University of California Cooperative Extension • Tulare County

Small Grain News

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Kings and Tulare 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 and Fresno Counties small plot trials are shown on the following pages. The regional wheat, barley and triticale trials in Kings County were conducted at near Corcoran and at the Westside Research and Extension Center in Five Points. An Agronomy Progress Report containing more detailed results from all trials is available at http://agric.ucdavis.edu/crops/cereals/cereal.htm or on the Tulare County website at http://cetulare.ucdavis.edu.

The 2009 season was dry and warm in the spring, resulting in a high yielding crop with low disease pressure from stripe rust, *septoria tritici*, and leaf rusts. Yields were down up to 30 percent due to spring frosts in some areas.

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 resistance along with high yield potential.
- Secondly, a well-timed fungicide application was 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:

Highly Susceptible: Yecora Rojo, Summit

Susceptible: Anza, Express, Solano, Orita, Blanca Grande

Moderately Susceptible: Express, Clear White

Moderately resistant-susceptible: Joaquin

Moderately resistant: Dash 12, PR 1404, Crown, Platinum, Desert King, Blanca Royal, Paloma, Trical 118, Pacheco

Resistant: Cal Rojo, Redwing, Ultra, Patwin, Expresso, Blanca Fuerte, Camelot, Trical 105, Fortisimo, Cristallo, Lariat

2009 California Wheat Variety Survey
California Wheat Commission

The 2009 California Wheat Variety Survey showed an overall decrease in estimated wheat plantings of ~15% over 2008's reported survey acreage. The largest percentage drop in acreage appeared to be in the Sacramento Valley region, although non-Durum acreage tended to be down across much of the state. Desert Durum acreage in Southern California was down slightly, while San Joaquin Valley Durum seedings increased compared to last year's survey.

CALIFORNIA'S RED AND WHITE WHEATS:

White wheat dropped ~30% in acreage over last year, almost twice the decrease that red wheat experienced. Two of the top 3 red wheat varieties from last year, Cal Rojo and Joaquin, showed substantial decreases in acreage from last year. PR1404, with ~135,000 acres seeded, and Ultra with ~65,000 acres planted had large increases in acreage this year. In fact, these 2 varieties, commonly used as feed wheat, were the top two red wheat varieties planted in the state. The ratio between hard red wheat and white wheat (both soft and hard) in California still remained at ~75% red to 25% white. The hard white wheat variety Blanca Royale had the most white wheat acreage reported. Alpowa was expected to be the top seeded soft white wheat.

DESERT DURUM:

Total Durum wheat plantings increased slightly due to an increase in estimated planted acreage in the San Joaquin Valley compared to last year. Orita dominated the varieties in the desert, while Fortisimo was the most planted variety in the San Joaquin Valley. Volante, new Durum variety in the San Joaquin Valley had substantial acreage, while several new varieties, each with 3,500 acres or less, showed up in the desert

Released: April 27, 2009

California Wheat Variety Survey--2009

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Also available on the Web at www.californiawheat.org

