

2014 Collaborator Meeting

Phil Mayo – Program Leader

Diane Prato – Lab Assistant

Sam Fraser – Staff Research Associate

Small Grains Regional Testing Program

Collaborative Wheat Quality
Evaluation Program

Regional Testing Program

Cultivars

Advanced Lines

Common Wheat

Durum Wheat

Barley

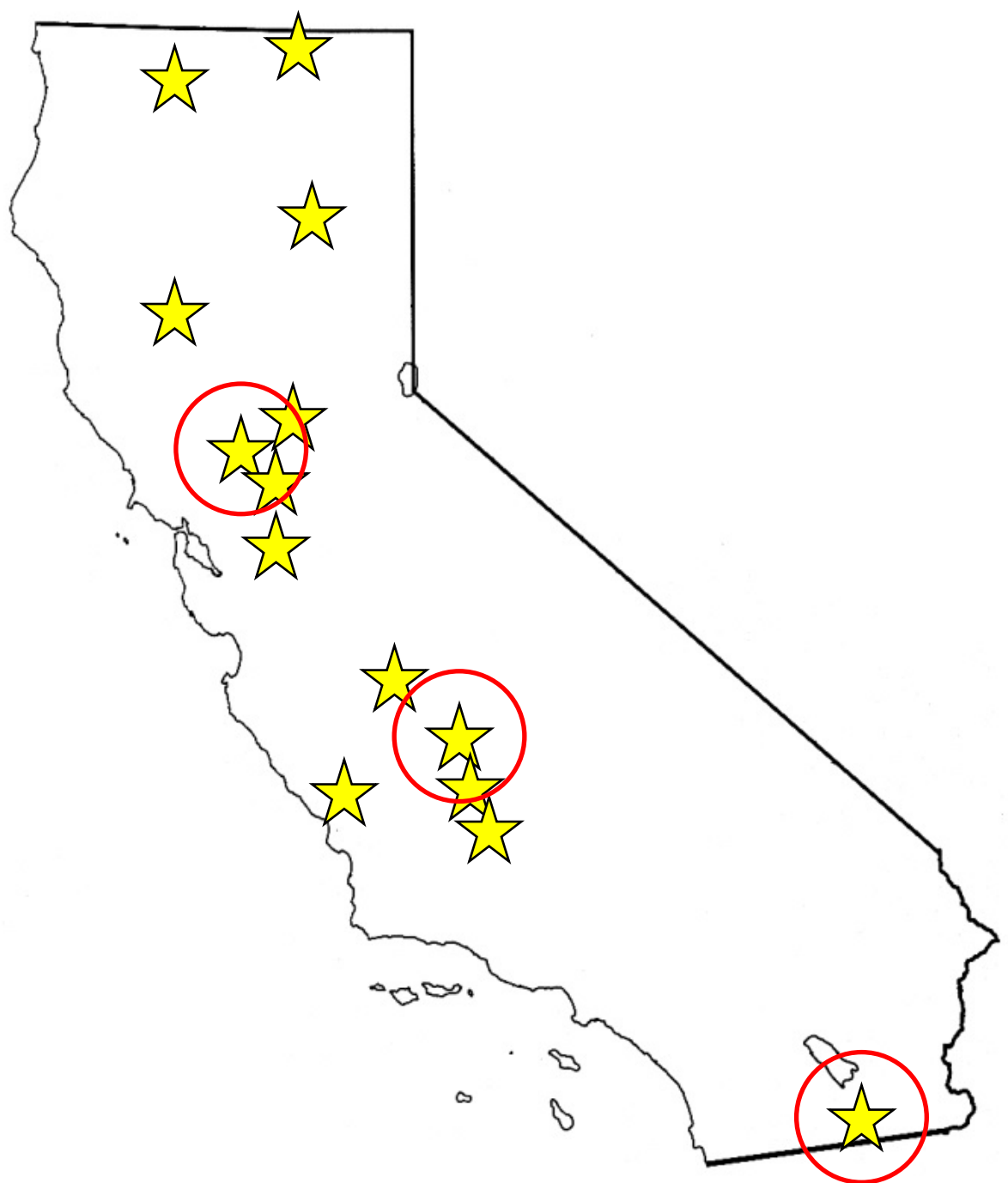
14 Sites from Oregon
To Arizona in regions
where wheat is grown

