A REPORT OF THE

# SMALL GRAIN VARIETY REVIEW BOARD

## ASSOCIATION OF OFFICIAL SEED CERTIFYING AGENCIES

**SMALL GRAIN VARIETY REVIEW BOARD REPORT ©2016**



OCT 2016

SMALL GRAIN VARIETY REVIEW BOARD

ASSOCIATION OF OFFICIAL SEED CERTIFYING AGENCIES
October 2016

The Association of Official Seed Certifying Agencies (AOSCA), Small Grain Variety Review Board (SGVRB), reviewed the following varieties on August 9, 2016. 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:

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,

Steve Schuler, Chairman
Small Grains Variety Review Board

# 2016 AOSCA SMALL GRAIN VARIETY REVIEW BOARD

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

# Wheat

## APB335
## 335 (Exp)

1. APB335 is a spring durum wheat variety developed by Arizona Plant Breeders.

2. APB335 was selected for high yield, superior pasta quality, lodging resistance, and resistance to stripe rust using the Male Sterile Facilitated Recurrent Selection method.

3. APB335 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. APB335 has demonstrated resistance to the prevalent races of Puccinia striiformis in the Central Valley of California.

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

| | | | |
|---|---|---|---|
| 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 "APB335" are breeder, foundation, registered, and certified. Arizona Plant Breeders will maintain the variety by the head-row method to produce breeder seed as needed. APB335 will have a royalty fee and licensing agreement required.

7. Certified seed of APB335 will likely be available for planting in the fall of 2016.

8. Application for PVP is anticipated with the option that APB335 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: Jun 30, 2016 Date recommended by the VRB: Oct 11, 2016

# Wheat

## LCS Anchor
## LNR12-0283 (Exp)

1. LCS Anchor is a hard red spring wheat developed by Limagrain Cereal Seeds. It was tested under the experimental number LNR12-0283.

2. LCS Anchor 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 Anchor is adapted to Eastern 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-except where indicated:

| | | | |
|---|---|---|---|
| 1. Kind: | Common, Hard Red Spring Wheat | | |
| If common, provide appropriate kernel characteristic: (Hard Red, Soft Red, Hard White, Soft White) | | | |
| 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: | Blue-green | 19. Glume Length: | Medium |
| 6. Flag Leaf at Boot: | Recurved, Not Twisted, Wax Absent | 20. Shoulder Shape: | Oblique |
| 7. Auricle Color: | Purple | 21. Shoulder Width: | Medium |
| 8. Day(s) to 50% Heading: | 199 | 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: | Ovate |
| 13. Spike Shape: | Oblong | 27. Cheeks: | Rounded |
| 14. Spike Density: | Lax | 28. Brush Size (S,M,L.): | Short |
| 15. Spike Curvature: | Erect | 29. Avg 1,000 Kernel Wt (g): | 31 |

30. Physiological/biochemical Traits: None

Variants and frequency: LCS Anchor may contain up to 5 per 1000 taller plants up to two spike lengths above main canopy height.

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 head-rowing and/or rogueing and removal of off-types in bulk seedings as necessary.

7. Foundation and Registered seed will be available in Spring 2017.

8. PVP will be applied for without the Title V option in Spring 2017.

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

Date this application was submitted: Jun 30, 2016 Date recommended by the VRB: Sep 1, 2016

# Wheat

## LCS Panther
## 08364-4 (Exp)

1. LCS Panther is a soft red winter wheat developed by Limagrain Cereal Seeds. It was tested under the experimental number 08364-4.

2. LCS Panther was selected using a modified bulk breeding procedure on the basis of grain yield, general agronomics, resistance to prevalent races of Leaf Rust and Yellow Rust, and Fusarium Head Blight in the Eastern US.

3. LCS Panther is adapted to the Soft Red Wheat growing regions of Virginia, Ohio, and Missouri.

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-except where indicated:

| | | | |
|---|---|---|---|
| 1. Kind: | Common, Soft Red Winter Wheat | | |
| If common, provide appropriate kernel characteristic: (Hard Red, Soft Red, Hard White, Soft White) | | | |
| 2. Seasonal Growth Habit: | Winter | 16. Awn Type: | Apically Awnletted |
| 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 Absent | 20. Shoulder Shape: | Square |
| 7. Auricle Color: | White | 21. Shoulder Width: | Medium |
| 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): | 81 | 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.): | Long |
| 15. Spike Curvature: | Erect | 29. Avg 1,000 Kernel Wt (g): | 35.6 |

30. Physiological/biochemical Traits: none

Variants and frequency: LCS Panther may contain up to 0.8% tall awnletted plants of blue-green or green color and up to 1 per 1000 awned 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 head-rowing and/or rogueing and removal of off-types in bulk seedings as necessary.