VARIETIES		SACRAMENTO VALLEY	SAN JOAQUIN VALLEY	COAST	SOUTHERN CALIFORNIA	SIERRA AND NO. CALIF.	VARIETY TOTALS	2008 TOTALS
WHITE VARIETIES								
Hard White Wheat								
Blanca Fuerte	Acres	14,000	11,000				25,000	50,800
(PVP Pending)	Percent*	2.7%	2.1%				4.8%	9.6%
Blanca Grande (PVP)	Acres	2,600	6,000	1,500	3500		12,600	35,680
	Percent*	0.5%	1.0%	0.3%	0.7%		2.4%	5.6%
Blanca Royale	Acres	500	39,000				39,500	25,000
(PVP Pending)	Percent*	0.1%	7.4%				7.5%	3.9%
Patwin (PVP)	Acres	3,000	2,500				5,500	N/A
	Percent*	0.6%	0.5%				1.0%	
Soft White Wheat								
Alpowa	Acres					15,000	15,000	20,000
	Percent *					2.9%	2.9%	3.2%
Stephens	Acres					3,500	3,500	6,000
	Percent*					0.7%	0.7%	0.9%
Twin	Acres					3,500	3,500	3,800
	Percent*					0.7%	0.7%	0.6%
Yamhill	Acres	500				12,000	12,500	16,300
	Percent*	0.1%				2.3%	2.4%	2.6%
Other/Unknown	Acres	2,000	4,200	500	1,000	2,800	10,300	11,720
White	Percent*	0.4%	0.8%	0.1%	0.2%	0.5%	2.0%	1.8%
RED VARIETIES								
Cal Rojo (PVP)	Acres	21,000	34,000	500	1,000		56,500	101,100
(U.S. Patent Pending)	Percent*	4.0%	6.5%	0.1%	0.2%		10.7%	15.9%
Dash 12 (PVP)	Acres	2,500	200				2,700	7,000
	Percent*	0.5%	<0.1%				0.5%	1.1%
Expresso (PVP)	Acres	7,000	1,000			100	8,100	27,000
	Percent*	1.3%	0.2%			<0.1%	1.5%	4.3%
Joaquin (PVP)	Acres	2,000	47,000		800		49,800	116,580
	Percent*	0.4%	8.9%		0.1%		9.4%	18.2%
Lariat	Acres		3,000				3,000	N/A
(PVP Pending)	Percent*		0.6%				0.6%	
PR 1404 (PVP)	Acres	32,000	100,000	2,000	500	2,000	138,500	108,000
	Percent*	6.1%	19.0%	0.4%	0.1%	0.4%	26.0%	17.0%
Redwing	Acres	9,000	2,800				11,800	N/A
	Percent*	1.7%	0.5%				2.2%	
Triple IV (PVP)	Acres	3,000	27,000	1,500	1,100		32,600	17,820
	Percent*	0.6%	5.1%	0.3%	0.2%		6.2%	2.8%
Ultra (PVP)	Acres		65,000				65,000	40,000
	Percent*		12.4%				12.4%	6.3%
Yecora Rojo	Acres		6,000		8,500	5,000	19,500	23,300
	Percent*		1.1%		1.6%	1.0%	3.7%	3.7%
Other/Unknown	Acres	2,500	4,500	2,000	3,800	800	13,800	15,200
Red	Percent*	0.5%	0.9%	0.4%	0.7%	0.2%	2.6%	2.4%
TOTAL (ALL WHEAT OTHER THAN DURUM)		101,500	352,000	8,000	20,000	44,500	526,000	634,000
		19.3%	66.9%	1.5%	3.8%	8.4%	100%	100.0%

* Percent of "All wheat other than Durum" (526,000 acres). (PVP): These varieties are protected under the Plant Variety Protection Act.

Table 02. 2009 AND 2007-09 DURUM WHEAT YIELD SUMMARY (LBS/ACRE)

Entry	Name	San Joaquin Valley 2009 (3 loc/yr)		2008-09 (6 loc/yr)		2007-09 (9 loc/yr)	
CULTIVARS							
878	DURAKING	4990	(14)	5290	(14)	5770	(6)
951	KRONOS	4750	(20)	5700	(4)	5770	(7)
1166	CROWN	5230	(6)	5750	(2)	5870	(4)
1210	PLATINUM	4870	(16)	5650	(5)	5920	(2)
1215	ORITA	-		-		-	
1375	DESERT KING	5020	(11)	5560	(7)	5900	(3)
1429	FORTISSIMO	5340	(2)	5520	(8)	5660	(9)
1430	RSI 59	-		-		-	
1431	VOLANTE	5300	(3)	5730	(3)	5780	(5)
1473	Q-MAX	4510	(24)	4980	(15)	5250	(10)
1479	HAVASU	-		-		-	
1484	WESTMORE	5140	(8)	5610	(6)	-	
1582	MAESTRALE	4690	(22)	5400	(13)	5760	(8)
1583	SARAGOLLA	5280	(5)	6040	(1)	6300	(1)
ADVANCED LINES							
1506	WWW D6575D	5090	(9)	-		-	
1542	WB YU 803-42	-		-		-	
1543	WB YU 803-52	-		-		-	
1544	WB YU 803-54	-		-		-	
1585	UCD 06222/53	5010	(12)	5500	(10)	-	
1598	UCD 06222/52	4620	(23)	5440	(12)	-	
1606	WB DA804-24	4870	(17)	5470	(11)	-	
1607	WB YU802-4	-		-		-	
1613	APB DO4AZ-335	4980	(15)	5510	(9)	-	
1627	UCD 08201/18	4740	(21)	-		-	
1628	UCD 08201/20	5300	(4)	-		-	
1629	UCD 08201/21	5540	(1)	-		-	
1630	BLUE BEARD	2270	(26)	-		-	
1631	DURUM IRAQ	2570	(25)	-		-	
1632	WB SJ806-13	5220	(7)	-		-	
1633	WB YU805-17	-		-		-	
1634	WB YU805-84	-		-		-	
1635	RSI 07W60083	4990	(13)	-		-	
1639	APB D1-1-5P	4780	(19)	-		-	
1640	APB D1-2	4860	(18)	-		-	
1641	APB D2-97	5060	(10)	-		-	
	MEAN	4810		5760		5920	
	CV	9.9		10.0		11.0	
	LSD (.05)	380		360		320	

