.
3. SY Llano is best adapted to the High Plains of Texas and north central Oklahoma.
4. SY Llano is resistant to stripe rust, moderately resistant to moderately susceptible to leaf rust, resistant to soil borne mosaic virus, susceptible to powdery mildew, and tolerant of acid soils.
5. Identifying characteristics –

1. Kind:	Common, Hard Red Winter Wheat		
2. Seasonal Growth Habit:	Winter	16. Awn Type:	Awned
3. Coleoptile Color:	White	17. Awn Color:	White
4. Juvenile Growth Habit:	Erect	18. Glume Color:	White/Amber
5. Leaf Color at Boot:	Blue-Green	19. Glume Length:	Medium
6. Flag Leaf at Boot:	Erect, Twisted, Waxy	20. Shoulder Shape:	Square
7. Auricle Color:	White	21. Shoulder Width:	Medium
8. Days to 50% Heading:	91	22. Beak Shape:	Acute
9. Anther Color:	Yellow	23. Beak Length (S.M.L.VL):	Medium
10. Stem Color:	Anthocyanin Absent	24. Glume Pubescence:	Absent
11. Plant Height (cm):	69.9	25. Seed Color	Red
12. Internodes:	Hollow	26. Seed Shape:	Elliptical
13. Spike Shape:	Tapering	27. Cheeks:	Rounded
14. Spike Density:	Mid Dense	28. Brush Size (S,M,L.):	Short
15. Spike Curvature:	Inclined	29. Avg 1,000 Kernel Wt (g):	27.3

### 30. Physiological/Biochemical Traits:

Variants and Frequency: Less than .06% of the plants were rogued from the Breeder seed increase. Approximately 95% of the rogued variant plans were taller height and the other variants 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 will be available in the fall of 2015.
8. Plant Variety Protection is anticipated in 2014 and SY Llano may only be sold as a class of certified seed.
9. Certified acreage is not to be published by AOSCA and certifying agencies.

Date this application was submitted: Jan 10, 2014

Date recommended by the VRB: Mar 13, 2014



# Wheat

## SY Monument 04BC574-2 (Exp)

1. SY Monument is a hard red winter wheat bred and developed by Syngenta Seeds, Inc.
2. SY Monument is the result of a cross made in 2003 by Syngenta Seeds, Inc. in Junction City, KS. SY Monument was selected for height, straw strength, yield, bread making quality and resistance to leaf and stripe rust.
3. SY Monument is best adapted to the winter wheat growing areas of the High Plains.
4. SY Monument has a high level of tolerance to low Ph soils.
5. Identifying characteristics –

1. Kind:	<u>Common, Hard Red Winter Wheat</u>		
2. Seasonal Growth Habit:	<u>Winter</u>	16. Awn Type:	<u>Awned</u>
3. Coleoptile Color:	<u>White</u>	17. Awn Color:	<u>White</u>
4. Juvenile Growth Habit:	<u>Erect</u>	18. Glume Color:	<u>White/Amber</u>
5. Leaf Color at Boot:	<u>Green</u>	19. Glume Length:	<u>Medium</u>
6. Flag Leaf at Boot:	<u>Erect, Non-Twisted, Waxy</u>	20. Shoulder Shape:	<u>Oblique</u>
7. Auricle Color:	<u>White</u>	21. Shoulder Width:	<u>Medium</u>
8. Days to 50% Heading:	<u>127</u>	22. Beak Shape:	<u>Acuminate</u>
9. Anther Color:	<u>Yellow</u>	23. Beak Length (S.M.L. VL):	<u>Medium</u>
10. Stem Color:	<u>Anthocyanin Absent</u>	24. Glume Pubescence:	<u>Absent</u>
11. Plant Height (cm):	<u>84</u>	25. Seed Color:	<u>Red</u>
12. Internodes:	<u>Hollow</u>	26. Seed Shape:	<u>Ovate</u>
13. Spike Shape:	<u>Tapering</u>	27. Cheeks:	<u>Rounded</u>
14. Spike Density:	<u>Mid Dense</u>	28. Brush Size (S,M,L.):	<u>Medium</u>
15. Spike Curvature:	<u>Nodding</u>	29. Avg 1,000 Kernel Wt (g):	<u>36</u>

### 30. Physiological/Biochemical Traits:

Variants and Frequency: Less than 1% of the plants were rogued from the breeder seed increase in Eaton, CO. Approximately 97% of the rogued variant plants were taller height wheat plants (8 to 15cm). The other variants were heads with different chaff color (red). 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 will be available in the fall of 2015.
8. Plant Variety Protection is anticipated in 2014 and SY Monument may only be sold as a class of certified seed.
9. Certified acreage is not to be published by AOSCA and certifying agencies.

