The Association of Official Seed Certifying Agencies (AOSCA), National Small Grain Variety Review Board (NSGVRB), reviewed the following varieties on August 06, 2014. The Board recommended the inclusion of these varieties for certification. Seed of these varieties may be certified, providing production meets all standards of the Seed Certifying Agency of the jurisdiction in which the seed is grown.

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

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

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

Phone: 309-736-0120
Fax: 309-736-0115
E-Mail: cboruff@aosca.org

Respectfully submitted,

Abed Anouti, Chairman
National Small Grains Variety Review Board
# 2014 AOSCA Small Grain Variety Review Board - August

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</tr>
<tr>
<td>Syngenta Seeds</td>
<td>Hard Red Spring</td>
<td>8</td>
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</tr>
<tr>
<td>Syngenta Seeds</td>
<td>Hard Red Spring</td>
<td>9</td>
<td>B</td>
<td>HRS 3378</td>
<td>02S0178-1</td>
</tr>
<tr>
<td>Syngenta Seeds</td>
<td>Hard Red Spring</td>
<td>10</td>
<td>B</td>
<td>SY Basalt</td>
<td>04W40240R</td>
</tr>
<tr>
<td>Syngenta Seeds</td>
<td>Hard Red Winter</td>
<td>11</td>
<td>B</td>
<td>SY Llano</td>
<td>AP09T9614</td>
</tr>
<tr>
<td>Syngenta Seeds</td>
<td>Hard Red Winter</td>
<td>12</td>
<td>B</td>
<td>SY Monument</td>
<td>04BC574-2</td>
</tr>
<tr>
<td>Syngenta Seeds</td>
<td>Hard Red Spring</td>
<td>13</td>
<td>B</td>
<td>SY Soren</td>
<td>01S0263-28</td>
</tr>
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<td>Syngenta Seeds</td>
<td>Hard White</td>
<td>14</td>
<td>B</td>
<td>SY Sky</td>
<td>BC98331-03S-11W</td>
</tr>
</tbody>
</table>

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| Syngenta Seeds               | Triticale             | 15   | B         | SY TF 131    | 05tf131d                 |
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Amendment Key:

- **A** – Name Change
- **B** – Description
- **C** – Other
Wheat

Mira

1. “Mira” (D2-97) is a spring durum developed by Arizona Plant Breeders (APB).

2. “Mira” was selected for high yield and pasta quality using a male sterile facilitated recurrent selection method.

3. “Mira” is adapted to the irrigated durum producing areas of the Southwest United States.

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

<table>
<thead>
<tr>
<th>Kind:</th>
<th>Durum</th>
</tr>
</thead>
<tbody>
<tr>
<td>If common, provide appropriate kernel characteristic: (Hard Red, Soft Red, Hard White, Soft White)</td>
<td></td>
</tr>
</tbody>
</table>

2. Seasonal Growth Habit: Spring

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: 80

9. Anther Color: Yellow

10. Stem Color: Green

11. Plant Height (cm): 87

12. Internodes: Hollow

13. Spike Shape: Oblong

14. Spike Density: Dense

15. Spike Curvature: Erect

16. Awn Type: Awned

17. Awn Color: White

18. Glume Color: Tan

19. Glume Length: Medium

20. Shoulder Shape: Square

21. Shoulder Width: Narrow

22. Beak Shape: Acuminate

23. Beak Length (S.M.L.VL): M

24. Glume Pubescence: Absent

25. Seed Color: Amber

26. Seed Shape: Ovate

27. Cheeks: Angular


29. Avg 1,000 Kernel Wt (g): 55

30. Physiological/biochemical Traits: Low cadmium

Variants and frequency: 1 in 10,000 plants is taller than the rest.

5. Recognized classes of “Mira” are breeder, foundation, registered, and certified. APB will maintain the variety by the head row method to produce breeder seed as needed. “Mira” will have a royalty fee and a licensing agreement will be required.

6. Certified seed will be offered in the fall of 2015.

7. Application for PVP is anticipated with Title V Certification Option.

8. The certified seed production acreage can be published by AOSCA and certifying agencies.

Date this application was submitted: May 30, 2014

Date recommended by the NVRB: Aug 29, 2014
Wheat
Chevelle

1. Chevelle is a hard red spring wheat developed by Limagrain Cereal Seeds. It was tested under the experimental number LNR10-0177.

2. Chevelle was developed by selecting for agronomic plant type, resistance to prevalent foliar diseases, and head scab mainly in Minnesota, with winter nursery selections made in Yuma, AZ.

3. Chevelle is adapted to the hard red spring wheat growing regions of North Dakota. 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 – insert the descriptive term from the Objective Description (pages 3-5) except where indicated:

<table>
<thead>
<tr>
<th>Identification</th>
<th>Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kind</td>
<td>Hard Red</td>
</tr>
<tr>
<td>Seasonal Growth Habit</td>
<td>Spring</td>
</tr>
<tr>
<td>Coleoptile Color</td>
<td>Red</td>
</tr>
<tr>
<td>Juvenile Growth Habit</td>
<td>Semi-erect</td>
</tr>
<tr>
<td>Leaf Color at Boot</td>
<td>Green</td>
</tr>
<tr>
<td>Flag Leaf at Boot</td>
<td>Erect, not twisted, wax absent</td>
</tr>
<tr>
<td>Auricle Color</td>
<td>White</td>
</tr>
<tr>
<td>Days to 50% Heading</td>
<td>179</td>
</tr>
<tr>
<td>Anther Color</td>
<td>Absent</td>
</tr>
<tr>
<td>Plant Height (cm)</td>
<td>84</td>
</tr>
<tr>
<td>Internodes</td>
<td>Hollow</td>
</tr>
<tr>
<td>Spike Shape</td>
<td>Tapering</td>
</tr>
<tr>
<td>Spike Density</td>
<td>Dense</td>
</tr>
<tr>
<td>Spike Curvature</td>
<td>Erect</td>
</tr>
<tr>
<td>Awn Type</td>
<td>Awned</td>
</tr>
<tr>
<td>Awn Color</td>
<td>White</td>
</tr>
<tr>
<td>Glume Color</td>
<td>White/amber</td>
</tr>
<tr>
<td>Glume Length</td>
<td>Medium</td>
</tr>
<tr>
<td>Shoulder Shape</td>
<td>Elevated</td>
</tr>
<tr>
<td>Shoulder Width</td>
<td>Medium</td>
</tr>
<tr>
<td>Glume Pubescence</td>
<td>Absent</td>
</tr>
<tr>
<td>Seed Color</td>
<td>Red</td>
</tr>
<tr>
<td>Seed Shape</td>
<td>Ovate</td>
</tr>
<tr>
<td>Cheeks</td>
<td>Angular</td>
</tr>
<tr>
<td>Brush Size</td>
<td>Short</td>
</tr>
<tr>
<td>Avg 1,000 Kernel Wt (g)</td>
<td>33</td>
</tr>
</tbody>
</table>

30. Physiological/biochemical Traits:

Variants and frequency: Chevelle may contain up to 5 per 1000 taller plants, up to 8” greater than canopy height.

