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2014 Small Grain and Grain Legume Report

Northern Idaho Small Grain and Grain Legume Research and Extension Program

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University of Idaho
College of Agricultural and Life Sciences

Cover: Seeding spring barley in Bonners Ferry with the new Kubota 4600 purchased with funds from Gifts of Grain.

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Clint Zenner – Genesee
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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, spring pea, lentil and chickpea cultivars tested in extension variety trials conducted in northern Idaho during the 2013-2014 crop season. The variety trials were located in cooperators' fields at 12 test sites in Lewis, Nez Perce, Latah, Benewah and Boundary counties and on two University of Idaho Research and Extension Centers; Parker and Kambitsch Farms.

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 http://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 yields are the result of a combination of improved agronomic practices and advances in variety development. Trials reported in this publication help producers compare new cultivars with widely grown cultivars using field production practices common for their area. The information provided 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 during the fall of 2013 and eight spring cereal trials were planted in the spring of 2014. 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 300 seeds of each cereal cultivar. 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 seed were treated with Vibrance Extreme at 4 oz/100 lbs seed plus Dynashield at 0.26 oz/100 lbs seed. All plots were seeded 20 feet long. Plots in conventional tillage systems were planted on 5-foot centers 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. Typical cereal seeding depth varied from 1 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, plot length was measured to more accurately determine the harvestable area for each plot, mature plant height was recorded and each plot was evaluated for lodging. 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 is reported in pounds per standard bushel. Cereal yields were reported in bushels per acre, using the 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 6/64-inch slotted screen after shaking. Thin percentage is the portion of the sample that went through a 5.5/64-inch slotted screen. Protein and kernel hardness were determined from a composite sample of four replications from each site for both winter and spring wheat. 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. Kernel hardness was also determined by NIRS. Values under 35 indicate soft wheat, and values above 35 indicate hard wheat. Cereal test weight is reported in pounds per standard bushel.

Legume Test Procedures

In the fall of 2013, a winter pea trial was established at Moscow using a seeding rate of 10 spsf. In the spring of 2014, spring pea, lentil and chickpea trials were seeded near Craigmont, Genesee and Moscow. For each legume cultivar, 300 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 2 inches for lentils and between 1.5 and 2.5 inches for pea and chickpea. Due wider row spacing between plots, 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, seed yield, and 100-seed weight. 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. Pea and lentil canopy heights were 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 25/65”, 22/64” and 20/64”.

Statistical Interpretation

Crop class averages are shown within the body of the data tables and 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 is an aid 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 cultivars, NS is shown for the LSD. Where data represent cultivar means across locations, an approximation of combined LSD was calculated. The CV is also included in the tables. This is given as a general measurement of the precision of each experiment. Lower CV percentage values indicate lower experimental variation and greater precision. CV values were not averaged across trials or years. Wheat protein and hardness data are determined from composite samples, therefore no LSD or CV values are presented.

Cultivar choice should take into consideration as much performance data as possible with comparisons across years and locations. In addition to yield, 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 cultivars to plant.

Growing Conditions and Factors Affecting Trial Results

Fall cereal trials were planted from early to late October. Winter wheat stands were well established at all locations. Winter temperatures across northern Idaho were generally mild, although there were two cold snaps in December and February. Winter precipitation was below normal at most locations. However, the fall seeded crops had minimal to no winter injury. Spring crops, particularly the cereals, were seeded slightly later than normal due to wet soil conditions in early April. Spring cereals were seeded from mid-April to early May, while spring legumes were seeded during early to mid-May. Spring temperatures were near normal, but dry for most of April through early June. At most locations, June rains helped with grain fill and improved moisture conditions for spring crops. Lower yields and test weights were observed at many locations, particularly in the Craigmont spring wheat. Storms were prevalent at most locations in mid-August, but resulted in very little to no sprouting. Exceptions included areas in the northeastern portion of the Camas Prairie and Bonners Ferry, which had mild sprout damage.

Stripe-rust was rarely observed in winter or spring wheat due to a combination of unfavorable winter conditions and dry spring weather. With the exception of Bonners Ferry, conditions were not conducive for disease development. Winter and spring plots were managed for stripe rust in Bonners Ferry, so very few symptoms were evident. Significant frost damage was observed in the winter wheat at Nezperce and Genesee (Kambitsch farm) following a cold event on May 16. This

resulted in damage to the upper 1 to 2 inches of the heads. In addition, Fusarium crown rot was also observed uniformly throughout the winter wheat variety trial at the Kambitsch farm.

As a result of biotic and abiotic factors mentioned above, winter wheat yields were 15 and 19 bu/A lower than the previous 3-year average for soft white winter and hard winter wheat, respectively. This was in large part due to very low winter wheat yields for Nezperce (54 bu/A) and Tammany (47 bu/A). Likewise, yields for the spring cereal crops were below the previous 3-year average, with soft white spring wheat 13 bu/A below, hard spring wheat 9 bu/A below, and spring barley 7 bu/A below.

No significant aphid activity or viruses were observed at any of the legume sites. However, peas at all locations were treated for pea weevil. As observed for the spring cereals, yields for spring legumes were reduced due to dry spring conditions. In addition, hail damage was observed at the Craigmont and Moscow sites. Average yields for spring legumes in 2014 were 30, 33 and 42% below the previous 3-year average for spring pea, lentil and chickpea, respectively. A winter pea trial was seeded at the Moscow location, but the results are not included in this report due to severe hail damage just prior to harvest.

Specific trial locations and management practices used at each of the trial locations are listed in Table 1. All data reported in Tables 3 to 45 have the yield for the individual location or north Idaho (multi-location) average yield list in order from highest to lowest yielding varieties.

Table 1. Trial locations and management information for the 2013-2014 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’	Conventional Tillage	10/11/13	8/19/14	Canola	90-25-0-20 (f) 30-0-0-6 (s)	PowerFlex MCPA Ester Starane Flex Bumper	3 oz/A 8 oz/A 13.5 oz/A 4 oz/A
Nez Perce	Lewiston (Tammany)	14”	1660’	Conventional Tillage	10/11/13	7/15/14	Canola	100-10-0-10 (f)	PowerFlex Huskie	3 oz/A 12 oz/A
Nez Perce	Genesee (rim area)	20”	2700’	Conventional Tillage	10/24/13	8/1/14		140-20-20-10 (f)	Widematch MCPA Ester Tilt	20 oz/A 12 oz/A 4 oz/A
Latah	Genesee (Kambitsch farm)	20”	2850’	Conventional Tillage	10/24/13	8/1/14	Chickpea	100-10-0-20 (f) 40-0-0-6 (s)	Huskie Harmony Extra WP Axial XL Quilt	12 oz/A 0.4 oz/A 16.4 oz/A 7 oz/A
Benewah	Tensed	27”	2600’	Conventional Tillage	10/18/13	8/25/14	Lentils	120-32-0-22 (f) 30-0-0-6 (s)	Osprey Bronate Peak Tilt	4.5 oz/A 12 oz/A 3 oz/A 4 oz/A
Boundary	Bonners Ferry	25”	1750’	Direct Seed	10/6/13	8/27/14	Canola	16-37-23-11 (f) 60-0-0-9 (s)	PowerFlex Wild Card Boron Tilt	2.0 oz/A 1 pt/A 1 qt/A 4 oz/A

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

Table 1 (continued). Trial locations and management information for the 2013-2014 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’	Conventional Tillage	10/11/13	8/19/14	Canola	90-25-0-20 (f) 30-0-0-6 (s)	PowerFlex MCPA Ester Starane Flex Bumper	3 oz/A 8 oz/A 13.5 oz/A 4 oz/A
Nez Perce	Lewiston (Tammany)	14”	1660’	Conventional Tillage	10/11/13	7/15/14	Canola	100-10-0-10 (f) 30-10-0-7 (s)	PowerFlex Huskie	3 oz/A 12 oz/A
Nez Perce	Genesee (rim area)	20”	2700’	Conventional Tillage	10/18/13	7/30/14		140-20-20-10 (f) 40-0-0-0 (s)	Widematch MCPA Ester Tilt	20 oz/A 12 oz/A 4 oz/A
Latah	Genesee (Kambitsch farm)	20”	2850’	Conventional Tillage	10/24/13	8/1/14	Chickpea	100-10-0-20 (f) 40-0-0-0 (s)	Huskie Harmony Extra WP Axial XL Quilt	12 oz/A 0.4 oz/A 16.4 oz/A 7 oz/A
Benewah	Tensed	27”	2600’	Conventional Tillage	10/18/13	8/25/14	Lentils	120-32-0-22 (f) 60-0-0-6 (s)	Osprey Bronate Peak Tilt	4.5 oz/A 12 oz/A 3 oz/A 4 oz/A
Boundary	Bonners Ferry	25”	1750’	Direct Seed	10/6/13	8/27/14	Canola	16-37-23-11 (f) 100-0-0-9 (s)	PowerFlex Wild Card Boron Tilt	2.0 oz/A 1 pt/A 1 qt/A 4 oz/A

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

Table 1 (continued). Trial locations and management information for the 2013-2014 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	4/21/14	9/2/14	W. Wheat	110-20-0-15	Orion Ally	17 oz/A 0.10 oz/A
Nez Perce	Genesee (rim area)	20”	2650’	Direct Seed	4/16/14	8/8/14	W. Wheat	100-10-0-25	Huskie Axial Star Priaxor Tilt	13 oz/A 16.4 oz/A 2 oz/A 2 oz/A
Latah	Moscow (Parker farm)	24”	2630’	Conventional Tillage	5/3/14	8/22/14	S Barley	93-30-0-20	Axial-XL Huskie Orion	16.4 oz/A 12 oz/A 17 oz/A
Boundary	Bonners Ferry	25”	1750’	Conventional Tillage	4/30/14	8/28/14	W. Wheat	76-37-22-11	Axial Boron Headline Tilt	16.4 oz/A 1 qt/A 8 oz/A 4 oz/A
Spring Cereals - Hard Spring Wheat										
Lewis	Craigmont	22”	3650’	Conventional Tillage	4/21/14	9/2/14	W. Wheat	140-32-0-24	Orion Ally	17 oz/A 0.10 oz/A
Nez Perce	Genesee (rim area)	20”	2650’	Direct Seed	4/16/14	8/8/14	W. Wheat	120-10-0-25	Huskie Axial Star Priaxor Tilt	13 oz/A 16.4 oz/A 2 oz/A 2 oz/A
Latah	Moscow (Parker farm)	24”	2630’	Conventional Tillage	5/3/14	8/22/14	S Barley	93-30-0-20	Axial-XL Huskie Orion	16.4 oz/A 12 oz/A 17 oz/A
Boundary	Bonners Ferry	25”	1750’	Conventional Tillage	4/30/14	8/28/14	W. Wheat	106-37-22-11	Axial Boron Headline Tilt	16.4 oz/A 1 qt/A 8 oz/A 4 oz/A

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

Table 1 (continued). Trial locations and management information for the 2013-2014 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	4/21/14	9/2/14	W. Wheat	85-10-0-7	Orion Ally	17 oz/A 0.10 oz/A
Nez Perce	Genesee (rim area)	20”	2650’	Direct Seed	4/16/14	8/4/14	W. Wheat	78-10-0-15	Huskie Axial Star Priaxor Tilt	13 oz/A 16.4 oz/A 2 oz/A 2 oz/A
Latah	Moscow (Parker farm)	24”	2630’	Direct Seed	5/2/14	8/22/14	W. Wheat	80-26-0-20	Roundup Huskie Axial Orion	20 oz/A Pre 12 oz/A 16.4 oz/A 17 oz/A
Boundary	Bonners Ferry	25”	1750’	Direct Seed	4/30/14	8/28/14	W. Wheat	76-37-22-11	Axial Boron Headline Tilt	16.4 oz/A 1 qt/A 8 oz/A 4 oz/A

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

Table 1 (continued). Trial locations and management information for the 2013-2014 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	Chemical Rate**
Legumes - Spring Peas										
Latah	Moscow (Parker farm)	24”	2630’	Direct Seed	5/2/14	8/7/14	S. Barley	None	RoundupRT3 Tricor Warrior II	32 oz/A PrePl 6.0 oz/A 1.9 oz/A
Nez Perce	Genesee (rim area)	20”	2800’	Conventional Tillage	5/1/14	8/18/14	S. Barley	None	Roundup Sharpen Sharpen Sencor Select DImethylate Warrior II	20 oz/A PrePl 1 oz/A PrePl 2 oz/A PreEm 1/3 lb PreEm 10.0 oz/A 10.6 oz/A 1.9 oz/A
Lewis	Craigmont	22”	3300’	Conventional Tillage	5/14/14	9/5/14	S. Wheat	None	Pursuit Sencor	2 oz/A PrePl 2 oz/A PreEm
Legumes - Spring Lentils										
Latah	Moscow (Parker farm)	24”	2615’	Conventional Tillage	5/10/14	9/8/14	S. Barley	None	Tricor	1/4 lb/A PreEm
Latah	Genesee (kambitsch farm)	20”	2850’	Direct Seed	5/7/14	8/8/14	S. Barley	None	Tricor Prowl Warrior II	1/4 lb/A PreEm 2 pt/A PreEm 1.9 oz/A
Nez Perce	Genesee (rim area)	20”	2600’	Direct Seed	5/1/14	8/18/14	S. Barley	None	Roundup Sharpen Sharpen Sencor Select Dimethylate Warrior II	20 oz/A PrePl 1 oz/A PrePl 2 oz/A PreEm 1/3 lb/A PreEm 10 oz/A 10.6 oz/A 1.9 oz/A
Lewis	Craigmont	22”	3300’	Conventional Tillage	5/14/14	9/5/14	S. Wheat	None	Pursuit Sencor	2 oz/A PrePl 2 oz/A PreEm

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

Table 1 (continued). Trial locations and management information for the 2013-2014 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 (Parker farm)	24”	2615’	Conventional Tillage	5/3/14	9/8/14	S. Barley	None	Tricor	1/4 lb/A PreEm
Lewis	Craigmont	22”	3300’	Conventional Tillage	5/14/14	9/5/14	S. Wheat	None	Pursuit Sencor	2 oz/A PrePl 2 oz/A PreEm
Nez Perce	Genesee (rim area)	20”	2600’	Direct Seed	5/1/14	9/8/14	S. Barley	None	Roundup Sharpen Sharpen Sencor Select Dimethylate Warrior II	20 oz/A PrePl 1 oz/A PrePl 2 oz/A PreEm 1/3 lb/A PreEm 10 oz/A 10.6 oz/A 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 2013-2014.

