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# 2017 Small Grain and Grain Legume Report

## Northern Idaho Small Grain and Grain Legume Research and Extension Program

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College of Agricultural and Life Sciences

Cover: University of Idaho winter wheat variety trials near Nezperce, Idaho, at the 2017 Prairie Area Crop & Conservation Tour. Photo by Doug Finkelnburg, University of Idaho Area Extension Educator.

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*Northern Idaho Small Grain and Grain Legume Research and Extension Program*

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Idaho Wheat Commission
USA Pea and Lentil Council
Idaho Barley Commission

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Cole Riggers – Craigmont
Roger Riggers – Craigmont
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Russ Zenner – Genesee
Clint Zenner – Genesee
John Frei – Ferdinand
Bert Henriksen – Lewiston
Neil Uptmor – Lewiston
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Doug Bruce – Tensed

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## Introduction

This report summarizes the performance of winter wheat, spring wheat, winter barley, spring barley, winter pea, spring pea, lentil and chickpea varieties tested in extension variety trials conducted in northern Idaho during the 2016-2017 crop season. The variety trials were located in cooperators' fields at 9 test sites in Lewis, Nez Perce, Latah, Benewah and Boundary counties and on the University of Idaho Research and Extension Center farm in Moscow (Plant Sciences Farm). Specific trial locations and management practices used at each of the trial locations are listed in Table 1.

Plant breeding and extension testing programs strive to increase yield potential through enhanced disease and insect resistance, winter hardiness, straw strength and other agronomic factors. In addition, varieties are developed for improved end-use quality and new markets. A more detailed description of variety development, cooperative extension testing and evaluation, and seed production programs is given in the University of Idaho publication CIS 976 titled, "Small Grain Variety Development and Adaptation in Idaho". Additional variety performance data for northern Idaho and the rest of the state can be viewed at the website www.extension.uidaho.edu/cereals. The northern Idaho Extension variety-testing program evaluates the relative performance of cereal and legume varieties grown in various northern Idaho environments under a range of commercial production conditions. Breeding lines that have shown promise through regional, public and private testing programs are evaluated along with leading commercially released varieties.

Increased field crop yield is the result of a combination of improved agronomic practices and advances in variety development. Trials reported in this publication help producers compare new varieties with widely grown varieties using field production practices common for their area. The provided information represents crop performance results from specific locations, production practices, and environmental conditions. Relative performance of varieties can change when tested under other environments and production practices. Evaluation of any variety included in these trials should not be construed as recommending any variety over varieties not included in the trials.

## Cereal Test Procedures

Seven winter cereal trials were planted in northern Idaho in the fall of 2016 and eight spring cereal trials were planted in the spring of 2017. For each crop, the seeding rate for all entries was a uniform number of seeds planted per square foot (spsf). These rates were determined by weighing 1,000 seeds of each cereal variety. Winter wheat and spring barley were planted at 23 spsf, spring wheat at 28 spsf, and winter barley at 21 spsf. Winter wheat, winter barley, spring wheat, and spring barley seeds were treated with Vibrance Extreme at 2.8 oz/100 lbs seed plus Sharda 1.0 oz/100 lbs seed. All plots were seeded 20 feet long. Plots in conventional tillage systems were seeded on 5-foot centers using a double-disc opener with 7 rows, 7-inches apart. Direct-seeded trials had five paired rows with 3-inch spacing and 10-inch from center to center of each opener. The direct-seed drill is equipped with Flexi-Coil Stealth openers that allow fertilizer to be banded below and between the paired rows. Typical cereal seeding depth varied from 0.75 to 1.5 inches depending on soil texture and moisture conditions. At each location, each variety entry was replicated four times in a randomized complete block design. After plants were well established, the beds were cut back to a plot size length of 15 feet with an application of glyphosate using a tractor-mounted, shielded sprayer between plots. For most trials conducted in collaboration with a grower cooperator, pesticides were applied by the grower while treating the remainder of the field surrounding the trial. Fertilizers and pesticides used in the trials are listed in Table 1 for the sites where the information was provided. Planting and harvesting operations by University of Idaho personnel were timed to approximately coincide with the cooperator’s operations.

Prior to harvest, mature plant height was recorded, each plot was evaluated for lodging and plot length was measured to more accurately determine the harvestable area for each plot. Cereal plant height is the length of the plant from the soil surface to the tip of the head (awns excluded). For lodging, the affected area was

scored from 0% to 100%, with 0% equal to no lodging and 100% being completely lodged. After harvest, each small grain entry at each location was evaluated for grain yield and test weight. Cereal test weight was reported in pounds per standard bushel. Cereal yields were reported in bushels per acre, using a standard 60 pounds per bushel conversion factor for wheat and 48 pounds per bushel for barley. Percentage grain plumps and thins were measured for barley. Plumpness is the percent of the sample that stayed on top of a 5.5/64-inch slotted screen after shaking. Thin percentage is the portion of the sample that went through a 5.5/64-inch slotted screen. Wheat whole grain protein at 12% moisture was measured at the University of Idaho Wheat Quality Laboratory at Aberdeen using Near Infrared Spectrometry (NIRS) technology. For winter and spring wheat samples, all four replications were tested for protein, but the barley samples consisted of a single composite sample for each variety at each location.

## Legume Test Procedures

In the fall of 2016, two winter pea trials were established using a seeding rate of 10 spsf. In the spring of 2017, spring pea, lentil and chickpea trials were seeded near Craigmont, Genesee and Moscow. For each legume variety, 1,000 seeds were weighed and seeding rates calculated to give a uniform planting density of pea at 8 spsf, lentil at 8 spsf, and chickpea at 5 spsf. Spring pea and lentil seed were treated with an Apron (0.16 oz/cwt), Maxim (0.08 oz/cwt), Cruiser (0.5 oz/cwt), and molybdenum (0.1 oz/cwt) mix; and chickpea seed was treated Apron (0.2 oz/cwt), Maxim (0.08 oz/cwt), Mertect (2.04 oz/cwt), Cruiser (0.5 oz/cwt), and molybdenum (0.1 oz/cwt). All winter and spring legume plots were established in beds similar to the cereal trials; they were planted on 20-ft long beds that were cut back to 15-ft plots. Planting depths were between 1 and 1.5 inches for lentils and between 1.5 and 2.5 inches for pea and chickpea. Due to wider row spacing between plots, particularly for peas, chemical weed control was supplemented with hand weeding when necessary. Legumes were evaluated for vine length (pea) or plant height (lentil and chickpea), canopy height at harvest, seed yield, 100-seed weight and seed size (chickpea only). Lentil or chickpea plant height or pea vine lengths were measured from the soil surface to the end of the growing point on the main stem. Plant height and vine length measurements were recorded several weeks prior to harvest when plant tissue was green. Pea and lentil canopy height was measured from the soil surface to the average height of the canopy immediately prior to harvest. Seed yields were expressed in pounds per acre. Chickpea seed was sized by shaking 250 g of seed through screens. The screen sizes included 25/64”, 22/64” and 20/64”.

## Statistical Interpretation

Data in the tables is sorted by yield with the highest yielding entries listed first. The overall trial average is shown at the bottom of each table. The least significant difference (LSD) and the coefficient of variation (CV) are listed. The LSD is given at the 5 percent error level and aids in comparing varieties. If the measured values of any two varieties within a column differ by the LSD value or greater, they may be considered different with a confidence level of 95%. If the measured values are less than the LSD value, the differences may be due to random error rather than actual varietal differences. If no significant statistical differences were found among varieties, ‘ns’ (not significant) is shown for the LSD. The CV listed in the tables is given as a general measurement of the precision of each experiment. Lower CV percentage values indicate lower experimental variation and greater precision. A higher CV value indicates abnormal variation within the trial that could be due to external factors such as animal grazing, hail damage or other variable stress on the plants. CV values were not averaged across trials or years.

Variety choice should take into consideration as much performance data as possible with comparisons across years and locations. In addition to yield, other factors such as end-use quality, disease and insect resistance, lodging tendency, maturity, plant height, winter hardiness, test weight, and any observations from grower experience can be used in deciding on which variety to plant. Due to seasonal variation, caution should be taken when looking at the results from a single growing season. A summary of released varieties tested during the 2016-2017 growing season is listed in Table 2.

**Table 1. Trial locations and management information for the 2016-2017 Northern Idaho Extension variety trials.**

| County | Nursery Location | Rainfall Zone (inches) | Elevation (feet) | Production System | Planting Date | Harvest Date | Previous Crop | Fertilizer N-P-K-S (lb/A)* | Chemical | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Product Name | Rate |
| **Winter Cereals - Soft White Winter Wheat** | | | | | | | | | | |
| Lewis | Nezperce | 22” | 3200’ | Direct Seed | 10/11/16 | 8/9/17 | Chickpeas | 110-50-10-22 (f)<br>29-13-6-10 (s) | Ally Xtra<br>Carnivore<br>Osprey<br>Priaxor<br>Propiconazole | 0.4 oz/A<br>20 oz/A<br>4 oz/A<br>2 oz/A<br>4 oz/A |
| Nez Perce | Lewiston (Tammany) | 14” | 1800’ | Conventional Tillage | 10/3/16 | 7/21/17 | Fallow | 120-30-0-20-10 (Cl) (f)<br>35-0-0-0 (s) | Osprey<br>Huskie<br>Orion<br>Priaxor<br>Propiconizol | 4.75 oz/A<br>13.5 oz/A<br>17 oz/A<br>2 oz/A<br>4 oz/A |
| Nez Perce | Genesee | 20” | 2900’ | Direct Seed | 10/13/16 | 8/11/17 | Chickpea | 30-30-0-6.5 (f)<br>33-5-5-18 (s) | Osprey<br>Widematch<br>Dagger<br>Tilt<br>Humic Acid | 4.75 oz/A<br>1 pt/A<br>0.5 pt/A<br>4 oz/A<br>0.25 gal/A |
| Latah | Moscow | 20” | 2600’ | Conventional Tillage | 10/12/16 | 8/10/17 | S. Oats | 100-20-0-20 (f) | Huskie<br>Affinity BS<br>Axial XL<br>Priaxor | 12 oz/A<br>0.8 oz/A<br>16.4 oz/A<br>4 oz/A |
| Benewah | Tensed | 27” | 2600’ | Conventional Tillage | 10/19/16 | 8/16/17 | Lentils | 130-30-0-20 (f) | Huskie<br>Affinity BS<br>Priaxor | 12 oz/A<br>0.8 oz/A<br>4 oz/A |
| Boundary | Bonners Ferry | 25” | 1750’ | Direct Seed | 9/26/16 | 8/3/17 | Chickpeas | 17-38-23-11 (f)<br>40-0-0-6 (s) | Axial Star<br>Affinity BS<br>Priaxor<br>Tilt<br>Huskie | 16.4 oz/A<br>0.4 oz/A<br>8 oz/A<br>4 oz/A<br>12 oz/A |

* (f) = fall applied, (s) = spring applied.

**Table 1 (continued). Trial locations and management information for the 2016-2017 Northern Idaho Extension variety trials.**

| County | Nursery Location | Rainfall Zone (inches) | Elevation (feet) | Production System | Planting Date | Harvest Date | Previous Crop | Fertilizer N-P-K-S (lb/A) | Chemical | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Product Name | Rate |
| **Winter Cereals - Hard Winter Wheat** | | | | | | | | | | |
| Lewis | Nezperce | 22” | 3200’ | Direct Seed | 10/11/16 | 8/9/17 | Chickpeas | 110-50-10-22 (f)<br>69-13-6-10 (s) | Ally Xtra<br>Carnivore<br>Osprey<br>Priaxor<br>Propiconazole | 0.4 oz/A<br>20 oz/A<br>4 oz/A<br>2 oz/A<br>4 oz/A |
| Nez Perce | Lewiston (Tammany) | 14” | 1800’ | Conventional Tillage | 10/3/16 | 7/21/17 | Fallow | 120-30-0-20-10 (Cl) (f)<br>40-0-0-0 (s) | Osprey<br>Huskie<br>Orion<br>Priaxor<br>Propiconizol | 4.75 oz/A<br>13.5 oz/A<br>17 oz/A<br>2 oz/A<br>4 oz/A |
| Nez Perce | Genesee | 20” | 2900’ | Direct Seed | 10/19/16 | 8/11/17 | Chickpeas | 30-30-0-6.5 (f)<br>73-5-5-18 (s) | Osprey<br>Widematch<br>Dagger<br>Tilt<br>Humic Acid | 4.75 oz/A<br>1 pt/A<br>0.5 pt/A<br>4 oz/A<br>0.25 gal/A |
| Latah | Moscow | 20” | 2600’ | Conventional Tillage | 10/12/16 | 8/10/17 | S. Oats | 100-20-0-20 (f)<br>40-0-0-0 (s) | Huskie<br>Affinity<br>Axial<br>Priaxor | 12 oz/A<br>0.4 oz/A<br>16.4 oz/A<br>8 oz/A |
| Benewah | Tensed | 27” | 2600’ | Conventional Tillage | 10/19/16 | 8/16/17 | Lentils | 130-30-0-20 (f)<br>40-0-0-0 (s) | Huskie<br>Affinity<br>Axial | 12 oz/A<br>0.4 oz/A<br>16.4 oz/A |
| Boundary | Bonners Ferry | 25” | 1750’ | Direct Seed | 9/26/16 | 8/3/17 | Chickpeas | 17-38-23-11 (f)<br>80-0-0-6 (s) | Axial Star<br>Affinity BS<br>Priaxor<br>Tilt<br>Huskie | 16.4 oz/A<br>0.4 oz/A<br>8 oz/A<br>4 oz/A<br>12 oz/A |
| **Winter Cereals – Winter Barley** | | | | | | | | | | |
| Boundary | Bonners Ferry | 25” | 1750’ | Direct Seed | 9/26/16 | 8/3/17 | Chickpeas | 17-38-23-11 (f)<br>40-0-0-6 (s) | Axial Star<br>Affinity BS<br>Priaxor<br>Tilt<br>WildCard | 16.4 oz/A<br>0.4 oz/A<br>8 oz/A<br>4 oz/A<br>32 oz/A |

* (f) = fall applied, (s) = spring applied.

**Table 1 (continued). Trial locations and management information for the 2016-2017 Northern Idaho Extension variety trials.**

| County | Nursery Location | Rainfall Zone (inches) | Elevation (feet) | Production System | Planting Date | Harvest Date | Previous Crop | Fertilizer N-P-K-S (lb/A)* | Chemical | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Product Name | Rate |
| **Spring Cereals - Soft Spring Wheat** | | | | | | | | | | |
| Lewis | Craigmont | 22” | 3650’ | Conventional Tillage | 5/9/17 | 8/28/17 | W. Wheat | 65-10-0-10 | Huskie<br>Orion | 12 oz/A<br>17 oz/A |
| Nez Perce | Genesee | 20” | 2650’ | Direct Seed | 5/1/17 | 8/23/17 | W. Wheat | 60-0-0-0 (f)<br>85-30-0-20 (s) | Huskie<br>Orion<br>Propiconizole<br>Priaxor | 12 oz/A<br>17 oz/A<br>4 oz/A<br>2 oz/A |
| Latah | Moscow | 24” | 2600’ | Conventional Tillage | 5/11/17 | 8/31/17 | W. Wheat | 93-30-0-21 | Huskie<br>Orion<br>Starane | 12 oz/A<br>17 oz/A<br>5 oz/A |
| Boundary | Bonners Ferry | 25” | 1750’ | Direct Seed | 5/18/17 | 9/8/17 | W. Wheat | 77-35-22-10 | Powerflex<br>Tilt<br>Wildcard | 2 oz/A<br>2 oz/A<br>25 oz/A |
| **Spring Cereals - Hard Spring Wheat** | | | | | | | | | | |
| Lewis | Craigmont | 22” | 3650’ | Conventional Tillage | 5/9/17 | 8/28/17 | W. Wheat | 110-10-0-10 | Huskie<br>Orion | 12 oz/A<br>17 oz/A |
| Nez Perce | Genesee | 20” | 2650’ | Direct Seed | 5/1/17 | 8/23/17 | W. Wheat | 60-0-0-0 (f)<br>135-30-0-20 (s) | Huskie<br>Orion<br>Propiconizole<br>Priaxor | 12 oz/A<br>17 oz/A<br>4 oz/A<br>2 oz/A |
| Latah | Moscow | 24” | 2600’ | Conventional Tillage | 5/11/17 | 8/31/17 | W. Wheat | 93-30-0-21 | Huskie<br>Orion<br>Starane | 12 oz/A<br>17 oz/A<br>5 oz/A |
| Boundary | Bonners Ferry | 25” | 1750’ | Direct Seed | 5/18/17 | 9/8/17 | W. Wheat | 117-35-22-10 | Powerflex<br>Tilt<br>Wildcard | 2 oz/A<br>2 oz/A<br>25 oz/A |

* (f) = fall applied, (s) = spring applied.

**Table 1 (continued). Trial locations and management information for the 2016-2017 Northern Idaho Extension variety trials.**

| County | Nursery Location | Rainfall Zone (inches) | Elevation (feet) | Production System | Planting Date | Harvest Date | Previous Crop | Fertilizer N-P-K-S (lb/A)* | Chemical | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Product Name | Rate |
| **Spring Cereals - Spring Barley** | | | | | | | | | | |
| Lewis | Craigmont | 22” | 3650’ | Conventional Tillage | 5/9/17 | 8/28/17 | W. Wheat | 65-10-0-10 | Huskie<br>Orion | 12 oz/A<br>17 oz/A |
| Nez Perce | Genesee | 20” | 2650’ | Direct Seed | 5/1/17 | 8/23/17 | W. Wheat | 60-0-0-0 (f)<br>85-30-0-20 (s) | Huskie<br>Orion | 12 oz/A<br>17 oz/A |
| Latah | Moscow | 24” | 2600’ | Direct Seed | 5/25/17 | 8/31/17 | W. Wheat | 87-28-0-20 | Huskie<br>Orion<br>Starane | 12 oz/A<br>17 oz/A<br>5 oz/A |
| Boundary | Bonners Ferry | 25” | 1750’ | Direct Seed | 5/18/17 | 9/8/17 | W. Wheat | 77-35-22-10 | Powerflex<br>Tilt<br>Wildcard | 2 oz/A<br>2 oz/A<br>25 oz/A |
| **Legumes - Winter Peas** | | | | | | | | | | |
| Latah | Moscow | 24” | 2600 | Conventional Tillage | 10/19/16 | 7/28/17 | S. Barley | None | Mustang Maxx<br>Warrior II<br>Dimethoate | 2.2 oz/A<br>1.9 oz/A<br>4.8 oz/A |
| Idaho | Ferdinand | 22” | 3850 | Conventional Tillage | 10/11/16 | -- | S. Wheat | None | Poast<br>Select<br>Warrior II<br>Mustang Maxx | 7 oz/A<br>4 oz/A<br>1.9 oz/A<br>2.2 oz/A |

* (f) = fall applied, (s) = spring applied.

**Table 1 (continued). Trial locations and management information for the 2016-2017 Northern Idaho Extension variety trials.**

| County | Nursery Location | Rainfall Zone (inches) | Elevation (feet) | Production System | Planting Date | Harvest Date | Previous Crop | Fertilizer N-P-K-S (lb/A)* | Chemical | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Product Name | Rate** |
| **Legumes - Spring Peas** | | | | | | | | | | |
| Latah | Moscow | 24” | 2600’ | Conventional Tillage | 5/11/17 | 8/31/17 | Sudangrass | None | Sharpen<br>Tricor<br>Lorox<br>Assure II<br>Warrior II | 1 oz/A PrePl<br>6 oz/A PrePl<br>24 oz/A PrePl<br>8 oz/A<br>1.9 oz/A |
| Nez Perce | Genesee | 20” | 2600’ | Direct Seed | 5/1/17 | 8/24/17 | S. Barley | None | Sharpen<br>Sencor<br>Valor SX<br>Warrior II<br>Mustang Maxx | 1 oz/A PrePl<br>2 oz/A PreEm<br>2 oz/A PreEm<br>1.9 oz./A<br>2.2 oz/A |
| Lewis | Craigmont | 22” | 3300’ | Conventional Tillage | 5/9/17 | 8/25/17 | S. Wheat | None | Metribuzin<br>Warrior II<br>Dimethoate<br>Select | 1 oz/A PreEm<br>1.9 oz/A<br>4.8 oz/A<br>4 oz/A |
| **Legumes - Spring Lentils** | | | | | | | | | | |
| Latah | Moscow | 24” | 2600’ | Conventional Tillage | 5/11/17 | 8/31/17 | Sudangrass | None | Lorox<br>Metribuzin<br>Warrior II | 20 oz/A PreEm<br>5.3 oz/A PreEm<br>1.9 oz/A |
| Nez Perce | Genesee | 20” | 2600’ | Direct Seed | 5/1/17 | 8/24/17 | S. Barley | None | Metribuzin<br>Warrior II | 5.3 oz/A PreEm<br>1.9 oz/A |
| Lewis | Craigmont | 22” | 3300’ | Conventional Tillage | 5/9/17 | 8/25/17 | W. Wheat | None | Metribuzin<br>Warrior II<br>Select | 5.3 oz/A PreEm<br>1.9 oz/A<br>4 oz/A |

* (f) = fall applied, (s) = spring applied.
** PreEm = Pre-emergence, PrePl = Pre-plant.

**Table 1 (continued). Trial locations and management information for the 2016-2017 Northern Idaho Extension variety trials.**

| County | Nursery Location | Rainfall Zone (inches) | Elevation (feet) | Production System | Planting Date | Harvest Date | Previous Crop | Fertilizer N-P-K-S (lb/A)* | Chemical | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Product Name | Rate** |
| **Legumes - Spring Chickpeas** | | | | | | | | | | |
| Latah | Moscow | 24” | 2600’ | Conventional Tillage | 5/11/17 | 8/31/17 | Sudangrass | None | Lorox<br>Metribuzin<br>Warrior II | 20 oz/A PreEm<br>5.3 oz/A PreEm<br>1.9 oz/A |
| Lewis | Craigmont | 22” | 3300’ | Conventional Tillage | 5/9/17 | 8/25/17 | S. Barley | None | Metribuzin<br>Warrior II<br>Select | 5 oz/A PreEm<br>1.9 oz/A<br>4 oz/A |
| Nez Perce | Genesee | 20” | 2600’ | Direct Seed | 5/1/17 | 8/24/17 | W. Wheat | None | Metribuzin<br>Warrior II | 5.3 oz/A PreEm<br>1.9 oz/A |

* (f) = fall applied, (s) = spring applied.
** PreEm = Pre-emergence, PrePl = Pre-plant.

