

## Fresno County Small Grain Variety Performance Trials

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Small grain variety tests were conducted at multiple locations throughout California, coordinated by Wheat Breeder Jorge Dubcovsky. The results from Kings County with Boyett Farms and Fresno County small plot trials are shown on the following pages. The regional wheat, barley and triticale trials were conducted at the Westside Research and Extension Center in Five Points and Corcoran. A special thanks to Milky Way Dairy, Boyett Farms and WSREC for their cooperation in these studies. An Agronomy Progress Report containing more detailed results from all trials is available at: <http://smallgrains.ucdavis.edu> and <http://cetulare.ucanr.edu>.

2015 started off with rain and then stopped, resulting in poor or no yields in the dryland regions and requiring full irrigations in the irrigated wheat growing regions. Very warm spring temperatures during grain fill had a serious impact reducing final yields. Although there was little rain and warm temperature conditions there was still stripe rust on some varieties.

Wheat varieties have different levels of genetic resistance to stripe rust, and as several new races of rust develop, the resistance breaks down. Often, our best silage varieties are also the high yielding grain varieties with high protein, resistance to disease and resistance to lodging and early maturing. A dual purpose variety gives options, particularly when grain prices are high and silage prices low or vice versa, or when water may be limited. Choose more than one variety or grain type to reduce the impacts of weather, disease, harvest schedules, and economics.

- First and foremost, select and plant varieties with good disease resistance along with high yield potential.
- Second, a well-timed fungicide application has shown to reduce the yield loss even in resistant varieties when weather conditions favor the disease. Stripe rust resistance based on observations from the University of California statewide variety tests indicate:

**Highly Susceptible:** Joaquin, Mika, Blanca Grande, Yecora Rojo, Dirkwin

**Susceptible:** WB-Paloma, Pacheco, Summit, Kronos

**Moderately Susceptible:** PR 1404, Redwing, Duraking, Clear White, Cristallo, Topper

**Moderately Resistant:** Trical 118, Westmore, Ultra, Camelot, Crown, Platinum, Blanca Fuerte, Volante, Trical 105, Desert King, Joaquin Oro

**Resistant:** Cal Rojo, Blanca Grande 515, Summit 515, Lariat, Lassik, Patwin, Blanca Royale, Rockland, Fortissimo, SY 158T



