

Phenotypic Variants Accepted as a Part of Variety Description

10 centimeters = 3.937 inches

VARIETY	PHENOTYPE OF VARIANT	ACCEPTANCE TOLERANCE IN EXCESS OF FIELD STANDARD
BARLEYS		
AAC Synergy spring barley	Taller plants Awnless	1/20,000 0.1/20,000
BG 104 Hulless Spring Barley	Hulled Long Awned	18/10,000 plants 18/10,000 plants
BG 161 Hulless Spring Barley	Long awned (either 2 or 6 rowed)	5/10,000 plants (0.05%)
Champion Spring Barley	4" – 8" taller	4/10,000
Explorer Spring Barley	variable awn length height variation up to 10cm sterile heads	1/10,000 plants 1/10,000 plants 1/10,000 plants
Hoody Winter Barley	short awn, 6-row & 2-row	1/1,000 – Foundation 2/1,000 – Registered & Certified
LCS Genie Spring Barley	6-8" taller than canopy	1/1,000
LCS Saturn Winter Barley	Taller plants	0.25%
LCS Vespa Spring Barley	Taller plants	0.25%
Oreana Spring Barley	Taller plants 4-8"	4/10,000
Stockford Hooded Spring Barley	6 Rowed Awned 2 Rowed Awned 6 Rowed Hooded	4/10,000 4/10,000 2/10,000
Verdant Winter Hooded Barley	Hooded Heads 1 inch longer than average	2.5/10,000 – Foundation Class
Verdant Winter Hooded Barley	Awned heads	10/10,000 –Foundation Class
Verdant Winter Hooded Barley	Hooded Heads 1 inch longer than average	5/10,000 – Registered & Certified Class
Verdant Winter Hooded Barley	Awned Heads	20/10,000 – Registered & Certified Class

BUCKWHEATS		
Koto Buckwheat	Red pericarp(husk/hull)	1/10,000 plants

CHICKPEAS		
CDC Alma Spring Chickpea	Purple flower or unifoliate leaves	6/10,000 foundation
CDC Alma Spring Chickpea		8/10,000 registered
CDC Alma Spring Chickpea		10/10,000 certified
CDC Frontier Spring Chickpea	Purple Flower Unifoliate leaf Talls 60 cm Green cotyledons Simple leaf	6/10,000 Foundation per each 8/10,000 Registered per each 10/10,000 Certified per each
CDC Orion Spring Chickpea	Purple flower or unifoliate leaves	6/10,000 foundation
CDC Orion Spring Chickpea		8/10,000 registered
CDC Orion Spring Chickpea		10/10,000 certified
Troy Spring Chickpea	Simple leaf	0.02%

Phenotypic Variants Accepted as a Part of Variety Description

OATS		
114 Spring Oat	8" – 10" taller, with more open panicle with white seed	0.10%
114 Spring Oat		
Kona Oat	With awn, taller plant	Less than 1% combined
Kona Oat	With bent awn, taller plant	

VARIETY	PHENOTYPE OF VARIANT	ACCEPTANCE TOLERANCE IN EXCESS OF FIELD STANDARD
TRITICALES		
102 Winter Triticale	6" – 11" taller	1/6,500
102 Winter Triticale	inclined spikes	1/6,000
102 Winter Triticale	tan to light brown heads	1/5,000
103BB Winter Triticale	Awned variants	0.50%
141 Spring Triticale	Awned variants	0.50%
141 Spring Triticale	Tall variants	0.50%
336 Winter Triticale	20 – 25cm taller, white chaff	1%
336 Winter Triticale	awnless, awnletted, or curled awns	0.10%
841446398 Winter Triticale	fully bearded head	up to .3% (30/10,000 plants)
815 Winter Triticale	5 – 10cm taller plants	3%
	brown, bronze, & red heads	2%
	awnless heads	0.50%
Bobcat Winter Triticale	Longer awns	1/5,000
Forerunner Winter Triticale	Elongated awns at various height and sterile spikes	Up to 0.5%
Merlin Spring Triticale	awnletted heads	up to 0.5%