6. Recognized seed classes will be Breeder, Foundation, Registered, and Certified. Limagrain Cereal Seeds will maintain Breeder seedstocks; variety has been sub-licensed and sub-licensee is authorized to maintain Foundation seed and control production of Registered and Certified seed.

7. Registered seed will be available for planting in Spring 2015.

8. PVP will be applied for without the Title V option in Spring 2015.

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

Date this application was submitted: Jun 23, 2014
Date recommended by the NVRB: Aug 06, 2014
Wheat

LCS Nitro

1. LCS Nitro is a hard red spring wheat marketed by Limagrain Cereal Seeds. It was tested under the experimental number BIO 10125.

2. LCS Nitro was selected for grain yield, agronomic type, reaction to main diseases, and characteristics desirable to the wheat industry in Brazil using a pedigreed head to row breeding method. Following its development, it was tested for these same characteristics in North Dakota and surrounding states.

3. LCS Nitro is adapted to the hard red spring wheat growing regions of North Dakota. 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 – insert the descriptive term from the Objective Description (pages 3-5) except where indicated:

<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>If common, provide appropriate kernel characteristic:</td>
<td>(Hard Red, Soft Red, Hard White, Soft White)</td>
</tr>
<tr>
<td>2. Seasonal Growth Habit:</td>
<td>Spring</td>
</tr>
<tr>
<td>3. Coleoptile Color:</td>
<td>White</td>
</tr>
<tr>
<td>4. Juvenile Growth Habit:</td>
<td>Semi-erect</td>
</tr>
<tr>
<td>5. Leaf Color at Boot:</td>
<td>Green</td>
</tr>
<tr>
<td>6. Flag Leaf at Boot:</td>
<td>Erect, twisted, wax absent</td>
</tr>
<tr>
<td>7. Auricle Color:</td>
<td>White</td>
</tr>
<tr>
<td>8. Days to 50% Heading:</td>
<td>177</td>
</tr>
<tr>
<td>9. Anther Color:</td>
<td>Yellow</td>
</tr>
<tr>
<td>10. Anthocyanin:</td>
<td>Absent</td>
</tr>
<tr>
<td>11. Internodes:</td>
<td>76</td>
</tr>
<tr>
<td>12. Spike Shape:</td>
<td>Oblong</td>
</tr>
<tr>
<td>13. Spike Density:</td>
<td>Dense</td>
</tr>
<tr>
<td>14. Spike Curvature:</td>
<td>Erect</td>
</tr>
<tr>
<td>15. Spike Curvature:</td>
<td>None</td>
</tr>
<tr>
<td>16. Awn Type:</td>
<td>Awned</td>
</tr>
<tr>
<td>17. Awn Color:</td>
<td>White</td>
</tr>
<tr>
<td>18. Glume Color:</td>
<td>White/amber</td>
</tr>
<tr>
<td>19. Glume Length:</td>
<td>Long</td>
</tr>
<tr>
<td>20. Shoulder Shape:</td>
<td>Oblique</td>
</tr>
<tr>
<td>21. Shoulder Width:</td>
<td>Medium</td>
</tr>
<tr>
<td>22. Beak Shape:</td>
<td>Acuminate</td>
</tr>
<tr>
<td>23. Beak Length (S.M.L.VL):</td>
<td>Long</td>
</tr>
<tr>
<td>24. Glume Pubescence:</td>
<td>Absent</td>
</tr>
<tr>
<td>25. Seed Color:</td>
<td>Red</td>
</tr>
<tr>
<td>26. Seed Shape:</td>
<td>Elliptical</td>
</tr>
<tr>
<td>27. Cheeks:</td>
<td>Rounded</td>
</tr>
<tr>
<td>28. Brush Size (S,M,L):</td>
<td>Long</td>
</tr>
<tr>
<td>29. Avg 1,000 Kernel Wt (g):</td>
<td>38</td>
</tr>
</tbody>
</table>

30. Physiological/biochemical Traits: None

Variants and frequency: LCS Nitro may contain up to 5 per 1000 taller plants up to 8" above canopy height, and up to 2 per 1000 plants with blue-green heads at flowering.

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

7. Registered seed will be available for planting in Spring 2015.

8. PVP will be applied for without the Title V option in Spring 2015.

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

Date this application was submitted: Jun 23, 2014

Date recommended by the NVRB: Aug 06, 2014
Wheat

LCS Pro

1. LCS Pro is a hard red spring wheat marketed by Limagrain Cereal Seeds. It was tested under the experimental number LNR10-0493.

2. LCS Pro was selected for grain yield, grain protein, milling and baking quality, and reaction to main diseases in the Northern Plains using a modified bulk breeding method.

3. LCS Pro is adapted to the hard red spring wheat growing regions of Western North Dakota. 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 – insert the descriptive term from the Objective Description (pages 3-5) except where indicated:

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Kind</td>
<td>Common – Hard Red</td>
</tr>
<tr>
<td>2. Seasonal Growth Habit</td>
<td>Spring</td>
</tr>
<tr>
<td>3. Coleoptile Color</td>
<td>White</td>
</tr>
<tr>
<td>4. Juvenile Growth Habit</td>
<td>Semi-erect</td>
</tr>
<tr>
<td>5. Leaf Color at Boot</td>
<td>Green</td>
</tr>
<tr>
<td>6. Flag Leaf at Boot</td>
<td>Recurved, not twisted, wax absent</td>
</tr>
<tr>
<td>7. Auricle Color</td>
<td>White</td>
</tr>
<tr>
<td>8. Days to 50% Heading</td>
<td>179</td>
</tr>
<tr>
<td>9. Anther Color</td>
<td>Yellow</td>
</tr>
<tr>
<td>10. Anthocyanin</td>
<td>Absent</td>
</tr>
<tr>
<td>11. Plant Height (cm)</td>
<td>94</td>
</tr>
<tr>
<td>12. Internodes</td>
<td>Hollow</td>
</tr>
<tr>
<td>13. Spike Shape</td>
<td>Tapering</td>
</tr>
<tr>
<td>14. Spike Density</td>
<td>Lax</td>
</tr>
<tr>
<td>15. Spike Curvature</td>
<td>Inclined</td>
</tr>
<tr>
<td>16. Awn Type</td>
<td>Awned</td>
</tr>
<tr>
<td>17. Awn Color</td>
<td>White</td>
</tr>
<tr>
<td>18. Glume Color</td>
<td>White/amber</td>
</tr>
<tr>
<td>19. Glume Length</td>
<td>Long</td>
</tr>
<tr>
<td>20. Shoulder Shape</td>
<td>Square</td>
</tr>
<tr>
<td>21. Shoulder Width</td>
<td>Wide</td>
</tr>
<tr>
<td>22. Beak Shape</td>
<td>Acuminate</td>
</tr>
<tr>
<td>23. Beak Length (S.M.L.VL)</td>
<td>Very long</td>
</tr>
<tr>
<td>24. Glume Pubescence</td>
<td>Absent</td>
</tr>
<tr>
<td>25. Seed Color</td>
<td>Red</td>
</tr>
<tr>
<td>26. Seed Shape</td>
<td>Oval</td>
</tr>
<tr>
<td>27. Cheeks</td>
<td>Angular</td>
</tr>
<tr>
<td>28. Brush Size (S.M.L)</td>
<td>Short</td>
</tr>
<tr>
<td>29. Avg 1,000 Kernel Wt (g)</td>
<td>40</td>
</tr>
</tbody>
</table>

30. Physiological/biochemical Traits: none

Variants and frequency: LCS Pro may contain up to 5 per 1000 taller plants up to 8” above canopy height.

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

7. Registered seed will be available for planting in Spring 2015.

8. PVP will be applied for without the Title V option in Spring 2015.

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

Date this application was submitted: Jun 23, 2014

Date recommended by the NVRB: Aug 06, 2014
Wheat

Redstone

1. Redstone is a hard red spring wheat developed by Limagrain Cereal Seeds. It was tested under the experimental number BIO 10101.

2. Redstone was selected for grain yield, agronomic type, reaction to main diseases, and characteristics desirable to the wheat industry in Brazil using a pedigreed head to row breeding method. Following its development, it was tested for these same characteristics in North Dakota and surrounding states.

3. Redstone is adapted to the hard red spring wheat growing regions of North Dakota. 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 – insert the descriptive term from the Objective Description (pages 3-5) except where indicated:

1. Kind: Hard Red

2. Seasonal Growth Habit: Spring

3. Coleoptile Color: White

4. Juvenile Growth Habit: Semi-erect

5. Leaf Color at Boot: Green

6. Flag Leaf at Boot: Erect, not twisted, wax absent

7. Auricle Color: White and purple on same stem

8. Days to 50% Heading: 184

9. Anther Color: Yellow

10. Stem Color: Absent

11. Plant Height (cm): 86

12. Internodes: Hollow

13. Spike Shape: Tapering

14. Spike Density: Mid dense

15. Spike Curvature: Erect

16. Awn Type: Awned

17. Awn Color: White

18. Glume Color: White/amber

19. Glume Length: Medium

20. Shoulder Shape: Oblique

21. Shoulder Width: Medium

22. Beak Shape: Acuminate

23. Beak Length (S.M.L.VL): Long

24. Glume Pubescence: Absent

25. Seed Color: Red

26. Seed Shape: Ovate

27. Cheeks: Rounded


29. Avg 1,000 Kernel Wt (g): 35

30. Physiological/biochemical Traits:

Variants and frequency: Redstone may contain up to 5 per 1000 taller plants up to 8” above canopy height.

6. Recognized seed classes will be Breeder, Foundation, Registered, and Certified. Limagrain Cereal Seeds will maintain Breeder seedstocks; variety has been sub-licensed and sub-licensee is authorized to maintain Foundation seed and control production of Registered and Certified seed.

7. Registered seed will be available for planting in Spring 2015.

8. PVP will be applied for without the Title V option in Spring 2015.

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

Date this application was submitted: Jun 23, 2014

Date recommended by the NVRB: Aug 06, 2014
Wheat

AP08TS7124 (Exp)

1. AP08TS7124 is a soft red winter wheat bred and developed by Syngenta Seeds, Inc.

2. AP08TS7124 is the result of a cross made in 2001 at the AgriPro Wheat research facility near Lafayette, Indiana. AP08TS7124 was selected for height, heading and disease reaction.

3. AP08TS7124 is best adapted to central and north-central Texas.

4. Identifying characteristics – insert the descriptive term from the Objective Description (pages 3-5) except where indicated:

   If common, provide appropriate kernel characteristic: (Hard Red, Soft Red, Hard White, Soft White)

2. Seasonal Growth Habit: Winter
   16. Awn Type: Awned

3. Coleoptile Color: White
   17. Awn Color: White

4. Juvenile Growth Habit: Erect
   18. Glume Color: White/Amber

5. Leaf Color at Boot: Blue-green
   19. Glume Length: Long

6. Flag Leaf at Boot: Erect, twisted & wax present
   20. Shoulder Shape: Oblique

7. Auricle Color: White
   21. Shoulder Width: Narrow

8. Days to 50% Heading: 97
   22. Beak Shape: Acuminate

9. Anther Color: Yellow
   23. Beak Length (S.M.L.VL): Long

10. Stem Color: Anthocyanin Absent
    24. Glume Pubescence: Absent

11. Plant Height (cm): 77
    25. Seed Color: Red

12. Internodes: Hollow
    26. Seed Shape: Oval

13. Spike Shape: Oblong
    27. Cheeks: Rounded

14. Spike Density: Mid-dense

15. Spike Curvature: Erect
    29. Avg 1,000 Kernel Wt (g): 45

30. Physiological/biochemical Traits:

   Variants and frequency: Up to 1.0% variant plants may be encountered in subsequent generations. Variants recorded were taller than the average canopy height of the variety.

5. Syngenta Seeds, Inc. maintains seed stock and certified classes of Foundation, Registered and Certified. Syngenta Seeds, Inc. will maintain the variety by the head row method to produce breeder seed if needed.