# 2015 California Wheat Variety Survey

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VARIETIES		SACRAMENTO VALLEY	SAN JOAQUIN VALLEY	COAST	SOUTHERN CALIFORNIA	SIERRA AND NO. CALIF.	2015 VARIETY TOTALS	2014 TOTALS
<b>WHITE VARIETIES</b>								
<b>Hard White Wheat</b>								
Blanca Grande 515	Acres	1,000	10,000		3,000		14,000	14,800
(PVP)	Percent*	0.2%	2.3%		0.7%		3.3%	2.9%
Patwin 515 (PVP)	Acres	2,800	600				3,400	N/A
	Percent*	0.7%	0.1%				0.8%	
WB Perla	Acres		2,000				2,000	2,000
PVP_Patent # 8,519,246	Percent*		0.5%				0.5%	0.4%
Other/Unknown	Acres	2,800	900				3,700	15,000
Hard White	Percent*	0.7%	0.2%				0.9%	2.9%
<b>Soft White Wheat</b>								
Alpowa	Acres					6,500	6,500	10,000
	Percent*					1.5%	1.5%	1.9%
<sup>1</sup> New Dirkwin (PVP)	Acres	700	10,000				10,700	10,000
	Percent*	0.2%	2.3%				2.5%	1.9%
Tubbs	Acres					2,000	2,000	3,000
	Percent*					0.5%	0.5%	0.6%
<sup>1</sup> Twin	Acres					3,500	3,500	4,000
	Percent*					0.8%	0.8%	0.8%
<sup>1</sup> Yamhill	Acres					7,500	7,500	15,000
	Percent*					1.8%	1.8%	2.9%
Other/Unknown	Acres	200	200			4,730	5,130	4,600
Soft White	Percent*	0.0%	0.0%			1.1%	1.2%	0.9%
<b>RED VARIETIES</b>								
Cal Rojo (PVP)	Acres	10,000	8,000				18,000	48,000
(Patent # 7563967 B2)	Percent*	2.3%	1.9%				4.2%	9.4%
Joaquin (PVP)	Acres	500	15,000		3,000		18,500	25,500
	Percent*	0.1%	3.5%		0.7%		4.3%	5.0%
WB Joaquin Oro	Acres		20,000				20,000	24,000
PVP_Patent # 8,507,775	Percent*		4.7%				4.7%	4.7%
<sup>1</sup> PR 1404 (PVP)	Acres	8,000	32,000	500		1,500	42,000	63,000
	Percent*	1.9%	7.5%	0.1%		0.4%	9.9%	12.3%
SY-Summit 515 (PVP)	Acres	13,000	68,000				81,000	90,000
	Percent*	3.1%	16.0%				19.0%	17.5%
<sup>1</sup> Triple IV (PVP)	Acres	500	25,000	1,000			26,500	22,500
	Percent*	0.1%	5.9%	0.2%			6.2%	4.4%
<sup>1</sup> Ultra (PVP)	Acres		15,000				15,000	13,000
	Percent*		3.5%				3.5%	2.5%
WB 9112	Acres	4,000	3,000				7,000	
(PVP pending)	Percent*	0.9%	0.7%				1.6%	0.0%
WB 9229 (PVP)	Acres	12,800	5,000				17,800	11,500
	Percent*	3.0%	1.2%	0.0%			4.2%	2.2%
<sup>1</sup> WB-Patron	Acres	20,000	60,000	2,500		1,000	83,500	83,000
PVP_Patent # 8,513,506	Percent*	4.7%	14.1%	0.6%		0.2%	19.6%	16.2%
Yecora Rojo	Acres		4,000		10,000	3,500	17,500	21,000
	Percent*		0.9%		2.3%	0.8%	4.1%	4.1%
Other/Unknown	Acres	3,700	11,300	1,000	4,000	770	20,770	33,100
Red	Percent*	0.9%	2.7%	0.2%	0.9%	0.2%	4.9%	6.5%
<b>TOTAL (ALL WHEAT OTHER THAN DURUM)</b>		<b>80,000</b>	<b>290,000</b>	<b>5,000</b>	<b>20,000</b>	<b>31,000</b>	<b>426,000</b>	<b>513,000</b>
		<b>18.8%</b>	<b>68.1%</b>	<b>1.2%</b>	<b>4.7%</b>	<b>7.3%</b>	<b>100.0%</b>	<b>100.0%</b>

\* Percent of "All wheat other than Durum" (426,000 acres). (PVP): These varieties are protected under the Plant Variety Protection Act.

<sup>1</sup> Primary use for these varieties is listed as "forage".

## 2015 California Wheat Variety Survey

		SACRAMENTO VALLEY	SAN JOAQUIN VALLEY	COAST	SOUTHERN CALIFORNIA	SIERRA AND NO. CALIF.	2015 VARIETY TOTALS	2014 TOTALS
<b>DURUM VARIETIES</b>								
Desert King (PVP)	Acres				20,000		20,000	7,000
	Percent*				20.3%		20.3%	14.9%
Desert King HP (PVP)	Acres		5,500		2,000		7,500	3,000
	Percent*		5.6%		2.0%		7.6%	6.4%
Fortissimo (PVP)	Acres	500	6,000				6,500	4,000
	Percent*	0.5%	6.1%				6.6%	8.5%
Orita (PVP)	Acres		4,500		20,000		24,500	9,000
	Percent*		4.6%		20.3%		24.8%	19.1%
Miwok (PVP)	Acres		4,700				4,700	N/A
	Percent*		4.8%				4.8%	
Tiburon (PVP)	Acres				6,300		6,300	N/A
	Percent*				6.4%		6.4%	
Volante (PVP)	Acres		4,500	200			4,700	4,000
	Percent*		4.6%	0.2%			4.8%	8.5%
WB Mohave (PVP)	Acres				6,000		6,000	2,000
	Percent*				6.1%		6.1%	4.3%
Other & Unknown Durum	Acres		6,300		12,200		18,500	18,000
	Percent*	0.0%	6.4%		12.4%		18.7%	38.3%
<b>ALL DURUM</b>	Acres	500	31,500	200	66,500	0	98,700	47,000
<b>WHEAT</b>	Percent*	0.5%	31.9%	0.2%	67.4%	0.0%	100.0%	100.0%
<b>ALL WHEAT</b>	Acres	80,500	321,500	5,200	86,500	31,000	524,700	560,000
	Percent	15.3%	61.3%	1.0%	16.5%	5.9%	100.0%	100.0%