Table 01. 2009 AND 2007-09 COMMON WHEAT AND TRITICALE YIELD SUMMARY (LBS/ACRE) FRESNO, KINGS, AND KERN COUNTIES

Entry	Name	San Joaquin Valley 2009 (3 Loc)		2008-09 (6 Loc/Yr)		2007-09 (9 Loc/Yr)	
CULTIVARS							
20	ANZA	4680	(23)	5060	(16)	5170	(14)
112	YECORA ROJO	4110	(29)	4970	(17)	5140	(16)
788	EXPRESS	4460	(27)	4810	(19)	5230	(13)
1156	BLANCA GRANDE	5490	(5)	6060	(3)	6230	(2)
1340	MIKA	4560	(25)	4960	(18)	5240	(12)
1361	CLEAR WHITE	5130	(13)	5380	(13)	5310	(11)
1419	PATWIN	5160	(11)	5800	(6)	5610	(8)
1424	JOAQUIN	5210	(9)	5480	(11)	5870	(5)
1478	CAL ROJO	5530	(4)	6020	(4)	5750	(7)
1495	LASSIK	5790	(1)	5850	(5)	5920	(4)
1500	EXPRESSO	4870	(19)	5070	(15)	5160	(15)
1521	REDWING	5790	(1)	6240	(2)	6470	(1)
1522	BLANCA ROYALE	5190	(10)	5600	(8)	5850	(6)
1523	BLANCA FUERTE	5160	(11)	5790	(7)	5980	(3)
1548	CHRISTALLO	5120	(15)	5290	(14)	5590	(10)
1550	TRIPLE IV	-		-		-	
1555	LARIAT	5000	(16)	5420	(12)	5600	(9)
1605	PALOMA	4980	(17)	5580	(9)	-	
ADVANCED LINES							
1592	RSI 01W20153	5680	(3)	6580	(1)	-	
1600	UCD 07013/30	4930	(18)	5520	(10)	-	
1616	UCD 0810/5	5310	(8)	-		-	
1617	UCD 08013/1	4730	(21)	-		-	
1618	UCD 08013/24	5420	(7)	-		-	
1619	SONORA	3210	(33)	-		-	
1620	WIT WOLKORING	3310	(32)	-		-	
1621	WWW BR2306	3780	(31)	-		-	
1622	WWW IMI5345-4	4290	(28)	-		-	
1623	WB DA905-55	5130	(13)	-		-	
1624	WB DA905-10	5430	(6)	-		-	
1625	WB SJ905-162W	4720	(22)	-		-	
1626	RSI 06W30002	4540	(26)	-		-	
1636	APB W1-10	4780	(20)	-		-	
1637	APB W8-2	4670	(24)	-		-	
1638	APB W11-6	4020	(30)	-		-	
TRITICALE							
3097	TRICAL BRAND 105	5460	(3)	5250	(4)	5540	(2)
3156	TRICAL BRAND 118	5510	(2)	5340	(3)	5780	(1)
3158	TRICAL BRAND 98	4520	(5)	4400	(5)	4950	(3)
3163	TRICAL BRAND 110	6250	(1)	6100	(1)	-	
3164	PACHECO	4790	(4)	5570	(2)	-	
MEAN		4910		5670		5690	
CV		11.9		12.4		11.7	
LSD (.05)		470		440		330	

Numbers in parentheses indicate relative rank.

