

2020 WSCIA

CERTIFIED SEED

Buying Guide

Winter Wheat

Spring Barley

Spring Wheat

Washington State University Department of
Crop and Soil Sciences in cooperation with

Washington State Crop

Improvement Association

2575 NE Hopkins Ct. Pullman, WA 99163
509-334-0461 washingtoncrop.com



WINTER WHEAT

SOFT WHITE COMMON

VARIETY	ORIGINATOR	RELEASE	<12"	12-16"	16"-20"	>20"	Irrigated	TEST	PLANT
		DATE	-----Yield as a % of Trial Mean-----					WEIGHT	
								(LBS/BU)	
Curiosity CL+	WSU	2013	103	101	--	--	--	61	Tall
Devote	WSU	2019	105	97	--	--	--	62	Medium
Eltan	USDA-ARS/WSU	1990	97	96	--	--	--	61	Tall
LCS Artdeco	Limagrain Cereal Seeds	2011	--	--	100	99	104	59	Short
LCS Blackjack	Limagrain Cereal Seeds	2019	--	--	111	112	110	57	Medium
LCS Ghost	Limagrain Cereal Seeds	2018	--	--	108	113	107	58	Medium
LCS Hulk	Limagrain Cereal Seeds	2017	102	102	99	104	104	61	Medium
LCS Shark	Limagrain Cereal Seeds	2017	--	--	95	94	103	59	Med-Short
Mela CL+	WSU	2013	98	97	--	--	--	61	Tall
M-press	The McGregor Co.	2017	105	105	103	102	--	60	Med-Short
Norwest Duet	OSU/LCS	2015	103	107	99	103	100	60	Tall
Norwest Tandem	OSU/LCS	2016	103	105	102	101	103	60	Short
Otto	WSU	2011	98	98	--	--	--	61	Tall
PNW Hailey	PNW Farmers CoOp	2017	--	--	103	102	104	61	Medium
Puma	WSU	2013	98	103	101	100	97	60	Tall
Purl	WSU	2017	--	--	98	101	99	60	Medium
Resilience CL+	WSU	2016	--	--	--	96	101	60	Med.-Short
Stingray CL+	WSU	2018	--	--	--	100	99	58	Medium
SY Assure	Syngenta Cereals	2016	--	--	96	95	101	61	Short
SY Dayton	Syngenta Cereals	2017	--	--	101	100	100	59	Med.-Short
SY Ovation	Syngenta Cereals	2011	--	--	102	103	100	59	Medium
UI Magic CL+	University of Idaho	2014	94	94	--	99	97	60	Med.-Short
WB1529	WestBred LLC	2015	97	98	92	91	101	61	Med.-Short
WB1604	WestBred LLC	2013	94	91	92	96	99	60	Med.-Short
Trial Mean (BU/A)			64	100	103	112	92		

SOFT WHITE CLUB WINTER WHEAT

Castella	USDA-ARS/WSU	2017	101	97	--	102	--	60	Med.-Tall
ARS-Crescent	USDA-ARS/WSU	2012	103	101	108	105	--	60	Med.-Tall
Pritchett	USDA-ARS/WSU	2015	--	--	106	108	--	59	Med.-Tall
<i>Trial Mean (BU/A)</i>			64	100	103	112	92	60	

HARD RED

HARD RED			PRECIPITATION ZONE (INCHES)						TEST WEIGHT (LBS/BU)	PLANT HEIGHT
VARIETY	ORIGINATOR	RELEASE DATE	<12"	12-16"	>16"	<12"	12-16"	>16"		
			--Yield as a % of Trial Mean--			-----% Protein-----				
Keldin	WestBred LLC	2011 (US)	109	109	99	10	10	11	62	Med.-Tall
LCS Jet	Limagrain Cereal Seeds	2014	114	114	105	10	10	11	61	Medium
LCS Rocket	Limagrain Cereal Seeds	2017	109	109	109	10	10	10	60	Med.-Short
Scorpio	WSU	2019	--	--	102	--	--	11	59	Medium
Sequoia	WSU	2015	89	89	--	11	11	--	60	Tall
SY Clearstone CL2	Syngenta Seeds, Inc.	2012	99	99	--	11	11	--	62	Tall
WB4311	WestBred LLC	2011	--	--	90	--	--	12	62	Med.-Tall
Trial Mean (BU/A)			93	93	110	10.6	10.6	11	61	

KEY

‡: Winter Survival Index based on Variety Testing field observations and laboratory studies conducted by USDA-ARS, Pullman, WA.