Date this application was submitted: Jan 09, 2014      Date recommended by the VRB: Apr 04, 2014



# Wheat

## SY Sky

### BC98331-03\$-11W (Exp)

1. SY Sky is a hard white winter wheat bred and developed by Syngenta Seeds, Inc.
2. SY Sky is the result of a cross made by Kansas State University and the F2 population shared in 1999. SY Sky was selected for yield, disease, quality and resistance to leaf rust.
3. SY Sky is best adapted to the winter wheat growing areas of Kansas.
4. SY Sky has moderate resistance to leaf rust.
5. Identifying characteristics –

1. Kind:	Common, Hard White Winter Wheat		
2. Seasonal Growth Habit:	Winter	16. Awn Type:	Awned
3. Coleoptile Color:	White	17. Awn Color:	White
4. Juvenile Growth Habit:	Semi-erect	18. Glume Color:	White/Amber
5. Leaf Color at Boot:	Green	19. Glume Length:	Short
6. Flag Leaf at Boot:	Erect, Twisted, Wax Present	20. Shoulder Shape:	Oblique
7. Auricle Color:	White	21. Shoulder Width:	Medium
8. Days to 50% Heading:	123	22. Beak Shape:	Acute
9. Anther Color:	Yellow	23. Beak Length (S.M.L.VL):	Medium
10. Stem Color:	Anthocyanin Absent	24. Glume Pubescence:	Absent
11. Plant Height (cm):	77	25. Seed Color:	White
12. Internodes:	Hollow	26. Seed Shape:	Ovate
13. Spike Shape:	Tapering	27. Cheeks:	Rounded
14. Spike Density:	Mid-dense	28. Brush Size (S,M,L.):	Medium
15. Spike Curvature:	Inclined	29. Avg 1,000 Kernel Wt (g):	36

#### 30. Physiological/Biochemical Traits:

Variants and Frequency: Less than .8% of the plants were rogued from the breeder seed increase in Eaton, CO. Approximately 98% of the rogued variant plants were taller height wheat plants (more than 8cm). 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 will be available in the fall of 2015.
8. Plant Variety Protection is anticipated in 2014 and SY Sky may only be sold as a class of certified seed.
9. Certified acreage is not to be published by AOSCA and certifying agencies

Date this application was submitted: Jan 10, 2014      Date recommended by the VRB: Apr 04, 2014



# Wheat

## HRS 3378 02S0178-1 (Exp)

1. HRS 3378 is a hard red spring wheat bred and developed by Syngenta Seeds, Inc.
2. HRS 3378 is the result of a cross made in 2002 by Syngenta Seeds, Inc. in Berthoud, Colorado. HRS 3378 was selected for height, and leaf rust.
3. HRS 3378 is best adapted to the spring wheat growing areas of North Dakota and Minnesota.
4. HRS 3378 is moderately resistant to leaf rust. Protection to leaf spotting diseases has been good. HRS 3378 tolerance to FHB has been intermediate.

### 5. Identifying characteristics –

1. Kind:	Common, Hard Red Spring Wheat		
2. Seasonal Growth Habit:	Spring	16. Awn Type:	Awed
3. Coleoptile Color:	White	17. Awn Color:	White
4. Juvenile Growth Habit:	Erect	18. Glume Color:	White/Amber
5. Leaf Color at Boot:	Green	19. Glume Length:	Medium
6. Flag Leaf at Boot:	Recurved, Wax Absent & Twisted	20. Shoulder Shape:	Square
7. Auricle Color:	White	21. Shoulder Width:	Medium
8. Days to 50% Heading:	57.5	22. Beak Shape:	Acuminate
9. Anther Color:	Yellow	23. Beak Length (S.M.L.VL):	M
10. Stem Color:	Anthocyanin Absent	24. Glume Pubescence:	Absent
11. Plant Height (cm):	77	25. Seed Color:	Red
12. Internodes:	Hollow	26. Seed Shape:	Ovate
13. Spike Shape:	Tapering	27. Cheeks:	Rounded
14. Spike Density:	Mid-dense	28. Brush Size (S,M,L.):	M
15. Spike Curvature:	Inclined	29. Avg 1,000 Kernel Wt (g):	26.7

### 30. Physiological/Biochemical Traits:

Variants and Frequency: Less than 0.8% of the plants were rogued from the Breeder seed increase in Eaton, CO. Approximately 95% of the rogued variant plants were taller height wheat plants (8 to 15 cm). 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 will be available in the Spring 2014.
8. Plant Variety Protection is anticipated in 2014 and HRS 3378 may only be sold as a class of certified seed.
9. Certified acreage is not to be published by AOSCA and certifying agencies.

