A REPORT OF THE

SMALL GRAIN VARIETY REVIEW BOARD

ASSOCIATION OF OFFICIAL SEED CERTIFYING AGENCIES

SMALL GRAIN VARIETY REVIEW BOARD REPORT ©2017

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April 2017

The Association of Official Seed Certifying Agencies (AOSCA), Small Grain Variety Review Board (SGVRB), reviewed the following varieties on April 3-4, 2017. 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 Small Grain Variety Review Board by the applicants. The Small Grain Variety Review Board makes judgments regarding recommendation of varieties for inclusion into certification based on the data supplied. Beyond that, the 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 Small Grain Variety Review Board can be obtained from:

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Respectfully submitted,

Rick Novak, Chairman
Small Grains Variety Review Board

2017 AOSCA SMALL GRAIN VARIETY REVIEW BOARD

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Wheat

TCG-Climax
T14C807 (Exp)

1. TCG-Climax is a hard red spring wheat (HRS) developed by 21st Century Genetics Corp. (experimental designation T14C807).

2. TCG-Climax was developed using a pedigree, single seed descent breeding procedure, with selection for standability, yielding potential, protein content, test weight, and bread and dough quality. It was also selected for general resistance/tolerance to the major diseases of the Red River Valley (RRV) region of ND and MN.

3. TCG-Climax is adapted to the RRV of ND and MN.

4 No claims are made in this application for disease or insect resistance.

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, Twisted, Waxy	18. Glume Color:	White
5. Leaf Color at Boot:	Blue Green	19. Glume Length:	Short
6. Flag Leaf at Boot:	Erect	20. Shoulder Shape:	Elevated
7. Auricle Color:	White	21. Shoulder Width:	Narrow
8. Days to 50% Heading:	67 DAP	22. Beak Shape:	Acuminate
9. Anther Color:	Yellow	23. Beak Length (S.M.L.VL):	M
10. Anthoncyanin:	No	24. Glume Pubescence:	No
11. Plant Height (cm):	88	25. Seed Color	Red
12. Internodes:	Hollow	26. Seed Shape:	Ovate
13. Spike Shape:	Oblong	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):	31

30. Physiological/Biochemical Traits:

Variants and Frequency: 1/1000 talls 30 cm above the canopy.

6. Recognized classes of seed are Breeder, Foundation Registered, and Certified. TCG-Climax will be regenerated by head row purification when needed.

7. Certified Seed will be offered for sale in 2018.

8. Application will be made for PVP (Title V) protection.

9. Seed production acreage of TCG is not to be published by AOSCA or other seed certifying agencies.

Date this application was submitted: Jan 07, 2017 Date recommended by the VRB: Apr 28, 2017

Wheat

Alberto
335 (Exp)
(Amended – Name Change)

Variety Name APB335

Experimental Designation(s) 335

Date SGVRB first recommended this variety 10/25/2016

Date(s) any previous amendments were recommended

Date this amendment was submitted 11/29/2016

1. Alberto is a spring durum wheat variety developed by Arizona Plant Breeders.
2. Alberto was selected for high yield, superior pasta quality, lodging resistance, and resistance to stripe rust using the Male Sterile Facilitated Recurrent Selection method.
3. Alberto has been tested in the durum producing regions of the southwestern United States and has proven to be well adapted to this region as an excellent pasta variety.
4. Alberto has demonstrated resistance to the prevalent races of *Puccinia striiformis* in the Central Valley of California.
5. Identifying characteristics –

1. Kind:	Durum		
2. Seasonal Growth Habit:	Spring	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:	Medium
6. Flag Leaf at Boot:	Erect, Not Twisted, Wax Absent	20. Shoulder Shape:	Rounded
7. Auricle Color:	White	21. Shoulder Width:	Medium
8. Day(s) to 50% Heading:	75.2	22. Beak Shape:	Acuminate
9. Anther Color:	Yellow	23. Beak Length (S.M.L.VL):	Long
10. Anthocyanin:	Absent	24. Glume Pubescence:	Absent
11. Plant Height (cm):	73.3	25. Seed Color	Amber
12. Internodes:	Hollow	26. Seed Shape:	Elliptical
13. Spike Shape:	Oblong	27. Cheeks:	Angular
14. Spike Density:	Dense	28. Brush Size (S,M,L.):	Short
15. Spike Curvature:	Erect	29. Avg 1,000 Kernel Wt (g):	53.1

30. Physiological/Biochemical Traits:

Variants and Frequency: Plants six inches taller occur at a rate of 1 in every 1,000 plants.

6. Recognized classes of Alberto are breeder, foundation, registered, and certified. Arizona Plant Breeders will maintain the variety by the head-row method to produce breeder seed as needed. Alberto will have a royalty fee and licensing agreement required.
7. Certified seed of Alberto will likely be available for planting in the fall of 2016.
8. Application for PVP is anticipated with the option that Alberto can sold by variety name only as a class of certified seed.
9. Certified seed acreage can be published by AOSCA and individual certifying agencies.

Date this application was submitted: Nov 29, 2016 Date recommended by the VRB: Apr 03, 2017

Wheat

Langin
CO11D446 (Exp)

1. Langin was tested under experimental number CO11D446. It is a medium-tall semidwarf hard red winter wheat developed by the Colorado State University (CSU) Agricultural experiment station. Ownership of Langin has been transferred to the Colorado Wheat Research Foundation.

2. Langin is a doubled haploid (DH) line developed using the wheat-maize hybridization method. Selection criteria during development included general agronomic adaptation, grain yield and yield stability, test weight, stripe rust resistance, and milling and bread baking quality.

3. Langin was tested throughout the western Great Plains area of the U.S. hard winter wheat region. It is best adapted for dryland and limited-irrigation production conditions in eastern Colorado, southeastern Wyoming, western Kansas, western Nebraska, and the Panhandles of both Oklahoma and Texas.

4. Langin is moderately resistant to stripe rust, and resistant to the wheat curl mite and wheat soilborne mosaic virus.

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
5. Leaf Color at Boot:	Blue-green	19. Glume Length:	Medium
6. Flag Leaf at Boot:	Erect, Twisted, Wax Present	20. Shoulder Shape:	Oblique
7. Auricle Color:	White	21. Shoulder Width:	Medium
8. Day(s) to 50% Heading:	145 (from Jan 1)	22. Beak Shape:	Acuminate
9. Anther Color:	Yellow	23. Beak Length (S.M.L.VL):	Medium
10. Anthoncyanin:	Absent (stem)	24. Glume Pubescence:	Not present
11. Plant Height (cm):	73.4	25. Seed Color	Red
12. Internodes:	Hollow	26. Seed Shape:	Ovate
13. Spike Shape:	Tapering	27. Cheeks:	Rounded
14. Spike Density:	Middense (Laxidense)	28. Brush Size (S,M,L.):	Medium
15. Spike Curvature:	Inclined	29. Avg 1,000 Kernel Wt (g):	26.0

30. Physiological/Biochemical Traits: N/A

Variants and Frequency: Tall plants at a frequency of 1 in 1,000; red-chaffed plants at a frequency of 1 in 1,000; white-seeded plants at a frequency of fewer than 1 in 200.

6. Recognized classes of Langin are breeder, foundation, registered, and certified. Colorado State University will maintain the variety by manual removal of off-types as needed to produce breeder seed and foundation seed. Royalties will be collected through the Colorado Wheat Research Foundation.

7. Certified seed of Langin will likely be available for planting in fall of 2017.

8. Application for PVP is anticipated with the option that Langin can be sold by variety name only as a class of certified seed.

9. Certified seed production acreage of Langin may be published by AOSCA and individual certifying agencies.

Date this application was submitted: Jan 09, 2017 Date recommended by the VRB: May 01, 2017

Wheat

M13C1010 (Exp)

1. M13C1010 is a hard red spring wheat owned by Global Soy Genetics.

2. M13C1010 was selected for yield, quality, disease tolerance, and agronomic characteristics in growth chambers and in the field using modified single seed descent.

3. M13C1010 was tested in the Red River Valley of North Dakota/Minnesota and is well-adapted to be a quality hard red spring bread wheat in the wheat production areas of North Dakota and Minnesota.

4. No claims are being made as to the disease or insect resistance of M13C1010.

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:	Erect, Twisted, Wax Absent	20. Shoulder Shape:	Square
7. Auricle Color:	White	21. Shoulder Width:	Medium
8. Day(s) to 50% Heading:	62 days after planting	22. Beak Shape:	Acuminate
9. Anther Color:	Yellow	23. Beak Length (S.M.L.VL):	Medium
10. Anthoncyanin:	Absent	24. Glume Pubescence:	Present
11. Plant Height (cm):	75	25. Seed Color	Red
12. Internodes:	Hollow	26. Seed Shape:	Ovate
13. Spike Shape:	Oblong	27. Cheeks:	Rounded
14. Spike Density:	Mid Dense	28. Brush Size (S,M,L.):	S
15. Spike Curvature:	Erect	29. Avg 1,000 Kernel Wt (g):	32

30. Physiological/Biochemical Traits: None

Variants and Frequency: 1/1000 talls 30 cm above the canopy.

6. Recognized classes of M13C1010 are breeder, foundation, registered, and certified. Global Soy Genetics will maintain the variety by the head-row purification method to produce breeder seed as needed.

7. Certified Seed will likely be offered for sale for planting in 2018.

8. Application will be made for PVP (Title V) protection.

9. Seed production acreage of M13C1010 is not to be published by AOSCA or other seed certifying agencies.

Date this application was submitted: Jan 11, 2017 Date recommended by the VRB: Apr 18, 2017

Wheat

Dyna-Gro Caliber
(HRSX 1677)

1. Dyna-Gro Caliber is a hard red spring wheat owned by Global Soy Genetics.

2. Dyna-Gro Caliber was selected for yield, quality, disease tolerance, and agronomic characteristics in growth chambers and in the field using modified single seed descent.

3. Dyna-Gro Caliber was tested in the Red River Valley of North Dakota/Minnesota and is well-adapted to be a quality hard red spring wheat in the wheat production areas of North Dakota and Minnesota.

4. No claims are being made as to the disease or insect resistance of Dyna-Gro Caliber.

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:	Blue-Green	19. Glume Length:	Medium
6. Flag Leaf at Boot:	Erect, Twisted, Wax Present	20. Shoulder Shape:	Wanting
7. Auricle Color:	White	21. Shoulder Width:	Medium
8. Day(s) to 50% Heading:	65.5 after planting	22. Beak Shape:	Acuminate
9. Anther Color:	Yellow	23. Beak Length (S.M.L.VL):	Medium
10. Anthoncyanin:	Absent	24. Glume Pubescence:	Present
11. Plant Height (cm):	76.7	25. Seed Color	Red
12. Internodes:	Hollow	26. Seed Shape:	Ovate
13. Spike Shape:	Oblong	27. Cheeks:	Rounded
14. Spike Density:	Mid Dense	28. Brush Size (S,M,L.):	Medium
15. Spike Curvature:	Erect	29. Avg 1,000 Kernel Wt (g):	31

30. Physiological/Biochemical Traits: None

Variants and Frequency: 1/1000 talls 30 cm above the canopy.

6. Recognized classes of Dyna-Gro Caliber are breeder, foundation, registered, and certified. Global Soy Genetics will maintain the variety by the head-row purification method to produce breeder seed as needed and all foundation seed.

7. Certified Seed will likely be offered for sale for planting in 2018.

8. Application will be made for PVP (Title V) protection.

9. Seed production acreage of Dyna-Gro Caliber is not to be published by AOSCA or other seed certifying agencies.

Date this application was submitted: Jan 11, 2017 Date recommended by the VRB: Apr 18, 2017

Wheat

1863
KS020319-7-3 (Exp)
(Amended – Variant Description)

Variety Name 1863

Experimental Designation(s) KS020319-7-3

Date SGVRB first recommended this variety 2012

Date(s) any previous amendments were recommended ___

Date this amendment was submitted Jan 20, 2017

1. 1863 is a hard red winter wheat developed by the Kansas Agricultural Experiment Station.
2. 1863 was selected for high yield, resistance to stripe rust and soil-borne mosaic and tolerance to acid soils by a selected bulk approach.
3. 1863 is best adapted to central Kansas.
4. 1863 is resistant to stem rust and soil-borne mosaic virus, moderately resistant to stripe rust and tolerant of acid soils.
5. Identifying characteristics –

1. Kind: Hard Red	2. Seasonal growth habit: Winter
3. Coleoptile color: White	4. Juvenile growth habit: Semi-erect
5. Leaf color at boot: Green	6. Flag leaf at boot: Erect, Twisted, Wax Absent
7. Auricle color: White	8. Days to 50% heading: 129
9. Anther color: Yellow	10. Stem color: Anthocyanin Absent
11. Plant height (cm): 76	12. Internodes: Hollow
13. Spike shape: Tapering	14. Spike density: Mid-dense
15. Spike curvature: Nodding	16. Awn type: Awned
17. Awn color: White	18. Glume color: White
19. Glume length: Medium	20. Shoulder shape: Elevated
21. Shoulder width: Narrow	22. Beak shape: Acuminate
23. Beak length (S, M, L, VL) M	24. Glume pubescence: Absent
25. Seed color: Red	26. Seed shape: Elliptical
27. Cheeks: Rounded	28.Brush size (S,M, L): Short
29. Avg 1,000 kernel wt (g):30.5	30. Phenol reaction: Dark Brown
Physiological/Biochemical Traits:	

Variants and Frequency: Brown chaffed variants occur at a rate of 1 in 500. White seed at a frequency of 0.8%.

6. Recognized classes of 1863 are breeder, foundation, registered, and certified. Kansas State University will maintain the variety by the head-row purification method to produce breeder seed as needed and all foundation seed. Royalties will be collected on 1863. No stewardship agreements will be needed.
7. Certified (Foundation) seed will likely be available for planting in the Fall of 2012.
8. Application for PVP is anticipated with the option that 1863 can be sold by variety name only as a class of certified seed.
9. Certified seed production acreage maybe be published by AOSCA and certifying agencies.

Date this application was submitted: Jan 20, 2017 Date recommended by the VRB: Apr 03, 2017

Wheat

Everest
KS970093-8-9-#1 (Exp)
(Amended – Variant Description)

Variety Name Everest

Experimental Designation(s) (KS970093-8-9-#1)

Date SGVRB first recommended this variety 2009

Date(s) any previous amendments were recommended 2011

Date this amendment was submitted Jan 20, 2017

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 –

1. Kind: Common	2. Growth habit: Winter
3. Coleoptile color: White	4. Juvenile growth habit: Semi-erect
5. Leaf color at boot: Green	6. Flag leaf at boot:Recurved/not twst
7. Auricle color: White	8. Days to 50% heading: 137
9. Anther color: Yellow	10. Stem color: No Anthocyanin
11. Plant height (cm): 68	12. Internodes: Hollow
13. Spike shape: Tapering	14. Spike density: Mid-dense
15. Spike curvature: Nodding	16. Awn type: Awned
17. Awn color: Tan	18. Glume color: Tan
19. Glume length: Medium	20. Shoulder shape: Square to Elevated
21. Shoulder width: Narrow	22. Beak shape: Acuminate
23. Beak length (S, M, L, VL): M	24. Glume pubescence: Absent
25. Seed color: Red	26. Seed shape: Elliptical
27. Cheeks: Rounded	28.Brush size (S,M, L) S
29. Avg 1,000 kernel wt (g): 31.36	30. Phenol reaction: Dark brown
31. Other:	

Physiological/Biochemical Traits:

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

Variants and Frequency: 1 in 1,000 tall, wanting to oblique shoulders, short to medium beak. White seed at a frequency of 0.8%.

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.

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Wheat

Everest
KS970093-8-9-#1 (Exp)
(Amended – Variant Description)

Variety Name Everest

Experimental Designation(s) (KS970093-8-9-#1)

Date SGVRB first recommended this variety 2009

Date(s) any previous amendments were recommended 2011

Date this amendment was submitted Jan 20, 2017

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.