Variety	Experimental No.	Year Released	Developer(s) of Variety
Soft White Winter Wheat			
Amber	ARS960277L	2011	Washington AES, USDA
Bobtail	OR08047P94	2013	Oregon AES, USDA
Brundage-96	ID-B-96	2001	Idaho AES, USDA
Bruneau	ID 93-64901A	2009	Idaho AES, USDA
Kaseberg	OR2071628	2012	Oregon State University
Ladd	OR2070870	2012	Oregon AES, USDA
LCS Artdeco	NSA-2153A	2011	Limagrain Cereal Seeds, LLC
LCS Biancor		2013	Limagrain Cereal Seeds, LLC
Madsen	WA 7163	1988	Washington AES, USDA
Mary	OR2040726	2011	Oregon State University
Puma	WA 8134	2013	Washington AES
Rosalyn	OR2071071	2013	Oregon AES, USDA
Stephens	OR 65-116	1977	Oregon AES, USDA
UI/WSU Huffman	IDN-03-29902A	2014	Idaho AES, Washington AES
WB-1070CL	BZ6WM04-1070	2012	WestBred/Monsanto
WB-1529	BZ6WM07-436	2014	WestBred/Monsanto
WB-1604	BZ6WM09-458	2014	WestBred/Monsanto
WB-523	BU6WOO-523	2008	WestBred/Monsanto
WB-Junction	BZ-6W02-616	2012	WestBred/Monsanto
Winter Club Wheat			
ARS-Crescent	ARS-970163-4C	2012	Washington State University/USDA-ARS
Cara	ARS97135-9	2007	Washington State University/USDA-ARS
Hard Red and White (W) Winter Wheat			
Boundary	IDO467	1997	Idaho AES, USDA
Keldin	AC55017	2011	WestBred/Monsanto
LCS Allezy			Limagrain Cereal Seeds, LLC
LCS Azimut	NSA97-2365	2007	Limagrain Cereal Seeds, LLC
LCS Colonia		2013	Limagrain Cereal Seeds, LLC
LCS Evina		2013	Limagrain Cereal Seeds, LLC
Norwest-553	ORN00B553	2007	Oregon State AES, USDA-ARSARS, Nickerson, UK
Rimrock	ACS 52025		WestBred/Monsanto
UI Silver (W)	IDO658	2011	Idaho AES, USDA
UI SRG	IDO656	2011	Idaho AES, USDA
UICF Grace (W)	IDO651B	2009	Idaho AES, USDA
WB-Arrowhead	ML9W05-2501	2011	WestBred/Monsanto

Table 2 (cont). Varieties tested in northern Idaho extension variety trials in 2013-2014.

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
JD (club)	WA 8047	2009	Washington AES, USDA
UI-Stone	IDO599	2012	Idaho AES
Seahawk	WA 8162	2014	Washington AES, USDA
WB 1035CL+		2011	WestBred/Monsanto
WB 6121	BZ608-121	2014	WestBred/Monsanto
WB 6341	BZ608-125	2014	WestBred/Monsanto
Whit	WA 8008	2008	Washington AES, USDA
Hard Red Spring Wheat			
Alum	WA 8166	2014	Washington AES, USDA
Buck Pronto	T 1052	2001	Limagrain Cereal Seeds, LLC
Glee	WA 8074	2012	Washington AES, USDA
Jefferson	IDO 462	1998	Idaho AES, USDA
UI Winchester	IDO 578	2009	Idaho AES, USDA
WB 9518		2013	WestBred/Monsanto
WB-Fuzion	BZ901-717	2008	WestBred/Monsanto
Hard White Spring Wheat			
Dayn	WA 8123	2013	Washington AES, USDA
LCS Atomo			Limagrain Cereal Seeds, LLC
LCS Star	08SB06568-B		Limagrain Cereal Seeds, LLC
Otis	WA 7931	2005	Washington AES, Idaho AES, Oregon AES, USDA
UI Platinum	IDO 694C	2014	Idaho AES, USDA
WB-Hartline	BZ903-445WP	2012	WestBred/Monsanto

Table 2 (cont). Varieties tested in northern Idaho extension variety trials in 2013-2014.

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
LCS Violetta			2009	Limagrain Cereal Seeds, LLC
Six-Row Winter Barley				
Alba	Feed/Malt	OR77	2010	Oregon AES, USDA
Eight-Twelve	Feed	79Ab812	1988	Idaho AES, USDA
LCS Saturn				Limagrain Cereal Seeds, LLC
Maja*	Feed/Malt	OR81	2009	Oregon AES, USDA
Schuyler	Feed	NY5619B-3B	1969	Cornell AES, USDA
Sprinter*	Feed	BU583-50	1987	WestBred/Monsanto
Streaker (hulless)	Food	OR85	2011	Oregon AES, USDA
Strider	Feed	ORW6	1998	Oregon AES, USDA
Sunstar Pride	Feed	SDM204-B	1995	Sunderman Breeding
Two-row spring barley				
Camas	Feed	ND 9147	1998	Idaho AES, USDA
CDC-Copeland	Malt	TR150	1999	University of Saskatchewan, Canada
CDC-Meredith	Malt	TR05104	2008	University of Saskatchewan, Canada
Champion	Feed	YU-501-385D	2008	WestBred/Monsanto
LCS Genie	Malt			Limagrain Cereal Seeds, LLC
LCS Vespa	Feed			Limagrain Cereal Seeds, LLC
Lenetah	Feed	01Ab11107	2007	Idaho AES, USDA
Lyon	Feed	05WA-316.K	2013	Washington AES, USDA
Merem	Malt	02Ab17271	2014	USDA-ARS, Idaho AES
Muir	Feed	07WA-601.6	2013	Washington AES, USDA
Salute	Food			WestBred/Monsanto
Tetonia	Feed	98Ab11720	2007	Idaho AES, USDA
Transit	Food	03AH3054-51	2010	Idaho AES, USDA

*Can be planted in spring or winter

Table 2 (cont). Varieties tested in northern Idaho extension variety trials in 2013-2014.

Variety	Experimental No.	Year Released	Developer(s) of Variety
Chickpea			
BillyBeans		2010	PNW Farmers Cooperative
Bronic			
CDC Alma		2010	University of Saskatchewan, Canada
CDC Frontier		2003	University of Saskatchewan, Canada
CDC Orion		2010	University of Saskatchewan, Canada
Myles (desi)		1994	USDA-ARS, Washington AES
Nash	CA 04900843C	2013	USDA-ARS, Washington AES
Sawyer	CA 0090B347C	2010	USDA-ARS, Washington AES
Sierra	CA 9783152C	2001	USDA-ARS, Washington AES
Troy	CA 99901875W	2006	USDA-ARS, Washington AES
Lentil (*class*)			
Avondale (*Richlea*)	LC 10602300R	2012	USDA-ARS, Washington AES
Crimson (*Turkish Red*)	LC 800024	1990	USDA-ARS, Washington AES
Merrit (*Laird*)	LC 460266B	2001	USDA-ARS, Washington AES
Morena (*Pardina*)	LC 02601144P	2011	USDA-ARS, Washington AES
Pardina (*Pardina*)			Spain
Richlea (*Richlea*)			Ag. Canada
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
Yellow Pea			
Carousel	SW 995848	2004	ProGene

Table 3. Soft white winter wheat variety performance results at Bonners Ferry, 2014.

Variety or Selection	3-Year Average (bu/A)	2-Year Average (bu/A)	2013-2014 Crop Year Yield Seed (bu/A)*	Test Weight (lb/bu)	Plant Height (inches)	Seed Protein (%)	Hardness Score (0-100)
IDN-01-10704A			**125**	55.6	34	8.8	24
Bruneau		100	**120**	55.9	33	8.9	22
LCS Artdeco		105	**118**	53.9	30	9.0	16
ARS-Amber		100	116	56.0	34	8.9	25
BZ6WM09-1038CLP			116	56.1	34	9.4	22
LWW12-7105			114	55.3	26	9	20
OR2080641			114	55.6	32	8.6	22
WB-Junction		90	114	56.4	30	8.6	18
IDN-02-29001A			113	56.2	31	9.2	21
UI/WSU Huffman (03-29902A)		100	111	55.6	32	8.5	21
IDN-02-08806A			110	55.4	31	9.2	18
OR2080637			110	55.7	30	9.6	26
Puma		102	109	56.0	34	9.2	24
Madsen	86	91	108	55.8	31	9.7	26
Mary			106	56.7	30	9.1	18
ARS-Crescent	87	96	105	54.3	33	7.9	18
Kaseberg	88	100	105	55.1	31	8.3	15
ORCF102			104	55.7	32	8.4	17
IDO1108		97	103	54.1	34	8.8	23
Stephens	85	98	103	55.8	30	9.7	24
BZ6WM09-1030CLP			102	57.6	32	10.1	21
WB-523	81	92	101	55.9	31	8.8	18
BZ6WM09-1028CLP			98	57.9	27	10.2	25
Bobtail	78	88	97	52.5	28	8.9	18
WB-1604 (BZ6W09-458)	88	88	97	55.0	29	9.8	19
Ladd			96	56.3	31	9.8	28
WB-1529 (BZ6W07-436)		88	91	56.8	28	9.4	20
Cara	66	67	89	53.8	31	9.1	25
WB-1070CL	75	85	89	57.8	28	10.1	20
Brundage 96			--	55.1	31	9.1	21
IDN-04-00405B			--	53.9	30	9.6	17
LCS Biancor			--	55.1	27	8.3	10
OR2090473			--	53.4	28	9.1	12
Rosalyn			--	53.2	30	8.2	13
Average	**81**	**92**	**106**	**55.5**	**31**	**9.1**	**20**
LSD (0.05)	**11**	**14**	**8**	**0.5**	**2**	**--**	**--**
CV (%)	**14**	**13**	**5**	**0.7**	**4**	**--**	**--**

*Varieties in bold were statistically equal to the top yielding variety in 2014. Brundage 96, IDN-04-00405B, LCS Biancor, OR2090473 and Rosalyn, all awnless varieties, sustained significant damage from selective feeding by deer and birds.

Table 4. Soft white winter wheat variety performance results at Genesee (rim area), 2014.

Variety or Selection	3-Year Average (bu/A)	2-Year Average (bu/A)	2013-2014 Crop Year Seed Yield (bu/A)*	Test Weight (lb/bu)	Plant Height (inches)	Seed Protein (%)	Hardness Score (0-100)
LCS Biancor			**101**	57.4	26	11.2	31
LWW12-7105			**100**	56.3	24	11.8	34
IDN-01-10704A			**97**	58.0	32	12.9	36
WB-1529 (BZ6W07-436)		94	**94**	62.0	29	13.0	37
LCS Artdeco	103	100	**94**	57.4	27	11.6	27
OR2090473			**94**	55.8	27	12.7	27
ORCF102			**94**	59.3	33	13.2	40
Bobtail	98	96	**92**	53.8	28	12.5	32
WB-1070CL	95	94	**92**	61.8	28	13.5	37
WB-Junction	93	91	**92**	59.7	30	12.7	30
BZ6WM09-1030CLP			**90**	62.0	30	13.8	36
IDN-02-29001A			**90**	57.8	30	14.0	32
Mary			**90**	58.8	27	13.5	31
Rosalyn		95	**90**	55.3	29	12.5	31
IDN-02-08806A			89	57.8	29	13.3	32
Ladd			88	59.2	28	13.1	34
OR2080637			88	56.7	28	12.5	28
Puma		91	87	58.1	33	13.3	35
IDO1108		93	86	57.2	33	12.4	37
Kaseberg	97	93	85	57.4	28	13.0	27
IDN-04-00405B			84	55.8	29	13.3	25
Brundage 96	94	91	83	57.9	28	13.7	26
Bruneau	98	93	83	58.2	28	13.3	31
BZ6WM09-1038CLP			83	59.0	30	13.4	40
OR2080641			83	56.3	29	12.7	35
WB-523	87	86	83	56.8	29	13.9	33
WB-1604 (BZ6W09-458)	80	83	82	58.8	28	12.8	30
BZ6WM09-1028CLP			82	59.3	26	14.2	42
Stephens	90	89	82	55.8	28	13.4	35
UI/WSU Huffman (03-29902A)		91	81	56.8	28	13.9	34
Madsen	88	86	80	59.0	30	13.5	30
ARS-Amber	89	86	76	56.6	27	12.9	37
ARS-Crescent	81	77	71	55.5	28	13.4	36
Cara	81	76	69	55.6	27	13.5	38
Average	**91**	**90**	**87**	**57.7**	**29**	**13.1**	**33**
LSD (0.05)	**9**	**10**	**11**	**1.5**	**3**	**--**	**--**
CV (%)	**11**	**10**	**9**	**1.9**	**6**	**--**	**--**

*Varieties in bold were statistically equal to the top yielding variety in 2014.

Table 5. Soft white winter wheat variety performance results at Genesee (Kambitsch farm), 2014.

	2013-2014 Crop Year				
Variety or Selection	**Seed Yield (bu/A)***	**Test Weight (lb/bu)**	**Plant Height (inches)**	**Seed Protein (%)**	**Hardness Score (0-100)**
LCS Biancor	**96**	55.7	25	10.7	30
LWW12-7105	**95**	55.1	24	10.9	31
OR2090473	**94**	55.0	29	11.5	24
Rosalyn	**94**	54.7	30	11.0	28
WB-1604 (BZ6W09-458)	**92**	58.1	30	10.9	24
Brundage 96	**91**	57.2	30	12.5	22
IDO1108	**91**	57.2	35	10.7	27
Kaseberg	**91**	57.6	30	12.2	34
Bobtail	**89**	55.0	29	11.5	25
ORCF102	**89**	59.1	32	12.1	32
IDN-04-00405B	**88**	55.6	28	12.7	22
LCS Artdeco	**88**	56.4	27	11.0	27
WB-1529 (BZ6W07-436)	**88**	59.0	27	11.4	29
OR2080641	**87**	56.3	29	12.1	32
Puma	**87**	58.5	33	11.4	32
UI/WSU Huffman (03-29902A)	**87**	58.2	32	11.7	27
WB-1070CL	**87**	60.1	29	12.7	28
IDN-02-08806A	**86**	58.2	30	12.2	25
Bruneau	85	57.5	30	12.1	28
BZ6WM09-1038CLP	84	57.1	30	12.1	45
IDN-01-10704A	84	56.6	33	11.6	27
Mary	84	56.4	28	12.3	25
BZ6WM09-1030CLP	83	60.4	29	13.0	26
Cara	83	56.0	29	12.6	33
Madsen	83	59.0	32	12.4	32
IDN-02-29001A	82	58.7	31	13.0	24
WB-Junction	82	57.1	29	13.2	29
Ladd	81	58.3	28	12.6	28
Stephens	81	54.9	27	12.9	30
OR2080637	79	55.8	28	12.8	27
ARS-Crescent	78	56.8	29	11.9	27
WB-523	77	56.9	30	12.8	24
BZ6WM09-1028CLP	75	58.0	26	14.4	39
ARS-Amber	73	55.4	27	12.3	30
Average	**86**	**57.1**	**29**	**12.1**	**29**
LSD (0.05)	**10**	**1.5**	**3**	**--**	**--**
CV (%)	**8**	**1.9**	**7**	**--**	**--**

*Varieties in bold were statistically equal to the top yielding variety in 2014.