--: Information not available or variety was not common to data set.

©: Variety contains BASF-patented Clearfield trait for Beyond resistance. Clearfield® varieties were not treated with Beyond® herbicide since experiments were designed to compare each entry under uniform conditions. Applying Beyond® to Clearfield® varieties could create bias in the trials since all entries would not be managed the same.

For Quality Rating key, see Spring Wheat page in this guide.

WINTER WHEAT

CHARACTERISTICS-----

RATINGS (1 = Best to 9 = Poorest)*									
MATURITY	AWN	WINTER SURVIVAL INDEX*	STRIPE RUST RATING**	CEPH. STRIPE TOLERANCE INDEX	STRAW-BREAKER RATING	SNOW MOLD RATING	FALLING NUMBER RATING ^F	QUALITY RATING	VARIETY
Med.-Late	Awned	2	5	5	7	3	8	A	Curiosity CL+
Med.-Late	Awned	2	2	6	5	3	7	D	Devote
Med.-Late	Awned	3	5	4	9	2	7	D	Eltan
Early-Med.	Awned	8	5	5	9	--	6	A	LCS Artdeco
Medium	Awnletted	6	1	-	-	-	7	--	LCS Blackjack
Early	Awnletted	8	2	5	9	-	9	MD	LCS Ghost
Medium	Awned	3	1	7	9	6	4	A	LCS Hulk
Early	Awned	6	1	7	6	--	7	D	LCS Shark
Med.-Late	Awned	3	4	5	7	2	9	A	Mela CL+
Medium	Awned	7	2	8	4		8	--	M-press
Medium	Awned	5	1	4	8	6	3	D	Norwest Duet
Early-Med.	Awned	4	1	5	3	8	4	A	Norwest Tandem
Med.-Late	Awned	4	2	6	4	2	6	D	Otto
Medium	Awned	4	1	5	5		6	--	PNW Hailey
Medium	Awned	6	4	6	5	8	5	MD	Puma
Medium	Awned	6	1	8	4	--	7	A	Purl
Med.-Late	Awned	5	1	7	4	--	3	D	Resilience CL+
Medium	Awned	--	2	4	8	6	2	--	Stingray CL+
Early-Med.	Awned	8	1	7	9	--	6	A	SY Assure
Medium	Awned	8	2	5	9	--	8	D	SY Dayton
Early-Med.	Awned	9	3	6	8	9	9	D	SY Ovation
Early-Med.	Awned	9	6	7	4	8	7	D	UI Magic CL+
Early	Awned	6	2	6	4	8	5	A	WB1529
Early	Awned	6	1	9	4	8	6	A	WB1604

MPARABLE CHARACTERISTICS-----

Medium	Awnletted	6	2	7	4	8	5	MD	Castella
Med.-Late	Awned	4	3	6	6	9	5	MD	ARS-Crescent
Medium	Awned	5	1	4	5	4	9	D	Pritchett

RATINGS (1 = Best to 9 = Poorest)*									
MATURITY	AWN	WINTER SURVIVAL INDEX*	STRIPE RUST RATING**	CEPH. STRIPE TOLERANCE INDEX	STRAW-BREAKER RATING	SNOW MOLD RATING	FALLING NUMBER RATING	QUALITY RATING	VARIETY
Medium	Awned	4	6	7	5	2	4	A	Keldin
Early-Med.	Awned	7	5	6	1	4	4	A	LCS Jet
Early	Awned	8	4	6	6	--	5	D	LCS Rocket
Early-Med.	Awned	6	1	5	5		5	--	Scorpio
Med.-Late	Awned	5	4	7	8	3	8	D	Sequoia
Early	Awned	3	2	8	7	6	4	D	SY Clearstone CL2
Early	Awned	3	6	7	5	2	7	MD	WB4311