Date this application was submitted: Jan 09, 2014

Date recommended by the VRB: Apr 04, 2014





# Wheat

## HRS 3361 05S0261-10 (Exp)

1. HRS 3361 is a hard red spring wheat bred and developed by Syngenta Seeds, Inc.
2. HRS 3361 is the result of a cross made in 2005 by Syngenta Seeds, Inc. in Berthoud, Colorado. HRS 3361 was selected for height and leaf rust.
3. HRS 3361 is best adapted to the spring wheat growing areas of North Dakota and Minnesota.
4. HRS 3361 has moderately resistance to leaf rust. Protection to leaf spotting diseases has been good. HRS 3361 tolerance to FHB has been intermediate.
5. Identifying characteristics –

1. Kind:	Common, Hard Red Spring Wheat		
2. Seasonal Growth Habit:	<u>Spring</u>	16. Awn Type:	<u>Awned</u>
3. Coleoptile Color:	<u>White</u>	17. Awn Color:	<u>White</u>
4. Juvenile Growth Habit:	<u>Erect</u>	18. Glume Color:	<u>White/Amber</u>
5. Leaf Color at Boot:	<u>Green</u>	19. Glume Length:	<u>Medium</u>
6. Flag Leaf at Boot:	<u>Twisted, Wax Absent, Recurved</u>	20. Shoulder Shape:	<u>Oblique</u>
7. Auricle Color:	<u>White</u>	21. Shoulder Width:	<u>Medium</u>
8. Days to 50% Heading:	<u>57.7</u>	22. Beak Shape:	<u>Acuminate</u>
9. Anther Color:	<u>Yellow</u>	23. Beak Length (S.M.L.VL):	<u>Medium</u>
10. Stem Color:	<u>Anthocyanin Absent</u>	24. Glume Pubescence:	<u>Absent</u>
11. Plant Height (cm):	<u>79</u>	25. Seed Color:	<u>Red</u>
12. Internodes:	<u>Hollow</u>	26. Seed Shape:	<u>Ovate</u>
13. Spike Shape:	<u>Tapering</u>	27. Cheeks:	<u>Rounded</u>
14. Spike Density:	<u>Mid dense</u>	28. Brush Size (S,M,L.):	<u>Medium</u>
15. Spike Curvature:	<u>Inclined</u>	29. Avg 1,000 Kernel Wt (g):	<u>27.6</u>

### 30. Physiological/Biochemical Traits:

Variants and Frequency: Less than 0.8% of the plants were rogued from the Breeder seed increase in Eaton, CO. Approximately 95% of the rogued variant plants were taller height wheat plants (8 to 15 cm). 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 will be available in the spring of 2014.
8. Plant Variety Protection is anticipated in 2014 and HRS 3361 may only be sold as a class of certified seed.
9. Certified acreage is not to be published by AOSCA and certifying agencies.

Date this application was submitted: Jan 09, 2014

Date recommended by the VRB: Apr 04, 2014



# Wheat

## BC03212-20 (Exp)

1. BC03212-20 is a hard red winter wheat bred and developed by Syngenta Seeds, Inc.
2. BC03212-20 is the result of a cross made in 2003 by Syngenta Seeds, Inc. in Junction City, KS. BC03212-20 was selected for height, straw strength, bread making quality, and yield.
3. BC03212-20 is best adapted to irrigated acres in the western hi-plains in Nebraska and Kansas as well as high management acres in Central Kansas.
4. BC03212-20 has excellent straw strength. BC03212-20 is moderately susceptible to leaf rust and stripe rust. Overall bread making characteristics are good.
5. Identifying characteristics –

1. Kind: Common, Hard Red Winter Wheat			
2. Seasonal Growth Habit:	Winter	16. Awn Type:	Awned
3. Coleoptile Color:	White	17. Awn Color:	Tan
4. Juvenile Growth Habit:	Erect	18. Glume Color:	Bronze
5. Leaf Color at Boot:	Green	19. Glume Length:	Medium
6. Flag Leaf at Boot:	Erect, Twisted, Waxy	20. Shoulder Shape:	Square
7. Auricle Color:	White	21. Shoulder Width:	Medium
8. Days to 50% Heading:	125	22. Beak Shape:	Acuminate
9. Anther Color:	Yellow	23. Beak Length (S.M.L.VL):	Medium
10. Stem Color:	Anthocyanin Absent	24. Glume Pubescence:	Absent
11. Plant Height (cm):	79	25. Seed Color:	Red
12. Internodes:	Hollow	26. Seed Shape:	Ovate
13. Spike Shape:	Tapering	27. Cheeks:	Rounded
14. Spike Density:	Mid-dense	28. Brush Size (S,M,L.):	Short
15. Spike Curvature:	Inclined	29. Avg 1,000 Kernel Wt (g):	35

### 30. Physiological/Biochemical Traits:

Variants and Frequency: Less than .8% of the plants were rogued from the breeder seed increase in Eaton, CO. Approximately 93% of the rogued variant plants were taller wheat plants (more than 8cm). We also had 4% awnless and 3% different chaff colors. 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 will be available in the fall of 2015.
8. Plant Variety Protection is anticipated in 2014 and BC03212-20 may only be sold as a class of certified seed.
9. Certified acreage is not to be published by AOSCA and certifying agencies.

Date this application was submitted: Jan 09, 2014      Date recommended by the VRB: Apr 04, 2014



# Wheat

## WB1529 BZ6W07-436 (Exp)

1. WB1529 is a soft white winter wheat developed by Monsanto Technology, LLC.
2. WB1529 was selected for yield, plant height, protein content, protein quality, and resistance to stripe rust using the pedigree method.
3. WB1529 is adapted to the soft white winter wheat growing areas of the Pacific Northwest.
4. WB1529 was rated resistant to prevalent races of stripe rust in 2012.