\* Percent of Total Durum (98,700 acres). (PVP): These varieties are protected under the Plant Variety Protection Act.

An estimated 525,000 acres of wheat were planted for 2015, down 6% from last year. Acreage planted to red and white wheat varieties decreased 17% from last season, on top of a similar decrease the year before. The bright spot was Durum wheat, with a 210% increase in plantings. California is experiencing a fourth consecutive year of drought. Warm storms early in the season and an overall lack of rain and snow after January led to a record low snowpack this year. Lack of availability of irrigation water continues to be a problem. Due to high prices being paid for silage, another record amount of wheat acreage is expected to be cut for non-grain purposes.

#### RED AND WHITE WHEAT:

Hard Red wheat, the top wheat class grown in California, accounted for 70% of all acreage grown in California this year. SY Summit 515 was the top planted red wheat variety, followed closely by the forage variety WB Patron. Yecora Rojo remained the most commonly planted red variety planted in the far northern and southern parts of California. Blanca Grande 515 was the top Hard White wheat planted and Yamhill, New Dirkwin, and Alpowa topped the Soft White varieties. Approximately 70% of all red and white varieties are grown in the San Joaquin Valley.

#### DURUM:

Due to high prices at planting time, Durum acreage in California more than doubled, accounting for nearly 20% of the total wheat acreage planted in the state for 2015. Desert King and Orita were the top planted varieties in Southern California, whereas acreage was pretty equally split between Desert King HP, Fortissimo, Orita, Miwok, and Volante in the San Joaquin Valley.

Note: This report reflects wheat that was planted in the fall of 2014/early winter 2015 for harvest in spring/summer of 2015 as well as intended spring plantings in far Northern California. This survey estimates the state's *planted* acreage.