Date this application was submitted: Jan 20, 2017 Date recommended by the VRB: Apr 03, 2017

Wheat

Hot Rod
KS061406-LN~37 (Exp)
(Amended – Variant Description)

Variety Name Hot Rod

Experimental Designation(s) KS061406-LN~37

Date SGVRB first recommended this variety 2014

Date(s) any previous amendments were recommended N/A

Date this amendment was submitted January 20, 2017

1. Hot Rod was tested under the experimental number KS061406-LN~37 and is a short-statured, early maturing hard red winter wheat.

2. Hot Rod was developed using a selected bulk approach where selection was applied for maturity (using early and late checks to identify plants within the acceptable window), height (semi-dwarf), straw strength, resistance to prevalent diseases (leaf rust, stripe rust, stem rust, soil borne mosaic, tan spot, septoria leaf blotch and powdery mildew) and other plant characteristics such as spike size and density and tillering capacity, yield and quality.

3. Hot Rod was extensively tested in central and western Kansas. Its best performance has been in south central Kansas. It is to be marketed as a component of varietal blends for central Kansas and is expected to improve yield performance.

4. Hot Rod is moderately resistant to the prevalent races of stripe rust and resistant to the prevalent races of leaf rust in the Great Plains. It is also resistant to soil-borne mosaic virus. KanMark is moderately resistant to powdery mildew and susceptible to Hessian fly and moderately susceptible to Fusarium head blight.

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
5. Leaf Color at Boot:	Green	19. Glume Length:	Medium
6. Flag Leaf at Boot:	Recurved, Wax Absent	20. Shoulder Shape:	Oblique to Wanting
7. Auricle Color:	White	21. Shoulder Width:	Narrow
8. Days to 50% Heading:	128	22. Beak Shape:	Acuminate
9. Anther Color:	Yellow	23. Beak Length (S.M.L.VL):	S
10. Stem Color:	No Anthocyanin	24. Glume Pubescence:	Glaborous
11. Plant Height (cm):	80	25. Seed Color	Red
12. Internodes:	Hollow	26. Seed Shape:	Oval
13. Spike Shape:	Oblong	27. Cheeks:	Rounded
14. Spike Density:	Mid-dense	28. Brush Size (S,M,L.):	M
15. Spike Curvature:	Nodding	29. Avg 1,000 Kernel Wt (g):	28

30. Physiological/Biochemical Traits: N/A

Variants and Frequency: Talls at a frequency of 1 in 1,000 and dark chaff at a frequency of 1 in 1,000. White seed at a frequency of 1.8%.

6. Recognized classes of Hot Rod are breeder, foundation, registered, and certified. Kansas State University will maintain the variety by the head-row purification method to produce breeder seed as needed and all foundation seed. Royalties or licensing agreements are anticipated to be collected through the Kansas Wheat Alliance.

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Wheat

Hot Rod
KS061406-LN~37 (Exp)
(Amended – Variant Description)

Variety Name Hot Rod

Experimental Designation(s) KS061406-LN~37

Date SGVRB first recommended this variety 2014

Date(s) any previous amendments were recommended N/A

Date this amendment was submitted January 20, 2017

7. Certified seed of Hot Rod will likely be available for planting in fall of 2015.

8. Application for PVP is anticipated with the option that Hot Rod can be sold by variety name only as a class of certified seed. Per licensing agreement, it will only be sold as a component of a varietal blend at a maximum of 50% of the blend with the other component(s) having good or better winterhardiness and quality.

9. Certified seed production acreage may be published by AOSCA and individual certifying agencies.

Date this application was submitted: Jan 20, 2017 Date recommended by the VRB: Apr 03, 2017

Wheat

KanMark
KS030887K-6 (Exp)
(Amended – Variant Description)

Variety Name KanMark

Experimental Designation(s) KS030887K-6

Date SGVRB first recommended this variety 2014

Date(s) any previous amendments were recommended N/A

Date this amendment was submitted January 20, 2017

1. KanMark is a hard red winter wheat developed by the Kansas Agricultural Experiment Station.

2. KanMark was selected for high yield, resistance to stripe rust and soil-borne mosaic by a selected bulk approach.

3. KanMark is well adapted across Kansas. It has good drought tolerance and has performed competitively against currently grown varieties in central and western Kansas and has excelled under irrigation.

4. KanMark is resistant to stem rust and soil-borne mosaic virus, moderately resistant to stripe rust but is moderately susceptible to 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:	Semi-erect	18. Glume Color:	White
5. Leaf Color at Boot:	Green	19. Glume Length:	Medium
6. Flag Leaf at Boot:	Erect	20. Shoulder Shape:	Square
7. Auricle Color:	White	21. Shoulder Width:	Medium
8. Days to 50% Heading:	128	22. Beak Shape:	Acuminate
9. Anther Color:	Yellow	23. Beak Length (S.M.L.VL):	M
10. Stem Color:	No anthocyanin	24. Glume Pubescence:	Glaborous
11. Plant Height (cm):	82,5	25. Seed Color	Red
12. Internodes:	Hollow	26. Seed Shape:	Ovate
13. Spike Shape:	Oblong	27. Cheeks:	Rounded
14. Spike Density:	Mid-dense	28. Brush Size (S,M,L.):	S
15. Spike Curvature:	Inclined	29. Avg 1,000 Kernel Wt (g):	27.5

30. Physiological/Biochemical Traits:

Variants and Frequency: Talls at a frequency of 1 in 1,000; dark chaff at a frequency of 1 in 1,000. White seed at a frequency of 0.8%.

6. Recognized classes of KanMark are breeder, foundation, registered, and certified. Kansas State University will maintain the variety by the head-row purification method to produce breeder seed as needed and all foundation seed. Royalties will be collected on KS030887K-6. No stewardship agreements will be needed.

7. Certified (Foundation) seed will likely be available for planting in the Fall of 2015.

8. Application for PVP is anticipated with the option that KanMark can be sold by variety name only as a class of certified seed.

9. Certified seed production acreage maybe be published by AOSCA and certifying agencies.

Date this application was submitted: Jan 20, 2017 Date recommended by the VRB: Apr 03, 2017

Wheat

Larry
KS060143K-2 (Exp)
(Amended – Variant Description)

Variety Name Larry

Experimental Designation(s) KS060143K-2

Date SGVRB first recommended this variety 2016

Date(s) any previous amendments were recommended N/A

Date this amendment was submitted January 20, 2017

1. Larry is a medium-tall statured semi-dwarf. hard red winter wheat developed by the Kansas Agricultural Experiment Station.

2. Larry was developed using a selected bulk approach where selection was applied for maturity (using early and late checks to identify plants within the acceptable window), height (semi-dwarf), straw strength, resistance to prevalent diseases (leaf rust, stripe rust, stem rust, soil borne mosaic, tan spot, septoria leaf blotch and powdery mildew) and other plant characteristics such as spike size and density and tillering capacity, yield and quality.

3. Larry was extensively tested in central and western Kansas. Larry is broadly adapted and should do well in dryland environments across the entire state but it's best area of adaptation is east of US Highway 283.

4. Larry is resistant to the prevalent races of stripe rust in the Great Plains and is also resistant to soil-borne mosaic virus. It has an intermediate reaction to KS060106M-11 is susceptible to leaf rust and Hessian fly.

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
5. Leaf Color at Boot:	Green	19. Glume Length:	Medium
6. Flag Leaf at Boot:	Erect, Twisted, Wax Absent	20. Shoulder Shape:	Elevated
7. Auricle Color:	White	21. Shoulder Width:	Medium
8. Day(s) to 50% Heading:	128	22. Beak Shape:	Acuminate
9. Anther Color:	Yellow	23. Beak Length (S.M.L.VL):	L
10. Anthoncyanin:	Absent	24. Glume Pubescence:	Absent
11. Plant Height (cm):	76	25. Seed Color	Red
12. Internodes:	Hollow	26. Seed Shape:	Elliptical
13. Spike Shape:	Oblong	27. Cheeks:	Angular
14. Spike Density:	Mid-dense	28. Brush Size (S,M,L.):	M
15. Spike Curvature:	Nodding	29. Avg 1,000 Kernel Wt (g):	31.4

30. Physiological/Biochemical Traits:

Variants and frequency: Talls at a frequency of 1 in 1,000 and dark chaff at a frequency of 1 in 1,000. White seed at a frequency of 0.8%.

6. Recognized classes of Larry are breeder, foundation, registered, and certified. Kansas State University will maintain the variety by the head-row purification method to produce breeder seed as needed and all foundation seed. Royalties or licensing agreements are anticipated to be collected through the Kansas Wheat Alliance.

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Wheat

Larry
KS060143K-2 (Exp)
(Amended – Variant Description)

Variety Name Larry

Experimental Designation(s) KS060143K-2

Date SGVRB first recommended this variety 2016

Date(s) any previous amendments were recommended N/A

Date this amendment was submitted January 20, 2017

7. Certified seed of Larry will likely be available for planting in fall of 2017.

8. Application for PVP is anticipated with the option that Larry can be sold by variety name only as a class of certified seed.

9. Certified seed production acreage may be published by AOSCA and individual certifying agencies.

Date this application was submitted: Jan 20, 2017 Date recommended by the VRB: Apr 03, 2017

Wheat

Zenda
KS060106M-11 (Exp)
(Amended – Variant Description)

Variety Name Zenda

Experimental Designation(s) KS060106M-11

Date SGVRB first recommended this variety 2016

Date(s) any previous amendments were recommended N/A

Date this amendment was submitted January 20, 2017

1. Zenda is a medium-tall statured semi-dwarf. hard red winter wheat developed by the Kansas Agricultural Experiment Station.

2. Zenda was developed using a selected bulk approach where selection was applied for maturity (using early and late checks to identify plants within the acceptable window), height (semi-dwarf), straw strength, resistance to prevalent diseases (leaf rust, stripe rust, stem rust, soil borne mosaic, tan spot, septoria leaf blotch and powdery mildew) and other plant characteristics such as spike size and density and tillering capacity, yield and quality.

3. Zenda was extensively tested in central and western Kansas. It is best adapted to central and eastern Kansas (areas to the east of US Highway 281).

4. Zenda is resistant to the prevalent races of stripe rust in the Great Plains and is also resistant to soil-borne mosaic virus. It has a reaction to FHB that is similar to 'Everest' for FHB severity and Fusarium damaged kernels. KS060106M-11 is moderately susceptible to leaf rust and susceptible to Hessian fly.

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
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. Day(s) to 50% Heading:	128	22. Beak Shape:	Acuminate
9. Anther Color:	Yellow	23. Beak Length (S.M.L.VL):	M
10. Anthoncyanin:	Absent	24. Glume Pubescence:	Absent
11. Plant Height (cm):	78	25. Seed Color	Red
12. Internodes:	Hollow	26. Seed Shape:	Elliptical
13. Spike Shape:	Oblong	27. Cheeks:	Rounded
14. Spike Density:	Mid-dense	28. Brush Size (S,M,L.):	S
15. Spike Curvature:	Inclined	29. Avg 1,000 Kernel Wt (g):	31.2

30. Physiological/Biochemical Traits:

Variants and Frequency: Talls at a frequency of 1 in 1,000 and dark chaff at a frequency of 1 in 1,000. White seed at a frequency of 0.8%.

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Wheat

Zenda
KS060106M-11 (Exp)
(Amended – Variant Description)

Variety Name Zenda

Experimental Designation(s) KS060106M-11

Date SGVRB first recommended this variety 2016

Date(s) any previous amendments were recommended N/A

Date this amendment was submitted January 20, 2017

6. Recognized classes of Zenda are breeder, foundation, registered, and certified. Kansas State University will maintain the variety by the head-row purification method to produce breeder seed as needed and all foundation seed. Royalties or licensing agreements are anticipated to be collected through the Kansas Wheat Alliance.

7. Certified seed of Zenda will likely be available for planting in fall of 2017.

8. Application for PVP is anticipated with the option that Zenda can be sold by variety name only as a class of certified seed.

9. Certified seed production acreage may be published by AOSCA and individual certifying agencies.

Date this application was submitted: Jan 20, 2017 Date recommended by the VRB: Apr 03, 2017

Wheat

KS061193K-2 (Exp)

1. KS061193K-2 is a tall statured, strong strawed hard red winter wheat developed by the Kansas Agricultural Experiment Station.

2. KS061193K-2 was developed through conventional breeding using a selected bulk approach. Individuals within populations were selected based on maturity (using early and late checks to identify plants within the acceptable window), height (semi-dwarf), straw strength, resistance to prevalent diseases (leaf rust, stripe rust, stem rust, soil borne mosaic, tan spot, septoria leaf blotch and powdery mildew) and other plant characteristics such as spike size and density, tillering capacity, yield and quality.

3. KS061193K-2 was tested extensively in central and western Kansas. KS061193K-2 has performed best in south central Kansas but has also performed well in western parts of the state.

4. KS061193K-2 is resistant to the prevalent races of stripe rust and leaf rust in the Great Plains and is also moderately resistant to soil-borne mosaic virus but susceptible to Hessian fly. It is intermediate in its response to Fusarium head blight.

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
5. Leaf Color at Boot:	Green	19. Glume Length:	Medium
6. Flag Leaf at Boot:	Erect, Twisted	20. Shoulder Shape:	Wanting
7. Auricle Color:	White	21. Shoulder Width:	Narrow
8. Day(s) to 50% Heading:	127	22. Beak Shape:	Acuminate
9. Anther Color:	Yellow	23. Beak Length (S.M.L.VL):	L
10. Anthoncyanin:	Absent	24. Glume Pubescence:	Absent
11. Plant Height (cm):	100	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):	31

30. Physiological/Biochemical Traits:

Variants and frequency: Talls at a frequency of 1 in 1,000; dark chaff at a frequency of 1 in 1,000; white seed at a frequency up to 0.8%

6. Recognized classes of KS061193K-2 are breeder, foundation, registered, and certified. Kansas State University will maintain the variety by the head-row purification method to produce breeder seed as needed and all foundation seed. Royalties or licensing agreements are anticipated to be collected through the Kansas Wheat Alliance.

7. Certified seed of KS061193K-2 will likely be available for planting in Fall of 2018.

8. Application for PVP is anticipated with the option that KS061193K-2 can be sold by variety name only as a class of certified seed.

9. Certified seed production acreage may be published by AOSCA and individual certifying agencies.

Date this application was submitted: Jan 11, 2017 Date recommended by the VRB: Apr 26, 2017

Wheat

KS080448C*-102 (Exp)

1. KS080448C*-102 is a medium statured semi-dwarf. hard red winter wheat developed by the Kansas Agricultural Experiment Station.

2. KS080448C*-102 was developed using doubled haploid technology. DH progeny were selected based on maturity (using early and late checks to identify plants within the acceptable window), height (semi-dwarf), straw strength, resistance to prevalent diseases (leaf rust, stripe rust, stem rust, soil borne mosaic, tan spot, septoria leaf blotch and powdery mildew) and other plant characteristics such as spike size and density, tillering capacity, yield and quality.

3. KS080448C*-102 was extensively tested in central and western Kansas. KS080448C*-102 has performed best in central Kansas and, based on SRPN data, is expected to do well in central Oklahoma and the Rolling Plains of Texas.

4. KS080448C*-102 is moderately resistant to the prevalent races of stripe rust and leaf rust in the Great Plains and is also resistant to soil-borne mosaic virus.

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
5. Leaf Color at Boot:	Green	19. Glume Length:	Medium
6. Flag Leaf at Boot:	Erect, Twisted	20. Shoulder Shape:	Square
7. Auricle Color:	White	21. Shoulder Width:	Medium
8. Day(s) to 50% Heading:	127	22. Beak Shape:	Acuminate
9. Anther Color:	Yellow	23. Beak Length (S.M.L.VL):	M
10. Anthoncyanin:	Absent	24. Glume Pubescence:	Absent
11. Plant Height (cm):	89	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.):	S
15. Spike Curvature:	Nodding	29. Avg 1,000 Kernel Wt (g):	27

30. Physiological/Biochemical Traits:

Variants and Frequency: Talls at a frequency of 1 in 1,000; dark chaff at a frequency of 1 in 1,000; white seed at a frequency up to 0.8%.

