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## 1982 REGIONAL BARLEY, DURUM AND COMMON WHEAT, AND TRITICALE PERFORMANCE TESTS IN CALIFORNIA<sup>1</sup>

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University of California Cooperative Extension regional cereal evaluation tests were conducted in the Sacramento, San Joaquin, and Imperial Valleys and in the south central coastal region in 1982. Entries evaluated in the tests included standard varieties, new and soon-to-be released varieties, and advanced breeding lines from the University of California cereal breeding programs, the International Maize and Wheat Improvement Center (CIMMYT), and several private breeding and seed companies. Barleys (29 entries) were evaluated at seven locations; durum wheats (39 entries), at five locations; common wheats (45 entries), at eight locations; and triticales (31 entries), at four locations.

Tests were conducted on University of California field stations or on grower fields under irrigated as well as rainfed culture. Plots, planted at a rate equivalent to 100 pounds of seed per acre in a randomized complete block design with four replications, were six drill rows wide (6-inch row spacing) and 25 feet long, except at Imperial Valley Field Station where

<sup>1</sup>These tests were conducted as a joint program of the University of California Department of Agronomy and Range Science and Cooperative Extension. Land for the tests, the grain produced, and other facilities were contributed by cooperating growers identified in Table 1. Quality evaluations were provided by the Western Wheat Quality Laboratory, USDA, Pullman, Washington; Hard Red Spring and Durum Wheat Quality Laboratory, USDA and North Dakota State University, Fargo, North Dakota; General Mills, Inc., Vallejo California; Centennial Mills, Los Angeles, California; and Con-Agra Flour Milling Company, Omaha, Nebraska. The assistance of growers and quality laboratories is acknowledged with appreciation. The regional testing program is supported in part by funds provided by grants from the California Crop Improvement Association.

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plots were 16 feet long. Grain was harvested with a Massey 35 combine modified for use in small plots. Foliar diseases were assessed at the soft-to-medium dough stage of growth by estimating the percentages of areas of second leaves (flag-1 leaf) affected. BYD assessments, however, were based on the percentages of plants showing symptoms. Black point and yellowberry of the wheats were assessed on grain samples after harvest. Yields, test weights, kernel weights, plant heights, days to heading, lodging, shattering, disease reactions, and grain quality were determined as indicated in the tables. Information (location, planting and harvest dates, soil type, previous crop, fertilization, irrigation, and seasonal rainfall) regarding each site is given in Table 1. Excessive rainfall in the fall of 1981 caused plantings at UCD, Yolo and Merced to be delayed past the optimum dates for planting, so lower than normal yields were realized at those locations.

Data for barley tests are given in Tables 2-10; durum wheat tests, Tables 11-18; common wheat tests, Tables 19-31; and triticale tests, Tables 32-36.

#### BARLEY

Average yields for the seven barley tests ranged from 1640 LBS/A at San Luis Obispo to 5100 LB/A at Kings. Performances of the entries were affected by lodging and several diseases. Lodging was most severe at Kings and Kern; entries UC 433, UC 295, Poco, and NAPB 6B-79-3 showed the best lodging resistance. Moderate to severe levels of scald occurred at Sutter, UCD, Yolo, Kern, and San Luis Obispo; of net blotch, at UCD, Merced, Kings, and Kern; of powdery mildew, at UCD, Merced, Kings and Kern; of leaf rust, at Merced, Kings and Kern; and of BYD, at UCD, Yolo, and Merced. The best resistance to scald was shown by the variety Sutter; to net blotch, by NK 41248, Multum, Westbred 501, Sutter, and Gus; to powdery mildew, by NK 41248, Multum, Poco and NK 82B1; to leaf rust, by Sutter, NK 41248, and NK 31275; and to BYD, by Sutter and NK 41248. The highest yielding variety was different for each test; UC 337, NK 82B2, NK 82B1, and UC 476 were the highest yielding entries over all locations (Table 9). For the 3-year period, 1980-1982, entries NK 41248 and NK 31275 were the highest yielding entries for irrigated tests in the Sacramento Valley; Prato and NK 31275, in the San Joaquin Valley; and Prato in dryland tests (Table 10).

#### DURUM WHEAT

Average yields for the durum wheat tests ranged from 4500 LB/A at UCD to 3130 LB/A at Tulelake. Performances of the entries were affected by lodging at Imperial and UCD; by BYD at UCD; and by powdery mildew at Imperial. The top yielding entries were Mallard 'S'-entry 498 (UCD and Imperial), D7911 (Delta), Yavaros (Kings) and UC 560 (Tulelake), with no significant differences in yields among the 7 to 24 top yielding entries at the individual locations. At UCD, Delta, and Kings, where both common and durum wheats were tested, the highest yielding durum wheat yielded 114, 105, and 109 percent, respectively, of the top yielding common wheat.