WHEATS

VARIETY	PHENOTYPE OF VARIANT	ACCEPTANCE TOLERANCE IN EXCESS OF FIELD STANDARD
4941026 Hard Red Spring Wheat	10-15 cm Taller	.2%
	Awnless	.01%
4951893 Hard Red Spring Wheat	15-20 cm taller	0.20%
	Bronze head	0.10%
	awnless	0.10%
4972951 Hard Red Spring Wheat	15-20 cm taller	0.20%
	Bronze head	0.10%
	awnless	0.10%
6261492 Soft Red Winter Wheat	10-15 cm taller	.2% (20 plants per 10,000)
	Awned	.1% (10 plants per 10,000)
	Bronze chaff	.1% (10 plants per 10,000)
6452018 Hard Red Winter Wheat	10-15 cm taller	.2% (20 plants per 10,000)
	Awnless	.1% (10 plants per 10,000)
	Bronze chaff	.1% (10 plants per 10,000)
6471972 Hard Red Winter Wheat	10-15 cm taller	.2% (20 plants per 10,000)
	Awnless	.1% (10 plants per 10,000)
	Bronze Chaff	.1% (10 plants per 10,000)

Phenotypic Variants Accepted as a Part of Variety Description

6763710 Hard White Spring Wheat	10-15 cm Taller awnless bronze chaff	.2% (20 plants per 10,000) .1% (10 plants per 10,000) .1% (10/10,000)
6964910 Hard Red Spring Wheat	10-15 cm Taller awnless bronze chaff	.2% (20 plants per 10,000) .1% (10 plants per 10,000) .1% (10/10,000)
6971688CLP	10-15 cm Taller awnless bronze chaff	.2% (20 plants per 10,000) .1% (10 plants per 10,000) .1% (10/10,000)
6977824 Hard Red Spring Wheat	10-15 cm Taller awnless bronze chaff	.2% (20 plants per 10,000) .1% (10 plants per 10,000) .1% (10/10,000)
Alzada Spring Durum Wheat	Black-awned 15 – 30 cm taller	0.2% (20/10,000) 0.2% (20/10,000)
AP 503 CL2 Hard Red Winter Wheat	Taller plants 8-15 cm Awnletted	Up to combination of 1.0%
AP Badger Soft White Winter Wheat	Taller Plants Awnletted Head	Up to combination of 1.0%
AP Legacy Soft White Winter Wheat	Taller Plants Awnletted Head	Up to combination of 1.0%
AP604CL Hard Red Spring Wheat	Taller 1" to 3" awned Awnless plants	Up to combination of 1.0%
AP700CL Soft White Winter Wheat	Taller	Up to 1%
ARS Crescent Soft White Winter Club Wheat	Semi-compact intermediate heads	Up to 1/20,000 (.005%)
Bauermeister Hard Red Winter Wheat	2" – 10" taller Variable awn length red/tan chaff or awns	1/10,000
Bobtail Soft White Winter Wheat	Awned plants	0.04%
Breaker Hard Red Spring Wheat	Taller 10-20 cm	Up to .1% foundation, up to .5% registered and certified
Buehl Soft White Winter Club Wheat	Awnless, common, taller Awned, common Awnless, club Awned, very compact club heads Semi-compact intermediate heads variable awn length 8"-10" taller	
Buchanan Hard Red Winter Wheat	Red Chaff, awned	1/10,000
Bullseye Hard Red Spring Wheat	Taller or shorter plants	Up to 1.0% combination
Cabernet Hard Red Spring Wheat	10-25 cm taller 0-10 cm taller longer tapering head	0.08% 0.05%
Cara Soft White Winter Club Wheat	4" to 8" Taller Awnless Common Head Awned or Partially Awned Common Head Awned Club Head Semi-Compact – Slim Heads Intermediate Between Club and Common Head Type	1/10,000 Combined
CDC Falcon Hard Red Winter Wheat	4" – 6" taller red chaff	1:1,250 1:1,666
Chukar Soft White Winter Club Wheat	Awnless, common head Awned or partially awned common head Awned, compact club head Awnless, compact club head Semi-compact heads, intermediate between club and common head types 4" – 6" taller	combination: 1/20,000
Corbin Hard Red Spring Wheat	10-15 cm taller Awnless	0.20% 0.10%
Eltan Soft White Winter Wheat	Taller Plants up to 3"	Less than 1%
Esperia Hard Red Winter Wheat	7-8" taller	1/15,000 heads
Espresso Hard Red Spring Wheat	Tall variant 4" to 12" taller Awnless 12-30 cm taller	Up to .5% Up to .5%