6. Recognized classes of KS080448C*-102 are breeder, foundation, registered, and certified. Kansas State University will maintain the variety by the head-row purification method to produce breeder seed as needed and all foundation seed. Royalties or licensing agreements are anticipated to be collected through the Kansas Wheat Alliance.

7. Certified seed of KS080448C*-102 will likely be available for planting in Fall of 2018.

8. Application for PVP is anticipated with the option that KS080448C*-102 can be sold by variety name only as a class of certified seed.

9. Certified seed production acreage may to be published by AOSCA and individual certifying agencies.

Date this application was submitted: Jan 11, 2017 Date recommended by the VRB: Apr 26, 2017

Wheat

LCS Link
LCH13-1471 (Exp)

1. LCS Link is a hard red winter wheat developed by Limagrain Cereal Seeds.

2. LCS Link was developed using double haploid breeding methodology: selection criteria included yield potential and winterhardiness.

3. LCS Link was tested in Kansas, Eastern Colorado, South-Western Nebraska, North-Central Oklahoma and Northern Texas. The area of probable adaptation is Northwestern Kansas and Southwestern Nebraska. The primary purpose of the variety will be for milling and baking of breads using processed and whole wheat flour.

4. No claims are made in this application relative to 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
5. Leaf Color at Boot:	Green	19. Glume Length:	Medium
6. Flag Leaf at Boot:	Erect, Twisted, Waxy	20. Shoulder Shape:	Wanting
7. Auricle Color:	White	21. Shoulder Width:	Narrow
8. Day(s) to 50% Heading:	140	22. Beak Shape:	Acuminate
9. Anther Color:	Yellow	23. Beak Length (S.M.L.VL):	Medium
10. Anthoncyanin:	Present	24. Glume Pubescence:	Absent
11. Plant Height (cm):	72.1	25. Seed Color	Red
12. Internodes:	Hollow	26. Seed Shape:	Ovate
13. Spike Shape:	Oblong	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):	37

30. Physiological/Biochemical Traits: none

Variants and Frequency: LCS Link may contain up to 2 per 1000 taller plants, up to 3 spike lengths above main canopy, up to 1 per 1000 red- or brown-glumed plants with oblique to square glumes, and up to 1 per 1000 awnless plants; seed may contain up to 3% white grain.

6. Recognized seed classes will be Breeder, Foundation, Registered, and Certified. Registered and Certified seed may be produced and sold only through a license agreement with Limagrain Cereal Seeds. LCS will maintain Breeder and Foundation seed by rogueing and removal of off-types in bulk seedings and headrowing if necessary.

7. Foundation seed will be available for planting in Fall 2017.

8. Plant Variety Protection will be applied for 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 04, 2017 Date recommended by the VRB: Apr 20, 2017

Wheat

LCS Rebel
LNR13-0594 (Exp)

1. LCS Rebel is a Hard Red Spring wheat developed by Limagrain Cereal Seeds.

2. LCS Rebel was bred using a modified bulk breeding procedure selecting for grain yield, grain protein, reaction to Fusarium head blight, foliar disease reaction, and end-use milling and baking characteristics.

3. LCS Rebel was tested in North Dakota, Minnesota, South Dakota, Montana and western Canada. The area of probable adaptation for LCS Rebel is North Dakota and Northwestern Minnesota. The primary purpose of the variety will be for milling and baking of breads using processed and whole wheat flour.

4. No claims are made in this application for disease resistance or insect reactions in terms of varietal attributes.

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:	Semi-erect	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:	Elevated
7. Auricle Color:	White	21. Shoulder Width:	Medium
8. Day(s) to 50% Heading:	196	22. Beak Shape:	Acuminate
9. Anther Color:	Yellow	23. Beak Length (S.M.L.VL):	Medium
10. Anthoncyanin:	Absent	24. Glume Pubescence:	Absent
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.):	Short
15. Spike Curvature:	Inclined	29. Avg 1,000 Kernel Wt (g):	43

30. Physiological/Biochemical Traits: none

Variants and Frequency: LCS Rebel may contain up to to 5 per 1000 taller plants up to 8" above canopy height and up to 1 per 1000 awnless plants.

6. Recognized seed classes will be Breeder, Foundation, Registered, and Certified. Registered and Certified seed may be produced and sold only through a license agreement with LCS. LCS will maintain Breeder and Foundation seed by rogueing and removal of off-types in bulk seedings and headrowing as necessary.

7. Breeder seed has been produced and will be sold in Spring 2017; Foundation seed will be available in Spring 2018.

8. PVP will be applied for without the Title V option in Spring 2018.

9. Certified seed production and acreages may be published by AOSCA and official state seed certifying agencies.

Date this application was submitted: Jan 11, 2017 Date recommended by the VRB: Apr 20, 2017

Wheat

6452018
HV9W10-0887 (Exp)

1. 6452018 is a Hard Red Winter wheat developed by the Monsanto LLC.

2. In early generations of 6452018, single spikes were selected based on agronomics and disease resistance. Later generations were selected based on yield, quality, and disease resistance.

3. 6452018 is adapted to the Hard Red Winter wheat growing regions of the Central Plains.

4. No claims about disease resistance are made at this time.

5. Identifying characteristics –

1. Kind:	Common, Hard Red Winter Wheat		
2. Seasonal Growth Habit:	Winter	16. Awn Type:	Awned
3. Coleoptile Color:	Red	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:	Long
6. Flag Leaf at Boot:	Erect, Twisted, Wax	20. Shoulder Shape:	Square
7. Auricle Color:	Purple	21. Shoulder Width:	Narrow
8. Day(s) to 50% Heading:	133	22. Beak Shape:	Acuminate
9. Anther Color:	Yellow	23. Beak Length (S.M.L.VL):	L
10. Anthoncyanin:	Absent	24. Glume Pubescence:	Absent (Glabrous)
11. Plant Height (cm):	86.4	25. Seed Color	Red
12. Internodes:	Hollow	26. Seed Shape:	Oval
13. Spike Shape:	Tapering	27. Cheeks:	Rounded
14. Spike Density:	Lax	28. Brush Size (S,M,L.):	Short
15. Spike Curvature:	Nodding	29. Avg 1,000 Kernel Wt (g):	48

30. Physiological/Biochemical Traits:

Variants and Frequency: A variant that is similar to 6452018 but has white seed occurs at a frequency of up to 0.50% (50 out 10,000 seeds). A variant that is similar to 6452018 but is 15cm to 20cm taller occurs at a frequency of up to 0.2% (20/10,000). A bronze head variant may occur at a frequency of 0.1% (10/10,000). An awnless variant may occur at a frequency of 0.1% (10/10,000).

6. Recognized classes of 6452018 are breeder, foundation, registered, and certified. Monsanto Company will maintain the variety by the head-row purification method to produce breeder seed as needed and all foundation seed. Royalty fees and/ or licensing agreements are anticipated.

7. Commercial seed of 6452018 will likely be ready for commercial sale by the fall of 2018.

8. Application for a Utility Patent and PVP is anticipated for 6452018 and the option for Title V will not be taken.

9. Certified seed production acreage is not to be published by AOSCA and individual certifying agencies.

Date this application was submitted: Jan 20, 2017 Date recommended by the VRB: May 04, 2017

Wheat

6471972
H4N12-0061 (Exp)

1. 6471972 is a Hard Red Winter wheat developed by the Monsanto LLC.

2. In early generations of 6471972, single spikes were selected based on agronomics and disease resistance. Later generations were selected based on yield, quality, and disease resistance.

3. 6471972 is adapted to the Hard Red Winter wheat growing regions of the Central Plains.

4. No claims about disease resistance are made at this time.

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
5. Leaf Color at Boot:	Green	19. Glume Length:	Long
6. Flag Leaf at Boot:	Erect, Twisted, Wax	20. Shoulder Shape:	Elevated
7. Auricle Color:	White	21. Shoulder Width:	Narrow
8. Day(s) to 50% Heading:	147	22. Beak Shape:	Acuminate
9. Anther Color:	Yellow	23. Beak Length (S.M.L.VL):	L
10. Anthoncyanin:	Absent	24. Glume Pubescence:	Absent (Glabrous)
11. Plant Height (cm):	81.3	25. Seed Color	Red
12. Internodes:	Hollow	26. Seed Shape:	Ovate
13. Spike Shape:	Tapering	27. Cheeks:	Angular
14. Spike Density:	Lax	28. Brush Size (S,M,L.):	Long
15. Spike Curvature:	Nodding	29. Avg 1,000 Kernel Wt (g):	48

30. Physiological/Biochemical Traits:

Variants and Frequency: A variant that is similar to 6471972 but has white seed occurs at a frequency of up to 0.25% (25 out 10,000 seeds). A variant that is similar to 6471972 but is 15cm to 20cm taller occurs at a frequency of up to 0.2% (20/10,000). A bronze head variant may occur at a frequency of 0.1% (10/10,000). An awnless variant may occur at a frequency of 0.1% (10/10,000).

6. Recognized classes of 6471972 are breeder, foundation, registered, and certified. Monsanto Company will maintain the variety by the head-row purification method to produce breeder seed as needed and all foundation seed. Royalty fees and/ or licensing agreements are anticipated.

7. Commercial seed of 6471972 will likely be ready for commercial sale by the fall of 2018.

8. Application for a Utility Patent and PVP is anticipated for 6471972 and the option for Title V will not be taken.

9. Certified seed production acreage is not to be published by AOSCA and individual certifying agencies.

Date this application was submitted: Jan 20, 2017 Date recommended by the VRB: May 04, 2017

Wheat

6763710
FA9S10-5037W (Exp)

1. 6763710 is a Hard White Spring wheat developed by the Monsanto LLC.

2. In early generations of 6763710, single spikes were selected based on agronomics and disease resistance. Later generations were selected based on yield, quality, and disease resistance.

3. 6763710 is adapted to the Hard White Spring wheat growing regions of the Northern Plains.

4. No claims about disease resistance are made at this time.

5. Identifying characteristics –

1. Kind:	Common, Hard White Spring Wheat		
2. Seasonal Growth Habit:	Spring	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:	No data
6. Flag Leaf at Boot:	Erect, Twisted, No Wax	20. Shoulder Shape:	Apiculate
7. Auricle Color:	Purple	21. Shoulder Width:	Narrow
8. Day(s) to 50% Heading:	169	22. Beak Shape:	Acuminate
9. Anther Color:	Yellow	23. Beak Length (S.M.L.VL):	L
10. Anthoncyanin:	Absent	24. Glume Pubescence:	Absent (Glabrous)
11. Plant Height (cm):	81.3	25. Seed Color	White
12. Internodes:	Hollow	26. Seed Shape:	Ovate
13. Spike Shape:	Tapering	27. Cheeks:	Rounded
14. Spike Density:	Lax	28. Brush Size (S,M,L.):	S
15. Spike Curvature:	Nodding	29. Avg 1,000 Kernel Wt (g):	32

30. Physiological/Biochemical Traits:

Variants and Frequency: A variant that is similar to 6763710 but has white seed occurs at a frequency of up to .25% (25 out 10,000 seeds). A variant that is similar to 6763710 but is 15cm to 20cm taller occurs at a frequency of up to .2% (20/10,000). A bronze head variant may occur at a frequency of .1% (10/10,000). An awnless variant may occur at a frequency of .1% (10/10,000).

6. Recognized classes of 6763710 are breeder, foundation, registered, and certified. Monsanto Company will maintain the variety by the head-row purification method to produce breeder seed as needed and all foundation seed. Royalty fees and/ or licensing agreements are anticipated.

7. Commercial seed of 6763710 will likely be ready for commercial sale by the spring of 2018.

8. Application for a Utility Patent and PVP is anticipated for 6763710 and the option for Title V will not be taken.

9. Certified seed production acreage is not to be published by AOSCA and individual certifying agencies.

Date this application was submitted: Jan 20, 2017 Date recommended by the VRB: Apr 25, 2017

Wheat

6964910
FA9S10-0049R (Exp)

1. 6964910 is a hard red wheat developed by the Monsanto LLC.

2. In early generations of 6964910, single spikes were selected based on agronomics and disease resistance. Later generations were selected based on yield, quality, and disease resistance.

3. 6964910 is adapted to the Hard Spring wheat growing regions of Northern Plains.

4. No claims about disease resistance are made at this time.

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:	Semi-erect	18. Glume Color:	White/Amber
5. Leaf Color at Boot:	Green	19. Glume Length:	No data
6. Flag Leaf at Boot:	Recurved, Twisted, No Wax	20. Shoulder Shape:	Elevated
7. Auricle Color:	White	21. Shoulder Width:	Narrow
8. Day(s) to 50% Heading:	183	22. Beak Shape:	Acuminate
9. Anther Color:	Yellow	23. Beak Length (S.M.L.VL):	L
10. Anthoncyanin:	Absent	24. Glume Pubescence:	Absent (Glabrous)
11. Plant Height (cm):	76.2	25. Seed Color	Red
12. Internodes:	Hollow	26. Seed Shape:	Oval
13. Spike Shape:	Tapering	27. Cheeks:	Rounded
14. Spike Density:	Lax	28. Brush Size (S,M,L.):	Short
15. Spike Curvature:	Inclined	29. Avg 1,000 Kernel Wt (g):	48.5

30. Physiological/Biochemical Traits:

Variants and Frequency: A variant that is similar to 6964910 but has white seed occurs at a frequency of up to .25% (25 out 10,000 seeds). A variant that is similar to 6964910 but is 15cm to 20cm taller occurs at a frequency of up to .2% (20/10,000). A bronze head variant may occur at a frequency of .1% (10/10,000). An awnless variant may occur at a frequency of .1% (10/10,000).

6. Recognized classes of 6964910 are breeder, foundation, registered, and certified. Monsanto Company will maintain the variety by the head-row purification method to produce breeder seed as needed and all foundation seed. Royalty fees and/ or licensing agreements are anticipated.

7. Commercial seed of 6964910 will likely be ready for commercial sale by the spring of 2018.

8. Application for a Utility Patent and PVP is anticipated for 6964910 and the option for Title V will not be taken.

9. Certified seed production acreage is not to be published by AOSCA and individual certifying agencies.

Date this application was submitted: Jan 20, 2017 Date recommended by the VRB: Apr 25, 2017

Wheat

6971688CLP
BZ9S09-0309RM (Exp)

1. 6971688CLP is a Hard Red Spring wheat developed by the Monsanto LLC.

2. In early generations of 6971688CLP, single spikes were selected based on agronomics and disease resistance. Later generations were selected based on yield, quality, and disease resistance.

3. 6971688CLP is adapted to the Hard Red Spring wheat growing regions of the Northern Plains. Genotyping and testing data indicate that 6971688CLP contains two genes for imazamox resistance.

4. No claims about disease resistance are made at this time.

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:	Semi-erect	18. Glume Color:	White/Amber
5. Leaf Color at Boot:	Green	19. Glume Length:	Long
6. Flag Leaf at Boot:	Recurved, Twisted, Wax	20. Shoulder Shape:	Apiculate
7. Auricle Color:	White	21. Shoulder Width:	Narrow
8. Day(s) to 50% Heading:	152	22. Beak Shape:	Acuminate
9. Anther Color:	Yellow	23. Beak Length (S.M.L.VL):	L
10. Anthoncyanin:	Absent	24. Glume Pubescence:	Absent (Glabrous)
11. Plant Height (cm):	73.7	25. Seed Color	Red
12. Internodes:	Semi-solid	26. Seed Shape:	Oval
13. Spike Shape:	Tapering	27. Cheeks:	Rounded
14. Spike Density:	Lax	28. Brush Size (S,M,L.):	M
15. Spike Curvature:	Erect	29. Avg 1,000 Kernel Wt (g):	25

30. Physiological/Biochemical Traits:

Variants and Frequency: A variant that is similar to 6971688CLP but has white seed occurs at a frequency of up to .25% (25 out 10,000 seeds). A variant that is similar to 6971688CLP but is 15cm to 20cm taller occurs at a frequency of up to .2% (20/10,000). A bronze head variant may occur at a frequency of .1% (10/10,000). An awnless variant may occur at a frequency of .1% (10/10,000).