**Table 2. Varieties tested in northern Idaho extension variety trials in 2016-2017.**

| Variety | Experimental No. | Year Released | Developer(s) of Variety |
|---|---|---|---|
| **Soft White Winter Wheat** | | | |
| Bobtail | OR08047P94 | 2013 | Oregon AES, USDA |
| Brundage-96 | ID-B-96 | 2001 | Idaho AES, USDA |
| Bruneau | ID 93-64901A | 2009 | Idaho AES, USDA |
| Jasper | WA8169 | 2014 | Washington, AES |
| LCS Artdeco | NSA-2153A | 2011 | Limagrain Cereal Seeds |
| LCS Drive | LWW12-7105 | 2015 | Limagrain Cereal Seeds |
| LCS Hulk | LWW14-73163 | 2017 | Limagrain Cereal Seeds |
| LCS Shark | LWW14-71195 | 2017 | Limagrain Cereal Seeds |
| LCS Sonic | LWW14-73161 | 2017 | Limagrain Cereal Seeds |
| Madsen | WA 7163 | 1988 | Washington AES, USDA |
| Norwest Duet | LOR-092 | 2016 | Limagrain Cereal Seeds, Oregon AES, USDA |
| Norwest Tandom | LOR-334 | 2016 | Limagrain Cereal Seeds, Oregon AES, USDA |
| PNW Hailey | | 2017 | |
| Puma | WA 8134 | 2013 | Washington AES |
| Stephens | OR 65-116 | 1977 | Oregon AES, USDA |
| SY Ovation | 03PN108-21 | 2011 | Syngenta Seeds |
| UI Castle CL+ | 09-DH10 | 2015 | Idaho AES, USDA |
| UI Magic CL+ | 09-DH11 | 2015 | Idaho AES, USDA |
| UI Palouse CL+ | 3_5_10 | 2015 | Idaho AES, USDA |
| UI Sparrow | IDO1108DH | 2016 | Idaho AES, USDA |
| UI/WSU Huffman | IDN-03-29902A | 2014 | Idaho AES, Washington AES |
| WB1376CLP | EXP-1030CLP | 2015 | WestBred/Monsanto |
| WB-Junction | BZ-6W02-616 | 2012 | WestBred/Monsanto |
| WB1529 | BZ6WM07-436 | 2014 | WestBred/Monsanto |
| WB1604 | BZ6WM09-458 | 2013 | WestBred/Monsanto |
| WB1783 | BZ6W09-471 | 2017 | WestBred/Monsanto |
| **Winter Club Wheat** | | | |
| Cara | ARS97135-9 | 2007 | Washington AES, USDA |
| **Hard Red and White (W) Winter Wheat** | | | |
| Keldin | AC55017 | 2011 | WestBred/Monsanto |
| LCS Colonia | NIC- 05-4711-B | 2013 | Limagrain Cereal Seeds |
| LCS Jet | NSA10-7208 | 2015 | Limagrain Cereal Seeds |
| LCS Rocket | NSA10-2196 | 2017 | Limagrain Cereal Seeds |
| Norwest-553 | ORN00B553 | 2007 | Oregon State AES, USDA-ARSARS, Nickerson, UK |
| UI Silver (W) | IDO658 | 2011 | Idaho AES, USDA |
| WB4303 | | 2017 | WestBred/Monsanto |
| WB4623CLP | | 2017 | WestBred/Monsanto |
| WB-Arrowhead | ML9W05-2501 | 2011 | WestBred/Monsanto |
| Whetstone | W98-344 | 2009 | Syngenta Seeds |

**Table 2 (cont). Varieties tested in northern Idaho extension variety trials in 2016-2017.**

| Variety | Experimental No. | Year Released | Developer(s) of Variety |
|---|---|---|---|
| **Soft White Spring Wheat** | | | |
| Alturas | IDO 526 | 2002 | Idaho AES, USDA |
| Babe | WA 8039 | 2009 | Washington AES, USDA |
| Diva | WA 8090 | 2009 | Washington AES, USDA |
| Melba (club) | WA 8193 | 2016 | Washington AES, USDA |
| JD (club) | WA 8047 | 2009 | Washington AES, USDA |
| Ryan | WA 8214 | 2016 | Washington AES, USDA |
| Seahawk | WA 8162 | 2014 | Washington AES, USDA |
| Tekoa | WA 8189 | 2016 | Washington AES, USDA |
| UI Stone | IDO599 | 2012 | Idaho AES |
| WB6121 | BZ608-121 | 2014 | WestBred/Monsanto |
| WB6341 | BZ608-125 | 2014 | WestBred/Monsanto |
| WB6430 | BZ608-125 | 2014 | WestBred/Monsanto |
| **Hard Red Spring Wheat** | | | |
| Alum | WA 8166 | 2014 | Washington AES, USDA |
| Glee | WA 8074 | 2012 | Washington AES, USDA |
| Jefferson | IDO 462 | 1998 | Idaho AES, USDA |
| LCS Iron | 11SB0096 | 2016 | Limagrain Cereal Seeds |
| UI Winchester | IDO 578 | 2009 | Idaho AES, USDA |
| WB9229 | | | WestBred/Monsanto |
| WB9350 | | 2016 | WestBred/Monsanto |
| WB9411 | BZ908-418 | 2015 | WestBred/Monsanto |
| WB9518 | BZ908-485 | 2013 | WestBred/Monsanto |
| WB9662 | | | WestBred/Monsanto |
| WB9668 | BZ908-552 | 2015 | WestBred/Monsanto |
| **Hard White Spring Wheat** | | | |
| Dayn | WA 8123 | 2013 | Washington AES, USDA |
| UI Platinum | IDO 694C | 2014 | Idaho AES, USDA |
| WB7417 | | | WestBred/Monsanto |
| WB-Hartline | BZ903-445WP | 2012 | WestBred/Monsanto |

**Table 2 (cont). Varieties tested in northern Idaho extension variety trials in 2016-2017.**

| Variety | Use | Experimental No. | Year Released | Developer(s) of Variety |
|---|---|---|---|---|
| **Two-Row Winter Barley** | | | | |
| Charles | Malt | 94Ab1274 | 2006 | USDA-ARS, Aberdeen |
| Endeavor | Malt | 95Ab2299 | 2008 | Idaho AES, USDA |
| Wintmalt | Malt | | 2007 | KWS Lochow, Germany |
| **Six-Row Winter Barley** | | | | |
| Buck | Food | 09OR-86 | 2015 | Oregon AES, USDA |
| Eight-Twelve | Feed | 79Ab812 | 1988 | Idaho AES, USDA |
| Sunstar Pride | Feed | SDM204-B | 1995 | Sunderman Breeding |
| **Two-Row Spring Barley** | | | | |
| Altorado | Feed | BZ509-601 | 2017 | Highland Specialty Grains |
| Camas | Feed | ND 9147 | 1998 | Idaho AES, USDA |
| CDC-Copeland | Malt | TR150 | 1999 | University of Saskatchewan, Canada |
| Champion | Feed | YU-501-385D | 2008 | WestBred/Monsanto |
| Claymore | Feed | BZ509-210 | 2016 | Highland Specialty Grains |
| Explorer | Malt | EB1401 | - | Secobra, France |
| Kardia | Food | 2Ab09-X06F084-51 | 2015 | Idaho AES, USDA |
| LCS Genie | Malt | | 2011 | Limagrain Cereal Seeds |
| LCS Odyssey | Malt | | 2013 | Limagrain Cereal Seeds |
| LCS Vespa | Feed | | 2010 | Limagrain Cereal Seeds |
| Lenetah | Feed | 01Ab11107 | 2007 | Idaho AES, USDA |
| Lyon | Feed | 05WA-316.K | 2013 | Washington AES, USDA |
| Oreana | Feed | BZ509-448 | 2016 | Highland Specialty Grains |
| Salute | Food | | - | WestBred/Monsanto |
| Tetonia | Feed | 98Ab11720 | 2007 | Idaho AES, USDA |
| Transit | Food | 03AH3054-51 | 2010 | Idaho AES, USDA |

**Table 2 (cont). Varieties tested in northern Idaho extension variety trials in 2016-2017.**

| Variety | Experimental No. | Year Released | Developer(s) of Variety |
|---|---|---|---|
| **Chickpea** | | | |
| BillyBeans | | 2010 | PNW Farmers Cooperative |
| Bronic | | - | Spain |
| CDC Orion | | 2010 | University of Saskatchewan, Canada |
| CDC Frontier | | 2003 | University of Saskatchewan, Canada |
| Nash | CA 04900843C | 2013 | USDA-ARS, Washington AES |
| Sawyer | CA 0090B347C | 2010 | USDA-ARS, Washington AES |
| Sierra | CA 9783152C | 2001 | USDA-ARS, Washington AES |
| **Lentil (*class*)** | | | |
| Avondale (*Medium green*) | LC 10602300R | 2012 | USDA-ARS, Washington AES |
| Crimson (*Small red*) | LC 800024 | 1990 | USDA-ARS, Washington AES |
| Eston (*Small green*) | | 1980 | University of Saskatchewan, Canada |
| Merrit (*Large green*) | LC 460266B | 2001 | USDA-ARS, Washington AES |
| Morena (Spanish brown) | LC 02601144P | 2011 | USDA-ARS, Washington AES |
| Pardina (*Spanish brown*) | | - | Spain |
| Richlea (*Medium green*) | | 1994 | University of Saskatchewan, Canada |
| **Winter Pea** | | | |
| Blaze | PRO 124-7130 | 2017 | ProGene |
| Granger (*Austrian*) | D258-1-2 | 1996 | USDA-ARS, Washington AES |
| Icicle | | 2011 | ProGene |
| Koyote | | 2014 | ProGene |
| Melrose (*Austrian*) | | 1979 | Idaho AES |
| Specter | PS9830F009 | 2006 | USDA-ARS, Washington AES |
| Windham | PS98305358 | 2006 | USDA-ARS, Washington AES |
| **Spring Green Pea** | | | |
| Aragorn | | 2007 | ProGene |
| Ariel | NZ 4L25 | 2001 | Crop and Food Research, New Zealand |
| Banner | Pro 031-7053 | 2007 | ProGene |
| Columbian | | - | Campbell Soup Co. |
| Ginny | Pro 091-7137 | 2014 | ProGene |
| Greenwood | Pro 7040 | 2012 | ProGene |
| Hampton | PS05100736 | 2014 | USDA-ARS, Washington AES |
| **Spring Yellow Pea** | | | |
| Carousel | SW 995848 | 2004 | ProGene |

## 2016-2017 Growing Conditions and Factors Affecting Trial Results

*Fall/winter conditions:*

Fall cereal trials were planted from late September to mid-October. There were frequent rain events during October that delayed seeding at some locations. However, there was very good soil moisture and winter wheat established well at all locations. Winter pea seeding was delayed until mid-October at both locations due to excessively dry soil conditions in late September and followed by frequent rain events. Despite the later seeding dates, the winter pea emerged due to mild temperatures well into November 2016. December and January temperatures were below normal (Figure 1A), but adequate snow cover protected the small seedlings and there was little to no evidence of winter injury at any location. As a result of extended snow cover (>60 to 70 days), there was concern about snow mold developing in the winter wheat trials. However, snow mold was not observed at any location during the 2016-2017 winter in northern Idaho.

*Spring/summer conditions:*

Precipitation from February to April was well above normal in northern Idaho (Figure 1B). October 2016 to June 2017 precipitation at the Parker Plant Sciences Farm east of Moscow was 10.7 inches above normal. This resulted in substantially delayed seeding for all spring trials. Spring cereals were seeded from May 1 to May 25 and spring legumes from May 1 to May 11. This was followed by below normal precipitation in June and July along with above normal temperatures for June, July and August. Therefore, the yield for all spring seeded crops was well below normal. Conditions were dry during the harvest season and there was no evidence of sprout in any of the wheat or barley plots.

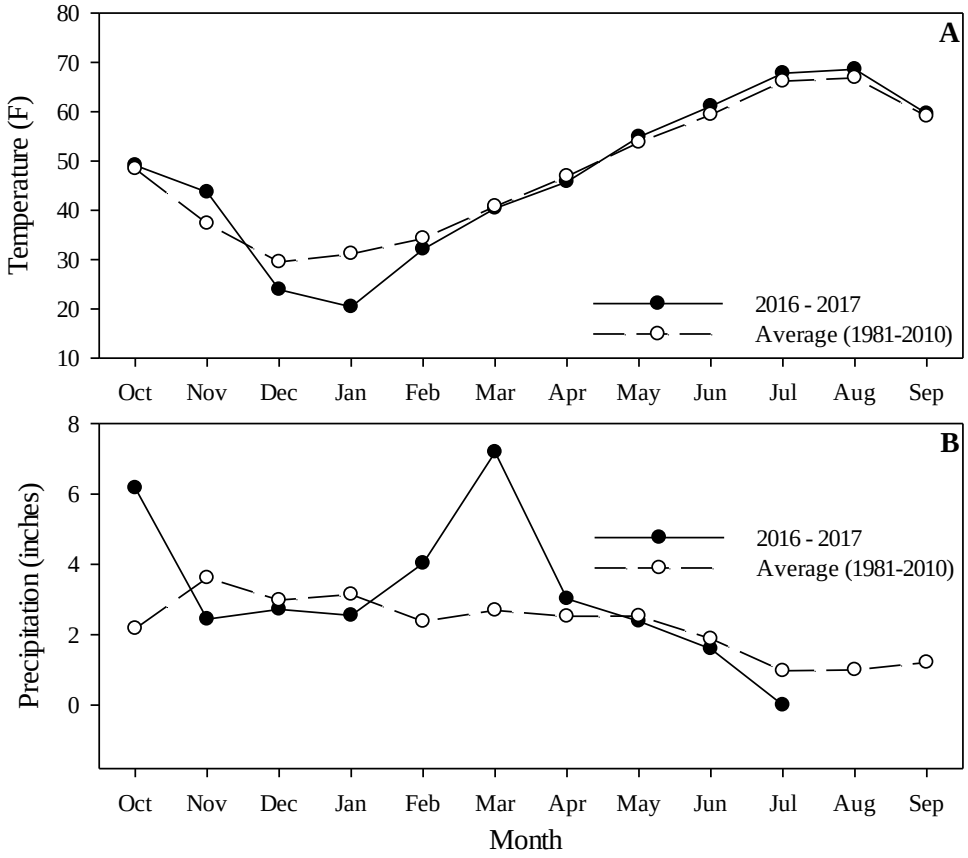


Figure 1. Mean monthly temperature (A) and precipitation (B) for the 2016-2017 growing season at the Parker Plant Sciences Farm east of Moscow compared to 30-year average.

*Diseases and pests:*
Stripe rust (*Puccinia striiformis* f.sp. *tritici*) on wheat is commonly observed in northern Idaho. Conditions were conducive for development of stripe rust in the spring of 2017. However, timely fungicide applications and disease resistance in the wheat varieties or lines resulted in very little stripe rust development in the plots. As a result, no notes were collected on this disease. Stem rust (*Puccinia graminis*) was observed to be developing on the spring barley seeded in Bonners Ferry late in the growing season, but was not observed on the winter barley or spring wheat at this location. All varieties appeared to be uniformly impacted and disease incidence was relatively low. The observation of stem rust and economic damage as a result of this pathogen are uncommon in Idaho. Disease severity was too low to result in significant yield reductions within the barley trial.

Pea leaf weevil (*Sitona lineatus* L.) was observed at all winter and spring pea locations, with substantial injury evident on the spring pea. Insecticide applications were performed to limit and prevent further injury to the seedlings. The pea leaf weevil has only one generation per year, with the new adults emerging in early June in the Pacific Northwest. Due to the delayed seeding and emergence of spring pea, the timing of pea leaf weevil adult emergence coincided with spring pea being at the small seeding stage at which point they are particularly vulnerable to damage from this insect. The other problem of note in the legume trials, was the presence of Aphanomyces root rot (*Aphanomyces euteiches*) at the Craigmont location. Both pea and lentil are hosts for this pathogen and portions of the plots had substantially reduced stand and poor seedling vigor. As a result, two replications of both the pea and lentil trial at Craigmont were dropped, leaving only two replications for data collection. The most effective management for Aphanomyeces root rot is avoiding heavily infected fields. In this case, only a portion of the field was impacted in a low valley that was not well drained and retained a greater quantity of water.

## Summary of 2016-2017 Results

Data is not reported for the winter wheat trial in Moscow or the either winter pea trials. Excessive snow melt and spring precipitation resulted in flooding and water logged conditions at these trial sites and the location was either not harvested or the yield variability was too high, producing poor quality and misleading data.

A summary of selected agronomic characteristics for winter wheat, spring wheat, spring barley and spring legumes is shown in Tables 3 and 4. Winter wheat yields in 2017 were 14 bu/A above the 10-year average. Winter wheat test weight in 2017 was the second highest of the past 10 years. Due to delayed seeding and higher than normal summer temperatures, the yield for spring wheat was 11 bu/A below the 10-year average while the spring barley yield was 12 bu/A below average. Test weight for both spring cereals were near normal at 58.3 and 50.7 for wheat and barley, respectively.

Like the spring cereal trials, the spring legume yields were significantly impacted by the delayed seeding followed, by drier and warmer than normal late spring and summer weather conditions. The 2017 spring pea yield was at a 10 year low of 749 lb/A, while the 100-seed weight was slightly below the 10-year average at 19.0 g. Vine length and canopy height also were well below normal. Likewise, spring lentil yield was near the 10 year low at 806 lb/A with average 100-seed weight and plant height. Chickpea was less impacted by weather conditions and was only 255 lb/A below the 10-year average at 1806 lb/A. The 100-seed weight was slightly below average while plant height was 2 inches below average.

Specific yield data for all north Idaho trials is listed in Tables 5 to 44. Varieties or breeding lines are listed in order from highest yielding to lowest yielding in each table.

**Table 3. Ten-year average of select agronomic characteristics for winter wheat, spring wheat and spring barley, 2008-2017.**

**Winter Wheat (all market classes)**

| YIELD | | | TEST WEIGHT | | | PLANT HEIGHT | | | LODGING | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | bu/A | # of Loc. | Year | lb/bu | # of Loc. | Year | inches | # of Loc. | Year | % | # of Loc |
| 2016 | 122 | 6 | 2011 | 61.4 | 6 | 2016 | 38 | 6 | 2014 | 4 | 6 |
| 2011 | 111 | 6 | 2017 | 61.2 | 5 | 2012 | 38 | 6 | 2011 | 3 | 6 |
| 2017 | 107 | 5 | 2016 | 61.1 | 6 | 2011 | 38 | 5 | **Ave.** | **1** | -- |
| 2013 | 104 | 6 | 2013 | 59.4 | 6 | 2010 | 38 | 5 | 2015 | 2 | 6 |
| 2015 | 97 | 6 | **Ave.** | **58.9** | -- | 2017 | 36 | 5 | 2017 | 0 | 5 |
| 2012 | 86 | 6 | 2012 | 58.5 | 6 | 2015 | 36 | 6 | 2016 | 0 | 6 |
| 2010 | 84 | 5 | 2009 | 58.4 | 4 | **Ave.** | **35** | -- | 2010 | 0 | 5 |
| 2014 | 78 | 6 | 2008 | 58.3 | 5 | 2013 | 35 | 6 | 2009 | 0 | 4 |
| **Ave.** | **93** | -- | 2015 | 57.4 | 6 | 2008 | 33 | 5 | 2008 | 0 | 5 |
| 2008 | 75 | 5 | 2010 | 56.9 | 5 | 2009 | 31 | 4 | 2013 | 0 | 4 |
| 2009 | 67 | 4 | 2014 | 56.5 | 6 | 2014 | 28 | 6 | 2012 | 0 | 6 |

**Spring Wheat (all market classes)**

| YIELD | | | TEST WEIGHT | | | PLANT HEIGHT | | | LODGING | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | bu/A | # of Loc. | Year | lb/bu | # of Loc. | Year | inches | # of Loc. | Year | % | # of Loc |
| 2013 | 76 | 4 | 2011 | 61.9 | 3 | 2014 | 33 | 4 | 2014 | 6 | 4 |
| 2012 | 75 | 4 | 2012 | 61.1 | 4 | 2012 | 33 | 4 | 2016 | 1 | 4 |
| 2016 | 72 | 4 | 2016 | 60.5 | 4 | 2013 | 32 | 4 | **Ave.** | **1** | -- |
| 2010 | 65 | 3 | 2013 | 60.4 | 4 | 2011 | 32 | 3 | 2017 | 0 | 4 |
| 2014 | 61 | 4 | 2009 | 59.1 | 2 | 2010 | 32 | 3 | 2015 | 0 | 4 |
| 2011 | 61 | 3 | **Ave.** | **58.6** | -- | 2016 | 30 | 4 | 2013 | 0 | 3 |
| **Ave.** | **58** | -- | 2017 | 58.3 | 4 | **Ave.** | **30** | -- | 2012 | 0 | 4 |
| 2017 | 47 | 4 | 2010 | 57.8 | 3 | 2015 | 29 | 4 | 2011 | 0 | 3 |
| 2015 | 46 | 4 | 2014 | 55.9 | 4 | 2017 | 27 | 4 | 2010 | 0 | 3 |
| 2009 | 44 | 3 | 2015 | 55.7 | 4 | 2009 | 27 | 3 | 2009 | 0 | 3 |
| 2008 | 32 | 3 | 2008 | 55.5 | 3 | 2008 | 22 | 3 | 2008 | 0 | 3 |

**Spring Barley (all market classes)**

| YIELD | | | TEST WEIGHT | | | PLANT HEIGHT | | | LODGING | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | bu/A | # of Loc. | Year | lb/bu | # of Loc. | Year | inches | # of Loc. | Year | % | # of Loc |
| 2016 | 113 | 4 | 2012 | 54.7 | 4 | 2010 | 34 | 4 | 2014 | 33 | 4 |
| 2012 | 100 | 4 | 2011 | 53.7 | 4 | 2011 | 33 | 4 | 2013 | 15 | 4 |
| 2011 | 97 | 4 | 2016 | 53.2 | 4 | 2016 | 32 | 4 | 2016 | 14 | 4 |
| 2010 | 90 | 4 | 2013 | 51.3 | 4 | 2014 | 32 | 4 | **Ave.** | **11** | -- |
| 2013 | 89 | 4 | **Ave.** | **50.9** | -- | 2012 | 31 | 4 | 2010 | 8 | 4 |
| 2014 | 88 | 4 | 2017 | 50.7 | 4 | **Ave.** | **30** | -- | 2012 | 6 | 4 |
| **Ave.** | **85** | -- | 2010 | 50.4 | 4 | 2017 | 29 | 4 | 2015 | 3 | 4 |
| 2015 | 76 | 4 | 2009 | 49.5 | 3 | 2015 | 29 | 4 | 2017 | 0 | 4 |
| 2017 | 73 | 4 | 2015 | 48.9 | 4 | 2009 | 29 | 3 | 2011 | -- | 0 |
| 2009 | 67 | 3 | 2008 | 48.7 | 4 | 2013 | 28 | 4 | 2009 | -- | 0 |
| 2008 | 61 | 4 | 2014 | 48.2 | 4 | 2008 | 25 | 4 | 2008 | -- | 0 |

**Table 4. Ten-year average of select agronomic characteristics for pea, lentil and chickpea, 2008-2017.**

**Pea (all market classes)**

| YIELD | | | 100 SEED WEIGHT | | | VINE LENGTH | | | CANOPY HEIGHT | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | lb/A | # of Loc. | Year | grams | # of Loc. | Year | inches | # of Loc. | Year | inches | # of Loc |
| 2011 | 2724 | 2 | 2011 | 22.0 | 2 | 2014 | 30 | 3 | 2011 | 27 | 2 |
| 2013 | 2678 | 3 | 2016 | 21.7 | 3 | 2012 | 30 | 4 | 2012 | 25 | 4 |
| 2012 | 2678 | 4 | 2012 | 21.0 | 4 | 2010 | 29 | 3 | 2010 | 22 | 3 |
| 2016 | 2327 | 3 | 2013 | 20.4 | 3 | 2013 | 28 | 3 | 2009 | 22 | 2 |
| 2014 | 1877 | 3 | 2009 | 19.7 | 2 | 2011 | 28 | 2 | **Ave.** | **20** | -- |
| **Ave.** | **1871** | -- | **Ave.** | **19.7** | -- | 2016 | 27 | 3 | 2016 | 19 | 3 |
| 2009 | 1640 | 2 | 2017 | 19.0 | 3 | **Ave.** | **26** | -- | 2015 | 17 | 3 |
| 2008 | 1469 | 2 | 2014 | 18.8 | 3 | 2009 | 25 | 2 | 2008 | 17 | 2 |
| 2010 | 1414 | 3 | 2008 | 18.5 | 2 | 2015 | 22 | 3 | 2017 | 15 | 3 |
| 2015 | 1156 | 3 | 2015 | 18.3 | 3 | 2017 | 18 | 3 | 2014 | 15 | 3 |
| 2017 | 749 | 3 | 2010 | 17.9 | 3 | 2008 | 18 | 2 | 2013 | -- | 0 |

**Lentil (all market classes)**

| YIELD | | | 100 SEED WEIGHT | | | PLANT HEIGHT | | | CANOPY HEIGHT | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | lb/A | # of Loc. | Year | grams | # of Loc. | Year | inches | # of Loc. | Year | inches | # of Loc |
| 2011 | 2063 | 3 | 2008 | 5.2 | 2 | 2014 | 16 | 4 | 2017 | 12 | 3 |
| 2012 | 1463 | 4 | 2010 | 5.1 | 2 | 2016 | 15 | 3 | 2014 | 11 | 4 |
| 2009 | 1383 | 2 | 2013 | 5.0 | 4 | 2011 | 15 | 3 | **Ave.** | **11** | -- |
| **Ave.** | **1145** | -- | 2011 | 5.0 | 3 | 2009 | 15 | 2 | 2015 | 9 | 1 |
| 2008 | 1124 | 2 | 2014 | 4.8 | 4 | 2013 | 14 | 4 | 2016 | -- | 0 |
| 2016 | 1110 | 3 | 2012 | 4.8 | 4 | 2012 | 14 | 4 | 2013 | -- | 0 |
| 2014 | 952 | 4 | **Ave.** | **4.7** | -- | **Ave.** | **14** | -- | 2012 | -- | 0 |
| 2013 | 946 | 4 | 2017 | 4.6 | 3 | 2017 | 13 | 3 | 2011 | -- | 0 |
| 2010 | 845 | 2 | 2009 | 4.4 | 2 | 2015 | 13 | 1 | 2010 | -- | 0 |
| 2017 | 806 | 3 | 2015 | 4.3 | 1 | 2010 | 13 | 2 | 2009 | -- | 0 |
| 2015 | 760 | 1 | 2016 | 3.9 | 3 | 2008 | 11 | 2 | 2008 | -- | 0 |