Table 6. Soft white winter wheat variety performance results at Nezperce, 2014.

Variety or Selection	3-Year Average (bu/A)	2-Year Average (bu/A)	2013-2014 Crop Year Seed Yield (bu/A)*	Test Weight (lb/bu)	Plant Height (inches)	Frost Damage (%)**	Seed Protein (%)	Hardness Score (0-100)
LWW12-7105			**68**	52.5	22	5	14.2	31
WB-Junction	71	67	**61**	55.5	25	28	16.2	27
IDN-01-10704A			**60**	53.5	28	53	14.6	33
IDN-04-00405B			**58**	54.5	24	30	15.3	23
WB-1604 (BZ6W09-458)	62	62	**55**	55.1	24	68	16.3	35
LCS Artdeco	75	66	**53**	52.6	22	35	14.9	33
Puma		66	**53**	56.0	26	25	15.8	35
Rosalyn		66	**53**	52.6	24	38	16.1	34
IDN-02-08806A			**52**	55.8	26	20	15.5	36
Madsen	72	67	**52**	54.6	27	43	16.3	37
Ladd			**51**	54.3	24	38	15.5	32
LCS Biancor			**51**	53.5	19	38	14.1	28
Stephens	62	62	**51**	53.8	24	33	15.6	39
Bruneau	73	69	**50**	55.4	24	35	15.8	31
OR2080641			**50**	54.0	24	55	15.7	38
Bobtail	79	67	48	52.8	23	43	15.2	35
OR2080637			48	53.7	21	45	15.3	37
WB-523	72	61	48	56.0	25	68	16.5	39
IDN-02-29001A			47	55.8	24	55	17.2	36
IDO1108		68	47	54.3	26	10	16.8	40
OR2090473			47	53.3	21	45	15.5	28
UI/WSU Huffman (03-29902A)		62	47	55.1	24	8	16.6	39
ORCF102			46	55.2	25	40	17.2	48
WB-1529 (BZ6W07-436)		58	44	56.4	21	55	15.7	36
Kaseberg	70	59	43	54.3	22	70	15.4	32
Mary			43	53.3	22	70	17.1	35
Brundage 96	66	58	42	54.8	22	40	17.0	34
Cara	67	54	42	51.4	24	13	17.2	47
ARS-Amber	70	60	40	53.5	23	28	16.7	42
WB-1070CL	56	51	40	56.6	21	18	16.4	38
BZ6WM09-1030CLP			38	56.2	20	63	17.7	45
ARS-Crescent	37	63	37	52.3	24	5	17.4	44
BZ6WM09-1038CLP			37	54.5	23	30	16.9	47
BZ6WM09-1028CLP			33	54.7	19	13	18.3	38
Average	**67**	**62**	**48**	**54.4**	**23**	**37**	**16.1**	**36**
LSD (0.05)	**11**	**13**	**19**	**1.0**	**5**	**--**	**--**	**--**
CV (%)	**17**	**19**	**28**	**1.3**	**14**	**--**	**--**	**--**

*Varieties in bold were statistically equal to the top yielding variety in 2014.
**Incidence of heads with frost damage that was typically restricted to the upper 1 to 1.5 inches of the spike.

Table 7. Soft white winter wheat variety performance results at Tammany (Lewiston), 2014.

			2013-2014 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 (inches)**	**Seed Protein (%)**	**Hardness Score (0-100)**
WB-523	76	73	**54**	57.4	28	16.5	35
Mary			**53**	55.7	27	14.8	29
WB-1070CL	76	72	**53**	60.0	27	15.4	26
LCS Biancor			**52**	56.1	24	14.1	32
LWW12-7105			**51**	54.1	24	15.5	30
OR2090473			**51**	54.7	27	16.0	33
Puma		77	**51**	57.0	28	16.4	39
IDN-01-10704A			**50**	55.2	28	16.4	37
IDN-02-08806A			**50**	57.9	28	15.8	35
IDO1108		74	**50**	57.6	28	15.9	39
UI/WSU Huffman (03-29902A)		77	**50**	56.0	26	16.9	39
Bruneau	74	75	**49**	56.6	27	15.9	34
BZ6WM09-1038CLP			**49**	55.3	29	16.0	38
Bobtail	81	77	**48**	54.9	25	15.6	31
IDN-02-29001A			**48**	57.2	27	16.7	34
LCS Artdeco	79	74	**48**	55.0	25	14.9	28
Kaseberg	72	70	**47**	56.1	26	15.7	31
WB-1529 (BZ6W07-436)		77	**47**	59.5	25	16.1	35
WB-1604 (BZ6W09-458)	67	67	46	54.3	27	17.0	32
WB-Junction	70	66	46	55.4	26	16.5	32
BZ6WM09-1030CLP			44	56.5	28	18.1	36
Madsen	66	65	44	56.6	26	17.0	43
Rosalyn		67	44	53.5	24	16.0	29
ARS-Amber	65	65	43	55.2	25	16.0	41
ARS-Crescent	43	68	43	56.1	25	16.9	47
Ladd			43	53.1	25	16.8	36
ORCF102			43	57.0	27	17.5	44
IDN-04-00405B			42	55.1	25	17.4	33
Brundage 96	67	67	41	55.9	25	17.1	36
OR2080641			41	56.2	25	17.1	44
BZ6WM09-1028CLP			39	54.2	24	18.8	45
OR2080637			39	56.6	22	16.4	37
Stephens	59	57	36	54.9	25	17.6	42
Cara**			--	54.7	23	16.5	46
Average	**70**	**72**	**45**	**55.9**	**26**	**16.4**	**36**
LSD (0.05)	**7**	**8**	**7**	**1.3**	**2**	**--**	**--**
CV (%)	**11**	**11**	**11**	**1.7**	**6**	**--**	**--**

*Varieties in bold were statistically equal to the top yielding variety in 2014.
**No yield reported for Cara due to selective cattle grazing just prior to harvest.

Table 8. Soft white winter wheat variety performance results at Tensed, 2014.

Variety or Selection	3-Year Average (bu/A)	2-Year Average (bu/A)	2013-2014 Crop Year Seed Yield (bu/A)*	Test Weight (lb/bu)	Plant Height (inches)	Lodging (%)	Seed Protein (%)	Hardness Score (0-100)
LCS Artdeco	118	135	**119**	54.5	26	9	9.7	22
IDN-02-08806A			**117**	56.1	29	3	10.0	21
LWW12-7105			**115**	53.7	24	3	10.3	25
ORCF102			**115**	58.0	31	14	10.3	32
BZ6WM09-1038CLP			**112**	58.1	32	15	10.8	32
IDN-02-29001A			**112**	57.4	29	4	10.1	24
Bruneau	117	126	**111**	56.9	30	8	10.3	29
UI/WSU Huffman (03-29902A)		124	**111**	55.8	29	19	10.0	31
Stephens	104	120	110	57.3	28	5	10.7	33
WB-Junction	117	129	108	56.9	27	48	10.6	25
Puma		127	107	55.6	32	43	10.4	26
IDO1108		126	106	55.5	29	83	10.1	34
WB-1529 (BZ6W07-436)		123	106	58.7	26	48	10.5	24
Bobtail	119	127	105	51.7	27	43	10.6	29
OR2080641			105	55.2	29	8	11.0	33
OR2080637			104	55.0	28	43	10.1	30
WB-523	104	121	103	56.5	26	10	10.7	29
Mary			101	55.2	26	3	11.4	28
Rosalyn		126	100	53.0	28	5	10.5	32
IDN-01-10704A			98	54.0	32	28	10.7	30
LCS Biancor			97	54.0	24	3	10.7	30
ARS-Amber	106	115	96	53.4	27	78	10.3	28
BZ6WM09-1030CLP			96	58.8	28	8	11.5	24
WB-1604 (BZ6W09-458)	102	112	96	56.6	26	3	11.3	23
BZ6WM09-1028CLP			95	57.4	26	0	12.2	33
IDN-04-00405B			95	53.6	27	3	10.9	27
Brundage 96	105	114	94	54.5	28	5	10.9	24
Cara	106	107	93	53.2	28	10	10.7	33
Madsen	109	117	93	53.8	27	3	11.8	36
Ladd			91	55.7	27	0	11.3	27
Kaseberg	108	116	89	54.4	28	5	10.7	27
OR2090473			89	52.1	27	0	11.3	23
WB-1070CL	92	109	89	58.7	25	0	12.7	27
ARS-Crescent	108	109	88	53.2	28	29	9.9	26
Average	**108**	**120**	**102**	**55.4**	**28**	**17**	**10.7**	**28**
LSD (0.05)	**10**	**8**	**8**	**1.3**	**2**	**19**	**--**	**--**
CV (%)	**10**	**7**	**6**	**1.6**	**5**	**78**	**--**	**--**

*Varieties in bold were statistically equal to the top yielding variety in 2014.

Table 9. Soft white winter wheat performance comparison across northern Idaho, 2014.

Variety or Selection	3-Year Yield	2-Year Yield	2013-2014 Crop Year: North Idaho Average*	Bonners Ferry	Genesee (rim)	Genesee (Kam)	Nezperce	Tammany	Tensed	Test Weight	Plant Height	Lodging**	Seed Protein	Hardness Score
	----------	----------	----------	----------	bu/A	----------	----------	----------	----------	(lb/bu)	(inches)	-----%-----		(0-100)
LWW12-7105			**91**	114	100	95	68	51	115	54.5	24	3	12.0	28.5
LCS Artdeco	95	96	**87**	118	94	88	53	48	119	55.0	26	9	11.9	25.5
IDN-01-10704A			**86**	125	97	84	60	50	98	55.5	31	28	12.5	31.2
IDN-02-08806A			84	110	89	86	52	50	117	56.9	29	3	12.7	27.8
WB-Junction	89	89	84	114	92	82	61	46	108	56.8	28	48	13.0	26.8
Bruneau	91	92	83	120	83	85	50	49	111	56.8	29	8	12.7	29.2
Puma		92	82	109	87	87	53	51	107	56.9	31	43	12.8	31.8
IDN-02-29001A			82	113	90	82	47	48	112	57.2	29	4	13.4	28.5
ORCF102			82	104	94	89	46	43	115	57.4	30	14	13.1	35.5
UI/WSU Huffman (03-29902A)		92	81	111	81	87	47	50	111	56.3	28	19	12.9	31.8
IDO1108		93	81	103	86	91	47	50	106	56.0	31	83	12.5	33.3
BZ6WM09-1038CLP			80	116	83	84	37	49	112	56.7	30	15	13.1	37.3
OR2080641			80	114	83	87	50	41	105	55.6	28	8	12.9	34.0
Bobtail	92	91	80	97	92	89	48	48	105	53.5	27	43	12.4	28.3
Mary			80	106	90	84	43	53	101	56.0	27	3	13.0	27.7
LCS Biancor			79	--	101	96	51	52	97	55.3	23	3	11.5	26.8
WB-1529 (BZ6W07-436)		88	78	91	94	88	44	47	106	58.7	26	48	12.7	30.2
OR2080637			78	110	88	79	48	39	104	55.6	26	43	12.8	30.8
WB-1604 (BZ6W09-458)	85	84	78	97	82	92	55	46	96	56.3	27	3	13.0	26.8
WB-523	85	86	78	101	83	77	48	54	103	56.6	28	10	13.2	29.7
Stephens	82	86	77	103	82	81	51	36	110	55.4	27	5	13.3	33.8
Madsen	86	86	77	108	80	83	52	44	93	56.5	29	3	13.5	34.0
Kaseberg	90	89	77	105	85	91	43	47	89	55.8	27	5	12.6	27.7
Rosalyn		90	76	--	90	94	53	44	100	53.8	27	5	12.4	27.8
BZ6WM09-1030CLP			76	102	90	83	38	44	96	58.6	28	8	14.0	31.3
Ladd			75	96	88	81	51	43	91	56.2	27	0	13.2	30.8
OR2090473			75	--	94	94	47	51	89	54.2	26	0	12.7	24.5
WB-1070CL	81	84	75	89	92	87	40	53	89	59.2	27	0	13.5	29.3
ARS-Amber	86	85	74	116	76	73	40	43	96	55.0	27	78	12.9	33.8
IDN-04-00405B			73	--	84	88	58	42	95	54.9	27	3	13.2	24.5
BZ6WM09-1028CLP			70	98	82	75	33	39	95	56.9	24	0	14.7	37.0
ARS-Crescent	80	84	70	105	71	78	37	43	88	54.7	28	29	12.9	33.0
Brundage 96	86	85	70	--	83	91	42	41	94	56.1	26	5	13.4	27.2
Cara	83	81	63	89	69	83	42	--	93	54.1	27	10	13.3	37.0
Average	**87**	**88**	**78**	**106**	**87**	**86**	**48**	**45**	**102**	**56.0**	**27**	**17**	**12.9**	**30.4**
LSD (0.05)	**4**	**4**	**6**	**8**	**11**	**10**	**19**	**7**	**8**	**0.6**	**--**	**--**	**--**	**--**
CV (%)	**12**	**11**	**10**	**5**	**9**	**8**	**28**	**11**	**6**	**1.6**	**--**	**--**	**--**	**--**

*Varieties in bold were statistically equal to the top yielding variety in 2014.
**Lodging only observed at the Tensed winter wheat location.

Table 10. Hard winter wheat variety performance results at Bonners Ferry, 2014.

Variety or Selection	Market Class	3-Year Average (bu/A)	2-Year Average (bu/A)	2013-2014 Crop Year Seed Yield (bu/A)*	Test Weight (lb/bu)	Plant Height (inches)	Lodging (%)	Seed Protein (%)	Hardness Score (0-100)
UI SRG	HRW		104	**119**	59.2	39	83	10.4	70
OR2100081H	HWW			**117**	58.9	31	0	10.1	64
LCS Colonia	HRW		115	**116**	56.0	31	0	9.0	47
IDO816	HRW	84	97	**115**	58.7	35	83	9.8	68
Keldin	HRW		112	**112**	59.5	32	0	10.0	59
Norwest 553	HRW		108	**111**	59.0	30	0	10.0	60
Boundary	HRW	79	96	**109**	56.9	30	0	9.4	59
UICF Grace	HWW			106	58.9	40	55	10.9	76
IDO1101	HWW		98	104	58.4	30	13	10.3	68
Rimrock	HRW	84	94	104	58.2	31	3	9.9	63
WB-Arrowhead	HRW	83	96	103	59.1	32	4	10.5	62
OR2080236H	HWW		99	102	58.3	32	0	10.1	86
UI Silver	HWW	77	85	100	59.5	34	85	9.9	70
IDO1103	HRW		89	90	58.9	30	48	10.8	69
LCS Azimut	HRW	66	71	84	54.7	28	0	9.5	56
Average		**79**	**97**	**106**	**58.3**	**32**	**25**	**10.0**	**65**
LSD (0.05)		**11**	**14**	**11**	**0.5**	**3**	**16**	**--**	**--**
CV (%)		**14**	**13**	**7**	**0.6**	**6**	**46**	**--**	**--**

*Varieties in bold were statistically equal to the top yielding variety in 2014.