Collaborative Common:

Davis and Kings

Collaborative Durum:

Imperial Valley



2013 Davis Regional Variety Trials

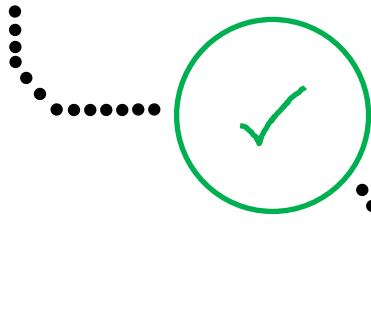


Regionals

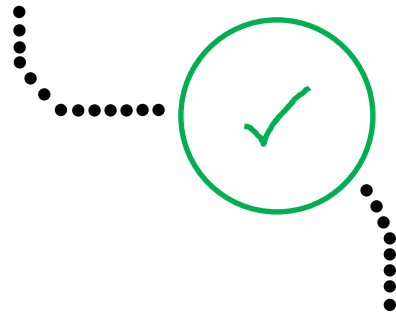
Collabs

Journey of a Variety of Wheat

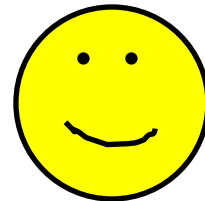
Regional Testing Program



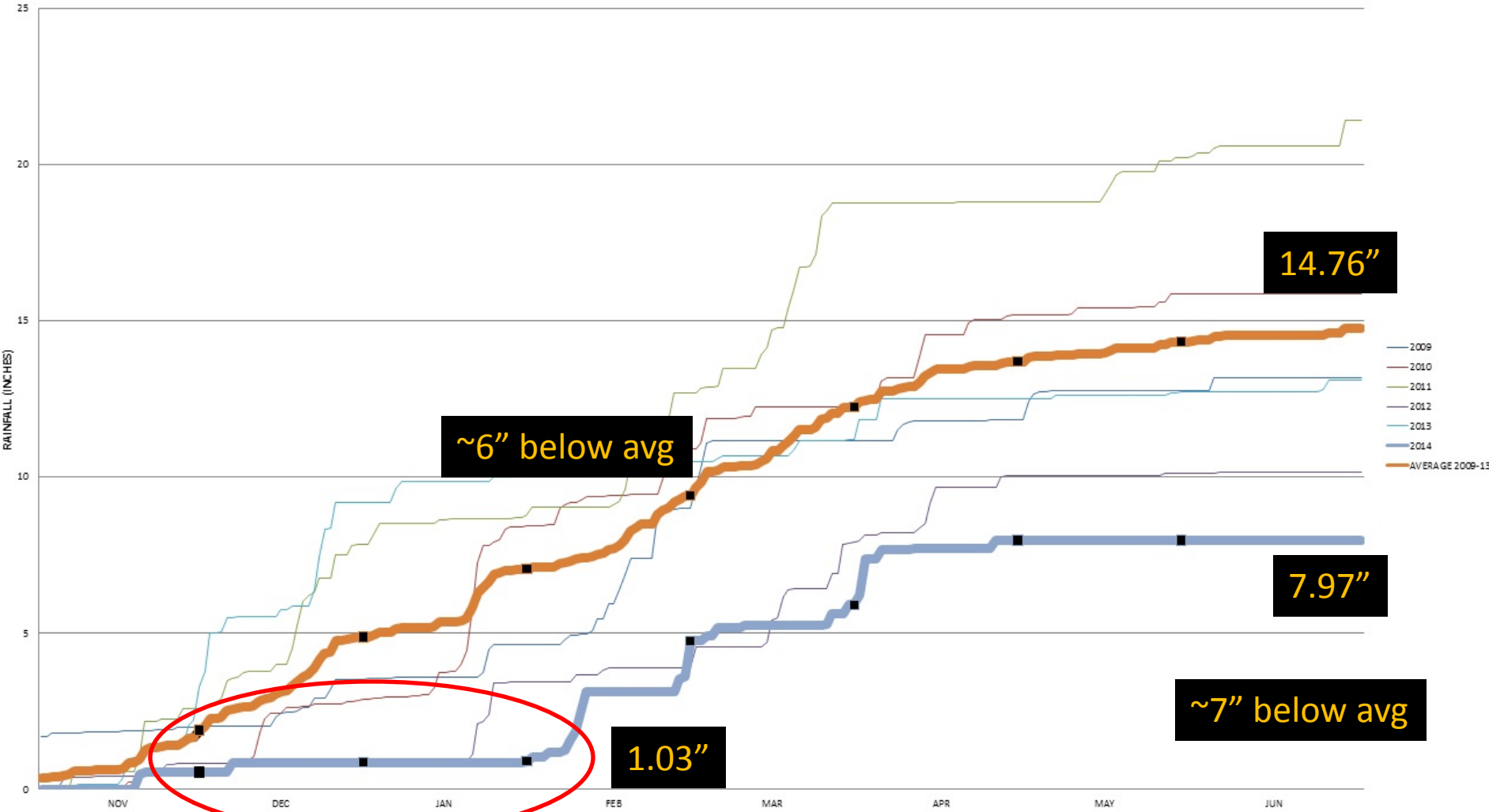
Collaborative Quality Program



Release for Sale in California!

