

2010 Collaborative Wheat Quality Evaluation Program

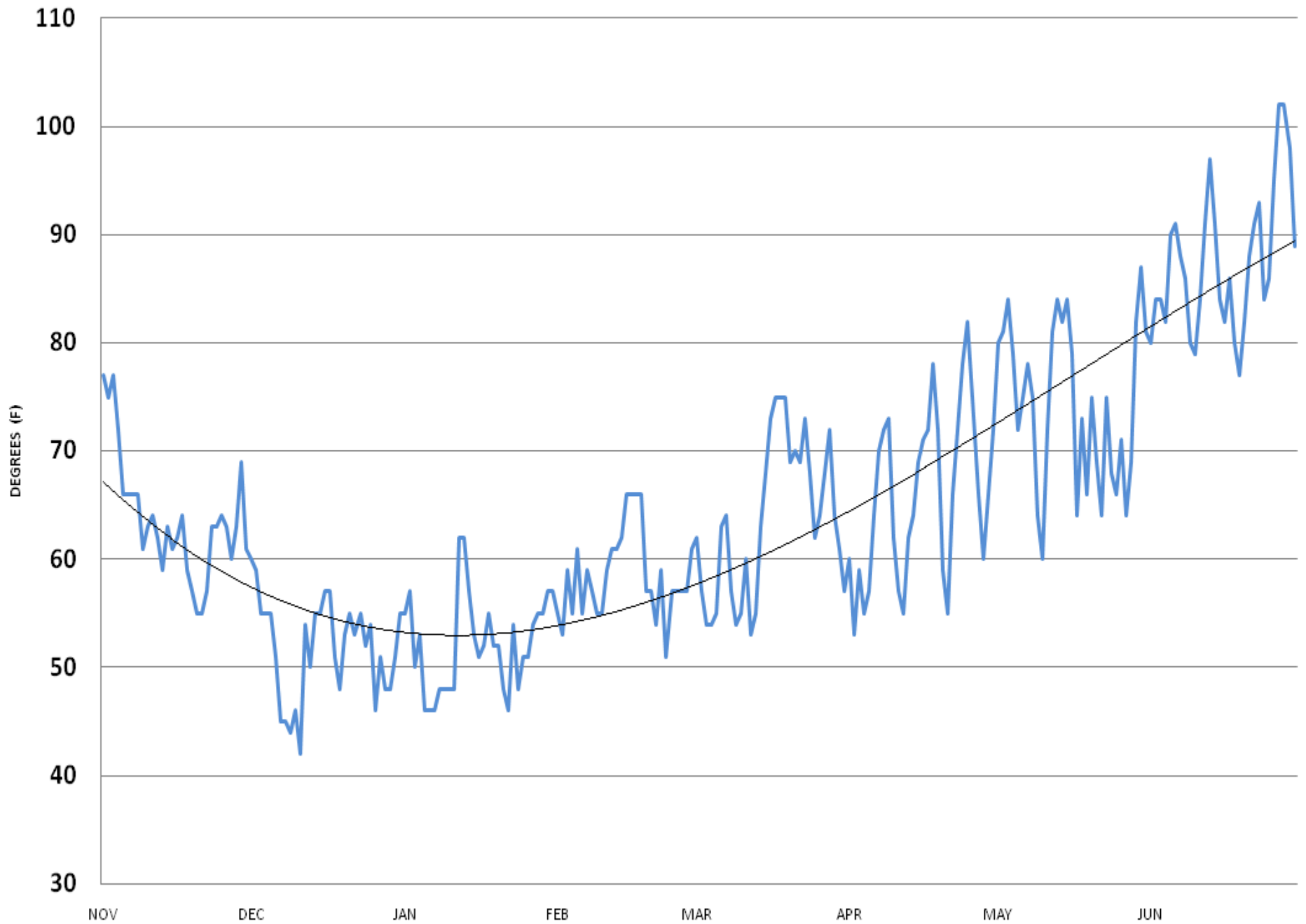


Phil Mayo, SRA

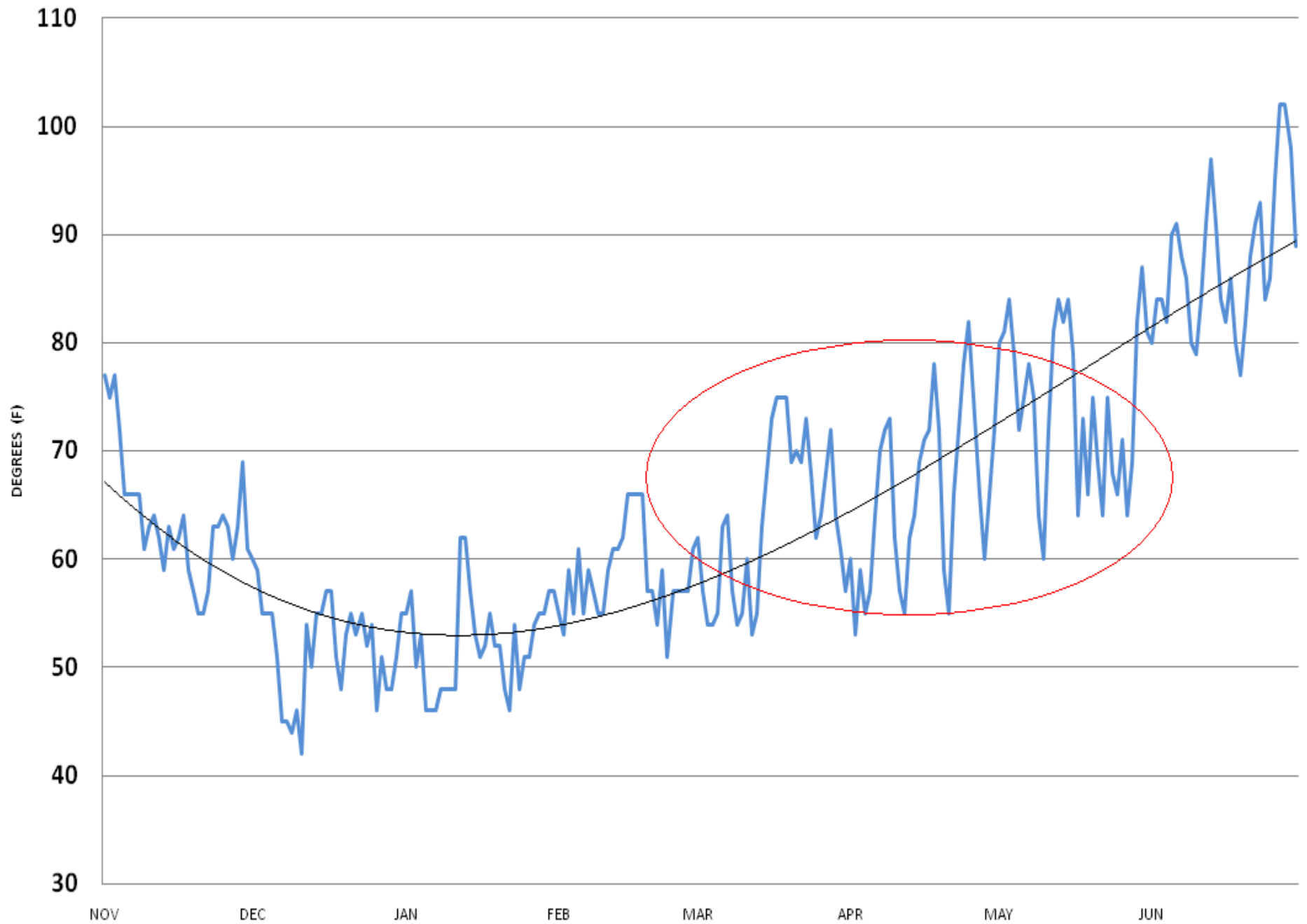
Diane Prato, Lab Assistant

Sam Fraser, Ag Tech

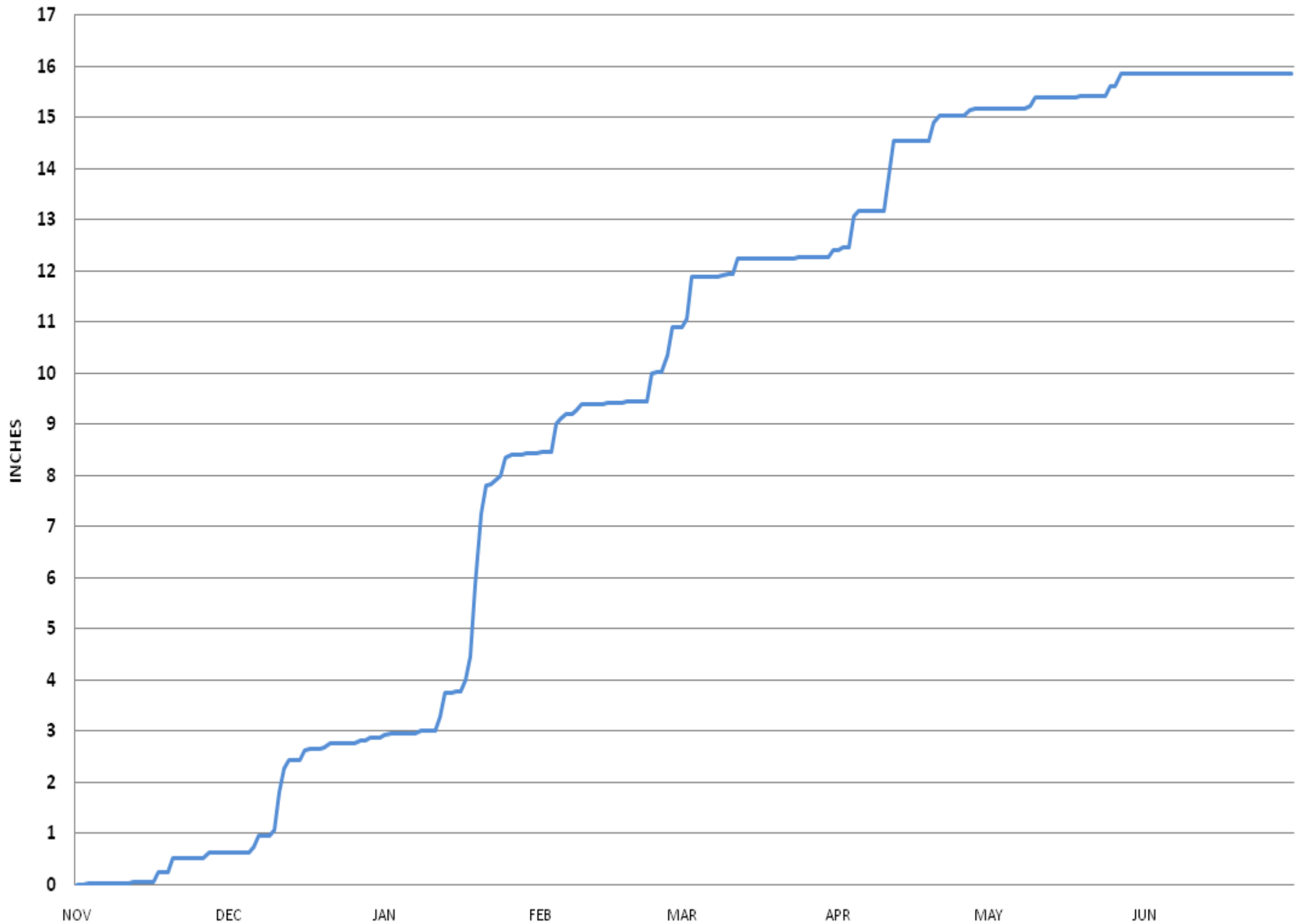
MAX TEMP THROUGH 2010 SEASON



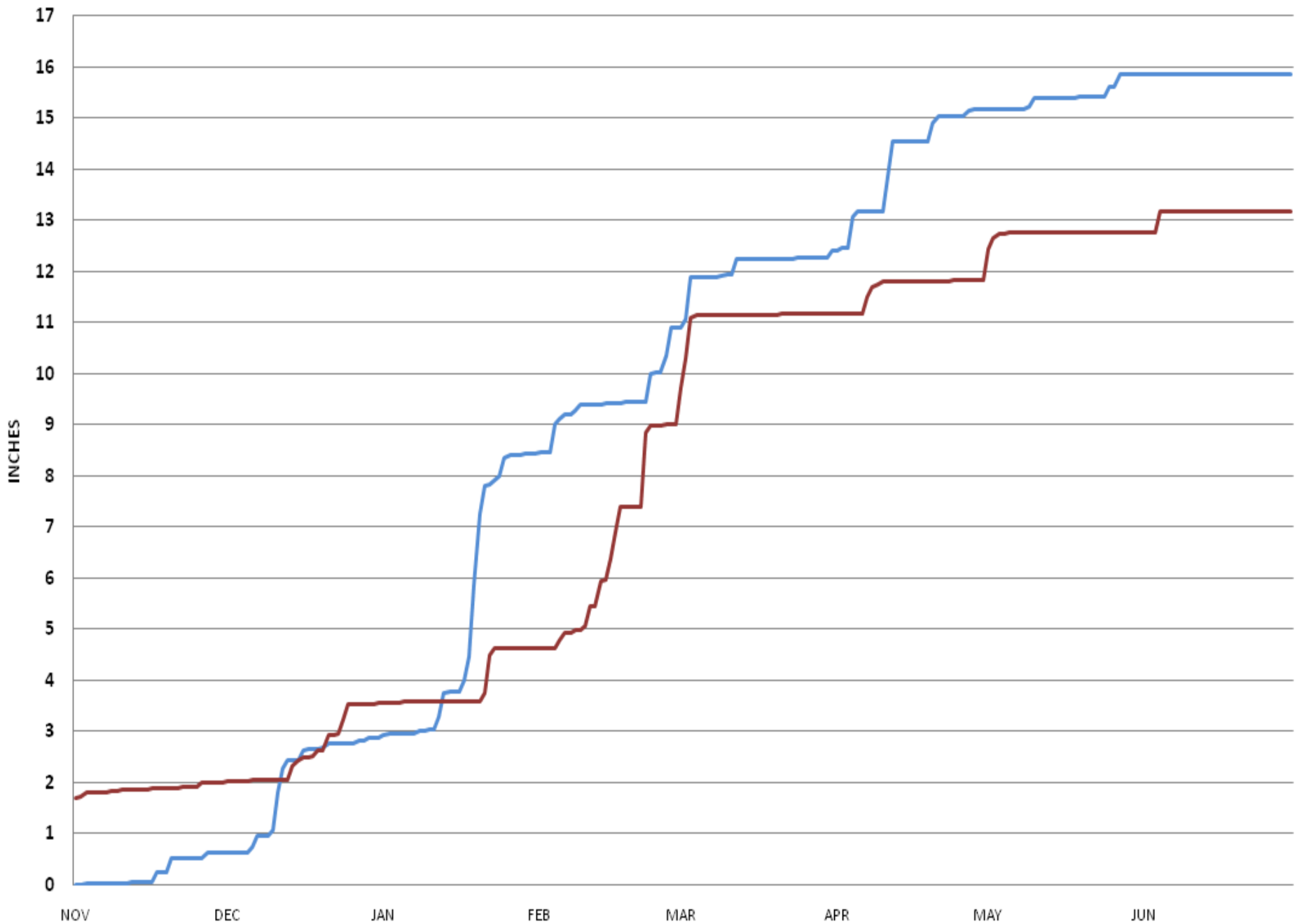
MAX TEMP THROUGH 2010 SEASON



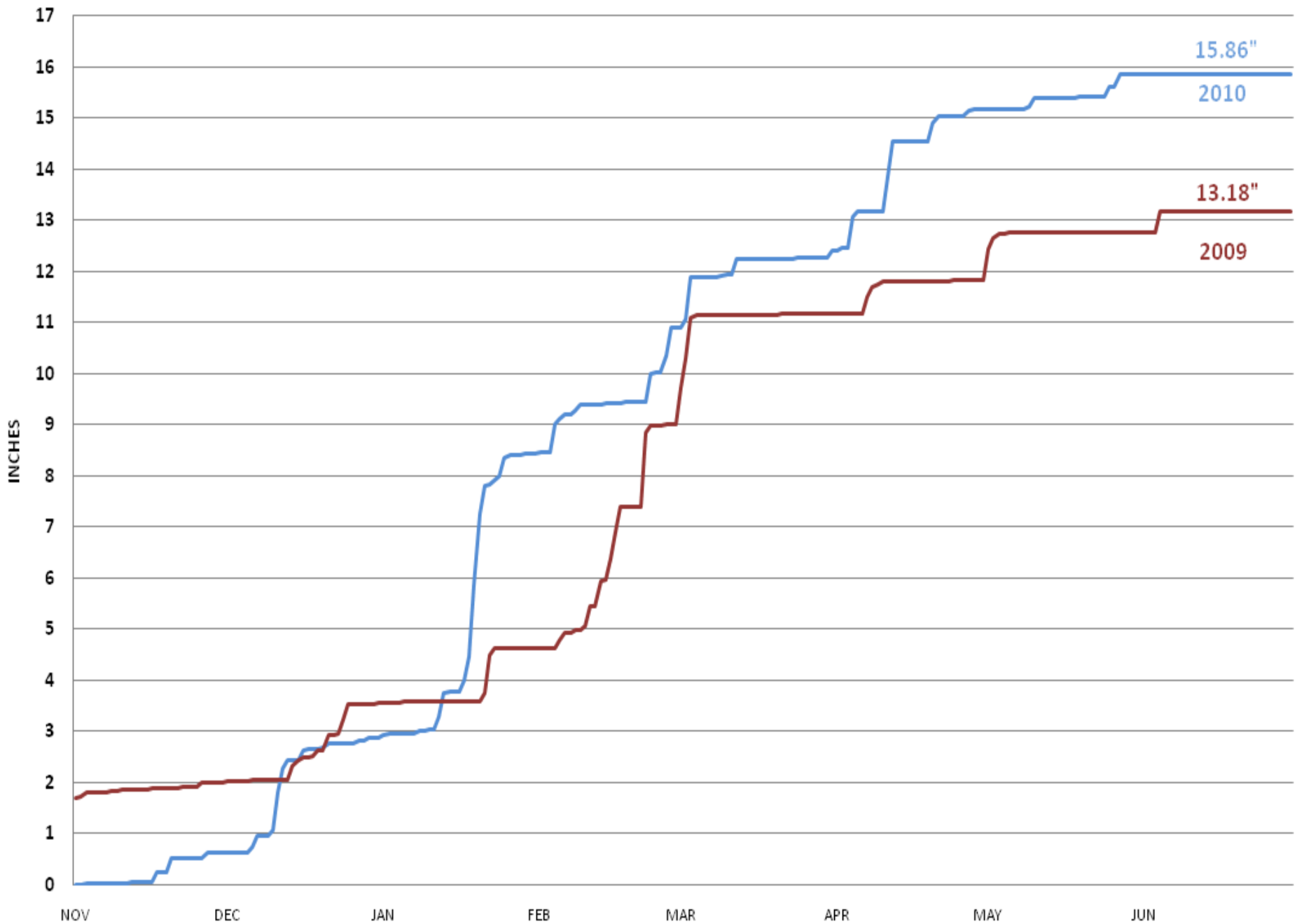
RAINFALL THROUGHOUT 2010 SEASON



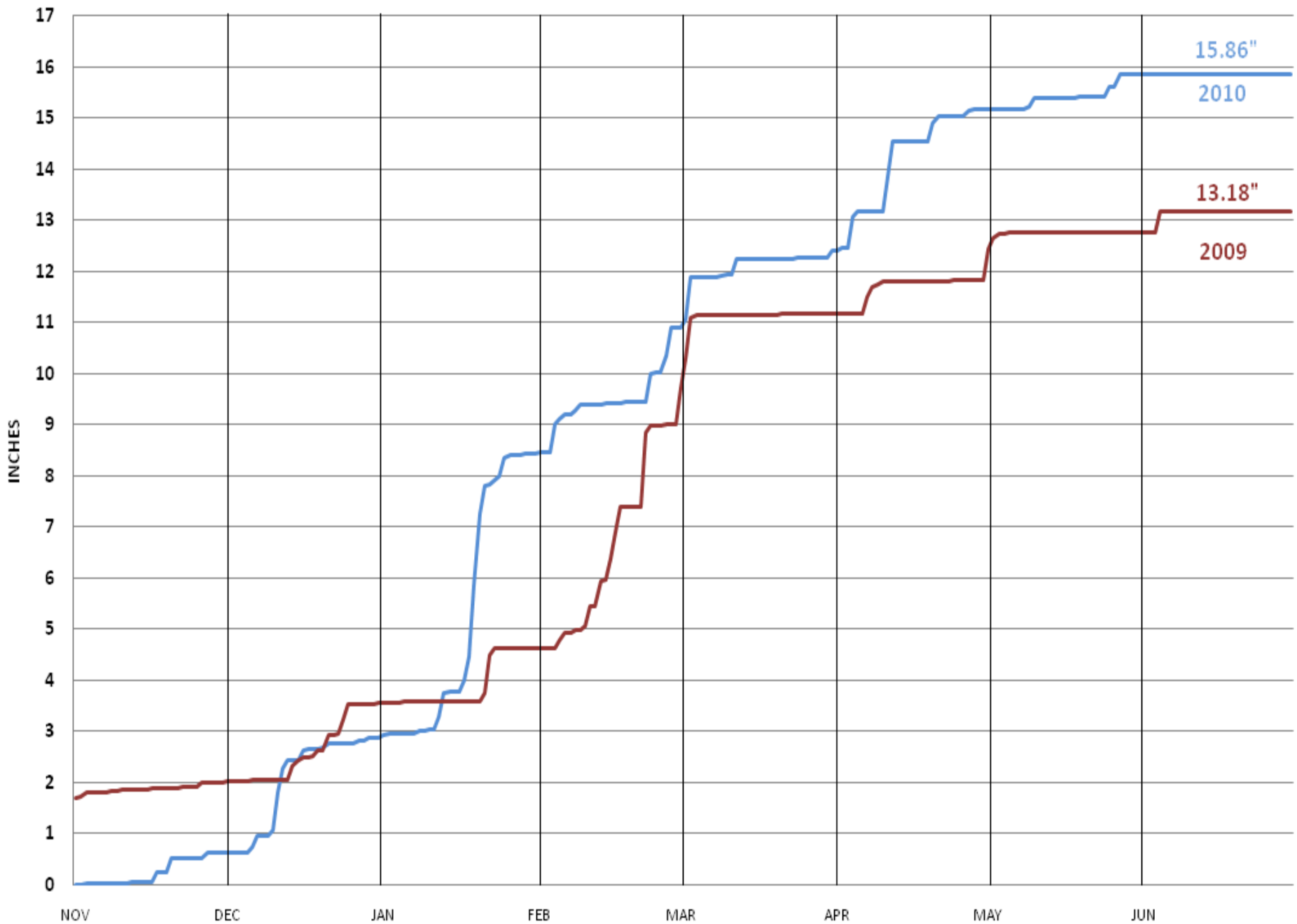
2009/2010 RAINFALL COMPARISON



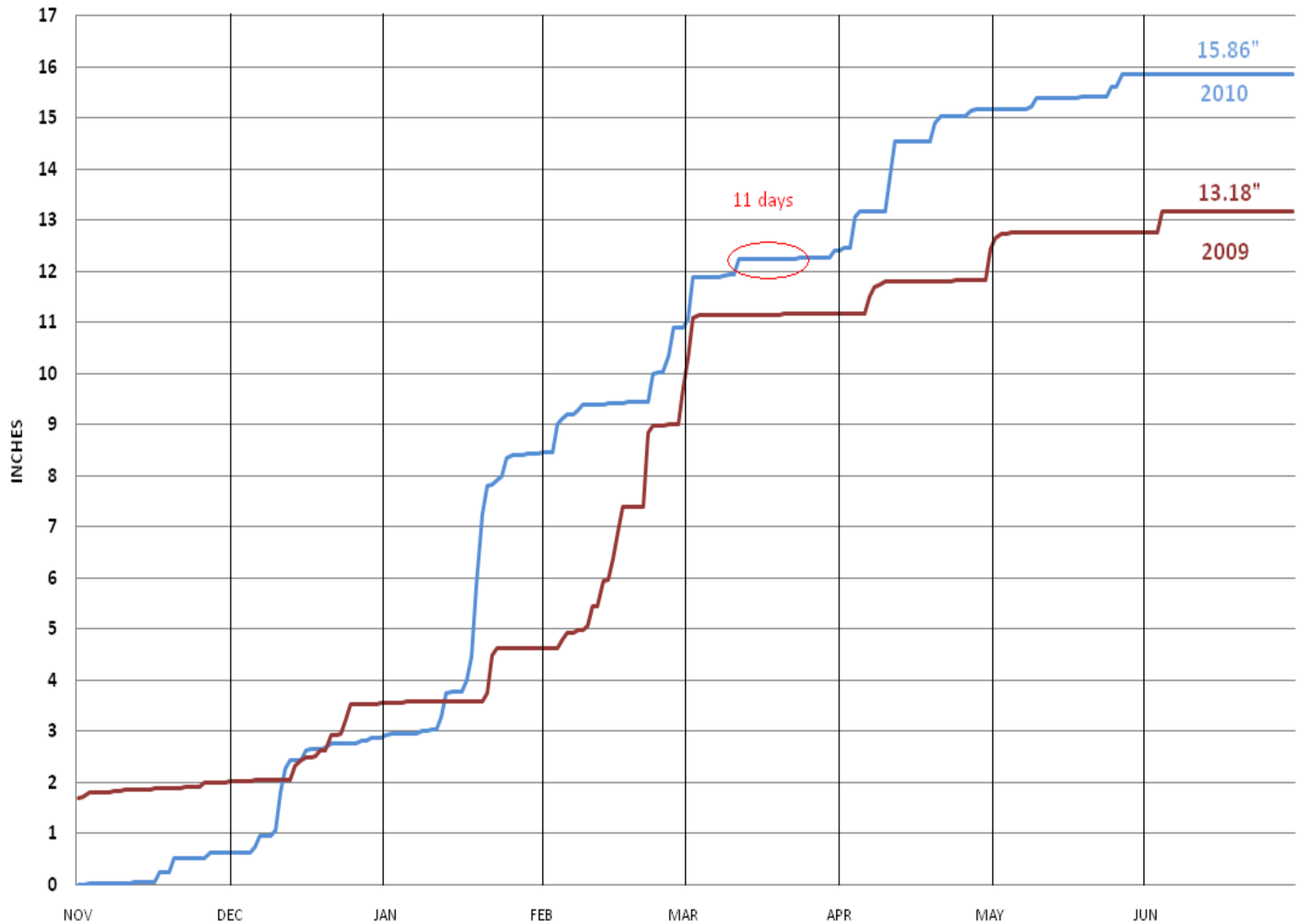
2009/2010 RAINFALL COMPARISON



2009/2010 RAINFALL COMPARISON



2009/2010 RAINFALL COMPARISON



•In 2009, the Collaboratives were moved to UC Davis to have more control over planting and growing conditions