Phenotypic Variants Accepted as a Part of Variety Description

Glee Hard Red Spring Wheat	taller by about 4" or 1 head	.005% (1/20,000 heads)
Goetze Soft White Winter Wheat	2-6" taller Awnless spikes Bronze(red or tan) chaff spikes	5/10,000 combined
Hill 81 Soft White Winter Wheat	Some taller plants	Not quantified
Jasper Soft White Winter Wheat	bronze-brown chaff color variable head morphology including clavate/club type plans up to 6" taller	1/10,000 combined
Keldin Hard Red Winter Wheat	1 -2 heads taller	25/10,000
Ladd Soft White Winter Wheat	Awnless or Awnletted plant	1 per 20,000 plants (.005%)
LCS Artdeco Soft White Winter Wheat	Awnless or Awnletted plants 1-2 heads taller	1/1,000 1/1,000
LCS Aymeric	Talls up to 2 spike lengths above main canopy Red/brown glumed plants Awned plants	5/1,000 1/1,000 1/1,000
LCS Azimut Hard Red Winter Wheat	Taller 1-2 heads Awned	1/1,000 1/1,000
LCS Biancor Soft White Winter Wheat	Awnless Taller-up to 2 spike lengths above canopy	1/1,000 plants 1/1,000 plants
LCS Colonia Hard Red Winter Wheat	Awned Plants Taller	1/1,000 1/1,000
LCS Drive Soft White Winter Wheat	Up to 2 spike lengths taller Red/brown glumed plants Awnless plant	5/1,000 1/1,000 1/1,000
LCS Evina Hard Red Winter Wheat	Up to 2 spike lengths taller Red/brown glumed plants Awned plants	5/1,000 1/1,000 1/1,000
LCS Iron Hard Red Spring Wheat	Up to 2 spike lengths taller Red/brown glumed plants Awnless plants	5/1,000 1/1,000 1/1,000
LCS Jet Hard Red Winter Wheat	Taller-up to 2 spike lengths above canopy Awnless	1/1,000 plants 1/1,000 plants
LCS Luna Hard Red Spring Wheat	Tall plants Up to 2 spike lengths above main canopy Red/brown glumed plants Awnless	8/1,000 1/1,000 1/1,000 1/1,000
LCS Silk Soft White Spring Wheat	taller plants, up to 10" above main canopy red/brown glumed plants awnless plants	1/1,000 1/1,000 1/1,000
LCS Star Hard White Spring Wheat	taller plants (1-3 spike lengths), earlier plants, red/brown glumed plants	up to 1% combination in the field
Legion Soft White Winter Wheat	Taller Plants , Awnletted plants	Up to 1.0% combined
Madsen Soft White Winter Wheat	tan/red, common, long awn 1 foot taller	combination: 1/337,000
Mela CL+ soft white winter wheat	3-6 inches taller	Up to 0.01%
Melba Soft White Spring Club Wheat	Awned common heads	.008% (8 per 100,000 plants)
Masami Soft White Winter Wheat	Awnless, common head 2"-10" taller Red/tan chaff or awns Variable awn length	Combination 1/10,000
Miwok Spring Durum Wheat	1 to 1.5 heads taller or shorter Black awns	1 in 2,000 plants 1 in 500 spikes
Nick Soft White Spring Wheat	4 – 8" taller	15 /10,000
Norwest 553 Hard Red Winter Wheat	2" to 6" taller Awnless spike bronze (red or tan) Chaff spike	1/10,000 Combined
Norwest Duet	Awnless/awnletted Bronze or brown chaffed Tall plants (2+ head lengths above canopy)	1/1,000 (0.1%) 1/1,000 (0.1%) 1/1,000 (0.1%)
Norwest Tandem	Awnless/awnletted	1/1,000 (0.1%)