**Chickpea (all market classes)**

| YIELD | | | 100 SEED WEIGHT | | | PLANT HEIGHT | | | 'A' BEAN (>22/64") | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | lb/A | # of Loc. | Year | grams | # of Loc. | Year | inches | # of Loc. | Year | % | # of Loc |
| 2011 | 3557 | 1 | 2008 | 53.4 | 1 | 2013 | 23 | 2 | 2015 | 73 | 3 |
| 2012 | 2936 | 1 | 2011 | 51.9 | 1 | 2016 | 22 | 3 | 2017 | 69 | 3 |
| 2016 | 2609 | 3 | 2012 | 48.9 | 1 | 2014 | 22 | 3 | **Ave.** | **64** | -- |
| 2008 | 2597 | 1 | 2010 | 48.3 | 1 | 2011 | 22 | 1 | 2016 | 57 | 3 |
| 2013 | 2514 | 2 | 2013 | 47.8 | 2 | **Ave.** | **19** | -- | 2014 | 57 | 3 |
| **Ave.** | **2061** | -- | 2015 | 47.6 | 3 | 2012 | 18 | 1 | 2013 | -- | 0 |
| 2017 | 1806 | 3 | **Ave.** | **46.6** | -- | 2010 | 18 | 1 | 2012 | -- | 0 |
| 2014 | 1742 | 3 | 2017 | 46.3 | 3 | 2017 | 17 | 3 | 2011 | -- | 0 |
| 2010 | 1233 | 1 | 2016 | 42.1 | 3 | 2015 | 17 | 3 | 2010 | -- | 0 |
| 2015 | 1119 | 2 | 2014 | 40.6 | 3 | 2008 | 16 | 1 | 2009 | -- | 0 |
| 2009 | 495 | 1 | 2009 | 38.6 | 1 | 2009 | 14 | 1 | 2008 | -- | 0 |

**Table 5. Soft white winter wheat variety performance results at Bonners Ferry, 2017.**

| Variety or Selection | 3-Year Average (bu/A)* | 2-Year Average (bu/A)* | 2016-2017 Crop Year | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | Seed Yield (bu/A)** | Test Weight (lb/bu) | Plant Height (in) | Lodging (%) | Heading Date | Protein (%) |
| Norwest Duet | 127 | 140 | **151** | 61.9 | 40 | 0 | 6/10 | 11.4 |
| Bruneau | 133 | 143 | **148** | 60.8 | 38 | 0 | 6/7 | 10.8 |
| IDN-01-10704A | 133 | 143 | **147** | 61.1 | 39 | 0 | 6/7 | 10.7 |
| WB1783 | | 139 | **146** | 63.7 | 37 | 0 | 6/8 | 11.6 |
| IDN-02-29001A | 131 | 139 | **142** | 60.8 | 35 | 0 | 6/5 | 11.7 |
| IDN-09-21102A | | | 140 | 61.3 | 36 | 0 | 6/6 | 11.2 |
| OR2101043 | | 133 | 139 | 61.3 | 36 | 0 | 6/8 | 11.2 |
| UI/WSU Huffman | 129 | 137 | 138 | 61.3 | 40 | 0 | 6/12 | 10.9 |
| UI Magic CL+ | 117 | 123 | 138 | 62.2 | 34 | 0 | 6/5 | 11.6 |
| WB 1529 | 117 | 128 | 138 | 62.3 | 35 | 0 | 6/5 | 11.3 |
| UI Castle CL+ | 122 | 132 | 138 | 63.6 | 36 | 0 | 6/9 | 11.7 |
| WB-Junction | 123 | 132 | 137 | 63.1 | 36 | 0 | 6/3 | 11.1 |
| WA8232 | | 131 | 137 | 62.4 | 35 | 14 | 6/8 | 11.3 |
| PNW Hailey | | | 136 | 61.1 | 36 | 0 | 6/7 | 11.1 |
| OR2121086 | | | 135 | 61.1 | 37 | 0 | 6/8 | 11.4 |
| IDN-06-03303B | | | 135 | 60.4 | 36 | 0 | 6/8 | 11.2 |
| Puma | 117 | 123 | 134 | 61.1 | 38 | 0 | 6/9 | 11.5 |
| WA8234 | | 132 | 134 | 62.3 | 34 | 0 | 6/4 | 11.3 |
| LCS Hulk | | 133 | 133 | 60.6 | 36 | 0 | 6/6 | 11.4 |
| Madsen | 120 | 129 | 133 | 61.5 | 36 | 0 | 6/12 | 11.9 |
| Bobtail | | | 132 | 57.4 | 33 | 0 | 6/11 | 11.1 |
| Stephens | 117 | 123 | 131 | 60.0 | 35 | 0 | 6/6 | 11.4 |
| IDN-09-08357A | | | 130 | 61.2 | 37 | 0 | 6/5 | 11.6 |
| Brundage 96 | | | 128 | 61.1 | 35 | 0 | 6/8 | 11.1 |
| UI Palouse CL+ | | | 128 | 60.7 | 33 | 0 | 6/10 | 11.4 |
| IDN-07-28017B | | | 128 | 60.8 | 35 | 0 | 6/7 | 11.2 |
| SY Ovation | | 125 | 127 | 61.2 | 36 | 0 | 6/5 | 11.3 |
| Jasper | 115 | 124 | 127 | 59.3 | 35 | 0 | 6/10 | 11.5 |
| UI Sparrow | 120 | 131 | 125 | 59.4 | 40 | 1 | 6/11 | 11.2 |
| Norwest Tandem | | | 124 | 59.4 | 36 | 0 | 6/8 | 11.5 |
| LCS Artdeco | 106 | 124 | 122 | 60.8 | 33 | 0 | 6/2 | 10.6 |
| ORI2130033CF+ | | | 122 | 60.6 | 34 | 0 | 6/7 | 12.1 |
| WB 1604 | 114 | 119 | 122 | 60.4 | 35 | 0 | 6/3 | 11.6 |
| ORI2150031CF+ | | | 120 | 60.4 | 34 | 0 | 6/7 | 12.3 |
| WB1376CLP | 108 | 112 | 113 | 63.3 | 35 | 0 | 6/5 | 12.5 |
| XA1401 | | | 95 | 62.8 | 33 | 0 | 6/4 | 14.2 |
| XA1101 | | | 94 | 62.6 | 37 | 0 | 6/3 | 13.2 |
| **Average** | **120** | **130** | **131** | **61.2** | **36** | **<1** | **6/7** | **11.5** |
| **LSD (0.05)** | **12** | **13** | **11** | **0.8** | **2** | **3** | **1.6** | **0.4** |
| **CV (%)** | **9.4** | **10.1** | **5.7** | **0.9** | **3.7** | **562.5** | **17.1** | **2.5** |

*Two and three year averages are not available for IDN-06-03303B, IDN-07-28017B, Brundage 96, and Bobtail due to wildlife damage to these varieties in 2016.

**Variety or selection yields in bold were not statistically different from the top yielding variety.

**Table 6. Soft white winter wheat variety performance results at Genesee (rim area), 2017.**

| Variety or Selection | 3-Year Average (bu/A) | 2-Year Average (bu/A) | 2016-2017 Crop Year Seed Yield (bu/A)* | Test Weight (lb/bu) | Plant Height (in) | Lodging (%) | Heading Date | Protein (%) |
|---|---|---|---|---|---|---|---|---|
| WA8234 | | 122 | **117** | 62.2 | 37 | 0 | 6/9 | 11.5 |
| IDN-06-03303B | 111 | 119 | **116** | 59.6 | 35 | 0 | 6/11 | 11.5 |
| UI Sparrow | 117 | 130 | **116** | 59.4 | 40 | 0 | 6/16 | 11.4 |
| IDN-07-28017B | | 112 | **115** | 62.2 | 36 | 0 | 6/10 | 11.5 |
| LCS Hulk | | 117 | **114** | 61.1 | 37 | 0 | 6/10 | 11.2 |
| Norwest Duet | 113 | 119 | **111** | 60.5 | 40 | 0 | 6/12 | 11.6 |
| IDN-02-29001A | 110 | 117 | **111** | 61.8 | 37 | 0 | 6/11 | 11.6 |
| OR2101043 | | 121 | **111** | 59.9 | 36 | 0 | 6/13 | 11.4 |
| Jasper | 116 | 126 | **110** | 59.1 | 35 | 0 | 6/15 | 11.4 |
| LWW14-73161 | | | **109** | 61.3 | 36 | 0 | 6/10 | 11.2 |
| LWW14-71195 | | | **109** | 60.7 | 34 | 0 | 6/10 | 12.0 |
| Bruneau | 113 | 117 | 107 | 61.5 | 35 | 0 | 6/14 | 11.1 |
| LCS Artdeco | 116 | 119 | 107 | 59.9 | 33 | 0 | 6/9 | 11.2 |
| UI Castle CL+ | 104 | 115 | 107 | 62.6 | 37 | 0 | 6/13 | 12.2 |
| UI/WSU Huffman | 109 | 115 | 106 | 60.7 | 37 | 0 | 6/15 | 11.9 |
| PNW Hailey | | | 106 | 62.5 | 35 | 0 | 6/14 | 11.6 |
| OR2121086 | | | 105 | 60.6 | 36 | 0 | 6/12 | 11.8 |
| LCS Drive | 109 | 114 | 105 | 59.2 | 28 | 0 | 6/8 | 11.5 |
| ORI2130033CF+ | | | 104 | 60.9 | 37 | 0 | 6/13 | 12.6 |
| WA8232 | | 116 | 104 | 62.1 | 37 | 0 | 6/14 | 11.6 |
| UI Palouse CL+ | 102 | 109 | 103 | 59.9 | 34 | 0 | 6/14 | 11.8 |
| Puma | 107 | 111 | 103 | 61.0 | 39 | 0 | 6/12 | 11.5 |
| Madsen | 102 | 111 | 102 | 60.8 | 34 | 0 | 6/14 | 12.0 |
| IDN-09-08357A | | | 102 | 61.0 | 34 | 0 | 6/10 | 11.4 |
| Cara | | | 102 | 58.3 | 32 | 0 | -- | 11.6 |
| WB 1529 | 99 | 101 | 102 | 62.4 | 35 | 0 | 6/10 | 11.8 |
| UI Magic CL+ | 104 | 112 | 101 | 62.2 | 34 | 0 | 6/10 | 12.1 |
| IDN-01-10704A | 104 | 109 | 101 | 60.8 | 38 | 0 | 6/11 | 10.9 |
| WB1783 | | 109 | 99 | 62.9 | 35 | 0 | 6/11 | 12.1 |
| Bobtail | 109 | 119 | 98 | 58.0 | 32 | 0 | 6/14 | 10.7 |
| ORI2150031CF+ | | | 98 | 61.0 | 37 | 0 | 6/13 | 12.5 |
| WB 1604 | 101 | 105 | 97 | 61.4 | 35 | 0 | 6/9 | 11.5 |
| WB1376CLP | 98 | 101 | 97 | 63.4 | 36 | 0 | 6/10 | 12.8 |
| IDN-09-21102A | | | 96 | 62.4 | 36 | 0 | 6/9 | 11.8 |
| Brundage 96 | 104 | 106 | 96 | 59.2 | 33 | 0 | 6/12 | 11.7 |
| Norwest Tandem | | | 96 | 60.0 | 34 | 0 | 6/11 | 11.6 |
| Stephens | 102 | 104 | 94 | 60.6 | 36 | 0 | 6/10 | 11.6 |
| XA1101 | | | 90 | 62.3 | 37 | 0 | 6/9 | 14.1 |
| SY Ovation | | 99 | 89 | 61.2 | 33 | 0 | 6/12 | 11.6 |
| WB-Junction | 105 | 104 | 89 | 62.7 | 35 | 0 | 6/8 | 11.5 |
| XA1401 | | | 83 | 62.9 | 34 | 0 | 6/10 | 14.3 |
| **Average** | **107** | **113** | **103** | **61.0** | **35** | **0** | **6/11** | **11.8** |
| **LSD (0.05)** | **5** | **6** | **9** | **1.0** | **2** | **--** | **1.6** | **0.5** |
| **CV (%)** | **5.9** | **5.7** | **6.4** | **1.2** | **4.9** | **--** | **11.2** | **3.1** |

*Variety or selection yields in bold were not statistically different from the top yielding variety.

**Table 7. Soft white winter wheat variety performance results at Nezperce, 2017.**

| | | | 2016-2017 Crop Year | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Variety or Selection** | **3-Year Average (bu/A)** | **2-Year Average (bu/A)** | **Seed Yield (bu/A)*** | **Test Weight (lb/bu)** | **Plant Height (in)** | **Lodging (%)** | **Heading Date** | **Protein (%)** |
| LCS Artdeco | 90 | 100 | **86** | 58.3 | 31 | 0 | 6/14 | 9.6 |
| WA8232 | | 98 | **85** | 61.0 | 34 | 0 | 6/18 | 9.2 |
| IDN-07-28017B | | 94 | **85** | 60.4 | 32 | 0 | 6/16 | 9.2 |
| Jasper | 86 | 104 | **84** | 58.2 | 32 | 0 | 6/18 | 9.3 |
| Bruneau | 88 | 102 | **84** | 60.4 | 33 | 0 | 6/17 | 9.7 |
| Norwest Duet | 91 | 106 | **83** | 60.7 | 36 | 0 | 6/18 | 9.7 |
| LCS Hulk | | 103 | **83** | 58.6 | 34 | 0 | 6/16 | 9.1 |
| OR2101043 | | 99 | **82** | 58.8 | 32 | 0 | 6/18 | 9.4 |
| Bobtail | 86 | 101 | **82** | 56.1 | 32 | 0 | 6/19 | 8.9 |
| IDN-09-21102A | | | **80** | 60.3 | 31 | 0 | 6/15 | 9.4 |
| IDN-06-03303B | 84 | 97 | **80** | 58.9 | 31 | 0 | 6/15 | 9.2 |
| PNW Hailey | | | **79** | 61.3 | 34 | 0 | 6/17 | 9.9 |
| UI Sparrow | 85 | 98 | **78** | 59.1 | 35 | 0 | 6/18 | 9.3 |
| IDN-02-29001A | 81 | 92 | **78** | 59.8 | 32 | 0 | 6/16 | 9.0 |
| UI/WSU Huffman | 82 | 95 | **77** | 59.9 | 34 | 0 | 6/19 | 10.2 |
| IDN-01-10704A | 81 | 93 | **77** | 59.8 | 35 | 0 | 6/16 | 9.2 |
| IDN-09-08357A | | | **77** | 59.9 | 31 | 0 | 6/17 | 9.6 |
| WA8234 | | 96 | **77** | 60.5 | 31 | 0 | 6/15 | 9.6 |
| WB1783 | | 93 | 75 | 61.9 | 32 | 0 | 6/16 | 10.2 |
| Cara | | | 75 | 57.7 | 30 | 0 | 6/20 | 9.9 |
| OR2121086 | | | 75 | 59.9 | 34 | 0 | 6/17 | 9.7 |
| UI Palouse CL+ | 76 | 89 | 75 | 57.7 | 30 | 0 | 6/18 | 9.7 |
| LCS Sonic | | | 74 | 59.1 | 34 | 0 | 6/16 | 9.4 |
| Brundage 96 | 80 | 91 | 74 | 58.3 | 31 | 0 | 6/16 | 9.6 |
| XA1101 | | | 74 | 61.4 | 30 | 0 | 6/13 | 11.6 |
| SY Ovation | | 89 | 74 | 60.0 | 32 | 0 | 6/16 | 9.8 |
| Puma | 81 | 92 | 74 | 60.2 | 34 | 0 | 6/16 | 9.6 |
| WB 1529 | 81 | 88 | 73 | 61.4 | 29 | 0 | 6/15 | 10.1 |
| UI Magic CL+ | 71 | 84 | 72 | 60.7 | 32 | 0 | 6/14 | 9.5 |
| Norwest Tandem | | | 72 | 59.6 | 29 | 0 | 6/17 | 9.3 |
| ORI2130033CF+ | | | 72 | 59.9 | 34 | 0 | 6/18 | 10.2 |
| ORI2150031CF+ | | | 72 | 59.9 | 33 | 0 | 6/17 | 10.5 |
| WB1376CLP | 74 | 83 | 72 | 62.4 | 32 | 0 | 6/14 | 10.6 |
| Madsen | 76 | 88 | 71 | 60.0 | 32 | 0 | 6/19 | 9.5 |
| UI Castle CL+ | 73 | 90 | 71 | 60.3 | 33 | 0 | 6/18 | 9.9 |
| WB 1604 | 77 | 84 | 70 | 59.8 | 30 | 0 | 6/12 | 10.1 |
| WB-Junction | 84 | 92 | 70 | 60.1 | 31 | 0 | 6/12 | 9.5 |
| Stephens | 77 | 87 | 66 | 59.1 | 32 | 0 | 6/15 | 9.9 |
| XA1401 | | | 61 | 61.7 | 30 | 0 | 6/14 | 12.2 |
| **Average** | **81** | **94** | **76** | **59.8** | **32** | **0** | **6/16** | **9.7** |
| **LSD (0.05)** | **6** | **8** | **10** | **1.2** | **2** | **--** | **2** | **0.8** |
| **CV (%)** | **8.8** | **8.2** | **9.1** | **1.4** | **4.1** | **--** | **11.5** | **5.7** |

*Variety or selection yields in bold were not statistically different from the top yielding variety.

**Table 8. Soft white winter wheat variety performance results at Tammany (Lewiston), 2017.**

| | | | 2016-2017 Crop Year | | | | | |
|---|---|---|---|---|---|---|---|---|
| Variety or Selection | 3-Year Average (bu/A) | 2-Year Average (bu/A) | Seed Yield (bu/A)* | Test Weight (lb/bu) | Plant Height (in) | Lodging (%) | Heading Date | Protein (%) |
| LCS Sonic | | | **133** | 59.4 | 42 | 0 | 5/29 | 9.0 |
| IDN-07-28017B | | 133 | **130** | 60.2 | 40 | 0 | 5/27 | 9.0 |
| LCS Hulk | | 141 | **129** | 59.5 | 43 | 0 | 5/28 | 8.6 |
| UI Magic CL+ | 129 | 136 | **129** | 61.1 | 37 | 0 | 5/27 | 8.4 |
| SY Ovation | | 137 | **128** | 60.6 | 39 | 0 | 5/28 | 9.2 |
| LCS Artdeco | 141 | 144 | **128** | 60.7 | 35 | 0 | 5/23 | 8.8 |
| IDN-02-29001A | 135 | 139 | **127** | 61.5 | 40 | 0 | 5/28 | 9.1 |
| UI/WSU Huffman | 127 | 131 | **126** | 59.5 | 44 | 0 | 5/31 | 8.9 |
| WA8234 | | 135 | **125** | 60.5 | 38 | 0 | 5/27 | 8.7 |
| IDN-06-03303B | 129 | 136 | **125** | 60.0 | 38 | 0 | 5/29 | 8.6 |
| Norwest Duet | 134 | 137 | **125** | 59.3 | 47 | 0 | 5/29 | 9.1 |
| Jasper | 127 | 132 | **124** | 59.2 | 40 | 0 | 5/30 | 8.6 |
| Bobtail | 131 | 138 | **124** | 57.3 | 38 | 0 | 5/29 | 7.3 |
| WA8232 | | 133 | **123** | 59.9 | 42 | 0 | 5/30 | 8.4 |
| PNW Hailey | | | **122** | 62.1 | 41 | 0 | 5/29 | 8.1 |
| IDN-01-10704A | 127 | 129 | **122** | 59.8 | 42 | 0 | 5/29 | 9.3 |
| OR2101043 | | 131 | **122** | 59.6 | 41 | 0 | 5/30 | 7.9 |
| UI Sparrow | 126 | 129 | 121 | 57.5 | 44 | 0 | 5/31 | 9.0 |
| WB 1529 | 130 | 133 | 120 | 62.2 | 39 | 0 | 5/28 | 8.7 |
| UI Palouse CL+ | 119 | 126 | 119 | 59.6 | 38 | 0 | 5/29 | 8.5 |
| Bruneau | 128 | 132 | 119 | 60.1 | 43 | 0 | 5/30 | 7.6 |
| WB 1604 | 129 | 133 | 118 | 61.5 | 37 | 0 | 5/24 | 8.5 |
| IDN-09-08357A | | | 118 | 60.7 | 39 | 0 | 5/28 | 9.1 |
| IDN-09-21102A | | | 118 | 61.4 | 40 | 0 | 5/26 | 8.5 |
| Puma | 129 | 126 | 118 | 59.7 | 44 | 0 | 5/28 | 10.3 |
| WB1783 | | 130 | 117 | 62.0 | 41 | 0 | 5/29 | 9.6 |
| Norwest Tandem | | | 114 | 60.3 | 37 | 0 | 5/26 | 8.1 |
| OR2121086 | | | 112 | 61.2 | 39 | 0 | 5/29 | 8.2 |
| UI Castle CL+ | 111 | 124 | 112 | 59.5 | 40 | 0 | 5/30 | 7.9 |
| Brundage 96 | 121 | 126 | 112 | 60.0 | 38 | 0 | 5/30 | 8.0 |
| WB-Junction | 128 | 128 | 111 | 61.6 | 38 | 0 | 5/24 | 8.3 |
| Stephens | 121 | 123 | 110 | 60.3 | 39 | 0 | 5/27 | 7.5 |
| ORI2130033CF+ | | | 109 | 59.9 | 39 | 0 | 5/30 | 9.3 |
| ORI2150031CF+ | | | 109 | 59.9 | 39 | 0 | 5/29 | 8.6 |
| Madsen | 118 | 119 | 108 | 60.0 | 38 | 0 | 5/30 | 7.5 |
| Cara | | | 106 | 57.8 | 39 | 0 | 5/31 | 8.4 |
| WB1376CLP | 113 | 116 | 105 | 63.7 | 39 | 0 | 5/28 | 9.3 |
| XA1101 | | | 104 | 62.7 | 41 | 0 | 5/27 | 8.8 |
| XA1401 | | | 84 | 62.4 | 38 | 0 | 5/28 | 8.6 |
| **Average** | **126** | **131** | **118** | **60.4** | **40** | **0** | **5/28** | **8.6** |
| **LSD (0.05)** | **7** | **9** | **12** | **0.7** | **2** | **--** | **1.2** | **0.9** |
| **CV (%)** | **6.7** | **6.7** | **7.3** | **0.8** | **3.8** | **--** | **12.3** | **7.8** |

*Variety or selection yields in bold were not statistically different from the top yielding variety.