Last year topics:

Nitrogen application

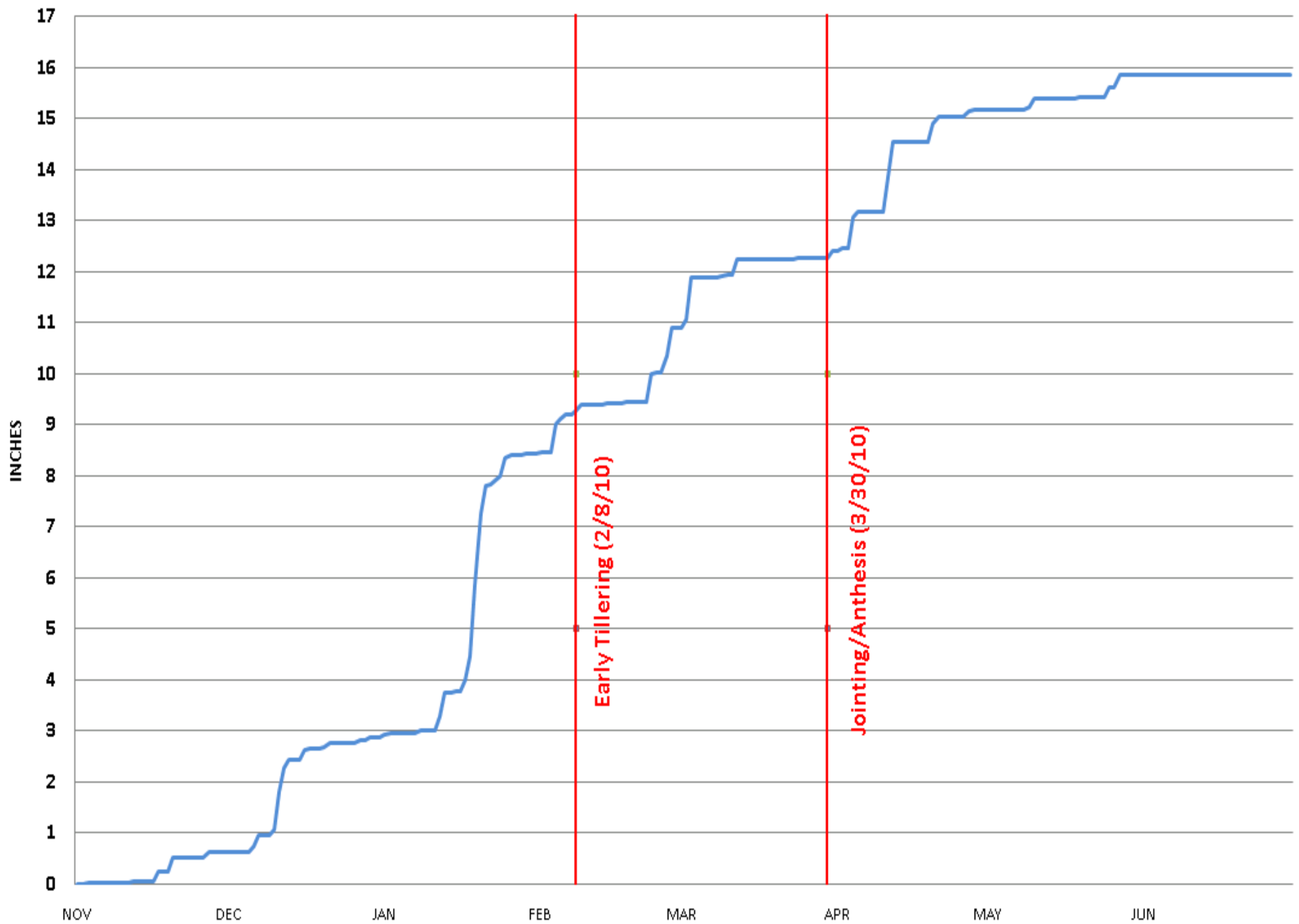
Last year 3 applications:

Tillering, Jointing, Anthesis

Reduce by 1 application to more closely represent conditions farmers could cost-effectively reproduce



RAINFALL THROUGHOUT 2010 SEASON



**2010 COLLABORATIVE WHEAT TEST ENTRIES:
PERFORMANCE IN 2010 REGIONAL TRIALS**

Entry	Name	Grain Yield (lb/acre)		Disease
		Sac Valley (3 Loc)	SJ Valley (3 Loc)	SR Davis
1156	BLANCA GRANDE	6500	7750	4.5
1599	UCD 07013/24	7260	7930	1.25
1600	UCD 07013/30	6800	7940	1
1608	WWW CNBR9330	5230	6410	1
1616	UCD 0810/5	6120	6970	3
1638	APB W11-6	3590	5600	2.75
1642	UCD 09013/4	6130	6730	2
1643	UCD 09014/16	5440	7180	4.25