## 2015 Common Wheat and Triticale Yields

Entry	Name	Stripe Rust	Yield		Yield		Yield		Yield	
			SJ Valley		KERN		FRESNO		KINGS	
<b>CULTIVARS</b>										
1340	WWW- MIKA	4.8	4297		4280 (48)		5090 (43)		3520 (48)	
1361	UC-CLEAR WHITE	2.8	4777		6230 (27)		3090 (50)		5010 (23)	
1419	UC-PATWIN	1.0	5427		5610 (38)		5720 (29)		4950 (25)	
1424	WB-JOQUIN	6.5	5407		6850 (7)		5790 (28)		3580 (46)	
1478	SY-CAL ROJO	1.0	4757		5460 (41)		3750 (48)		5060 (19)	
1495	UC-LASSIK	1.0	5460		4950 (45)		6050 (22)		5380 (7)	
1521	SY-REDWING	2.2	5927		6280 (25)		6300 (13)		5200 (14)	
1522	SY-BLANCA ROYALE	1.1	5937		6230 (27)		6740 (3)		4840 (30)	
1526	WB-PR 1404	1.7	5357		5480 (40)		5700 (30)		4890 (28)	
1550	WB-TRIPLE IV	4.9	4823		5500 (39)		5700 (30)		3270 (49)	
1590	SY-ULTRA	1.1	5000		5240 (44)		4000 (47)		5760 (3)	
1608	WWW-FV 2808	3.0	5637		6090 (29)		6210 (18)		4610 (38)	
1650	WB-ROCKLAND	1.0	4997		5350 (42)		5120 (42)		4520 (41)	
1657	SY-BLANCA GRANDE 515	1.0	5687		6910 (6)		5510 (37)		4640 (36)	
1658	SY-SUMMIT 515	1.0	5680		6340 (20)		5580 (36)		5120 (16)	
1660	SY-314	1.0	5843		6310 (22)		6430 (7)		4790 (34)	
1667	BAG-NEW DIRKWIN	1.0	4693		4340 (47)		6190 (19)		3550 (47)	
1680	UC-PATWIN 515	1.0	5020		5770 (36)		4260 (46)		5030 (22)	
1688	LCS-STAR	1.0	6177		6840 (8)		6290 (14)		5400 (6)	
1723	LCS-ATOMO	1.9	6120		7140 (2)		5630 (34)		5590 (5)	
1728	WB-JOQUIN ORO	1.2	5560		6490 (15)		5650 (33)		4540 (40)	
1729	WB- PERLA	1.0	5587		6750 (10)		5600 (35)		4410 (44)	
1730	WB-9229	1.1	5780		6360 (19)		6390 (9)		4590 (39)	
1731	WB-PATRON	1.0	5737		6040 (32)		6100 (21)		5070 (18)	
1748	WB-9112	1.0	5767		6940 (4)		5490 (38)		4870 (29)	
1749	WB-7618	1.0	5763		6450 (17)		5890 (27)		4950 (25)	
1766	SY-VACA	1.7	4733		3410 (50)		5960 (25)		4830 (31)	
1778	ASSY-TAM 204	1.1	4490		4920 (46)		3410 (49)		5140 (15)	
1795	SY-DAYN	1.0	5520		5340 (43)		6400 (8)		4820 (32)	
20	UC-ANZA	7.0	5930		--		5930 (26)		--	
<b>ADVANCED LINES</b>										
1745	UC12014/35	1.0	5930		5660 (37)		6920 (1)		5210 (13)	