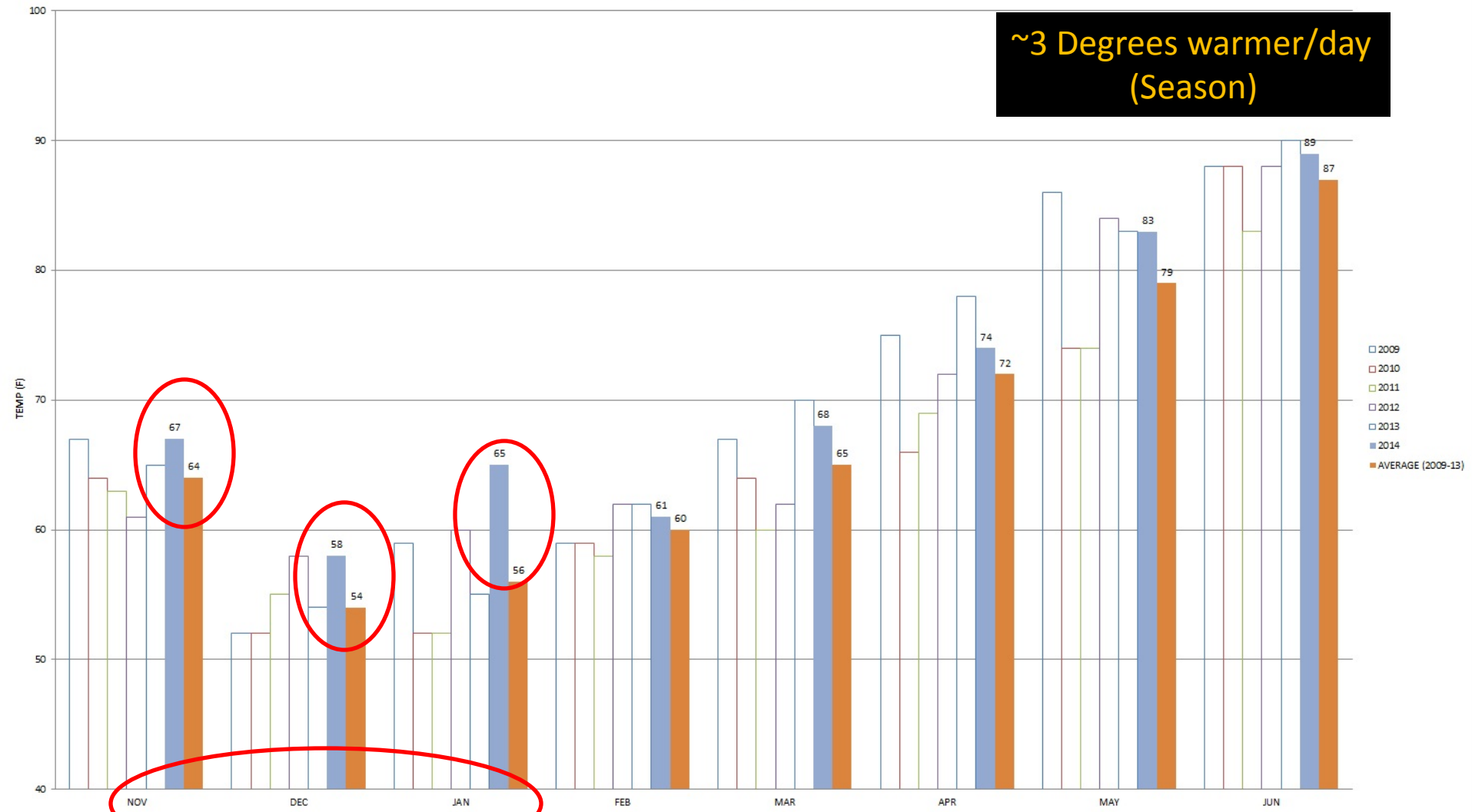


DAVIS RAINFALL



DAVIS TEMP BY MONTH

~3 Degrees warmer/day
(Season)



~5 Degrees warmer/day (Nov-Jan)

Low Rainfall: ~ 7" below average

Higher Temperatures: ~3° above average

Extra Irrigations

Early Drought Stress

Lowered Yields/Quality

Harvesting for hay instead of grain

2014 Collaborative Wheat Program

6 Mills – Common Wheat

ADM Milling

Ardent Mills (Minneapolis, MN Location)

Ardent Mills (Omaha, NE Location)

Bay State Milling

California Wheat Commission

Cereal Foods Processors

3 Mills – Durum Wheat

Ardent Mills (Omaha, NE Location)

California Wheat Commission

Miller Milling

2014 COMMON WHEAT COLLABORATIVE ENTRY LIST

ENTRY	NAME	TYPE
1	CAL ROJO	HRS