5. Identifying characteristics –

1. Kind:	<u>Common</u>	2. Seasonal Growth Habit:	<u>Winter</u>
3. Coleoptile Color:	<u>White</u>	4. Juvenile Growth Habit:	<u>Prostrate</u>
5. Leaf Color at Boot:	<u>Green</u>	6. Flag Leaf at Boot:	<u>Recurved, Twisted, Waxy</u>
7. Auricle Color:	<u>White</u>	8. Days to 50% Heading:	<u>171 (Julian)</u>
9. Anther Color:	<u>Yellow</u>	10. Stem Color:	<u>Anthocyanin Absent</u>
11. Plant Height (cm):	<u>87.6</u>	12. Internodes:	<u>Hollow</u>
13. Spike Shape:	<u>Oblong (Strap)</u>	14. Spike Density:	<u>Dense</u>
15. Spike Curvature:	<u>Inclined</u>	16. Awn Type:	<u>Awned</u>
17. Awn Color:	<u>White</u>	18. Glume Color:	<u>White</u>
19. Glume Length:	<u>Medium</u>	20. Shoulder Shape:	<u>Square</u>
21. Shoulder Width:	<u>Medium</u>	22. Beak Shape:	<u>Acuminate</u>
23. Beak Length (S.M.L.VL):	<u>M</u>	24. Glume Pubescence:	<u>Absent</u>
25. Seed Color:	<u>White</u>	26. Seed Shape:	<u>Ovate</u>
27. Cheeks:	<u>Angular</u>	28. Brush Size (S,M,L.):	<u>M</u>
29. Avg 1,000 Kernel Wt (g):	<u>41</u>		

30. Physiological/Biochemical Traits: \_\_\_\_\_

Variants and Frequency: A tall variant that is 1 to 2 heads taller than WB1529 can occur at a frequency of up to 0.1%. Red seed may be found at a frequency of up to 20/10,000 seed (0.2%).

6. Recognized classes of this variety will be breeder, foundation, registered, and certified. Monsanto will maintain the variety by the head-row purification method to produce breeder seed as needed and foundation seed will be produced from breeder or foundation class of seed.
7. Certified seed will be available for planting in the Fall of 2014.
8. Application will be made under the Plant Variety Protection Act and the certification option will not be selected.
9. AOSCA and seed certifying agencies may not publish seed production acreages.

Date this application was submitted: Jan 15, 2014

Date recommended by the VRB: Apr 01, 2014



# Wheat

## WB1604 BZ6W07-458 (Exp)

1. WB1604 is a soft white winter wheat developed by Monsanto Technology, LLC.
2. WB1604 was selected for yield, lodging resistance, high test weight and low protein and sedimentation values.
3. WB1604 is adapted to the soft white winter wheat growing areas of the Pacific Northwest.
4. WB1604 showed resistance to prevalent races of stripe rust in 2012.

5. Identifying characteristics –

1. Kind:	<u>Common Wheat</u>	2. Seasonal Growth Habit:	<u>Winter</u>
3. Coleoptile Color:	<u>White</u>	4. Juvenile Growth Habit:	<u>Prostrate</u>
5. Leaf Color at Boot:	<u>Green</u>	6. Flag Leaf at Boot:	<u>Recurved Twisted, Not Waxy</u>
7. Auricle Color:	<u>White</u>	8. Days to 50% Heading:	<u>171 (Julian)</u>
9. Anther Color:	<u>Yellow</u>	10. Stem Color:	<u>Anthocyanin Absent</u>
11. Plant Height (cm):	<u>87.7</u>	12. Internodes:	<u>Hollow</u>
13. Spike Shape:	<u>Oblong (Strap)</u>	14. Spike Density:	<u>Mid dense</u>
15. Spike Curvature:	<u>Inclined</u>	16. Awn Type:	<u>Awned</u>
17. Awn Color:	<u>White</u>	18. Glume Color:	<u>White</u>
19. Glume Length:	<u>Long</u>	20. Shoulder Shape:	<u>Square</u>
21. Shoulder Width:	<u>Wide</u>	22. Beak Shape:	<u>Acuminate</u>
23. Beak Length (S.M.L.VL):	<u>M</u>	24. Glume Pubescence:	<u>Absent</u>
25. Seed Color:	<u>White</u>	26. Seed Shape:	<u>Ovate</u>
27. Cheeks:	<u>Rounded</u>	28. Brush Size (S,M,L.):	<u>Long</u>
29. Avg 1,000 Kernel Wt (g):	<u>42</u>		

30. Physiological/Biochemical Traits: \_\_\_\_\_

Variants and Frequency: WB1604 may contain red seed at a frequency of up to 20/10,000 seeds and may contain plants that are one to two heads taller at a frequency of up to 10 plants/10,000.