**LCS Allezy, LCS Evina and NSA10-7208 were not included at Bonners Ferry.

Table 11. Hard winter wheat variety performance results at Genesee (rim area), 2014.

Variety or Selection	Market Class	3-Year Average (bu/A)	2-Year Average (bu/A)	2013-2014 Crop year Seed Yield (bu/A)*	Test Weight (lb/bu)	Plant Height (inches)	Seed Protein (%)	Hardness Score (0-100)
NSA10-7208	HRW			**116**	58.9	30	11.3	71
Keldin	HRW		104	**106**	59.7	33	11.6	73
Rimrock	HRW	99	103	**105**	58.0	32	11.2	76
OR2100081H	HWW			**102**	59.6	32	11.8	78
LCS Colonia	HRW		100	100	53.2	31	11.8	54
LCS Allezy	HRW			100	53.7	27	12.2	73
IDO1101	HWW		93	97	59.9	27	12.0	85
UI Silver	HWW	95	98	94	59.8	32	11.9	85
LCS Evina	HRW			94	57.2	36	12.8	73
IDO1103	HRW		92	92	58.5	31	12.3	85
WB-Arrowhead	HRW	93	91	91	59.8	33	11.7	73
Boundary	HRW	86	84	89	58.0	31	11.6	82
UICF Grace	HWW			87	58.7	45	12.7	85
IDO816	HRW	92	91	87	58.3	33	12.1	83
Norwest 553	HRW	92	89	87	57.5	27	12.1	72
LCS Azimut	HRW	91	91	86	52.3	27	12.3	77
UI SRG	HRW	80	78	78	57.4	36	13.8	86
OR2080236H	HWW		85	76	56.6	29	13.1	95
Average		**91**	**92**	**94**	**57.6**	**32**	**12.1**	**78**
LSD (0.05)		**9**	**10**	**15**	**1.9**	**3**	**--**	**--**
CV (%)		**11**	**10**	**11**	**2.7**	**6**	**--**	**--**

*Varieties in bold were statistically equal to the top yielding variety in 2014.

Table 12. Hard winter wheat variety performance results at Genesee (Kambitsch farm), 2014.

		2013-2014 Crop Year				
Variety or Selection	**Market Class**	**Seed Yield (bu/A)***	**Test Weight (lb/bu)**	**Plant Height (inches)**	**Seed Protein (%)**	**Hardness Score (0-100)**
LCS Allezy	HRW	**100**	57.4	29	12.1	72
NSA10-7208	HRW	**100**	58.9	30	11.8	68
OR2100081H	HWW	**97**	60.1	32	11.5	75
Keldin	HRW	**94**	60.6	31	11.5	67
LCS Azimut	HRW	**93**	54.2	27	11.1	70
Norwest 553	HRW	**93**	60.1	29	12.1	71
IDO1101	HWW	**92**	61.7	29	11.3	79
LCS Colonia	HRW	**90**	58.0	30	11.6	57
WB-Arrowhead	HRW	85	60.8	33	11.7	71
Boundary	HRW	82	58.0	29	13.0	76
UI Silver	HWW	81	61.6	36	11.8	81
IDO1103	HRW	80	60.3	32	12.6	85
LCS Evina	HRW	79	59.4	34	13.2	74
Rimrock	HRW	79	59.6	30	12.0	76
UI SRG	HRW	77	58.0	37	12.9	86
IDO816	HRW	74	60.0	34	12.2	80
UICF Grace	HWW	73	59.4	46	12.7	90
OR2080236H	HWW	65	56.9	29	14.1	94
Average		**85**	**59.2**	**32**	**12.2**	**76**
LSD (0.05)		**12**	**1.6**	**4**	**--**	**--**
CV (%)		**10**	**1.9**	**8**	**--**	**--**

*Varieties in bold were statistically equal to the top yielding variety in 2014.

**Plot was moved from the Parker Farm in Moscow to the Kambitsch Farm near Genesee for 2014. Two-year and 3-year averages are not available for this location.

Table 13. Hard winter wheat variety performance results at Nezperce, 2014.

Variety or Selection	Market Class	3-Year Average (bu/A)	2-Year Average (bu/A)	2013-2014 Crop Year Seed Yield (bu/A)*	Test Weight (lb/bu)	Plant Height (inches)	Frost Damage (%)**	Seed Protein (%)	Hardness Score (0-100)
LCS Colonia	HRW		85	**79**	52.0	28	3	13.5	59
OR2100081H	HWW			**78**	58.5	29	3	13.2	77
IDO1101	HWW		81	**77**	58.7	26	13	13.5	84
NSA10-7208	HRW			**71**	54.5	22	45	14.5	71
Norwest 553	HRW	75	75	**70**	58.0	24	8	13.9	76
LCS Allezy	HRW			**65**	51.8	23	0	14.5	75
LCS Azimut	HRW	75	75	**65**	52.3	23	13	14.1	70
Keldin	HRW		73	**61**	56.4	23	25	14.3	71
UI SRG	HRW	77	72	**61**	55.9	30	38	14.6	84
Rimrock	HRW	77	69	**60**	55.4	23	10	14.4	74
IDO816	HRW	74	68	57	55.8	28	25	14.4	82
OR2080236H	HWW		64	55	52.8	25	0	15.9	94
UICF Grace	HWW			51	56.0	33	53	15.7	95
LCS Evina	HRW			48	53.7	26	30	16.2	78
WB-Arrowhead	HRW	62	62	45	56.5	25	43	14.6	75
Boundary	HRW	71	61	42	55.6	23	3	15.5	78
IDO1103	HRW		59	40	55.1	22	25	15.2	89
UI Silver	HWW	65	52	28	57.2	25	73	15.2	89
Average		**72**	**69**	**59**	**55.3**	**25**	**23**	**14.6**	**79**
LSD (0.05)		**11**	**13**	**21**	**1.8**	**5**	**--**	**--**	**--**
CV (%)		**17**	**19**	**26**	**2.3**	**14**	**--**	**--**	**--**

*Varieties in bold were statistically equal to the top yielding variety in 2014.

**Incidence of heads with frost damage that was typically restricted to the upper 1 to 1.5 inches of the spike.

Table 14. Hard winter wheat variety performance results at Tammany (Lewiston), 2014.

Variety or Selection	Market Class	3-Year Average (bu/A)	2-Year Average (bu/A)	2013-2014 Crop Year Seed Yield (bu/A)*	Test Weight (lb/bu)	Plant Height (inches)	Seed Protein (%)	Hardness Score (0-100)
NSA10-7208	HRW			**60**	57.1	26	14.8	73
IDO1101	HWW		76	**56**	60.3	29	14.8	87
Keldin	HRW		70	**52**	57.0	30	15.9	71
LCS Azimut	HRW	77	78	**51**	48.8	27	15.0	76
UICF Grace	HWW			**51**	56.1	38	15.8	94
OR2100081H	HWW			49	56.1	28	15.2	79
Rimrock	HRW	66	72	49	59.0	29	15.9	91
WB-Arrowhead	HRW	65	61	49	58.6	31	15.0	75
UI Silver	HWW	60	60	47	59.2	29	14.9	96
Boundary	HRW	66	72	46	56.6	28	16.1	89
LCS Colonia	HRW		93	46	54.1	24	15.4	67
Norwest 553	HRW	72	70	46	58.2	26	15.6	76
IDO1103	HRW		58	44	58.1	27	16.4	91
LCS Evina	HRW			44	56.2	30	16.1	85
UI SRG	HRW	59	60	44	56.3	35	15.9	91
IDO816	HRW	56	55	41	57.7	26	15.6	93
LCS Allezy	HRW			41	53.6	26	16.0	85
OR2080236H	HWW		64	41	57.0	24	16.8	100
Average		**65**	**68**	**48**	**56.7**	**28**	**15.6**	**84**
LSD (0.05)		**7**	**8**	**9**	**1.7**	**4**	**--**	**--**
CV (%)		**11**	**11**	**13**	**2.1**	**9**	**--**	**--**

*Varieties in bold were statistically equal to the top yielding variety in 2014.

Table 15. Hard winter wheat variety performance results at Tensed, 2014.

Variety or Selection	Market Class	3-Year Average (bu/A)	2-Year Average (bu/A)	2013-2014 Crop Year Seed Yield (bu/A)*	Test Weight (lb/bu)	Plant Height (inches)	Lodging (%)	Seed Protein (%)	Hardness Score (0-100)
NSA10-7208	HRW			**129**	57.8	30	0	10.8	74
Keldin	HRW		131	115	59.3	30	63	10.8	70
LCS Allezy	HRW			114	54.1	29	24	11.4	76
Rimrock	HRW	107	108	110	58.3	29	70	11.2	76
IDO1101	HWW		122	103	60.0	28	30	11.3	77
UICF Grace	HWW			102	58.5	42	86	11.8	88
WB-Arrowhead	HRW	116	124	102	58.5	32	53	11.3	73
LCS Evina	HRW			101	56.7	33	35	12.0	79
LCS Azimut	HRW	111	115	99	52.7	26	8	11.6	71
Boundary	HRW	109	110	98	56.2	30	33	11.1	72
OR2080236H	HWW		117	96	57.2	29	8	11.4	92
UI SRG	HRW	111	117	95	57.7	35	86	11.6	84
OR2100081H	HWW			92	59.2	29	3	12.1	78
LCS Colonia	HRW		124	90	53.3	28	5	11.4	60
IDO816	HRW	103	105	87	58.2	30	96	11.2	83
UI Silver	HWW	106	111	87	58.6	30	96	11.6	85
Norwest 553	HRW	110	112	86	58.4	27	0	12.4	75
IDO1103	HRW		109	76	57.4	30	89	12.0	80
Average		**109**	**116**	**99**	**57.3**	**30**	**44**	**11.5**	**77**
LSD (0.05)		**10**	**8**	**7**	**1.5**	**4**	**26**	**--**	**--**
CV (%)		**10**	**7**	**5**	**1.8**	**8**	**42**	**--**	**--**

*Varieties in bold were statistically equal to the top yielding variety in 2014.

Table 16. Hard winter wheat performance comparison across northern Idaho, 2014.

Variety or Selection	Market Class	3-Year Yield	2-Year Yield	2013-2014 Crop Year: North Idaho Average*	Bonners Ferry	Genesee (rim)	Genesee (Kam)	Nezperce	Tammany	Tensed	Test Weight	Plant Height	Lodging**	Seed Protein	Hardness
		---bu/A---									(lb/bu)	(inches)	---(%)---		(0-100)
NSA10-7208***	HRW			**95**	--	116	100	71	60	129	57.4	28	0	12.6	71
Keldin	HRW		100	86	112	106	94	61	52	115	58.8	30	32	12.4	69
IDO1101	HWW		96	85	104	97	92	77	56	103	59.8	28	22	12.2	80
LCS Allezy***	HRW			84	--	100	100	65	41	114	54.1	27	24	13.2	76
OR2100081H	HWW			84	117	102	97	78	49	92	58.7	30	2	12.3	75
LCS Colonia	HRW		105	81	116	100	90	79	46	90	54.4	29	3	12.1	57
Rimrock	HRW	90	92	81	104	105	79	60	49	110	58.1	29	37	12.4	76
LCS Azimut	HRW	89	91	79	84	86	93	65	51	99	52.5	26	4	12.3	70
Norwest 553	HRW	92	93	76	111	87	93	70	46	86	58.5	27	0	12.7	72
WB-Arrowhead	HRW	87	90	74	103	91	85	45	49	102	58.9	31	29	12.5	72
LCS Evina***	HRW			73	--	94	79	48	44	101	56.6	32	35	14.1	78
UICF Grace	HWW			73	106	87	73	51	51	102	57.9	40	71	13.3	88
Boundary	HRW	86	88	71	109	89	82	42	46	98	56.9	28	17	12.8	76
UI SRG	HRW	87	87	71	119	78	77	61	44	95	57.4	35	85	13.2	84
IDO816	HRW	84	85	69	115	87	74	57	41	87	58.1	31	90	12.6	82
UI Silver	HWW	85	84	67	100	94	81	28	47	87	59.3	31	91	12.6	84
OR2080236H	HWW		84	67	102	76	65	55	41	96	56.5	28	4	13.6	94
IDO1103	HRW		84	66	90	92	80	40	44	76	58.1	29	69	13.2	83
Average		**87**	**91**	**77**	**106**	**94**	**85**	**59**	**48**	**99**	**57.3**	**30**	**34**	**13.0**	**77**
LSD (0.05)		**4**	**4**	**5**	**11**	**15**	**12**	**21**	**9**	**7**	**0.6**	**1**	**--**	**--**	**--**
CV (%)		**12**	**11**	**11**	**7**	**11**	**10**	**26**	**13**	**5**	**1.9**	**8**	**--**	**--**	**--**

*Varieties in bold were statistically equal to the top yielding variety in 2014. Average yield excludes Bonners Ferry.
**Lodging only observed at the Bonners Ferry and Tensed hard winter wheat locations.
***Average lodging, seed protein and hardness do not include data from Bonners Ferry for LCS Allezy, LCS Evina and NSA10-7208.

Table 17. Soft white spring wheat variety performance results at Bonners Ferry, 2014.

Variety or Selection	3-Year Average (bu/A)	2-Year Average (bu/A)	2013-2014 Crop Year Seed Yield (bu/A)*	Test Weight (lb/bu)	Plant Height (inches)	Lodging (%)	Seed Protein (%)	Hardness Score (0-100)
WA8189		107	**98**	57.9	33	28	10.8	32
Seahawk (WA8162)		106	**95**	57.0	34	4	11.0	38
WB 6121		98	**93**	57.5	33	1	11.8	28
Whit	93	97	89	57.2	35	9	11.4	36
Diva	90	93	84	55.5	35	81	10.8	30
WB 6341		99	84	53.6	33	11	10.6	23
WB 1035CL+	85	86	80	56.0	33	5	12.0	31
WA8193**			77	54.6	32	3	10.9	34
JD**	83	82	71	56.6	33	25	11.6	41
ID0852	82	80	70	54.8	33	26	10.4	24
ID0851	84	80	68	54.4	32	10	10.5	24
UI Stone	78	77	68	55.0	32	70	10.0	23
Babe	82	76	66	53.3	33	25	11.0	24
Alturas	80	75	61	54.7	30	3	10.7	26
Average	**84**	**89**	**79**	**55.6**	**33**	**21**	**11.0**	**30**
LSD (0.05)	**5**	**5**	**7**	**1.1**	**2**	**14**	**--**	**--**
CV (%)	**1**	**6**	**6**	**1.3**	**5**	**44**	**--**	**--**

*Varieties in bold were statistically equal to the top yielding variety in 2014.
**JD and WA8193 are spring clubs.