6. Certified seed will be available in the 2015.

7. Plant Variety Protection is anticipated in 2014.

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

Date this application was submitted: Jun 30, 2014
Date recommended by the NVRB: Sep 05, 2014
Wheat

HRS 385-5

1. HRS 385-5 is a hard red spring wheat bred and developed by Syngenta Seeds, Inc.

2. HRS 385-5 is the result of a cross made in 2006 by Syngenta Seeds, Inc. in Berthoud, Colorado. HRS 385-5 was selected for height and leaf rust resistance.

3. HRS 385-5 is best adapted to the spring wheat growing areas of North Dakota and Minnesota.

4. HRS 385-5 is resistant to stem rust and moderately resistant to leaf rust.

5. Identifying characteristics – insert the descriptive term from the Objective Description (pages 3-5) except where indicated:

<table>
<thead>
<tr>
<th></th>
<th>Hard Red</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Kind:</td>
<td>Hard Red</td>
</tr>
<tr>
<td>If common, provide appropriate kernel characteristic: (Hard Red, Soft Red, Hard White, Soft White)</td>
<td></td>
</tr>
<tr>
<td>2. Seasonal Growth Habit:</td>
<td>Spring</td>
</tr>
<tr>
<td>3. Coleoptile Color:</td>
<td>White</td>
</tr>
<tr>
<td>4. Juvenile Growth Habit:</td>
<td>Erect</td>
</tr>
<tr>
<td>5. Leaf Color at Boot:</td>
<td>Green</td>
</tr>
<tr>
<td>6. Flag Leaf at Boot:</td>
<td>Re-curved, twisted, wax absent</td>
</tr>
<tr>
<td>7. Auricle Color:</td>
<td>White</td>
</tr>
<tr>
<td>8. Days to 50% Heading:</td>
<td>57.7</td>
</tr>
<tr>
<td>9. Anther Color:</td>
<td>Yellow</td>
</tr>
<tr>
<td>10. Anthocyanin:</td>
<td>Absent</td>
</tr>
<tr>
<td>11. Plant Height (cm):</td>
<td>77</td>
</tr>
<tr>
<td>12. Internodes:</td>
<td>Hollow</td>
</tr>
<tr>
<td>13. Spike Shape:</td>
<td>Tapering</td>
</tr>
<tr>
<td>14. Spike Density:</td>
<td>Lax</td>
</tr>
<tr>
<td>15. Spike Curvature:</td>
<td>Inclined</td>
</tr>
<tr>
<td>16. Awn Type:</td>
<td>Awned</td>
</tr>
<tr>
<td>17. Awn Color:</td>
<td>White</td>
</tr>
<tr>
<td>18. Glume Color:</td>
<td>White/Amber</td>
</tr>
<tr>
<td>19. Glume Length:</td>
<td>Short</td>
</tr>
<tr>
<td>20. Shoulder Shape:</td>
<td>Oblique</td>
</tr>
<tr>
<td>21. Shoulder Width:</td>
<td>Narrow</td>
</tr>
<tr>
<td>22. Beak Shape:</td>
<td>Acuminate</td>
</tr>
<tr>
<td>23. Beak Length (S.M.L.VL):</td>
<td>Medium</td>
</tr>
<tr>
<td>24. Glume Pubescence:</td>
<td>Absent</td>
</tr>
<tr>
<td>25. Seed Color</td>
<td>Red</td>
</tr>
<tr>
<td>26. Seed Shape:</td>
<td>Ovate</td>
</tr>
<tr>
<td>27. Cheeks:</td>
<td>Rounded</td>
</tr>
<tr>
<td>29. Avg 1,000 Kernel Wt (g):</td>
<td>31.7</td>
</tr>
</tbody>
</table>

30. Physiological/biochemical Traits:

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

6. Syngenta Seeds, Inc. maintains seed stock and certified classes of Foundation, Registered and Certified. Syngenta Seeds, Inc. will maintain the variety by the head row method to produce breeder seed if needed.

7. Certified seed will be available in 2016.


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

Date this application was submitted: Jun 30, 2014

Date recommended by the NVRB: Aug 06, 2014
Wheat

HRS 3361

(Amended – Correction to Description in Original Application)

1. HRS 3361 is a hard red spring wheat bred and developed by Syngenta Seeds, Inc.

2. HRS 3361 is the result of a cross made in 2005 by Syngenta Seeds, Inc. in Berthoud, Colorado. HRS 3361 was selected for height and leaf rust.

3. HRS 3361 is best adapted to the spring wheat growing areas of North Dakota and Minnesota.

4. HRS 3361 has moderately resistance to leaf rust. Protection to leaf spotting diseases has been good. HRS 3361 tolerance to FHB has been intermediate.

5. Identifying characteristics – insert the descriptive term from the Objective Description (pages 3-5) except where indicated:

<table>
<thead>
<tr>
<th>Kind:</th>
<th>Hard Red</th>
</tr>
</thead>
<tbody>
<tr>
<td>If common, provide appropriate kernel characteristic: (Hard Red, Soft Red, Hard White, Soft White)</td>
<td></td>
</tr>
</tbody>
</table>

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

30. Physiological/biochemical Traits:

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

6. Syngenta Seeds, Inc. maintains seed stock and certified classes of Foundation, Registered and Certified. Syngenta Seeds, Inc. will maintain the variety by the head row method to produce breeder seed if needed.

7. Certified seed will be available in the spring of 2014.


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

Variety Name  HRS 3361

Experimental Designation(s)  05S0261-10

Date NA&MLVRB first accepted this variety  April 04, 2014

Date(s) previous amendments were accepted  N/A

Date amendment submitted  June 30, 2014

Date recommended by the NVRB  August 06, 2014
Wheat
HRS 3378
(Amended – Correction to Description in Original Application)

1. HRS 3378 is a hard red spring wheat bred and developed by Syngenta Seeds, Inc.

2. HRS 3378 is the result of a cross made in 2002 by Syngenta Seeds, Inc. in Berthoud, Colorado. HRS 3378 was selected for height, and leaf rust.

3. HRS 3378 is best adapted to the spring wheat growing areas of North Dakota and Minnesota.

4. HRS 3378 is moderately resistant to leaf rust. Protection to leaf spotting diseases has been good. HRS 3378 tolerance to FHB has been intermediate.

5. Identifying characteristics – insert the descriptive term from the Objective Description (pages 3-5) except where indicated:

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

30. Physiological/biochemical Traits:

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

6. Syngenta Seeds, Inc. maintains seed stock and certified classes of Foundation, Registered and Certified. Syngenta Seeds, Inc. will maintain the variety by the head row method to produce breeder seed if needed.