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Table 03. 2009 FRESNO COMMON WHEAT TEST

Entry	Name	Yield (lbs/acre)		Test Wt (lbs/bu)	Protein %	Plant Ht (in)	Lodging Harvest	Septoria	Stripe Rust
CULTIVARS									
20	ANZA	6180	(23)	61.7	8.39	36	2.3	1.0	6.5
112	YECORA ROJO	5500	(29)	62.4	10.24	33	1.0	1.0	6.5
788	EXPRESS	6450	(18)	63.1	10.45	35	1.0	1.0	1.8
1156	BLANCA GRANDE	6870	(9)	64.1	11.15	36	1.5	1.0	1.0
1340	MIKA	5730	(27)	61.5	11.68	38	1.5	1.0	1.0
1361	CLEAR WHITE	6760	(12)	63.0	10.05	40	1.0	1.0	1.0
1419	PATWIN	6460	(17)	61.8	8.28	31	1.0	1.0	1.0
1424	JOAQUIN	7030	(5)	63.1	10.58	37	1.8	1.0	1.0
1478	CAL ROJO	6850	(10)	61.5	9.73	35	1.0	1.0	1.0
1495	LASSIK	6760	(12)	62.7	11.61	36	1.8	1.0	1.0
1500	EXPRESSO	6440	(19)	63.5	11.45	31	1.3	1.0	1.0
1521	REDWING	7380	(2)	61.1	9.48	33	1.0	1.8	1.0
1522	BLANCA ROYALE	6940	(8)	63.1	9.95	31	1.0	1.0	1.0
1523	BLANCA FUERTE	7070	(4)	64.2	8.05	33	1.0	1.0	1.0
1548	CHRISTALLO	6650	(15)	63.2	9.27	37	1.3	1.0	1.0
1555	LARIAT	6470	(16)	62.3	11.71	37	1.0	1.0	1.0
1605	PALOMA	6310	(22)	62.8	10.79	33	3.0	1.0	1.0
ADVANCED LINES									
1592	RSI 01W20153	7400	(1)	63.0	8.91	39	1.3	1.0	1.3
1600	UCD 07013/30	6980	(7)	63.1	9.30	28	1.0	1.0	1.0
1616	UCD 0810/5	7030	(5)	63.4	9.91	33	1.0	1.3	1.0
1617	UCD 08013/1	6420	(20)	62.4	10.88	34	1.0	1.0	1.0
1618	UCD 08013/24	6770	(11)	62.4	10.04	36	2.0	1.0	1.3
1619	SONORA	3010	(33)	64.3	7.83	43	7.8	1.0	1.3
1620	WIT WOLKORING	3610	(32)	63.7	11.26	43	8.0	1.0	1.0
1621	WWW BR2306	5560	(28)	61.8	11.59	40	1.5	1.0	7.0
1622	WWW IMI5345-4	5090	(30)	61.9	12.04	39	2.5	1.0	7.3
1623	WB DA905-55	6710	(14)	63.7	9.70	35	1.0	1.3	1.0
1624	WB DA905-10	7270	(3)	63.0	9.92	40	1.0	1.0	1.0
1625	WB SJ905-162W	6370	(21)	63.0	10.34	31	3.3	1.0	1.0
1626	RSI 06W30002	6020	(25)	62.4	10.68	40	1.0	1.0	1.0
1636	APB W1-10	5820	(26)	60.8	13.61	39	2.0	1.0	1.3
1637	APB W8-2	6060	(24)	61.9	10.88	39	1.0	1.0	1.3
1638	APB W11-6	4960	(31)	62.1	12.97	32	3.8	1.0	1.0
TRITICALE									
3097	TRICAL BRAND 105	6520	(3)	59.8		41	1.0	1.0	1.0
3156	TRICAL BRAND 118	6860	(2)	58.5		37	1.0	1.0	1.5
3158	TRICAL BRAND 98	6370	(4)	56.2		36	1.0	1.5	5.3
3163	TRICAL BRAND 110	8040	(1)	58.8		36	1.0	1.0	4.0
3164	PACHECO	4760	(5)	58.4		37	3.5	1.0	1.0

Rating scale for diseases (area of flag-1 leaf affected), lodging, shatter, blackpoint, and yellowberry:

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.