2	BLANCA GRANDE 515	HWS
3	SUMMIT 515	HRS
4	SY 314	HRS
5	LCS 08SB0738	HWS
6	UC 1745	HRS
7	CAL ROJO	HRS
8	BLANCA GRANDE 515	HWS
9	UC 13010-23	HRS
10	UC 13010-31	HRS
11	UC 13010-34	HWS
12	CAL ROJO	HRS
13	BLANCA GRANDE 515	HWS
14	LCS 11SB0096	HRS
15	LCS 11SB0097	HRS
16	APB 12104	HRS
17	APB 11512	HWS

2014 DURUM WHEAT COLLABORATIVE ENTRY LIST

ENTRY	NAME	TYPE
1	KRONOS	DUR
2	WB YU807-115	DUR
3	KRONOS	DUR
4	UC 13210-5	DUR
5	UC 13210-21	DUR
6	KRONOS	DUR
7	APB 11705	DUR
8	APB 11710	DUR

2014 COMMON WHEAT COLLABORATIVE ENTRY LIST

ENTRY	NAME	TYPE
1	CAL ROJO	HRS
2	BLANCA GRANDE 515	HWS
3		HRS
4		HRS
5		HWS
6		HRS
7		HRS
8		HWS
9		HRS
10		HRS
11		HWS
12		HRS
13		HWS
14		HRS
15		HRS
16		HRS
17		HWS




