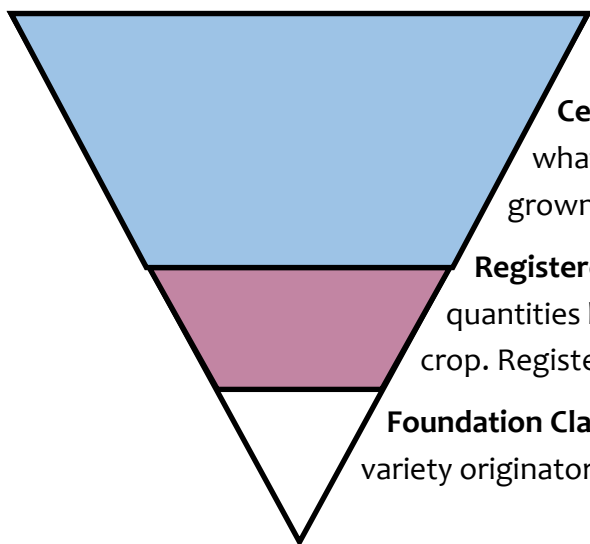
*: Disease Scale Key: 1,2 = Resistant; 3,4 = Moderately Resistant; 5 = Moderate; 6,7 = Moderately Susceptible; 8,9 = Susceptible. Disease ratings are based on recently observed disease symptoms but data are limited in scope. Disease ratings can change and should be used as relative comparisons.

** : Stripe rust ratings are based on data from Dr. Xianming Chen at USDA-ARS, Pullman, WA.

^F: Falling number rankings are based on all data collected 2013-2019, excluding 2015, though some varieties were not in WSU variety trials during all years. Environments with no falling numbers below 290 were eliminated as no-event. Falling number (FN) data above 330 was truncated, because variation above 330 is not associated with alpha amylase. Varieties more resistant to FN reduction due to preharvest sprouting or late-maturity alpha amylase are ranked 1-5.; varieties ranked 6-7 are intermediate, and varieties ranked 8+ will frequently have low FN in event environments. For more information about Falling Number events and data, visit steberlab.org.

WHAT
IS

CERTIFIED SEED?



There are three recognized classes of Certified Seed:

Certified Class (blue tag), is most widely available and is typically what a farmer will plant to produce a commercial crop. It is usually grown from

Registered Class (purple tag), which is available in moderate quantities but is not usually directly available to produce commercial crop. Registered seed is usually grown from

Foundation Class (white tag) is available in the lowest quantities, from the variety originator or their designated agent.

Certification is administered by designated authorities providing field and seed inspection services for seed growers and dealers. Nearly every state in the U.S. has an entity designated to certify seed, and they are part of a global organization to administer uniform seed standards. In Washington, there are two entities offering seed certification services:

Washington State Department of Agriculture (WSDA) certifies grass, vegetables, canola, corn, wildflowers, hemp, and many other crops. Learn more: <https://agr.wa.gov/services/inspections-and-investigations/inspections/seed>, or 509-249-6950.

Washington State Crop Improvement Association (WSCIA) certifies wheat, triticale, barley, oats, rye, peas, chickpeas, lentils, buckwheat, sorghum, and forest reproductive material. Learn more: washingtoncrop.com, or 509-334-0461.

Does all seed have to be certified?

No, not all seed has to be certified, but some varieties require it. Uncertified seed is often referred to as “common.” All seed, certified or common, must be labeled with germination, purity, other required analysis results, and other information (see WAC 16-301-015).

How do I know if a variety must be certified?

Varieties with PVP Title V protection can only be sold as certified seed (not common). Certification may also be required as a contract term in agreements made with seed companies. If you are unsure if a variety must be certified or if you can save seed, it is best to check with your seed dealer and/or the variety owner.

Each class of seed is held to specific standards throughout the certification process.

All Washington certification standards can be found in Washington Administrative Code (WAC) 16-302.



Each **field** producing certified seed is:

- Planted from an approved higher-class seed lot known to represent the variety
- Held to specific standards for past crop history
- Inspected by designated agency at least once prior to harvest



Seed from inspected fields is:

- Conditioned only at approved facilities
- Tested by WSDA Seed Program
- Evaluated by designated agency to confirm it meets standards for purity, germination, and other required analyses.

Seed is only “certified” when conditioning, sampling, testing, and labeling are complete. Seed that has only been field inspected is not certified seed.