able 04. 2009 KINGS COUNTY DURUM WHEAT TEST

Entry	Name	Yield (lbs/acre)		Test Wt (lbs/bu)	Protein %	Plant Ht (in)	Lodging Harvest	Stripe Rust
CULTIVARS								
878	DURAKING	2630	(16)	62.2	14.35	29	1.0	1.3
951	KRONOS	2560	(17)	60.7	14.61	30	1.0	1.0
1166	CROWN	3010	(2)	60.7	14.20	31	1.0	1.0
1210	PLATINUM	2680	(12)	58.5	15.47	29	1.0	1.0
1375	DESERT KING	2550	(19)	61.0	14.75	33	1.0	1.0
1429	FORTISSIMO	2790	(6)	61.1	14.82	31	1.0	1.0
1431	VOLANTE	2890	(5)	62.5	14.20	29	1.0	1.0
1473	Q-MAX	2950	(3)	61.0	14.54	33	1.0	1.0
1484	WESTMORE	2500	(20)	60.1	15.13	30	1.3	1.0
1582	MAESTRALE	2640	(14)	61.2	15.16	33	1.5	2.0
1583	SARAGOLLA	2920	(4)	62.4	13.37	30	1.0	1.0
ADVANCED LINES								
1506	WWW D6575D	2780	(8)	61.2	14.75	34	1.0	1.0
1585	UCD 06222/53	2550	(18)	61.7	13.61	32	1.3	3.0
1598	UCD 06222/52	2650	(13)	60.5	14.10	29	1.0	3.5
1606	WB DA804-24	2630	(15)	60.4	15.32	30	1.0	1.0
1613	APB DO4AZ-335	2700	(11)	61.0	14.01	27	1.0	1.0
1627	UCD 08201/18	2360	(23)	57.8	14.82	30	1.0	1.0
1628	UCD 08201/20	2790	(7)	61.6	14.63	35	1.0	1.0
1629	UCD 08201/21	3150	(1)	62.2	14.93	31	1.0	1.0
1630	BLUE BEARD	2310	(25)	62.5	15.43	50	4.3	1.0
1631	DURUM IRAQ	2340	(24)	60.8	15.77	53	1.8	1.0
1632	WB SJ806-13	2740	(9)	61.5	15.79	30	1.0	2.0
1635	RSI 07W60083	2740	(10)	61.5	15.42	30	1.0	1.0
1639	APB D1-1-5P	2430	(21)	61.7	13.22	34	1.0	1.0
1640	APB D1-2	2400	(22)	60.1	15.26	29	1.0	1.0
1641	APB D2-97	2280	(26)	61.4	13.92	29	1.0	1.0
	MEAN	2650		61.0		32	1.2	1.3
	CV	10.8		1.4		8.0	23.6	75.0
	LSD (.05)	400		1.7		5.0	0.4	1.3

Rating scale for diseases (area of flag-1 leaf affected), lodging, shatter, blackpoint, and yellowberry: 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.

Table 05. 2009 FRESNO COUNTY DURUM WHEAT

TEST

Entry	Name	Yield (lbs/acre)		Test Wt (lbs/bu)	Grain Protein	Plant Ht (in)	Lodging Harvest	Septoria	Stripe Rust	Powdery Mildew
CULTIVARS										
878	DURAKING	7220	(1)	62.7	15.19	33	1.5	1.5	1.0	2.0
951	KRONOS	6570	(15)	61.9	15.26	31	3.8	1.0	1.0	1.0
1166	CROWN	6670	(11)	61.0	14.33	37	1.0	1.0	1.0	2.0
1210	PLATINUM	6680	(10)	62.5	15.84	33	1.3	1.3	1.0	1.0
1375	DESERT KING	6510	(18)	63.3	14.70	36	1.0	1.0	1.0	1.0
1429	FORTISSIMO	7080	(3)	63.0	14.12	34	1.0	1.0	1.0	1.0
1431	VOLANTE	6730	(8)	63.2	14.12	34	1.0	1.0	1.0	1.0
1473	Q-MAX	6310	(21)	61.2	15.46	40	1.0	1.0	1.0	1.0
1484	WESTMORE	6640	(12)	61.9	15.68	36	1.8	1.0	1.0	1.0
1582	MAESTRALE	6020	(24)	63.7	15.36	34	2.0	1.0	1.0	1.0
1583	SARAGOLLA	7150	(2)	63.4	14.16	37	1.3	1.0	1.0	1.0
ADVANCED LINES										
1506	WWW D6575D	6730	(9)	63.3	15.36	34	1.8	1.3	1.0	1.0
1585	UCD 06222/53	6930	(5)	64.0	14.18	36	4.8	1.0	1.3	1.0
1598	UCD 06222/52	6340	(20)	63.2	15.83	36	4.5	1.3	2.0	1.0
1606	WB DA804-24	6510	(17)	63.0	15.83	34	2.5	1.5	1.0	1.0
1613	APB DO4AZ-335	6220	(22)	61.0	15.12	30	1.5	1.3	1.0	1.5
1627	UCD 08201/18	6220	(23)	61.4	17.36	33	1.3	1.0	1.0	1.0
1628	UCD 08201/20	6870	(6)	63.2	14.85	35	2.0	1.0	1.0	1.0
1629	UCD 08201/21	6860	(7)	64.2	14.68	33	3.0	1.0	1.0	1.0
1630	BLUE BEARD	2220	(26)	63.0	13.79	51	6.8	1.0	1.0	1.0
1631	DURUM IRAQ	3210	(25)	63.2	15.44	51	5.8	1.0	1.0	1.0
1632	WB SJ806-13	6570	(16)	63.9	15.01	34	1.5	1.0	1.0	1.0
1635	RSI 07W60083	6620	(13)	63.1	15.62	36	1.3	1.0	1.0	1.0
1639	APB D1-1-5P	6410	(19)	64.1	14.29	34	2.5	1.3	1.0	1.0
1640	APB D1-2	6960	(4)	61.6	15.38	32	2.0	1.0	1.0	1.0
1641	APB D2-97	6610	(14)	62.6	15.01	35	3.5	1.0	1.0	2.8
	MEAN	6340		62.8		35	2.3	1.1	1.0	1.2
	CV	8.5		0.8		8.8	47.2	27.7	28.1	76.5
	LSD (.05)	760		1.0		5.0	1.6	ns	0.4	ns