1750	WB 7390	1.0	5937		6480 (16)		6230 (16)		5100 (17)	
1751	WB 9904	1.0	5767		5910 (34)		6330 (11)		5060 (19)	
1767	UC 13010-23	1.0	5870		6240 (26)		5690 (32)		5680 (4)	
1772	LCS 11SB0096	1.0	5843		6080 (30)		6190 (19)		5260 (11)	
1773	LCS 11SB0097	1.0	6150		6930 (5)		6570 (5)		4950 (25)	
1779	BAG NEW DIRKWIN HP	1.0	4300		4180 (49)		4590 (45)		4130 (45)	
1789	UC 14010/17	1.0	5693		6440 (18)		6000 (24)		4640 (36)	
1790	UC 14010/20	1.0	6037		6510 (14)		6340 (10)		5260 (11)	
1791	UC 14010/22	1.0	6187		6660 (12)		6560 (6)		5340 (9)	
1792	UC 14010/29	1.0	6087		7280 (1)		6010 (23)		4970 (24)	
1793	UC 14010/42	1.2	5433		6330 (21)		5280 (40)		4690 (35)	
1794	SY 034	2.3	6207		6620 (13)		6670 (4)		5330 (10)	
1802	WB DA909-325	1.0	6170		5830 (35)		6870 (2)		5810 (2)	
1803	WB DA907-005	1.0	5597		5950 (33)		6330 (11)		4510 (42)	
1804	LCS 10SB0087-B	1.1	5447		6290 (24)		5240 (41)		4810 (33)	
1805	LCS UI-PLATINUM	3.1	5983		6670 (11)		6230 (16)		5050 (21)	
1806	ABP 500553	2.8	6483		6990 (3)		6280 (15)		6180 (1)	
1807	ABP 501189	1.3	5853		6800 (9)		5380 (39)		5380 (7)	
1808	APB 430429	1.4	5177		6060 (31)		5040 (44)		4430 (43)	
1809	APB 717	6.4	3937		6300 (23)		2950 (51)		2560 (50)	
<b>TRITICALE</b>										
3097	SY-TRICAL 105	1.0	6013		5750 (2)		6470 (5)		5820 (3)	
3164	WB-PACHECO	1.0	5850		4950 (8)		6720 (3)		5880 (1)	
3168	SY-CAMELOT	1.0	6067		5790 (10)		6700 (4)		5710 (4)	
3169	SY-158T	1.0	5757		4530 (11)		6890 (2)		5850 (2)	
3170	SY-115T	1.0	6077		5640 (4)		7280 (1)		5310 (5)	
3171	BAG TYNDAL	1.7	5367		5690 (3)		5190 (8)		5220 (6)	
3172	APB 660049	2.0	5110		5180 (6)		5450 (70)		4700 (7)	
3173	APB 9919	1.0	5150		4570 (10)		6390 (6)		4490 (8)	
3174	BAG NU WHEAT	2.7	4733		5370 (5)		4470 (10)		4360 (10)	
3175	BAG BG 198-14	1.0	4617		4920 (90)		4500 (9)		4430 (9)	
3176	BAG BG 225-14	1.0	4300		5040 (7)		3900 (11)		3960 (11)	
	MEAN	-	-		5890		5700		4880	
	CV	-	-		40.15		10.31		10.45	
	LSD (0.05)	-	-		846.15		830.93		721.61	