Phenotypic Variants Accepted as a Part of Variety Description

	Bronze or brown chaffed Tall plants (2+ head lengths above canopy)	1/1,000 (0.1%) 1/1,000 (0.1%)
ORCF-101 (Clearfield) Soft White Winter Wheat	8 – 15 cm taller Bronze (red or tan) heads	1/10,000 Combined
ORCF-102 (Clearfield) Soft White Winter Wheat	8 – 15 cm taller Bronze (red or tan) heads	1/10,000 Combined
ORCF-103 (Clearfield) Soft White Winter Wheat	8-21 cm taller Bronze (red or tan) chaff spikes	2/10,000 combined all variants
Otto Soft White Winter Wheat	Taller	5/10,000
Pritchett Soft White Winter Club Wheat	Awnless or awned white chaffed common heads Awnless or awned red chaffed club heads <u>awnless white chaffed club heads</u> uniform but significant number of plants 3-6 inches taller than the main canopy.	<u>1/10,000 combined</u> uniform in field
Rimrock Hard Red Winter Wheat	1 -2 heads taller Awnless Red Chaffed	45/10,000 1/10,000 1/10,000
Rod Soft White Winter Wheat	Variable canopy height All Clavate type common heads acceptable	
Ryan Soft White Spring Wheat	Intermediate to club head	.008% (8 per 100,000 plants)
SAS W4 Hard Red Spring Wheat	taller and shorter 2-4 inches	Frequently
Seahawk Soft White Spring Wheat	Taller 4"	.005% 1/20,000 heads
Sequoia Hard Red Winter Wheat	tan common awned heads white common awned heads red common awnless heads white common awnless heads	3 per 1 million heads 15 per 1 million heads 70 per 1 million heads 6 per 1 million heads
Skiles Soft White Winter Wheat	2" to 6" taller (more distinct in high production) Plants with awnless spike	Up to 2/10,000 combined
Solano Hard Red Spring Wheat	12 - 24 cm taller Awnless	0.10% 0.10%
Sprinter Hard Red Winter Wheat	Dark Chaff	1/10,000 plants
SY 107 Soft White Winter Wheat	3 – 6 inches taller	1.00%
SY Banks Soft White Winter Wheat	8 to 10 cm taller Awnless	Up to .1% combined
SY Basalt Hard Red Spring Wheat	Taller 5-10 cm and/or 2-3 days early maturity	combination of up to 1%
SY Capstone Hard White Spring Wheat	Heads vary in canopy by 20 cm	All found
SY Clearstone 2CL Hard Red Winter	Talls and Red chaffed	25/10,000 plants and 3/10,000 plants
SY Coho Hard Red Spring Wheat	1.6 to 3.2 inches taller	up to 1% combined
SY Command Soft White Winter Wheat	4 to 10 cm taller Awnless	Up to 1% combined
SY Dayton Soft White Winter Wheat	8 to 12 cm taller Awnless	Up to 0.1% combined.
SY Ovation Soft White Winter Wheat	3 – 6 inches taller	Up to 1.0%
SY Raptor Soft White Winter Wheat	8 to 10 cm taller Awnless	Up to 0.1% combined
SY Saltese Soft White Spring Wheat	3-6 cm taller Awnless with bronze or white chaff Awned with bronze chaff	Up to 1.0% combined
SY Selway Hard Red Spring Wheat	1.2 to 4 inches taller	up to 1% combined
SY Touchstone Hard Red Winter Wheat	3-10 cm taller awnless	up to 1% combined
SY605 CL Hard Red Spring Wheat	8 – 15 cm taller	1.00%
Tekoa Soft White Spring Wheat	height variant	up to 0.005% (1 /20,000 heads)
UI Castle Soft White Winter Wheat	awnless plants taller plants up to 8" above canopy height	up to 3/1,000 2/1,000