Rating scale for diseases (area of flag-1 leaf affected), lodging, shatter, blackpoint, and yellowberry: 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.

Table 06. 2009 TULARE RAINFED COMMON WHEAT AND TRITICALE TEST

Entry	Name	Yield (lbs/acre)		Plant Ht (in)
CULTIVARS				
20	ANZA	250	(32)	17
112	YECORA ROJO	620	(6)	17
788	EXPRESS	350	(24)	16
1156	BLANCA GRANDE	320	(28)	20
1340	MIKA	280	(31)	18
1361	CLEAR WHITE	650	(3)	21
1419	PATWIN	650	(4)	19
1424	JOAQUIN	330	(27)	16
1478	CAL ROJO	200	(34)	17
1495	LASSIK	220	(33)	19
1500	EXPRESSO	560	(9)	20
1521	REDWING	300	(30)	14
1522	BLANCA ROYALE	400	(20)	20
1523	BLANCA FUERTE	630	(5)	19
1548	CHRISTALLO	490	(16)	15
1550	TRIPLE IV	400	(21)	16
1555	LARIAT	340	(25)	19
ADVANCED LINES				
1592	RSI 01W20153	750	(1)	22
1600	UCD 07013/30	410	(19)	17
1616	UCD 0810/5	310	(29)	15
1617	UCD 08013/1	510	(15)	17
1618	UCD 08013/24	360	(23)	16
1619	SONORA	170	(35)	15
1620	WIT WOLKORING	330	(26)	19
1621	WWW BR2306	570	(8)	23
1622	WWW IMI5345-4	540	(13)	22
1626	RSI 06W30002	450	(17)	17
1636	APB W1-10	420	(18)	25
1637	APB W8-2	540	(14)	22
1638	APB W11-6	540	(11)	19
TRITICALE				
3097	TRICAL BRAND 105	540	(12)	20
3156	TRICAL BRAND 118	550	(10)	18
3158	TRICAL BRAND 98	660	(2)	26
3163	TRICAL BRAND 110	610	(7)	23
3164	PACHECO	380	(22)	17
	MEAN	450		19
	CV	60.2		16.9
	LSD (.05)	ns		ns

Numbers in parentheses indicate relative rank in column.

Table 07. 2009 AND 2007-09 BARLEY YIELD SUMMARY (LBS/ACRE)

Entry	Name	San Joaquin Valley					
		2009 Fresno		2008-09 (2 Loc/Yr)		2007-09 (3 Loc/Yr)	
CULTIVARS							
603	UC 603	6370	(14)	6160	(7)	5400	(9)
816	MAX	7510	(1)	7580	(1)	-	
933	UC 933	6110	(16)	5950	(8)	6410	(6)
951	MELTAN	6230	(15)	5460	(10)	4660	(10)
969	UC 969	5870	(18)	5050	(11)	5720	(7)
1047	ISHI	6870	(6)	6930	(3)	7080	(3)
1134	TAMALPAIS	6020	(17)	5590	(9)	5660	(8)
ADVANCED LINES							
1095	23 IBYT 7	6660	(10)	6350	(5)	6680	(5)
1115	UCD C135	7290	(2)	7450	(2)	7350	(1)
1116	UCD C140	6720	(8)	6300	(6)	6720	(4)
1118	UCD C147	7030	(3)	6720	(4)	7310	(2)
1231	UCD 08YP 111	6990	(4)	-		-	
1232	UCD 08YP 301	6920	(5)	-		-	
1233	UCD 08YP 244	6440	(12)	-		-	
1234	UCD 08YP 247	6420	(13)	-		-	
1235	UCD 08YP 254	6670	(9)	-		-	
1236	UCD 08YP 258	6830	(7)	-		-	
1237	WWW BA4513	6660	(11)	-		-	
	MEAN	6650		6320		6260	
	CV	8.2		11.0		10.6	
	LSD (.05)	770		980		660	

Numbers in parentheses indicate relative rank in column.