1650	WB-Rockland	6550	6700	1
1659	RSI 05W90192	6640	7480	1
1660	RSI 05W90314	7660	7940	1
1673	WWW CNBR9302	5260	6850	1

11 Entries

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%.

**2010 COLLABORATIVE WHEAT TEST ENTRIES:
PERFORMANCE IN 2010 REGIONAL TRIALS**

Entry	Name	Grain Yield (lb/acre)		Disease
		Sac Valley (3 Loc)	SJ Valley (3 Loc)	SR Davis
1156	BLANCA GRANDE	6500	7750	4.5
1599	UCD 07013/24	7260	7930	1.25
1600	UCD 07013/30	6800	7940	1
1608	WWW CNBR9330	5230	6410	1
1616	UCD 0810/5	6120	6970	3
1638	APB W11-6	3590	5600	2.75
1642	UCD 09013/4	6130	6730	2
1643	UCD 09014/16	5440	7180	4.25
1650	WB-Rockland	6550	6700	1
1659	RSI 05W90192	6640	7480	1
1660	RSI 05W90314	7660	7940	1
1673	WWW CNBR9302	5260	6850	1

11 Entries

4 HWW

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%.

**2010 COLLABORATIVE WHEAT TEST ENTRIES:
PERFORMANCE IN 2010 REGIONAL TRIALS**

11 Entries

4 HWW

7 HRW

Entry	Name	Grain Yield (lb/acre)		Disease
		Sac Valley (3 Loc)	SJ Valley (3 Loc)	SR Davis
1156	BLANCA GRANDE	6500	7750	4.5
1599	UCD 07013/24	7260	7930	1.25
1600	UCD 07013/30	6800	7940	1
1608	WWW CNBR9330	5230	6410	1
1616	UCD 0810/5	6120	6970	3
1638	APB W11-6	3590	5600	2.75
1642	UCD 09013/4	6130	6730	2
1643	UCD 09014/16	5440	7180	4.25
1650	WB-Rockland	6550	6700	1
1659	RSI 05W90192	6640	7480	1
1660	RSI 05W90314	7660	7940	1
1673	WWW CNBR9302	5260	6850	1

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%.