6. Recognized classes of this variety will be breeder, foundation, registered, and certified. Monsanto will maintain the variety by the head-row purification method to produce breeder seed as needed and foundation seed will be produced from breeder or foundation class of seed.
7. Certified Seed of WB1604 will be available for planting in the fall of 2014.
8. Application will be made under the Plant Variety Protection Act and certification option will not be selected.
9. AOSCA and seed certifying agencies may not publish seed production acreages.

Date this application was submitted: Jan 15, 2014

Date recommended by the VRB: Apr 01, 2014



# Wheat

## WB1843 BZ6W06-451 (Exp)

1. WB1843 is a soft white winter wheat developed by Monsanto Technology, LLC.
2. WB1843 was selected for yield, plant height, protein content, protein quality, and resistance to stripe rust using the pedigree method.
3. WB1843 is adapted to the soft white winter wheat growing areas of the Pacific Northwest.
4. WB1843 was rated moderately resistant to prevalent races of stripe rust in 2012.

5. Identifying characteristics –

1. Kind:	<u>Common</u>	2. Seasonal Growth Habit:	<u>Winter</u>
3. Coleoptile Color:	<u>White</u>	4. Juvenile Growth Habit:	<u>Prostrate</u>
5. Leaf Color at Boot:	<u>Blue-green</u>	6. Flag Leaf at Boot:	<u>Twisted, Recurved, Wax Present</u>
7. Auricle Color:	<u>White</u>	8. Days to 50% Heading:	<u>177 (Julian)</u>
9. Anther Color:	<u>Yellow</u>	10. Stem Color:	<u>Anthocyanin Absent</u>
11. Plant Height (cm):	<u>90</u>	12. Internodes:	<u>Hollow</u>
13. Spike Shape:	<u>Oblong (Strap)</u>	14. Spike Density:	<u>Mid Dense</u>
15. Spike Curvature:	<u>Inclined</u>	16. Awn Type:	<u>Awned</u>
17. Awn Color:	<u>White</u>	18. Glume Color:	<u>White</u>
19. Glume Length:	<u>Medium</u>	20. Shoulder Shape:	<u>Square</u>
21. Shoulder Width:	<u>Narrow</u>	22. Beak Shape:	<u>Acuminate</u>
23. Beak Length (S,M,L,VL):	<u>M</u>	24. Glume Pubescence:	<u>Pubescence Absent</u>
25. Seed Color:	<u>White</u>	26. Seed Shape:	<u>Ovate</u>
27. Cheeks:	<u>Angular</u>	28. Brush Size (S,M,L):	<u>L</u>
29. Avg 1,000 Kernel Wt (g):	<u>41</u>		

30. Physiological/Biochemical Traits: \_\_\_\_\_

Variants and Frequency: A tall variant that is 1 to 2 heads taller than WB1843 can occur at a frequency of up to 0.1%. An awnless variant may occur at a frequency of up to .01%. Red seed may be found at a frequency of up to 20/10,000 seed (0.2%).

6. Recognized classes of this variety will be breeder, foundation, registered, and certified. Monsanto will maintain the variety by the head-row purification method to produce breeder seed as needed and foundation seed will be produced from breeder or foundation class of seed.
7. Certified seed will be available for planting in the fall of 2014.
8. Application will be made under the Plant Variety Protection Act and certification option will not be selected.
9. AOSCA and seed certifying agencies may not publish seed production acreages.

Date this application was submitted: Jan 15, 2014      Date recommended by the VRB: Apr 01, 2014



# Wheat

## WB4614 BZ9W07-2034 (Exp)

1. WB4614 is a hard red winter wheat developed by Monsanto Technology, LLC.
2. WB4614 was selected for yield, plant height, protein content, protein quality, and tolerance to wheat stem sawfly, using the pedigree method.
3. WB4614 is adapted to the winter wheat growing areas of Montana.
4. WB4614 is rated slightly tolerant to wheat stem sawfly.

5. Identifying characteristics –

1. Kind:	Common, Hard Red Winter Wheat		
2. Seasonal Growth Habit:	Winter	16. Awn Type:	Awned
3. Coleoptile Color:	White	17. Awn Color:	Tan
4. Juvenile Growth Habit:	Prostrate	18. Glume Color:	White
5. Leaf Color at Boot:	Green	19. Glume Length:	Medium
6. Flag Leaf at Boot:	Erect, Twisted, Wax Absent	20. Shoulder Shape:	Square
7. Auricle Color:	White	21. Shoulder Width:	Medium
8. Days to 50% Heading:	176 (Julian)	22. Beak Shape:	Acuminate
9. Anther Color:	Yellow	23. Beak Length (S.M.L.VL):	Medium
10. Stem Color:	Anthocyanin Absent	24. Glume Pubescence:	Not present
11. Plant Height (cm):	83	25. Seed Color:	Red
12. Internodes:	Hollow	26. Seed Shape:	Elliptical
13. Spike Shape:	Oblong	27. Cheeks:	Rounded
14. Spike Density:	Lax	28. Brush Size (S,M,L.):	M
15. Spike Curvature:	Inclined	29. Avg 1,000 Kernel Wt (g):	24.6

30. Physiological/Biochemical  
Traits:

Variants and Frequency: A tall variant that is 15cm to 30 cm taller than WB4614 occurs at a frequency of up to 0.2%.  
A variant that is similar to WB4614 but has white seed may occur at a frequency of up to 0.2%.