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

8. PVP will not be applied for.

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

Date this application was submitted: Jun 30, 2016 Date recommended by the VRB: Aug 9, 2016

# Wheat

## 122001W
## 05S0157-4 (Exp)

1. 122001W is hard red spring wheat bred and developed by Syngenta Seeds, Inc.

2. 122001W was selected for height, straw strength, maturity, and foliar diseases.

3. 122001W was tested in and is broadly adapted in the spring wheat production areas of the Northern Plains.

4. 122001W is moderately resistant to stem rust and moderately resistant to leaf rust. It has intermediate tolerance to FHB. 122001W is moderately resistant to foliar leaf spotting diseases.

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

| | | | |
|---|---|---|---|
| 1. Kind: | Common, Hard Red Spring Wheat | | |
| If common, provide appropriate kernel characteristic: (Hard Red, Soft Red, Hard White, Soft White) | | | |
| 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 |
| 5. Leaf Color at Boot: | Green | 19. Glume Length: | Medium |
| 6. Flag Leaf at Boot: | Erect, Twisted, Wax Absent | 20. Shoulder Shape: | Rounded |
| 7. Auricle Color: | White | 21. Shoulder Width: | Narrow |
| 8. Day(s) to 50% Heading: | 56 | 22. Beak Shape: | Acute |
| 9. Anther Color: | Yellow | 23. Beak Length (S.M.L.VL): | M |
| 10. Anthoncyanin: | Absent | 24. Glume Pubescence: | Absent |
| 11. Plant Height (cm): | 77 | 25. Seed Color | Red |
| 12. Internodes: | Hollow | 26. Seed Shape: | Ovate |
| 13. Spike Shape: | Tapering | 27. Cheeks: | Rounded |
| 14. Spike Density: | Middense | 28. Brush Size (S,M,L.): | M |
| 15. Spike Curvature: | Inclined | 29. Avg 1,000 Kernel Wt (g): | 32 |

30. Physiological/biochemical Traits:

Variants and frequency: Less than 0.8% of the plants were rogued from the breeder seed increase at Berthoud, 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/progeny method to produce seed as needed.

7. Certified seed of 122001W will likely be available for planting in spring of 2017.

8. Application for PVP is anticipated.

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

Date this application was submitted: Jul 4, 2016 Date recommended by the VRB: Sep 1, 2016

# Wheat

## SY Rockford
## 07S0027-3 (Exp)

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

2. SY Rockford was selected for height, straw strength, maturity, foliar diseases, yield and end use quality.

3. SY Rockford was tested in and is broadly adapted in the spring wheat production areas of the Northern Plains.

4. SY Rockford is moderately resistant to stem rust and intermediate to leaf rust. It is moderately resistant to Fusarium Head Blight.

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

| | | | |
|---|---|---|---|
| 1. Kind: | Common, Hard Red Spring Wheat | | |
| If common, provide appropriate kernel characteristic: (Hard Red, Soft Red, Hard White, Soft White) | | | |
| 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 |
| 5. Leaf Color at Boot: | Green | 19. Glume Length: | Medium |
| 6. Flag Leaf at Boot: | Erect, Twisted, Wax Absent | 20. Shoulder Shape: | Oblique |
| 7. Auricle Color: | White | 21. Shoulder Width: | Narrow |
| 8. Day(s) to 50% Heading: | 59 | 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): | 79 | 25. Seed Color | Red |
| 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: | Erect | 29. Avg 1,000 Kernel Wt (g): | 32 |

30. Physiological/biochemical Traits:

Variants and frequency: SY Rockford has been uniform and stable since 2013. Less than 0.8% of the plants were rogued from the breeder seed increase at Berthoud, 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/progeny method to produce seed as needed.

7. Certified seed of SY Rockford will likely be available for planting in spring of 2017.

8. Application for PVP is anticipated.

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

Date this application was submitted: Jul 4, 2016 Date recommended by the VRB: Sep 1, 2016

# Wheat

## SY Saltese
## 06PN3024-2

1. SY Saltese is soft white spring wheat bred and developed by Syngenta Seeds, Inc

2. SY Saltese was selected for height, early maturity, uniformity, agronomics and disease reaction with acceptable end use quality.

3. SY Saltese was tested in the spring wheat growing areas (12 to 20-inch moisture zones) of the Pacific Northwest (PNW) and was determined to be adapted to this area.