Rating scale for Stripe Rust (area of flag-1 leaf affected): 1 = 0-3%, 2 = 4-14%, 3 = 15-29%, 4 = 30-49%, 5 = 50-69%, 6 = 70-84%, 7 = 85-95%, 8 = 96-100%.

Numbers in parentheses indicate relative rank in column

## 2015 Durum Wheat Yields

Entry	Name	Stripe Rust	Yield						
			SJ Valley		KERN	FRESNO	KINGS		
<b>CULTIVARS</b>									
878	WWW-DURAKING	1.3	6277		5970 (15)	7170 (10)	5690 (21)		
951	APB-KRONOS	3.0	5680		4930 (30)	6720 (22)	5390 (27)		
1166	WWW-CROWN	1.2	6257		5460 (22)	7060 (11)	6250 (7)		
1210	WWW-PLATINUM	1.0	5637		5040 (28)	6920 (17)	4950 (34)		
1211	WWW-TOPPER	2.0	5687		5080 (27)	6670 (23)	5310 (31)		
1215	WB-ORITA	3.3	5410		5110 (25)	5910 (34)	5210 (32)		
1375	UC-DESERT KING	1.1	6447		6260 (6)	7750 (2)	5330 (30)		
1429	SY-FORTISSIMO	1.1	6430		5430 (23)	7590 (5)	6270 (5)		
1431	SY-VOLANTE	1.0	6507		6030 (14)	7340 (8)	6150 (9)		
1440	APB-HELIOS	1.8	6083		6060 (12)	6800 (21)	5390 (27)		
1473	WWW-Q-MAX	1.1	5797		4920 (31)	6940 (15)	5530 (24)		
1479	WB-HAVASU	3.3	6143		6320 (4)	6060 (30)	6050 (12)		
1484	APB-WESTMORE HP	1.0	5790		5780 (17)	5970 (31)	5620 (22)		
1582	AS-MAESTRALE	1.3	6403		6300 (5)	6950 (14)	5960 (14)		
1582	AS-SARAGOLLA	2.0	6323		5750 (18)	7400 (7)	5820 (17)		
1607	WB-MEAD	2.1	5420		4910 (32)	6350 (27)	5000 (33)		
1627	UC-DESERT KING-HP	1.0	5937		5040 (28)	6990 (13)	5780 (19)		
1640	APB-TIBURON	1.0	6600		5870 (16)	7750 (2)	6180 (8)		
1654	WB-MOHAVE	3.4	5990		6590 (3)	5940 (32)	5440 (25)		
1690	UC-MIWOK	1.6	6060		6150 (10)	6200 (28)	5830 (16)		
1697	LCS-KIKO	1.1	6947		6750 (1)	7970 (1)	6120 (10)		
1721	LCS-ALIRON	1.3	5947		5300 (24)	6630 (24)	5910 (15)		
1786	KAMUT	3.0	1355		--	1520 (36)	1190 (36)		
<b>ADVANCED LINES</b>									
1770	UC 13210-5	1.3	6893		6170 (7)	7720 (4)	6790 (1)		
1771	UC 13210-21	1.0	6690		6160 (9)	7410 (6)	6500 (4)		
1776	WWW D2517Bell25	1.6	6147		6070 (11)	6810 (19)	5560 (23)		
1796	UC 14215/9	1.3	6613		6040 (13)	7260 (9)	6540 (2)		
1797	UC 14215//11	1.1	6290		6700 (2)	6470 (26)	5700 (20)		
1798	UC 14215/14	1.0	5810		5590 (19)	5580 (35)	6260 (6)		
1799	UC 14215/42	2.4	5713		5690 (20)	6090 (29)	5360 (29)		
1800	AS COLOMBO	2.6	4917		4400 (33)	5940 (32)	4410 (35)		
1801	WWW D3.085	2.3	5783		5110 (25)	6810 (19)	5430 (26)		
1810	APB 571217	1.9	6357		6170 (7)	6840 (18)	6060 (11)		
1811	APB 571189	2.5	6730		--	6940 (15)	6520 (3)		
1812	APB 571353	3.2	6520		--	7030 (12)	6010 (13)		
1813	APB 335	1.0	5960		5490 (20)	6570 (25)	5820 (17)		
	MEAN	-	-		5710	6670	5650		
	CV	-	-		9.85	10.29	8.43		
	LSD (0.05)	-	-		ns	984.47	683		