Table 18. Soft white spring wheat variety performance results at Craigmont, 2014.

Variety or Selection	3-Year Average (bu/A)	2-Year Average bu/A)	2013-2014 Crop Year Seed Yield (bu/A)*	Test Weight (lb/bu)	Plant Height (inches)	Lodging (%)	Seed Protein (%)	Hardness Score (0-100)
Babe	62	66	**66**	53.9	37	3	14.1	22
WB 1035CL+	62	62	**64**	52.0	34	0	15.9	35
WB 6341		62	**62**	51.1	33	0	14.1	25
WB 6121		60	**61**	52.6	33	3	15.1	34
WA8189		59	**59**	52.0	35	1	15.1	28
UI Stone	61	60	56	50.9	35	3	14.8	27
ID0852	60	57	55	50.4	34	24	14.3	23
WA8193**			55	50.3	33	2	14.3	31
Whit	56	54	54	50.8	34	7	14.2	29
Seahawk (WA8162)		57	53	52.7	33	3	15.8	35
JD**	57	54	52	52.2	39	20	14.3	36
Diva	58	55	51	53.3	38	23	13.7	29
ID0851	55	51	43	51.4	34	1	14.2	30
Alturas	56	49	43	50.1	34	1	14.5	28
Average	**58**	**57**	**54**	**51.5**	**35**	**7**	**14.6**	**30**
LSD (0.05)	**5**	**6**	**7**	**2.0**	**2**	**12**	**--**	**--**
CV (%)	**11**	**10**	**9**	**2.9**	**4**	**125**	**--**	**--**

*Varieties in bold were statistically equal to the top yielding variety in 2014.
**JD and WA8193 are spring clubs.

Table 19. Soft white spring wheat variety performance results at Genesee (rim area), 2014.

			2013-2014 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 (inches)**	**Seed Protein (%)**	**Hardness Score (0-100)**
Babe	69	68	**61**	60.2	33	11.9	33
WB 6341		64	**57**	58.1	31	12.6	33
UI Stone	67	63	**56**	60.0	35	12.7	31
WB 1035CL+	64	62	**54**	59.5	32	14.2	39
Whit	66	64	**54**	58.8	32	13.1	34
JD*	62	59	**54**	59.8	34	12.5	46
WA8189		62	**54**	57.5	33	13.6	34
WB 6121		63	**53**	59.3	32	13.6	36
Alturas	66	61	**51**	58.1	32	12.7	38
ID0852	67	61	**51**	59.1	34	12.5	27
WA8193**			**51**	58.3	30	12.9	39
Seahawk (WA8162)		60	**50**	58.0	31	13.1	36
Diva	65	61	**49**	58.8	35	12.2	35
ID0851	65	60	**48**	58.2	32	12.8	30
Average	**65**	**62**	**53**	**58.7**	**32**	**13.0**	**35**
LSD (0.05)	**4**	**5**	**n.s.**	**1.7**	**2**	**--**	**--**
CV (%)	**9**	**10**	**10**	**2.0**	**4**	**--**	**--**

*Varieties in bold were statistically equal to the top yielding variety in 2014.
**JD and WA8193 are spring clubs.

Table 20. Soft white spring wheat variety performance results at Moscow, 2014.

		2013-2014 Crop Year				
Variety or Selection	**2-Year Average (bu/A)**	**Seed Yield (bu/A)***	**Test Weight (lb/bu)**	**Plant Height (inches)**	**Seed Protein (%)**	**Hardness Score (0-100)**
Seahawk (WA8162)	85	**80**	61.0	31	9.7	35
Whit	81	**79**	59.5	34	10.2	30
WB 6341	83	**79**	59.0	30	9.5	27
Diva	83	**78**	59.3	35	9.1	36
WB 6121	77	**77**	60.2	32	9.7	32
WA8189	80	**76**	61.0	33	10.5	36
UI Stone	81	**75**	58.7	33	9.9	25
Babe	75	73	60.2	33	9.5	28
WA8193**		73	60.0	30	9.5	33
ID0852	77	73	59.5	32	9.0	27
JD**	74	71	61.6	34	9.6	38
ID0851	76	71	58.8	32	10.8	38
Alturas	73	70	58.8	32	9.9	31
WB 1035CL+	72	67	60.0	32	9.6	29
Average	**78**	**74**	**59.8**	**32**	**9.8**	**32**
LSD (0.05)	**5**	**5**	**0.8**	**1**	**--**	**--**
CV (%)	**7**	**5**	**0.9**	**3**	**--**	**--**

*Varieties in bold were statistically equal to the top yielding variety in 2014.
**JD and WA8193 are spring clubs.

Table 21. Soft white spring wheat variety performance comparison across northern Idaho, 2014.

			2013-2014 Crop Year									
Variety or Selection	**3-Year Average**	**2-Year Average**	**N. Idaho Average***	**Bonners Ferry**	**Craigmont**	**Genesee**	**Moscow**	**Test Weight**	**Plant Height**	**Lodging**	**Seed Protein**	**Hardness Score**
	----------bu/A----------							(lb/bu)	(inches)	(%)	(%)	(0-100)
WA8189		78	**68**	98	59	54	76	57.1	33	7	12.5	30
WB 6341		78	**68**	84	62	57	79	55.4	32	3	11.7	27
WB 6121		76	**68**	93	61	53	77	57.4	33	1	12.6	33
Whit	73	73	**66**	89	54	54	79	56.6	34	4	12.2	32
Seahawk (WA8162)		79	**66**	95	53	50	80	57.2	32	2	12.4	37
Babe	72	72	65	66	66	61	73	56.9	34	7	11.6	29
WB 1035CL+	72	71	64	80	64	54	67	56.9	33	1	12.9	34
Diva	73	74	62	84	51	49	78	56.7	36	26	11.5	31
UI Stone	70	71	62	68	56	56	75	56.2	34	19	11.9	30
WA8193**			61	77	55	51	73	55.8	31	1	11.9	34
JD**	68	68	60	71	52	54	71	57.6	35	11	12.0	36
ID0852	69	70	60	70	55	51	73	56.0	33	13	11.6	25
ID0851	70	69	56	68	43	48	71	55.7	32	3	12.1	32
Alturas	66	65	55	61	43	51	70	55.4	32	1	12.0	31
Average	**70**	**72**	**63**	**79**	**55**	**53**	**74**	**56.5**	**33**	**7**	**12.1**	**31**
LSD (0.05)	**3**	**3**	**3**	**7**	**7**	**n.s.**	**5**	**2.5**	**1**	**11**	**--**	**--**
CV (%)	**9**	**8**	**7**	**6**	**9**	**10**	**5**	**6.4**	**5**	**222**	**--**	**--**

*Varieties in bold were statistically equal to the top yielding variety in 2014.
**JD and WA8193 are spring clubs.

Table 22. Hard spring wheat variety performance results at Bonners Ferry, 2014.

Variety or Selection	Market Class	3-Year Average (bu/A)	2-Year Average (bu/A)	2013-2014 Crop Year Seed Yield (bu/A)*	Test Weight (lb/bu)	Plant Height (inches)	Lodging (%)	Seed Protein (%)	Hardness Score (0-100)
HRS3419	HRS			**97**	56.7	34	0	12.3	89
Dayn (WA 8123)	HWS			**97**	57.7	34	1	12.7	85
LCS Star (08SB06568-B)	HWS			**95**	56.0	32	1	12.9	80
WA8216	HWS			**94**	58.6	37	10	13.2	78
Otis	HWS			**94**	58.3	39	6	11.8	79
LCS Atomo	HWS			**92**	55.7	28	0	13.2	92
WA8217	HRS			**91**	57.0	36	3	13.5	84
WB-Hartline	HWS	94	96	**90**	55.3	38	13	13.2	68
Glee	HRS		95	88	58.5	36	39	13.0	82
ID01202S	HWS			88	57.1	36	8	12.5	89
11SB0096	HRS		85	87	54.8	33	0	12.8	84
HRS3361	HRS			87	56.2	36	0	13.6	85
Jefferson	HRS	85	87	86	57.5	36	13	12.4	80
WB-9518	HRS		93	86	56.4	31	0	14.5	92
WB-Fuzion	HRS	83	82	82	57.7	38	6	13.0	90
HRS3378	HRS			82	58.1	35	3	13.0	92
UI Platinum (ID0694C)	HWS			82	56.3	31	0	12.8	66
UI Winchester	HRS	77	77	77	57.1	34	19	13.3	78
Buck Pronto	HRS	71	73	76	56.9	35	14	14.1	77
Alum (WA8166)	HRS	81	81	75	58.0	34	20	13.2	84
Average		**82**	**85**	**87**	**57.0**	**35**	**8**	**12.4**	**83**
LSD (0.05)		**5**	**5**	**7**	**1.0**	**2**	**10**	**--**	**--**
CV (%)		**1**	**6**	**5**	**1.3**	**4**	**91**	**--**	**--**

*Varieties in bold were statistically equal to the top yielding variety in 2014.

Table 23. Hard spring wheat variety performance results at Craigmont, 2014.

Variety or Selection	Market Class	3-Year Average (bu/A)	2-Year Average (bu/A)	2013-2014 Crop Year Seed Yield (bu/A)*	Test Weight (lb/bu)	Plant Height (inches)	Lodging (%)	Seed Protein (%)	Hardness Score (0-100)
LCS Atomo	HWS			**66**	49.7	27	40	14.9	92
UI Platinum (ID0694C)	HWS			**64**	52.5	32	0	14.3	66
WB-9518	HRS		59	**62**	50.7	32	0	15.6	80
WB-Fuzion	HRS	62	61	57	50.0	37	18	16.5	84
Glee	HRS		60	57	50.8	35	35	15.9	87
11SB0096	HRS		57	57	47.8	32	0	15.3	78
LCS Star (08SB06568-B)	HWS			55	47.7	31	5	16.5	86
WA8217	HRS			55	49.5	35	8	15.8	84
WB-Hartline	HWS	63	59	55	47.8	34	11	16.7	84
UI Winchester	HRS	58	56	55	48.8	32	30	16.0	67
Jefferson	HRS	58	57	55	50.9	35	5	16.0	79
Buck Pronto	HRS	56	55	52	50.6	33	6	16.5	85
ID01202S	HWS			52	50.9	34	0	15.6	74
Dayn (WA 8123)	HWS			51	51.4	35	0	15.9	79
WA8216	HWS			49	49.8	35	11	16.0	67
HRS3378	HRS			49	52.3	32	13	15.4	88
HRS3361	HRS			49	48.6	33	0	15.7	72
Otis	HWS			47	51.4	38	0	16.3	63
HRS3419	HRS			47	45.7	32	15	15.4	81
Alum (WA8166)	HRS	57	52	42	47.8	34	18	17.3	86
Average		**59**	**57**	**54**	**49.7**	**33**	**11**	**15.9**	**79**
LSD (0.05)		**5**	**6**	**5**	**1.9**	**2**	**18**	**--**	**--**
CV (%)		**11**	**10**	**7**	**2.6**	**4**	**112**	**--**	**--**

*Varieties in bold were statistically equal to the top yielding variety in 2014.

Table 24. Hard spring wheat variety performance results at Genesee, 2014.

Variety or Selection	Market Class	3-Year Average (bu/A)	2-Year Average (bu/A)	2013-2014 Crop Year Seed Yield (bu/A)*	Test Weight (lb/bu)	Plant Height (inches)	Seed Protein (%)	Hardness Score (0-100)
WA8217	HRS			**59**	56.8	33	14.9	84
Glee	HRS		65	**56**	58.6	35	15.1	81
LCS Atomo	HWS			**53**	54.7	24	14.8	86
Jefferson	HRS	67	63	**53**	58.4	32	15.2	82
WB-9518	HRS		61	**52**	56.7	29	15.6	80
WA8216	HWS			50	57.0	34	15.0	71
WB-Fuzion	HRS	60	58	49	57.1	34	16.4	90
HRS3378	HRS			48	58.9	30	15.2	92
UI Platinum (ID0694C)	HWS			48	56.0	30	14.4	60
11SB0096	HRS		54	47	53.9	31	15.5	83
HRS3361	HRS			46	57.1	32	16.3	90
HRS3419	HRS			46	53.1	31	16.4	82
UI Winchester	HRS	61	55	45	57.0	28	15.0	73
Dayn (WA 8123)	HWS			44	56.7	32	15.2	82
LCS Star (08SB06568-B)	HWS			43	51.4	29	16.3	72
ID01202S	HWS			43	55.8	33	15.4	78
Otis	HWS			39	56.0	37	15.1	80
Buck Pronto	HRS	56	49	39	54.9	30	16.6	91
WB-Hartline	HWS	62	52	37	53.3	30	15.8	59
Alum (WA8166)	HRS	56	47	35	52.9	33	16.4	86
Average		**60**	**56**	**47**	**55.8**	**31**	**15.5**	**80**
LSD (0.05)		**4**	**5**	**8**	**2.1**	**2**	**--**	**--**
CV (%)		**9**	**10**	**12**	**2.7**	**5**	**--**	**--**

*Varieties in bold were statistically equal to the top yielding variety in 2014.

Table 25. Hard spring wheat variety performance results at Moscow, 2014.

Variety or Selection	Market Class	2-Year Average (bu/A)	2013-2014 Crop Year Seed Yield (bu/A)*	Test Weight (lb/bu)	Plant Height (inches)	Seed Protein (%)	Hardness Score (0-100)
WB-Hartline	HWS	76	**74**	58.2	33	10.8	66
Glee	HRS	72	**72**	60.6	34	11.0	81
WA8217	HRS		**72**	61.0	34	11.6	80
LCS Star (08SB06568-B)	HWS		**70**	58.7	29	11.0	77
11SB0096	HRS	62	**69**	58.2	30	10.9	82
WA8216	HWS		68	59.7	37	11.5	73
Jefferson	HRS	68	67	59.3	33	11.5	78
Buck Pronto	HRS	63	67	59.1	33	12.2	76
Dayn (WA 8123)	HWS		67	59.2	33	11.5	78
LCS Atomo	HWS		66	59.0	26	11.1	89
ID01202S	HWS		66	60.4	34	11.0	79
WB-Fuzion	HRS	62	66	59.0	34	11.6	93
Alum (WA8166)	HRS	70	66	60.5	33	11.0	78
Otis	HWS		62	60.1	37	11.0	78
UI Platinum (ID0694C)	HWS		62	60.8	30	11.1	72
WB-9518	HRS	59	61	59.8	29	12.0	85
HRS3378	HRS		61	60.8	32	11.2	88
HRS3361	HRS		60	58.2	31	11.6	79
UI Winchester	HRS	61	59	59.4	31	11.1	70
HRS3419	HRS		52	56.9	32	11.1	74
Average		**66**	**65**	**59.4**	**32**	**11.3**	**79**
LSD (0.05)		**5**	**5**	**1.2**	**1**	**--**	**--**
CV (%)		**7**	**6**	**1.4**	**3**	**--**	**--**

*Varieties in bold were statistically equal to the top yielding variety in 2014.