7. Certified seed will be available in the Spring 2014.


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

Variety Name  HRS 3378
Experimental Designation(s)  02S0178-1
Date NA&MLV RB first accepted this variety  April 04, 2014
Date(s) previous amendments were accepted N/A
Date amendment submitted  June 30, 2014
Date recommended by the NVRB  August 06, 2014
Wheat

SY Basalt

(Amended – Correction to Description in Original Application)

1. SY Basalt is a hard red spring wheat bred and developed by Syngenta Seeds, Inc.

2. SY Basalt is the result of a cross made in 2001 by Syngenta Seeds, Inc. in Woodland, CA. SY Basalt was selected for height, good yield performance and absence of stripe rust.

3. SY Basalt is best adapted to the spring wheat growing areas in the Basin of Washington.

4. SY Basalt has medium maturity.

5. Identifying characteristics – insert the descriptive term from the Objective Description (pages 3-5) except where indicated:

<table>
<thead>
<tr>
<th>No.</th>
<th>Characteristic</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Kind:</td>
<td>Hard Red</td>
</tr>
<tr>
<td>2.</td>
<td>Seasonal Growth Habit:</td>
<td>Spring</td>
</tr>
<tr>
<td>3.</td>
<td>Coleoptile Color:</td>
<td>White</td>
</tr>
<tr>
<td>4.</td>
<td>Juvenile Growth Habit:</td>
<td>Erect</td>
</tr>
<tr>
<td>5.</td>
<td>Leaf Color at Boot:</td>
<td>Green</td>
</tr>
<tr>
<td>6.</td>
<td>Flag Leaf at Boot:</td>
<td>Erect, twisted, wax absent</td>
</tr>
<tr>
<td>7.</td>
<td>Auricle Color:</td>
<td>White</td>
</tr>
<tr>
<td>8.</td>
<td>Days to 50% Heading:</td>
<td>163</td>
</tr>
<tr>
<td>9.</td>
<td>Anther Color:</td>
<td>Yellow</td>
</tr>
<tr>
<td>10.</td>
<td>Stem Color:</td>
<td>Anthocyanin absent</td>
</tr>
<tr>
<td>11.</td>
<td>Plant Height (cm):</td>
<td>84</td>
</tr>
<tr>
<td>12.</td>
<td>Internodes:</td>
<td>Hollow</td>
</tr>
<tr>
<td>13.</td>
<td>Spike Shape:</td>
<td>Tapering</td>
</tr>
<tr>
<td>14.</td>
<td>Spike Density:</td>
<td>Mid dense</td>
</tr>
<tr>
<td>15.</td>
<td>Spike Curvature:</td>
<td>Erect</td>
</tr>
<tr>
<td>16.</td>
<td>Awn Type:</td>
<td>Awned</td>
</tr>
<tr>
<td>17.</td>
<td>Awn Color:</td>
<td>White</td>
</tr>
<tr>
<td>18.</td>
<td>Glume Color:</td>
<td>White/amber</td>
</tr>
<tr>
<td>19.</td>
<td>Glume Length:</td>
<td>Long</td>
</tr>
<tr>
<td>20.</td>
<td>Shoulder Shape:</td>
<td>Oblique</td>
</tr>
<tr>
<td>21.</td>
<td>Shoulder Width:</td>
<td>Medium</td>
</tr>
<tr>
<td>22.</td>
<td>Beak Shape:</td>
<td>Acuminate</td>
</tr>
<tr>
<td>23.</td>
<td>Beak Length (S,M,L,VL):</td>
<td>M</td>
</tr>
<tr>
<td>24.</td>
<td>Glume Pubescence:</td>
<td>Absent</td>
</tr>
<tr>
<td>25.</td>
<td>Seed Color</td>
<td>Red</td>
</tr>
<tr>
<td>26.</td>
<td>Seed Shape:</td>
<td>Ovate</td>
</tr>
<tr>
<td>27.</td>
<td>Cheeks:</td>
<td>Rounded</td>
</tr>
<tr>
<td>28.</td>
<td>Brush Size (S,M,L):</td>
<td>M</td>
</tr>
<tr>
<td>29.</td>
<td>Avg 1,000 Kernel Wt (g):</td>
<td>38</td>
</tr>
</tbody>
</table>

30. Physiological/biochemical Traits:

Variants and frequency: Less than 0.1% of the plants were rogued from the Breeder and Foundation seed increases. Fifty percent of the variant plants were taller height wheat plants (5 to 10 cm). Twenty-five percent of the variants were later maturity (2 to 3 days) and a white seeded variant of approximately 0.5% has also been identified in the Foundation seed production. Up to 1.0% variant plants may be encountered in subsequent generations.

6. Syngenta Seeds, Inc. maintains seed stock and certified classes of Foundation, Registered and Certified. Syngenta Seeds, Inc. will maintain the variety by the head row method to produce breeder seed if needed.

7. Certified seed will be available in the spring of 2015.

8. Plant Variety Protection is anticipated in 2014 and SY Basalt may only be sold as a class of certified seed.

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

Variety Name: SY Basalt

Experimental Designation(s): 04W40240R

Date NA&MLVRB first accepted this variety: April 04, 2014

Date(s) previous amendments were accepted: N/A

Date amendment submitted: June 30, 2014

Date recommended by the NVRB: August 06, 2014
Wheat
SY Llano
(Amended – Correction to Description in Original Application)

1. SY Llano is a hard red winter wheat bred and developed by Syngenta Seeds, Inc.

2. SY Llano is the result of a cross made in 2006 by Syngenta Seeds, Inc. in Vernon, Texas. SY Llano was selected for its early maturity and resistance to endemic races of leaf rust.

3. SY Llano is best adapted to the High Plains of Texas and north central Oklahoma.

4. SY Llano is resistant to stripe rust, moderately resistant to moderately susceptible to leaf rust, resistant to soil borne mosaic virus, susceptible to powdery mildew, and tolerant of acid soils.