6. Recognized classes of 6971688CLP are breeder, foundation, registered, and certified. Monsanto Company will maintain the variety by the head-row purification method to produce breeder seed as needed and all foundation seed. Royalty fees and/ or licensing agreements are anticipated.

7. Commercial seed of 6971688CLP will likely be ready for commercial sale by the spring of 2018.

8. Application for a Utility Patent and PVP is anticipated for 6971688CLP and the option for Title V will be taken.

9. Certified seed production acreage is not to be published by AOSCA and individual certifying agencies.

Date this application was submitted: Jan 20, 2017 Date recommended by the VRB: Apr 25, 2017

Wheat

6977824
F9N12-0152 (Exp)

1. 6977824 is a Hard Red Spring wheat developed by the Monsanto LLC.

2. In early generations of 6977824, single spikes were selected based on agronomics and disease resistance. Later generations were selected based on yield, quality, and disease resistance.

3. 6977824 is adapted to the Hard Red Spring wheat growing regions of Northern Plains.

4. No claims about disease resistance are made at this time.

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:	Semi-erect	18. Glume Color:	White/Amber
5. Leaf Color at Boot:	Yellow-Green	19. Glume Length:	No data
6. Flag Leaf at Boot:	Recurved, Twisted, No Wax	20. Shoulder Shape:	Elevated
7. Auricle Color:	Purple	21. Shoulder Width:	Medium
8. Day(s) to 50% Heading:	167	22. Beak Shape:	Acuminate
9. Anther Color:	Yellow	23. Beak Length (S.M.L.VL):	L
10. Anthoncyanin:	Absent	24. Glume Pubescence:	Absent (Glabrous)
11. Plant Height (cm):	73.7	25. Seed Color	Red
12. Internodes:	Hollow	26. Seed Shape:	Oval
13. Spike Shape:	Tapering	27. Cheeks:	Angular
14. Spike Density:	Lax	28. Brush Size (S,M,L.):	Short
15. Spike Curvature:	Inclined	29. Avg 1,000 Kernel Wt (g):	33

30. Physiological/Biochemical Traits:

Variants and Frequency: A variant that is similar to 6977824 but has white seed occurs at a frequency of up to .25% (25 out 10,000 seeds). A variant that is similar to 6977824 but is 15cm to 20cm taller occurs at a frequency of up to .2% (20/10,000). A bronze head variant may occur at a frequency of .1% (10/10,000). An awnless variant may occur at a frequency of .1% (10/10,000).

6. Recognized classes of 6977824 are breeder, foundation, registered, and certified. Monsanto Company will maintain the variety by the head-row purification method to produce breeder seed as needed and all foundation seed. Royalty fees and/ or licensing agreements are anticipated.

7. Commercial seed of 6977824 will likely be ready for commercial sale by the spring of 2018.

8. Application for a Utility Patent and PVP is anticipated for 6977824 and the option for Title V will not be taken.

9. Certified seed production acreage is not to be published by AOSCA and individual certifying agencies.

Date this application was submitted: Jan 20, 2017 Date recommended by the VRB: Apr 25, 2017

Wheat

WB1783
BZ6W09-471 (Exp)

1. WB1783 is a Soft White Winter wheat developed by the Monsanto LLC.

2. In early generations of WB1783, single spikes were selected based on agronomics and disease resistance. Later generations were selected based on yield, quality, and disease resistance.

3. WB1783 is adapted to the Soft White Winter wheat growing regions of the Pacific Northwest.

4. No claims about disease resistance are made at this time.

5. Identifying characteristics –

1. Kind:	Common, Soft 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:	Long
6. Flag Leaf at Boot:	Erect, Twisted, Wax	20. Shoulder Shape:	Oblique
7. Auricle Color:	Purple	21. Shoulder Width:	Narrow
8. Day(s) to 50% Heading:	184	22. Beak Shape:	Acuminate
9. Anther Color:	Yellow	23. Beak Length (S.M.L.VL):	L
10. Anthoncyanin:	Absent	24. Glume Pubescence:	Absent (Glabrous)
11. Plant Height (cm):	91.44	25. Seed Color	White
12. Internodes:	Semi-solid	26. Seed Shape:	Oval
13. Spike Shape:	Tapering	27. Cheeks:	Rounded
14. Spike Density:	Lax	28. Brush Size (S,M,L.):	L
15. Spike Curvature:	Nodding	29. Avg 1,000 Kernel Wt (g):	38

30. Physiological/Biochemical Traits:

Variants and Frequency: A variant that is similar to WB1783 but has red seed occurs at a frequency of up to .25% (25 out 10,000 seeds). A variant that is similar to WB1783 but is 15cm to 20cm taller occurs at a frequency of up to .2% (20/10,000). A bronze head variant may occur at a frequency of .1% (10/10,000). An awnless variant may occur at a frequency of .1% (10/10,000).

6. Recognized classes of WB1783 are breeder, foundation, registered, and certified. Monsanto Company will maintain the variety by the head-row purification method to produce breeder seed as needed and all foundation seed. Royalty fees and/ or licensing agreements are anticipated.

7. Commercial seed of WB1783 will likely be ready for commercial sale by the fall of 2018.

8. Application for a Utility Patent and PVP is anticipated for WB1783 and the option for Title V will not be taken.

9. Certified seed production acreage is not to be published by AOSCA and individual certifying agencies.

Date this application was submitted: Jan 20, 2017 Date recommended by the VRB: Apr 25, 2017

Wheat

WB4269
H4N12-0038 (Exp)

1. WB4269 is a Hard Red Winter wheat developed by the Monsanto LLC.

2. In early generations of WB4269, single spikes were selected based on agronomics and disease resistance. Later generations were selected based on yield, quality, and disease resistance.

3. WB4269 is adapted to the Hard Red Winter wheat growing regions of the Central Plains.

4. No claims about disease resistance are made at this time.

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:	Green	19. Glume Length:	Long
6. Flag Leaf at Boot:	Erect, Twisted, Wax	20. Shoulder Shape:	Square
7. Auricle Color:	Purple	21. Shoulder Width:	Narrow
8. Day(s) to 50% Heading:	146	22. Beak Shape:	Acuminate
9. Anther Color:	Yellow	23. Beak Length (S.M.L.VL):	L
10. Anthoncyanin:	Absent	24. Glume Pubescence:	Absent (Glabrous)
11. Plant Height (cm):	73.7	25. Seed Color	Red
12. Internodes:	Hollow	26. Seed Shape:	Ovate
13. Spike Shape:	Tapering	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):	36.4

30. Physiological/Biochemical Traits:

Variants and Frequency: A variant that is similar to WB4269 but has white seed occurs at a frequency of up to .25% (25 out 10,000 seeds). A variant that is similar to WB4269 but is 15cm to 20cm taller occurs at a frequency of up to .2% (20/10,000). A bronze head variant may occur at a frequency of .1% (10/10,000). An awnless variant may occur at a frequency of .1% (10/10,000).

6. Recognized classes of WB4269 are breeder, foundation, registered, and certified. Monsanto Company will maintain the variety by the head-row purification method to produce breeder seed as needed and all foundation seed. Royalty fees and/ or licensing agreements are anticipated.

7. Commercial seed of WB4269 will likely be ready for commercial sale by the fall of 2018.

8. Application for a Utility Patent and PVP is anticipated WB4269 and the option for Title V will not be taken.

9. Certified seed production acreage is not to be published by AOSCA and individual certifying agencies.

Date this application was submitted: Jan 20, 2017 Date recommended by the VRB: Apr 25, 2017

Wheat

WB4575
BZ9W09-2075 (Exp)

1. WB4575 is a Hard Red Winter wheat developed by the Monsanto LLC.

2. In early generations of WB4575, single spikes were selected based on agronomics and disease resistance. Later generations were selected based on yield, quality, and disease resistance.

3. WB4575 is adapted to the Hard Red Winter wheat growing regions of Montana.

4. No claims about disease resistance are made at this time.

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
5. Leaf Color at Boot:	Blue-Green	19. Glume Length:	Long
6. Flag Leaf at Boot:	Recurved, Twisted, Wax	20. Shoulder Shape:	Elevated
7. Auricle Color:	Purple	21. Shoulder Width:	Narrow
8. Day(s) to 50% Heading:	163	22. Beak Shape:	Acuminate
9. Anther Color:	Yellow	23. Beak Length (S.M.L.VL):	M
10. Anthoncyanin:	Absent	24. Glume Pubescence:	Absent (Glabrous)
11. Plant Height (cm):	78	25. Seed Color	Red
12. Internodes:	Hollow	26. Seed Shape:	Oval
13. Spike Shape:	Tapering	27. Cheeks:	Angular
14. Spike Density:	Lax	28. Brush Size (S,M,L.):	Short
15. Spike Curvature:	Nodding	29. Avg 1,000 Kernel Wt (g):	38

30. Physiological/Biochemical Traits:

Variants and Frequency: A variant that is similar to WB4575 but has white seed occurs at a frequency of up to .25% (25 out 10,000 seeds). A variant that is similar to WB4575 but is 15cm to 20cm taller occurs at a frequency of up to .2% (20/10,000). A bronze head variant may occur at a frequency of .1% (10/10,000). An awnless variant may occur at a frequency of .1% (10/10,000).

6. Recognized classes of WB4575 are breeder, foundation, registered, and certified. Monsanto Company will maintain the variety by the head-row purification method to produce breeder seed as needed and all foundation seed. Royalty fees and/ or licensing agreements are anticipated.

7. Commercial seed of WB4575 will likely be ready for commercial sale by the fall of 2018.

8. Application for a Utility Patent and PVP is anticipated for WB4575 and the option for Title V will not be taken.

9. Certified seed production acreage is not to be published by AOSCA and individual certifying agencies.

Date this application was submitted: Jan 20, 2017 Date recommended by the VRB: Apr 25, 2017

Wheat

WB9350
Y9A13-006 (Exp)

1. WB9350 is a Hard Red Spring wheat developed by the Monsanto LLC.

2. In early generations of WB9350, single spikes were selected based on agronomics and disease resistance. Later generations were selected based on yield, quality, and disease resistance.

3. WB9350 is adapted to the Hard Red Spring wheat growing regions of California and the Pacific Northwest.

4. No claims about disease resistance are made at this time.

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:	Semi-erect	18. Glume Color:	White/Amber
5. Leaf Color at Boot:	Green	19. Glume Length:	Medium
6. Flag Leaf at Boot:	Erect, Twisted, Wax	20. Shoulder Shape:	Elevated
7. Auricle Color:	White	21. Shoulder Width:	Narrow
8. Day(s) to 50% Heading:	82	22. Beak Shape:	Acuminate
9. Anther Color:	Yellow	23. Beak Length (S.M.L.VL):	L
10. Anthoncyanin:	Absent	24. Glume Pubescence:	Absent (Glabrous)
11. Plant Height (cm):	76	25. Seed Color	Red
12. Internodes:	Hollow	26. Seed Shape:	Oval
13. Spike Shape:	Tapering	27. Cheeks:	Angular
14. Spike Density:	Lax	28. Brush Size (S,M,L.):	S
15. Spike Curvature:	Nodding	29. Avg 1,000 Kernel Wt (g):	48.5

30. Physiological/Biochemical Traits:

Variants and Frequency: A variant that is similar to WB9350 but has white seed occurs at a frequency of up to .25% (25 out 10,000 seeds). A variant that is similar to WB9350 but is 15cm to 20cm taller occurs at a frequency of up to .2% (20/10,000). A bronze head variant may occur at a frequency of .1% (10/10,000). An awnless variant may occur at a frequency of .1% (10/10,000).

6. Recognized classes of WB9350 are breeder, foundation, registered, and certified. Monsanto Company will maintain the variety by the head-row purification method to produce breeder seed as needed and all foundation seed. Royalty fees and/ or licensing agreements are anticipated.

7. Commercial seed of WB9350 will likely be ready for commercial sale by the spring of 2018.

8. Application for a Utility Patent and PVP is anticipated for WB9350 and the option for Title V will not be taken.

9. Certified seed production acreage is not to be published by AOSCA and individual certifying agencies.

Date this application was submitted: Jan 20, 2017 Date recommended by the VRB: Apr 25, 2017

Wheat

WB9479
FA9S10-0038R (Exp)

1. WB9479 is a Hard Red Spring wheat developed by the Monsanto LLC.

2. In early generations of WB9479, single spikes were selected based on agronomics and disease resistance. Later generations were selected based on yield, quality, and disease resistance.

3. WB9479 is adapted to the Hard Red Spring wheat growing regions of Northern Plains.

4. No claims about disease resistance are made at this time.

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:	Semi-erect	18. Glume Color:	White/Amber
5. Leaf Color at Boot:	Green	19. Glume Length:	No data
6. Flag Leaf at Boot:	Erect, Twisted, No Wax	20. Shoulder Shape:	Elevated
7. Auricle Color:	White	21. Shoulder Width:	Narrow
8. Day(s) to 50% Heading:	181	22. Beak Shape:	Acuminate
9. Anther Color:	Yellow	23. Beak Length (S.M.L.VL):	L
10. Anthoncyanin:	Absent	24. Glume Pubescence:	Absent (Glabrous)
11. Plant Height (cm):	71.12	25. Seed Color	Red
12. Internodes:	Hollow	26. Seed Shape:	Oval
13. Spike Shape:	Tapering	27. Cheeks:	Angular
14. Spike Density:	Lax	28. Brush Size (S,M,L.):	S
15. Spike Curvature:	Erect	29. Avg 1,000 Kernel Wt (g):	31

30. Physiological/Biochemical Traits:

Variants and Frequency: A variant that is similar to WB9479 but has white seed occurs at a frequency of up to .25% (25 out 10,000 seeds). A variant that is similar to WB9479 but is 15cm to 20cm taller occurs at a frequency of up to .2% (20/10,000). A bronze head variant may occur at a frequency of .1% (10/10,000). An awnless variant may occur at a frequency of .1% (10/10,000).

6. Recognized classes of WB9479 are breeder, foundation, registered, and certified. Monsanto Company will maintain the variety by the head-row purification method to produce breeder seed as needed and all foundation seed. Royalty fees and/ or licensing agreements are anticipated.

7. Commercial seed of WB9479 will likely be ready for commercial sale by the spring of 2018.

8. Application for a Utility Patent and PVP is anticipated for WB9479 and the option for Title V will not be taken.

9. Certified seed production acreage is not to be published by AOSCA and individual certifying agencies.

Date this application was submitted: Jan 20, 2017 Date recommended by the VRB: Apr 25, 2017

Wheat

WB9578
Y9A12-0004 (Exp)

1. WB9578 is a Hard Red Spring wheat developed by the Monsanto LLC.

2. In early generations of WB9578, single spikes were selected based on agronomics and disease resistance. Later generations were selected based on yield, quality, and disease resistance.