TABLE 08. 2009 FRESNO BARLEY TEST

Entry	Name	Yield (lbs/acre)		Test Wt (lbs/bu)	Plant Ht (in)	Lodging Harvest	Septoria	Net Blotch	Stripe Rust	Shatter
CULTIVARS										
603	UC 603	6370	(14)	52.6	40	1.0	1.0	1.3	1.0	1.0
816	MAX	7510	(1)	52.9	30	1.0	1.0	1.0	4.0	1.0
933	UC 933	6110	(16)	51.6	33	1.0	1.0	1.0	1.0	1.0
951	MELTAN	6230	(15)	56.4	30	1.0	1.0	1.0	1.0	1.0
969	UC 969	5870	(18)	54.6	39	1.0	1.0	1.5	1.0	2.3
1047	ISHI	6870	(6)	50.8	33	1.3	1.0	1.5	1.0	1.0
1134	TAMALPAIS	6020	(17)	59.9	33	1.0	1.3	1.5	1.5	1.0
ADVANCED LINES										
1095	23 IBYT 7	6660	(10)	50.6	32	1.0	1.0	2.0	1.0	1.0
1115	UCD C135	7290	(2)	51.5	34	1.5	1.0	2.0	1.0	1.0
1116	UCD C140	6720	(8)	51.9	31	1.0	1.3	2.0	1.0	1.0
1118	UCD C147	7030	(3)	51.0	32	1.5	1.0	1.0	1.0	1.0
1231	UCD 08YP 111	6990	(4)	51.8	36	1.0	1.0	1.0	1.0	1.0
1232	UCD 08YP 301	6920	(5)	51.6	33	1.3	1.0	1.8	1.0	1.0
1233	UCD 08YP 244	6440	(12)	50.6	37	1.0	1.0	1.0	1.3	1.0
1234	UCD 08YP 247	6420	(13)	51.5	35	1.0	1.0	1.3	1.0	1.0
1235	UCD 08YP 254	6670	(9)	50.9	34	2.0	1.0	1.0	1.3	1.0
1236	UCD 08YP 258	6830	(7)	51.2	35	1.0	1.0	1.0	1.8	1.0
1237	WWW BA4513	6660	(11)	52.6	35	1.0	1.0	2.0	1.3	1.0
	MEAN	6650		52.4	34	1.1	1.0	1.4	1.3	1.1
	CV	8.2		2.1	6.1	32.3	15.7	54.1	47.8	11
	LSD (.05)	770		2.3	3	0.5	ns	ns	0.9	0.2

Rating scale for diseases (area of flag-1 leaf affected), lodging, shatter, blackpoint, and yellowberry: 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.

Table 09. 2009 TULARE RAINFED BARLEY TEST

Entry	Name	Yield (lbs/acre)		Plant Ht (in)
CULTIVARS				
603	UC 603	290	(12)	15
816	MAX	70	(18)	6
933	UC 933	1130	(1)	20
951	MELTAN	570	(7)	12
969	UC 969	800	(4)	18
1047	ISHI	370	(9)	11
1134	TAMALPAIS	330	(11)	14
ADVANCED LINES				
1095	23 IBYT 7	650	(5)	13
1115	UCD C135	540	(8)	11
1116	UCD C140	600	(6)	13
1118	UCD C147	1060	(2)	19
1231	UCD 08YP 111	340	(10)	11
1232	UCD 08YP 301	890	(3)	15
1233	UCD 08YP 244	240	(14)	10
1234	UCD 08YP 247	120	(17)	6
1235	UCD 08YP 254	260	(13)	11
1236	UCD 08YP 258	180	(16)	9
1237	WWW BA4513	190	(15)	10
	MEAN	480		12
	CV	58.7		30.3
	LSD (.05)	400		ns

Numbers in parentheses indicate relative rank in column.