Table 26. Hard spring wheat variety performance comparison across northern Idaho, 2014.

				2013-2014 Crop Year									
Variety or Selection	**Market Class**	**3-Year Average**	**2-Year Average**	**N. Idaho Average***	**Bonners Ferry**	**Craigmont**	**Genesee**	**Moscow**	**Test Weight**	**Plant Height**	**Lodging**	**Seed Protein**	**Hardness Score**
		----------bu/A----------							(lb/bu)	(inches)	-----%-----		(0-100)
LCS Atomo	HWS			**66**	92	66	53	66	54.8	26	10	13.5	90
Glee	HRS		72	**66**	88	57	56	72	57.1	35	18	13.8	83
WA8217	HRS			**65**	91	55	59	72	56.1	34	3	14.0	83
Buck Pronto	HRS	63	61	**64**	76	52	39	67	55.4	33	5	14.9	82
Jefferson	HRS	72	68	**63**	86	55	53	67	56.5	34	4	13.8	80
11SB0096	HRS		66	61	87	57	47	69	53.7	32	0	13.6	82
LCS Star (08SB06568-B)	HWS			61	95	55	43	70	53.5	30	2	14.2	79
UI Platinum (ID0694C)	HWS			61	82	64	48	62	56.4	31	0	13.2	66
WB-Fuzion	HRS	69	68	60	82	57	49	66	55.9	36	6	14.4	89
Dayn (WA 8123)	HWS			60	97	51	44	67	56.3	34	0	13.8	81
WA8216	HWS			60	94	49	50	68	56.3	36	5	13.9	72
WB-9518	HRS		67	60	86	62	52	61	55.9	30	0	14.4	84
WB-Hartline	HWS	72	73	60	90	55	37	74	53.6	34	6	14.1	69
ID01202S	HWS			58	88	52	43	66	56.0	34	2	13.6	80
HRS3361	HRS			58	87	49	46	60	55.0	33	0	14.3	82
HRS3378	HRS			58	82	49	48	61	57.5	32	4	13.7	90
HRS3419	HRS			57	97	47	46	52	53.1	32	4	13.8	82
Otis	HWS			56	94	47	39	62	56.4	38	2	13.6	75
UI Winchester	HRS	68	63	56	77	55	45	59	55.6	31	12	13.9	72
Alum (WA8166)	HRS	67	65	50	75	42	35	66	54.8	34	9	14.5	84
Average		**68**	**67**	**60**	**87**	**54**	**47**	**65**	**55.5**	**33**	**5**	**13.8**	**80**
LSD (0.05)		**3**	**3**	**3**	**7**	**5**	**8**	**5**	**2.9**	**1**	**8**	**--**	**--**
CV (%)		**9**	**8**	**8**	**5**	**7**	**12**	**6**	**7.5**	**6**	**243**	**--**	**--**

*Varieties in bold were statistically equal to the top yielding variety in 2014.

Table 27. Spring barley variety performance results at Bonners Ferry, 2014.

Variety or Selection	3-Year Average (bu/A)	2-Year Average (bu/A)	2013-2014 Crop Year Seed Yield (bu/A)*	Test Weight (lb/bu)	Plant Height (inches)	Plumps (%) (>6/64)	Plumps (%) (>5.5/64)	Thins (%)	Seed Protein (%)	Lodging (%)
Feed										
BZ509-216			**143**	51.4	41	93	5	2	8.8	28
09WA-203.24			**132**	51.8	36	96	3	1	9.4	80
LCS Vespa		133	**131**	51.0	32	94	4	2	9.2	50
Tetonia	131	134	**130**	50.9	36	92	5	3	9.7	53
Camas	131	130	**130**	51.7	38	93	5	2	9.2	65
BZ509-601			**130**	51.1	36	90	7	3	9.3	40
BZ509-448			**130**	51.0	31	96	3	1	9.1	83
Lenetah	128	130	**130**	51.3	36	91	6	3	9.4	93
Champion	125	125	**126**	51.9	37	94	4	2	9.7	58
09WA-228.13			**126**	51.3	37	92	6	2	9.4	63
08ID2661**	127	126	**124**	51.5	37	91	7	2	9.2	39
Lyon			**122**	49.5	36	87	9	4	8.8	94
RWA-1758			**118**	50.8	35	94	5	2	9.2	65
Muir			**118**	51.3	37	95	4	2	9.8	55
09WA-231.5			107	51.5	36	87	9	4	11.4	60
08ID1549**	107	101	104	51.9	36	87	10	3	9.8	46
Malt										
Merem (02Ab17271)			**134**	51.2	39	94	4	2	9.4	28
LCS Genie		127	**128**	49.8	34	95	3	2	8.6	53
CDC-Copeland	127	128	**128**	50.5	43	92	5	2	9.3	79
CDC-Meredith	124	126	**127**	49.1	40	92	5	3	9.2	76
2Ab08-X031098-31			**123**	50.1	37	91	7	3	10.1	70
2Ab08-X05M010-82			**122**	51.0	37	95	4	2	8.7	40
2Ab04-X01084-27			**116**	49.1	36	90	7	3	9.4	90
Food										
Salute			**111**	50.4	39	96	2	2	11.3	89
2Ab09-X06F058HL-31			92	48.4	37	92	6	3	12.5	71
Transit			83	48.4	40	85	13	2	13.6	11
Average	**125**	**126**	**121**	**50.7**	**37**	**92**	**6**	**2**	**9.8**	**61**
LSD (0.05)	**8**	**9**	**9**	**1.1**	**3**	**--**	**--**	**--**	**--**	**21**
CV (%)	**7**	**7**	**5**	**1.6**	**5**	**--**	**--**	**--**	**--**	**25**

*Varieties in bold were statistically equal to the top yielding variety in 2014.
**Low phytate variety

Table 28. Spring barley variety performance results at Craigmont, 2014.

			2013-2014 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 (inches)	Plumps (%) (>6/64)	Plumps (%) (>5.5/64)	Thins (%)	Seed Protein (%)	Lodging (%)
Feed										
Lenetah	88	88	**92**	45.4	36	34	33	33	10.0	66
BZ509-216			**91**	46.2	35	24	40	36	11.1	40
09WA-203.24			**91**	45.6	33	39	21	40	10.1	36
Champion	89	86	**90**	46.7	37	27	28	45	9.6	68
09WA-228.13			**89**	46.7	36	26	37	37	10.9	65
BZ509-601			**88**	45.9	36	21	29	51	10.7	38
08ID2661**	94	86	**87**	43.7	34	17	30	54	9.8	70
LCS Vespa		81	**86**	44.4	29	18	39	43	11.1	10
BZ509-448			**84**	44.7	31	18	35	48	12.2	38
Camas	88	83	83	46.3	38	29	30	41	10.6	51
Muir			79	42.1	34	25	40	35	10.9	85
Lyon			77	42.0	34	24	34	42	10.7	74
Tetonia	84	77	77	42.9	33	16	26	58	11.8	68
RWA-1758			76	43.0	33	20	33	46	11.5	53
09WA-231.5			72	42.3	33	24	38	37	13.0	78
08ID1549**	69	67	67	43.7	36	15	30	55	11.6	58
Malt										
2Ab08-X05M010-82			76	42.5	35	26	21	53	11.9	73
LCS Genie		79	76	41.8	28	21	30	50	12.3	66
2Ab08-X031098-31			76	40.8	35	29	29	42	12.2	70
2Ab04-X01084-27			74	40.2	34	20	35	45	12.6	80
CDC-Meredith	83	74	71	40.3	36	28	27	44	10.8	69
CDC-Copeland	78	70	70	42.8	36	22	29	49	12.3	50
Merem (02Ab17271)			67	44.5	34	31	36	33	11.5	55
Food										
Salute			82	45.1	35	42	38	20	12.1	85
2Ab09-X06F058HL-31			67	39.6	31	25	31	44	11.7	98
Transit			61	46.8	37	19	43	38	14.3	60
Average	**84**	**79**	**79**	**43.7**	**34**	**25**	**32**	**43**	**11.4**	**62**
LSD (0.05)	**9**	**7**	**8**	**3.3**	**2**	**--**	**--**	**--**	**--**	**35**
CV (%)	**13**	**9**	**8**	**5.3**	**5**	**--**	**--**	**--**	**--**	**40**

*Varieties in bold were statistically equal to the top yielding variety in 2014.
**Low phytate variety.

Table 29. Spring barley variety performance results at Genesee, 2014.

Variety or Selection	3-Year Average (bu/A)	2-Year Average (bu/A)	2013-2014 Crop Year: Seed Yield (bu/A)*	Test Weight (lb/bu)	Plant Height (inches)	Plumps (%) (>6/64)	Plumps (%) (>5.5/64)	Thins (%)	Seed Protein (%)	Lodging (%)
Feed										
Lyon			**83**	50.5	27	60	27	13	9.7	4
BZ509-601			**83**	51.1	29	26	43	31	10.4	0
RWA-1758			**82**	49.7	28	44	39	17	11.7	0
Muir			**78**	48.9	26	49	38	12	10.4	9
BZ509-216			**77**	49.5	28	45	34	21	10.6	3
Champion	89	92	**76**	52.4	29	42	32	26	10.0	1
09WA-203.24			**76**	50.0	26	45	33	22	10.4	1
Lenetah	88	86	**75**	50.6	27	54	29	17	9.9	9
BZ509-448			**74**	49.5	25	36	36	28	11.5	14
09WA-228.13			**73**	51.2	29	28	40	32	10.9	6
08ID2661**	94	80	**72**	50.3	28	48	32	20	9.4	1
Camas	84	83	71	52.0	26	52	29	19	9.9	3
LCS Vespa		92	71	48.9	26	40	39	21	10.4	3
Tetonia	84	86	71	49.3	27	32	39	29	9.9	1
09WA-231.5			68	54.1	29	46	36	18	13.1	4
08ID1549**	69	75	61	55.7	28	30	36	33	11.1	14
Malt										
2Ab08-X05M010-82			**73**	48.1	29	32	40	28	11.3	16
LCS Genie		86	71	50.4	25	52	27	21	9.9	6
CDC-Copeland	78	80	68	48.9	28	57	29	14	10.0	4
CDC-Meredith	83	83	67	45.8	27	47	34	19	11.1	40
2Ab08-X031098-31			64	46.0	29	34	32	34	11.9	30
2Ab04-X01084-27			63	45.6	27	32	41	27	11.0	3
Merem (02Ab17271)			57	46.4	28	38	30	31	11.7	8
Food										
Salute			68	49.4	28	54	30	16	11.7	8
2Ab09-X06F058HL-31			53	45.8	28	34	33	33	13.9	53
Transit			51	52.2	31	28	42	31	14.1	5
Average	**77**	**81**	**63**	**49.7**	**28**	**40**	**35**	**26**	**11.6**	**9**
LSD (0.05)	**9**	**6**	**11**	**2.8**	**3**	**--**	**--**	**--**	**--**	**14**
CV (%)	**13**	**7**	**11**	**4.0**	**8**	**--**	**--**	**--**	**--**	**107**

*Varieties in bold were statistically equal to the top yielding variety in 2014.
**Low phytate variety.

Table 30. Spring barley variety performance results at Moscow, 2014.

Variety or Selection	3-Year Average (bu/A)	2-Year Average (bu/A)	2013-2014 Crop Year: Seed Yield (bu/A)*	Test Weight (lb/bu)	Plant Height (inches)	Plumps (%) (>6/64)	Plumps (%) (>5.5/64)	Thins (%)	Seed Protein (%)
Feed									
09WA-203.24			**91**	49.4	29	88	10	2	7.6
BZ509-601			**91**	49.7	29	73	23	4	7.8
RWA-1758			**90**	50.0	29	89	9	2	7.9
Champion	89	82	**89**	50.3	31	81	17	2	7.9
Muir			**88**	49.5	31	88	10	2	8.1
LCS Vespa		79	**88**	48.3	26	83	15	2	7.8
BZ509-448			**88**	49.1	26	90	8	1	7.8
Lyon			**87**	49.4	29	89	9	2	7.6
Camas	84	77	**86**	49.7	30	82	15	3	8.3
BZ509-216			**86**	48.1	30	80	17	3	7.5
Tetonia	84	77	**84**	48.8	29	77	19	4	7.9
08ID2661**	83	76	**84**	47.9	29	60	32	8	7.6
09WA-228.13			**84**	49.8	33	82	15	2	8.6
Lenetah	81	71	81	49.9	29	87	11	2	7.2
08ID1549**	82	75	73	53.1	31	40	46	14	8.4
09WA-231.5			69	49.2	28	63	29	8	10.2
Malt									
LCS Genie		80	**88**	49.0	26	92	7	1	7.3
CDC-Copeland	82	76	**86**	48.3	34	82	14	4	9.1
CDC-Meredith	81	72	**85**	47.4	30	90	8	2	7.6
2Ab08-X031098-31			**84**	47.7	30	81	16	3	7.7
2Ab04-X01084-27			**83**	46.9	29	81	15	4	7.9
2Ab08-X05M010-82			79	49.0	28	65	28	7	7.4
Merem (02Ab17271)			78	48.0	30	86	11	3	8.0
Food									
Salute			**83**	47.9	29	94	5	1	9.4
2Ab09-X06F058HL-31			70	44.9	30	68	26	6	10.5
Transit			63	47.7	32	48	36	15	11.6
Average	**83**	**76**	**83**	**48.8**	**29**	**78**	**17**	**4**	**8.3**
LSD (0.05)	**4**	**5**	**8**	**1.6**	**3**	**--**	**--**	**--**	**--**
CV (%)	**6**	**6**	**7**	**2.4**	**6**	**--**	**--**	**--**	**--**

*Varieties in bold were statistically equal to the top yielding variety in 2014.
**Low phytate variety.
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Table 31. Spring barley performance comparison across northern Idaho, 2014.