**Table 9. Soft white winter wheat variety performance results at Tensed, 2017.**

| Variety or Selection | 3-Year Average (bu/A) | 2-Year Average (bu/A) | 2016-2017 Crop Year | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | Seed Yield (bu/A)* | Test Weight (lb/bu) | Plant Height (in) | Lodging (%) | Heading Date | Protein (%) |
| Jasper | 131 | 137 | **133** | 60.4 | 41 | 0 | 6/13 | 11.8 |
| WA8232 | | 131 | **130** | 62.6 | 42 | 0 | 6/13 | 12.2 |
| LCS Hulk | | 139 | **130** | 60.7 | 41 | 0 | 6/11 | 11.9 |
| PNW Hailey | | | **127** | 63.2 | 41 | 0 | 6/12 | 12.2 |
| Puma | 129 | 130 | **125** | 60.6 | 43 | 0 | 6/13 | 12.1 |
| Norwest Duet | 128 | 135 | **124** | 61.2 | 45 | 0 | 6/13 | 11.8 |
| IDN-01-10704A | 126 | 132 | **124** | 61.5 | 41 | 0 | 6/10 | 11.8 |
| OR2101043 | | 130 | **121** | 60.7 | 41 | 0 | 6/13 | 12.3 |
| UI/WSU Huffman | 126 | 134 | **121** | 61.0 | 40 | 0 | 6/16 | 12.7 |
| IDN-09-21102A | | | **119** | 62.3 | 38 | 0 | 6/8 | 12.4 |
| UI Sparrow | 126 | 131 | **119** | 60.1 | 42 | 0 | 6/16 | 11.9 |
| IDN-06-03303B | 123 | 124 | 117 | 59.0 | 38 | 0 | 6/12 | 12.1 |
| LCS Artdeco | 126 | 133 | 117 | 60.4 | 34 | 0 | 6/7 | 11.8 |
| IDN-07-28017B | | 115 | 116 | 61.5 | 37 | 0 | 6/9 | 12.1 |
| Madsen | 118 | 124 | 116 | 61.5 | 40 | 0 | 6/16 | 12.8 |
| WA8234 | | 131 | 116 | 62.6 | 39 | 0 | 6/8 | 12.2 |
| UI Magic CL+ | 108 | 125 | 115 | 61.8 | 37 | 0 | 6/9 | 12.4 |
| UI Castle CL+ | 103 | 123 | 115 | 62.1 | 40 | 0 | 6/15 | 12.4 |
| Bobtail | 124 | 135 | 112 | 57.7 | 37 | 0 | 6/14 | 11.3 |
| OR2121086 | | | 111 | 60.7 | 38 | 0 | 6/12 | 12.2 |
| LCS Drive | 112 | 121 | 109 | 59.0 | 31 | 0 | 6/8 | 12.3 |
| Norwest Tandem | | | 109 | 60.1 | 35 | 0 | 6/11 | 11.8 |
| UI Palouse CL+ | 115 | 120 | 109 | 59.8 | 37 | 0 | 6/15 | 12.3 |
| SY Ovation | | 126 | 109 | 60.6 | 37 | 0 | 6/13 | 12.1 |
| IDN-02-29001A | 118 | 123 | 109 | 61.7 | 38 | 0 | 6/10 | 12.2 |
| Stephens | 117 | 121 | 109 | 60.7 | 39 | 0 | 6/9 | 11.9 |
| LCS Shark | | | 108 | 60.4 | 36 | 0 | 6/9 | 12.7 |
| Bruneau | 125 | 125 | 107 | 61.3 | 39 | 0 | 6/14 | 12.1 |
| WB 1529 | 116 | 117 | 105 | 62.3 | 36 | 0 | 6/10 | 12.2 |
| ORI2150031CF+ | | | 104 | 61.0 | 40 | 0 | 6/14 | 13.1 |
| WB1376CLP | 105 | 110 | 104 | 63.0 | 39 | 0 | 6/11 | 13.8 |
| WB 1604 | 108 | 116 | 104 | 61.3 | 36 | 0 | 6/8 | 12.4 |
| IDN-09-08357A | | | 104 | 61.2 | 38 | 0 | 6/9 | 12.7 |
| Brundage 96 | 115 | 115 | 104 | 60.2 | 38 | 0 | 6/13 | 12.3 |
| WB1783 | | 123 | 103 | 63.8 | 38 | 0 | 6/12 | 12.7 |
| ORI2130033CF+ | | | 96 | 61.2 | 40 | 0 | 6/13 | 13.1 |
| WB-Junction | 116 | 114 | 94 | 63.1 | 36 | 0 | 6/9 | 12.5 |
| Cara | | | 91 | 60.4 | 35 | 0 | 6/17 | 12.9 |
| XA1101 | | | 88 | 62.2 | 38 | 0 | 6/9 | 14.4 |
| XA1401 | | | 82 | 62.3 | 40 | 0 | 6/10 | 15.4 |
| **Average** | **119** | **126** | **111** | **61.2** | **38** | **0** | **6/11** | **12.4** |
| **LSD (0.05)** | **16** | **18** | **15** | **1.0** | **2** | **--** | **1.5** | **0.4** |
| **CV (%)** | **15.8** | **14.1** | **9.3** | **1.1** | **3.8** | **--** | **8.5** | **2.3** |

*Variety or selection yields in bold were not statistically different from the top yielding variety.

**Table 10. Soft white winter wheat performance comparison across northern Idaho, 2017.**

| Variety or Selection** | 3-Year Yield*** | 2-Year Yield | 2016-2017 Crop Year* | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | North Idaho Average | Bonners Ferry | Genesee | Nezperce | Tammany | Tensed | Test Weight | Plant Height | Lodging | Protein |
| | bu/A | | | | | | | | (lb/bu) | (inches) | (%) | (%) |
| Norwest Duet | 118 | 127 | **119** | **151** | **111** | **83** | **125** | **124** | 60.7 | 41 | 0 | 10.7 |
| LCS Hulk | | 126 | **118** | 133 | **114** | **83** | **129** | **130** | 60.1 | 38 | 0 | 10.4 |
| Jasper | 115 | 124 | **116** | 127 | **110** | **84** | **124** | **133** | 59.2 | 37 | 0 | 10.5 |
| WA8232 | | 121 | **116** | 137 | 104 | **85** | **123** | **130** | 61.6 | 38 | 3 | 10.5 |
| OR2101043 | | 123 | **115** | 139 | **111** | **82** | **122** | **121** | 60.1 | 37 | 0 | 10.4 |
| IDN-06-03303B | | | **115** | 135 | **116** | **80** | **125** | 117 | 59.6 | 36 | 0 | 10.5 |
| IDN-01-10704A | 114 | 121 | **114** | **147** | 101 | **77** | **122** | **124** | 60.6 | 39 | 0 | 10.4 |
| IDN-07-28017B | | | **114** | 128 | **115** | **85** | **130** | 116 | 61.0 | 36 | 0 | 10.5 |
| UI/WSU Huffman | 114 | 123 | **114** | 138 | 106 | **77** | **126** | **121** | 60.5 | 39 | 0 | 10.9 |
| WA8234 | | 123 | **114** | 134 | **117** | **77** | **125** | 116 | 61.6 | 36 | 0 | 10.6 |
| IDN-02-29001A | 115 | 122 | 113 | **142** | **111** | **78** | **127** | 109 | 61.1 | 36 | 0 | 10.7 |
| Bruneau | 117 | 124 | 113 | **148** | 107 | **84** | 119 | 107 | 60.8 | 38 | 0 | 10.2 |
| PNW Hailey | | | 113 | 136 | 106 | **79** | **122** | **127** | 62.1 | 37 | 0 | 10.6 |
| LCS Artdeco | 116 | 124 | 112 | 122 | 107 | **86** | **128** | 117 | 60.0 | 33 | 0 | 10.4 |
| UI Magic CL+ | 106 | 116 | 112 | 138 | 101 | 72 | **129** | 115 | 61.6 | 35 | 0 | 10.8 |
| UI Sparrow | 115 | 124 | 112 | 125 | **116** | **78** | 121 | **119** | 59.1 | 40 | <1 | 10.6 |
| IDN-09-21102A | | | 111 | 140 | 96 | **80** | 118 | **119** | 61.5 | 36 | 0 | 10.6 |
| Puma | 112 | 116 | 110 | 134 | 103 | 74 | 118 | **125** | 60.5 | 39 | 0 | 11.0 |
| Bobtail | | | 110 | 132 | 98 | **82** | **124** | 112 | 57.3 | 34 | 0 | 9.9 |
| WB1783 | | 119 | 108 | **146** | 99 | 75 | 117 | 103 | 62.9 | 37 | 0 | 11.3 |
| OR2121086 | | | 108 | 135 | 105 | 75 | 112 | 111 | 60.7 | 37 | 0 | 10.6 |
| WB 1529 | 109 | 114 | 107 | 138 | 102 | 73 | 120 | 105 | 62.1 | 35 | 0 | 10.8 |
| UI Castle CL+ | 102 | 116 | 107 | 138 | 107 | 71 | 112 | 115 | 61.5 | 37 | 0 | 10.8 |
| UI Palouse CL+ | | | 107 | 128 | 103 | 75 | 119 | 109 | 59.6 | 34 | 0 | 10.7 |
| IDN-09-08357A | | | 106 | 130 | 102 | **77** | 118 | 104 | 60.8 | 36 | 0 | 10.9 |
| Madsen | 107 | 114 | 106 | 133 | 102 | 71 | 108 | 116 | 60.7 | 36 | 0 | 10.7 |
| SY Ovation | | 115 | 106 | 127 | 89 | 74 | **128** | 109 | 60.7 | 35 | 0 | 10.8 |
| Norwest Tandem | | | 103 | 124 | 96 | 72 | 114 | 109 | 59.9 | 34 | 0 | 10.4 |
| Brundage 96 | | | 103 | 128 | 96 | 74 | 112 | 104 | 59.7 | 35 | 0 | 10.5 |
| WB 1604 | 106 | 111 | 102 | 122 | 97 | 70 | 118 | 104 | 60.9 | 34 | 0 | 10.8 |
| Stephens | 107 | 112 | 102 | 131 | 94 | 66 | 110 | 109 | 60.2 | 36 | 0 | 10.4 |
| ORI2130033CF+ | | | 101 | 122 | 104 | 72 | 109 | 96 | 60.5 | 37 | 0 | 11.4 |
| ORI2150031CF+ | | | 100 | 120 | 98 | 72 | 109 | 104 | 60.4 | 37 | 0 | 11.4 |
| WB-Junction | 111 | 114 | 100 | 137 | 89 | 70 | 111 | 94 | 62.1 | 35 | 0 | 10.6 |
| WB1376CLP | 99 | 104 | 98 | 113 | 97 | 72 | 105 | 104 | 63.2 | 36 | 0 | 11.8 |
| XA1101 | | | 90 | 94 | 90 | 74 | 104 | 88 | 62.2 | 36 | 0 | 12.4 |
| XA1401 | | | 81 | 95 | 83 | 61 | 84 | 82 | 62.4 | 35 | 0 | 12.9 |
| Cara | | | -- | -- | 102 | 75 | 106 | 91 | -- | -- | -- | -- |
| LCS Drive | | | -- | -- | 105 | -- | -- | 109 | -- | -- | -- | -- |
| LCS Sonic | | | -- | -- | **109** | 74 | **133** | -- | -- | -- | -- | -- |
| LCS Shark | | | -- | -- | **109** | -- | -- | 108 | -- | -- | -- | -- |
| **Average** | **111** | **119** | **108** | **131** | **103** | **76** | **118** | **111** | **60.8** | **36** | **<1** | **10.8** |
| **LSD (0.05)** | **3** | **4** | **6** | **11** | **9** | **10** | **12** | **15** | **0.4** | **1** | **1** | **0.3** |
| **CV (%)** | **8.3** | **8.3** | **9.3** | **5.7** | **6.4** | **9.1** | **7.3** | **9.3** | **1.1** | **4.2** | **1267** | **4.4** |

*Variety or selection yields in bold were not statistically different from the top yielding variety.

**Cara, LCS Drive, LCS Sonic and LCS Shark were not included in the multilocation averages since these varieties were not included in Bonners Ferry. Bobtail, IDN-06-03303B, IDN-07-28017B and UI Palouse CL+ are not included in 2-year and 3-year averages as these varieties were significantly impacted by wildlife herbivory in 2015 and 2016 at Bonners Ferry.

**Table 11. Hard winter wheat variety performance results at Bonners Ferry, 2017.**

| Variety or Selection | Market Class* | 3-Year Average (bu/A) | 2-Year Average (bu/A) | 2016-2017 Crop Year Seed Yield (bu/A)** | Test Weight (lb/bu) | Plant Height (in) | Lodging (%) | Heading Date | Protein (%) |
|---|---|---|---|---|---|---|---|---|---|
| LCS Rocket | HRW | | | **144** | 59.8 | 32 | 0 | 6/7 | 12.3 |
| Keldin | HRW | 114 | 116 | **142** | 63.9 | 36 | 0 | 6/7 | 12.4 |
| XA4104 | HRW | | | **140** | 63.8 | 35 | 0 | 6/3 | 13.1 |
| LCS Jet | HRW | 126 | 126 | **135** | 60.9 | 31 | 3 | 6/6 | 12.2 |
| OR2111025 | HWW | | | **130** | 62.8 | 35 | 0 | 6/7 | 12.4 |
| OR2120070R | HRW | | | 127 | 61.8 | 34 | 0 | 6/6 | 12.6 |
| Norwest 553 | HRW | 110 | 114 | 124 | 62.3 | 31 | 0 | 6/7 | 12.8 |
| WA8248 | HRW | | | 122 | 63.6 | 34 | 0 | 6/3 | 13.2 |
| UI Silver | HWW | 103 | 109 | 121 | 63.1 | 38 | 50 | 6/8 | 12.1 |
| OR2130118H | HWW | | | 121 | 63.6 | 33 | 0 | 6/7 | 12.3 |
| WB-Arrowhead | HRW | 105 | 104 | 121 | 63.1 | 40 | 0 | 6/6 | 12.4 |
| OR2130021R | HRW | | | 119 | 62.9 | 32 | 0 | 6/8 | 12.7 |
| WB4303 | HRW | | | 116 | 64.3 | 33 | 0 | 6/2 | 14.0 |
| OR2120276H | HWW | | 103 | 116 | 62.7 | 35 | 0 | 6/5 | 12.7 |
| OR2110679 | HWW | | 106 | 116 | 61.8 | 36 | 0 | 6/7 | 12.4 |
| IDO1506 | HWW | | | 114 | 59.3 | 27 | 0 | 6/7 | 12.3 |
| XA4103 | HRW | | | 111 | 63.5 | 33 | 0 | 6/2 | 12.7 |
| WB4623 CLP | HRW | | | 106 | 63.0 | 34 | 0 | 6/4 | 14.0 |
| **Average** | | **112** | **111** | **124** | **62.6** | **34** | **3** | **6/5** | **12.7** |
| **LSD (0.05)** | | **9** | **11** | **16** | **0.6** | **3** | **10** | **1.6** | **0.3** |
| **CV (%)** | | **9.7** | **9.6** | **8.9** | **0.6** | **5.4** | **243.4** | **20.3** | **1.5** |

*HRW = hard red wheat, HWW = hard white wheat

**Variety or selection yields in bold were not statistically different from the top yielding variety.

**Table 12. Hard winter wheat variety performance results at Genesee, 2017.**

| Variety or Selection | Market Class* | 3-Year Average (bu/A) | 2-Year Average (bu/A) | 2016-2017 Crop Year | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Seed Yield (bu/A)** | Test Weight (lb/bu) | Plant Height (in) | Lodging (%) | Heading Date | Protein (%) |
| LCS Rocket | HRW | | | **116** | 60.2 | 35 | 0 | 6/11 | 11.9 |
| LCS Jet | HRW | 116 | 122 | **110** | 61.0 | 35 | 0 | 6/11 | 12.2 |
| LCS Colonia | HRW | 107 | 114 | 107 | 59.1 | 35 | 0 | 6/15 | 12.4 |
| Keldin | HRW | 108 | 109 | 103 | 63.3 | 37 | 0 | 6/11 | 12.4 |
| OR2130021R | HRW | | | 100 | 62.0 | 34 | 0 | 6/11 | 12.7 |
| WA8248 | HRW | | | 98 | 63.4 | 35 | 0 | 6/9 | 13.5 |
| WB-Arrowhead | HRW | 104 | 105 | 94 | 61.9 | 39 | 0 | 6/12 | 12.7 |
| UI Silver | HWW | 100 | 100 | 94 | 62.6 | 40 | 0 | 6/15 | 12.4 |
| XA4104 | HRW | | | 92 | 63.0 | 34 | 0 | 6/8 | 12.8 |
| OR2120070R | HRW | | | 90 | 61.5 | 34 | 0 | 6/10 | 12.5 |
| Norwest 553 | HRW | 97 | 100 | 87 | 60.9 | 31 | 0 | 6/11 | 12.7 |
| OR2130118H | HWW | | | 87 | 63.1 | 33 | 0 | 6/12 | 13.0 |
| OR2111025 | HWW | | | 85 | 62.1 | 36 | 0 | 6/14 | 12.8 |
| XA4103 | HRW | | | 84 | 62.8 | 33 | 0 | 6/5 | 12.6 |
| OR2110679 | HWW | | 100 | 84 | 61.1 | 35 | 0 | 6/13 | 12.7 |
| WB4623 CLP | HRW | | | 82 | 61.8 | 35 | 0 | 6/10 | 13.6 |
| WB4303 | HRW | | | 81 | 63.7 | 32 | 0 | 6/8 | 14.4 |
| OR2120276H | HWW | | 93 | 79 | 61.3 | 33 | 0 | 6/10 | 12.8 |
| IDO1506 | HWW | | | 77 | 60.9 | 26 | 0 | 6/11 | 12.1 |
| **Average** | | **105** | **105** | **92** | **61.9** | **34** | **0** | **6/11** | **12.7** |
| **LSD (0.05)** | | **5** | **7** | **7** | **1.0** | **2** | **--** | **1.3** | **0.3** |
| **CV (%)** | | **5.6** | **6.3** | **5.5** | **1.1** | **3.6** | **--** | **9.5** | **1.8** |

*HRW = hard red wheat, HWW = hard white wheat

**Variety or selection yields in bold were not statistically different from the top yielding variety.

**Table 13. Hard winter wheat variety performance results at Nezperce, 2017.**

| | | | | 2016-2017 Crop Year | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Variety or Selection** | **Market Class*** | **3-Year Average (bu/A)** | **2-Year Average (bu/A)** | **Yield (bu/A)**** | **Test Weight (lb/bu)** | **Plant Height (in)** | **Lodging (%)** | **Heading Date** | **Protein (%)** |
| LCS Jet | HRW | 94 | 107 | **96** | 59.5 | 32 | 0 | 6/14 | 10.0 |
| LCS Rocket | HRW | | | **95** | 57.9 | 31 | 0 | 6/14 | 10.1 |
| LCS Colonia | HRW | 87 | 103 | **93** | 59.7 | 32 | 0 | 6/18 | 10.6 |
| Keldin | HRW | 86 | 96 | **91** | 62.1 | 34 | 0 | 6/15 | 10.9 |
| OR2120070R | HRW | | | **90** | 60.8 | 31 | 0 | 6/13 | 10.5 |
| Norwest 553 | HRW | 84 | 101 | **90** | 60.6 | 29 | 0 | 6/16 | 10.8 |
| XA4104 | HRW | | | **90** | 62.5 | 31 | 0 | 6/12 | 11.2 |
| OR2130021R | HRW | | | 89 | 61.8 | 32 | 0 | 6/16 | 11.0 |
| UI Silver | HWW | 85 | 96 | 86 | 61.9 | 36 | 0 | 6/17 | 10.2 |
| WB-Arrowhead | HRW | 87 | 97 | 86 | 61.4 | 36 | 0 | 6/15 | 11.4 |
| OR2130118H | HWW | | | 86 | 63.0 | 32 | 0 | 6/15 | 11.2 |
| OR2120276H | HWW | | 90 | 85 | 60.8 | 31 | 0 | 6/13 | 11.1 |
| OR2110679 | HWW | | 96 | 82 | 61.2 | 32 | 0 | 6/15 | 10.8 |
| OR2111025 | HWW | | | 82 | 61.8 | 33 | 0 | 6/17 | 11.1 |
| WB4623 CLP | HRW | | | 81 | 62.6 | 33 | 0 | 6/15 | 11.7 |
| XA4103 | HRW | | | 80 | 62.2 | 31 | 0 | 6/7 | 10.9 |
| IDO1506 | HWW | | | 77 | 60.0 | 24 | 0 | 6/15 | 11.0 |
| WB4303 | HRW | | | 73 | 63.7 | 30 | 0 | 6/8 | 12.4 |
| WA8248 | HRW | | | 67 | 62.3 | 31 | 0 | 6/13 | 11.3 |
| **Average** | | **87** | **98** | **85** | **61.0** | **32** | **0** | **6/14** | **11.0** |
| **LSD (0.05)** | | **5** | **7** | **7** | **0.9** | **2** | **--** | **1** | **0.5** |
| **CV (%)** | | **7.5** | **6.6** | **6.1** | **1.1** | **3.8** | **--** | **13.0** | **3.2** |

*HRW = hard red wheat, HWW = hard white wheat

**Variety or selection yields in bold were not statistically different from the top yielding variety.

**Table 14. Hard winter wheat variety performance results at Tammany (Lewiston), 2017.**

| | | | | 2016-2017 Crop Year | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Variety or Selection** | **Market Class*** | **3-Year Average (bu/A)** | **2-Year Average (bu/A)** | **Seed Yield (bu/A)**** | **Test Weight (lb/bu)** | **Plant Height (in)** | **Lodging (%)** | **Heading Date** | **Protein (%)** |
| LCS Rocket | HRW | | | **140** | 59.5 | 36 | 0 | 5/26 | 10.3 |
| LCS Jet | HRW | 135 | 140 | **136** | 61.3 | 38 | 0 | 5/26 | 10.5 |
| LCS Colonia | HRW | 127 | 133 | **128** | 58.2 | 36 | 0 | 5/30 | 10.8 |
| OR2120070R | HRW | | | 126 | 60.7 | 37 | 0 | 5/27 | 10.0 |
| Keldin | HRW | 131 | 135 | 121 | 62.5 | 43 | 0 | 5/27 | 10.0 |
| OR2130021R | HRW | | | 120 | 60.9 | 36 | 0 | 5/28 | 10.5 |
| Norwest 553 | HRW | 114 | 125 | 115 | 60.8 | 34 | 0 | 5/28 | 9.5 |
| XA4104 | HRW | | | 114 | 61.8 | 38 | 0 | 5/24 | 9.8 |
| WB4303 | HRW | | | 111 | 64.8 | 37 | 0 | 5/23 | 9.9 |
| OR2130118H | HWW | | | 111 | 63.0 | 36 | 0 | 5/28 | 9.7 |
| UI Silver | HWW | 104 | 114 | 110 | 60.2 | 45 | 0 | 5/30 | 10.8 |
| IDO1506 | HWW | | | 109 | 60.4 | 27 | 0 | 5/28 | 9.4 |
| OR2110679 | HWW | | 121 | 108 | 60.5 | 37 | 0 | 5/28 | 9.7 |
| XA4103 | HRW | | | 108 | 63.3 | 39 | 0 | 5/22 | 9.6 |
| OR2120276H | HWW | | 124 | 108 | 61.9 | 38 | 0 | 5/25 | 10.2 |
| OR2111025 | HWW | | | 106 | 61.5 | 38 | 0 | 5/28 | 10.1 |
| WB-Arrowhead | HRW | 115 | 119 | 106 | 60.5 | 43 | 0 | 5/28 | 10.2 |
| WA8248 | HRW | | | 105 | 63.0 | 39 | 0 | 5/24 | 9.6 |
| WB4623 CLP | HRW | | | 94 | 62.9 | 42 | 0 | 5/27 | 9.3 |
| **Average** | | **121** | **126** | **115** | **61.5** | **38** | **0** | **5/27** | **10.0** |
| **LSD (0.05)** | | **5** | **8** | **14** | **0.8** | **2** | **--** | **1.2** | **0.7** |
| **CV (%)** | | **5.5** | **6.2** | **8.4** | **1.0** | **3.1** | **--** | **15.3** | **5.2** |

*HRW = hard red wheat, HWW = hard white wheat

**Variety or selection yields in bold were not statistically different from the top yielding variety.

**Table 15. Hard winter wheat variety performance results at Tensed, 2017.**

| | | | | 2016-2017 Crop Year | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Variety or Selection** | **Market Class*** | **3-Year Average (bu/A)** | **2-Year Average (bu/A)** | **Seed Yield (bu/A)**** | **Test Weight (lb/bu)** | **Plant Height (in)** | **Lodging (%)** | **Heading Date** | **Protein (%)** |
| LCS Rocket | HRW | | | **138** | 59.8 | 35 | 0 | 6/8 | 12.8 |
| LCS Jet | HRW | 136 | 146 | **134** | 61.3 | 38 | 0 | 6/8 | 13.3 |
| LCS Colonia | HRW | 120 | 138 | 127 | 57.5 | 38 | 0 | 6/11 | 12.9 |
| Keldin | HRW | 126 | 129 | 121 | 62.2 | 39 | 0 | 6/9 | 13.4 |
| UI Silver | HWW | 120 | 125 | 121 | 62.6 | 43 | 0 | 6/11 | 13.1 |
| Norwest 553 | HRW | 109 | 128 | 119 | 62.3 | 35 | 0 | 6/10 | 13.7 |
| OR2130021R | HRW | | | 118 | 62.2 | 37 | 0 | 6/11 | 13.6 |
| OR2120070R | HRW | | | 117 | 61.5 | 37 | 0 | 6/9 | 13.4 |
| OR2130118H | HWW | | | 109 | 64.0 | 35 | 0 | 6/10 | 13.8 |
| XA4104 | HRW | | | 107 | 62.8 | 35 | 0 | 6/6 | 14.2 |
| OR2111025 | HWW | | | 105 | 63.2 | 37 | 0 | 6/10 | 13.9 |
| OR2110679 | HWW | | 116 | 102 | 62.0 | 36 | 0 | 6/11 | 13.7 |
| WB-Arrowhead | HRW | 115 | 114 | 102 | 63.5 | 41 | 0 | 6/8 | 14.1 |
| WB4623 CLP | HRW | | | 101 | 62.3 | 38 | 0 | 6/9 | 15.0 |
| WA8248 | HRW | | | 98 | 63.3 | 36 | 0 | 6/8 | -- |
| IDO1506 | HWW | | | 93 | 60.3 | 27 | 0 | 6/10 | 13.2 |
| XA4103 | HRW | | | 92 | 63.2 | 34 | 0 | 5/31 | 13.8 |
| OR2120276H | HWW | | 108 | 89 | 61.7 | 35 | 0 | 6/8 | 13.9 |
| WB4303 | HRW | | | 86 | 63.9 | 34 | 0 | 6/3 | 14.8 |
| **Average** | | **121** | **125** | **109** | **62.1** | **36** | **0** | **6/8** | **13.7** |
| **LSD (0.05)** | | **17** | **17** | **10** | **1.1** | **2** | **--** | **2.0** | **0.4** |
| **CV (%)** | | **17.4** | **13.0** | **6.5** | **1.2** | **3.4** | **--** | **15.0** | **2.0** |