6. Recognized classes of this variety will be breeder, foundation, registered, and certified. Monsanto will maintain the variety by the head-row purification method to produce breeder seed as needed and foundation seed will be produced from breeder or foundation class of seed.
7. Certified Seed of this variety will be sold in 2014.
8. Application will be made under the Plant Variety Protection Act and certification option will not be selected.
9. AOSCA and seed certifying agencies may not publish seed production acreages.

Date this application was submitted: Jan 15, 2014      Date recommended by the VRB: Mar 13, 2014



**Wheat**  
**WB6430**  
**BZ608-125 (Exp)**

1. WB6430 is a soft white spring wheat developed by Monsanto Technology, LLC.
2. WB6430 was selected for yield, plant height, protein content, and resistance to stripe rust using the backcross method.
3. WB6430 is adapted to the soft white spring wheat growing areas of the Pacific Northwest.
4. WB6430 was rated resistant to prevalent races of stripe rust found in the Pacific Northwest in 2012.
5. Identifying characteristics –

1. Kind:	<u>Common</u>	2. Seasonal Growth Habit:	<u>Spring</u>
3. Coleoptile Color:	<u>White</u>	4. Juvenile Growth Habit:	<u>Erect</u>
5. Leaf Color at Boot:	<u>Blue-green</u>	6. Flag Leaf at Boot:	<u>Erect, Twisted, Waxy</u>
7. Auricle Color:	<u>White</u>	8. Days to 50% Heading:	<u>184 (Julian)</u>
9. Anther Color:	<u>Yellow</u>	10. Stem Color:	<u>Anthocyanin Absent</u>
11. Plant Height (cm):	<u>71</u>	12. Internodes:	<u>Hollow</u>
13. Spike Shape:	<u>Oblong (Strap)</u>	14. Spike Density:	<u>Mid dense</u>
15. Spike Curvature:	<u>Inclined</u>	16. Awn Type:	<u>Awned</u>
17. Awn Color:	<u>White</u>	18. Glume Color:	<u>White</u>
19. Glume Length:	<u>Long</u>	20. Shoulder Shape:	<u>Square</u>
21. Shoulder Width:	<u>Medium</u>	22. Beak Shape:	<u>Acuminate</u>
23. Beak Length (S.M.L.VL):	<u>Medium</u>	24. Glume Pubescence:	<u>Absent</u>
25. Seed Color	<u>White</u>	26. Seed Shape:	<u>Ovate</u>
27. Cheeks:	<u>Rounded</u>	28. Brush Size (S,M,L.):	<u>M</u>
29. Avg 1,000 Kernel Wt (g):	<u>36</u>		

30. Physiological/Biochemical Traits: \_\_\_\_\_

Variants and Frequency: A tall variant that is one to two heads taller than WB6430 may occur at a frequency of up to 0.2%. A variant that is similar to WB6430 but has red seed may occur at a frequency of up to 0.2%.

6. Recognized classes of this variety will be breeder, foundation, registered, and certified. Monsanto will maintain the variety by the head-row purification method to produce breeder seed as needed and foundation seed will be produced from breeder or foundation class of seed.
7. Certified Seed of WB6430 will be available for planting in the spring of 2015.
8. Application will be made under the Plant Variety Protection Act and certification option will not be selected.
9. AOSCA and seed certifying agencies may not publish seed production acreages.

Date this application was submitted: Jan 15, 2014      Date recommended by the VRB: Apr 01, 2014



# Wheat

## WB7390 DA908-306 (Exp)

1. WB7390 (Experimental code, DA908-306) is a hard white spring wheat variety developed by WestBred, a Unit of Monsanto
2. WB7390 was selected for white seed, high yield, plant height, stripe rust resistance prior to F5 in 2008.
3. WB7390 is adapted to wheat production areas of Southern California, San Joaquin valley in California. The primary end use its flour is to make raised loaf bread.
4. WB7390 is resistant to the current field races of stripe rust in California.
5. Identifying characteristics –