Variety or Selection	3-Year Average	2-Year Average	2013-2014 Crop Year: N. Idaho Average*	Bonners Ferry	Craigmont	Genesee	Moscow	Test Weight	Plant Height	Plumps (>6/64)	Plumps (>5.5/64)	Thins	Seed Protein	Lodging**
	bu/A	bu/A	bu/A	bu/A	bu/A	bu/A	bu/A	(lb/bu)	(inches)	%	%	%	%	%
Feed														
BZ509-216			**99**	143	91	77	86	48.8	33	61	23	16	9.5	23
BZ509-601			**98**	130	88	83	91	49.4	32	52	26	22	9.6	26
09WA-203.24			**97**	132	91	76	91	49.0	31	67	17	16	9.4	39
Champion	99	96	**95**	126	90	76	89	50.3	34	61	20	19	9.3	42
Lenetah	96	93	**95**	130	92	75	81	49.3	32	67	19	14	9.1	56
BZ509-448			**94**	130	84	74	88	48.6	28	60	20	20	10.2	45
LCS Vespa		97	**94**	131	86	71	88	47.9	28	59	24	17	9.6	21
09WA-228.13			93	126	89	73	84	49.7	34	57	25	18	10.0	45
Camas	95	93	93	130	83	71	86	49.9	33	63	21	16	9.5	40
Lyon			93	122	77	83	87	47.7	31	65	20	15	9.2	57
RWA-1758			92	118	76	82	90	48.4	31	62	21	17	10.1	39
08ID2661***	97	92	92	124	87	72	84	48.3	32	54	25	21	9.0	37
Muir			91	118	79	78	88	47.9	32	64	23	13	9.8	50
Tetonia	98	93	91	130	77	71	84	48.0	31	54	23	23	9.8	40
09WA-231.5			79	107	72	68	69	49.3	32	56	27	17	11.9	47
08ID1549***	84	80	76	104	67	61	73	51.1	33	43	31	26	10.2	39
Malt														
LCS Genie		93	91	128	76	71	88	47.8	28	65	17	18	9.5	42
CDC-Copeland	93	88	88	128	70	68	86	47.6	35	63	20	17	10.2	44
2Ab08-X05M010-82			88	122	76	73	79	47.7	32	54	23	23	9.8	43
CDC-Meredith	93	89	87	127	71	67	85	45.7	33	65	18	17	9.7	62
2Ab08-X031098-31			87	123	76	64	84	46.1	33	59	20	21	10.5	57
Merem (02Ab17271)			84	134	67	57	78	47.5	33	62	21	17	10.2	30
2Ab04-X01084-27			84	116	74	63	83	45.4	32	56	24	20	10.2	58
Food														
Salute			86	111	82	68	83	48.0	33	72	18	10	11.1	60
2Ab09-X06F058HL-31			70	92	67	53	70	44.7	32	55	23	22	12.2	74
Transit			64	83	61	51	63	48.8	35	45	33	22	13.4	25
Average	**94**	**91**	**88**	**122**	**79**	**70**	**83**	**48.2**	**32**	**59**	**59**	**18**	**10.2**	**44**
LSD (0.05)	**3**	**3**	**5**	**9**	**8**	**11**	**8**	**1.2**	**1**	**--**	**--**	**--**	**--**	**14**
CV (%)	**9**	**8**	**8**	**5**	**8**	**11**	**7**	**3.5**	**6**	**--**	**--**	**--**	**--**	**40**

*Varieties in bold were statistically equal to the top yielding variety in 2014.
**No lodging was reported at Moscow, so this number reflects lodging at Bonners Ferry, Craigmont and Genesee.
***Low phytate variety.

Table 32. Winter barley variety performance results at Bonners Ferry, 2014.*

Variety or Selection	Class	2-Year Average (bu/A)	2013-2014 Crop Year Seed Yield (bu/A)**	Test Weight (lb/bu)	Plant Height (inches)	Plumps (%) (>6/64)	Plumps (%) (>5.5/64)	Thins (%)	Seed Protein (%)
6-row									
Sunstar Pride	Feed		**120**	47.7	24	84	9	7	6.5
Eight-Twelve	Feed		**108**	48.5	27	93	4	3	7.3
Schuyler	Feed		**105**	50.4	31	81	14	5	7.3
Sprinter	Feed		102	50.5	27	96	3	1	7.5
Strider	Feed		101	50.0	26	96	3	1	7.3
Streaker	Food (hulless)		84	48.7	24	77	18	5	9.3
LCS Saturn	Feed		78	47.8	25	83	14	3	7.6
Alba	feed	96	74	48.5	30	95	4	1	8.2
2-row									
2Ab11-W06BG60-15	Food (hulless)		71	44.3	32	90	7	3	10.7
93Ab669	Malt		56	49.9	34	96	3	1	9.4
02Ab671	Malt		52	46.2	35	95	3	2	9.2
Endeavor	Malt		50	48.0	33	93	3	4	9.9
2Ab09-X05W048-270HL	Food (hulless)		50	48.6	31	87	10	3	11.6
2Ab11-W06BG59-11	Food (hulless)		49	49.2	33	89	8	3	12.5
02Ab431	Malt		45	46.8	35	93	5	2	10.0
Charles	Malt		39	45.5	30	95	3	2	10.4
LCS Violetta			31	43.2	29	83	12	5	11.5
2Ab09-X05W049HL-15	Food (hulless)	46	18	42.5	35	90	5	5	12.3
Average		**71**	**68**	**47.6**	**30**	**90**	**7**	**3**	**9.4**
LSD (0.05)		**--**	**16**	**3.8**	**2.5**	**--**	**--**	**--**	**--**
CV (%)		**--**	**16**	**5.7**	**6**	**--**	**--**	**--**	**--**

*The highlighted 2-row barley listed above had significant damage to the primary tillers due to bird damage. The yield is a result of short tillers that were further down in the canopy.

**Varieties in bold were statistically equal to the top yielding variety in 2014. Analysis of 6-row barley varieties only resulted in an LSD of 15 and CV of 10.

Table 33. Dry pea variety performance results at Craigmont, 2014.

Variety or Selection	Market Class	3-Year Average (lb/A)	2-Year Average (lb/A)	2013-2014 Crop Year: Seed Yield (lb/A)*	100 Seed Weight (gram)	Vine Length (inches)	Canopy Height (inches)	Erect Index (0.1-1.0)
Pro 793	Yellow	2124	2180	**2247**	22.4	29	19	0.6
PS05100840	Green	2119	1843	**2146**	19.5	26	10	0.4
PS08101004	Yellow			**2136**	19.6	29	11	0.4
PS07100471	Green	2085	1907	**2058**	16.9	27	14	0.5
Banner	Green	2060		**1967**	16.2	30	12	0.4
Ginny	Green		1959	**1959**	17.8	27	15	0.6
Greenwood	Green	2131	1925	**1932**	16.6	27	15	0.6
Hampton	Green	1918	1803	**1861**	17.7	27	13	0.5
PS08100133	Green		1971	**1820**	19.2	26	16	0.6
PS08100582	Green		1814	1757	18.0	26	18	0.7
Carousel	Yellow	2017	1822	1743	18.4	26	25	0.9
Pro 103-7402	Yellow			1742	20.0	28	18	0.7
Pro 822	Yellow	2094	1856	1572	19.6	30	21	0.7
Aragorn	Green	1818	1700	1537	17.7	29	15	0.5
PS07100925	Yellow		1542	1477	20.1	26	18	0.7
PS03101445	Green	1919	1663	1473	16.2	25	11	0.5
Ariel	Green	1669	1473	1328	15.1	28	16	0.6
Columbian	Green	1624	1444	1212	17.5	39	9	0.2
Average		**1950**	**1766**	**1748**	**18.0**	**28**	**15**	**0.6**
LSD (0.05)		**294**	**265**	**478**	**1.0**	**4**	**5**	**0.2**
CV (%)		**18**	**15**	**19**	**3.9**	**10**	**22**	**20.7**

*Varieties in bold were statistically equal to the top yielding variety in 2014.

Table 34. Dry pea variety performance results southeast of Genesee, 2014.

		2013-2014 Crop Year				
Variety or Selection	**Market Class**	**Seed Average (lb/A)***	**100 Seed Weight (gram)**	**Vine Length (inches)**	**Canopy Height (inches)**	**Erect Index (0.1-1.0)**
Pro 793	Yellow	**2582**	23.7	31	16	0.5
PS08101004	Yellow	**2554**	22.0	31	12	0.4
Pro 822	Yellow	2361	21.7	32	16	0.5
Hampton	Green	2332	19.5	31	15	0.5
Greenwood	Green	2322	18.4	35	17	0.5
PS05100840	Green	2253	20.5	30	13	0.4
Ginny	Green	2188	19.0	32	17	0.5
PS07100471	Green	2172	17.9	33	14	0.4
Banner	Green	2130	17.5	38	16	0.4
PS08100582	Green	2107	19.6	32	14	0.4
PS08100133	Green	2082	20.3	28	16	0.6
Aragorn	Green	2030	18.3	32	16	0.5
Pro 103-7402	Yellow	1963	20.5	33	18	0.6
PS07100925	Yellow	1961	22.4	27	14	0.5
Carousel	Yellow	1923	20.8	33	16	0.5
Ariel	Green	1810	16.5	33	16	0.5
PS03101445	Green	1684	18.5	31	14	0.5
Columbian	Green	1529	18.9	43	10	0.2
Average		**2110**	**19.8**	**32**	**15**	**0.5**
LSD (0.05)		**158**	**1.8**	**4**	**2**	**0.1**
CV (%)		**5**	**2.7**	**9**	**7**	**12.5**

*Varieties in bold were statistically equal to the top yielding variety in 2014. No 2- and 3-year averages due to the spring pea trial being lost in 2013.

Table 35. Dry pea variety performance results at Moscow, 2014.

				2013-2014 Crop Year				
Variety or Selection	**Market Class**	**3-Year Average (lb/A)**	**2-Year Average (lb/A)**	**Seed Yield (lb/A)***	**100 Seed Weight (gram)**	**Vine Length (inches)**	**Canopy Height (inches)**	**Erect Index (0.1-1.0)**
PS08101004	Yellow		2592	**2292**	20.5	32	13	0.4
Hampton	Green	2665	2482	**2215**	18.0	30	19	0.6
Pro 793	Yellow	2552	2524	**2109**	22.0	34	16	0.5
PS05100840	Green	2231	2216	**2073**	19.4	28	13	0.5
Ginny	Green		2491	**2000**	17.6	32	18	0.6
Pro 103-7402	Yellow			1911	19.2	31	19	0.6
Greenwood	Green	2228	2117	1816	16.4	30	17	0.6
PS07100925	Yellow		2304	1758	20.5	30	16	0.5
Carousel	Yellow	2173	2008	1754	19.5	32	18	0.6
PS07100471	Green	2254	2211	1718	16.8	28	16	0.6
Aragorn	Green	2030	1938	1652	16.8	30	16	0.6
PS08100582	Green		2086	1636	18.1	32	15	0.5
Pro 822	Yellow	2306		1610	19.3	31	18	0.6
PS08100133	Green		1948	1568	18.3	31	16	0.5
Columbian	Green	1931	1984	1449	18.1	44	12	0.3
Banner	Green	2191	2108	1424	16.2	33	17	0.5
Ariel	Green	2103	2067	1324	15.1	29	17	0.6
PS03101445	Green	1988	1905	1086	16.2	26	15	0.6
Average		**2221**	**2186**	**1744**	**18.2**	**31**	**16**	**0.5**
LSD (0.05)		**257**	**279**	**371**	**0.8**	**4**	**4**	**0.1**
CV (%)		**14**	**12**	**15**	**3.1**	**9**	**16**	**16.0**

*Varieties in bold were statistically equal to the top yielding variety in 2014.

Table 36. Dry pea performance comparison across northern Idaho, 2014.

Variety or Selection	Market Class	2013-2014 Crop Year							
		N. Idaho Average*	Craigmont	Genesee	Moscow	100 Seed Weight	Vine Length	Canopy Height	Erect Index
		----------(lb/A)----------				(grams)	(inches)	(inches)	(0.1-1.0)
PS08101004	Yellow	**2327**	2136	2554	2292	20.8	30	12	0.4
Pro 793	Yellow	**2313**	2247	2582	2109	22.7	31	17	0.5
PS05100840	Green	**2157**	2146	2253	2073	19.8	28	12	0.4
Hampton	Green	**2136**	1861	2332	2215	18.4	29	15	0.5
Ginny	Green	**2049**	1959	2188	2000	18.1	30	17	0.6
Greenwood	Green	2023	1932	2322	1816	17.1	30	16	0.5
PS07100471	Green	1983	2058	2172	1718	17.2	29	15	0.5
Pro 103-7402	Yellow	1872	1742	1963	1911	19.9	31	18	0.6
Pro 822	Yellow	1848	1572	2361	1610	20.2	31	18	0.6
Banner	Green	1840	1967	2130	1424	16.6	34	15	0.4
PS08100582	Green	1833	1757	2107	1636	18.5	30	15	0.5
PS08100133	Green	1823	1820	2082	1568	19.3	28	16	0.6
Carousel	Yellow	1807	1743	1923	1754	19.6	30	19	0.7
Aragorn	Green	1740	1537	2030	1652	17.6	30	16	0.5
PS07100925	Yellow	1732	1477	1961	1758	21.0	28	16	0.6
Ariel	Green	1487	1328	1810	1324	15.5	30	16	0.5
PS03101445	Green	1414	1473	1684	1086	17.0	27	13	0.5
Columbian	Green	1397	1212	1529	1449	18.2	42	10	0.2
Average		**1877**	**1776**	**2110**	**1744**	**18.8**	**30**	**15**	**0.5**
LSD (0.05)		**278**	**478**	**158**	**371**	**0.8**	**3**	**2**	**0.1**
CV (%)		**18**	**19**	**5**	**15**	**5.3**	**12**	**19**	**21.8**

*Varieties in bold were statistically equal to the top yielding variety in 2014.

Table 37. Spring lentil variety performance results at Craigmont, 2014.

Variety or Selection	Market Class	3-Year Average (lb/A)	2-Year Average (lb/A)	2013-2014 Crop Year Seed Yield (lb/A)*	100 Seed Weight (grams)	Plant Height (inches)	Canopy Height (inches)	Erect Index (0.1-1.0)
Avondale	Richlea	791	969	**1122**	4.0	14	8	0.6
Richlea	Richlea	714	830	891	4.3	14	9	0.7
LC01602062T	Turkish Red	823	800	875	3.9	12	8	0.6
Morena	Pardina	798	740	858	3.3	14	10	0.7
LC01602273E	Eston	742	796	857	2.8	13	8	0.6
LC09600507P	Pardina			845	3.8	14	9	0.6
Merrit	Laird	649	696	788	5.5	13	9	0.7
LC0860B130L	Laird		761	771	6.2	15	8	0.5
LC08600116P	Pardina			737	4.2	13	8	0.6
Eston	Eston	567	682	698	2.7	15	10	0.6
Pardina	Pardina	847	775	698	3.3	13	7	0.6
LC08600113P	Pardina		699	695	3.6	14	9	0.6
LC06601734L	Laird	556	636	666	5.5	13	9	0.7
LC0860B123L	Laird		487	484	7.9	15	9	0.6
Crimson	Turkish Red			422	3.0	12	10	0.8
Average		**721**	**739**	**760**	**4.3**	**13**	**9**	**0.6**
LSD (0.05)		**159**	**179**	**194**	**0.3**	**2**	**2**	**n.s.**
CV (%)		**27**	**24**	**18**	**4.6**	**9**	**13**	**15.9**

*Varieties in bold were statistically equal to the top yielding variety in 2014.