4. SY Saltese has shown a tolerant reaction to the current strains of stripe rust in the PNW.

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

| | | | |
|---|---|---|---|
| 1. Kind: | Common, Soft White Spring Wheat | | |
| If common, provide appropriate kernel characteristic: (Hard Red, Soft Red, Hard White, Soft White) | | | |
| 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 |
| 5. Leaf Color at Boot: | Green | 19. Glume Length: | Medium |
| 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: | 164 | 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): | 85 | 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.): | Short |
| 15. Spike Curvature: | Erect | 29. Avg 1,000 Kernel Wt (g): | 46.6 |

30. Physiological/biochemical Traits:

Variants and frequency: Up to 1% of the plants were rogued from seed production The majority of the variant plants were taller height wheat plants (3 to 6 cm). With a lesser awnless (bronzed and white chaff) and bronze awn chaff may express in subsequent generations. The red seeded variant up to 0.7% may also be identified in 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/progeny method to produce seed as needed.

7. Certified seed of SY Saltese will likely be available for planting in spring of 2017.

8. Application for PVP is anticipated.

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

Date this application was submitted: Jul 4, 2016 Date recommended by the VRB: Sep 1, 2016

# Barley

## P15Y8009 (Exp)

1. P15Y8009 is a 2-row spring hay barley developed by Phoenix Seed, Inc.

2. P15Y8009 was developed using the pedigree method with selection for hood type, fertility, straw strength, height, tillering, and forage quality.

3. P15Y8009 as been tested in Fargo, ND, Bozeman, MT and Northern California and is adapted to the Northern Great Plains as a forage barley.

4 P15Y8009 has not been tested for disease reactions.

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

| | | | |
|---|---|---|---|
| 1. Growth Habit: | Spring | 16. Plant Height (see below): | 87.7 |
| 2. Spike: | 2 row | 17. Spike Shape: | Oblong |
| 3. Coleoptile Color: | Green | 18. Spike Density: | Mid-dense |
| 4. Juvenile Growth Habit: | Erect | 19. Spike Position at Maturity: | Erect |
| 5. Plant Tillering: | High | 20. Hairiness of Rachis Edge: | Covered |
| 6. Leaf Color at Boot: | Green | 21. Rachilla Hair Length: | Long |
| 7. Flag Leaf at Boot: | Recurved, Not Twisted, Waxy Bloom | 22. Lemma Awns: | Sessile Hoods |
| 8. Pubescence on Leaf Blade: | No | 23. Length of Lemma Awns: | Short |
| 9. Pubescence on Leaf Sheath: | No | 24. Lemma Awn Surface: | Smooth |
| 10.:Auricle Color: | White | 25. Glume Hairiness: | Covered |
| 11.Heading Date (see below): | 184.2 | 26. Glume Awn Surface: | Smooth |
| 12. Stem Color: | White | 27. Glume/Lemma Adherence: | Covered |
| 13. Neck Shape: | Straight | 28. Texture (if covered): | Wrinkled |
| 14. Collar Shape: | Closed | 29. Aleurone Color: | Colorless |
| 15. Spike Exsertion: | Slight | 30. Avg 1,000 Kernel Wt (g): | 47 |

Heading date: 184.2 which is: 1 Day(s) (EARLIER) (LATER) than: Stockford

Plant height: 87.7 cm, which is 3.6 cm (SHORTER) (TALLER) (SAME AS) Stockford

Physiological or biochemical traits: P15Y8009 has deficiens laterals.

Variants and their frequency: P15Y8009 may contain up to 0.25% of any of the following variants in subsequent generations: medium talls, non-deficiens laterals or non-hooded awns.

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 2017.

8. Application for PVP is anticipated for P15Y8009. 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: Jul 5, 2016 Date recommended by the VRB: Sep 1, 2016

# Triticale

## APB001
## APB770001 (Exp)

1. APB001 (Experimental number APB770001) is a spring triticale developed by Arizona Plant Breeders, Inc.

2. APB001 was selected for high forage yield and forage quality.

3. APB001 has been tested and found to be well adapted to triticale producing regions of the central valley of California and Washington.

4 APB001 has excellent forage yield and excellent forage quality. Data was collected over the course of 2016 and 2015 at two locations each year in CA and WA for a total of 4 site years of data.

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

| | | | |
|---|---|---|---|
| 1. Ploidy: | Hexaploid | 15. Awn Color: | White |
| 2. Growth Habit: | Spring | 16. Glume Pubescence: | Slightly Pubescent |
| 3. Photoperiod Reaction: | Insensitive | 17. Glume Color: | White |
| 4. Winterhardiness: | Low | 18. Glume Length: | Long |
| 5. Maturity: | Mid-season | 19. Glume Width: | Narrow |
| 6. Height: | Mid-Tall | 20. Glume Shoulder Shape: | Oblique |
| 7. Plant Color at Boot Stage: | Green | 21. Glume Beak Shape: | Acuminate |
| 8. Stem Anthocyanin: | Absent | 22. Coleoptile Color: | White |
| 9. Neck Hairiness: | Slight | 23. Seed Shape: | Ovate |
| 10. Neck Shape: | Straight | 24. Seed Smoothness: | Wrinkled |
| 11. Flag Leaf at Boot: | Twisted, Recurved, Present | 25. Seed Brush Area: | Mid-Size |
| 12. Spike Density: | Mid-Dense | 26. Seed Brush Length: | Mid-Long |
| 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: Plants six inches taller occur at a rate of 1 in every 1,000 plants.