3. WB9578 is adapted to the Hard Red Spring wheat growing regions of California and the Pacific Northwest.

4. No claims about disease resistance are made at this time.

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:	Black
4. Juvenile Growth Habit:	Semi-erect	18. Glume Color:	White/Amber
5. Leaf Color at Boot:	Green	19. Glume Length:	Long
6. Flag Leaf at Boot:	Recurved, Twisted, Wax	20. Shoulder Shape:	Apiculate
7. Auricle Color:	Purple	21. Shoulder Width:	Narrow
8. Day(s) to 50% Heading:	71	22. Beak Shape:	Acuminate
9. Anther Color:	Yellow	23. Beak Length (S.M.L.VL):	L
10. Anthoncyanin:	Present	24. Glume Pubescence:	Absent (Glabrous)
11. Plant Height (cm):	58.42	25. Seed Color	Red
12. Internodes:	Semi-solid	26. Seed Shape:	Ovate
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):	48.5

30. Physiological/Biochemical Traits:

Variants and Frequency: A variant that is similar to WB9578 but has white seed occurs at a frequency of up to .25% (25 out 10,000 seeds). A variant that is similar to WB9578 but is 15cm to 20cm taller occurs at a frequency of up to .2% (20/10,000). A white head variant may occur at a frequency of .1% (10/10,000). An awnless variant may occur at a frequency of .1% (10/10,000).

6. Recognized classes of WB9578 are breeder, foundation, registered, and certified. Monsanto Company will maintain the variety by the head-row purification method to produce breeder seed as needed and all foundation seed. Royalty fees and/ or licensing agreements are anticipated.

7. Commercial seed of WB9578 will likely be ready for commercial sale by the fall of 2018.

8. Application for a Utility Patent and PVP is anticipated for WB9578 and the option for Title V will not be taken.

9. Certified seed production acreage is not to be published by AOSCA and individual certifying agencies.

Date this application was submitted: Jan 20, 2017 Date recommended by the VRB: Apr 25, 2017

Wheat

WB9590
F9N12-0151 (Exp)

1. WB9590 is a Hard Red Spring wheat developed by the Monsanto LLC.

2. In early generations of WB9590, single spikes were selected based on agronomics and disease resistance. Later generations were selected based on yield, quality, and disease resistance.

3. WB9590 is adapted to the Hard Red Spring wheat growing regions of Northern Plains.

4. No claims about disease resistance are made at this time.

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:	Semi-erect	18. Glume Color:	White/Amber
5. Leaf Color at Boot:	Green	19. Glume Length:	No data
6. Flag Leaf at Boot:	Erect, Twisted, Wax	20. Shoulder Shape:	Oblique
7. Auricle Color:	Purple	21. Shoulder Width:	Narrow
8. Day(s) to 50% Heading:	166	22. Beak Shape:	Acuminate
9. Anther Color:	Yellow	23. Beak Length (S.M.L.VL):	L
10. Anthoncyanin:	Present	24. Glume Pubescence:	Absent (Glabrous)
11. Plant Height (cm):	68.58	25. Seed Color	Red
12. Internodes:	Hollow	26. Seed Shape:	Oval
13. Spike Shape:	Tapering	27. Cheeks:	Angular
14. Spike Density:	Lax	28. Brush Size (S,M,L.):	Short
15. Spike Curvature:	Inclined	29. Avg 1,000 Kernel Wt (g):	33

30. Physiological/Biochemical Traits:

Variants and Frequency: A variant that is similar to WB9590 but has white seed occurs at a frequency of up to .25% (25 out 10,000 seeds). A variant that is similar to WB9590 but is 15cm to 20cm taller occurs at a frequency of up to .2% (20/10,000). A bronze head variant may occur at a frequency of .1% (10/10,000). An awnless variant may occur at a frequency of .1% (10/10,000).

6. Recognized classes of WB9590 are breeder, foundation, registered, and certified. Monsanto Company will maintain the variety by the head-row purification method to produce breeder seed as needed and all foundation seed. Royalty fees and/ or licensing agreements are anticipated.

7. Commercial seed of WB9590 will likely be ready for commercial sale by the spring of 2018.

8. Application for a Utility Patent and PVP is anticipated for WB9590 and the option for Title V will not be taken.

9. Certified seed production acreage is not to be published by AOSCA and individual certifying agencies.

Date this application was submitted: Jan 20, 2017 Date recommended by the VRB: Apr 25, 2017

Wheat

WB9616CLP
BZ9S09-0300RM (Exp)

1. WB9616CLP is a Hard Red Spring wheat developed by the Monsanto LLC.

2. In early generations of WB9616CLP, single spikes were selected based on agronomics and disease resistance. Later generations were selected based on yield, quality, and disease resistance.

3. WB9616CLP is adapted to the Hard Red Spring wheat growing regions of the Montana region. Genotyping and testing data indicate that WB9616CLP contains two genes for imazamox resistance.

4. No claims about disease resistance are made at this time.

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:	Semi-erect	18. Glume Color:	White/Amber
5. Leaf Color at Boot:	Green	19. Glume Length:	Long
6. Flag Leaf at Boot:	Recurved, Twisted, Wax	20. Shoulder Shape:	Apiculate
7. Auricle Color:	White	21. Shoulder Width:	Narrow
8. Day(s) to 50% Heading:	164	22. Beak Shape:	Acuminate
9. Anther Color:	Yellow	23. Beak Length (S.M.L.VL):	L
10. Anthoncyanin:	Absent	24. Glume Pubescence:	Absent (Glabrous)
11. Plant Height (cm):	78.5	25. Seed Color	Red
12. Internodes:	Hollow	26. Seed Shape:	Oval
13. Spike Shape:	Tapering	27. Cheeks:	Angular
14. Spike Density:	Lax	28. Brush Size (S,M,L.):	S
15. Spike Curvature:	Erect	29. Avg 1,000 Kernel Wt (g):	48.5

30. Physiological/Biochemical Traits:

Variants and Frequency: A variant that is similar to WB9616CLP but has white seed occurs at a frequency of up to .25% (25 out 10,000 seeds). A variant that is similar to WB9616CLP but is 15cm to 20cm taller occurs at a frequency of up to .2% (20/10,000). A bronze head variant may occur at a frequency of .1% (10/10,000). An awnless variant may occur at a frequency of .1% (10/10,000).

6. Recognized classes of WB9616CLP are breeder, foundation, registered, and certified. Monsanto Company will maintain the variety by the head-row purification method to produce breeder seed as needed and all foundation seed. Royalty fees and/ or licensing agreements are anticipated.

7. Commercial seed of WB9616CLP will likely be ready for commercial sale by the spring of 2018.

8. Application for a Utility Patent and PVP is anticipated for WB9616CLP and the option for Title V will be taken.

9. Certified seed production acreage is not to be published by AOSCA and individual certifying agencies.

Date this application was submitted: Jan 20, 2017 Date recommended by the VRB: Apr 25, 2017

Wheat

WB9662
07651-10-0006 (Exp)

1. WB9662 is a Hard Red Spring wheat developed by the Monsanto LLC.

2. In early generations of WB9662, single spikes were selected based on agronomics and disease resistance. Later generations were selected based on yield, quality, and disease resistance.

3. WB9662 is adapted to the Hard Red Spring wheat growing regions of the Pacific Northwest.

4. No claims about disease resistance are made at this time.

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:	Semi-erect	18. Glume Color:	White/Amber
5. Leaf Color at Boot:	Green	19. Glume Length:	Long
6. Flag Leaf at Boot:	Recurved, Twisted, Wax	20. Shoulder Shape:	Elevated
7. Auricle Color:	White	21. Shoulder Width:	Narrow
8. Day(s) to 50% Heading:	166	22. Beak Shape:	Acuminate
9. Anther Color:	Yellow	23. Beak Length (S.M.L.VL):	L
10. Anthoncyanin:	Present	24. Glume Pubescence:	Absent (Glabrous)
11. Plant Height (cm):	81.3	25. Seed Color	Red
12. Internodes:	Hollow	26. Seed Shape:	Oval
13. Spike Shape:	Tapering	27. Cheeks:	Angular
14. Spike Density:	Lax	28. Brush Size (S,M,L.):	M
15. Spike Curvature:	Nodding	29. Avg 1,000 Kernel Wt (g):	38

30. Physiological/Biochemical Traits:

Variants and frequency: A variant that is similar to WB9662 but has white seed occurs at a frequency of up to .25% (25 out 10,000 seeds). A variant that is similar to WB9662 but is 15cm to 20cm taller occurs at a frequency of up to .2% (20/10,000). A bronze head variant may occur at a frequency of .1% (10/10,000). An awnless variant may occur at a frequency of .1% (10/10,000).

6. Recognized classes of WB9662 are breeder, foundation, registered, and certified. Monsanto Company will maintain the variety by the head-row purification method to produce breeder seed as needed and all foundation seed. Royalty fees and/ or licensing agreements are anticipated.

7. Commercial seed of WB9662 will likely be ready for commercial sale by the spring of 2018.

8. Application for a Utility Patent and PVP is anticipated for WB9662 and the option for Title V will not be taken.

9. Certified seed production acreage is not to be published by AOSCA and individual certifying agencies.

Date this application was submitted: Jan 20, 2017 Date recommended by the VRB: Apr 25, 2017

Wheat

WB9719
F9N12-0153 (Exp)

1. WB9719 is a Hard Red Spring wheat developed by the Monsanto LLC.

2. In early generations of WB9719, single spikes were selected based on agronomics and disease resistance. Later generations were selected based on yield, quality, and disease resistance.

3. WB9719 is adapted to the Hard Red Spring wheat growing regions of Northern Plains.

4. No claims about disease resistance are made at this time.

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:	Semi-erect	18. Glume Color:	White/Amber
5. Leaf Color at Boot:	Green	19. Glume Length:	No data
6. Flag Leaf at Boot:	Recurved, Twisted, Wax	20. Shoulder Shape:	Elevated
7. Auricle Color:	White	21. Shoulder Width:	Medium
8. Day(s) to 50% Heading:	168	22. Beak Shape:	Acuminate
9. Anther Color:	Yellow	23. Beak Length (S.M.L.VL):	L
10. Anthoncyanin:	Absent	24. Glume Pubescence:	Absent (Glabrous)
11. Plant Height (cm):	68.58	25. Seed Color	Red
12. Internodes:	Hollow	26. Seed Shape:	Oval
13. Spike Shape:	Tapering	27. Cheeks:	Rounded
14. Spike Density:	Lax	28. Brush Size (S,M,L.):	S
15. Spike Curvature:	Inclined	29. Avg 1,000 Kernel Wt (g):	26

30. Physiological/Biochemical Traits:

Variants and Frequency: A variant that is similar to WB9719 but has white seed occurs at a frequency of up to .25% (25 out 10,000 seeds). A variant that is similar to WB9719 but is 15cm to 20cm taller occurs at a frequency of up to .2% (20/10,000). A bronze head variant may occur at a frequency of .1% (10/10,000). An awnless variant may occur at a frequency of .1% (10/10,000).

6. Recognized classes of WB9719 are breeder, foundation, registered, and certified. Monsanto Company will maintain the variety by the head-row purification method to produce breeder seed as needed and all foundation seed. Royalty fees and/ or licensing agreements are anticipated.

7. Commercial seed of WB9719 will likely be ready for commercial sale by the spring of 2018.

8. Application for a Utility Patent and PVP is anticipated for WB9719 and the option for Title V will not be taken.

9. Certified seed production acreage is not to be published by AOSCA and individual certifying agencies.

Date this application was submitted: Jan 20, 2017 Date recommended by the VRB: Apr 25, 2017

Wheat

AKF-ASTRO
P12X4433W (Exp)
(Amended – Name Change)

Variety Name AKF-ASTRO

Experimental Designation(s) P12X4433W

Date SGVRB first recommended this variety September 2015

Date(s) any previous amendments were recommended _____

Date this amendment was submitted 1/5/2017

1. AKF-ASTRO is a hard white spring wheat obtained from Cimmyt and commercialized by Phoenix Seed, Inc. for the food/beverage industry.

2. AKF-ASTRO was selected from a heat tolerant wheat nursery and advanced as a bulk for 4 generations of testing and increase. Selection was based on yield, low protein and disease resistance.

3. AKF-ASTRO has been grown and tested in North Dakota and Montana since 2012. AKF-ASTRO is widely adapted to the northern plains region of the United States.

4 AKF-ASTRO is susceptible to leaf rust and Fusarium head blight.

5. Identifying characteristics –

1. Kind:	Common, Hard White Spring Wheat		
2. Seasonal Growth Habit:	Spring	16. Awn Type:	Awned
3. Coleoptile Color:	White	17. Awn Color:	White
4. Juvenile Growth Habit:	Semi-Erect	18. Glume Color:	Tan
5. Leaf Color at Boot:	Green	19. Glume Length:	Long
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:	49	22. Beak Shape:	Acuminate
9. Anther Color:	Yellow	23. Beak Length (S.M.L.VL):	Medium
10. Anthocyanin:	Absent	24. Glume Pubescence:	Absent
11. Plant Height (cm):	85.7	25. Seed Color	White
12. Internodes:	Hollow	26. Seed Shape:	Oval
13. Spike Shape:	Oblong	27. Cheeks:	Angular
14. Spike Density:	Lax	28. Brush Size (S,M,L.):	Medium
15. Spike Curvature:	Erect	29. Avg 1,000 Kernel Wt (g):	41

30. Physiological/Biochemical Traits:

Variants and Frequency: Variants are limited to: slightly taller plants that occur at a frequency of less than .2% (20/10,000 plants); red seed at a frequency of .5% (50/10,000).

6. Recognized classes are breeder, foundation, registered, and certified seed. Phoenix Seed, Inc. will maintain its purity by the head-row method to produce breeder seed as needed.

7. Commercial seed of AKF-ASTRO may be ready for commercial sale by the spring of 2016.

8. Application for PVP is anticipated for AKF-ASTRO. Title V option will likely not be taken.

9. Certified seed production acreage cannot be published by AOSCA and certifying agencies.

Date this application was submitted: Jan 04, 2017 Date recommended by the VRB: Apr 03, 2017

Wheat

25R61
XW12M (Exp)
(Amended – Name Change)

Variety Name 25R61

Experimental Designation(s) XW12M

Date SGVRB first recommended this variety March 22, 2016

Date(s) any previous amendments were recommended

Date this amendment was submitted December 27, 2016

1. 25R61 is a soft red winter wheat developed by Pioneer Hi-Bred Int'l., Inc.

2. The cultivar 25R61was 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. 25R61has shown best adaptation to the northern U.S. soft wheat regions.

4. 25R61has shown strong resistance to leaf rust and very good resistance to Fusarium head blight (scab), powdery mildew and soil-borne mosaic virus.

5. Identifying characteristics –

1. Kind:	Common, Soft 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:	Green	19. Glume Length:	Medium
6. Flag Leaf at Boot:	Erect, Twisted, Waxy	20. Shoulder Shape:	Rounded
7. Auricle Color:	White	21. Shoulder Width:	Medium
8. Day(s) to 50% Heading:	128	22. Beak Shape:	Acuminate
9. Anther Color:	Yellow	23. Beak Length (S.M.L.VL):	Medium
10. Anthoncyanin:	Absent	24. Glume Pubescence:	Absent
11. Plant Height (cm):	91.4	25. Seed Color	Red
12. Internodes:	Hollow	26. Seed Shape:	Ovate
13. Spike Shape:	Tapering	27. Cheeks:	Rounded
14. Spike Density:	Dense	28. Brush Size (S,M,L.):	Short
15. Spike Curvature:	Nodding	29. Avg 1,000 Kernel Wt (g):	37.7

30. Physiological/Biochemical Traits: Phenol Reaction = Dark brown

Variants and Frequency: Awnless and/or taller plants may occur at a frequency up to 0.1% (10/10,000).

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 25R61will potentially first be offered for sale in the fall of 2017.

8. Plant Variety Protection application is anticipated in 2016 and the certification option will not be elected.

9. Certified acreage is not to be published by A0SCA and certifying agencies.

Date this application was submitted: Dec 27, 2016 Date recommended by the VRB: Apr 03, 2017

Wheat

25R74
XW14B (Exp)
(Amended – Name Change)

Variety Name 25R74

Experimental Designation(s) XW14B

Date SGVRB first recommended this variety March 22, 2016

Date(s) any previous amendments were recommended

Date this amendment was submitted December 27, 2016

1. 25R74 is a soft red winter wheat developed by Pioneer Hi-Bred Int'l., Inc.