1. Kind:	Common, Hard White Spring Wheat		
2. Seasonal Growth Habit:	<u>Spring</u>	16. Awn Type:	<u>Awned</u>
3. Coleoptile Color:	<u>White</u>	17. Awn Color:	<u>White</u>
4. Juvenile Growth Habit:	<u>Erect</u>	18. Glume Color:	<u>White</u>
5. Leaf Color at Boot:	<u>Green</u>	19. Glume Length:	<u>Medium</u>
6. Flag Leaf at Boot:	<u>Erect, Twisted Waxy</u>	20. Shoulder Shape:	<u>Elevated</u>
7. Auricle Color:	<u>White</u>	21. Shoulder Width:	<u>Narrow</u>
8. Days to 50% Heading:	<u>86</u>	22. Beak Shape:	<u>Acute</u>
9. Anther Color:	<u>Yellow</u>	23. Beak Length:	<u>Medium</u>
10. Stem Color:	<u>No Anthocyanin</u>	24. Glume Pubescence:	<u>Glabrous</u>
11. Plant Height (cm):	<u>96.5</u>	25. Seed Color:	<u>White</u>
12. Internodes:	<u>Hollow</u>	26. Seed Shape:	<u>Elliptical</u>
13. Spike Shape:	<u>Oblong (Strap)</u>	27. Cheeks:	<u>Rounded</u>
14. Spike Density:	<u>Lax</u>	28. Brush Size (S,M,L.):	<u>Medium</u>
15. Spike Curvature:	<u>Inclined</u>	29. Avg 1,000 Kernel Wt (g):	<u>34.5</u>
30. Physiological/Biochemical Traits:	<u>n/a</u>		

Variants and Frequency: A variant that is similar to WB7390 but has red seed occurs at a frequency of up to .2%. A tall variant that is 15cm to 30 cm taller than WB7390 occurs at a frequency of up to .2%. Otherwise, WB7390 is a stable and uniform variety in appearance and performance across several generations (F6-F9) and growing conditions.

6. The certified classes of seed to be recognized are Breeder, Foundation, Registered, and Certified. WestBred, a unit of Monsanto, will produce all foundation seed either from breeder seed or foundation class seed. Production of registered and certified seed will be by license to associate seed companies. A royalty fee will be collected on all registered and certified seed sales.
7. Certified seed will be offered for sale in the Fall 2014.
8. Plant Variety Protection will be applied for and the “Certification Option” was not selected.
9. Certified seed production acreage is not to be published by AOSCA and individual certifying agencies.

Date this application was submitted: Jan 15, 2014      Date recommended by the VRB: Apr 01, 2014





# Wheat

## WB7618 DA907-047 (Exp)

1. WB7618 (Experimental code, DA907-047) is a hard white spring wheat variety developed by WestBred, a Unit of Monsanto
2. WB7618 was selected for white seed, stripe rust resistance and good milling and baking qualities and developed to be alternative variety to Cristallo in California.
3. WB7618 is adapted to wheat production areas of Sacramento Valley in California. The primary end use its flour is to make raised loaf bread.
4. No claims are made in this application relative to disease reactions.
5. Identifying characteristics –

1. Kind:	Common, Hard White Spring Wheat		
2. Seasonal Growth Habit:	<u>Spring</u>	16. Awn Type:	<u>Awned</u>
3. Coleoptile Color:	<u>White</u>	17. Awn Color:	<u>White</u>
4. Juvenile Growth Habit:	<u>Erect</u>	18. Glume Color:	<u>White</u>
5. Leaf Color at Boot:	<u>Green</u>	19. Glume Length:	<u>Medium</u>
6. Flag Leaf at Boot:	<u>Erect, Not Twisted, Waxy</u>	20. Shoulder Shape:	<u>Wanting</u>
7. Auricle Color:	<u>White</u>	21. Shoulder Width:	<u>Narrow</u>
8. Days to 50% Heading:	<u>88</u>	22. Beak Shape:	<u>Acute</u>
9. Anther Color:	<u>Yellow</u>	23. Beak Length:	<u>Medium</u>
10. Stem Color:	<u>No Anthocyanin</u>	24. Glume Pubescence:	<u>Glabrous</u>
11. Plant Height (cm):	<u>90</u>	25. Seed Color:	<u>White</u>
12. Internodes:	<u>Hollow</u>	26. Seed Shape:	<u>Elliptical</u>
13. Spike Shape:	<u>Oblong (Strap)</u>	27. Cheeks:	<u>Rounded</u>
14. Spike Density:	<u>Lax</u>	28. Brush Size (S,M,L.):	<u>Medium</u>
15. Spike Curvature:	<u>Inclined</u>	29. Avg 1,000 Kernel Wt (g):	<u>34.4</u>
30. Physiological/Biochemical Traits:	<u>n/a</u>		

Variants and Frequency: A tall variant that is 15cm to 30 cm taller than WB7618 occurs at a frequency of up to .2%. Otherwise, WB7618 is a stable and uniform variety in appearance and performance across several generations (F6-F10) and growing conditions.

6. The certified classes of seed to be recognized are Breeder, Foundation, Registered, and Certified. WestBred, a unit of Monsanto, will produce all foundation seed either from breeder seed or foundation class seed. Production of registered and certified seed will be by license to associate seed companies. A royalty fee will be collected on all registered and certified seed sales.
7. Certified seed will be offered for sale in the Fall 2014.
8. Plant Variety Protection will be applied for and the “Certification Option” was not selected.
9. Certified seed production acreage is not to be published by AOSCA and individual certifying agencies.