SPRING WHEAT

			-----COMPARABLE C						
			-----PRECIPITATION ZONE (INCHES)-----					-----PRECIPITA	
SOFT WHITE COMMON			<12"	12"-16"	16"-20"	>20"	IRRIGATED	<12"	12"-16"
VARIETY	ORIGINATOR	RELEASE DATE	----- Yield as a % of TRIAL MEAN -----						
Diva	WSU	2010	103	105	104	98	89	12	11
Louise	WSU	2004	104	103	105	100	89	11	11
Ryan	WSU	2015	98	105	106	111	93	11	11
Seahawk	WSU	2014	98	99	103	110	93	11	11
Tekoa	WSU	2015	101	101	106	110	110	11	11
WB-1035CL+	WestBred	2011	96	89	90	86	93	13	12
WB6121	WestBred	2013	95	98	93	96	101	12	12
Whit	WSU	2008	102	101	102	103	96	11	11
SOFT WHITE CLUB									
JD	WSU	2009	100	101	93	96	--	12	11
Melba	WSU	2015	109	101	100	101	101	11	11
TRIAL MEAN			33	51	74	76	124	12	11
HARD RED			----- Yield as a % of TRIAL MEAN -----						
Alum	WSU	2014	--	101	105	99	93	--	13.6
AP Renegade	AgriPro Wheat	2018	102	103	--	108	108	13.5	13.0
Chet	WSU	2014	102	99	98	99	--	14.3	14.1
Glee	WSU	2012	103	103	104	106	94	13.6	13.0
Kelse	WSU	2008	96	102	99	93	--	14.7	13.8
Net CL+	WSU	2019	--	102	105	101	93	--	13.5
SY Coho	Syngenta Cereals	2015	102	101	94	97	104	13.7	13.4
SY Gunsight	Syngenta Cereals	2017	--	99	99	101	109	--	13.1
SY Selway	Syngenta Cereals	2015	97	100	102	98	--	13.9	13.3
SY605 CL	Syngenta Cereals	2010	93	90	90	85	--	14.7	14.2
WB7202CLP	WestBred	2017	105	109	--	106	105	13.0	12.2
WB9662	WestBred	2018	86	82	86	82	98	15.1	15.3
WB9668	WestBred	2014	86	89	87	91	99	15.9	15.7
TRIAL MEAN			30	43	67	75	121	13.9	13.5

KEY

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-- : Information not available or variety was not common to data set.

©: Variety contains BASF-patented Clearfield trait for Beyond resistance. Clearfield® varieties were not treated with Beyond® herbicide since experiments were designed to compare each entry under uniform conditions. Applying Beyond® to Clearfield® varieties could create bias in the trials since all entries would not be managed the same.

CHARACTERISTICS-----

PLANTING ZONE (INCHES)-----

DISEASE REACTIONS *

16"-20"	>20"	IRRIGATED	TEST WEIGHT (LBS/BU)	PLANT HEIGHT INCHES	MATURITY	STRIPE RUST**	HESSIAN FLY	FALLING NUMBER RATING ^F	QUALITY RATING	VARIETY
10	10	89	60	33	Med.-Late	3	2	4	MD	Diva
10	9	12	60	34	Med.-Late	3	2	3	MD	Louise
10	9	13	60	31	Early	3	1	4	MD	Ryan
10	10	13	61	30	Med.-Late	1	1	5	MD	Seahawk
10	9	13	62	32	Med.-Late	3	1	4	MD	Tekoa
11	10	--	60	29	Early-Med.	9	2	7	UCS	WB-1035CL+
11	11	14	62	29	Early	2	1	8	D	WB6121
10	9	13	60	31	Early-Med.	5	1	7	MD	Whit
11	10	--	61	32	Med.-Late	1	9	4	MD	JD
10	9	12	60	29	Med.-Late	2	9	5	MD	Melba
10	10	10	61							
12.6	11.5	15.4	61.1	32	Medium	3	1	3	MD	Alum
--	11.1	14.0	60.6	37	Med.-Late	4	2	2	D	AP Renegade
12.8	11.7	--	61.5	38	Medium	3	1	9	MD	Chet
12.1	11.3	14.9	61.6	31	Early-Med.	3	1	7	MD	Glee
13.1	12.3	--	61.2	33	Medium	5	2	3	D	Kelse
12.5	11.7	15.0	61.6	31	Med-Late	4	1	1	D	Net CL+
12.4	11.7	15.3	59.0	29	Med.-Late	2	9	1	MD	SY Coho
11.8	11.1	14.1	60.5	27	Medium	3	8	3	D	SY Gunsight
12.4	11.4	--	60.2	32	Medium	3	1	1	MD	SY Selway
13.2	12.2	--	61.5	33	Early	9	9	2	MD	SY605 CL
--	11.0	14.0	61.7	25	Early	6	1	8	--	WB7202CLP
14.1	13.1	16.0	60.2	27	Med-Late	2	9	8	--	WB9662
14.1	13.1	16.2	61.1	26	Early-Med.	1	1	1	D	WB9668
12.5	11.7	14.8	61.2							

SPRING WHEAT

Quality Ratings:

Most Desirable (MD)—These varieties generally have high test weights, appropriate protein content (kernel properties), and excellent milling and end-use properties.