2. The cultivar 25R74was 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. 25R74has shown best adaptation to the northern U.S. soft wheat regions.

4. 25R74has shown high resistance to powdery mildew and stripe rust and intermediate resistance to Fusarium head blight (scab), leaf rust, and soil-borne mosaic virus.

5. Identifying characteristics –

1. Kind:	Common, Soft Red Winter Wheat		
2. Seasonal Growth Habit:	Winter	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:	Yellow-Green	19. Glume Length:	Medium
6. Flag Leaf at Boot:	Erect, Twisted, Waxy	20. Shoulder Shape:	Wanting
7. Auricle Color:	Purple	21. Shoulder Width:	Medium
8. Day(s) to 50% Heading:	128	22. Beak Shape:	Acuminate
9. Anther Color:	Yellow	23. Beak Length (S.M.L.VL):	Medium
10. Anthoncyanin:	Absent	24. Glume Pubescence:	Absent
11. Plant Height (cm):	83.8	25. Seed Color	Red
12. Internodes:	Hollow	26. Seed Shape:	Ovate
13. Spike Shape:	Oblong	27. Cheeks:	Rounded
14. Spike Density:	Lax	28. Brush Size (S,M,L.):	Medium
15. Spike Curvature:	Nodding	29. Avg 1,000 Kernel Wt (g):	34.4

30. Physiological/Biochemical Traits: Phenol Reaction = Dark brown

Variants and Frequency: Awnless plants may occur at a frequency up to 0.5% (50/10,000).

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 25R74will potentially first be offered for sale in the fall of 2017.

8. Plant Variety Protection application is anticipated in 2016 and the certification option will not be elected.

9. Certified acreage is not to be published by A0SCA and certifying agencies.

Date this application was submitted: Dec 27, 2016 Date recommended by the VRB: Apr 03, 2017

Wheat

XW12Q (Exp)

1. XW12Q is a soft white winter wheat developed by DuPont Pioneer.

2. The cultivar XW12Q 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. XW12Q has shown best adaptation to the soft white wheat growing regions of the U.S. and Canada.

4. XW12Q has shown high resistance to powdery mildew and stripe rust and intermediate resistance to Fusarium head blight (scab), leaf rust, and leaf blights.

5. Identifying characteristics –

1. Kind:	Common, Soft White Winter Wheat		
2. Seasonal Growth Habit:	Winter	16. Awn Type:	Awned
3. Coleoptile Color:	Red	17. Awn Color:	White
4. Juvenile Growth Habit:	Semi-Erect	18. Glume Color:	Other (Yellow)
5. Leaf Color at Boot:	Yellow-Green	19. Glume Length:	Short
6. Flag Leaf at Boot:	Recurved, Twisted, Wax Absent	20. Shoulder Shape:	Oblique
7. Auricle Color:	Purple	21. Shoulder Width:	Narrow
8. Day(s) to 50% Heading:	150	22. Beak Shape:	Acuminate
9. Anther Color:	Yellow	23. Beak Length (S.M.L.VL):	Medium
10. Anthoncyanin:	Present	24. Glume Pubescence:	Absent
11. Plant Height (cm):	89	25. Seed Color	White
12. Internodes:	Hollow	26. Seed Shape:	Ovate
13. Spike Shape:	Oblong	27. Cheeks:	Rounded
14. Spike Density:	Dense	28. Brush Size (S,M,L.):	Medium
15. Spike Curvature:	Nodding	29. Avg 1,000 Kernel Wt (g):	38.2

30. Physiological/Biochemical Traits: Phenol Reaction = Dark brown

Variants and Frequency: Awnless and/or taller plants may occur at a frequency up to 0.1% (10/10,000).

6. Breeder, foundation, and registered seed classes will be maintained and controlled by the DuPont Pioneer Integrated Operations 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 DuPont Pioneer Integrated Operations or the appropriate certifying agency. No royalty fees or licensing agreements are anticipated.

7. Certified seed of XW12Q will potentially first be offered for sale in the fall of 2018.

8. Plant Variety Protection application is anticipated in 2017 and the certification option will not be elected.

9. Certified acreage is not to be published by A0SCA and certifying agencies.

Date this application was submitted: Jan 06, 2017 Date recommended by the VRB: Apr 03, 2017

Wheat

XW15C (Exp)

1. XW15C is a soft red winter wheat developed by DuPont Pioneer.

2. The cultivar XW15C 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. XW15C has shown best adaptation to the southern soft wheat growing regions of the U.S.

4. XW15C has shown high resistance to stripe rust and very good resistance to leaf rust and powdery mildew.

5. Identifying characteristics –

1. Kind:	Common, Soft Red Winter Wheat		
2. Seasonal Growth Habit:	Winter	16. Awn Type:	Apically Awnletted
3. Coleoptile Color:	White	17. Awn Color:	White
4. Juvenile Growth Habit:	Erect	18. Glume Color:	Tan
5. Leaf Color at Boot:	Green	19. Glume Length:	Short
6. Flag Leaf at Boot:	Erect, Twisted, Wax Present	20. Shoulder Shape:	Square
7. Auricle Color:	Purple	21. Shoulder Width:	Medium
8. Day(s) to 50% Heading:	131	22. Beak Shape:	Acute
9. Anther Color:	Yellow	23. Beak Length (S.M.L.VL):	Medium
10. Anthoncyanin:	Absent	24. Glume Pubescence:	Absent
11. Plant Height (cm):	94	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:	Nodding	29. Avg 1,000 Kernel Wt (g):	36.1

30. Physiological/Biochemical Traits: Phenol Reaction = Fawn

Variants and Frequency: Awned and/or taller plants may occur at a frequency up to 0.1% (10/10,000).

6. Breeder, foundation, and registered seed classes will be maintained and controlled by the DuPont Pioneer Integrated Operations 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 DuPont Pioneer Integrated Operations or the appropriate certifying agency. No royalty fees or licensing agreements are anticipated.

7. Certified seed of XW15C will potentially first be offered for sale in the fall of 2018.

8. Plant Variety Protection application is anticipated in 2017 and the certification option will not be elected.

9. Certified acreage is not to be published by A0SCA and certifying agencies.

Date this application was submitted: Jan 06, 2017 Date recommended by the VRB: Apr 03, 2017

Wheat

Mpress
09PN066#36 (Exp)

1. Mpress is a soft white winter wheat bred and developed by Syngenta Participations AG.

2. Mpress was selected for maturity, plant height uniformity, disease reaction and satisfactory preliminary quality screen.

3. Mpress 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. Mpress has above average tolerance to stripe rust.

5. Identifying characteristics –

1. Kind:	Common, Soft White 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
5. Leaf Color at Boot:	Green	19. Glume Length:	Medium
6. Flag Leaf at Boot:	Recurved, Twisted, Wax Present	20. Shoulder Shape:	Square
7. Auricle Color:	White	21. Shoulder Width:	Narrow
8. Day(s) to 50% Heading:	145	22. Beak Shape:	Acuminae
9. Anther Color:	Yellow	23. Beak Length (S.M.L.VL):	Medium
10. Anthoncyanin:	Absent	24. Glume Pubescence:	Present
11. Plant Height (cm):	82.5	25. Seed Color	White
12. Internodes:	Hollow	26. Seed Shape:	Ovate
13. Spike Shape:	Tapering	27. Cheeks:	Rounded
14. Spike Density:	Middense	28. Brush Size (S,M,L.):	Long
15. Spike Curvature:	Inclined	29. Avg 1,000 Kernel Wt (g):	54

30. Physiological/Biochemical Traits:

Variants and Frequency: Less than 0.5% of plants were rogued from the Breeder Seed increase. Ninety percent of the variant plants were taller (8 to 14 cm). One percent of the variants were awnless as opposed to the predominant awned typed. Up to 0.1% variant plants may be encountered in subsequent generations. Up to 0.3% red seed may be encountered in all classes of certified production.

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/progeny method to produce breeder seed as needed. Royalty fees are anticipated.

7. Certified seed will likely be available Fall of 2017.

8. Plant Variety Protection is anticipated in 2017.

9. Certified acreage is not to be published by AOSCA and certifying agencies.

Date this application was submitted: Jan 10, 2017 Date recommended by the VRB: Apr 25, 2017

Wheat

Paradise
AP11T2227 (Exp)

1. Paradise is a hard red winter wheat developed by Syngenta Participations AG.

2. Paradise was selected for height, maturity and green leaf duration.

3. Paradise was tested in and is adapted to Central and Southern Plains. Best adapted for dryland production but can be produced under irrigation.

4. Paradise is moderately resistant to stripe rust but moderately susceptible to leaf rust. Tolerance to both SBMV and acid soils. Susceptible to FHB.

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
5. Leaf Color at Boot:	Green	19. Glume Length:	Long
6. Flag Leaf at Boot:	Recurved, Twisted, Wax Absent	20. Shoulder Shape:	Oblique
7. Auricle Color:	White	21. Shoulder Width:	Medium
8. Day(s) to 50% Heading:	123	22. Beak Shape:	Acute
9. Anther Color:	Yellow	23. Beak Length (S.M.L.VL):	Medium
10. Anthoncyanin:	Absent	24. Glume Pubescence:	Present
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:	Lax	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: Approximately 0.8% of the plants were rogued from the Breeder's seed increase in 2015. Approximately 99% 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. We also would expect to see up to 1.8% white seed variant.

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/progeny method to produce breeder seed as needed. Royalty fees are anticipated.

7. Certified seed will likely be available Fall of 2017.

8. Plant Variety Protection is anticipated in 2017.

9. Certified acreage is not to be published by AOSCA and certifying agencies.

Date this application was submitted: Jan 10, 2017 Date recommended by the VRB: Apr 20, 2017

Wheat

PNW Hailey
09PN046#28 (Exp)

1. PNW Hailey is a soft white winter wheat bred and developed by Syngenta Participations AG.

2. PNW Hailey was selected for maturity, plant height uniformity, disease reaction and satisfactory preliminary quality screen.

3. PNW Hailey 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. PNW Hailey has above average tolerance to stripe rust.

5. Identifying characteristics –

1. Kind:	Common, Soft White 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
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:	Wide
8. Day(s) to 50% Heading:	143	22. Beak Shape:	Acute
9. Anther Color:	Yellow	23. Beak Length (S.M.L.VL):	Long
10. Anthoncyanin:	Absent	24. Glume Pubescence:	Absent
11. Plant Height (cm):	98	25. Seed Color	White
12. Internodes:	Hollow	26. Seed Shape:	Ovate
13. Spike Shape:	Tapering	27. Cheeks:	Rounded
14. Spike Density:	Lax	28. Brush Size (S,M,L.):	Short
15. Spike Curvature:	Inclined	29. Avg 1,000 Kernel Wt (g):	57

30. Physiological/Biochemical Traits:

Variants and Frequency: Less than 0.5% of plants were rogued from the Breeder Seed increase. Ninety percent of the variant plants were taller (8 to 12 cm). Four percent of the variants were awnless as opposed to the predominant awned typed. Up to 0.1% variant plants may be encountered in subsequent generations. Up to 0.3% red seed may be encountered in all classes of certified production.

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/progeny method to produce breeder seed as needed. Royalty fees are anticipated.

7. Certified seed will likely be available Fall of 2017.

8. Plant Variety Protection is anticipated in 2017.

9. Certified acreage is not to be published by AOSCA and certifying agencies.

Date this application was submitted: Jan 10, 2017 Date recommended by the VRB: Apr 25, 2017

Wheat

SY 517 CL2
07CL039-7 (Exp)

1. SY 517 CL2 is a hard red winter wheat developed by Syngenta Participations AG.

2. SY 517 CL2 was selected for height, maturity and green leaf duration.

3. SY 517 CL2 was tested and is best adapted to Kansas, Nebraska and South Dakota. Best adapted for dryland production but can be produced under irrigation.

4. SY 517 CL2 is moderately susceptible to Stripe Rust and Moderately resistant to Leaf rust. Tolerance to SBMV and 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
5. Leaf Color at Boot:	Green	19. Glume Length:	Medium
6. Flag Leaf at Boot:	Recurved, Twisted, Wax Present	20. Shoulder Shape:	Oblique
7. Auricle Color:	White	21. Shoulder Width:	Narrow
8. Day(s) to 50% Heading:	124	22. Beak Shape:	Acuminate
9. Anther Color:	Yellow	23. Beak Length (S.M.L.VL):	Medium
10. Anthoncyanin:	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:	Lax	28. Brush Size (S,M,L.):	Short
15. Spike Curvature:	Inclined	29. Avg 1,000 Kernel Wt (g):	36

30. Physiological/Biochemical Traits:

Variants and Frequency: Approximately 0.8% of the plants were rogued from the Breeder's seed increase in 2015. Approximately 99% of the rogued variant plants were taller height wheat plants (8 to 15 cm) and 1 % were awnless. Up to 1.0% variant plants may be encountered in subsequent generations. We also would expect to see up to 1.8% white seed variant.

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/progeny method to produce breeder seed as needed. Royalty fees are anticipated.

7. Certified seed will likely be available Fall of 2017.

8. Plant Variety Protection is anticipated in 2017 and SY 517 CL2 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, 2017 Date recommended by the VRB: Apr 20, 2017

Wheat

SY 912
M12-3312CW (Exp)

1. SY 912 is a soft white winter wheat developed by Syngenta Participations AG.

2. SY 912 was selected for height, maturity, appearance, kernel color and kernel soundness in early generations using a bulk breeding method that originated with a single cross made in December of 2006.

3. SY 912 has shown best adaptation though testing to the primary white wheat growing regions of Michigan and northwest Ohio however it also has performed well in areas north of US 30 in the Midwest.

4. SY 912 has shown medium early maturity and above average test weight. It has tested above average resistance to Fusarium head blight, current races of powdery mildew, stripe rust and leaf rust in the testing area. It has tested average to soilborne mosaic virus. It has tested susceptible to septoria and glume blotch.

5. Identifying characteristics –

1. Kind:	Common, Soft White Winter Wheat		
2. Seasonal Growth Habit:	Winter	16. Awn Type:	Apically Awnletted
3. Coleoptile Color:	White	17. Awn Color:	White
4. Juvenile Growth Habit:	Erect	18. Glume Color:	White
5. Leaf Color at Boot:	Green	19. Glume Length:	Short
6. Flag Leaf at Boot:	Recurved, Twisted, Wax Present	20. Shoulder Shape:	Oblique
7. Auricle Color:	White	21. Shoulder Width:	Narrow
8. Day(s) to 50% Heading:	139	22. Beak Shape:	Acute
9. Anther Color:	Yellow	23. Beak Length (S.M.L.VL):	Short
10. Anthoncyanin:	Absent	24. Glume Pubescence:	Absent
11. Plant Height (cm):	93.9	25. Seed Color	White
12. Internodes:	Hollow	26. Seed Shape:	Ovate
13. Spike Shape:	Tapering	27. Cheeks:	Rounded
14. Spike Density:	Lax	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: Approximately 0.8% of the plants were rogued from the Breeder's seed increase in 2016. 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/progeny method to produce breeder seed as needed. Royalty fees are anticipated.

7. Certified seed will likely be available Fall of 2017.

8. Plant Variety Protection is anticipated in 2017 and SY 912 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, 2017 Date recommended by the VRB: Apr 25, 2017

Wheat

SY Achieve CL2
07CL041-1 (Exp)

1. SY Achieve CL2 is a hard red winter wheat developed by Syngenta Participations AG.

2. SY Achieve CL2 was selected for Beyond resistance, height, maturity and green leaf duration.

3. SY Achieve CL2 was tested in and is adapted to Central and Southern Plains. Best adapted for dryland production.

4. SY Achieve CL2 is moderately resistant to both Stripe and Leaf rust. Tolerant to SBMV and acid soils.

5. Identifying characteristics –

1. Kind:	Common, Hard Red Wintere 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
5. Leaf Color at Boot:	Green	19. Glume Length:	Medium
6. Flag Leaf at Boot:	Recurved, Twisted, Wax Present	20. Shoulder Shape:	Oblique
7. Auricle Color:	White	21. Shoulder Width:	Narrow
8. Day(s) to 50% Heading:	121	22. Beak Shape:	Acuminate
9. Anther Color:	Yellow	23. Beak Length (S.M.L.VL):	Medium
10. Anthoncyanin:	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:	Lax	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: Approximately 0.8% of the plants were rogued from the Breeder's seed increase in 2015. Approximately 99% of the rogued variant plants were taller height wheat plants (8 to 15 cm) and 1 % were awn less. Up to 1.0% variant plants may be encountered in subsequent generations. We also would expect to see up to 1.8% white seed variant.