5. Identifying characteristics – insert the descriptive term from the Objective Description (pages 3-5) except where indicated:

   1. Kind: Hard Red
      If common, provide appropriate kernel characteristic: (Hard Red, Soft Red, Hard White, Soft White)
   2. Seasonal Growth Habit: Winter
   3. Coleoptile Color: White
   4. Juvenile Growth Habit: Erect
   5. Leaf Color at Boot: Blue-Green
   6. Flag Leaf at Boot: Erect, Twisted, Waxy
   7. Auricle Color: White
   8. Days to 50% Heading: 91
   9. Anther Color: Yellow
   10. Stem Color: Anthocyanin absent
   11. Plant Height (cm): 69.9
   12. Internodes: Hollow
   13. Spike Shape: Tapering
   14. Spike Density: Mid Dense
   15. Spike Curvature: Inclined
   16. Awn Type: Awned
   17. Awn Color: White
   18. Glume Color: White/Amer
   19. Glume Length: Medium
   20. Shoulder Shape: Square
   21. Shoulder Width: Narrow
   22. Beak Shape: Acute
   23. Beak Length (S.M.L.VL): Medium
   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): 27.3
   30. Physiological/biochemical Traits:

      Variants and frequency: Less than .06% of the plants were rogued from the Breeder seed increase. Approximately 95% of the rogued variant plans were taller height and the other variants were awnless. Up to 1.0% variant plants may be encountered in subsequent generations.

6. Syngenta Seeds, Inc. maintains seed stock and certified classes of Foundation, Registered and Certified. Syngenta Seeds, Inc. will maintain the variety by the head row method to produce breeder seed if needed.

7. Certified seed will be available in the fall of 2015.

8. Plant Variety Protection is anticipated in 2014 and SY Llano may only be sold as a class of certified seed.

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

Variety Name        SY Llano
Experimental Designation(s) AP09T9614
Date NA&MLVRB first accepted this variety        April 04, 2014
Date(s) previous amendments were accepted N/A
Date amendment submitted        June 30, 2014
Date recommended by the NVRB        August 06, 2014
Wheat

SY Monument
(Amended – Correction to Description in Original Application)

1. SY Monument is a hard red winter wheat bred and developed by Syngenta Seeds, Inc.

2. SY Monument is the result of a cross made in 2003 by Syngenta Seeds, Inc. in Junction City, KS. SY Monument was selected for height, straw strength, yield, bread making quality and resistance to leaf and stripe rust.

3. SY Monument is best adapted to the winter wheat growing areas of the High Plains.

4. SY Monument has a high level of tolerance to low pH soils.

5. Identifying characteristics – insert the descriptive term from the Objective Description (pages 3-5) except where indicated:

1. Kind: Hard Red
   If common, provide appropriate kernel characteristic: (Hard Red, Soft Red, Hard White, Soft White)

2. Seasonal Growth Habit: Winter
3. Coleoptile Color: White
4. Juvenile Growth Habit: Erect
5. Leaf Color at Boot: Green
6. Flag Leaf at Boot: Erect, non-twisted, waxy
7. Auricle Color: White
8. Days to 50% Heading: 127
9. Anthocyanin: Absent
10. Stem Color: Yellow
11. Plant Height (cm): 84
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: Oblique
21. Shoulder Width: Wide
22. Beak Shape: Acuminata
23. Beak Length (S.M.L.VL): Medium
24. Glume Pubescence: Absent
25. Seed Color: Red
26. Seed Shape: Ovate
27. Cheeks: Rounded
28. Brush Size (S,M,L): Medium
29. Avg 1,000 Kernel Wt (g): 36
30. Physiological/biochemical Traits:

Variants and frequency: Less than 1% of the plants were rogued from the breeder seed increase in Eaton, CO. Approximately 97% of the rogued variant plants were taller height wheats (8 to 15cm). The other variants were heads with different chaff color (red). Up to 1.0% variant plants may be encountered in subsequent generations.

6. Syngenta Seeds, Inc. maintains seed stock and certified classes of Foundation, Registered and Certified. Syngenta Seeds, Inc. will maintain the variety by the head row method to produce breeder seed if needed.

7. Certified seed will be available in the fall of 2015.

8. Plant Variety Protection is anticipated in 2014 and SY Monument may only be sold as a class of certified seed.

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

SY Soren

(Amended – Variants Change)

1. SY Soren (Experimental designation – (01S0263-28) is a hard red spring wheat bred and developed by Syngenta Seeds, Inc.

2. SY Soren originated from the cross “Norpro/Kelby” and was developed using a modified single seed descent breeding method. SY Soren was selected for high yield, good agronomics, general disease resistance and good overall bread making characteristics.

3. SY Soren has been primarily tested across North Dakota and surrounding states since 2005. It has yielded very well across the region relative to popular checks. It has good bread making quality intended for grain production.

4. SY Soren has moderate resistance to the prevalent races of leaf rust. It has shown good tolerance to leaf spotting diseases such as tan spot and septoria.

<table>
<thead>
<tr>
<th>Kind:</th>
<th>Hard Red Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td>If common, provide appropriate kernel characteristic:</td>
<td>(Hard Red, Soft Red, Hard White, Soft White)</td>
</tr>
</tbody>
</table>

2. Seasonal Growth Habit: Spring 16. Awn Type: Awned
5. Leaf Color at Boot: Green 19. Glume Length: Short
8. Days to 50% Heading: 57 22. Beak Shape: Acuminate
11. Plant Height (cm): 74 25. Seed Color: Red
15. Spike Curvature: Inclined 29. Avg 1,000 Kernel Wt (g): 34

30. Physiological/biochemical Traits:

Variants and frequency: About 0.8% of the plants were rogued from the Breeder seed increase in 2009. Approximately 95% of the variant plants were taller height wheat plants (8 to 30 cm.) and 5% were awnless wheat plants. Up to 1.0% variant plants may be encountered in subsequent generations.

6. Syngenta Seeds, Inc. maintains seed stock and certified classes of Foundation, Registered and Certified. Syngenta Seeds, Inc. will maintain the variety by the head row method to produce Breeder seed if needed.

7. Certified seed sales of SY Soren will be available in the spring of 2012.

8. Plant Variety Protection is anticipated in the fall of 2011 and SY Soren may only be sold as a class of certified seed.

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

Variety Name: SY Soren

Experimental Designation(s) 01S0263-28

Date NA&MLV RB first accepted this variety April 22, 2011

Date(s) previous amendments were accepted N/A

Date amendment submitted April 7, 2014

Date recommended by the NVRB August 06, 2014
SY Sky
(Amended – Correction to Description in Original Application)

1. SY Sky is a hard white winter wheat bred and developed by Syngenta Seeds, Inc.

2. SY Sky is the result of a cross made by Kansas State University and the F2 population shared in 1999. SY Sky was selected for yield, disease, quality and resistance to leaf rust.

3. SY Sky is best adapted to the winter wheat growing areas of Kansas.

4. SY Sky has moderate resistance to leaf rust.

5. Identifying characteristics – insert the descriptive term from the Objective Description (pages 3-5) except where indicated:

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

     Variants and frequency: Less than .8% of the plants were rogued from the breeder seed increase in Eaton, CO. 