2014 DURUM WHEAT COLLABORATIVE ENTRY LIST

ENTRY	NAME	TYPE
1	KRONOS	DUR
2		DUR
3		DUR
4		DUR
5		DUR
6		DUR
7		DUR
8		DUR



	TEST WT							PRO					
	ADM	BSM	CFP	CONAGRA	CWC	GENMILLS		ADM	BSM	CFP	CONAGRA	CWC	GENMILLS
CAL ROJO	60.7	60.5	60.6	60.7	60.9	61.3		15.5	15.1	15.5	15.4	14.7	15.0
BLANCA GRANDE 515	64.7	64.8	64.9	65.4	65.0	65.6		13.3	13.1	12.7	12.7	12.2	12.7
SUMMIT 515	62.2	61.8	61.8	62.0	61.6	62.0		14.9	14.7	14.6	14.8	14.0	14.8
SY 314	61.0	61.1	61.4	61.4	61.0	61.6		14.9	14.7	14.7	14.7	14.1	14.8
LCS 08SB0738	64.4	64.2	64.1	64.4	64.0	64.5		11.5	11.3	11.0	11.1	10.3	11.5
UC 1745	64.1	63.5	63.9	64.2	63.6	64.2		14.8	14.7	14.4	14.6	13.9	14.5
CAL ROJO	60.1	60.5	60.4	60.8	60.4	61.1		15.5	15.2	15.2	15.5	14.8	15.1
BLANCA GRANDE 515	64.7	64.8	64.7	65.2	65.4	65.6		13.3	13.0	12.7	12.7	11.3	12.6
UC 13010-23	63.8	64.2	63.5	63.6	63.2	63.7		13.2	13.4	13.6	13.2	12.9	14.0
UC 13010-31	64.1	63.9	64.0	64.2	63.3	63.8		13.4	13.4	13.5	13.9	13.4	14.4
UC 13010-34	65.1	64.6	64.7	65.1	64.8	65.3		11.3	11.1	10.7	10.8	10.2	11.0
CAL ROJO	NA	60.2	60.7	60.7	61.3	61.2		NA	15.3	15.3	15.3	14.5	15.1
BLANCA GRANDE 515	64.7	64.6	64.9	65.2	65.0	65.6		13.4	12.8	12.6	12.6	11.8	12.7
LCS 11SB0096	64.7	64.2	64.6	64.5	64.3	64.8		12.1	12.2	12.0	11.8	10.5	11.9
LCS 11SB0097	63.1	62.8	62.9	62.8	62.1	63.1		14.6	14.6	14.7	14.9	14.4	15.2
APB 12104	62.1	63.1	62.7	63.2	64.2	NA		14.0	13.1	13.7	13.5	12.8	13.7
APB 11512	65.0	64.6	64.8	65.5	65.6	65.6		12.6	12.4	11.5	11.6	11.2	11.9
Correlations to ADM		97%	99%	97%	90%	96%			98%	97%	97%	95%	93%
Correlations to BSM			98%	98%	94%	97%				98%	98%	97%	96%
Correlations to CFP				99%	94%	99%					99%	97%	98%
Correlations to CONAGRA					96%	99%						98%	98%
Correlations to CWC						99%							98%
Correlations to GENMILLS													
Average Correlation	96%	97%	98%	98%	95%	98%		96%	97%	98%	98%	97%	97%
CAL ROJO Variation	0.7%	0.3%	0.3%	0.1%	0.7%	0.2%		0.2%	0.7%	1.0%	0.6%	1.1%	0.5%
BLANCA GRANDE 515 Variation	0.0%	0.2%	0.2%	0.2%	0.3%	0.0%		0.7%	1.1%	0.5%	0.5%	4.0%	0.4%