**2010 COLLABORATIVE WHEAT TEST ENTRIES:
PERFORMANCE IN 2010 REGIONAL TRIALS**

Entry	Name	Grain Yield (lb/acre)		Disease
		Sac Valley	SJ Valley	SR
		(3 Loc)	(3 Loc)	Davis
1156	BLANCA GRANDE	6500	7750	4.5
1599	UCD 07013/24	7260	7930	1.25
1600	UCD 07013/30	6800	7940	1
1608	WWW CNBR9330	5230	6410	1
1616	UCD 0810/5	6120	6970	3
1638	APB W11-6	3590	5600	2.75
1642	UCD 09013/4	6130	6730	2
1643	UCD 09014/16	5440	7180	4.25
1650	WB-Rockland	6550	6700	1
1659	RSI 05W90192	6640	7480	1
1660	RSI 05W90314	7660	7940	1
1673	WWW CNBR9302	5260	6850	1

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

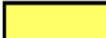
1 = 0-3%, 2 = 4-14%, 3 = 15-29%, 4 = 30-49%, 5 = 50-69%, 6 = 70-84%, 7 = 85-95%, 8 = 96-100%.

2010 UC DAVIS COLLABORATIVE TRIALS

WHEAT

DURUM

1600		1156-B		1659		1435		1628		1644		1675	
3		8		13		2		7		12		17	
1599	1608	1642	1643	1651	1660	951-A	1582	1589	1629	1641	1645	1674	1676
2		4		7		9		12		14		1	
3		6		8		11		13		16		18	
1156-A	1616	1638	1647	1650	1673	1156-C	1583	1585	1640	951-B	1646	1656	951-C
1		5		6		10		11		15		16	
4		5		9		10		14		15		19	

 CHECK VARIETIES

•In 2009, the Collaboratives were moved to UC Davis to have more control over planting and growing conditions

Last year topics:

Nitrogen application

Last year 3 applications:
Tillering, Jointing, Anthesis

Reduce by 1 application to more closely represent conditions farmers could cost-effectively reproduce

Reproducibility of Milling Results

Homogenize 3 reps, send as separate samples.

**2010 COLLABORATIVE WHEAT TEST ENTRIES:
PERFORMANCE IN 2010 REGIONAL TRIALS**

Entry	Name	Grain Yield (lb/acre)		Disease
		Sac Valley	SJ Valley	SR
		(3 Loc)	(3 Loc)	Davis
1156	BLANCA GRANDE	6500	7750	4.5
1599	UCD 07013/24	7260	7930	1.25
1600	UCD 07013/30	6800	7940	1
1608	WWW CNBR9330	5230	6410	1
1616	UCD 0810/5	6120	6970	3
1638	APB W11-6	3590	5600	2.75
1642	UCD 09013/4	6130	6730	2
1643	UCD 09014/16	5440	7180	4.25
1650	WB-Rockland	6550	6700	1
1659	RSI 05W90192	6640	7480	1
1660	RSI 05W90314	7660	7940	1
1673	WWW CNBR9302	5260	6850	1

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%.

**2010 COLLABORATIVE WHEAT TEST ENTRIES:
PERFORMANCE IN 2010 REGIONAL TRIALS**

Entry	Name	Grain Yield (lb/acre)		Disease
		Sac Valley	SJ Valley	SR
		(3 Loc)	(3 Loc)	Davis
1156	BLANCA GRANDE	6500	7750	4.5
1599	UCD 07013/24	7260	7930	1.25
1600	UCD 07013/30	6800	7940	1
1608	WWW CNBR9330	5230	6410	1
1616	UCD 0810/5	6120	6970	3
1638	APB W11-6	3590	5600	2.75
1642	UCD 09013/4	6130	6730	2
1643	UCD 09014/16	5440	7180	4.25
1650	WB-Rockland	6550	6700	1
1659	RSI 05W90192	6640	7480	1
1660	RSI 05W90314	7660	7940	1
1673	WWW CNBR9302	5260	6850	1

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%.

**2010 COLLABORATIVE DURUM TEST ENTRIES:
PERFORMANCE IN 2010 REGIONAL TRIALS**

Entry	Name	Grain Yield (lb/acre)	
		SJ Valley (3 loc/yr)	IV (1 loc/yr)
951	KRONOS	7290	8350
1582	MAESTRALE *	8170	8010
1583	SARAGOLLA *	6810	8790
1435	WWW D8270	7030	7970
1585	UCD 06222/53	7400	8890
1589	NORMANO *	6340	7430
1628	UCD 08201/20	6960	8340
1629	UCD 08201/21	8200	8970
1640	APB D1-2	8030	8570
1641	APB D2-97	8390	8830
1644	UCD 09210/17	6330	8420
1645	UCD 09213/30	8560	8310
1646	UCD 09220/135	8170	8740
1656	WB SJ807-006	7430	-
1674	TANGO	5980	7470

14 Entries

* not grown in all SJ Valley Locations


**2010 COLLABORATIVE DURUM TEST ENTRIES:
PERFORMANCE IN 2010 REGIONAL TRIALS**

Entry	Name	Grain Yield (lb/acre)	
		SJ Valley (3 loc/yr)	IV (1 loc/yr)
951	KRONOS	7290	8350
1582	MAESTRALE *	8170	8010
1583	SARAGOLLA *	6810	8790
1435	WWW D8270	7030	7970
1585	UCD 06222/53	7400	8890
1589	NORMANO *	6340	7430
1628	UCD 08201/20	6960	8340
1629	UCD 08201/21	8200	8970
1640	APB D1-2	8030	8570
1641	APB D2-97	8390	8830
1644	UCD 09210/17	6330	8420
1645	UCD 09213/30	8560	8310
1646	UCD 09220/135	8170	8740
1656	WB SJ807-006	7430	-
1674	TANGO	5980	7470

* not grown in all SJ Valley Locations

2010 UC DAVIS COLLABORATIVE TRIALS													
WHEAT							DURUM						

1600		1156-B		1659		1435		1628		1644		1675	
3		8		13		2		7		12		17	
1599	1608	1642	1643	1651	1660	951-A	1582	1589	1629	1641	1645	1674	1676
2	4	7	9	12	14	1	3	6	8	11	13	16	18
1156-A	1616	1638	1647	1650	1673	1156-C	1583	1585	1640	951-B	1646	1656	951-C
1	5	6	10	11	15	16	4	5	9	10	14	15	19

 CHECK VARIETIES

**2010 COLLABORATIVE DURUM TEST ENTRIES:
PERFORMANCE IN 2010 REGIONAL TRIALS**

Entry	Name	Grain Yield (lb/acre)	
		SJ Valley (3 loc/yr)	IV (1 loc/yr)
951	KRONOS	7290	8350
1582	MAESTRALE *	8170	8010
1583	SARAGOLLA *	6810	8790
1435	WWW D8270	7030	7970
1585	UCD 06222/53	7400	8890
1589	NORMANO *	6340	7430
1628	UCD 08201/20	6960	8340
1629	UCD 08201/21	8200	8970
1640	APB D1-2	8030	8570
1641	APB D2-97	8390	8830
1644	UCD 09210/17	6330	8420
1645	UCD 09213/30	8560	8310
1646	UCD 09220/135	8170	8740
1656	WB SJ807-006	7430	-
1674	TANGO	5980	7470

* not grown in all SJ Valley Locations

**2010 COLLABORATIVE DURUM TEST ENTRIES:
PERFORMANCE IN 2010 REGIONAL TRIALS**

Entry	Name	Grain Yield (lb/acre)	
		SJ Valley (3 loc/yr)	IV (1 loc/yr)
951	KRONOS	7290	8350
1582	MAESTRALE *	8170	8010
1583	SARAGOLLA *	6810	8790
1435	WWW D8270	7030	7970
1585	UCD 06222/53	7400	8890
1589	NORMANO *	6340	7430
1628	UCD 08201/20	6960	8340
1629	UCD 08201/21	8200	8970
1640	APB D1-2	8030	8570
1641	APB D2-97	8390	8830
1644	UCD 09210/17	6330	8420
1645	UCD 09213/30	8560	8310
1646	UCD 09220/135	8170	8740
1656	WB SJ807-006	7430	-
1674	TANGO	5980	7470