*HRW = hard red wheat, HWW = hard white wheat

**Variety or selection yields in bold were not statistically different from the top yielding variety.

**Table 16. Hard winter wheat performance comparison across northern Idaho, 2017.**

| Variety or Selection | Market Class | 3-Year Yield | 2-Year Yield | 2016-2017 Crop Year* | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | North Idaho Average* | Bonners Ferry | Genesee | Nezperce | Tammany | Tensed | Test Weight | Plant Height | Lodging | Protein |
| | | ---------- | ---------- | ---------- | bu/A | ---------- | ---------- | ---------- | ---------- | (lb/bu) | (inches) | (%) | (%) |
| LCS Rocket | HRW | | | **127** | **144** | **116** | **95** | **140** | **138** | 59.4 | 34 | 0 | 11.5 |
| LCS Jet | HRW | 121 | 128 | **122** | **135** | **110** | **96** | **136** | **134** | 60.8 | 35 | <1 | 11.6 |
| Keldin | HRW | 113 | 117 | 116 | **142** | 103 | **91** | 121 | 121 | 62.8 | 38 | 0 | 11.8 |
| OR2120070R | HRW | | | 110 | 127 | 90 | **90** | 126 | 117 | 61.2 | 34 | 0 | 11.8 |
| OR2130021R | HRW | | | 109 | 119 | 100 | 89 | 120 | 118 | 62.0 | 34 | 0 | 12.1 |
| XA4104 | HRW | | | 108 | **140** | 92 | **90** | 114 | 107 | 62.8 | 35 | 0 | 12.2 |
| Norwest 553 | HRW | 103 | 114 | 107 | 124 | 87 | **90** | 115 | 119 | 61.4 | 32 | 0 | 11.9 |
| UI Silver | HWW | 102 | 109 | 106 | 121 | 94 | 86 | 110 | 121 | 62.1 | 40 | 10 | 11.7 |
| OR2130118H | HWW | | | 103 | 121 | 87 | 86 | 111 | 109 | 63.3 | 34 | 0 | 12.0 |
| WB-Arrowhead | HRW | 105 | 108 | 102 | 121 | 94 | 86 | 106 | 102 | 62.1 | 39 | 0 | 12.2 |
| OR2111025 | HWW | | | 102 | **130** | 85 | 82 | 106 | 105 | 62.3 | 36 | 0 | 12.1 |
| OR2110679 | HWW | | 108 | 98 | 116 | 84 | 82 | 108 | 102 | 61.3 | 35 | 0 | 11.9 |
| WA8248 | HRW | | | 98 | 122 | 98 | 67 | 105 | 98 | 63.1 | 35 | 0 | 11.9 |
| OR2120276H | HWW | | 104 | 95 | 116 | 79 | 85 | 108 | 89 | 61.7 | 34 | 0 | 12.1 |
| XA4103 | HRW | | | 95 | 111 | 84 | 80 | 108 | 92 | 63.0 | 34 | 0 | 11.9 |
| IDO1506 | HWW | | | 94 | 114 | 77 | 77 | 109 | 93 | 60.2 | 26 | 0 | 11.6 |
| WB4303 | HRW | | | 94 | 116 | 81 | 73 | 111 | 86 | 64.1 | 33 | 0 | 13.1 |
| WB4623 CLP | HRW | | | 93 | 106 | 82 | 81 | 94 | 101 | 62.5 | 36 | 0 | 12.7 |
| LCS Colonia** | HRW | | | -- | -- | 107 | **93** | **128** | 127 | -- | -- | -- | -- |
| **Average** | | **109** | **112** | **104** | **124** | **92** | **85** | **115** | **109** | **62.0** | **35** | **<1** | **12.0** |
| **LSD (0.05)** | | **3** | **4** | **6** | **16** | **7** | **7** | **14** | **10** | **0.4** | **1** | **2.0** | **0.2** |
| **CV (%)** | | **7.6** | **8.1** | **9.1** | **8.9** | **5.5** | **6.1** | **8.4** | **6.5** | **1.0** | **4.1** | **540.5** | **3.0** |

*Variety or selection yields in bold were not statistically different from the top yielding variety.

**LCS Colonia was not included at Bonners Ferry so multilocation data as well as 2-year and 3-year averages are not available.

**Table 17. Soft white spring wheat variety performance results at Bonners Ferry, 2017.**

| Variety or Selection* | 3-Year Average (bu/A) | 2-Year Average (bu/A) | 2017 Crop Year: Seed Yield (bu/A)** | Test Weight (lb/bu) | Plant Height (in) | Lodging (%) | Heading Date | Protein (%) |
|---|---|---|---|---|---|---|---|---|
| 14-SSW-1059 | | | **48** | 58.4 | 22 | 0 | 7/12 | 11.4 |
| WA8278 | | | **46** | 60.2 | 25 | 0 | 7/7 | 9.5 |
| WB-6341 | 65 | 70 | **44** | 61.1 | 21 | 0 | 7/4 | 9.9 |
| Seahawk | 74 | 85 | **44** | 61.7 | 21 | 0 | 7/10 | 10.1 |
| Tekoa | 62 | 67 | **42** | 63.0 | 22 | 0 | 7/5 | 10.5 |
| Ryan | 59 | 68 | 38 | 61.2 | 23 | 0 | 7/2 | 11.8 |
| JD[c] | 63 | 66 | 37 | 62.2 | 21 | 0 | 7/5 | 11.1 |
| Babe | 52 | 52 | 37 | 62.3 | 22 | 0 | 7/9 | 11.1 |
| Diva | 67 | 74 | 36 | 60.7 | 24 | 0 | 7/4 | 10.6 |
| IDO1405S | | | 35 | 61.5 | 22 | 0 | 7/6 | 12.3 |
| WA8277 | | | 34 | 62.5 | 21 | 0 | 6/30 | 11.6 |
| WB-6121 | 58 | 67 | 33 | 62.1 | 20 | 0 | 7/1 | 12.2 |
| Melba[c] | | 62 | 32 | 61.9 | 19 | 0 | 7/7 | 11.3 |
| Alturas | 52 | 50 | 31 | 60.8 | 19 | 0 | 7/13 | 11.1 |
| WB-6430 | | | 29 | 62.7 | 18 | 0 | 7/3 | 11.5 |
| IDO1403S | | | 29 | 61.2 | 19 | 0 | 7/5 | 12.5 |
| UI Stone | 50 | 53 | 29 | 61.7 | 21 | 0 | 7/3 | 10.9 |
| **Average** | **60** | **65** | **37** | **61.5** | **21** | **0** | **7/5** | **11.2** |
| **LSD (0.05)** | **5** | **7** | **7** | **0.9** | **2** | **--** | **2.6** | **0.6** |
| **CV (%)** | **10.3** | **10.0** | **10.0** | **0.7** | **4.6** | **--** | **18.5** | **2.6** |

*c = spring club.

**Variety or selection yields in bold were not statistically different from the top yielding variety.

**Table 18. Soft white spring wheat variety performance results at Craigmont, 2017.**

| Variety or Selection* | 3-Year Average (bu/A) | 2-Year Average (bu/A) | 2017 Crop Year Seed Yield (bu/A)** | Test Weight (lb/bu) | Plant Height (in) | Lodging (%) | Heading Date | Protein (%) |
|---|---|---|---|---|---|---|---|---|
| WA8277 | | | **56** | 56.7 | 35 | 0 | 7/5 | 14.1 |
| 14-SSW-1059 | | | **56** | 53.7 | 31 | 0 | 7/14 | 15.5 |
| Ryan | 60 | 74 | **55** | 53.7 | 32 | 0 | 7/5 | 13.2 |
| Tekoa | 61 | 75 | **53** | 56.1 | 30 | 0 | 7/8 | 14.2 |
| IDO1405S | | | **53** | 53.6 | 31 | 0 | 7/5 | 14.3 |
| WA8278 | | | **52** | 55.1 | 32 | 0 | 7/8 | 12.9 |
| UI Stone | 58 | 69 | 51 | 55.4 | 30 | 0 | 7/5 | 13.6 |
| WB-6121 | 58 | 72 | 51 | 54.5 | 29 | 0 | 7/5 | 14.2 |
| Babe | 58 | 70 | 51 | 56.1 | 31 | 0 | 7/9 | 13.3 |
| Seahawk | 60 | 75 | 50 | 55.7 | 29 | 0 | 7/11 | 14.8 |
| Melba[c] | | 72 | 50 | 55.6 | 26 | 0 | 7/8 | 13.9 |
| Diva | 55 | 67 | 50 | 53.8 | 31 | 0 | 7/7 | 13.6 |
| WB-6430 | | | 50 | 55.2 | 24 | 0 | 7/5 | 14.1 |
| JD[c] | 55 | 66 | 47 | 56.2 | 33 | 0 | 7/8 | 14.9 |
| WB-6341 | 54 | 62 | 47 | 53.7 | 29 | 0 | 7/5 | 13.6 |
| IDO1403S | | | 46 | 55.6 | 27 | 0 | 7/5 | 13.8 |
| Alturas | 47 | 56 | 42 | 54.4 | 27 | 0 | 7/8 | 13.9 |
| **Average** | **57** | **69** | **51** | **55.0** | **30** | **0** | **7/7** | **14.0** |
| **LSD (0.05)** | **4** | **5** | **5** | **1.7** | **3** | **--** | **1.2** | **1.1** |
| **CV (%)** | **8.4** | **6.8** | **7.1** | **2.2** | **6.5** | **--** | **21.6** | **5.5** |

*c = spring club.

**Variety or selection yields in bold were not statistically different from the top yielding variety.

**Table 19. Soft white spring wheat variety performance results at Genesee (rim area), 2017.**

| Variety or Selection* | 3-Year Average (bu/A) | 2-Year Average (bu/A) | 2017 Crop Year | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | Seed Yield (bu/A)** | Test Weight (lb/bu) | Plant Height (in) | Lodging (%) | Heading Date | Protein (%) |
| Tekoa | 66 | 76 | **72** | 60.0 | 33 | 0 | 7/1 | 11.8 |
| Ryan | 64 | 73 | **70** | 58.9 | 34 | 0 | 6/27 | 11.8 |
| WA8277 | | | **69** | 61.4 | 35 | 0 | 6/26 | 12.1 |
| WB-6341 | 57 | 63 | **69** | 59.1 | 33 | 0 | 6/27 | 11.5 |
| Diva | 60 | 70 | 63 | 59.9 | 36 | 1 | 6/30 | 11.8 |
| WA8278 | | | 63 | 59.3 | 35 | 0 | 6/30 | 11.5 |
| Babe | 58 | 58 | 62 | 59.4 | 34 | 0 | 6/30 | 12.2 |
| UI Stone | 54 | 60 | 62 | 59.7 | 33 | 0 | 6/27 | 11.9 |
| WB-6121 | 64 | 70 | 62 | 59.1 | 32 | 0 | 6/28 | 12.8 |
| JD[c] | 62 | 70 | 61 | 60.0 | 35 | 0 | 6/30 | 12.0 |
| WB-6430 | | | 60 | 59.6 | 30 | 0 | 6/26 | 12.0 |
| Melba[c] | | 73 | 60 | 58.7 | 30 | 0 | 7/2 | 11.3 |
| IDO1405S | | | 60 | 58.0 | 33 | 0 | 6/27 | 12.8 |
| 14-SSW-1059 | | | 60 | 57.4 | 33 | 0 | 7/3 | 13.7 |
| Seahawk | 67 | 75 | 59 | 59.9 | 33 | 0 | 7/2 | 12.6 |
| Alturas | 49 | 55 | 56 | 59.2 | 32 | 0 | 7/1 | 11.8 |
| IDO1403S | | | 53 | 58.6 | 30 | 0 | 6/27 | 12.7 |
| **Average** | **60** | **67** | **62** | **59.3** | **33** | **<0.1** | **6/29** | **12.1** |
| **LSD (0.05)** | **6** | **5** | **7** | **1.1** | **2** | **ns** | **2.2** | **0.7** |
| **CV (%)** | **12.0** | **8.0** | **7.9** | **1.3** | **4.2** | **824.6** | **31.3** | **3.9** |

*c = spring club.

**Variety or selection yields in bold were not statistically different from the top yielding variety.

**Table 20. Soft white spring wheat variety performance results at Moscow, 2017.**

| Variety or Selection* | 3-Year Average (bu/A) | 2-Year Average (bu/A) | 2017 Crop Year | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | Seed Yield (bu/A)** | Test Weight (lb/bu) | Plant Height (in) | Lodging (%) | Heading Date | Protein (%) |
| JD[c] | 55 | 58 | **47** | 60.5 | 28 | 0 | 7/3 | 10.7 |
| WA8278 | | | **47** | 60.1 | 30 | 0 | 7/2 | 10.8 |
| WA8277 | | | **46** | 62.4 | 27 | 0 | 6/27 | 11.1 |
| Ryan | 56 | 55 | **46** | 59.8 | 27 | 0 | 6/29 | 10.9 |
| WB-6121 | 54 | 56 | **45** | 61.1 | 25 | 0 | 7/1 | 12.3 |
| Diva | 56 | 56 | **45** | 60.3 | 30 | 0 | 7/1 | 10.5 |
| WB-6341 | 49 | 45 | **43** | 60.3 | 27 | 0 | 7/2 | 10.9 |
| IDO1405S | | | **42** | 60.7 | 29 | 0 | 6/30 | 12.2 |
| WB-6430 | | | **41** | 60.5 | 25 | 0 | 7/1 | 11.0 |
| Seahawk | 59 | 60 | **41** | 59.6 | 27 | 0 | 7/4 | 11.6 |
| UI Stone | 44 | 42 | **40** | 61.0 | 26 | 0 | 6/30 | 11.3 |
| Tekoa | 54 | 57 | 37 | 61.6 | 28 | 0 | 7/2 | 11.2 |
| Babe | 44 | 38 | 36 | 59.6 | 27 | 0 | 7/4 | 11.2 |
| Melba[c] | | 52 | 35 | 59.8 | 24 | 0 | 7/3 | 10.5 |
| 14-SSW-1059 | | | 34 | 57.2 | 23 | 0 | 7/8 | 11.6 |
| Alturas | 43 | 37 | 29 | 58.5 | 24 | 0 | 7/4 | 11.6 |
| IDO1403S | | | 28 | 60.2 | 23 | 0 | 7/1 | 11.2 |
| **Average** | **51** | **50** | **40** | **60.2** | **26** | **0** | **7/2** | **11.2** |
| **LSD (0.05)** | **5** | **7** | **10** | **1.2** | **2** | **--** | **1.3** | **ns** |
| **CV (%)** | **10.9** | **12.9** | **14.4** | **1.4** | **5.7** | **--** | **13.3** | **8.1** |

*c = spring club.

**Variety or selection yields in bold were not statistically different from the top yielding variety.

**Table 21. Soft white spring wheat variety performance comparison across northern Idaho, 2017.**

| Variety or Selection* | 3-Year Yield | 2-Year Yield | 2017 Crop Year | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | North Idaho Average** | Bonners Ferry | Craigmont | Genesee | Moscow | Test Weight | Plant Height | Protein |
| | bu/A | | | | | | | (lb/bu) | (inches) | (%) |
| Tekoa | 61 | 69 | **54** | **42** | **53** | **72** | 37 | 59.9 | 28 | 12.0 |
| Ryan | 60 | 68 | **54** | 38 | **55** | **70** | **46** | 58.2 | 29 | 11.9 |
| 14-SSW-1059 | | | **53** | **48** | **56** | 60 | 34 | 56.6 | 28 | 13.2 |
| WA8278 | | | **53** | **46** | **52** | 63 | **47** | 58.4 | 31 | 11.4 |
| WA8277 | | | **53** | 34 | **56** | **69** | **46** | 60.6 | 30 | 12.3 |
| Diva | 59 | 67 | **51** | 36 | 50 | 63 | **45** | 58.4 | 31 | 11.8 |
| WB-6341 | 56 | 60 | **51** | **44** | 47 | **69** | **43** | 58.4 | 28 | 11.6 |
| WB-6121 | 59 | 66 | 50 | 33 | 51 | 62 | **45** | 58.8 | 27 | 13.0 |
| Seahawk | 65 | 73 | 50 | **44** | 50 | 59 | **41** | 58.9 | 28 | 12.6 |
| JD[c] | 59 | 65 | 49 | 37 | 47 | 61 | **47** | 59.5 | 30 | 12.3 |
| UI Stone | 52 | 56 | 49 | 29 | 51 | 62 | **40** | 59.1 | 28 | 12.0 |
| IDO1405S | | | 48 | 35 | **53** | 60 | **42** | 58.2 | 29 | 12.9 |
| Babe | 53 | 54 | 48 | 37 | 51 | 62 | 36 | 58.9 | 29 | 12.0 |
| WB-6430 | | | 47 | 29 | 50 | 60 | **41** | 59.0 | 25 | 12.3 |
| Melba[c] | | 65 | 46 | 32 | 50 | 60 | 35 | 58.8 | 25 | 11.8 |
| Alturas | 48 | 50 | 41 | 31 | 42 | 56 | 29 | 57.8 | 26 | 12.2 |
| IDO1403S | | | 40 | 29 | 46 | 53 | 28 | 58.5 | 25 | 12.5 |
| **Average** | **57** | **63** | **49** | **37** | **51** | **62** | **40** | **58.7** | **28** | **12.2** |
| **LSD (0.05)** | **3** | **3** | **4** | **7** | **5** | **7** | **10** | **0.7** | **1** | **0.6** |
| **CV (%)** | **12.9** | **10.6** | **11.9** | **10.0** | **7.1** | **7.9** | **14.4** | **1.7** | **6.1** | **6.5** |

*c = spring club.

**Variety or selection yields in bold were not statistically different from the top yielding variety.

**Table 22. Hard spring wheat variety performance results at Bonners Ferry, 2017.**

| | | | | 2017 Crop Year | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Variety or Selection** | **Market Class*** | **3-Year Average (bu/A)** | **2-Year Average (bu/A)** | **Seed Yield (bu/A)**** | **Test Weight (lb/bu)** | **Plant Height (in)** | **Lodging (%)** | **Heading Date** | **Protein (%)** |
| 12SB0197 | HRS | | | **42** | 61.1 | 20 | 0 | 7/10 | 12.9 |
| IDO1202S | HWS | 58 | 62 | **40** | 62.2 | 23 | 0 | 7/5 | 13.0 |
| WB-Hartline | HWS | 58 | 67 | **39** | 61.5 | 21 | 0 | 7/7 | 12.2 |
| Alum | HRS | 51 | 56 | 37 | 63.3 | 22 | 0 | 7/4 | 13.1 |
| Dayn | HWS | 64 | 77 | 37 | 62.8 | 21 | 0 | 7/3 | 12.3 |
| IDO1203S-A | HWS | 55 | 63 | 36 | 63.4 | 20 | 0 | 6/30 | 13.0 |
| IDO1602S | HWS | | | 36 | 63.3 | 22 | 0 | 7/3 | 12.5 |
| Glee | HRS | 62 | 73 | 35 | 62.9 | 22 | 0 | 7/3 | 13.3 |
| LCS Iron | HRS | 60 | 72 | 35 | 61.1 | 20 | 0 | 7/11 | 13.1 |
| WB7417 | HWS | | | 35 | 62.7 | 24 | 0 | 7/1 | 13.8 |
| WB9518 | HRS | 52 | 62 | 35 | 60.9 | 20 | 0 | 7/8 | 15.8 |
| WB9411 | HRS | 56 | 65 | 34 | 62.3 | 19 | 0 | 7/2 | 12.9 |
| IDO1603S | HRS | | | 33 | 62.2 | 21 | 0 | 7/4 | 14.0 |
| Jefferson | HRS | 54 | 62 | 32 | 62.5 | 22 | 0 | 7/4 | 13.6 |
| UI Winchester | HRS | 50 | 57 | 32 | 62.0 | 19 | 0 | 7/4 | 13.9 |
| WB9662 | HRS | | | 31 | 61.4 | 20 | 0 | 7/13 | 14.0 |
| WB9229 | HRS | | | 31 | 62.5 | 18 | 0 | 7/12 | 14.0 |
| XA7320 | HWS | | | 30 | 62.8 | 18 | 0 | 6/30 | 12.8 |
| UI Platinum | HWS | 53 | 69 | 29 | 62.9 | 20 | 0 | 7/1 | 12.4 |
| 500-709 | HRS | | | 29 | 61.3 | 18 | 0 | 7/6 | 13.1 |
| WB9668 | HRS | 44 | 53 | 26 | 62.3 | 19 | 0 | 7/1 | 15.1 |
| 501-089 | HRS | | | 26 | 59.0 | 17 | 0 | 7/6 | 14.9 |
| WB9350 | HRS | | | 24 | 61.2 | 16 | 0 | 7/3 | 14.4 |
| **Average** | | **55** | **64** | **33** | **62.1** | **20** | **0** | **7/4** | **13.6** |
| **LSD (0.05)** | | **5** | **5** | **5** | **0.5** | **2** | **--** | **2.4** | **0.9** |
| **CV (%)** | | **10.3** | **7.0** | **7.5** | **0.4** | **4.7** | **--** | **19.9** | **3.6** |

*HRS = hard red spring, HWS = hard white spring

**Variety or selection yields in bold were not statistically different from the top yielding variety.

**Table 23. Hard spring wheat variety performance results at Craigmont, 2017.**

| | | | | 2017 Crop Year | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Variety or Selection** | **Market Class*** | **3-Year Average (bu/A)** | **2-Year Average (bu/A)** | **Seed Yield (bu/A)**** | **Test Weight (lb/bu)** | **Plant Height (in)** | **Lodging (%)** | **Heading Date** | **Protein (%)** |
| WB7417 | HWS | | | **51** | 56.4 | 31 | 0 | 7/5 | 16.2 |
| XA7320 | HWS | | | **50** | 52.6 | 29 | 0 | 7/4 | 15.1 |
| LCS Iron | HRS | 61 | 71 | **50** | 52.4 | 27 | 0 | 7/5 | 15.9 |
| IDO1602S | HWS | | | **49** | 53.5 | 31 | 0 | 7/4 | 16.0 |
| 500-709 | HRS | | | **48** | 51.0 | 25 | 0 | 7/6 | 15.5 |
| Dayn | HWS | 61 | 73 | **48** | 54.4 | 29 | 0 | 7/6 | 15.8 |
| 12SB0197 | HRS | | | **47** | 52.5 | 27 | 0 | 7/6 | 16.4 |
| UI Platinum | HWS | 59 | 68 | **47** | 53.2 | 27 | 0 | 7/5 | 15.3 |
| WB9350 | HRS | | | **46** | 51.1 | 23 | 0 | 7/5 | 15.7 |
| WB9668 | HRS | 55 | 64 | **46** | 53.7 | 26 | 0 | 7/4 | 16.5 |
| 501-089 | HRS | | | **46** | 53.5 | 22 | 0 | 7/5 | 15.2 |
| WB-Hartline | HWS | 55 | 66 | **46** | 52.9 | 28 | 0 | 7/6 | 16.0 |
| IDO1203S-A | HWS | 56 | 65 | 45 | 54.3 | 28 | 0 | 7/4 | 15.9 |
| WB9411 | HRS | 57 | 66 | 45 | 55.3 | 28 | 0 | 7/5 | 16.1 |
| IDO1603S | HRS | | | 44 | 53.2 | 27 | 0 | 7/5 | 16.1 |
| Glee | HRS | 55 | 65 | 43 | 54.4 | 28 | 0 | 7/5 | 16.5 |
| UI Winchester | HRS | 54 | 64 | 43 | 53.2 | 27 | 0 | 7/5 | 16.3 |
| Alum | HRS | 53 | 64 | 43 | 55.4 | 27 | 0 | 7/7 | 16.7 |
| WB9518 | HRS | 54 | 62 | 42 | 53.3 | 25 | 0 | 7/5 | 16.6 |
| IDO1202S | HWS | 56 | 64 | 41 | 55.1 | 29 | 0 | 7/8 | 16.2 |
| Jefferson | HRS | 51 | 58 | 41 | 55.5 | 28 | 0 | 7/6 | 16.5 |
| WB9229 | HRS | | | 40 | 54.4 | 25 | 0 | 7/9 | 16.4 |
| WB9662 | HRS | | | 37 | 54.8 | 23 | 0 | 7/11 | 16.9 |
| **Average** | | **56** | **65** | **45** | **53.7** | **27** | **0** | **7/6** | **16.1** |
| **LSD (0.05)** | | **4** | **5** | **6** | **1.3** | **3** | **--** | **1.4** | **0.8** |
| **CV (%)** | | **8.8** | **8.0** | **9.8** | **1.8** | **7.8** | **--** | **38.9** | **3.5** |