Phenotypic Variants Accepted as a Part of Variety Description

UI Magic	awnless plants later flowering or greener taller plants, up to 8" above canopy height	5/1,000 3/1,000 2/1,000
UI Palouse	blue-green color awned plants taller plants, up to 8" above canopy height	1/1,000 1/1,000 1/1,000
UI Stone SW Spring Wheat	1 – 2 Inches taller Bronze or Tan Chaff Spikes	Up to 1 in 10,000 combined
UI-WSU Huffman Soft White Winter Wheat	Red Chaff Talls	up to 2/1,000 up to 2/1,000
Volt Hard Red Spring Wheat	taller 1-2 heads awnless	0.10% 0.01%
WB-1070CL Soft White Winter Wheat	1 – 2 heads taller	15/10,000
WB 3768 Hard White Winter Wheat	Taller Dark Chaff	<5/10,000 <1/10,000
WB 456 SW Winter Wheat	Red Chaff Taller plants – 1 to 2 heads taller	1/10,000 8/10,000
WB 523 Soft White Winter	Red chaff 1 - 2 heads taller	1/10,000 8/10,000
WB 528 Soft White Winter Wheat	1 to 2 heads taller	15/10,000
WB7566 Hard Red Spring Wheat	10-15 cm taller Awnless Bronze chaff	0.2% (20 plants per 10,000) 0.1% (10 plants per 10,000) 0.1% (10/10,000)
WB-1035CL+ Soft White Spring Wheat	4 -8 Inches Taller Red or Brown Chaff	.1% (10/10,000 plants) .01% (1/10,000 plants)
WB-1081CL+ Soft White Winter Wheat	1 -2 Head taller	29 plants per 10,000
WB1529 Soft White Winter Wheat	Taller 1-2 heads	10 plants/10,000
WB1604 Soft White Winter Wheat	Taller 1-2 heads	10 plants/10,000
WB1783 Soft White Winter Wheat	15-20cm taller Bronze Head Awnless	.2% (20/10,000) .1% (10/10,000) .1% (10/10,000)
WB1843 Soft White Winter Wheat	Taller 1-2 heads	10 plants/10,000
WB4059CLP Hard Red Winter Wheat	Taller Taller and awned Red chaffed	80/10,000 20/10,000 10/10,000
WB4269 Hard Red Winter Wheat	10-15 cm taller Awnless Bronze chaff	0.2% (20/10,000) 0.1% (10/10,000) 0.1% (10/10,000)
WB4303 Hard Red Winter Wheat	10-15 cm Taller Awnless Bronze Head	0.2% 0.1% 0.1%
WB4458 Hard Red Winter Wheat	White Chaff Talls >10cm	0.25% 0.01%
WB4462 Hard Red Winter Wheat	10-15 cm Taller Awnless Bronze Head	0.2% 0.1% 0.1%
WB4483 Hard Red Winter Wheat	10-15 cm Taller Awnless Bronze Head	0.2% 0.1% 0.1%
WB4515 Hard Red Winter Wheat	10-15 cm Taller Awnless Bronze Head	0.2% 0.1% 0.1%
WB4575 Hard Red Winter Wheat	10-15 cm taller Awnless Bronze chaff	0.2% (20/10,000) 0.1% (10/10,000) 0.1% (10/10,000)
WB4614 Hard Red Winter Wheat	Taller 15-30 cm	Up to .2%
WB4623CLP Hard Red Winter Wheat	10-15 cm taller Awnless head Bronze head	0.2% (20/10,000) 0.1% (10/10,000) 0.1% (10/10,000)
WB6121 Soft White Spring Wheat	Taller 1-2 heads	Up to .15%(15 plants/10,000)