* not grown in all SJ Valley Locations

Breeding Programs

Allstar

Arizona Plant Breeders

Resource Seeds, Incorporated / Syngenta

University of California

WestBred LLC / Monsanto

World Wide Wheat



Collaborating Mills



ADM – Wheat

Bay State Milling – Wheat and Durum

Cargill – Wheat

Cereal Food Processors, Inc. – Wheat

ConAgra – Wheat and Durum

California Wheat Commission – Wheat and Durum

CONSISTENCY AMONGST COLLABORATING MILLS

ID	Entry	Name	Protein				TEST WEIGHT						TKW						
			CWC	ADM	Cereal Food	Bay State	Hor. Mil.	Conagra	CWC	ADM	Cereal Food	Bay State	Hor. Mil.	Conagra	CWC	ADM	Cereal Food	Hor. Mil.	Conagra
2	1600	UCD 07013/30	12.3	12.0	12.3	12.3	12.4	12.1	63.6	64.1	63.9	64.8	64.1	63.8	52.4	45.3	44.2	48.1	46.4
3	MIX-C	BLANCA GRANDE	11.9	12.3	11.9	12.0	12.0	12.1	64.4	64.8	64.5	65.0	65.1	64.7	49.7	46.1	42.8	43.3	45.2
4	1673	WWW CNBR9302	9.0	9.5	8.3	9.1	8.9	9.2	63.1	64.0	62.4	63.1	63.9	63.6	41.7	39.3	40.2	40.9	40.1
5	1660	RSI 05W90314	9.9	11.3	10.8	11.0	10.9	11.3	63.1	63.5	63.4	63.0	63.5	63.2	49.2	43.8	41.2	43.6	44.6
6	1638	APB W11-6	12.6	12.8	11.8	11.5	12.0	12.5	63.6	64.2	64.1	64.0	64.1	64.1	55.6	50.3	46.6	46.4	50.7
7	1599	UCD 07013/24	10.3	11.2	10.6	11.6	10.8	11.1	62.9	62.9	62.9	63.2	62.9	62.9	44.3	38.5	40.0	37.0	39.0
8	MIX-A	BLANCA GRANDE	11.8	12.5	11.9	12.4	12.0	12.3	64.5	64.9	64.6	64.9	64.8	64.7	49.6	46.4	42.4	44.4	45.4
9	MIX-B	BLANCA GRANDE	11.7	12.1	11.6	12.4	11.7	12.0	64.4	65.1	64.6	65.1	64.8	64.9	49.5	45.7	45.4	45.6	46.4
10	1643	UCD 09014/16	10.7	12.0	11.9	12.5	12.5	12.5	64.0	64.2	64.0	64.2	64.2	64.2	49.2	46.7	42.2	41.7	42.8
12	1650	WB SJ908-247	12.3	13.5	13.0	13.0	13.0	13.4	64.2	63.7	64.2	64.2	64.8	64.0	46.1	44.2	44.0	42.2	41.4
13	1616	UCD 0810/5	11.3		11.5	11.6	11.6	11.8	63.5		64.2	64.0	64.3	64.3	46.7		45.0	45.1	45.8
14	1642	UCD 09013/4	12.7	11.9	11.5	11.6	11.6	11.8	63.0	63.9	63.7	63.7	63.6	63.5	47.7	46.3	44.4	44.2	45.2
15	1639	RSI 05W90192	11.5	12.1	11.4	11.7	11.7	11.8	64.4	64.5	64.3	64.2	65.0	64.7	40.8	46.1	43.0	43.6	43.6
16	1608	WWW CNBR9330	9.1	9.0	8.4	10.7	9.0	9.0	63.4	64.1	64.2	64.4	63.9	63.8	42.4	41.5	39.6	40.1	39.8
AVERAGE			83%	92%	95%	86%	94%	94%	86%	82%	82%	83%	86%	89%	73%	79%	79%	79%	86%
Blanca Grande Variability			0.5%	1.6%	1.5%	1.9%	1.8%	1.0%	0.1%	0.2%	0.1%	0.2%	0.3%	0.2%	0.2%	0.8%	3.7%	2.6%	1.4%

CONSISTENCY AMONGST COLLABORATING MILLS

ID	Entry	Name	Protein				TEST WEIGHT					TKW							
			CWC	ADM	Cereal Food	Bay State	Hor. Mil.	Conagra	CWC	ADM	Cereal Food	Bay State	Hor. Mil.	Conagra	CWC	ADM	Cereal Food	Hor. Mil.	Conagra
2	1600	UCD 07013/30	12.3	12.0	12.3	12.3	12.4	12.1	63.6	64.1	63.9	64.8	64.1	63.8	52.4	45.3	44.2	48.1	46.4
3	MIX-C	BLANCA GRANDE	11.9	12.3	11.9	12.0	12.0	12.1	64.4	64.8	64.5	65.0	65.1	64.7	49.7	46.1	42.8	43.3	45.2
4	1673	WWW CNBR9302	9.0	9.5	8.3	9.1	8.9	9.2	63.1	64.0	62.4	63.1	63.9	63.6	41.7	39.3	40.2	40.9	40.1
5	1660	RSI 05W90314	9.9	11.3	10.8	11.0	10.9	11.3	63.1	63.5	63.4	63.0	63.5	63.2	49.2	43.8	41.2	43.6	44.6
6	1638	APB W11-6	12.6	12.8	11.8	11.5	12.0	12.5	63.6	64.2	64.1	64.0	64.1	64.1	55.6	50.3	46.6	46.4	50.7
7	1599	UCD 07013/24	10.3	11.2	10.6	11.6	10.8	11.1	62.9	62.9	62.9	63.2	62.9	62.9	44.3	38.5	40.0	37.0	39.0
8	MIX-A	BLANCA GRANDE	11.8	12.5	11.9	12.4	12.0	12.3	64.5	64.9	64.6	64.9	64.8	64.7	49.6	46.4	42.4	44.4	45.4
9	MIX-B	BLANCA GRANDE	11.7	12.1	11.6	12.4	11.7	12.0	64.4	65.1	64.6	65.1	64.8	64.9	49.5	45.7	45.4	45.6	46.4
10	1643	UCD 09014/16	10.7	12.0	11.9	12.5	12.5	12.5	64.0	64.2	64.0	64.2	64.2	64.2	49.2	46.7	42.2	41.7	42.8
12	1650	WB SJ908-247	12.3	13.5	13.0	13.0	13.0	13.4	64.2	63.7	64.2	64.2	64.8	64.0	46.1	44.2	44.0	42.2	41.4
13	1616	UCD 0810/5	11.3		11.5	11.6	11.6	11.8	63.5		64.2	64.0	64.3	64.3	46.7		45.0	45.1	45.8
14	1642	UCD 09013/4	12.7	11.9	11.5	11.6	11.6	11.8	63.0	63.9	63.7	63.7	63.6	63.5	47.7	46.3	44.4	44.2	45.2
15	1639	RSI 05W90192	11.5	12.1	11.4	11.7	11.7	11.8	64.4	64.5	64.3	64.2	65.0	64.7	40.8	46.1	43.0	43.6	43.6
16	1608	WWW CNBR9330	9.1	9.0	8.4	10.7	9.0	9.0	63.4	64.1	64.2	64.4	63.9	63.8	42.4	41.5	39.6	40.1	39.8
AVERAGE			83%	92%	95%	86%	94%	94%	86%	82%	82%	83%	86%	89%	73%	79%	79%	79%	86%
Blanca Grande Variability			0.5%	1.6%	1.5%	1.9%	1.8%	1.0%	0.1%	0.2%	0.1%	0.2%	0.3%	0.2%	0.2%	0.8%	3.7%	2.6%	1.4%