Rating scale for Stripe Rust (area of flag-1 leaf affected): 1 = 0-3%, 2 = 4-14%, 3 = 15-29%, 4 = 30-49%, 5 = 50-69%, 6 = 70-84%, 7 = 85-95%, 8 = 96-100%.

Numbers in parentheses indicate relative rank in column

## 2015 Fresno Barley

Entry	Name	Yield (lbs/acre)	Test Wt (lbs/bu)	Plant Ht (in)	Lodging	Stripe	Powdery
					Soft Dough	Rust 4/21	Mildew 4/21
<u>CULTIVARS</u>							
603	UC 603	4850 (16)	49.5	35	3.0	1.0	2.3
816	MAX	4530 (25)	52.7	38	4.0	3.3	3.0
933	UC 933	5330 (2)	50.1	37	6.8	1.0	1.0
969	UC 969	4430 (28)	52.1	35	5.3	1.0	2.5
1047	ISHI	4610 (22)	50.2	35	6.0	1.0	1.3
1134	TAMALPAIS	4880 (15)	56.3	34	4.8	1.0	1.0
<u>ADVANCED LINES</u>							
162	UCD BR6	2950 (35)	45.9	43	2.0	1.0	5.0
1255	UCD B369	5180 (5)	49.6	37	5.5	1.0	1.3
1256	UCD B398	-	-	-	-	-	-
1261	UCD A237	5160 (6)	49.4	37	5.5	1.0	2.3
1263	UCD 1263	4180 (30)	58.8	40	3.8	1.0	1.0
1266	UCD 1266	4730 (19)	57.6	35	5.5	1.0	1.0
1280	UCD 1280	4470 (27)	51.1	38	6.0	1.0	1.0
1317	UCD 1317	4490 (26)	57.0	36	5.5	1.0	1.5
1318	UCD 1318	4200 (29)	57.7	30	7.0	1.0	2.5
1319	UCD 1319	4590 (24)	57.2	35	3.8	1.0	1.3
1321	UCD 1321	4610 (22)	59.2	39	6.3	1.0	1.3
1351	UCD UYP 210	4950 (13)	51.2	38	6.5	1.0	1.3
1360	UCD BUTTA 12-96	4180 (30)	53.0	38	4.0	1.0	1.3
1379	UCD UYP3	4950 (13)	50.4	37	6.8	1.0	1.0
1383	UCD UYP210	5030 (11)	50.4	32	5.5	1.0	1.5
1385	UCD 08YP 111 (1231 LATE)	5090 (9)	49.3	38	4.0	1.0	2.0
1390	UCD 1390	3410 (33)	54.7	39	5.5	1.0	1.0
1399	UCD UOP 95	5130 (7)	49.6	36	6.0	1.0	1.0
1400	UCD UOP 96	4680 (21)	50.8	34	6.0	1.0	3.3
1401	UCD UOP 97	5330 (2)	50.1	39	5.5	1.0	1.5
1402	UCD UOP 98	5050 (10)	50.4	35	6.0	1.0	1.0
1403	UCD UOP 99	5000 (12)	50.5	31	6.0	1.0	1.0
1404	UCD UOP 100	5250 (4)	48.9	37	4.3	1.0	1.5
1405	UCD UOP 102	4770 (17)	49.3	33	5.8	1.0	1.8
1406	UCD UOP 105	5350 (1)	50.5	35	6.0	1.0	1.8
1407	UCD UOP 110	4090 (32)	50.5	25	4.3	1.0	2.0
1408	UCD UOP 111	5130 (7)	57.9	25	5.0	1.0	1.8
1409	UCD MP103	4730 (19)	53.7	28	3.8	1.0	1.0
1410	UCD MP179	4770 (17)	52.0	27	3.5	1.0	1.0
1411	OSU-FULL PINT	3360 (34)	53.3	24	4.8	1.0	6.5
MEAN		4670	52.3	35	5.1	1.1	1.8
CV		11.48	2.0	10.12	21.1	23.9	37.7
LSD (0.05)		769.15	1.5	5.02	1.6	0.4	1.0

Rating scale for diseases (area of flag-1 leaf affected), lodging, and shatter: 1 = 0-3%, 2 = 4-14%, 3 = 15-29%, 4 = 30-49%, 5 = 50-69%, 6 = 70-84%, 7 = 85-95%, 8 = 96-100%.

Numbers in parentheses indicate relative rank in column.

## Small Grain Silage Variety Trial 2015

Visalia - Wright, Clark, Parry, Martinez, Taylor, Frigulti, Padilla, and Giron

Variety	Type	Harvest % H <sub>2</sub> O	Tons/A 70% H <sub>2</sub> O <sup>1</sup>	Lodging %
<b>Tricale 115</b>	T	59.8	<b>23.4 a</b>	32.5
<b>Tricale 158 EP</b>	T	65.3	<b>22.8 a</b>	7.5
<b>Tricale 105</b>	T	60.8	<b>21.1 ab</b>	64.4
<b>WB-9904</b>	HRS	58.8	<b>20.8 ab</b>	46.3
<b>Camelot</b>	Beardless T	61.8	<b>20.7 ab</b>	57.5
<b>Patwin 515</b>	HWS	52.3	<b>19.8 ab</b>	11.3
<b>WB-Patron</b>	Beardless HRS	48.0	<b>19.4 ab</b>	68.1
<b>Pacheco</b>	T	60.5	<b>19.3 ab</b>	49.4
<b>Summit 515</b>	HRS	53.5	<b>19.1 ab</b>	51.9
<b>Ultra</b>	HRS	57.0	<b>17.8 ab</b>	53.8
<b>Forage Blend</b>	n/a	76.0	<b>17.7 ab</b>	11.3
<b>SY 314</b>	HRS	56.3	<b>17.2 ab</b>	65.0
<b>Blanca Grande 515</b>	HWS	46.7	<b>15.5 ab</b>	75.0
<b>Cal Rojo</b>	HRS	55.5	<b>14.5 b</b>	56.9

<sup>1</sup> Means followed by the same lower case letter are not significantly different according to Tukey HSD ( $\alpha = 0.05$ )

This study was planted November 17, 2014 at 135 lbs./acre. Plot size was 20 by 1200 ft. and was replicated four times. Yields were lower this year most likely due to high temperatures. Although varieties are ranked highest to lowest, there were no statistical differences between varieties except for two triticales compared to the grain type Cal Rojo wheat. Under the conditions of this study, there was considerable variability. Silage harvest moistures were drier than expected. Lodging was high in most varieties except for Triticale 158 EP, Patwin 515, and the forage blend which had excellent lodging resistance.