Date this application was submitted: Jan 15, 2014      Date recommended by the VRB: Apr 01, 2014





# Triticale

## SY TF 131 05tf131d (Exp)

1. SY TF 131 is a tall semi-dwarf cultivar of winter triticale developed by Syngenta Seeds, Inc.
2. SY TF 131 was selected for its shorter stature, earlier maturity, substantially higher grain yields and vegetative biomass production ability.
3. SY TF 131 is best adapted to Southwest Oklahoma, the Rolling Plains of Texas and the Texas Cross Timbers Regions
4. SY TF 131 possesses leaf rust tolerance, is moderately susceptible to stripe rust, and moderately resistant to stem rust.
5. Identifying characteristics –

1. Ploidy:	<u>Hexaploid</u>	15. Awn Color:	<u>Yellow</u>
2. Growth Habit:	<u>Winter</u>	16. Glume Pubescence:	<u>Glabrous</u>
3. Photoperiod Reaction:	<u>(no data)</u>	17. Glume Color:	<u>White</u>
4. Winterhardiness:	<u>Medium</u>	18. Glume Length:	<u>Long</u>
5. Maturity:	<u>Early</u>	19. Glume Width:	<u>Narrow</u>
6. Height:	<u>Tall Semi-Dwarf</u>	20. Glume Shoulder Shape:	<u>Wanting</u>
7. Plant Color at Boot Stage:	<u>Blue - Green</u>	21. Glume Beak Shape:	<u>Acute</u>
8. Stem Anthocyanin:	<u>Absent</u>	22. Coleoptile Color:	<u>Purple</u>
9. Neck Hairiness:	<u>None</u>	23. Seed Shape:	<u>Elliptical</u>
10. Neck Shape:	<u>Wavy</u>	24. Seed Smoothness:	<u>Slightly Wrinkled</u>
11. Flag Leaf at Boot:	<u>Twisted</u>	25. Seed Brush Area:	<u>Mid-size</u>
12. Spike Density:	<u>Mid-dense</u>	26. Seed Brush Length:	<u>Mid-long</u>
13. Spike Shape:	<u>Clavate</u>	27. Seed Color:	<u>Red</u>
14. Spike Awedness:	<u>Apically Awnletted</u>	28. Seed Relative Size:	<u>Medium</u>

#### Unique Physiological/Biochemical Traits:

Variants and Frequency: Less than 0.07% of the plants were rogued from the Breeder seed. Approximately 91% of the rogued variant plants were taller height and the other variants were awned. 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. Limited amounts of certified seed may be available in the fall of 2015.
8. Plant Variety Protection is anticipated in 2014 and SY TF 131 may only be sold as a class of certified seed.
9. Certified acreage is not to be published by AOSCA and certifying agencies

Date this application was submitted: Jan 10, 2014

Date recommended by the VRB: Apr 04, 2014



# Triticale

## SY TF 813 08TF13 (Exp)

1. SY TF 813 is a tall semi-dwarf cultivar of winter triticale developed by Syngenta Seeds, Inc.
2. SY TF 813 was selected for its earlier maturity, productivity, substantially higher grain yields, vegetative biomass production ability and silage harvests.
3. SY TF 813 is best adapted to silage and grazing production systems in the Texas Rolling Plains and the Texas Panhandle. SY TF 813 is sufficiently winter hardy to withstand the cold temperatures characteristic of the Texas Panhandle and western Kansas.
4. SY TF 813 possesses leaf rust tolerance and is moderately resistant to stripe rust.
5. Identifying characteristics –

1. Ploidy:	Hexaploid	15. Awn Color:	Yellow
2. Growth Habit:	Winter	16. Glume Pubescence:	Glabrous
3. Photoperiod Reaction:	(no data)	17. Glume Color:	White
4. Winterhardiness:	Medium High	18. Glume Length:	Long
5. Maturity:	Early	19. Glume Width:	Narrow
6. Height:	Semi-Dwarf	20. Glume Shoulder Shape:	Wanting
7. Plant Color at Boot Stage:	Green	21. Glume Beak Shape:	Acute
8. Stem Anthocyanin:	Absent	22. Coleoptile Color:	White
9. Neck Hairiness:	Moderate	23. Seed Shape:	Elliptical
10. Neck Shape:	Wavy	24. Seed Smoothness:	Slightly Wrinkled
11. Flag Leaf at Boot:	Twisted, Waxy Bloom, Erect	25. Seed Brush Area:	Mid-size
12. Spike Density:	Mid-dense	26. Seed Brush Length:	Mid-long
13. Spike Shape:	Clavate	27. Seed Color:	Red
14. Spike Awnedness:	Apically Awnletted	28. Seed Relative Size:	Medium-Large

### Unique Physiological/Biochemical Traits:

Variants and Frequency: Less than 0.2% of the plants were rogued from the Breeder seed. Approximately 50% of the rogued variant plants were taller height and the other variants were awned. 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. Limited amounts of certified seed may be available in the fall of 2015.
8. Plant Variety Protection is anticipated in 2014 and SY TF 813 may only be sold as a class of certified seed.
9. Certified acreage is not to be published by AOSCA and certifying agencies

Date this application was submitted: Jan 10, 2014      Date recommended by the VRB: Apr 04, 2014