CONSISTENCY AMONGST COLLABORATING MILLS

ID	Entry	Name	Protein				TEST WEIGHT				TKW								
			CWC	ADM	Cereal Food	Bay State	Hor. Mil.	Conagra	CWC	ADM	Cereal Food	Bay State	Hor. Mil.	Conagra	CWC	ADM	Cereal Food	Hor. Mil.	Conagra
2	1600	UCD 07013/30	12.3	12.0	12.3	12.3	12.4	12.1	63.6	64.1	63.9	64.8	64.1	63.8	52.4	45.3	44.2	48.1	46.4
3	MIX-C	BLANCA GRANDE	11.9	12.3	11.9	12.0	12.0	12.1	64.4	64.8	64.5	65.0	65.1	64.7	49.7	46.1	42.8	43.3	45.2
4	1673	WWW CNBR9302	9.0	9.5	8.3	9.1	8.9	9.2	63.1	64.0	62.4	63.1	63.9	63.6	41.7	39.3	40.2	40.9	40.1
5	1660	RSI 05W90314	9.9	11.3	10.8	11.0	10.9	11.3	63.1	63.5	63.4	63.0	63.5	63.2	49.2	43.8	41.2	43.6	44.6
6	1638	APB W11-6	12.6	12.8	11.8	11.5	12.0	12.5	63.6	64.2	64.1	64.0	64.1	64.1	55.6	50.3	46.6	46.4	50.7
7	1599	UCD 07013/24	10.3	11.2	10.6	11.6	10.8	11.1	62.9	62.9	62.9	63.2	62.9	62.9	44.3	38.5	40.0	37.0	39.0
8	MIX-A	BLANCA GRANDE	11.8	12.5	11.9	12.4	12.0	12.3	64.5	64.9	64.6	64.9	64.8	64.7	49.6	46.4	42.4	44.4	45.4
9	MIX-B	BLANCA GRANDE	11.7	12.1	11.6	12.4	11.7	12.0	64.4	65.1	64.6	65.1	64.8	64.9	49.5	45.7	45.4	45.6	46.4
10	1643	UCD 09014/16	10.7	12.0	11.9	12.5	12.5	12.5	64.0	64.2	64.0	64.2	64.2	64.2	49.2	46.7	42.2	41.7	42.8
12	1650	WB SJ908-247	12.3	13.5	13.0	13.0	13.0	13.4	64.2	63.7	64.2	64.2	64.8	64.0	46.1	44.2	44.0	42.2	41.4
13	1616	UCD 0810/5	11.3		11.5	11.6	11.6	11.8	63.5		64.2	64.0	64.3	64.3	46.7		45.0	45.1	45.8
14	1642	UCD 09013/4	12.7	11.9	11.5	11.6	11.6	11.8	63.0	63.9	63.7	63.7	63.6	63.5	47.7	46.3	44.4	44.2	45.2
15	1639	RSI 05W90192	11.5	12.1	11.4	11.7	11.7	11.8	64.4	64.5	64.3	64.2	65.0	64.7	40.8	46.1	43.0	43.6	43.6
16	1608	WWW CNBR9330	9.1	9.0	8.4	10.7	9.0	9.0	63.4	64.1	64.2	64.4	63.9	63.8	42.4	41.5	39.6	40.1	39.8

AVERAGE

83% 92% 95% 86% 94% 94%

86% 82% 82% 83% 86% 89%

73% 79% 79% 79% 86%

Blanca Grande Variability

0.5% 1.6% 1.5% 1.9% 1.8% 1.0%

0.1% 0.2% 0.1% 0.2% 0.3% 0.2%

0.2% 0.8% 3.7% 2.6% 1.4%



CONSISTENCY AMONGST COLLABORATING MILLS

ID	Entry	Name	Protein				TEST WEIGHT				TKW								
			CWC	ADM	Cereal Food	Bay State	Hor. Mil.	Conagra	CWC	ADM	Cereal Food	Bay State	Hor. Mil.	Conagra	CWC	ADM	Cereal Food	Hor. Mil.	Conagra
2	1600	UCD 07013/30	12.3	12.0	12.3	12.3	12.4	12.1	63.6	64.1	63.9	64.8	64.1	63.8	52.4	45.3	44.2	48.1	46.4
3	MIX-C	BLANCA GRANDE	11.9	12.3	11.9	12.0	12.0	12.1	64.4	64.8	64.5	65.0	65.1	64.7	49.7	46.1	42.8	43.3	45.2
4	1673	WWW CNBR9302	9.0	9.5	8.3	9.1	8.9	9.2	63.1	64.0	62.4	63.1	63.9	63.6	41.7	39.3	40.2	40.9	40.1
5	1660	RSI 05W90314	9.9	11.3	10.8	11.0	10.9	11.3	63.1	63.5	63.4	63.0	63.5	63.2	49.2	43.8	41.2	43.6	44.6
6	1638	APB W11-6	12.6	12.8	11.8	11.5	12.0	12.5	63.6	64.2	64.1	64.0	64.1	64.1	55.6	50.3	46.6	46.4	50.7
7	1599	UCD 07013/24	10.3	11.2	10.6	11.6	10.8	11.1	62.9	62.9	62.9	63.2	62.9	62.9	44.3	38.5	40.0	37.0	39.0
8	MIX-A	BLANCA GRANDE	11.8	12.5	11.9	12.4	12.0	12.3	64.5	64.9	64.6	64.9	64.8	64.7	49.6	46.4	42.4	44.4	45.4
9	MIX-B	BLANCA GRANDE	11.7	12.1	11.6	12.4	11.7	12.0	64.4	65.1	64.6	65.1	64.8	64.9	49.5	45.7	45.4	45.6	46.4
10	1643	UCD 09014/16	10.7	12.0	11.9	12.5	12.5	12.5	64.0	64.2	64.0	64.2	64.2	64.2	49.2	46.7	42.2	41.7	42.8
12	1650	WB SJ908-247	12.3	13.5	13.0	13.0	13.0	13.4	64.2	63.7	64.2	64.2	64.8	64.0	46.1	44.2	44.0	42.2	41.4
13	1616	UCD 0810/5	11.3		11.5	11.6	11.6	11.8	63.5		64.2	64.0	64.3	64.3	46.7		45.0	45.1	45.8
14	1642	UCD 09013/4	12.7	11.9	11.5	11.6	11.6	11.8	63.0	63.9	63.7	63.7	63.6	63.5	47.7	46.3	44.4	44.2	45.2
15	1639	RSI 05W90192	11.5	12.1	11.4	11.7	11.7	11.8	64.4	64.5	64.3	64.2	65.0	64.7	40.8	46.1	43.0	43.6	43.6
16	1608	WWW CNBR9330	9.1	9.0	8.4	10.7	9.0	9.0	63.4	64.1	64.2	64.4	63.9	63.8	42.4	41.5	39.6	40.1	39.8

AVERAGE

83% 92% 95% 86% 94% 94%

86% 82% 82% 83% 86% 89%

73% 79% 79% 79% 86%

Blanca Grande Variability

0.5% 1.6% 1.3% 1.9% 1.8% 1.0%

0.1% 0.2% 0.1% 0.2% 0.3% 0.2%

0.2% 0.8% 3.7% 2.6% 1.4%

CONSISTENCY AMONGST COLLABORATING MILLS

Farinograph absorption

Farinograph peak

Loaf volume

ID	Entry	Name	Farinograph absorption				Farinograph peak				Loaf volume								
			CWC	ADM	Cereal Food	Bay State	Hor. Mil.	Conagra	CWC	ADM	Cereal Food	Bay State	Hor. Mil.	Conagra	CWC	ADM	Cereal Food	Hor. Mil.	Conagra
2	1600	UCD 07013/30	63.0	64.4	60.7	61.9	61.4	59.3	6.0	7.0	5	8.5	5.3	4.5	920	2800	2985	858	2500
3	MIX-C	BLANCA GRANDE	67.4	68.4	68.4	66.0	64.8	66.9	5.5	7.5	6	5.8	5.8	6.0	920	2750	3074	865	2525
4	1673	WWW CNBR9302	68.0	67.0	65.4	65.3	64.0	65.1	2.0	3.5	3	1.8	4.8	3.0	675	2500	2514	590	2175
5	1660	RSI 05W90314	64.2	66.8	63.8	62.3	62.9	62.7	3.5	5.5	5	6	4.5	4.0	775	2850	3015	820	2600
6	1638	APB W11-6	67.0	67.2	63.0	64.4	64.1	65.7	6.0	6.5	5	6.5	5.5	6.0	880	2800	2897	875	2575
7	1599	UCD 07013/24	65.2	65.4	62.1	62.7	63.6	63.9	3.5	5.0	5	5.3	4.0	4.5	800	2650	2897	805	2375
8	MIX-A	BLANCA GRANDE	67.6	70.2	68.2	66.3	65.5	67.6	5.5	12.5	5	5.2	5.5	6.0	920	2850	3103	848	2475
9	MIX-B	BLANCA GRANDE	67.8	70.0	65.0	65.6	65.7	67.6	5.0	12.0	5	4.5	4.5	5.5	920	2800	2926	913	2350
10	1643	UCD 09014/16	69.2	70.7	68.2	67.1	67.6	67.5	5.0	5.5	5	4.5	4.5	5.5	760	2550	2838	838	2350
12	1650	WB SJ908-247	69.8	72.4	68.9	66.0	67.0	68.4	4.8	8.0	6	4.8	6.5	5.5	890	2925	2838	863	2450
13	1616	UCD 0810/5	64.8		62.2	62.2	62.0	62.4	4.8		5	5.0	5.5	5.0	885		2985	863	2450
14	1642	UCD 09013/4	71.0	71.8	70.2	67.8	71.0	68.8	6.0	4.5	5	3.7	4.3	4.5	900	2600	2853	780	2425
15	1639	RSI 05W90192	64.0	65.8	62.4	62.4	63.2	62.4	5.0	5.0	5	4.5	4.5	4.5	850	2900	3044	825	2650
16	1608	WWW CNBR9330	69.0	72.0	68.5	65.6	66.3	68.6	2.5	2.5	4	2.2	2.5	2.0	625		2691	500	2200