Table 38. Spring lentil variety performance results northwest of Genesee (rim area), 2014.

				2013-2014 Crop Year				
Variety or Selection	**Market Class**	**3-Year Average (lb/A)**	**2-Year Average (lb/A)**	**Seed Yield (lb/A)***	**100 Seed Weight (grams)**	**Plant Height (inches)**	**Canopy Height (inches)**	**Erect Index (0.1-1.0)**
LC09600507P	Pardina			**1312**	4.0	15	8	0.5
LC01602273E	Eston	1168	920	**1308**	3.3	15	11	0.8
Richlea	Richlea	1261	1047	**1305**	5.0	18	11	0.6
LC0860B130L	Laird		911	**1286**	6.8	19	12	0.6
Avondale	Richlea	1374	1104	**1273**	4.6	18	13	0.7
Morena	Pardina	1221	949	**1216**	3.8	16	11	0.7
LC06601734L	Laird	1138	878	**1211**	6.6	17	12	0.7
Merrit	Laird	1066	826	**1142**	6.0	16	11	0.7
Pardina	Pardina	1063	858	**1127**	3.5	15	8	0.6
LC08600116P	Pardina			1111	4.3	15	10	0.6
LC0860B123L	Laird		776	1077	8.2	16	13	0.8
LC01602062T	Turkish Red	1050	797	1025	4.1	16	11	0.7
Crimson	Turkish Red			966	3.0	14	9	0.6
LC08600113P	Pardina		802	949	4.1	15	9	0.6
Eston	Eston	1007	748	908	2.8	15	12	0.8
Average		**1150**	**885**	**1148**	**4.7**	**16**	**11**	**0.7**
LSD (0.05)		**112**	**126**	**186**	**0.3**	**2**	**1**	**0.1**
CV (%)		**12**	**14**	**11**	**4.8**	**7**	**9**	**11.1**

*Varieties in bold were statistically equal to the top yielding variety in 2014.

Table 39. Spring lentil variety performance results southeast of Genesee (Kambitsch farm), 2014.

				2013-2014 Crop Year				
Variety or Selection	**Market Class**	**3-Year Average (lb/A)**	**2-Year Average (lb/A)**	**Seed Yield (lb/A)**	**100 Seed Weight (grams)**	**Plant Height (inches)**	**Canopy Height (inches)**	**Erect Index (0.1-1.0)**
LC01602273E	Eston	1732	1547	**1843**	4.2	15	13	0.9
Avondale	Richlea	1556	1336	1515	5.4	17	13	0.8
Pardina	Pardina	1555	1198	1452	4.3	13	11	0.8
Morena	Pardina	1477	1018	1449	4.4	16	13	0.9
LC09600507P	Pardina			1445	5.2	15	12	0.8
LC08600113P	Pardina		1257	1440	4.5	16	13	0.9
LC08600116P	Pardina			1437	5.9	15	12	0.8
Crimson	Turkish Red			1410	4.1	13	12	0.9
LC01602062T	Turkish Red	1382	1185	1359	4.8	14	13	0.9
LC0860B130L	Laird		1010	1342	7.1	17	14	0.8
Merrit	Laird	1534	1192	1314	6.6	17	13	0.8
Richlea	Richlea	1295	1026	1263	5.9	17	12	0.7
LC0860B123L	Laird		1001	1245	8.4	16	14	0.9
Eston	Eston	1391	1260	1176	3.8	15	14	0.9
LC06601734L	Laird	1182	868	1071	7.1	16	14	0.8
Average		**1456**	**1158**	**1384**	**5.4**	**15**	**13**	**0.8**
LSD (0.05)		**162**	**188**	**267**	**0.9**	**1**	**1**	**0.1**
CV (%)		**14**	**16**	**14**	**11.5**	**7**	**6**	**8.5**

*Varieties in bold were statistically equal to the top yielding variety in 2014.

Table 40. Spring lentil variety performance results at Moscow, 2014.

				2013-2014 Crop Year				
Variety or Selection	**Market Class**	**3-Year Average (lb/A)**	**2-Year Average (lb/A)**	**Seed Yield (lb/A)**	**100 Seed Weight (grams)**	**Plant Height (inches)**	**Canopy Height (inches)**	**Erect Index (0.1-1.0)**
Pardina	Pardina	1031	844	**761**	3.9	18	12	0.7
Morena	Pardina	913	818	**699**	4.8	20	13	0.7
Avondale	Richlea	1123	841	**693**	4.5	18	12	0.7
LC01602273E	Eston	1094	826	**649**	3.4	17	13	0.8
LC09600507P	Pardina			546	4.1	18	12	0.7
Merrit	Laird	971	719	543	7.0	19	13	0.7
Crimson	Turkish Red			519	3.7	15	12	0.8
LC01602062T	Turkish Red	800	710	501	3.8	17	12	0.7
Eston	Eston	858	742	476	3.5	17	13	0.8
LC08600113P	Pardina		665	471	4.1	19	13	0.7
LC0860B130L	Laird		623	454	6.0	19	11	0.6
Richlea	Richlea	906	702	428	4.2	18	12	0.7
LC08600116P	Pardina			365	5.1	17	12	0.7
LC06601734L	Laird	863	563	338	6.0	20	12	0.6
LC0860B123L	Laird		520	310	6.6	18	12	0.7
Average		**951**	**714**	**517**	**4.7**	**18**	**12**	**0.7**
LSD (0.05)		**198**	**115**	**154**	**0.9**	**2**	**1**	**n.s.**
CV (%)		**26**	**16**	**21**	**13.8**	**8**	**8**	**13.1**

*Varieties in bold were statistically equal to the top yielding variety in 2014.

Table 41. Spring lentil performance comparison across northern Idaho, 2014.

				2013-2014 Crop Year								
Variety or Selection	**Market Class**	**3-Year Yield**	**2-Year Yield**	**N. Idaho Average***	**Craigmont**	**Genesee**	**Kambitsch**	**Moscow**	**100 Seed Weight**	**Plant Height**	**Canopy Height**	**Erect Index**
		----------lb/A----------							(gram)	(inches)	(inches)	(0.1-1.0)
LC01602273E	Eston	1184	1022	**1164**	857	1308	1843	649	3.4	15	11	0.8
Avondale	Richlea	1211	1062	**1151**	1122	1273	1515	693	4.6	17	12	0.7
Morena	Pardina	1102	881	1056	858	1216	1449	699	4.1	16	12	0.7
LC09600507P	Pardina			1037	845	1312	1445	546	4.3	16	10	0.7
Pardina	Pardina	1124	919	1010	698	1127	1452	761	3.7	15	10	0.7
Richlea	Richlea	1044	901	972	891	1305	1263	428	4.8	17	11	0.7
LC0860B130L	Laird		826	963	771	1286	1342	454	6.5	17	11	0.6
Merrit	Laird	1055	858	947	788	1142	1314	543	6.3	16	12	0.7
LC01602062T	Turkish Red	1014	873	940	875	1025	1359	501	4.2	15	11	0.7
LC08600116P	Pardina			913	737	1111	1437	365	4.9	15	11	0.7
LC08600113P	Pardina		855	889	695	949	1440	471	4.1	16	11	0.7
Crimson	Turkish Red			829	422	966	1410	519	3.4	14	11	0.8
LC06601734L	Laird	935	736	822	666	1211	1071	338	6.3	17	12	0.7
Eston	Eston	956	858	815	698	908	1176	476	3.2	16	12	0.8
LC0860B123L	Laird		696	779	484	1077	1245	310	7.8	16	12	0.7
Average		**980**	**1061**	**952**	**760**	**1148**	**1384**	**517**	**4.8**	**16**	**11**	**0.7**
LSD (0.05)		**79**	**77**	**101**	**194**	**186**	**267**	**154**	**0.3**	**1**	**1**	**0.1**
CV (%)		**18**	**18**	**15**	**18**	**11**	**14**	**21**	**9.9**	**8**	**9**	**13.0**

*Varieties in bold were statistically equal to the top yielding variety in 2014.

Table 42. Chickpea variety performance results at Craigmont, 2014.

	2013-2014 Crop Year						
Variety or Selection	**Seed Yield (lb/A)***	**100 Seed Weight (grams)**	**Plant Height (inches)**	**Chickpea Size (%)**			
				(>25/64")	**(>22/64")**	**(>20/64")**	**(<20/64")**
CDC Orion	**2140**	37.4	21	1	59	33	8
Myles	**2020**	16.4	21	0	0	1	98
BillyBeans	1749	26.6	27	5	19	30	46
CA0790B0043C	1738	45.1	26	11	74	12	3
Bronic	1734	32.4	25	0	17	54	29
CA0790B0642C	1711	45.3	22	11	62	20	7
Nash	1710	51.0	24	31	58	9	2
CDC Frontier	1695	31.7	23	0	19	54	27
CDC Alma	1663	31.2	18	0	16	57	27
CA0790B0733C	1657	42.2	22	4	62	27	6
CA0790B0034C	1592	45.4	23	17	67	13	3
Sawyer	1516	37.1	21	4	47	39	10
CA0790B0054C	1445	44.8	27	9	64	21	6
Troy	1359	43.0	23	14	58	20	7
Sierra	1351	41.1	23	17	51	25	8
Average	**1672**	**38.0**	**23**	**8**	**45**	**28**	**19**
LSD (0.05)	**259**	**3.2**	**3**	**--**	**--**	**--**	**--**
CV (%)	**10.9**	**5.7**	**7.7**	**--**	**--**	**--**	**--**

*Varieties in bold were statistically equal to the top yielding variety in 2014. All varieties are kabuli chickpeas with the exception of Myles which is a desi.

Table 43. Chickpea variety performance results southeast of Genesee, 2014.

	2013-2014 Crop year						
Variety or Selection*	**Seed Yield (lb/A)****	**100 Seed Weight (grams)**	**Plant Height (inches)**	**Chickpea Size (%)**			
				(>25/64")	**(>22/64")**	**(>20/64")**	**(<20/64")**
CA0790B0733C	**1927**	49.8	22	18	65	9	8
Nash	**1894**	60.9	19	54	42	2	2
BillyBeans	**1854**	31.1	23	1	6	52	42
CDC Frontier	**1792**	38.4	20	0	45	48	7
Myles	1770	19.2	20	0	0	2	98
Sierra	1758	53.5	21	32	61	5	2
CA0790B0642C	1755	56.7	20	38	55	5	2
Sawyer	1689	45.0	19	6	76	17	1
CA0790B0034C	1666	53.4	23	32	60	6	2
Bronic	1654	37.8	24	1	33	52	14
CA0790B0054C	1578	56.0	23	37	57	5	2
CA0790B0043C	1533	52.9	22	36	57	5	3
Troy	1478	55.5	18	55	39	4	2
Average	**1719**	**46.9**	**21**	**27**	**46**	**14**	**13**
LSD (0.05)	**181**	**1.8**	**2**	**--**	**--**	**--**	**--**
CV (%)	**7**	**2.7**	**7**	**--**	**--**	**--**	**--**

*CDC Orion and CDC Alma were not included at this location.

**Varieties in bold were statistically equal to the top yielding variety in 2014. All varieties are kabuli chickpeas with the exception of Myles which is a desi.

Table 44. Chickpea variety performance results at Moscow, 2014.

Variety or Selection	3-Year Average (lb/A)	2-Year Average (lb/A)	2013-2014 Crop Year Seed Yield (lb/A)*	100 Seed Weight (grams)	Plant Height (inches)	Chickpea Size (%) (>25/64")	(>22/64")	(>20/64")	(<20/64")
Myles			**2339**	16.5	21	0	0	1	99
Bronic			**2062**	32.9	25	0	12	57	31
CDC Frontier	2495	2482	**1961**	31.9	22	0	15	59	25
CA0790B0043C	2512	2264	**1959**	47.9	24	26	62	8	3
CA0790B0034C		2399	1921	44.6	22	16	65	14	5
BillyBeans	2581	2434	1915	26.6	26	0	3	35	63
CA0790B0733C			1874	41.2	23	3	63	28	7
Nash	2376	1839	1839	48.9	21	18	66	12	3
CDC Alma	2413	2387	1813	33.7	18	0	24	53	23
Sawyer	2473	2256	1732	36.7	21	0	39	41	20
CA0790B0642C			1722	46.1	20	12	65	15	7
CDC Orion	2562	2326	1640	37.0	18	2	57	31	10
Sierra	2307	2059	1609	43.1	23	7	60	25	9
CA0790B0054C		1872	1504	46.2	25	13	70	13	4
Troy			1502	44.3	18	16	60	17	7
Average	**2465**	**2232**	**1826**	**38.5**	**22**	**8**	**44**	**27**	**21**
LSD (0.05)	**238**	**261**	**385**	**2.6**	**2**	**--**	**--**	**--**	**--**
CV (%)	**12**	**12**	**14.6**	**4.6**	**6.9**	**--**	**--**	**--**	**--**

*Varieties in bold were statistically equal to the top yielding variety in 2014. All varieties are kabuli chickpeas with the exception of Myles which is a desi.

Table 45. Chickpea performance comparison across northern Idaho, 2014

Variety or Selection	2013-2014 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")
Myles	2043	2020	1770	2339	17.4	20	0	0	1	98
CDC Orion**	1890	2140	--	1640	37.2	19	2	58	32	9
BillyBeans	1839	1749	1854	1915	28.2	25	2	9	39	50
CA0790B0733C	1819	1657	1927	1874	44.4	22	8	63	21	7
CDC Frontier	1818	1695	1792	1961	34.0	21	0	26	54	20
Bronic	1816	1734	1654	2062	34.3	25	0	21	54	25
Nash	1814	1710	1894	1839	53.6	21	34	55	8	2
CA0790B0043C	1743	1738	1533	1959	48.6	24	24	64	8	3
CDC Alma**	1738	1663	--	1813	32.4	18	0	20	55	25
CA0790B0642C	1729	1711	1755	1722	49.4	20	20	61	13	5
CA0790B0034C	1709	1592	1666	1921	47.8	23	22	64	11	3
Sawyer	1646	1516	1689	1732	39.6	20	3	54	32	10
Sierra	1572	1351	1758	1609	45.9	22	19	57	18	6
CA0790B0054C	1509	1445	1578	1504	49.0	25	20	64	13	4
Troy	1446	1359	1478	1502	47.7	19	28	52	14	5
Trial Average	**1742**	**1672**	**1719**	**1826**	**40.6**	**22**	**12**	**45**	**25**	**18**
LSD (0.05)	**199**	**259**	**181**	**385**	**3.7**	**2**	**--**	**--**	**--**	**--**
CV (%)	**14**	**11**	**7**	**15**	**10.9**	**9**	**--**	**--**	**--**	**--**

*Varieties in bold were statistically equal to the top yielding variety in 2014. All varieties are kabuli chickpeas with the exception of Myles which is a desi.

**CDC Orion and CDC Alma were not grown in Genesee. Due to this, they may not be accurately represented in the north Idaho average.