Desirable (D)—The kernel, milling, and end-use qualities of these varieties range from good to very good. The quality attributes of these varieties are desirable in international trade.

Acceptable (A)—The kernel, milling, and end-use qualities of these varieties range from acceptable to good. Individual varieties may possess minor flaws. The quality attributes of these varieties are acceptable in international trade.

Least Desirable (LD)—One or more critical flaws in quality are present in these varieties. The intrinsic quality of PNW wheat will be improved if these varieties are not planted.

Unacceptable Except Customer-Specific Uses (UCS) --- One or more critical flaws in quality are present in these varieties and will not make suitable products for this class of wheat. Production of these varieties should be targeted to specific end-uses and kept strictly segregated from general commercial channels.

SPRING BARLEY

COMPARABLE CHARACTERISTICS

VARIETY	ORIGINATOR	RELEASE DATE	PRECIPITATION ZONE (INCHES)			TEST WEIGHT (LBS/BU)	PLANT HEIGHT INCHES	HEADING DATE JULIAN DAYS	MATURITY	STRIPE RUST**
			<16"	16"-20"	>20"					
Altorado	Highland Specialty Grains	2017	107	105	107	51.1	25	169	Medium	7
CDC Copeland ^M	U. of Saskatchewan	1999	96	95	96	49.7	28	172	Med.-Late	5
Champion	Highland Specialty Grains	2008	98	105	100	53.3	27	167	Early-Med.	7
Claymore	Highland Specialty Grains	2015	104	106	102	51.0	27	170	Medium	8
Havener ^F	WSU	2015	87	83	85	58.4	26	170	Med.-Late	7
LCS Genie ^M	Limagrains Cereal Seeds	2010	96	102	102	51.7	23	170	Med.-Late	4
LCS Opera ^M	Limagrains Cereal Seeds	2019	118	115	111	51.2	23	170	Medium	2
LCS Vespa	Limagrains Cereal Seeds	2014	98	103	98	51.2	24	170	Medium	6
Lenetah	UI	2007	104	105	104	52.8	25	170	Medium	6
Lyon	WSU	2013	101	104	103	51.1	25	167	Early-Med.	7
Meg's Song ^F	WSU	2017	79	83	86	57.3	26	171	Medium	4
Oreana	Highland Specialty Grains	2015	107	104	101	51.5	22	171	Medium	7
Palmer ^M	WSU	2019	100	100	99	52.4	27	169	Medium	7
Survivor	WSU	2017	100	93	95	52.3	26	168	Early-Med.	4
Trial mean (lb/ac)			3120	4700	5090	52.1	25	170		

^F: Food barley

^M: Malting barley

**Stripe rust ratings are based on data from Dr. Xianming Chen, USDA-ARS, Pullman, WA. Disease Scale Key: 1,2 = Resistant; , 4 = Moderately Resistant;

5 = Moderate; 6, 7 = Moderately Susceptible; 8, 9 = Susceptible.

---: Information not available or not relevant to data set.

VARIETY PERFORMANCE RESULTS: The information provided in this buying guide is the result of a cooperative effort among WSCIA, WSU, USDA-ARS and private seed companies. Plant height and test weight are averages of all test sites. Unless otherwise noted, yield data displayed for wheat and barley is based on averages of 2018 and 2019 data from testing sites of WSU's Extension Cereal Variety Testing Program. The % protein (12% moisture basis) and yield performance are summarized within several precipitation zones including irrigated.

Yield values are listed as a percent of the trial mean. Actual average yield values are listed for the trial mean at the bottom of each market class section. Information on variety performance at specific locations in individual years can be found at: <http://smallgrains.wsu.edu/variety>.

An additional method of comparing variety performance is the Variety Selection Tool, located on the wheat and small grains website:

<http://smallgrains.wsu.edu>. The Variety Selection Tool lets you choose your precipitation zone and market class of grain, then populates an interactive table with a two-year average of agronomic data, as well as disease ratings and other variety characteristics. Columns of information are moveable, sortable, and can be filtered to display only varieties that meet your chosen criteria.