Phenotypic Variants Accepted as a Part of Variety Description

WB6341 Soft White Spring Wheat	1-2 heads taller	15/10,000 plants
WB6430 Soft White Spring Wheat	Taller 1-2 heads	10/10,000
WB7328 Hard White Spring Wheat	10-15 cm Taller Awnless Bronze Head	.2% .02% (2/10,000 plants) .02% (2/10,000)
WB7390 Hard White Spring Wheat	15-20 cm Taller Bronze Head Awnless	.2% .1% .1%
WB7417 Hard White Spring Wheat	10-20 cm Taller Awnless Bronze Head	.2% .01% .1%
WB7589 Hard White Spring Wheat	10-15 cm Taller Awnless Bronze Head	.2% .01% .10%
WB7618 Hard White Spring Wheat	Taller 15-30 cm	0.20%
WB9112 Hard Red Spring Wheat	12-30 cm taller	20/10,000
WB9200 Hard Red Spring Wheat	15-20 cm taller Awnless Bronze Head	.2% (20/10,000) .1% (10/10,000) .1% (10/10,000)
WB-9229 Hard Red Spring Wheat	12 – 30 cm Taller	0.2%;
WB9350 Hard Red Spring Wheat	15-20cm Taller Bronze Head Awnless	.2% (20/10,000) .1% (10/10,000) .1% (10/10,000)
WB9377 Hard Red Spring Wheat	10-20 cm Taller Awnless Bronze Head	.2% .01% .1%
WB9411 Hard Red Spring Wheat	10-15 cm Taller Awnless Bronze Head	.2% .02% (2/10,000) .01% (1/10,000)
WB9479 Hard Red Spring Wheat	10-15 cm Taller awnless bronze chaff	.2% (20 plants per 10,000) .1% (10 plants per 10,000) .1% (10/10,000)
WB9507 Hard Red Spring Wheat	10 cm taller	1/500 = 20/10,000
WB9518 Hard Red Spring Wheat	1-2 heads taller	15/10,000
WB9576 Hard Red Spring Wheat	Taller 1-2 heads	Up to 10 plants/10,000
WB9578 Hard Red Spring Wheat	15-20cm Taller White Head Awnless	.2% (20/10,000) .1% (10/10,000) .1% (10/10,000)
WB9590 Hard Red Spring Wheat	10-15 cm Taller awnless bronze chaff	.2% (20 plants per 10,000) .1% (10 plants per 10,000) .1% (10/10,000)
WB9616CLP	10-15 cm Taller awnless bronze chaff	.2% (20 plants per 10,000) .1% (10 plants per 10,000) .1% (10/10,000)
WB9653 Hard Red Spring Wheat	15-20 cm Taller Bronze Head Awnless	.2% .1% .1%
WB9662 Hard Red Spring Wheat	1-2 heads taller	.15% (15 plants per 10,000)
WB9668 Hard Red Spring Wheat	Taller 1-2 heads	10/10,000 plants
WB9719 Hard Red Spring Wheat	10-15 cm Taller awnless bronze chaff	.2% (20 plants per 10,000) .1% (10 plants per 10,000) .1% (10/10,000)
WB9879CLP Hard Red Spring Wheat	1-2 heads taller	30/10,000
WB-Arrowhead Hard Red Winter Wheat	1 – 2 heads taller White chaffed plants	.1% (10/10,000 plants) .005% (5/100,000 plants)
WB-Cedar Hard Red Winter Wheat	5-10 cm taller Brown/Bronze chaff	0.50% 0.10%
WB-Cristallo Hard White Spring Wheat	12 – 25 cm Taller	0.20%

Phenotypic Variants Accepted as a Part of Variety Description

WB-Fuzion Hard Red Spring Wheat	Taller Plants – 1-2 heads higher White Chaff	10 /10,000 1/10,000
WB-Gunnison Hard Red Spring Wheat	1-2 heads taller Red chaffed	10/10,000 plants(.10%) 5/100,000 plants(.005%)
WB-Hartline Hard White Spring Wheat	1-2 heads taller Red chaffed plants	10/10,000 plants (0.10%) 5/100,000 plants (0.005%)
WB-Idamax Hard White Spring Wheat	1 -2 heads taller Awnless plants Red Chaff	.1% (10/10,000 plants) .01% (1/10,000 plants) .005% (5/100,000 plants)
WB-Junction Soft White Winter Wheat	1 -2 Heads taller	20/10,001
WB-Matlock Hard Red Winter Wheat	20 cm taller red glume	0.5% in Fdn, up to 1% in Reg or Cert 1 in 10,000
WB-Mayville Hard Red Spring Wheat	20 cm height variance across field up to 30cm taller than general population	all found Up to 1%
WB-Paloma HW Spring Wheat	12 – 25 cm Taller	0.50%
WB-Patron HR Spring Wheat	12-30 cm Taller Awned	0.20% 0.20%
WB-Perla HW Spring Wheat	12 – 30 cm Taller	0.20%
WB-Prestea Hard White Spring Wheat	1-2 heads taller white chaff awnless	.1% .1% .1%
WB-Rockland Hard Red Spring Wheat	12 – 30 cm taller Awnletted variant	0.20% 0.20%
WB Tucson Hard Red Winter Wheat	1 – 2 Heads Taller Red Chaff	45/10,000 1/10,000
Whetstone Hard Red Winter Wheat	Taller Bronze Chaff	1/1,000 (1.0%) COMBINED?
Winterhawk Hard Red Winter Wheat	5-10 cm taller bronze/brown chaffed plants	0.10% 0.01%
Xerpha Soft White Winter Wheat	2" to 8" taller Awnless heads, Club type heads	1/10,000 1/80,000

Phenotypic Variants Accepted as a Part of Variety Description