*HRS = hard red spring, HWS = hard white spring

**Variety or selection yields in bold were not statistically different from the top yielding variety.

**Table 24. Hard spring wheat variety performance results at Genesee, 2017.**

| | | | | 2017 Crop Year | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Variety or Selection** | **Market Class*** | **3-Year Average (bu/A)** | **2-Year Average (bu/A)** | **Seed Yield (bu/A)**** | **Test Weight (lb/bu)** | **Plant Height (in)** | **Lodging (%)** | **Heading Date** | **Protein (%)** |
| WB7417 | HWS | | | **68** | 59.9 | 33 | 0 | 6/26 | 14.6 |
| XA7320 | HWS | | | **68** | 58.4 | 28 | 0 | 6/26 | 14.1 |
| Glee | HRS | 64 | 69 | **67** | 58.9 | 32 | 0 | 6/27 | 14.6 |
| WB9518 | HRS | 67 | 72 | **65** | 59.5 | 30 | 0 | 6/28 | 15.3 |
| 12SB0197 | HRS | | | **63** | 56.9 | 30 | 0 | 7/1 | 14.3 |
| Jefferson | HRS | 57 | 61 | **62** | 59.3 | 32 | 0 | 6/29 | 14.8 |
| LCS Iron | HRS | 65 | 74 | **62** | 57.0 | 29 | 0 | 7/1 | 14.4 |
| IDO1203S-A | HWS | 58 | 59 | **62** | 59.3 | 29 | 0 | 6/27 | 13.9 |
| IDO1202S | HWS | 58 | 61 | **61** | 58.9 | 33 | 0 | 6/29 | 14.6 |
| Dayn | HWS | 65 | 72 | 60 | 56.9 | 33 | 0 | 6/26 | 14.9 |
| WB-Hartline | HWS | 60 | 66 | 60 | 55.9 | 33 | 0 | 6/30 | 14.9 |
| UI Platinum | HWS | 63 | 68 | 60 | 58.6 | 28 | 0 | 6/26 | 14.1 |
| IDO1602S | HWS | | | 59 | 58.5 | 31 | 0 | 6/27 | 14.3 |
| WB9668 | HRS | 63 | 67 | 59 | 59.0 | 27 | 0 | 6/26 | 15.9 |
| 500-709 | HRS | | | 58 | 57.0 | 28 | 0 | 6/29 | 14.4 |
| IDO1603S | HRS | | | 58 | 58.0 | 29 | 0 | 6/29 | 14.7 |
| UI Winchester | HRS | 56 | 61 | 57 | 57.4 | 30 | 0 | 6/27 | 14.5 |
| WB9411 | HRS | 61 | 67 | 57 | 58.6 | 28 | 0 | 6/26 | 15.1 |
| Alum | HRS | 59 | 63 | 56 | 58.6 | 31 | 0 | 6/29 | 15.0 |
| WB9662 | HRS | | | 56 | 59.3 | 28 | 0 | 7/1 | 15.4 |
| WB9229 | HRS | | | 56 | 59.1 | 27 | 0 | 6/30 | 14.6 |
| 501-089 | HRS | | | 53 | 57.1 | 24 | 0 | 6/27 | 14.4 |
| WB9350 | HRS | | | 51 | 56.5 | 23 | 0 | 6/27 | 14.5 |
| **Average** | | **61** | **66** | **60** | **58.2** | **29** | **0** | **6/28** | **14.7** |
| **LSD (0.05)** | | **5** | **5** | **8** | **1.4** | **2** | **--** | **1.7** | **0.6** |
| **CV (%)** | | **9.9** | **7.5** | **9.5** | **1.7** | **4.0** | **--** | **31.2** | **3.1** |

*HRS = hard red spring, HWS = hard white spring

**Variety or selection yields in bold were not statistically different from the top yielding variety.

**Table 25. Hard spring wheat variety performance results at Moscow, 2017.**

| | | | | 2017 Crop Year | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Variety or Selection** | **Market Class*** | **3-Year Average (bu/A)** | **2-Year Average (bu/A)** | **Seed Yield (bu/A)**** | **Test Weight (lb/bu)** | **Plant Height (in)** | **Lodging (%)** | **Heading Date** | **Protein (%)** |
| Dayn | HWS | 57 | 55 | **47** | 59.5 | 29 | 0 | 6/29 | 13.5 |
| Glee | HRS | 51 | 50 | **46** | 60.3 | 30 | 0 | 6/30 | 14.1 |
| 12SB0197 | HRS | | | **45** | 57.6 | 25 | 0 | 7/2 | 13.6 |
| WB9411 | HRS | 56 | 54 | **45** | 59.5 | 26 | 0 | 6/27 | 14.0 |
| WB7417 | HWS | | | **45** | 61.3 | 30 | 0 | 6/29 | 13.0 |
| UI Platinum | HWS | 52 | 49 | **45** | 59.9 | 26 | 0 | 6/27 | 13.3 |
| WB-Hartline | HWS | 55 | 52 | **43** | 58.7 | 27 | 0 | 7/2 | 13.8 |
| IDO1602S | HWS | | | **41** | 60.6 | 28 | 0 | 6/27 | 13.8 |
| IDO1603S | HRS | | | **41** | 59.9 | 25 | 0 | 7/1 | 14.1 |
| LCS Iron | HRS | 52 | 51 | **41** | 58.1 | 25 | 0 | 7/2 | 13.5 |
| IDO1202S | HWS | 47 | 44 | **41** | 60.9 | 28 | 0 | 7/2 | 13.3 |
| IDO1203S-A | HWS | 47 | 41 | 40 | 61.2 | 26 | 0 | 6/27 | 12.7 |
| XA7320 | HWS | | | 39 | 61.0 | 24 | 0 | 6/27 | 13.1 |
| Alum | HRS | 51 | 48 | 39 | 60.1 | 26 | 0 | 7/2 | 14.2 |
| WB9518 | HRS | 52 | 49 | 39 | 58.7 | 25 | 0 | 7/2 | 15.2 |
| Jefferson | HRS | 47 | 44 | 38 | 60.2 | 27 | 0 | 7/1 | 14.0 |
| UI Winchester | HRS | 48 | 44 | 38 | 59.4 | 26 | 0 | 7/1 | 13.8 |
| WB9350 | HRS | | | 37 | 58.7 | 21 | 0 | 6/29 | 14.5 |
| WB9668 | HRS | 50 | 45 | 36 | 60.8 | 24 | 0 | 6/29 | 15.2 |
| 500-709 | HRS | | | 35 | 59.8 | 23 | 0 | 7/2 | 13.7 |
| 501-089 | HRS | | | 33 | 57.8 | 21 | 0 | 7/2 | 13.8 |
| WB9229 | HRS | | | 32 | 59.5 | 23 | 0 | 7/4 | 14.4 |
| WB9662 | HRS | | | 30 | 59.5 | 23 | 0 | 7/4 | 14.7 |
| **Average** | | **51** | **48** | **40** | **59.7** | **26** | **0** | **6/30** | **13.9** |
| **LSD (0.05)** | | **4** | **4** | **7** | **1.3** | **2** | **--** | **1.1** | 0.9 |
| **CV (%)** | | **10.2** | **8.9** | **11.7** | **1.5** | **4.6** | **--** | **15.0** | 4.8 |

*HRS = hard red spring, HWS = hard white spring

**Variety or selection yields in bold were not statistically different from the top yielding variety.

**Table 26. Hard spring wheat variety performance comparison across northern Idaho, 2017.**

| Variety or Selection | Market Class* | 3-Year Yield | 2-Year Yield | 2017 Crop Year: North Idaho Average** | Bonners Ferry | Craigmont | Genesee | Moscow | Test Weight | Plant Height | Protein |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | ---------- bu/A ---------- | | | | | | | (lb/bu) | (inches) | (%) |
| WB7417 | HWS | | | **51** | 35 | **51** | **68** | **45** | 59.9 | 30 | 14.4 |
| 12SB0197 | HRS | | | **50** | **42** | **47** | **63** | **45** | 56.4 | 26 | 14.5 |
| Glee | HRS | 58 | 64 | **50** | 35 | 43 | **67** | **46** | 58.6 | 29 | 14.8 |
| Dayn | HWS | 62 | 69 | **50** | 37 | **48** | 60 | **47** | 57.8 | 29 | 14.4 |
| LCS Iron | HRS | 59 | 67 | **49** | 35 | **50** | **62** | **41** | 56.6 | 26 | 14.4 |
| WB-Hartline | HWS | 57 | 62 | **48** | **39** | **46** | 60 | **43** | 56.6 | 28 | 14.5 |
| XA7320 | HWS | | | **48** | 30 | **50** | **68** | 39 | 58.4 | 25 | 13.8 |
| UI Platinum | HWS | 57 | 63 | 47 | 29 | **47** | 60 | **45** | 58.0 | 26 | 13.9 |
| WB9411 | HRS | 58 | 63 | 47 | 34 | 45 | 57 | **45** | 58.4 | 26 | 14.8 |
| IDO1602S | HWS | | | 47 | 36 | **49** | 59 | **41** | 58.4 | 29 | 14.4 |
| IDO1203S-A | HWS | 54 | 57 | 47 | 36 | 45 | **62** | 40 | 59.3 | 26 | 13.9 |
| IDO1202S | HWS | 55 | 58 | 46 | **40** | 41 | **61** | **41** | 59.1 | 28 | 14.3 |
| Jefferson | HRS | 52 | 56 | 45 | 32 | 41 | **62** | 38 | 58.9 | 28 | 14.9 |
| IDO1603S | HRS | | | 45 | 33 | 44 | 58 | **41** | 58.1 | 26 | 14.7 |
| 500-709 | HRS | | | 44 | 29 | **48** | 58 | 35 | 56.7 | 24 | 14.3 |
| WB9518 | HRS | 56 | 61 | 44 | 35 | 42 | **65** | 39 | 57.9 | 25 | 15.7 |
| Alum | HRS | 54 | 57 | 44 | 37 | 43 | 56 | 39 | 59.1 | 27 | 14.8 |
| UI Winchester | HRS | 52 | 57 | 43 | 32 | 43 | 57 | 38 | 57.7 | 26 | 14.7 |
| WB9668 | HRS | 53 | 57 | 43 | 26 | **46** | 59 | 36 | 58.7 | 24 | 15.7 |
| WB9229 | HRS | | | 41 | 31 | 40 | 56 | 32 | 58.3 | 24 | 15.0 |
| WB9350 | HRS | | | 41 | 24 | **46** | 51 | 37 | 56.6 | 21 | 14.8 |
| 501-089 | HRS | | | 40 | 26 | **46** | 53 | 33 | 56.7 | 21 | 14.5 |
| WB9662 | HRS | | | 40 | 31 | 37 | 56 | 30 | 58.4 | 24 | 15.4 |
| **Average** | | **56** | **61** | **46** | **33** | **45** | **60** | **40** | **58.0** | **26** | **14.6** |
| **LSD (0.05)** | | **3** | **3** | **4** | **5** | **6** | **8** | **7** | **0.8** | **1.1** | **0.6** |
| **CV (%)** | | **11.5** | **9.0** | **13.0** | **7.5** | **9.8** | **9.5** | **11.7** | **1.9** | **5.9** | **5.6** |

*HRS = hard red spring, HWS = hard white spring

**Variety or selection yields in bold were not statistically different from the top yielding variety.

**Table 27. Winter barley variety performance results at Bonners Ferry, 2017.**

| Variety or Selection* | Market Class* | 3-Year Average (bu/A) | 2-Year Average (bu/A) | 2016-2017 Crop Year | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Seed Yield (bu/A)** | Test Weight (lb/bu) | Plant Height (in) | Plumps (%) (>6/64") | Plumps (%) (>5.5/64") | Thins (%) | Lodging (%) | Heading Date |
| **2-row** | | | | | | | | | | | |
| 10.0777 | Malt | | 139 | **157** | 52.8 | 31 | 96 | 3 | 1 | 19 | 6/7 |
| Wintmalt | Malt | | 132 | 154 | 52.9 | 34 | 96 | 2 | 1 | 0 | 6/6 |
| 06ARS633-3 | Malt | | | 137 | 52.7 | 32 | 83 | 11 | 7 | 18 | 6/6 |
| 05ARS561-208 | Malt | 131 | 129 | 137 | 52.7 | 31 | 92 | 6 | 2 | 31 | 6/8 |
| 10.0860 | Malt | | 119 | 132 | 52.6 | 30 | 95 | 4 | 1 | 10 | 6/7 |
| Charles | Malt | 111 | 116 | 116 | 51.8 | 29 | 93 | 5 | 2 | 35 | 6/7 |
| Endeavor | Malt | 99 | 100 | 113 | 54.1 | 34 | 95 | 4 | 1 | 10 | 6/5 |
| 06ARS617-25 | Malt | | | 112 | 54.1 | 31 | 95 | 2 | 3 | 5 | 6/5 |
| 05ARS748-270 | Malt | 66 | 77 | 110 | 58.4 | 33 | 83 | 12 | 5 | 3 | 6/6 |
| **6-row** | | | | | | | | | | | |
| Sunstar Pride | Feed | 156 | 162 | **172** | 52.2 | 33 | 80 | 13 | 7 | 0 | 6/9 |
| Eight-Twelve | Feed | 134 | 136 | **161** | 52.9 | 31 | 88 | 9 | 3 | 11 | 6/4 |
| Buck | Malt | | 72 | 89 | 61.0 | 32 | 77 | 18 | 5 | 3 | 6/6 |
| **Average** | | **116** | **118** | **133** | **54.0** | **32** | **90** | **7** | **3** | **12** | **6/6** |
| **LSD (0.05)** | | **12** | **14** | **17** | **1.1** | **3** | **2** | **2** | **1** | **23** | **1.1** |
| **CV (%)** | | **12.9** | **12.0** | **8.8** | **1.4** | **6.0** | **1.9** | **20.8** | **25.1** | **133.8** | **18.9** |

*05ARS748-270 and Buck are hulless.

**Variety or selection yields in bold were not statistically different from the top yielding variety.

**Table 28. Spring barley variety performance results at Bonners Ferry, 2017.**

| Variety or Selection | 3-Year Average (bu/A) | 2-Year Average (bu/A) | 2017 Crop Year | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Seed Yield (bu/A)* | Test Weight (lb/bu) | Plant Height (in) | Plumps (%) (>6/64") | Plumps (%) (>5.5/64") | Thins (%) | Lodging (%) | Protein (%) |
| **Feed** | | | | | | | | | | |
| Tetonia | 103 | 121 | **81** | 51.4 | 22 | 97 | 2 | 1 | 0 | 9.1 |
| Camas | 100 | 115 | **78** | 52.1 | 23 | 94 | 5 | 2 | 0 | 9.8 |
| Claymore | 109 | 126 | **77** | 51.8 | 24 | 97 | 3 | 1 | 0 | 11.3 |
| 11WA-105-13 | | | **76** | 51.3 | 23 | 98 | 1 | <1 | 0 | 10.3 |
| Lyon | 97 | 111 | **75** | 50.5 | 22 | 99 | 1 | <1 | 0 | 10.3 |
| 09WA-232.16 | 102 | 116 | **75** | 51.9 | 21 | 98 | 2 | <1 | 0 | 10.8 |
| 09WA-203.24 | 97 | 115 | **75** | 52.2 | 21 | 98 | 1 | 1 | 0 | 10.8 |
| Oreana | 103 | 122 | **75** | 52.1 | 21 | 97 | 2 | 1 | 0 | 11.8 |
| LCS Vespa | 102 | 119 | **74** | 51.9 | 22 | 99 | 1 | <1 | 0 | 12.4 |
| 11WA-102-23 | | | 72 | 51.4 | 23 | 99 | 1 | <1 | 0 | 11.1 |
| Champion | 98 | 117 | 71 | 51.6 | 22 | 97 | 3 | 1 | 0 | 10.4 |
| Lenetah | 104 | 117 | 70 | 51.8 | 22 | 96 | 3 | 1 | 0 | 10.4 |
| Altorado | 98 | 116 | 69 | 51.2 | 21 | 96 | 3 | 1 | 0 | 11.2 |
| **Malt** | | | | | | | | | | |
| Explorer | | | 71 | 50.8 | 21 | 97 | 2 | 1 | 0 | 11.6 |
| 2Ab08-X05M010-65 | | | 69 | 50.4 | 20 | 97 | 3 | 1 | 0 | 10.5 |
| 2Ab07-X031098-31 | 90 | 104 | 68 | 52.0 | 22 | 96 | 4 | 1 | 0 | 10.7 |
| CDC-Copeland | 96 | 111 | 68 | 51.4 | 24 | 96 | 4 | <1 | 0 | 11.0 |
| LCS Odyssey | 103 | 123 | 68 | 50.6 | 22 | 98 | 1 | <1 | 0 | 11.2 |
| 2Ab08-X05M010-82 | 97 | 114 | 66 | 51.5 | 22 | 97 | 2 | 1 | 0 | 10.8 |
| LCS Genie | 95 | 116 | 64 | 52.6 | 22 | 99 | 1 | 1 | 0 | 11.9 |
| **Food** | | | | | | | | | | |
| Kardia | 98 | 114 | 59 | 50.9 | 23 | 97 | 3 | 1 | 0 | 13.8 |
| Salute | 84 | 100 | 59 | 50.8 | 24 | 99 | 1 | <1 | 0 | 14.0 |
| 2Ab09-X06F058HL-31** | 68 | 79 | 49 | 57.8 | 21 | 94 | 5 | 1 | 0 | 14.0 |
| Transit** | 53 | 63 | 29 | 55.1 | 23 | 79 | 19 | 2 | 0 | 16.1 |
| **Average** | **95** | **111** | **68** | **51.9** | **22** | **96** | **3** | **1** | **0** | **11.5** |
| **LSD (0.05)** | **10** | **7** | **9** | **1.1** | **2** | **3** | **3** | **1** | **--** | **--** |
| **CV (%)** | **9.0** | **6.1** | **7.0** | **1.1** | **5.0** | **1.6** | **43.3** | **42.9** | **--** | **--** |

*Variety or selection yields in bold were not statistically different from the top yielding variety.
**Entries are hulless or naked.

## Table 29. Spring barley variety performance results at Craigmont, 2017.

| | | | 2017 Crop Year | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Variety or Selection | 3-Year Average (bu/A) | 2-Year Average (bu/A) | Seed Yield (bu/A)* | Test Weight (lb/bu) | Plant Height (in) | Plumps (%) (>6/64") | Plumps (%) (>5.5/64") | Thins (%) | Lodging (%) | Protein (%) |
| **Feed** | | | | | | | | | | |
| 09WA-232.16 | 91 | 112 | **97** | 50.9 | 34 | 73 | 22 | 5 | 0 | 10.0 |
| 09WA-203.24 | 90 | 111 | **96** | 50.8 | 35 | 73 | 21 | 6 | 0 | 10.9 |
| Lenetah | 88 | 108 | **96** | 50.8 | 31 | 77 | 18 | 5 | 0 | 10.6 |
| Champion | 90 | 110 | **95** | 51.2 | 35 | 67 | 27 | 7 | 0 | 10.7 |
| Altorado | 90 | 109 | **93** | 49.3 | 33 | 31 | 46 | 23 | 0 | 9.9 |
| 11WA-102-23 | | | **91** | 48.4 | 36 | 57 | 28 | 15 | 0 | 11.6 |
| Lyon | 86 | 106 | **89** | 48.7 | 35 | 53 | 33 | 14 | 0 | 9.7 |
| 11WA-105-13 | | | 88 | 47.4 | 35 | 49 | 30 | 20 | 0 | 10.7 |
| Tetonia | 83 | 104 | 88 | 46.8 | 35 | 43 | 35 | 22 | 0 | 11.8 |
| LCS Vespa | 83 | 106 | 87 | 50.2 | 31 | 67 | 24 | 9 | 0 | 11.6 |
| Oreana | 92 | 115 | 85 | 41.0 | 30 | 42 | 32 | 27 | 0 | 10.8 |
| Camas | 82 | 100 | 84 | 51.9 | 35 | 64 | 27 | 10 | 0 | 10.9 |
| Claymore | 87 | 106 | 84 | 44.6 | 35 | 50 | 31 | 19 | 0 | 10.2 |
| **Malt** | | | | | | | | | | |
| Explorer | | | **93** | 48.0 | 30 | 55 | 33 | 12 | 0 | 9.7 |
| LCS Genie | 83 | 108 | **93** | 48.0 | 30 | 66 | 23 | 11 | 0 | 10.9 |
| LCS Odyssey | 88 | 111 | **91** | 45.4 | 31 | 74 | 18 | 8 | 0 | 10.1 |
| 2Ab08-X05M010-65 | | | 88 | 45.2 | 36 | 35 | 34 | 32 | 0 | 11.5 |
| 2Ab07-X031098-31 | 81 | 102 | 85 | 49.6 | 34 | 49 | 33 | 18 | 0 | 11.0 |
| 2Ab08-X05M010-82 | 77 | 97 | 80 | 47.6 | 34 | 40 | 32 | 29 | 0 | 10.9 |
| CDC-Copeland | 73 | 93 | 77 | 48.2 | 35 | 58 | 29 | 12 | 0 | 11.0 |
| **Food** | | | | | | | | | | |
| Salute | 74 | 92 | 87 | 47.2 | 36 | 69 | 21 | 10 | 0 | 12.6 |
| 2Ab09-X06F058HL-31** | 64 | 81 | 70 | 53.9 | 33 | 33 | 35 | 32 | 0 | 13.6 |
| Kardia | 68 | 89 | 61 | 49.9 | 34 | 74 | 19 | 6 | 0 | 13.4 |
| Transit** | 44 | 58 | 41 | 55.2 | 33 | 19 | 48 | 33 | 0 | 15.9 |
| **Average** | **81** | **101** | **85** | **48.7** | **34** | **54** | **29** | **17** | **0** | **11.3** |
| **LSD (0.05)** | **6** | **7** | **9** | **2.6** | **3** | **13** | **7** | **10** | **--** | **--** |
| **CV (%)** | **9.5** | **7.4** | **7.3** | **3.8** | **5.4** | **16.6** | **15.0** | **40.5** | **--** | **--** |

*Variety or selection yields in bold were not statistically different from the top yielding variety.
**Entries are hulless or naked.

## Table 30. Spring barley variety performance results at Genesee, 2017.

| Variety or Selection | 3-Year Average (bu/A) | 2-Year Average (bu/A) | 2017 Crop Year | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Seed Yield (bu/A)* | Test Weight (lb/bu) | Plant Height (in) | Plumps (%) | | Thins (%) | Lodging (%) | Protein (%) |
| | | | | | | (>6/64") | (>5.5/64") | | | |
| **Feed** | | | | | | | | | | |
| Tetonia | 78 | 75 | **58** | 50.3 | 23 | 70 | 23 | 7 | 0 | 7.6 |
| Lyon | 73 | 71 | **54** | 51.1 | 21 | 88 | 10 | 2 | 0 | 7.3 |
| 11WA-102-23 | | | **51** | 49.8 | 23 | 84 | 13 | 3 | 0 | 7.7 |
| Claymore | 71 | 64 | 50 | 48.3 | 21 | 78 | 17 | 5 | 0 | 8.1 |
| Camas | 70 | 66 | 47 | 51.3 | 24 | 68 | 24 | 8 | 0 | 7.8 |
| 09WA-232.16 | 72 | 67 | 45 | 49.4 | 21 | 82 | 14 | 4 | 0 | 8.1 |
| 11WA-105-13 | | | 44 | 49.2 | 21 | 78 | 18 | 4 | 0 | 7.8 |
| Lenetah | 69 | 63 | 44 | 49.4 | 22 | 82 | 13 | 5 | 0 | 8.4 |
| Champion | 71 | 64 | 44 | 49.6 | 23 | 84 | 12 | 4 | 0 | 8.4 |
| Oreana | 72 | 65 | 44 | 49.8 | 22 | 81 | 14 | 5 | 0 | 8.2 |
| LCS Vespa | 75 | 70 | 44 | 49.7 | 22 | 93 | 6 | 1 | 0 | 8.4 |
| Altorado | 73 | 67 | 43 | 49.5 | 22 | 80 | 15 | 4 | 0 | 7.9 |
| 09WA-203.24 | 68 | 61 | 42 | 50.2 | 20 | 86 | 11 | 3 | 0 | 8.0 |
| **Malt** | | | | | | | | | | |
| 2Ab08-X05M010-65 | | | **54** | 48.0 | 23 | 74 | 21 | 5 | 0 | 7.6 |
| LCS Odyssey | 73 | 68 | **51** | 49.4 | 22 | 94 | 4 | 1 | 0 | 7.9 |
| 2Ab08-X05M010-82 | 72 | 68 | 47 | 48.2 | 21 | 70 | 22 | 8 | 0 | 7.5 |
| CDC-Copeland | 77 | 78 | 46 | 48.0 | 23 | 77 | 17 | 7 | 0 | 7.7 |
| Explorer | | | 46 | 48.0 | 22 | 92 | 6 | 2 | 0 | 8.0 |
| LCS Genie | 65 | 63 | 42 | 49.5 | 23 | 92 | 6 | 2 | 0 | 9.0 |
| 2Ab07-X031098-31 | 69 | 64 | 41 | 48.3 | 21 | 69 | 22 | 8 | 0 | 8.2 |
| **Food** | | | | | | | | | | |
| Salute | 62 | 59 | 43 | 49.0 | 22 | 93 | 6 | 2 | 0 | 9.5 |
| 2Ab09-X06F058HL-31** | 44 | 43 | 34 | 57.2 | 21 | 44 | 39 | 17 | 0 | 11.3 |
| Kardia | 57 | 51 | 29 | 48.6 | 24 | 89 | 9 | 2 | 0 | 11.5 |
| Transit** | 39 | 37 | 24 | 52.0 | 23 | 26 | 48 | 26 | 0 | 13.1 |
| **Average** | **67** | **63** | **44** | **49.7** | **22** | **78** | **16** | **6** | **0** | **8.5** |
| **LSD (0.05)** | **7** | **10** | **8** | **1.1** | **2** | **6** | **4** | **3** | **--** | **--** |
| **CV (%)** | **12.5** | **15.4** | **12.9** | **1.5** | **6.9** | **5.3** | **18.4** | **31.6** | **--** | **--** |

*Variety or selection yields in bold were not statistically different from the top yielding variety.
**Entries are hulless or naked.