     Approximately 98% of the rogued variant plants were taller height wheat plants (more than 8cm). Up to 1.0% variant plants may be encountered in subsequent generations.

6. Syngenta Seeds, Inc. maintains seed stock and certified classes of Foundation, Registered and Certified. Syngeta Seeds, Inc. will maintain the variety by the head row method to produce breeder seed if needed.

7. Certified seed will be available in the fall of 2015.

8. Plant Variety Protection is anticipated in 2014 and SY Sky may only be sold as a class of certified seed.

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

Variety Name SY Sky
Experimental Designation(s) BC98331-03$-11W
Date NA&MLVRB first accepted this variety April 04, 2014
Date(s) previous amendments were accepted N/A
Date amendment submitted June 30, 2014
Date recommended by the NVRB August 06, 2014
Triticale

SY TF 131

(Amended – Correction to Description in Original Application)

1. SY TF 131 is a tall semi-dwarf cultivar of winter triticale developed by Syngenta Seeds, Inc.

2. SY TF 131 was selected for its shorter stature, earlier maturity, substantially higher grain yields and vegetative biomass production ability.

3. SY TF 131 is best adapted to Southwest Oklahoma, the Rolling Plains of Texas and the Texas Cross Timbers Regions.

4. SY TF 131 possesses leaf rust tolerance, is moderately susceptible to stripe rust, and moderately resistant to stem rust.

5. Identifying characteristics – insert the appropriate descriptive term from the Objective Description

<table>
<thead>
<tr>
<th>Ploidy</th>
<th>Hexaploid</th>
<th>15. Awn Color:</th>
<th>Yellow</th>
</tr>
</thead>
<tbody>
<tr>
<td>Photoperiod Reaction:</td>
<td>(no data)</td>
<td>17. Glume Color:</td>
<td>White</td>
</tr>
<tr>
<td>Winterhardiness:</td>
<td>Medium</td>
<td>18. Glume Length:</td>
<td>Long</td>
</tr>
<tr>
<td>Maturity:</td>
<td>Early</td>
<td>19. Glume Width:</td>
<td>Narrow</td>
</tr>
<tr>
<td>Height:</td>
<td>Tall Semi-Dwarf</td>
<td>20. Glume Shoulder Shape:</td>
<td>Wanting</td>
</tr>
<tr>
<td>Plant Color at Boot Stage:</td>
<td>Blue-Green</td>
<td>21. Glume Beak Shape:</td>
<td>Acute</td>
</tr>
<tr>
<td>Stem Anthocyanin:</td>
<td>Absent</td>
<td>22. Coleoptile Color:</td>
<td>Purple</td>
</tr>
<tr>
<td>Neck Hairiness:</td>
<td>None</td>
<td>23. Seed Shape:</td>
<td>Elliptical</td>
</tr>
<tr>
<td>Neck Shape:</td>
<td>Wavy</td>
<td>24. Seed Smoothness:</td>
<td>Slightly Wrinkled</td>
</tr>
<tr>
<td>Flag Leaf at Boot:</td>
<td>Twisted</td>
<td>25. Seed Brush Area:</td>
<td>Mid-Size</td>
</tr>
<tr>
<td>Spike Density:</td>
<td>Mid-Dense</td>
<td>26. Seed Brush Length:</td>
<td>Mid-Long</td>
</tr>
<tr>
<td>Spike Shape:</td>
<td>Clavate</td>
<td>27. Seed Color:</td>
<td>Red</td>
</tr>
<tr>
<td>Spike Awnedness:</td>
<td>Apically Awnletted</td>
<td>28. Seed Relative Size:</td>
<td>Medium</td>
</tr>
</tbody>
</table>

Unique physiological/biochemical traits:

Variants and frequency: Less than 0.07% of the plants were rogued from the Breeder seed. Approximately 91% of the rogued variant plants were taller height and the other variants were awned. Up to 1.0% variant plants may be encountered in subsequent generations.

6. Syngenta Seeds, Inc. maintains seed stock and certified classes of Foundation, Registered and Certified. Syngenta Seeds, Inc. will maintain the variety by the head row method to produce breeder seed if needed.

7. Limited amounts of certified seed may be available in the fall of 2015.


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

Variety Name  SY TF 131
Experimental Designation(s)  05tf131d
Date NA&MLVRB first accepted this variety  April 04, 2014
Date(s) previous amendments were accepted  N/A
Date amendment submitted  June 30, 2014
Date recommended by the NVRB  August 06, 2014
Triticale

SY TF 813
(Amended – Correction to Description in Original Application)

1. SY TF 813 is a tall semi-dwarf cultivar of winter triticale developed by Syngenta Seeds, Inc.

2. SY TF 813 was selected for its earlier maturity, productivity, substantially higher grain yields, vegetative biomass production ability and silage harvests.

3. SY TF 813 is best adapted to silage and grazing production systems in the Texas Rolling Plains and the Texas Panhandle. SY TF 813 is sufficiently winter hardy to withstand the cold temperatures characteristic of the Texas Panhandle and western Kansas.

4. SY TF 813 possesses leaf rust tolerance and is moderately resistant to stripe rust.

5. Identifying characteristics – insert the appropriate descriptive term from the Objective Description

1. Ploidy
   - Hexaploid

2. Growth Habit:
   - Winter

3. Photoperiod Reaction:
   - (no data)

4. Winterhardiness:
   - Medium High

5. Maturity:
   - Early

6. Height:
   - Semi-Dwarf

7. Plant Color at Boot Stage:
   - Green

8. Stem Anthocyanin:
   - Absent

9. Neck Hairiness:
   - Moderate

10. Neck Shape:
    - Wavy

11. Flag Leaf at Boot:
    - Twisted, Waxy Bloom

12. Spike Density:
    - Mid-Dense

13. Spike Shape:
    - Clavate

14. Spike Awnedness:
    - Awnletted

15. Awn Color:
    - White

16. Glume Pubescence:
    - Slight Pubescent

17. Glume Color:
    - White

18. Glume Length:
    - Long

19. Glume Width:
    - Narrow

20. Glume Shoulder Shape:
    - Wanting

21. Glume Beak Shape:
    - Acute

22. Coleoptile Color:
    - White

23. Seed Shape:
    - Elliptical

24. Seed Brush Area:
    - Mid

25. Seed Brush Length:
    - Mid-Long

26. Seed Color:
    - Red

27. Seed Relative Size:
    - Medium-Large

Unique physiological/biochemical traits:

Variants and frequency: Less than 0.2% of the plants were rogued from the Breeder seed. Approximately 50% of the rogued variant plants were taller height and the other variants were awned. Up to 1.0% variant plants may be encountered in subsequent generations.