WHERE TO BUY CERTIFIED SEED

Most of the varieties included in this guide are available as Certified class seed to plant to produce a commercial crop. Newer releases (dated 2019 and 2020) may only be available as Foundation or Registered for the first couple of years, as seed dealers increase their supplies in order to commercialize the variety.

If you are interested in a particular variety, you can use the WSCIA Seed Source List to find out what dealers of certified seed may have it available this season. The lists from the 2020 production year, and prior years, can be accessed at washingtongrain.com/seed-source-lists.



Washington Conditioners and Sellers of Certified Seed

OF FIELD PEA,
LENTIL, CHICKPEA,
and SMALL GRAIN

ADAMS COUNTY

Columbia Grain, Lind.....	509-677-3441
Homestead Family Grain, Co., Ritzville	509-660-0086
ProGene, Othello.....	509-488-3977
Ritzville Warehouse, Ritzville.....	509-659-0270

COLUMBIA COUNTY

Abbey Farms, Inc., Waitsburg.....	509-337-8860
Bayer, Dayton.....	509-540-2319
Northwest Grain Growers, Dayton.....	509-525-6510

DOUGLAS COUNTY

HighLine Grain Growers, Waterville.....	509-745-8551
John L. McLean Seed Company, Coulee City	509-632-5238

FRANKLIN COUNTY

CHS Sun Basin Growers, Connell.....	509-234-2641
Frontier Seed, Inc., Basin City.....	509-269-4241
Tri State Seed, Connell.....	509-234-2500

GRANT COUNTY

KAPA Seed Service, Quincy.....	509-787-1561
McKay Seed Company, Inc., Moses Lake.....	509-766-9894
McGregor Seed, Warden.....	509-349-8893
The McGregor Co., Quincy.....	509-787-4541
Wagner Seed Company, Warden	509-349-8094
Wilson Creek Union Grain & Trading Co., Wilson Creek.....	509-345-2551

KITTITAS COUNTY

Foothills Farm, Thorp	509-964-2515/2364
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LINCOLN COUNTY

Highline Grain Growers, Almira.....	509-639-2431
Highline Grain Growers, Davenport.....	509-725-7081
HighLine Grain Growers, Harrington.....	509-253-4324
Highline Grain Growers, Reardan.....	509-796-2575
Highline Grain Growers, Wilbur.....	509-647-5510
McKay Seed Company, Inc., Almira.....	509-639-2293

SNOHOMISH COUNTY

Marine View Farms, Stanwood.....	360-629-3952
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SPOKANE COUNTY

Custom Seed Conditioning, Inc., Elk (Portable).....	509-292-2506
Pacific Northwest Farmers Cooperative, Fairfield.....	509-283-2333
Spokane Seed Company, Spokane.....	509-535-3671

WALLA WALLA COUNTY

Blue Mountain Seed, Inc., Walla Walla.....	509-529-3366
McGregor Seed, Clyde.....	509-749-2237
Northwest Grain Growers, Inc., Walla Walla.....	509-525-6510

WHITMAN COUNTY

Columbia Grain, Pullman.....	509-332-1000
Hager Seed Processing, Inc., Oakesdale.....	509-999-SEED/509-285-4243
Hinrichs Trading Company, Steptoe.....	509-332-8889
Inland Empire Milling Co., St John.....	509-648-3366
McKay Seed Company, LLC, Rosalia.....	509-523-3471
Northwest Grain Growers., St. John.....	509-648-3713
Northwest Grain Growers, Garfield.....	509-635-0107
Pacific Northwest Farmers Cooperative, Rosalia	509-523-5061
Pacific Northwest Farmers Cooperative, Steptoe.....	509-397-4664
Palouse Pulse, Farmington.....	509-287-2711
Spokane Seed Company, Colfax.....	509-397-4613
Stateline Processors, Inc., Tekoa.....	509-284-4101
Uniontown Cooperative Assn., Uniontown.....	509-229-3828

WSCIA Foundation Seed Service, WSU Seedhouse, Pullman.....	509-335-4365
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**BUY CERTIFIED SEED OF THE
PREFERRED VARIETY AND BRAND
FROM YOUR SEEDSMAN**

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