AVERAGE

92% 89% 89% 90% 88% 90%

74% 53% 75% 70% 73% 83%

70% 67% 72% 73% 66%

Blanca Grande Variability

0.3% 1.4% 2.8% 0.5% 0.7% 0.6%

5.4% 25.8% 10.8% 12.6% 12.6% 4.9%

0.0% 1.8% 3.1% 3.9% 3.7%

CONSISTENCY AMONGST COLLABORATING MILLS

Farinograph absorption

Farinograph peak

Loaf volume

ID	Entry	Name
2	1600	UCD 07013/30
3	MIX-C	BLANCA GRANDE
4	1673	WWW CNBR9302
5	1660	RSI 05W90314
6	1638	APB W11-6
7	1599	UCD 07013/24
8	MIX-A	BLANCA GRANDE
9	MIX-B	BLANCA GRANDE
10	1643	UCD 09014/16
12	1650	WB SJ908-247
13	1616	UCD 0810/5
14	1642	UCD 09013/4
15	1639	RSI 05W90192
16	1608	WWW CNBR9330

CWC	ADM	Cereal Food	Bay State	Hor. Mil.	Conagra
63.0	64.4	60.7	61.9	61.4	59.3
67.4	68.4	68.4	66.0	64.8	66.9
68.0	67.0	65.4	65.3	64.0	65.1
64.2	66.8	63.8	62.3	62.9	62.7
67.0	67.2	63.0	64.4	64.1	65.7
65.2	65.4	62.1	62.7	63.6	63.9
67.6	70.2	68.2	66.3	65.5	67.6
67.8	70.0	65.0	65.6	65.7	67.6
69.2	70.7	68.2	67.1	67.6	67.5
69.8	72.4	68.9	66.0	67.0	68.4
64.8		62.2	62.2	62.0	62.4
71.0	71.8	70.2	67.8	71.0	68.8
64.0	65.8	62.4	62.4	63.2	62.4
69.0	72.0	68.5	65.6	66.3	68.6

CWC	ADM	Cereal Food	Bay State	Hor. Mil.	Conagra
6.0	7.0	5	8.5	5.3	4.5
5.5	7.5	6	5.8	5.8	6.0
2.0	3.5	3	1.8	4.8	3.0
3.5	5.5	5	6	4.5	4.0
6.0	6.5	5	6.5	5.5	6.0
3.5	5.0	5	5.3	4.0	4.5
5.5	12.5	5	5.2	5.5	6.0
5.0	12.0	5	4.5	4.5	5.5
5.0	5.5	5	4.5	4.5	5.5
4.8	8.0	6	4.8	6.5	5.5
4.8		5	5.0	5.5	5.0
6.0	4.5	5	3.7	4.3	4.5
5.0	5.0	5	4.5	4.5	4.5
2.5	2.5	4	2.2	2.5	2.0

CWC	ADM	Cereal Food	Hor. Mil.	Conagra
920	2800	2985	858	2500
920	2750	3074	865	2525
675	2500	2514	590	2175
775	2850	3015	820	2600
880	2800	2897	875	2575
800	2650	2897	805	2375
920	2850	3103	848	2475
920	2800	2926	913	2350
760	2550	2838	838	2350
890	2925	2838	863	2450
885		2985	863	2450
900	2600	2853	780	2425
850	2900	3044	825	2650
625		2691	500	2200

AVERAGE

92%	89%	89%	90%	88%	90%
-----	-----	-----	-----	-----	-----

74%	53%	75%	70%	73%	83%
-----	-----	-----	-----	-----	-----

70%	67%	72%	73%	66%
-----	-----	-----	-----	-----

Blanca Grande Variability

0.3%	1.4%	2.8%	0.5%	0.7%	0.6%
------	------	------	------	------	------

5.4%	25.8%	10.8%	12.6%	12.6%	4.9%
------	-------	-------	-------	-------	------

0.0%	1.8%	3.1%	3.9%	3.7%
------	------	------	------	------



Comparison Durum Davis vs. Imperial

TES T# ENTRY NAME	D Imp		D Imp		D Imp		D Imp		D Imp		D Imp		D Imp		D Imp		D Imp	
	PROT %		SEM. EXT.		ALVEO- GRAPH W		WET GLUT		DRY GLUT		COLOR "b" VALUE		COLOR SCORE		COOK LOSS %		FIRM (gcm)	
1 MIX951 - C KRONOS	11.7	13.6	60.3	60.1	186	111	28.2	36.5	10.9	12.6	24.3	25.3	8.0	9.5	8.0	7.1	7.0	8.1
2 1585-Tipai TIPAI	9.9	13.1	65.9	63.9	144	90	24.4	26.8	9.4	10.1	26.0	28.0	8.5	10.0	7.7	7.4	6.8	8.3
3 1589 NORMANO ALLSTAR	10.4	13.9	64.0	63.6	171	135	25.1	33.5	9.7	11.6	25.5	26.2	7.5	9.0	8.7	7.6	7.0	8.3
4 1641 APB D2-97	10.6	13.5	62.9	62.3	223	166	25.8	32.7	9.7	11.3	27.1	27.3	8.5	9.0	8.3	7.3	7.2	8.5
5 1435 WWW D8270	12.4	13.6	62.6	60.4	247	113	32.5	34.7	11.3	12.9	25.7	26.2	7.5	8.5	7.0	7.5	7.6	8.1
8 1628 UCD 08201/20	10.1	13.9	63.8	63.4	183	173	23.5	35.0	8.3	12.1	25.9	26.9	9.0	10.0	8.7	7.3	6.7	9.1
10 1629 UCD 08201/21	11.0	14.5	65.6	62.0	182	58	26.6	36.0	9.6	12.3	24.8	26.6	8.0	8.5	8.2	7.9	6.4	8.2
11 1644 UCD 09210/17	11.0	13.6	63.2	64.2	158	96	27.2	35.6	9.6	11.7	25.3	26.5	9.0	9.5	8.2	8.2	7.4	8.0
12 1645 UCD 09213/30	7.7	12.7	60.4	61.6	101	104	19.0	34.4	7.0	11.9	26.0	27.3	10.0	9.0	8.2	6.8	5.8	8.5
14 1583 SARAGOLLA ALLSTAR	9.9	12.8	63.8	65.4	179	95	27.9	25.9	9.8	9.6	24.4	25.0	8.0	8.5	8.7	7.9	6.4	7.9
15 1646 UCD 09220/135	10.4	14.6	65.2	63.7	135	81	28.0	40.4	10.1	14.2	25.7	28.4	8.5	10.0	8.6	6.5	6.4	9.2
17 1640 APB D1-2	11.2	13.8	63.2	65.9	224	213	28.1	37.3	10.2	13.1	26.7	28.7	9.0	10.0	7.6	7.2	6.8	8.2
18 1674 TANGO WWW MAESTRALE	11.0	13.3	62.1	62.2	107	39	31.7	32.4	11.0	11.8	24.9	25.7	7.5	9.0	7.1	7.8	7.5	8.3
20 1582 ALLSTAR	9.6	15.1	64.7	60.5	108	98	22.7	43.4	8.2	15.0	22.1	25.5	7.5	8.0	8.1	8.3	6.2	8.3
AVERAGE	10.5	13.7	63.4	62.8	167.5	112.2	26.5	34.6	9.6	12.2	25.3	26.7	8.3	9.2	8.1	7.5	6.8	8.4
Correlation Davis vs. Imperial	24%		38%		59%		-10%		-3%		71%		53%		-11%		-29%	

Good correlation: semolina extraction, Alveograph W, and Color

Poor correlation: protein content, wet and dry gluten, firmness and cooking loss.

It might be better to run the durum collaborators directly in Imperial

CLOSING

- 2011 Collaboratives have been requested
- We will be planting common wheat again at UC Davis
- Nitrogen application changes?
- Plant Durums in Imperial?

- Future data available at:
<http://agric.ucdavis.edu/crops/cereals/cereal.htm>