## Small Grain Silage Variety Trial 2014

Tulare/Kings Co. - Wright, Banuelos, Souza, Collar

Variety	Type	Harvest % H <sub>2</sub> O	Tons/A 70% H <sub>2</sub> O	Height (in)	Lodging %
Patwin	HWW	65.9	24.9	35	34
Triticale 115	T	71.0	24.0	40	0
Pacheco	T	70.1	23.1	46	45
Triticale 158 EP	T	73.5	23.1	42	1
Triticale 105	T	70.1	22.9	46	62
SY 314	HRW	63.8	22.7	37	67
Joaquin Oro	HRW	59.8	22.5	36	47
Summit 515	HRW	64.5	22.3	36	63
Cal Rojo	HRW	63.5	22.2	33	54
WB Patron	Beardless HRW	63.9	21.8	40	69
Camelot	Beardless T	68.9	21.2	43	55
LC Star	HWW	66.9	21.0	38	77
PR 1404	Beardless HRW	69.4	20.5	40	76
Blanca Royale	HWW	65.7	19.8	36	58
SY VACA	Beardless SRW	72.4	19.7	40	32
Ultra	HRW	66.6	19.4	35	78
Blanca Grande 515	HWW	62.7	19.3	37	78

## Small Grain Silage Variety Trial 2014

Tulare/Kings Co. - Wright, Banuelos, Souza, Collar

Variety	Protien % DM	ADF	NDF	Lignin	Ash	TDN
Summit 515	13.6	28.1	43.5	3.8	9.5	63.5
Blanca Grande 515	13.4	28.4	43.9	3.9	9.5	63.1
Ultra	13.2	29.7	45.5	4.2	9.8	62.1
Cal Rojo	12.5	27.8	43.0	3.8	9.7	63.8
SY VACA	13.4	36.5	54.3	4.9	11.5	57.6
Blanca Royale	12.6	29.1	45.0	4.1	9.4	62.8
Patwin	12.8	30.7	47.0	4.1	10.0	61.8
LC Star	12.4	33.2	49.8	4.8	10.2	59.8
SY 314	12.2	31.9	48.0	4.4	10.9	59.8
WB Patron	12.6	29.7	45.7	4.1	9.2	62.9
PR 1404	12.9	31.8	48.1	4.4	10.3	61.0
Joaquin Oro	15.1	26.7	41.6	3.8	10.1	63.0
Pacheco	11.0	30.1	46.5	4.1	8.6	63.8
Camelot	11.3	31.9	49.0	4.6	8.3	62.4
Triticale 105	12.0	30.5	46.8	4.5	8.7	63.3
Triticale 115	10.4	30.6	46.6	4.5	9.1	62.7
Triticale 158 EP	10.7	33.3	50.7	4.9	8.6	61.3

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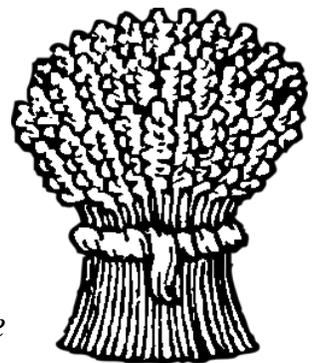
**September 2015**

*Fresno County Small Grain  
Variety Performance Trials*

*2015 California Wheat Variety Survey*

*California Wheat Commission*

*2015 Tulare County Small Grain Silage  
Variety Trial*



Steve Wright  
Farm Advisor

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