	TEST WT						PRO					
	ADM	BSM	CFP	CONAGRA	CWC	GENMILLS	ADM	BSM	CFP	CONAGRA	CWC	GENMILLS
CAL ROJO	60.7	60.5	60.6	60.7	60.9	61.3	15.5	15.1	15.5	15.4	14.7	15.0
BLANCA GRANDE 515	64.7	64.8	64.9	65.4	65.0	65.6	13.3	13.1	12.7	12.7	12.2	12.7
SUMMIT 515	62.2	61.8	61.8	62.0	61.6	62.0	14.9	14.7	14.6	14.8	14.0	14.8
SY 314	61.0	61.1	61.4	61.4	61.0	61.6	14.9	14.7	14.7	14.7	14.1	14.8
LCS 08SB0738	64.4	64.2	64.1	64.4	64.0	64.5	11.5	11.3	11.0	11.1	10.3	11.5
UC 1745	64.1	63.5	63.9	64.2	63.6	64.2	14.8	14.7	14.4	14.6	13.9	14.5
CAL ROJO	60.1	60.5	60.4	60.8	60.4	61.1	15.5	15.2	15.2	15.5	14.8	15.1
BLANCA GRANDE 515	64.7	64.8	64.7	65.2	65.4	65.6	13.3	13.0	12.7	12.7	11.3	12.6
UC 13010-23	63.8	64.2	63.5	63.6	63.2	63.7	13.2	13.4	13.6	13.2	12.9	14.0
UC 13010-31	64.1	63.9	64.0	64.2	63.3	63.8	13.4	13.4	13.5	13.9	13.4	14.4
UC 13010-34	65.1	64.6	64.7	65.1	64.8	65.3	11.3	11.1	10.7	10.8	10.2	11.0
CAL ROJO	NA	60.2	60.7	60.7	61.3	61.2	NA	15.3	15.3	15.3	14.5	15.1
BLANCA GRANDE 515	64.7	64.6	64.9	65.2	65.0	65.6	13.4	12.8	12.6	12.6	11.8	12.7
LCS 11SB0096	64.7	64.2	64.6	64.5	64.3	64.8	12.1	12.2	12.0	11.8	10.5	11.9
LCS 11SB0097	63.1	62.8	62.9	62.8	62.1	63.1	14.6	14.6	14.7	14.9	14.4	15.2
APB 12104	62.1	63.1	62.7	63.2	64.2	NA	14.0	13.1	13.7	13.5	12.8	13.7
APB 11512	65.0	64.6	64.8	65.5	65.6	65.6	12.6	12.4	11.5	11.6	11.2	11.9
Correlations to ADM		97%	99%	97%	90%	96%		98%	97%	97%	95%	93%
Correlations to BSM			98%	98%	94%	97%			98%	98%	97%	96%
Correlations to CFP				99%	94%	99%				99%	97%	98%
Correlations to CONAGRA					96%	99%					98%	98%
Correlations to CWC						99%						98%
Correlations to GENMILLS												
Average Correlation	96%	97%	98%	98%	95%	98%	96%	97%	98%	98%	97%	97%
CAL ROJO Variation	0.7%	0.3%	0.3%	0.1%	0.7%	0.2%	0.2%	0.7%	1.0%	0.6%	1.1%	0.5%
BLANCA GRANDE 515 Variation	0.0%	0.2%	0.2%	0.2%	0.3%	0.0%	0.7%	1.1%	0.5%	0.5%	4.0%	0.4%
												

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UC 1745	64.1	63.5	63.9	64.2	63.6	64.2	14.8	14.7	14.4	14.6	13.9	14.5
CAL ROJO	60.1	60.5	60.4	60.8	60.4	61.1	15.5	15.2	15.2	15.5	14.8	15.1
BLANCA GRANDE 515	64.7	64.8	64.7	65.2	65.4	65.6	13.3	13.0	12.7	12.7	11.3	12.6
UC 13010-23	63.8	64.2	63.5	63.6	63.2	63.7	13.2	13.4	13.6	13.2	12.9	14.0
UC 13010-31	64.1	63.9	64.0	64.2	63.3	63.8	13.4	13.4	13.5	13.9	13.4	14.4
UC 13010-34	65.1	64.6	64.7	65.1	64.8	65.3	11.3	11.1	10.7	10.8	10.2	11.0
CAL ROJO	NA	60.2	60.7	60.7	61.3	61.2	NA	15.3	15.3	15.3	14.5	15.1
BLANCA GRANDE 515	64.7	64.6	64.9	65.2	65.0	65.6	13.4	12.8	12.6	12.6	11.8	12.7
LCS 11SB0096	64.7	64.2	64.6	64.5	64.3	64.8	12.1	12.2	12.0	11.8	10.5	11.9
LCS 11SB0097	63.1	62.8	62.9	62.8	62.1	63.1	14.6	14.6	14.7	14.9	14.4	15.2
APB 12104	62.1	63.1	62.7	63.2	64.2	NA	14.0	13.1	13.7	13.5	12.8	13.7
APB 11512	65.0	64.6	64.8	65.5	65.6	65.6	12.6	12.4	11.5	11.6	11.2	11.9
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Correlations to BSM			98%	98%	94%	97%			98%	98%	97%	96%
Correlations to CFP				99%	94%	99%				99%	97%	98%
Correlations to CONAGRA					96%	99%					98%	98%
Correlations to CWC						99%						98%
Correlations to GENMILLS												
												