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/progeny method to produce breeder seed as needed. Royalty fees are anticipated.

7. Certified seed will likely be available Fall of 2017.

8. Plant Variety Protection is anticipated in 2017 and SY Achieve CL2 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, 2017 Date recommended by the VRB: Apr 20, 2017

Wheat

SY Banks
09PN005#25 (Exp)

1. SY Banks is a soft white winter wheat developed by Syngenta Participations AG.

2. SY Banks was selected for maturity, plant height, uniformity, appearance, kernel color and soundness, disease reaction and satisfactory preliminary quality screen.

3. SY Banks is primarily adapted to the dryland central Washington growing area. It appears also well suited to Southern Idaho as well.

4. SY Banks has shown above average tolerance to current races of stripe rust.

5. Identifying characteristics –

1. Kind:	Common, Soft White 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
5. Leaf Color at Boot:	Green	19. Glume Length:	Long
6. Flag Leaf at Boot:	Erect, Twisted, Waxy	20. Shoulder Shape:	Wanting
7. Auricle Color:	White	21. Shoulder Width:	Narrow
8. Day(s) to 50% Heading:	145	22. Beak Shape:	Acuminate
9. Anther Color:	Yellow	23. Beak Length (S.M.L.VL):	Long
10. Anthoncyanin:	Absent	24. Glume Pubescence:	Present
11. Plant Height (cm):	94	25. Seed Color	White
12. Internodes:	hollow	26. Seed Shape:	Ovate
13. Spike Shape:	Tapering	27. Cheeks:	Rounded
14. Spike Density:	Lax	28. Brush Size (S,M,L.):	Medium
15. Spike Curvature:	Inclined	29. Avg 1,000 Kernel Wt (g):	50

30. Physiological/Biochemical Traits:

Variants and Frequency: Less than 0.5% of plants were rogued from the Breeder Seed increase. Ninety percent of the variant plants were taller (8 to 10 cm). One percent of the variants were awnless as opposed to the predominant awned typed. Up to 0.1% variant plants may be encountered in subsequent generations. Up to 0.3% red seed may be encountered in all classes of certified production.

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/progeny method to produce breeder seed as needed. Royalty fees are anticipated.

7. Certified seed will likely be available Fall of 2017.

8. Plant Variety Protection is anticipated in 2017 and SY Banks 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, 2017 Date recommended by the VRB: Apr 25, 2017

Wheat

SY Benefit
06BC362-8 (Exp)

1. SY Benefit is a hard red winter wheat developed by Syngenta Participations AG.

2. SY Benefit was selected for height, maturity and green leaf duration.

3. SY Benefit was tested and is adapted to the Central and Southern Plains. Best adapted for dryland production but can be produced under irrigation.

4. SY Benefit is moderately resistant to Stripe and leaf rust. SY Benefit also has tolerance to FHB, acid soils and SBMV.

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
5. Leaf Color at Boot:	Green	19. Glume Length:	Short
6. Flag Leaf at Boot:	Recurved, Twisted, Wax Present	20. Shoulder Shape:	Oblique
7. Auricle Color:	White	21. Shoulder Width:	Narrow
8. Day(s) to 50% Heading:	122	22. Beak Shape:	Acuminate
9. Anther Color:	Yellow	23. Beak Length (S.M.L.VL):	Medium
10. Anthoncyanin:	Absent	24. Glume Pubescence:	Not Present
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:	Lax	28. Brush Size (S,M,L.):	Short
15. Spike Curvature:	Inclined	29. Avg 1,000 Kernel Wt (g):	36

30. Physiological/Biochemical Traits:

Variants and frequency: Approximately 0.8% of the plants were rogued from the Breeder's seed increase in 2016. Approximately 74.7% of the rogued variant plants were larger head type. Where 25.1% were taller height wheat plants (8 to 15 cm), with the other remaining 0.2% being of the awn less type. Up to 1.0% variant plants may be encountered in subsequent generations. We also would expect to see up to 1.8% white seed variant.

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/progeny method to produce breeder seed as needed. Royalty fees are anticipated.

7. Certified seed will likely be available Fall of 2017.

8. Plant Variety Protection is anticipated in 2017 and SY Benefit 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, 2017 Date recommended by the VRB: Apr 20, 2017

Wheat

SY Command
04PN066-7 (Exp)

1. SY Command is a soft white winter wheat developed by Syngenta Participations AG.

2. SY Command was selected for height, maturity, appearance, kernel color, kernel soundness, disease reaction and end use quality in early generations using a bulk breeding method that originated with a single cross made in January of 2004.

3. SY Command is primarily adapted to lower rainfall dryland areas in Central and Southern Washington and Northern Oregon as well as the Northern Highway 2 region and Spokane area of Washington.

4. SY Command has shown above average resistance to Stripe Rust. SY Command has tested average milling and adequate baking.

5. Identifying characteristics –

1. Kind:	Common, Soft White 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
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. Day(s) to 50% Heading:	142	22. Beak Shape:	Acuminate
9. Anther Color:	Yellow	23. Beak Length (S.M.L.VL):	Medium
10. Anthoncyanin:	Absent	24. Glume Pubescence:	Absent
11. Plant Height (cm):	81	25. Seed Color	White
12. Internodes:	Hollow	26. Seed Shape:	Ovate
13. Spike Shape:	Oblong	27. Cheeks:	Rounded
14. Spike Density:	Lax	28. Brush Size (S,M,L.):	Medium
15. Spike Curvature:	Inclined	29. Avg 1,000 Kernel Wt (g):	34

30. Physiological/Biochemical Traits:

Variants and Frequency: Less than 0.5% of plants were rogued from the Breeder Seed increase. Ninety percent of the variant plants were taller (4 to 10 cm). Twenty percent of the variants were awnless as opposed to the predominant awned typed. Up to 1% variant plants may be encountered in subsequent generations. Up to 0.5% red seed may be encountered in all classes of certified production.

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/progeny method to produce breeder seed as needed. Royalty fees are anticipated.

7. Certified seed will likely be available Fall of 2017.

8. Plant Variety Protection is anticipated in 2017 and SY Command 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, 2017 Date recommended by the VRB: Apr 25, 2017

Wheat

SY Dayton
09PN062#18 (Exp)

1. SY Dayton is a soft white winter wheat developed by Syngenta Participations AG.

2. SY Dayton was selected for height, maturity, appearance, kernel color, kernel soundness, disease reaction and end use quality in early generations using a DH breeding method that originated with a single cross made in January of 2009.

3. SY Dayton is primarily adapted to high rainfall dryland production in Southern Washington and Northern Oregon.

4. SY Dayton has shown above average stripe rust tolerance and root rot tolerance.

5. Identifying characteristics –

1. Kind:	Common, Soft White 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
5. Leaf Color at Boot:	Green	19. Glume Length:	Medium
6. Flag Leaf at Boot:	Recurved, Twisted, Wax Present	20. Shoulder Shape:	Rounded
7. Auricle Color:	White	21. Shoulder Width:	Narrow
8. Day(s) to 50% Heading:	142	22. Beak Shape:	Acuminate
9. Anther Color:	Yellow	23. Beak Length (S.M.L.VL):	Long
10. Anthoncyanin:	Absent	24. Glume Pubescence:	Present
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:	Middense	28. Brush Size (S,M,L.):	Medium
15. Spike Curvature:	Inclined	29. Avg 1,000 Kernel Wt (g):	47

30. Physiological/Biochemical Traits:

Variants and Frequency: Less than 0.5% of plants were rogued from the Breeder Seed increase. Ninety percent of the variant plants were taller (8 to 12 cm). Six percent of the variants were awnless as opposed to the predominant awned typed. Up to 0.1% variant plants may be encountered in subsequent generations. Up to 0.3% red seed may be encountered in all classes of certified production.

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/progeny method to produce breeder seed as needed. Royalty fees are anticipated.

7. Certified seed will likely be available Fall of 2017.

8. Plant Variety Protection is anticipated in 2017 and SY Dayton 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, 2017 Date recommended by the VRB: Apr 25, 2017

Wheat

SY Miskin
B12*1790 (Exp)

1. SY Miskin is a soft red winter common wheat bred and developed by Syngenta Participations AG.

2. SY Miskin was selected for plant height, medium maturity, and general desirable phenotype.

3. SY Miskin has shown good adaptation in yield trials to the wheat growing areas of southeast Missouri, eastern Arkansas, western Tennessee and Kentucky, the upper 'Delta' region of Mississippi, eastern North Carolina, and northeastern South Carolina.

4. SY Miskin has shown moderate susceptibility to the current races of leaf rust in area of adaptation.

5. Identifying characteristics –

1. Kind:	Common, Soft 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
5. Leaf Color at Boot:	Green	19. Glume Length:	Medium
6. Flag Leaf at Boot:	Recurved, Twisted, Wax Present	20. Shoulder Shape:	Oblique
7. Auricle Color:	White	21. Shoulder Width:	Narrow
8. Day(s) to 50% Heading:	112.3	22. Beak Shape:	Acuminate
9. Anther Color:	Yellow	23. Beak Length (S.M.L.VL):	Medium
10. Anthoncyanin:	Absent	24. Glume Pubescence:	Absent
11. Plant Height (cm):	101.9	25. Seed Color	Red
12. Internodes:	Hollow	26. Seed Shape:	Ovate
13. Spike Shape:	Tapering	27. Cheeks:	Rounded
14. Spike Density:	Lax	28. Brush Size (S,M,L.):	Medium
15. Spike Curvature:	Inclined	29. Avg 1,000 Kernel Wt (g):	35

30. Physiological/Biochemical Traits:

Variants and Frequency: Approximately 0.14 % of the plants were rogued from the Breeder's seed increase in 2016. Approximately 99.8 % of these rogued variant plants were taller plants (> 3 inches) and the remainder 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/progeny method to produce breeder seed as needed. Royalty fees are anticipated.

7. Certified seed will likely be available Fall of 2017.

8. Plant Variety Protection is anticipated in 2017 and SY Miskin 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, 2017 Date recommended by the VRB: Apr 20, 2017

Wheat

SY Raptor
09PN046#16 (Exp)

1. SY Raptor is a soft white winter wheat developed by Syngenta Seeds, Inc.

2. SY Raptor was selected for maturity, plant height uniformity, disease reaction and satisfactory preliminary quality screen.

3. SY Raptor is primarily adapted to irrigated production in Washington, Oregon, and Idaho. It may also have a fit in the high to moderate rainfall dryland production of Southern and Central Washington and Northern Oregon.

4. SY Raptor has shown above average tolerance to current races of stripe rust in the testing area.

5. Identifying characteristics –

1. Kind:	Common, Soft White 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
5. Leaf Color at Boot:	Green	19. Glume Length:	Long
6. Flag Leaf at Boot:	Erect, Twisted, Wax Present	20. Shoulder Shape:	Wanting
7. Auricle Color:	White	21. Shoulder Width:	Narrow
8. Day(s) to 50% Heading:	140	22. Beak Shape:	Acuminate
9. Anther Color:	Yellow	23. Beak Length (S.M.L.VL):	Medium
10. Anthoncyanin:	Absent	24. Glume Pubescence:	Present
11. Plant Height (cm):	90	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.):	Short
15. Spike Curvature:	Inclined	29. Avg 1,000 Kernel Wt (g):	51

30. Physiological/Biochemical Traits:

Variants and Frequency: Less than 0.3% of plants were rogued from the Breeder Seed increase. Ninety-five percent of the variant plants were taller (8 to 10 cm). Ten percent of the variants were awnless as opposed to the predominant awned typed. Up to 0.1% variant plants may be encountered in subsequent generations. Up to 0.3% red seed may be encountered in all classes of certified production.

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/progeny method to produce breeder seed as needed. Royalty fees are anticipated.

7. Certified seed will likely be available Fall of 2017.

8. Plant Variety Protection is anticipated in 2017 and SY Raptor 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, 2017 Date recommended by the VRB: Apr 25, 2017

Wheat

SY Rugged
AP11T2222 (Exp)

1. SY Rugged is a hard red winter wheat developed by Syngenta Participations AG.

2. SY Rugged was selected for height, maturity and green leaf duration.

3. SY Rugged was tested in and is adapted to the Central and Southern Plains. Best adapted for dryland production but can be produced under irrigation.

4. SY Rugged is resistant to the current races of Stripe rust in the plains. It is moderately resistant to current races of Leaf rust. We also show good tolerance to acid soils and SBMV.

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
5. Leaf Color at Boot:	Green	19. Glume Length:	Medium
6. Flag Leaf at Boot:	Recurved, Twisted, Waxy	20. Shoulder Shape:	Oblique
7. Auricle Color:	White	21. Shoulder Width:	Narrow
8. Day(s) to 50% Heading:	123	22. Beak Shape:	Acuminate
9. Anther Color:	Yellow	23. Beak Length (S.M.L.VL):	Medium
10. Anthoncyanin:	Absent	24. Glume Pubescence:	Present
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:	Lax	28. Brush Size (S,M,L.):	Long
15. Spike Curvature:	Nodding	29. Avg 1,000 Kernel Wt (g):	36

30. Physiological/Biochemical Traits:

Variants and Frequency: AP11T2222 has been uniform and stable since 2015. Approximately 0.8% of the plants were rogued from the Breeder's seed increase in 2015. Approximately 28.6% of the rogued variant plants were taller height wheat plants (8 to 15 cm) and 1.1% were awn less and 68% were red chaffed. Up to 1.0% variant plants may be encountered in subsequent generations. We also would expect to see up to 1.8% white seed variant.

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/progeny method to produce breeder seed as needed. Royalty fees are anticipated.

7. Certified seed will likely be available Fall of 2017.

8. Plant Variety Protection is anticipated in 2017 and SY Rugged 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, 2017 Date recommended by the VRB: Apr 20, 2017

Barley

LCS Odyssey
NSL08-4556-A (Exp)

1. LCS Odyssey (NSL08-4556-A) is a two-row spring malting barley bred by Limagrain UK and now marketed in the United States by Limagrain Cereal Seeds.

2. LCS Odyssey was selected for yield, malt barley quality characteristics, and disease reactions in the United Kingdom.

3. LCS Odyssey was tested in Washington state in the <16" rainfall, 16-20" rainfall, and >20" rainfall zones. The variety is adapted to these barley-growing zones of Washington and will be used for malting barley production.

4. No claims are made in this application relative to disease or insect resistance reactions.

5. Identifying characteristics –

1. Growth Habit:	Spring	16. Plant Height (see below):	67.3 cm
2. Spike:	Two-row	17. Spike Shape:	Fusiform
3. Coleoptile Color:	Green	18. Spike Density:	Mid-Dense
4. Juvenile Growth Habit:	Semi-erect	19. Spike Position at Maturity:	Inclined
5. Plant Tillering:	Intermediate	20. Hairiness of Rachis Edge:	Covered
6. Leaf Color at Boot:	Green	21. Rachilla Hair Length:	Short
7. Flag Leaf at Boot:	Erect, Twisted, Waxy	22. Lemma Awns:	Straight
8. Pubescence on Leaf Blade:	No	23. Length of Lemma Awns:	Long
9. Pubescence on Leaf Sheath:	No	24. Lemma Awn Surface:	Semi-Smooth
10.:Auricle Color:	White	25. Glume Hairiness:	Middle only
11.Heading Date (see below):	77.5 days	26. Glume Awn Surface:	Smooth
12. Stem Color:	White	27. Glume/Lemma Adherence:	Covered
13. Neck Shape:	Straight	28. Texture (if covered):	Semi-Wrinkled
14. Collar Shape:	V-shaped	29. Aleurone Color:	Colorless
15. Spike Exsertion:	Slight	30. Avg 1,000 Kernel Wt (g):	47

Heading date: 78 days which is: 2 Day(s) LATER than: AC Metcalfe
Plant height: 67.3 cm, which is 0.6 cm SHORTER than: LCS Genie
Physiological or Biochemical Traits: None
Variants and Frequency: LCS Odyssey may contain up to 1/1000 taller plants up to two spike lengths above main canopy.