6. Recognized classes of APB001 are breeder, foundation, registered, and certified. Arizona Plant Breeders will maintain the variety by the head-row method to produce breeder seed as needed. APB001 will have a royalty fee and licensing agreement required.

7. Certified seed of APB001 will most likely be available for sale in the spring of 2017.

8. Application for PVP is anticipated with the option that APB001 can be 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: Jul 5, 2016 Date recommended by the VRB: Oct 11, 2016

# Triticale

## APB246
## APB70246 (Exp)

1. APB246 (Experimental number APB470246) is a spring triticale developed by Arizona Plant Breeders, Inc.

2. APB246 was selected for high forage yield and good feed quality.

3. APB246 has been tested and found to be well adapted to triticale producing regions of the central valley of California.

4 APB246 has excellent forage yield, good feed quality, and is resistant to lodging. Lodging data was taken in 2016 and 2015 at two separate locations each year in CA for a total of 4 site years of data.

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

| | | | |
|---|---|---|---|
| 1. Ploidy: | Hexaploid | 15. Awn Color: | White |
| 2. Growth Habit: | Spring | 16. Glume Pubescence: | Glabrous |
| 3. Photoperiod Reaction: | Insensitive | 17. Glume Color: | White |
| 4. Winterhardiness: | Low | 18. Glume Length: | Long |
| 5. Maturity: | Mid-Season | 19. Glume Width: | Narrow |
| 6. Height: | Short | 20. Glume Shoulder Shape: | Oblique |
| 7. Plant Color at Boot Stage: | Blue-Green | 21. Glume Beak Shape: | Acuminate |
| 8. Stem Anthocyanin: | Absent | 22. Coleoptile Color: | White |
| 9. Neck Hairiness: | None | 23. Seed Shape: | Ovate |
| 10. Neck Shape: | Straight | 24. Seed Smoothness: | Slightly Wrinkled |
| 11. Flag Leaf at Boot: | Not Twisted, Erect, Present | 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: | Medium |

Unique 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 APB246 are breeder, foundation, registered, and certified. Arizona Plant Breeders will maintain the variety by the head-row method to produce breeder seed as needed. APB246 will have a royalty fee and licensing agreement required.

7. Certified seed of APB246 will most likely be available for sale in the spring of 2017.

8. Application for PVP is anticipated with the option that APB246 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: Jul 5, 2016 Date recommended by the VRB: Oct 11, 2016

# Triticale

## APB249
## APB70249 (Exp)

1. APB249 (Experimental number APB470249) is a spring triticale developed by Arizona Plant Breeders, Inc.

2. APB249 was selected for high forage yield and good feed quality.

3. APB249 has been tested and found to be well adapted to triticale producing regions of the central valley of California.

4 APB249 has excellent forage yield, good feed quality, and is resistant to lodging. Lodging data was taken in 2016 and 2015 at two separate locations each year in CA for a total of 4 site years of data.

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

| | | | |
|---|---|---|---|
| 1. Ploidy: | Hexaploid | 15. Awn Color: | White |
| 2. Growth Habit: | Spring | 16. Glume Pubescence: | Glabrous |
| 3. Photoperiod Reaction: | Insensitive | 17. Glume Color: | White |
| 4. Winterhardiness: | Low | 18. Glume Length: | Long |
| 5. Maturity: | Mid-Season | 19. Glume Width: | Narrow |
| 6. Height: | Mid-Tall | 20. Glume Shoulder Shape: | Oblique |
| 7. Plant Color at Boot Stage: | Blue-Green | 21. Glume Beak Shape: | Acuminate |
| 8. Stem Anthocyanin: | Absent | 22. Coleoptile Color: | White |
| 9. Neck Hairiness: | None | 23. Seed Shape: | Ovate |
| 10. Neck Shape: | Straight | 24. Seed Smoothness: | Slightly Wrinkled |
| 11. Flag Leaf at Boot: | Twisted, Erect, Present | 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: | Medium |

Unique 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 APB249 are breeder, foundation, registered, and certified. Arizona Plant Breeders will maintain the variety by the head-row method to produce breeder seed as needed. APB249 will have a royalty fee and licensing agreement required.

7. Certified seed of APB249 will most likely be available for sale in the spring of 2017.

8. Application for PVP is anticipated with the option that APB249 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: Jul 5, 2016 Date recommended by the VRB: Oct 11, 2016