Average Correlation	96%	97%	98%	98%	95%	98%	96%	97%	98%	98%	97%	97%
CAL ROJO Variation	0.7%	0.3%	0.3%	0.1%	0.7%	0.2%	0.2%	0.7%	1.0%	0.6%	1.1%	0.5%
BLANCA GRANDE 515 Variation	0.0%	0.2%	0.2%	0.2%	0.3%	0.0%	0.7%	1.1%	0.5%	0.5%	4.0%	0.4%

Collaborative Durum

6 Entries

KRONOS → Replicated as Check Variety
WB YU807-115
UC 13210-5
UC 13210-21
APB 11705
APB 11710

3 Breeding Programs

Arizona Plant Breeders
University of California, Davis
Westbred (Monsanto)

UC					Grain Yield (lb/acre)			Protein		
Entry	Test	Name	Class	Source	SJ Valley	Imperial		SJ Valley	Imperial	Avg Collab
#	#				(3 Loc)	Valley		(3 Loc)	Valley	Imperial

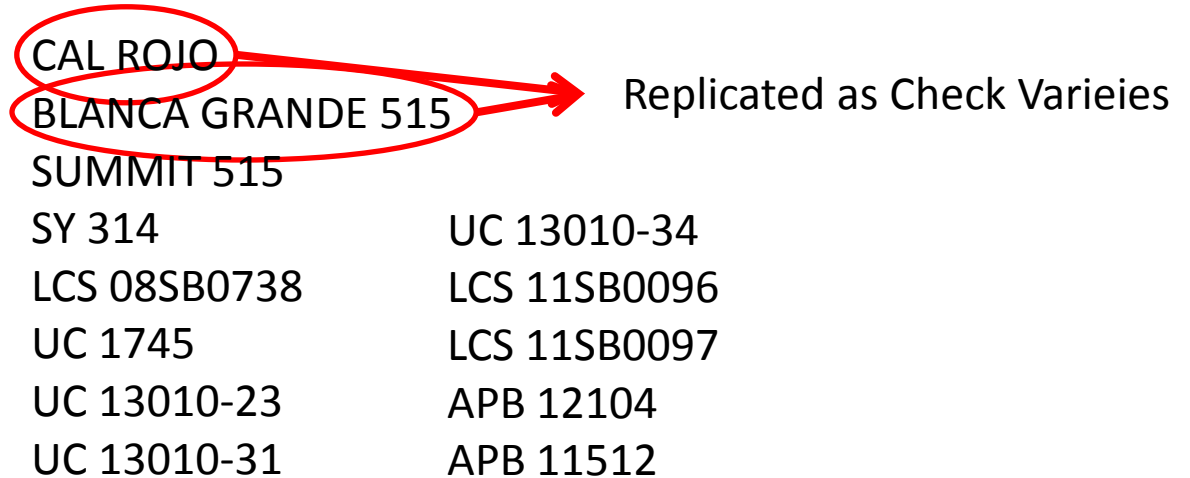
[REDACTED]

[illegible]

Numbers in parentheses indicate relative rank
ND = No Data

Collaborative Common

13 Entries



4 Breeding Programs

Arizona Plant Breeders
Limagrain Cereal Seeds
Syngenta
University of California, Davis

PERFORMANCE IN 2014 REGIONAL TRIALS

[illegible]

2014/15

FINISHED:

2014 Small Grains Annual Progress Report

www.smallgrains.ucdavis.edu

Call for Entries Sent

Planted Winter Wheat Trials (Tulelake & Siskiyou)

CURRENT:

New Entries Being Received/Treated/Packaged

UPCOMING:

Planting of 2015 Regional/Collaborative Trials

Suggestions for Improvement

www.smallgrains.ucdavis.edu