6. Recognized seed classes will be Breeder, Foundation, Registered, and Certified. Registered and Certified seed may be produced and sold only through a license agreement with Limagrain Cereal Seeds. LCS will maintain Breeder and Foundation seed by rogueing and removal of off-types in bulk seedings and headrowing if necessary.

7. Foundation seed will be available in Spring 2017.

8. LCS Odyssey has been sold in Europe for over 4 years, therefore PVP cannot be applied for. Intellectual Property rights will be enforced via contract.

9. Certified seed production and acreage may be published by AOSCA and official state seed certifying agencies.

Date this application was submitted: Jan 11, 2017 Date recommended by the VRB: Apr 20, 2017

Barley

AKF-ACE
P14Y8709 (Exp)
(Amended – Name Change)

Variety Name AKF-ACE

Experimental Designation(s) P14Y8709

Date SGVRB first recommended this variety September 2015

Date(s) any previous amendments were recommended

Date this amendment was submitted 1/5/2017

1. AKF-ACE is a two-row, spring, waxy, hulless barley developed by Phoenix Seed, Inc. for the specialty food market.

2. AKF-ACE was selected from a cross "Wanubet/Rasmusson" made in the summer of 2012. Single F3 heads were selected for head, hull and starch type. F4 rows were selected for height, standability and uniformity.

3. AKF-ACE is adapted to North Dakota.

4. AKF-ACE has not been tested for disease or insect resistance. AKF-ACE has a beta-glucan content of 7.3% based on an analysis performed at the Northern Crops Institute in Fargo, ND.

5. Identifying characteristics –

1. Growth Habit:	Spring	16. Plant Height (see below):	77 cm
2. Spike:	Two-row	17. Spike Shape:	Oblong
3. Coleoptile Color:	Green	18. Spike Density:	Lax
4. Juvenile Growth Habit:	Erect	19. Spike Position at Maturity:	Inclined
5. Plant Tillering:	High	20. Hairiness of Rachis Edge:	Few
6. Leaf Color at Boot:	Yellow-green	21. Rachilla Hair Length:	Long
7. Flag Leaf at Boot:	Recurved, Not Twisted, Waxy	22. Lemma Awns:	Straight
8. Pubescence on Leaf Blade:	No	23. Length of Lemma Awns:	Long
9. Pubescence on Leaf Sheath:	No	24. Lemma Awn Surface:	Rough
10.:Auricle Color:	White	25. Glume Hairiness:	Banded
11.Heading Date (see below):	58 days after planting	26. Glume Awn Surface:	Rough
12. Stem Color:	White	27. Glume/Lemma Adherence:	Naked
13. Neck Shape:	Straight	28. Texture (if covered):	
14. Collar Shape:	V-shaped	29. Aleurone Color:	Colorless
15. Spike Exsertion:	Slight	30. Avg 1,000 Kernel Wt (g):	49

Heading date: 58 which is: 1 days EARLIER than: Wanubet

Plant height: 77 cm, which is 9.4 cm SHORTER than: Wanubet

Physiological or Biochemical Traits: AKF-ACE starch is waxy which stains red using a Potassium Iodide solution (IKI_2). Non-waxy starch (normal) stains dark purple with this solution. The waxy starch also results in the kernel being opaque rather than vitreous. P14Y8709 has deficiens laterals.

Variants and Frequency: AKF-ACE may contain up to 0.25% of any of the following variants in subsequent generations: covered seed, medium talls, non-deficiens laterals or hooded awns.

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Barley

AKF-ACE
P14Y8709 (Exp)
(Amended – Name Change)

Variety Name AKF-ACE

Experimental Designation(s) P14Y8709

Date SGVRB first recommended this variety September 2015

Date(s) any previous amendments were recommended

Date this amendment was submitted Jan 5, 2017

6. Recognized classes are breeder, foundation, registered, and certified seed. Phoenix Seed, Inc. will maintain its purity by the head-row method to produce breeder seed as needed.

7. Certified seed may be available in summer of 2016.

8. Application for PVP is anticipated for AKF-ACE. Title V option will likely not be taken.

9. Certified seed production acreage is not to be published by AOSCA and certifying agencies.

Date this application was submitted: Jan 05, 2017 Date recommended by the VRB: Apr 03, 2017

Triticale

261216487
10T50020 (Exp)

1. 261216487 (10T50020) is an awned spring triticale developed by Northern Agri-Brands LLC.

2. 261216487 was selected for its respectable soft-dough silage yield, grain yield, early maturity, straw strength, and disease tolerance.

3. 261216487 has been tested and found to be adaptive to the Central Valley of California.

4. 261216487 possess increased stripe rust tolerance within the Central Valley of California.

5. Identifying characteristics –

1. Ploidy:	Hexaploid	15. Awn Color:	Yellow
2. Growth Habit:	Spring	16. Glume Pubescence:	Slightly-Pubescent
3. Photoperiod Reaction:	Insensitive	17. Glume Color:	Yellow
4. Winterhardiness:	Med-Low	18. Glume Length:	Med-Long
5. Maturity:	Early	19. Glume Width:	Narrow
6. Height:	Short	20. Glume Shoulder Shape:	Wanting
7. Plant Color at Boot Stage:	Blue-Green	21. Glume Beak Shape:	Acuminate
8. Stem Anthocyanin:	Absent	22. Coleoptile Color:	White
9. Neck Hairiness:	Slight	23. Seed Shape:	Elliptical
10. Neck Shape:	Straight	24. Seed Smoothness:	Slightly Wrinkled
11. Flag Leaf at Boot:	Twisted, Erect, Waxy	25. Seed Brush Area:	Mid-Size
12. Spike Density:	Mid-Dense	26. Seed Brush Length:	Mid-Long
13. Spike Shape:	Oblong	27. Seed Color:	Red
14. Spike Awnedness:	Awned	28. Seed Relative Size:	Med-Large

Unique Physiological/Biochemical Traits: _____

Variants and Frequency: Less than 1% tall plants observed

6. Recognized classes of 261216487are breeder, foundation, registered, and certified. Northern Agri-Brands LLC will maintain the variety by the head-row system to produce breeder seed if needed.

7. Certified seed of 261216487 will be available 2017.

8. Application for Plant Variety Protection is anticipated in 2017.

9. Certified seed production acreage may not be published by AOSCA or other Certification agencies.

Date this application was submitted: Jan 17, 2017 Date recommended by the VRB: Apr 03, 2017

Triticale

618491724
10T70126 (Exp)

1. 618491724 (10T70126) is an awnless and facultative triticale developed by Northern Agri-Brands LLC.

2. 618491724 was selected for its awnless characteristic, increase grain yield, silage yield, and increased stripe rust tolerance.

3. 618491724 has been tested and found to be adaptive to the Central Valley of California.

4. 618491724 possess increased stripe rust tolerance within the Central Valley of California.

5. Identifying characteristics –

1. Ploidy:	Hexaploid	15. Awn Color:	
2. Growth Habit:	Intermediate	16. Glume Pubescence:	Pubescent
3. Photoperiod Reaction:	N/A	17. Glume Color:	Yellow
4. Winterhardiness:	Medium	18. Glume Length:	Mid-Long
5. Maturity:	Late	19. Glume Width:	Mid-Wide
6. Height:	Tall	20. Glume Shoulder Shape:	Wanting
7. Plant Color at Boot Stage:	Green	21. Glume Beak Shape:	Acuminate
8. Stem Anthocyanin:	Absent	22. Coleoptile Color:	White
9. Neck Hairiness:	Heavy	23. Seed Shape:	Elliptical
10. Neck Shape:	Straight	24. Seed Smoothness:	Wrinkled
11. Flag Leaf at Boot:	Twisted, Drooping, Waxy	25. Seed Brush Area:	Large
12. Spike Density:	Dense	26. Seed Brush Length:	Mid-Long
13. Spike Shape:	Oblong	27. Seed Color:	Red
14. Spike Awnedness:	Awnless	28. Seed Relative Size:	Med-small

Unique Physiological/Biochemical Traits:

Variants and Frequency: Less than 1% tall plants observed

6. Recognized classes of 618491724 are breeder, foundation, registered, and certified. Northern Agri-Brands LLC will maintain the variety by the head-row system to produce breeder seed if needed.

7. Certified seed of 618491724 will be available 2017.

8. Application for Plant Variety Protection is anticipated in 2017.

9. Certified seed production acreage may not be published by AOSCA or other Certification agencies.

Date this application was submitted: Jan 17, 2017 Date recommended by the VRB: Apr 18, 2017

Triticale

641512175
RSI 202567 (Exp)

1. 641512175 is an awnless facultative triticale that was developed by Northern Agri-Brands LLC.

2. 641512175 was selected for it awnless character, and respectable late boot stage silage yield.

3. 641512175 has been tested and found to be adaptive to Pacific Northwest region of the U.S. including Washington and Idaho as well as adaptive to Wisconsin.

4. 641512175 possess excellent pre-dough forage quality.

5. Identifying characteristics –

1. Ploidy:	Hexaploid	15. Awn Color:	
2. Growth Habit:	Intermediate	16. Glume Pubescence:	Glabrous
3. Photoperiod Reaction:	Sensitive	17. Glume Color:	Yellow
4. Winterhardiness:	Medium	18. Glume Length:	Mid-Long
5. Maturity:	Very Late	19. Glume Width:	Narrow
6. Height:	Tall	20. Glume Shoulder Shape:	Oblique
7. Plant Color at Boot Stage:	Green	21. Glume Beak Shape:	Acute
8. Stem Anthocyanin:	Absent	22. Coleoptile Color:	White
9. Neck Hairiness:	Slight	23. Seed Shape:	Elliptical
10. Neck Shape:	Straight	24. Seed Smoothness:	Slightly Wrinkled
11. Flag Leaf at Boot:	Twisted, Erect	25. Seed Brush Area:	Large
12. Spike Density:	Dense	26. Seed Brush Length:	Long
13. Spike Shape:	Fusiform	27. Seed Color:	Red
14. Spike Awnedness:	Awnless	28. Seed Relative Size:	Med-Large

Unique Physiological/Biochemical Traits:

Variants and Frequency: Less than 1% awned or awnletted

6. Recognized classes of 641512175 are breeder, foundation, registered, and certified. Northern Agri-Brands LLC will maintain the variety by the head-row system to produce breeder seed if needed.

7. Certified seed of 641512175 will be available 2017.

8. Application for Plant Variety Protection is anticipated in 2017 and the Title V option will NOT be taken.

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9. Certified seed production acreage may not be published by AOSCA or other Certification agencies.

Date this application was submitted: Mar 21, 2017 Date recommended by the VRB: Apr 03, 2017

Triticale

841446398
RSI 204719 (Exp)

1. 841446398 (RSI 204719) is an awnletted and winter triticale developed by Northern Agri-Brands LLC.

2. 841446398 was selected for its awn length, lodging resistance, substantially higher seed yield, and high silage forage yield.

3. 841446398 has been tested and found to be adaptive to the Pacific Northwest region of the US specifically Washington and Idaho.

4. 841446398 possesses excellent lodging tolerance.

5. Identifying characteristics –

1. Ploidy:	Hexaploid	15. Awn Color:	Yellow
2. Growth Habit:	Winter	16. Glume Pubescence:	Glabrous
3. Photoperiod Reaction:	Insensitive	17. Glume Color:	Yellow
4. Winterhardiness:	Medium-High	18. Glume Length:	Mid-Long
5. Maturity:	Early	19. Glume Width:	Mid-Wide
6. Height:	Mid-Tall	20. Glume Shoulder Shape:	Rounded
7. Plant Color at Boot Stage:	Blue-green	21. Glume Beak Shape:	Acuminate
8. Stem Anthocyanin:	Absent	22. Coleoptile Color:	White
9. Neck Hairiness:	Slight	23. Seed Shape:	Elliptical
10. Neck Shape:	Straight	24. Seed Smoothness:	Slightly-Wrinkled
11. Flag Leaf at Boot:	Not Twisted, Erect, Waxy	25. Seed Brush Area:	Mid-Size
12. Spike Density:	Dense	26. Seed Brush Length:	Mid-Long
13. Spike Shape:	Oblong	27. Seed Color:	Amber
14. Spike Awnedness:	Awnletted	28. Seed Relative Size:	Medium

Unique Physiological/Biochemical Traits: _____

Variants and Frequency: Less than 1% bearded heads

6. Recognized classes of 841446398 are breeder, foundation, registered, and certified. Northern Agri-Brands LLC will maintain the variety by the head-row system to produce breeder seed if needed.

7. Certified seed of 841446398 will be available Fall 2017.

8. Application for Plant Variety Protection is anticipated in 2017.

9. Certified seed production acreage may not be published by AOSCA or other Certification agencies.

Date this application was submitted: Jan 17, 2017 Date recommended by the VRB: Apr 18, 2017

Triticale

946802617
154 (Exp)

1. 946802617 (154) is a winter triticale developed by Northern Agri-Brands LLC.

2. 946802617 was selected for its winter-hardiness, high vegetative forage yield, high boot stage silage yield and early maturity.

3. 946802617 has been tested and found to be adaptive to Great Plains region of the US including Nebraska, Colorado, Kansas, Oklahoma, New Mexico, Texas as well as Northeastern dairy production region of the US including New York, Pennsylvania, and Virginia.

4. No claims are made in this application relative to disease or insect resistance reactions.

5. Identifying characteristics –

1. Ploidy:	Hexaploid	15. Awn Color:	Tan
2. Growth Habit:	Winter	16. Glume Pubescence:	Slightly-Pubescent
3. Photoperiod Reaction:	Insensitive	17. Glume Color:	Yellow
4. Winterhardiness:	Mid-High	18. Glume Length:	Mid-Long
5. Maturity:	Early	19. Glume Width:	Mid-wide
6. Height:	Semi-Dwarf	20. Glume Shoulder Shape:	Wanting
7. Plant Color at Boot Stage:	Green	21. Glume Beak Shape:	Obtuse
8. Stem Anthocyanin:	Absent	22. Coleoptile Color:	White
9. Neck Hairiness:	Heavy	23. Seed Shape:	Elliptical
10. Neck Shape:	Wavy	24. Seed Smoothness:	Slightly-Wrinkled
11. Flag Leaf at Boot:	Not Twisted, Recurved, Waxy	25. Seed Brush Area:	Large
12. Spike Density:	Mid-Dense	26. Seed Brush Length:	Short
13. Spike Shape:	Fusiform	27. Seed Color:	Red
14. Spike Awnedness:	Awned	28. Seed Relative Size:	Med-Large

Unique Physiological/Biochemical Traits:

Variants and Frequency: Taller plants observed occurring at the rate of 1 per l000 plants in subsequent generations.

6. Recognized classes of 946802617 are breeder, foundation, registered, and certified. Northern Agri-Brands LLC will maintain the variety by the head-row system to produce breeder seed if needed.

7. Certified seed of 946802617 will be available 2017.

8. Application for Plant Variety Protection was submitted in 2016.

9. Certified seed production acreage may not be published by AOSCA or other Certification agencies.

Date this application was submitted: Jan 17, 2017 Date recommended by the VRB: Apr 18, 2017