6. Syngenta Seeds, Inc. maintains seed stock and certified classes of Foundation, Registered and Certified. Syngenta Seeds, Inc. will maintain the variety by the head row method to produce breeder seed if needed.

7. Limited amounts of certified seed may be available in the fall of 2015.


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

Variety Name: SY TF 813

Experimental Designation(s): 08TF13

Date NA&MLVRB first accepted this variety: April 04, 2014

Date(s) previous amendments were accepted: N/A

Date amendment submitted: June 30, 2014

Date recommended by the NVRB: August 06, 2014
Barley
BG 104

1. “BG 104” (FAS09-00104, FSN09-0104), six-rowed spring barley, was developed by WestBred/a Unit of Monsanto, (Ownership of all barley germplasm has been transferred from WestBred/Monsanto to Highland Specialty Grain).

2. BG 104 was selected for hulless and shrunken endosperm, waxy starch content, yield, and standability following the initial cross and subsequent pedigree breeding procedures.

3. BG 104 was tested against established check varieties in the irrigated areas of Idaho Falls, ID, Bozeman, MT, and the dryland area of Belfield, ND and has shown good adaptation those areas.

4. BG 104 is moderately resistant to powdery mildew and leaf rust. BG 104 is resistant to stem rust.

5. Identifying characteristics:

   1. Growth Habit: Spring
   2. Spike: Six-row
   3. Coleoptile Color: Green
   4. Juvenile Growth Habit: Semi-erect
   5. Plant Tillering: Intermediate
   6. Leaf Color at Boot: Green
   7. Flag Leaf at Boot: Erect straight n/waxy
   8. Pubescence on Leaf Blade: No
   9. Pubescence on Leaf Sheath: No
   10. Auricle Color: White
   11. Heading Date (see below): 61 days
   12. Stem Color: White
   13. Neck Shape: Straight
   14. Collar Shape: Open
   15. Spike Exsertion: Full
   16. Plant Height (see below): 53.4 cm
   17. Spike Shape: Oblong
   18. Spike Density: Mid-Dense
   19. Spike Position at Maturity: Inclined
   20. Hairiness of Rachis Edge: Covered
   21. Rachilla Hair Length: Long
   22. Lemma Awns: Straight
   23. Length of Lemma Awns: Short
   24. Lemma Awn Surface: Rough
   25. Glume Hairiness: Covered
   26. Glume Awn Surface: Rough
   27. Glume/Lemma Adherence: N/A
   28. Texture (if covered): Colorless
   29. Aleurone Color: Colorless
   30. Avg 1,000 Kernel Wt (g): 25.6 gm

   NOTE: The sheath of the flag leaf is waxy while the blade is not waxy.
   NOTE: Having a shrunken endosperm greatly reduces the 1000-Kernel weight.
   Heading date: 61 days which is: 2 days LATER than: BG 006

   Plant height: 53.4 cm, which is 2.5 cm Shorter than BG 006

   Physiological or biochemical traits: This is a naked, shrunken endosperm barley with high beta-glucan content.

   Variants and frequency: BG 104 may contain a hulled or long awned variant at frequencies of up to 18/10000 seed (0.18%). No other variants are known to occur and BG 104 is a stable and uniform variety.

6. Highland Specialty Grains will maintain Breeder seed by planting head rows when necessary. The certified classes of seed shall be: Foundation Registered, and Certified.

7. Certified seed will be contracted for sale in spring of 2016.

8. Application for PVP is anticipated with the option that BG 104 can be sold by variety name only.

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

Date this application was submitted: June 23, 2014
Date recommended by the NVRB: August 06, 2014
Barley

BG 203

1. “BG 203” (FA5S09-00203, F5N09-0203), two-rowed spring barley, was developed by WestBred/a Unit of Monsanto, from the cross of BG 705/GSHO 2071 in Fargo, ND in 2008.

2. BG 203 was selected for hulless and shrunken endosperm, waxy starch content, yield, and standability following the initial cross and subsequent pedigree breeding procedures.

3. BG 203 was tested against established check varieties in the irrigated area of Idaho Falls, ID and dryland area of Rosali, WA. It has shown good adaptation to these areas.

4. BG 203 has not been extensively tested enough for disease or pests to make claims of its resistance.

5. Identifying characteristics –

- Growth Habit: Spring
- Spike: Two-Row
- Coleoptile Color: Green
- Juvenile Growth Habit: Semi-erect
- Plant Tillering: Intermediate
- Leaf Color at Boot: Green
- Flag Leaf at Boot: Erect straight n/waxy
- Pubescence on Leaf Blade: No
- Pubescence on Leaf Sheath: No
- Stem Color: White
- Neck Shape: Straight
- Collar Shape: Open
- Spike Exsertion: Full
- Plant Height (see below): 16. Plant Shape:
- Spike Shape: Oblong
- Spike Density: Mid-Dense
- Spike Position at Maturity: Nodding
- Hairiness of Rachis Edge: Lacking
- Rachilla Hair Length: Long
- Lemma Awns: Straight
- Length of Lemma Awns: Long
- Lemma Awn Surface: Rough
- Glume Hairiness: Covered
- Glume Awn Surface: Rough
- Glume/Lemma Adherence: Naked
- Texture (if covered): N/A
- Aleurone Color: Colorless
- Avg 1,000 Kernel Wt (g): 32.9

- Heading date: 6/18 which is: 5 days EARLIER than: Champion
- Plant height: 87.8 cm, which is: 21.4 cm SHORTER than: Champion

Physiological or biochemical traits:
BG 203 is a naked, shrunken endosperm barley with high beta-glucan content.

- Variants and frequency: BG 203 may contain a hulled variant at frequencies of up to 18/10000 seed (0.18%). No other variants are known to occur and BG 203 is a stable and uniform variety in appearance and performance.

- Highland Specialty Grains will maintain Breeder seed by planting head rows when necessary. The certified classes of seed shall be: Foundation Registered, and Certified.

- Certified seed will be contracted for sale in spring of 2015.

- Application for PVP is anticipated with the option that BG 203 can be sold by variety name only.

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

Date this application was submitted: Jun 23, 2014
Date recommended by the NVRB: Aug 27, 2014