## Table 31. Spring barley variety performance results at Moscow, 2017.

| Variety or Selection | 3-Year Average (bu/A) | 2-Year Average (bu/A) | 2017 Crop Year | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Seed Yield (bu/A)* | Test Weight (lb/bu) | Plant Height (in) | Plumps (%) (>6/64") | Plumps (%) (>5.5/64") | Thins (%) | Lodging (%) | Protein (%) |
| **Feed** | | | | | | | | | | |
| Tetonia | 78 | 75 | **58** | 50.3 | 23 | 70 | 23 | 7 | 0 | 7.6 |
| Lyon | 73 | 71 | **54** | 51.1 | 21 | 88 | 10 | 2 | 0 | 7.3 |
| 11WA-102-23 | | | **51** | 49.8 | 23 | 84 | 13 | 3 | 0 | 7.7 |
| Claymore | 71 | 64 | 50 | 48.3 | 21 | 78 | 17 | 5 | 0 | 8.1 |
| Camas | 70 | 66 | 47 | 51.3 | 24 | 68 | 24 | 8 | 0 | 7.8 |
| 09WA-232.16 | 72 | 67 | 45 | 49.4 | 21 | 82 | 14 | 4 | 0 | 8.1 |
| 11WA-105-13 | | | 44 | 49.2 | 21 | 78 | 18 | 4 | 0 | 7.8 |
| Lenetah | 69 | 63 | 44 | 49.4 | 22 | 82 | 13 | 5 | 0 | 8.4 |
| Champion | 71 | 64 | 44 | 49.6 | 23 | 84 | 12 | 4 | 0 | 8.4 |
| Oreana | 72 | 65 | 44 | 49.8 | 22 | 81 | 14 | 5 | 0 | 8.2 |
| LCS Vespa | 75 | 70 | 44 | 49.7 | 22 | 93 | 6 | 1 | 0 | 8.4 |
| Altorado | 73 | 67 | 43 | 49.5 | 22 | 80 | 15 | 4 | 0 | 7.9 |
| 09WA-203.24 | 68 | 61 | 42 | 50.2 | 20 | 86 | 11 | 3 | 0 | 8.0 |
| **Malt** | | | | | | | | | | |
| 2Ab08-X05M010-65 | | | **54** | 48.0 | 23 | 74 | 21 | 5 | 0 | 7.6 |
| LCS Odyssey | 73 | 68 | **51** | 49.4 | 22 | 94 | 4 | 1 | 0 | 7.9 |
| 2Ab08-X05M010-82 | 72 | 68 | 47 | 48.2 | 21 | 70 | 22 | 8 | 0 | 7.5 |
| CDC-Copeland | 77 | 78 | 46 | 48.0 | 23 | 77 | 17 | 7 | 0 | 7.7 |
| Explorer | | | 46 | 48.0 | 22 | 92 | 6 | 2 | 0 | 8.0 |
| LCS Genie | 65 | 63 | 42 | 49.5 | 23 | 92 | 6 | 2 | 0 | 9.0 |
| 2Ab07-X031098-31 | 69 | 64 | 41 | 48.3 | 21 | 69 | 22 | 8 | 0 | 8.2 |
| **Food** | | | | | | | | | | |
| Salute | 62 | 59 | 43 | 49.0 | 22 | 93 | 6 | 2 | 0 | 9.5 |
| 2Ab09-X06F058HL-31** | 44 | 43 | 34 | 57.2 | 21 | 44 | 39 | 17 | 0 | 11.3 |
| Kardia | 57 | 51 | 29 | 48.6 | 24 | 89 | 9 | 2 | 0 | 11.5 |
| Transit** | 39 | 37 | 24 | 52.0 | 23 | 26 | 48 | 26 | 0 | 13.1 |
| **Average** | **67** | **63** | **44** | **49.7** | **22** | **78** | **16** | **6** | **0** | **8.5** |
| **LSD (0.05)** | **7** | **10** | **8** | **1.1** | **2** | **6** | **4** | **3** | **--** | **--** |
| **CV (%)** | **12.5** | **15.4** | **12.9** | **1.5** | **6.9** | **5.3** | **18.4** | **31.6** | **--** | **--** |

*Variety or selection yields in bold were not statistically different from the top yielding variety.
**Entries are hulless or naked.

**Table 32. Spring barley performance comparison across northern Idaho, 2017.**

| Variety or Selection | 3-Year Average | 2-Year Average | 2017 Crop Year: North Idaho Ave.* | Bonners Ferry | Craigmont | Genesee | Moscow | Test Weight | Plant Height | Plumps (>6/64) | Plumps (>5.5/64) | Thins | Lodging | Protein |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | bu/A | | | | | | | (lb/bu) | (inches) | % | | | | |
| **Feed** | | | | | | | | | | | | | | |
| 09WA-203.24 | 91 | 96 | **89** | **75** | **96** | **88** | 42 | 52.0 | 31 | 80 | 15 | 5 | 0 | 10.0 |
| Champion | 92 | 96 | **88** | 71 | **95** | **89** | 44 | 52.6 | 31 | 77 | 19 | 5 | 0 | 10.2 |
| 09WA-232.16 | 93 | 97 | **87** | **75** | **97** | **86** | 45 | 51.9 | 30 | 82 | 15 | 4 | 0 | 9.9 |
| Lenetah | 93 | 97 | **85** | 70 | **96** | **87** | 44 | 52.1 | 29 | 85 | 12 | 3 | 0 | 9.9 |
| Oreana | 95 | 102 | **84** | **75** | 85 | **88** | 44 | 47.9 | 29 | 66 | 21 | 14 | 0 | 10.3 |
| Tetonia | 92 | 98 | **84** | **81** | 88 | **82** | **58** | 50.1 | 30 | 70 | 20 | 10 | 0 | 9.8 |
| LCS Vespa | 93 | 101 | **84** | **74** | 87 | **87** | 44 | 51.7 | 28 | 82 | 14 | 5 | 0 | 10.6 |
| Lyon | 90 | 94 | 83 | **75** | **89** | 80 | **54** | 50.7 | 31 | 75 | 19 | 7 | 6 | 9.4 |
| Altorado | 90 | 95 | 82 | 69 | **93** | 76 | 43 | 51.1 | 29 | 53 | 34 | 13 | 0 | 9.9 |
| Camas | 88 | 93 | 82 | **78** | 84 | **82** | 47 | 53.1 | 31 | 78 | 16 | 6 | 1 | 9.8 |
| Claymore | 93 | 97 | 79 | **77** | 84 | 75 | 50 | 48.9 | 32 | 70 | 20 | 10 | 0 | 10.0 |
| 11WA-105-13 | | | 74 | **76** | 88 | 79 | 44 | 49.5 | 29 | 69 | 21 | 10 | 0 | 9.7 |
| 11WA-102-23 | | | 74 | 72 | **91** | 81 | **51** | 50.1 | 29 | 77 | 16 | 7 | 0 | 10.2 |
| **Malt** | | | | | | | | | | | | | | |
| 2Ab08-X05M010-65 | | | 73 | 69 | 88 | **82** | **54** | 48.5 | 28 | 67 | 21 | 13 | 0 | 10.0 |
| LCS Odyssey | 94 | 102 | 73 | 68 | **91** | 80 | **51** | 48.4 | 27 | 87 | 10 | 4 | 0 | 9.9 |
| Explorer | | | 72 | 71 | **93** | 79 | 46 | 49.4 | 26 | 79 | 15 | 6 | 0 | 9.9 |
| CDC-Copeland | 85 | 92 | 72 | 68 | 77 | 78 | 46 | 49.5 | 30 | 76 | 17 | 7 | 1 | 10.1 |
| LCS Genie | 87 | 97 | 69 | 64 | **93** | 75 | 42 | 50.3 | 26 | 83 | 12 | 6 | 0 | 10.5 |
| 2Ab07-X031098-31 | 84 | 90 | 68 | 68 | 85 | 79 | 41 | 50.3 | 28 | 72 | 19 | 9 | 0 | 10.1 |
| 2Ab08-X05M010-82 | 88 | 95 | 68 | 66 | 80 | 79 | 47 | 49.5 | 28 | 65 | 21 | 14 | 0 | 9.9 |
| **Food** | | | | | | | | | | | | | | |
| Salute | 78 | 82 | 65 | 59 | 87 | 68 | 43 | 49.5 | 28 | 84 | 11 | 4 | 0 | 12.0 |
| 2Ab09-X06F058HL-31** | 64 | 70 | 54 | 49 | 70 | 61 | 34 | 56.3 | 27 | 58 | 27 | 16 | 1 | 12.9 |
| Kardia | 80 | 86 | 54 | 59 | 61 | 68 | 29 | 49.9 | 29 | 82 | 14 | 5 | 0 | 12.7 |
| Transit** | 52 | 56 | 38 | 29 | 41 | 56 | 24 | 55.0 | 29 | 41 | 41 | 18 | 0 | 14.9 |
| **Average** | **86** | **92** | **73** | **68** | **85** | **79** | **44** | **50.7** | **29** | **73** | **18** | **8** | **<1** | **10.5** |
| **LSD (0.05)** | **3** | **4** | **5** | **9** | **9** | **8** | **8** | **1.1** | **1** | **7** | **4** | **4** | **2** | **--** |
| **CV (%)** | **9.8** | **8.4** | **8.9** | **7.0** | **7.3** | **6.9** | **12.9** | **2.8** | **6.0** | **11.1** | **25.8** | **54.0** | **786.1** | **--** |

*Variety or selection yields in bold were not statistically different from the top yielding variety.
**Entries are hulless or naked.

**Table 33. Dry pea variety performance results at Craigmont, 2017.***

| Variety or Selection | 3-Year Average (lb/A) | 2-Year Average (lb/A) | 2017 Crop Year | | | | |
|---|---|---|---|---|---|---|---|
| | | | Seed Yield (lb/A)** | 100 Seed Weight (g) | Vine Length (in) | Canopy Height (in) | Erect Index (0-1) |
| **Green** | | | | | | | |
| Pro 141-6258 | | | **1581** | 20.4 | 18 | 15 | 0.80 |
| Greenwood | 1598 | 2063 | **1356** | 19.0 | 16 | 14 | 0.90 |
| PS1410B0064 | | | **1308** | 21.4 | 17 | 14 | 0.82 |
| Pro 121-7126 | | | **1290** | 21.0 | 14 | 14 | 1.00 |
| Pro 131-7123 | 1525 | 1846 | **1230** | 17.9 | 16 | 16 | 0.97 |
| Hampton | 1679 | 1867 | 1165 | 20.4 | 15 | 15 | 0.97 |
| PS14100018 | | | 1091 | 18.0 | 19 | 17 | 0.91 |
| Aragorn | 1327 | 1517 | 1064 | 20.0 | 17 | 13 | 0.79 |
| Ginny | 1626 | 2002 | 1057 | 19.4 | 17 | 17 | 1.00 |
| PS1514B0002 | | | 989 | 22.0 | 17 | 13 | 0.77 |
| Ariel | 1306 | 1573 | 969 | 17.9 | 17 | 16 | 0.95 |
| PS1514B0049 | | | 922 | 20.5 | 17 | 17 | 0.97 |
| PS1410B0073 | | | 909 | 18.7 | 16 | 14 | 0.90 |
| PS05100840 | 1604 | 1647 | 898 | 21.4 | 17 | 15 | 0.91 |
| PS12100058 | | | 864 | 19.8 | 18 | 16 | 0.89 |
| PS14100072 | | | 842 | 20.4 | 16 | 12 | 0.76 |
| PS1514B0095 | | | 705 | 22.4 | 13 | 11 | 0.85 |
| Columbian | 1082 | 1439 | 690 | 19.6 | 18 | 13 | 0.74 |
| PS05100735 | | | 556 | 19.0 | 13 | 13 | 0.97 |
| Banner | 1256 | 1662 | 521 | 19.5 | 16 | 14 | 0.93 |
| **Yellow** | | | | | | | |
| Pro 133-7409 | | | **1444** | 24.2 | 19 | 16 | 0.84 |
| Pro 133-6243 | | | **1333** | 26.3 | 18 | 14 | 0.80 |
| Pro 143-6230 | | | **1264** | 20.1 | 18 | 14 | 0.78 |
| Carousel | 1439 | 1505 | 1084 | 24.0 | 17 | 17 | 1.00 |
| PS1514B0400 | | | 963 | 21.5 | 16 | 16 | 1.00 |
| Pro 093-7410 | | | 738 | 20.8 | 16 | 14 | 0.87 |
| PS10100207 | | | 722 | 23.0 | 15 | 15 | 1.00 |
| PS08101022 | 1139 | 1186 | 681 | 24.8 | 14 | 10 | 0.68 |
| PS08101004 | 1365 | 1523 | 641 | 22.5 | 14 | 12 | 0.88 |
| PS07100925 | 1391 | 1198 | 584 | 23.0 | 13 | 11 | 0.85 |
| **Average** | **1410** | **1617** | **981** | **20.9** | **16** | **14** | **0.89** |
| **LSD (0.05)** | **ns** | **311** | **405** | **1.7** | **4** | **4** | **ns** |
| **CV (%)** | **33.3** | **16.6** | **20.2** | **4.0** | **12.2** | **12.4** | **14.4** |

*Data in this table is comprised of only two replications due to severe Aphanomyces root rot in a portion of the trial.

**Variety or selection yields in bold were not statistically different from the top yielding variety.

**Table 34. Dry pea variety performance results southeast of Genesee, 2017.**

| Variety or Selection | 3-Year Average (lb/A) | 2-Year Average (lb/A) | 2017 Crop Year Seed Yield (lb/A)* | 100 Seed Weight (g) | Vine Length (in) | Canopy Height (in) | Erect Index (0-1) |
|---|---|---|---|---|---|---|---|
| **Green** | | | | | | | |
| PS1410B0073 | | | **968** | 17.6 | 20 | 16 | 0.84 |
| PS1514B0002 | | | **958** | 19.5 | 20 | 16 | 0.80 |
| Hampton | 2258 | 2613 | **950** | 20.0 | 19 | 17 | 0.89 |
| PS05100840 | 2275 | 2361 | **897** | 19.9 | 19 | 16 | 0.85 |
| Pro 121-7126 | | | **864** | 18.6 | 18 | 16 | 0.86 |
| PS14100018 | | | **849** | 16.2 | 22 | 19 | 0.86 |
| PS05100735 | | | **849** | 17.4 | 21 | 17 | 0.83 |
| Ginny | 2102 | 2137 | **824** | 17.1 | 19 | 16 | 0.83 |
| Pro 131-7123 | 2134 | 2286 | **824** | 16.2 | 19 | 17 | 0.86 |
| Greenwood | 2047 | 2129 | **772** | 16.3 | 18 | 16 | 0.89 |
| PS1410B0064 | | | **759** | 18.5 | 20 | 18 | 0.92 |
| PS12100058 | | | **748** | 17.8 | 21 | 17 | 0.81 |
| Columbian | 1871 | 1981 | **733** | 15.8 | 20 | 15 | 0.72 |
| Pro 141-6258 | | | **726** | 17.1 | 17 | 15 | 0.87 |
| Banner | 1682 | 1749 | 649 | 15.0 | 18 | 15 | 0.88 |
| Ariel | 1938 | 1977 | 636 | 16.2 | 19 | 18 | 0.93 |
| Aragorn | 1853 | 1874 | 630 | 17.7 | 20 | 18 | 0.91 |
| PS1514B0049 | | | 590 | 19.2 | 23 | 19 | 0.83 |
| PS14100072 | | | 528 | 16.0 | 20 | 17 | 0.86 |
| PS1514B0095 | | | 379 | 20.5 | 16 | 13 | 0.85 |
| **Yellow** | | | | | | | |
| Pro 133-6243 | | | **857** | 21.8 | 22 | 18 | 0.84 |
| PS08101004 | 2253 | 2404 | **855** | 19.0 | 20 | 16 | 0.83 |
| PS08101022 | 2190 | 2275 | **853** | 18.9 | 18 | 16 | 0.87 |
| Pro 093-7410 | | | **834** | 17.3 | 17 | 15 | 0.88 |
| Pro 133-7409 | | | **819** | 19.2 | 22 | 18 | 0.85 |
| PS07100925 | 2315 | 2449 | **810** | 18.6 | 16 | 13 | 0.86 |
| Pro 143-6230 | | | **790** | 17.3 | 20 | 18 | 0.89 |
| PS1514B0400 | | | 644 | 17.2 | 19 | 17 | 0.90 |
| Carousel | 2040 | 2223 | 625 | 20.3 | 20 | 17 | 0.86 |
| PS10100207 | | | 372 | 19.9 | 24 | 20 | 0.82 |
| **Average** | **2074** | **2189** | **753** | **18.1** | **19** | **17** | **0.86** |
| **LSD (0.05)** | **242** | **340** | **298** | **1.2** | **2** | **2** | **ns** |
| **CV (%)** | **14.5** | **15.6** | **28.1** | **4.9** | **7.4** | **8.7** | **10.1** |

*Variety or selection yields in bold were not statistically different from the top yielding variety.

**Table 35. Dry pea variety performance results at Moscow, 2017.**

| Variety or Selection | 3-Year Average (lb/A) | 2-Year Average (lb/A) | 2017 Crop Year Seed Yield (lb/A)* | 100 Seed Weight (g) | Vine Length (in) | Canopy Height (in) | Erect Index (0-1) |
|---|---|---|---|---|---|---|---|
| **Green** | | | | | | | |
| PS14100018 | | | **887** | 17.7 | 18 | 17 | 0.96 |
| PS1410B0064 | | | **780** | 19.2 | 17 | 16 | 0.97 |
| PS1514B0049 | | | **779** | 19.5 | 22 | 19 | 0.87 |
| PS1410B0073 | | | **725** | 19.1 | 18 | 15 | 0.87 |
| PS1514B0095 | | | **714** | 21.2 | 13 | 12 | 0.91 |
| PS1514B0002 | | | **695** | 20.0 | 15 | 15 | 0.97 |
| PS14100072 | | | **686** | 18.8 | 16 | 16 | 0.97 |
| Hampton | 1181 | 1626 | 676 | 21.1 | 16 | 15 | 0.93 |
| Pro 141-6258 | | | 638 | 19.0 | 15 | 14 | 0.97 |
| Ariel | 629 | 761 | 619 | 17.7 | 16 | 15 | 0.90 |
| Pro 121-7126 | | | 619 | 19.4 | 17 | 15 | 0.92 |
| PS05100840 | 1180 | 1238 | 612 | 20.4 | 16 | 15 | 0.93 |
| Greenwood | 809 | 962 | 570 | 17.6 | 16 | 15 | 0.91 |
| Pro 131-7123 | 790 | 936 | 566 | 18.0 | 16 | 15 | 0.99 |
| Aragorn | 750 | 914 | 562 | 19.2 | 17 | 15 | 0.86 |
| PS12100058 | | | 559 | 17.8 | 16 | 16 | 0.96 |
| Ginny | 823 | 961 | 553 | 18.3 | 15 | 15 | 1.00 |
| PS05100735 | | | 468 | 19.0 | 16 | 15 | 0.96 |
| Banner | 448 | 538 | 459 | 17.3 | 17 | 16 | 0.96 |
| Columbian | 476 | 488 | 329 | 17.1 | 17 | 13 | 0.76 |
| | | | | | | | |
| **Yellow** | | | | | | | |
| Pro 133-6243 | | | **884** | 20.6 | 19 | 17 | 0.89 |
| Pro 133-7409 | | | **790** | 17.0 | 18 | 16 | 0.88 |
| Carousel | 844 | 1012 | 673 | 18.8 | 18 | 17 | 0.96 |
| Pro 143-6230 | | | 663 | 16.9 | 17 | 16 | 0.95 |
| PS07100925 | 805 | 952 | 601 | 20.4 | 14 | 12 | 0.89 |
| PS1514B0400 | | | 593 | 19.7 | 15 | 14 | 0.95 |
| Pro 093-7410 | | | 584 | 18.7 | 17 | 14 | 0.84 |
| PS08101022 | 981 | 1061 | 571 | 19.1 | 14 | 13 | 0.95 |
| PS08101004 | 1103 | 1207 | 532 | 18.6 | 17 | 15 | 0.93 |
| PS10100207 | | | 440 | 20.5 | 17 | 16 | 0.93 |
| **Average** | **833** | **974** | **627** | **18.9** | **16** | **15** | **0.92** |
| **LSD (0.05)** | **170** | **194** | **205** | **2.0** | **3** | **2** | **ns** |
| **CV (%)** | **25.1** | **19.9** | **23.3** | **7.4** | **11.6** | **10.8** | **9.4** |

*Variety or selection yields in bold were not statistically different from the top yielding variety.