Small Grain Silage Variety Study

2009 - Tulare County - Milky Way Dairy - S. Wright, N. Silva-del-Rio, C. Collar, G. Banuelos									
Variety	**Type**	**Tons/Acre**	**Harvest**	**%**	**Height**	**TDN[2]**	**%**	**% ADF[4]**	**%**

		70% H_20	% H_20	Lodging	(in)		Protein[3]		NDF[5]
*** Trittical 110**	Triticale	30.3 A	62.3	5	44	58.8 A	8.1 ABC	28.6 D	49.7 B
*** 40264**	Triticale	29.6 A	62.4	21	40	58.4 A	8.5 A	31.7 AB	52.6 AB
Pacheco	Triticale	29.0 A	61.0	12	44	57.5 A	7.9 BC	31.75 ABC	52.3 AB
Trittical 118	Triticale	26.9 AB	64.4	39	44	57.4 AB	7.7 C	33.0 A	53.6 A
63111	Beardless Triticale	25.8 ABC	61.3	34	43	58.5 A	8.4 A	29.9 BCD	50.9 AB
Camelot	BeardlessTriticale	25.5 ABC	62.2	31	45	57.3 AB	8.1 ABC	32.5 AB	53.8 A
Ultra	Red Wheat	22.5 BC	59.6	24	39	53.9 C	8.3 AB	30.5 BCD	51.7 AB
Joaquin	Red Wheat	22.0 BC	54.6	63	39	56.2 ABC	8.2 AB	29.9 BCD	50.9 AB
Red Wing	Red Wheat	21.6 BC	57.8	71	35	54.3 BC	7.7 C	30.7 ABCD	51.7 AB
PR 1404	Beardless Wheat	19.3 C	59.4	76	39	57.6 A	8.6 A	29.2 CD	50.3 AB
LSD .05		*5.59*	*2.70*			*3.15*	*0.47*	*2.49*	*3.97*
% CV		*10.4*	*3.15*			*3.81*	*3.95*	*5.59*	*5.28*
2008 - Tulare County - Milky Way Dairy - S. Wright, C. Collar, G. Banuelos, N. Silva-del-Rio									
Triticale 118	Triticale	29.5 **A**[1]	63.8	4	39	53.8 **A**	8.7 B	30.2 A**B**	45.8 AB**C**
Triticale 105	Triticale	29.2 **A**	63.7	10	41	53.0 **A**B	8.3 B	31.1 A**B**	47.3 AB
PR 1404	Beardless Wheat	28.7 **A**B	62.5	31	39	53.0 **A**B	9.0 **A**B	31.2 A**B**	46.2 AB**C**
Red Wing	Red Wheat	28.6 **A**B	60.1	0	32	52.4 B	8.6 B	32.1 A	48.6 A
Triticale 110	Triticale	28.5 **A**B	65.7	0	36	53.7 **A**	8.7 B	30.1 A**B**	45.0 B**C**
Camelot	Beardless Triticale	27.1 **A**BC	64.3	0	39	53.3 **A**B	8.9 **A**B	30.8 A**B**	46.8 AB
Ultra	Red Wheat	26.6 **A**BC	60.1	0	32	53.3 **A**B	8.6 B	30.8 A**B**	45.6 AB**C**
Blanca Royal	White Wheat	25.9 BC	57.9	16	33	52.4 B	8.9 **A**B	32.2 A	48.1 AB
Blanca Fuerte	White Wheat	25.3 BC	61.7	0	32	54.3 **A**	10.0 **A**	29.4 **B**	43.3 **C**
Joaquin	Red Wheat	25.1 C	59.0	9	35	53.0 **A**B	9.0 **A**B	31.3 A**B**	45.6 AB**C**
LSD .05		*3.11*	*2.21*			*1.50*	*1.13*	*2.23*	*3.16*
% CV		*7.82*	*3.99*			*1.94*	*8.78*	*4.97*	*4.72*

[1]Varieties followed by the same letter are not statistically different. Bolded letters indicate the most desirable outcome for the different variables.

[2] Calculated based on NRC(2001) for yr 2009, and calculated based on ADF value and the formula for alfalfa for yr 2008.

[3] Official Method of analysis AOAC 990.33.

[4] Official Method of analysis AOAC 973.18.

[5] Method of analysis based on Van Soest et al. (1991).

* Varieties have been pulled off the market

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Small Grain News

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In this issue:
Small Grain Variety
Performance Trials in
Kings and Tulare Counties

Steve Wright, Farm Advisor