**Table 36. Dry pea performance comparison across northern Idaho, 2017.**

| Variety or Selection | 3-Year Average (lb/A) | 2-Year Average (lb/A) | 2017 Crop Year | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | N. Idaho Average | Craigmont | Genesee | Moscow | 100 Seed Weight | Vine Length | Canopy Height | Erect Index |
| | ---------- | ---------- | (lb/A)** | ---------- | ---------- | ---------- | (gram) | ---- (inches) ---- | | (0-1) |
| **Green** | | | | | | | | | | |
| PS14100018 | | | **913** | 1091 | **849** | **887** | 17.2 | 20 | 18 | 0.91 |
| Hampton | 1708 | 2050 | **883** | 1165 | **950** | 676 | 20.5 | 17 | 16 | 0.92 |
| PS1410B0064 | | | **877** | **1308** | **759** | **780** | 19.4 | 18 | 17 | 0.92 |
| Pro 141-6258 | | | **861** | **1581** | **726** | 638 | 18.5 | 16 | 15 | 0.90 |
| PS1410B0073 | | | **859** | 909 | **968** | **725** | 18.4 | 18 | 15 | 0.86 |
| PS1514B0002 | | | **859** | 989 | **958** | **695** | 20.2 | 17 | 15 | 0.86 |
| Pro 121-7126 | | | **851** | **1290** | **864** | 619 | 19.4 | 17 | 15 | 0.94 |
| Greenwood | 1478 | 1686 | **808** | **1356** | **772** | 570 | 17.3 | 17 | 15 | 0.90 |
| Pro 131-7123 | 1501 | 1711 | **802** | **1230** | **824** | 566 | 17.3 | 17 | 16 | 0.93 |
| PS05100840 | 1691 | 1758 | 783 | 898 | **897** | 612 | 20.4 | 17 | 15 | 0.89 |
| Ginny | 1511 | 1673 | 762 | 1057 | **824** | 553 | 18.1 | 16 | 15 | 0.97 |
| PS1514B0049 | | | 732 | 922 | 590 | **779** | 19.6 | 21 | 19 | 0.87 |
| PS12100058 | | | 696 | 864 | **748** | 559 | 18.2 | 19 | 16 | 0.89 |
| Ariel | 1290 | 1424 | 695 | 969 | 636 | 619 | 17.1 | 17 | 16 | 0.92 |
| Aragorn | 1309 | 1427 | 689 | 1064 | 630 | 562 | 18.7 | 18 | 16 | 0.87 |
| PS14100072 | | | 654 | 842 | 528 | **686** | 18.0 | 17 | 15 | 0.88 |
| PS05100735 | | | 638 | 556 | **849** | 468 | 18.3 | 17 | 16 | 0.91 |
| PS1514B0095 | | | 578 | 705 | 379 | **714** | 21.1 | 14 | 12 | 0.87 |
| Columbian | 1147 | 1290 | 563 | 690 | **733** | 329 | 17.0 | 18 | 14 | 0.74 |
| Banner | 1121 | 1285 | 547 | 521 | 649 | 459 | 16.8 | 17 | 15 | 0.92 |
| **Yellow** | | | | | | | | | | |
| Pro 133-6243 | | | **963** | **1333** | **857** | **884** | 22.2 | 20 | 17 | 0.85 |
| Pro 133-7409 | | | **932** | **1444** | **819** | **790** | 19.3 | 20 | 17 | 0.86 |
| Pro 143-6230 | | | **834** | **1264** | **790** | 663 | 17.7 | 19 | 16 | 0.89 |
| Carousel | 1441 | 1587 | 736 | 1084 | 625 | 673 | 20.4 | 19 | 17 | 0.93 |
| Pro 093-7410 | | | 715 | 738 | **834** | 584 | 18.5 | 17 | 14 | 0.86 |
| PS08101022 | 1454 | 1536 | 706 | 681 | **853** | 571 | 20.1 | 15 | 13 | 0.86 |
| PS1514B0400 | | | 687 | 963 | 644 | 593 | 19.1 | 17 | 15 | 0.94 |
| PS08101004 | 1586 | 1728 | 683 | 641 | **855** | 532 | 19.5 | 17 | 15 | 0.88 |
| PS07100925 | 1510 | 1563 | 681 | 584 | **810** | 601 | 20.2 | 14 | 12 | 0.87 |
| PS10100207 | | | 469 | 722 | 372 | 440 | 20.8 | 19 | 17 | 0.91 |
| **Average** | **1442** | **1593** | **749** | **981** | **753** | **627** | **19.0** | **18** | **15** | **0.89** |
| **LSD (0.05)** | **175** | **236** | **180** | **405** | **298** | **205** | **1.0** | **2** | **2** | **0.09** |
| **CV (%)** | **25.4** | **24.8** | **27.2** | **20.2** | **28.1** | **23.3** | **6.0** | **10.7** | **11.1** | **11.0** |

**Variety or selection yields in bold were not statistically different from the top yielding variety.

**Table 37. Spring lentil variety performance results at Craigmont, 2017.**

| Variety or Selection | Market Class | 2-Year Average (lb/A) | 2017 Crop Year | | | | |
|---|---|---|---|---|---|---|---|
| | | | Seed Yield (lb/A)** | 100 Seed Weight (g) | Vine Length (in) | Canopy Height (in) | Erect Index (0-1) |
| LC14600031P | Spanish brown | | **2321** | 4.1 | 15 | 14 | 0.97 |
| LC14600017P | Spanish brown | 2290 | **2282** | 4.3 | 15 | 15 | 1.00 |
| LC11600342R | Medium green | 1907 | **2203** | 5.6 | 17 | 16 | 0.97 |
| Crimson | Small red | 2047 | **2039** | 3.1 | 14 | 14 | 1.00 |
| LC09600507P | Spanish brown | | **2037** | 4.2 | 16 | 11 | 0.71 |
| Avondale | Medium green | 2192 | **1993** | 4.8 | 15 | 15 | 1.00 |
| LC09600476L | Large green | | **1873** | 6.6 | 15 | 14 | 0.90 |
| LC14600024P | Spanish brown | | **1872** | 3.9 | 14 | 14 | 1.00 |
| Richlea | Medium green | 2000 | **1826** | 4.7 | 16 | 16 | 1.00 |
| LC10600494P | Spanish brown | 2045 | **1788** | 3.8 | 16 | 15 | 0.97 |
| LC1460NZ06FG | French green | 1791 | **1743** | 2.8 | 15 | 14 | 0.97 |
| Pardina | Spanish brown | 1818 | **1684** | 3.2 | 13 | 13 | 0.96 |
| LC09600410L | Large green | 1591 | **1660** | 7.1 | 15 | 15 | 1.00 |
| Morena | Spanish brown | 2146 | **1655** | 3.6 | 15 | 15 | 1.00 |
| LC14600023P | Spanish brown | | 1601 | 4.0 | 13 | 13 | 0.96 |
| Merrit | Large green | 1796 | 1600 | 6.1 | 14 | 13 | 0.93 |
| Eston | Small green | 1892 | 1565 | 2.8 | 17 | 15 | 0.91 |
| LC08600005E | Small green | 1824 | 1452 | 4.2 | 15 | 15 | 1.00 |
| LC01602273E | Small green | 1931 | 1450 | 3.3 | 16 | 13 | 0.83 |
| LC14600030P | Spanish brown | | 1401 | 3.7 | 13 | 11 | 0.86 |
| LC14600010P | Spanish brown | 1445 | 1202 | 4.0 | 15 | 13 | 0.84 |
| Black Beluga | | | 702 | 2.3 | 17 | 17 | 1.00 |
| **Average** | | **1914** | **1724** | **4.2** | **15** | **14** | **0.94** |
| **LSD (0.05)** | | **353** | **713** | **0.4** | **ns** | **ns** | **ns** |
| **CV (%)** | | **16.0** | **19.9** | **4.0** | **9.1** | **11.8** | **9.2** |

*Data in this table is comprised of only two replications due to severe Aphanomyces root rot in a portion of the trial.

**Variety or selection yields in bold were not statistically different from the top yielding variety.

**Table 38. Spring lentil variety performance results southeast of Genesee (rim area), 2017.**

| | | | | 2017 Crop Year | | | | |
|---|---|---|---|---|---|---|---|---|
| **Variety or Selection** | **Market Class** | **3-Year Average (lb/A)** | **2-Year Average (lb/A)** | **Seed Yield (lb/A)*** | **100 Seed Weight (g)** | **Vine Length (in)** | **Canopy Height (in)** | **Erect Index (0-1)** |
| LC11600342R | Medium green | | 1157 | **1109** | 4.9 | 14 | 14 | 0.97 |
| Richlea | Medium green | 959 | 905 | **1034** | 4.9 | 15 | 14 | 0.92 |
| LC09600507P | Spanish brown | | | **1021** | 4.2 | 12 | 12 | 1.00 |
| Merrit | Large green | 1098 | 1138 | **1007** | 6.2 | 13 | 12 | 0.98 |
| LC09600476L | Large green | | | **992** | 6.7 | 14 | 13 | 0.95 |
| Avondale | Medium green | 1199 | 1170 | **988** | 5.2 | 14 | 13 | 0.95 |
| LC09600410L | Large green | 1056 | 1064 | **984** | 7.0 | 13 | 13 | 1.00 |
| Morena | Spanish brown | 1156 | 1156 | **942** | 3.8 | 13 | 13 | 1.00 |
| LC01602273E | Small green | 1277 | 1287 | **909** | 3.7 | 14 | 14 | 1.00 |
| LC14600017P | Spanish brown | | 1099 | **899** | 4.3 | 13 | 13 | 1.00 |
| LC14600010P | Spanish brown | | 895 | **890** | 4.5 | 12 | 12 | 1.00 |
| LC14600023P | Spanish brown | | | **888** | 4.2 | 12 | 12 | 1.00 |
| LC14600024P | Spanish brown | | | 864 | 4.4 | 12 | 11 | 0.98 |
| LC08600005E | Small green | | 750 | 861 | 4.8 | 13 | 12 | 0.98 |
| LC14600031P | Spanish brown | | | 814 | 4.3 | 11 | 11 | 1.00 |
| LC14600030P | Spanish brown | | | 734 | 4.2 | 11 | 10 | 0.98 |
| LC10600494P | Spanish brown | 975 | 956 | 709 | 4.3 | 13 | 13 | 0.98 |
| Eston | Small green | 752 | 713 | 644 | 3.7 | 14 | 13 | 0.92 |
| Crimson | Small red | 874 | 987 | 621 | 3.7 | 12 | 12 | 1.00 |
| Pardina | Spanish brown | 1044 | 908 | 512 | 3.9 | 12 | 12 | 1.00 |
| LC1460NZ06FG | French green | | 574 | 436 | 3.1 | 12 | 12 | 1.00 |
| **Average** | | **1039** | **985** | **850** | **4.6** | **13** | **12** | **0.98** |
| **LSD (0.05)** | | **182** | **228** | **242** | **0.4** | **2** | **2** | **ns** |
| **CV (%)** | | **21.5** | **23.2** | **20.0** | **6.3** | **8.8** | **9.6** | **4.2** |

*Variety or selection yields in bold were not statistically different from the top yielding variety.

**Table 39. Spring lentil variety performance results at Moscow, 2017.**

| Variety or Selection | Market Class | 2-Year Average (lb/A) | 2017 Crop Year | | | | |
|---|---|---|---|---|---|---|---|
| | | | Seed Yield (lb/A)* | 100 Seed Weight (g) | Vine Length (in) | Canopy Height (in) | Erect Index (0-1) |
| LC14600024P | Spanish brown | | **627** | 4.8 | 12 | 12 | 1.00 |
| LC14600023P | Spanish brown | | 491 | 4.8 | 11 | 11 | 0.98 |
| LC14600017P | Spanish brown | 344 | 396 | 4.8 | 13 | 12 | 0.95 |
| LC01602273E | Small green | 327 | 358 | 4.1 | 13 | 13 | 0.98 |
| Morena | Spanish brown | 504 | 348 | 4.2 | 13 | 12 | 0.98 |
| LC14600030P | Spanish brown | | 336 | 4.5 | 11 | 10 | 0.94 |
| LC14600031P | Spanish brown | | 333 | 5.0 | 12 | 11 | 0.92 |
| Avondale | Medium green | 361 | 331 | 5.1 | 13 | 12 | 0.98 |
| Richlea | Medium green | 241 | 315 | 5.3 | 13 | 13 | 0.96 |
| LC14600010P | Spanish brown | 252 | 296 | 4.9 | 11 | 11 | 1.00 |
| LC11600342R | Medium green | 261 | 280 | 5.5 | 13 | 13 | 0.97 |
| LC09600507P | Spanish brown | | 261 | 4.9 | 13 | 12 | 0.92 |
| LC09600410L | Large green | 282 | 260 | 7.6 | 12 | 12 | 1.00 |
| LC08600005E | Small green | 206 | 226 | 4.6 | 13 | 12 | 0.94 |
| LC09600476L | Large green | | 198 | 7.0 | 13 | 12 | 0.96 |
| Merrit | Large green | 268 | 189 | 6.3 | 13 | 13 | 0.98 |
| LC10600494P | Spanish brown | 213 | 159 | 4.3 | 12 | 12 | 0.98 |
| Pardina | Spanish brown | 229 | 154 | 4.2 | 11 | 11 | 0.96 |
| Eston | Small green | 172 | 120 | 3.7 | 12 | 12 | 0.98 |
| LC1460NZ06FG | French green | 97 | 106 | 3.3 | 12 | 11 | 0.98 |
| Crimson | Small red | 125 | 99 | 3.9 | 11 | 11 | 0.96 |
| Black Beluga | | | 44 | 2.4 | 13 | 13 | 0.98 |
| **Average** | | **259** | **269** | **4.8** | **12** | **12** | **0.97** |
| **LSD (0.05)** | | **82** | **120** | **0.3** | **2** | **2** | **ns** |
| **CV (%)** | | **31.7** | **31.6** | **4.7** | **9.7** | **8.9** | **5.7** |

*Variety or selection yields in bold were not statistically different from the top yielding variety.

## Table 40. Lentil performance comparison across northern Idaho, 2017

| Variety or Selection | Market Class | 2-Year Average (lb/A) | 2017 Crop Year | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | N. Idaho Average** | Craigmont | Genesee | Moscow | 100 Seed Weight | Vine Length | Canopy Height | Erect Index |
| | | ---------- | (lb/A)** | ---------- | | | (gram) | ----- (inches) ----- | | (0-1) |
| LC11600342R | Medium green | 1036 | **996** | **2203** | **1109** | 280 | 5.3 | 14 | 14 | 0.97 |
| LC14600017P | Spanish brown | 1149 | **975** | **2282** | **899** | 396 | 4.5 | 14 | 13 | 0.98 |
| LC14600024P | Spanish brown | | **971** | **1872** | 864 | 627 | 4.5 | 12 | 12 | 0.99 |
| Avondale | Medium green | 1154 | **926** | **1993** | **988** | 331 | 5.1 | 13 | 13 | 0.97 |
| LC14600031P | Spanish brown | | **923** | **2321** | 814 | 333 | 4.5 | 12 | 11 | 0.96 |
| LC09600507P | Spanish brown | | **920** | **2037** | **1021** | 261 | 4.5 | 13 | 12 | 0.91 |
| Richlea | Medium green | 962 | **905** | **1826** | **1034** | 315 | 5.0 | 14 | 14 | 0.95 |
| LC14600023P | Spanish brown | | **872** | 1601 | **888** | 491 | 4.4 | 12 | 12 | 0.98 |
| LC09600476L | Large green | | **851** | **1873** | **992** | 198 | 6.8 | 14 | 13 | 0.94 |
| Morena | Spanish brown | 1189 | **847** | **1655** | **942** | 348 | 3.9 | 13 | 13 | 0.99 |
| LC09600410L | Large green | 923 | 829 | **1660** | **984** | 260 | 7.3 | 13 | 13 | 1.00 |
| Merrit | Large green | 1001 | 798 | 1600 | **1007** | 189 | 6.2 | 13 | 13 | 0.97 |
| LC01602273E | Small green | 1114 | 797 | 1450 | **909** | 358 | 3.8 | 14 | 13 | 0.96 |
| LC08600005E | Small green | 845 | 725 | 1452 | 861 | 226 | 4.6 | 13 | 13 | 0.97 |
| LC14600030P | Spanish brown | | 708 | 1401 | 734 | 336 | 4.2 | 11 | 10 | 0.94 |
| LC10600494P | Spanish brown | 983 | 705 | **1788** | 709 | 159 | 4.2 | 13 | 13 | 0.98 |
| Crimson | Small red | 963 | 696 | **2039** | 621 | 99 | 3.7 | 12 | 12 | 0.98 |
| LC14600010P | Spanish brown | 807 | 695 | 1202 | **890** | 296 | 4.6 | 12 | 12 | 0.97 |
| Eston | Small green | 838 | 618 | 1565 | 644 | 120 | 3.5 | 13 | 13 | 0.94 |
| Pardina | Spanish brown | 909 | 603 | **1684** | 512 | 154 | 3.9 | 12 | 12 | 0.98 |
| LC1460NZ06FG | French green | 733 | 565 | **1743** | 436 | 106 | 3.1 | 12 | 12 | 0.99 |
| Black Beluga | | | -- | 702 | -- | 44 | 2.4 | 14 | 14 | 0.99 |
| **Average** | | **974** | **806** | **1724** | **850** | **269** | **4.6** | **13** | **12** | **0.97** |
| **LSD (0.05)** | | | **167** | **713** | **242** | **120** | **0.2** | **1** | **1** | **0.05** |
| **CV (%)** | | **22.2** | **23.4** | **19.9** | **20.0** | **31.6** | **5.5** | **9.5** | **9.9** | **5.8** |

*No 3-year average due to loss of Craigmont and Moscow locations in 2015.
**Variety or selection yields in bold were not statistically different from the top yielding variety.

## Table 41. Chickpea variety performance results at Craigmont, 2017

| Variety or Selection | 2-Year Average (lb/A) | 2017 Crop year | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | Seed Yield (lb/A)* | 100 Seed Weight (g) | Plant Height (in) | Chickpea Size (%) | | | |
| | | | | | (>25/64") | (>22/64") | (>20/64") | (<20/64") |
| BillyBeans | 2182 | **2276** | 27.4 | 20 | <1 | 3 | 50 | 47 |
| Nash | 1868 | **2185** | 48.4 | 18 | 24 | 65 | 9 | 1 |
| CA0790B0547C | 1998 | **2172** | 46.7 | 19 | 7 | 69 | 21 | 3 |
| Bronic | 1959 | **2141** | 35.2 | 21 | 1 | 29 | 56 | 15 |
| CDC Orion | 2042 | **2089** | 48.3 | 17 | 3 | 72 | 23 | 2 |
| CA0790B0043C | 1781 | **1997** | 46.5 | 22 | 18 | 71 | 10 | 1 |
| CA0790B0034C | 1866 | 1941 | 48.8 | 20 | 19 | 67 | 12 | 2 |
| CA0890B0531C | 1976 | 1909 | 46.8 | 17 | 12 | 67 | 15 | 6 |
| CA0890B0429C | 1673 | 1886 | 48.0 | 18 | 24 | 65 | 9 | 1 |
| CDC Frontier | 1846 | 1793 | 40.1 | 17 | <1 | 39 | 51 | 9 |
| Sierra | 1540 | 1741 | 46.4 | 17 | 10 | 54 | 28 | 8 |
| Sawyer | 1869 | 1662 | 42.7 | 17 | 6 | 56 | 34 | 4 |
| **Average** | **1885** | **1983** | **43.8** | **18** | **11** | **55** | **27** | **8** |
| **LSD (0.05)** | **332** | **288** | **4.3** | **3** | **7** | **11** | **9** | **3** |
| **CV (%)** | **17.4** | **10.1** | **6.9** | **10.2** | **46.6** | **14.0** | **22.2** | **24.9** |

*Variety or selection yields in bold were not statistically different from the top yielding variety.

**Table 42. Chickpea variety performance results southeast of Genesee, 2017.**

| Variety or Selection | 3-Year Average (lb/A) | 2-Year Average (lb/A) | 2017 Crop year | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | Seed Yield (lb/A)* | 100 Seed Weight (g) | Plant Height (in) | Chickpea Size (%) | | | |
| | | | | | | (>25/64") | (>22/64") | (>20/64") | (<20/64") |
| CDC Frontier | 2563 | 3268 | **2909** | 39.5 | 16 | <1 | 63 | 35 | 2 |
| CA0790B0034C | | | **2681** | 55.8 | 19 | 39 | 57 | 3 | 1 |
| CA0890B0429C | 2016 | 2848 | **2560** | 54.5 | 16 | 61 | 38 | 1 | <1 |
| Bronic | 2375 | 3022 | **2558** | 38.9 | 18 | 1 | 32 | 56 | 12 |
| CDC Orion | 2509 | 3002 | **2477** | 44.2 | 14 | 7 | 80 | 12 | 1 |
| BillyBeans | 2416 | 3097 | **2388** | 35.1 | 14 | 4 | 12 | 57 | 27 |
| CA0790B0043C | 2204 | 2911 | 2358 | 55.4 | 18 | 59 | 39 | 2 | 1 |
| Nash | 2097 | 2741 | 2227 | 62.3 | 16 | 51 | 47 | 1 | 1 |
| CA0790B0547C | | | 2061 | 53.0 | 15 | 26 | 66 | 6 | 2 |
| CA0890B0531C | 2085 | 2482 | 1980 | 54.0 | 15 | 40 | 52 | 7 | 1 |
| Sawyer | 2030 | 2536 | 1672 | 47.2 | 15 | 4 | 66 | 28 | 2 |
| Sierra | 1728 | 2348 | 1611 | 47.3 | 15 | 18 | 74 | 8 | 1 |
| **Average** | **2206** | **2829** | **2290** | **48.9** | **16** | **26** | **52** | **18** | **4** |
| **LSD (0.05)** | **290** | **375** | **537** | **4.0** | **2** | **11** | **12** | **5** | **4** |
| **CV (%)** | **16.0** | **12.9** | **16.3** | **5.7** | **8.5** | **30.8** | **15.3** | **17.5** | **63** |

*Variety or selection yields in bold were not statistically different from the top yielding variety.

**Table 43. Chickpea variety performance results at Moscow, 2017.**

| Variety or Selection | 3-Year Average (lb/A) | 2-Year Average (lb/A) | 2017 Crop Year | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | Seed Yield (lb/A)* | 100 Seed Weight (g) | Plant Height (in) | Chickpea Size (%) | | | |
| | | | | | | (>25/64") | (>22/64") | (>20/64") | (<20/64") |
| CA0790B0547C | 1898 | 2178 | 1437 | 51.2 | 16 | 9 | 73 | 11 | 7 |
| BillyBeans | 1737 | 2009 | 1258 | 31.6 | 16 | 1 | 5 | 50 | 45 |
| CA0790B0034C | | 2001 | 1246 | 51.5 | 17 | 20 | 68 | 10 | 3 |
| Bronic | 1753 | 1928 | 1195 | 36.5 | 18 | 1 | 24 | 51 | 23 |
| CDC Frontier | 1713 | 1904 | 1194 | 36.5 | 14 | 0 | 28 | 59 | 13 |
| Nash | 1743 | 2051 | 1164 | 52.4 | 16 | 42 | 48 | 8 | 2 |
| CA0790B0043C | 1582 | 1747 | 1117 | 52.6 | 18 | 23 | 65 | 10 | 2 |
| CA0890B0531C | 1630 | 1768 | 1067 | 51.7 | 15 | 30 | 57 | 9 | 4 |
| Sierra | 1528 | 1818 | 1061 | 51.0 | 15 | 8 | 73 | 16 | 3 |
| CDC Orion | 1697 | 1867 | 1038 | 47.0 | 14 | 3 | 57 | 34 | 6 |
| Sawyer | 1613 | 1843 | 1032 | 42.9 | 15 | 3 | 44 | 46 | 6 |
| CA0890B0429C | 1592 | 1803 | 939 | 50.6 | 15 | 24 | 63 | 9 | 4 |
| **Average** | **1681** | **1910** | **1146** | **46.3** | **16** | **14** | **51** | **26** | **10** |
| **LSD (0.05)** | **208** | **ns** | **ns** | **4.9** | **2** | **11** | **11** | **7** | **5** |
| **CV (%)** | **15.3** | **15.0** | **18.3** | **7.4** | **9.9** | **57.3** | **15.1** | **19.8** | **36.7** |

*Variety or selection yields in bold were not statistically different from the top yielding variety.

## Table 44. Chickpea performance comparison across northern Idaho, 2017

| Variety or Selection | 3-Year Average (lb/A)* | 2-Year Average (lb/A) | 2017 Crop Year | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | N. Idaho Average | Craigmont | Genesee | Moscow | 100 Seed Weight | Plant Height | Chickpea Size (%) | | | |
| | ---------- | ---------- | (lb/A)** ---------- | | | | (gram) | (inches) | (>25/64") | (>22/64") | (>20/64") | (<20/64") |
| BillyBeans | 2077 | 2429 | **1974** | **2276** | **2388** | 1258 | 31.3 | 18 | 1 | 7 | 52 | 40 |
| CDC Frontier | 2138 | 2339 | **1965** | 1793 | **2909** | 1194 | 38.7 | 16 | 0 | 44 | 48 | 8 |
| Bronic | 2064 | 2303 | **1965** | **2141** | **2558** | 1195 | 36.8 | 19 | 1 | 28 | 54 | 17 |
| CA0790B0034C | | | **1956** | 1941 | **2681** | 1246 | 52.0 | 18 | 26 | 64 | 8 | 2 |
| CA0790B0547C | | | **1890** | **2172** | 2061 | 1437 | 50.3 | 17 | 14 | 69 | 13 | 4 |
| CDC Orion | 2103 | 2304 | **1868** | **2089** | **2477** | 1038 | 46.5 | 15 | 4 | 70 | 23 | 3 |
| Nash | 1920 | 2235 | **1858** | **2185** | 2227 | 1164 | 54.4 | 17 | 39 | 54 | 6 | 1 |
| CA0790B0043C | 1893 | 2162 | **1824** | **1997** | 2358 | 1117 | 51.5 | 20 | 33 | 58 | 7 | 1 |
| CA0890B0429C | 1785 | 2041 | **1795** | 1886 | **2560** | 939 | 51.0 | 17 | 36 | 55 | 6 | 2 |
| CA0890B0531C | 1848 | 2058 | 1652 | 1909 | 1980 | 1067 | 50.8 | 16 | 27 | 58 | 10 | 4 |
| Sierra | 1628 | 1902 | 1471 | 1741 | 1611 | 1061 | 48.2 | 16 | 12 | 67 | 17 | 4 |
| Sawyer | 1822 | 2083 | 1455 | 1662 | 1672 | 1032 | 44.2 | 16 | 4 | 56 | 36 | 4 |
| **Average** | **1929** | **2187** | **1806** | **1983** | **2290** | **1146** | **46.3** | **17** | **17** | **52** | **24** | **7** |
| **LSD (0.05)** | **181** | **203** | **277** | **288** | **537** | **ns** | **2.5** | **2** | **6** | **6** | **4** | **2** |
| **CV (%)** | **16.4** | **16.1** | **18.9** | **10.1** | **16.3** | **18.3** | **6.7** | **10.5** | **43.3** | **14.9** | **21.3** | **40.3** |

*3-year average yield does not include data from Craigmont since this location was lost in 2015.
**Variety or selection yields in bold were not statistically different from the top yielding variety.