Durum wheat samples from the Kings test in 1981 were analyzed by the Hard Red Spring and Durum wheat quality laboratory, USDA and North Dakota State University, Fargo, North Dakota (Table 17). Westbred 881 was singled out as having the best overall quality. Samples from the Delta test in 1982 were analyzed by General Mills, Inc., Vallejo, California (Table 18). Only three

samples had grain proteins above 12 percent. Grain of Westbred 831 had the best color.

#### COMMON WHEAT

Average yields for the eight common wheat tests ranged from 2170 LB/A at Yolo to 6410 LB/A at Kern. Performances of some of the entries were affected by lodging at UCD and Kern, and by Septoria leaf blotch disease at Sutter. BYD disease was severe on many entries at UCD, Yolo, and Stanislaus, with entries Anza, Phoenix, Aim, UC 485, UC 489 and Westbred 911 less affected than the other entries. Test weights were high at all locations while thousand kernel weights were high at Sutter, Delta and Kings (averaging 41.5, 41.3 and 42.7g, respectively) and low at Yolo (averaging 31.5g). Entries Yecora Rojo, Probred, Klasic, Westbred 911, NK 2437 and SGY 022 consistently had high kernel weights. Yellowberry was severe at all locations except Kern, with entries Inia 66R, Yecora Rojo, Probred, Genero F 81, and NK 2437 less affected than other entries. The highest yielding entries over all locations in 1982 were Yolo and Anza (Table 27). For the 3-year period, 1980-1982, Yolo and Anza were the highest yielding varieties on irrigated acreage in the Sacramento Valley; Yolo, Klasic, Anza and UC 360, in the San Joaquin Valley; and Anza, Shasta, Oslo and Yolo on dryland acreage (Table 28).

Common wheat samples from the Yolo test were analyzed by Con-Agra Flour Milling Company, Omaha, Nebraska (Table 29). Grain proteins were low; the samples were satisfactory for pastry flour but not for bread flour. Entry UC 487, however, did bake a fair loaf of bread. Samples from the Kern test were analyzed by Centennial Mills, Los Angeles, California (Table 30). Grain proteins and flour yields were high for most entries. In bake tests, entry UC 545 was rated very good for loaf grade and texture, while Yecora Rojo, Klasic, Oslo, NK 3940, NK 4236, WS 3974 and UC 547 were rated good. Samples from the Sutter and Kings tests were analyzed by the Western Wheat Quality laboratory, USDA, Pullman, Washington (Table 31). Grain proteins of the samples were too low for desirable bread making properties, although several of the entries, including Probrand 771, Klasic, Oslo, UC 485, NK 2437, NK 3940, WS 3974, WS 4071, SGW 069B, SGY 022 and UC 545 were equal to or better than Yecora Rojo in overall quality. In additional tests to determine the suitability of the samples in markets in the Middle East and Central and South America, for Arabic pocket bread and Chilean Marraqueta rolls, respectively, many entries were well suited for one or both of these purposes.

#### TRITICALE

Average yields for the four triticale tests ranged from 3880 LB/A at UCD to 5690 LB/A at Imperial. Performances of some of the entries were affected by lodging at UCD, Kings and Imperial, and by BYD disease at UCD, Sutter, and Kings. The highest yielding entries at individual locations were Juanillo 168, Beaguelita 'S' (entry 22), Beaguelita 'S' (entry 13) and Topo 120 at Sutter, UCD, Kings, and Imperial, respectively, with no significant differences among the 8, 6, 6 and 13 highest yielding entries at those locations. Over all locations, Beaguelita 'S' (entry 13), Juanillo 168, Beaguelita 'S' (entry 22) and Juanillo 97 were the highest yielding entries. At Sutter, UCD and Kings, where both triticales and common wheats were tested, the highest yielding triticale yielded 121, 105 and 103 percent, respectively, of the highest yielding common wheat.

Table 1. Site Characteristics for Regional Cereal Evaluation Tests, 1982

Location	Test	Planting date	Harvest date	Soil type	1981 crop	Fertilization	Irrigation (inches)	Seasonal* rain (inches)	Irrigation + rain (inches)
Sutter Newhall Land and Farming, Meridian	Common wheat Triticale Barley	12/11/81	6/21/82	Marvin silty clay loam	Safflower	90 lbs N (preplant)	None	18.5	18.5
UC Davis Agronomy Farm, Davis	Common wheat Durum wheat Triticale Barley Oats	1/16/82	7/14/82	Yolo fine sandy loam	Beans	100 lbs N (preplant) 60 lbs N (topdress)	12 (wheat, triticale) 6 (barley, oats) (flood)	16.3	28.3
Yolo Durst Ranch, Hungry Hollow	Common wheat Barley Oats	1/15/82	7/20/82	Rincon silty clay loam	Safflower	220 lbs 27-12-0 (topdress)	None	15.0	15.0
Sacramento-San Joaquin Delta Lewallen Ranch, Tyler Island	Common wheat Durum wheat	12/17/81	7/12/82	Egbert muck (70% organic)	Corn	100 lbs 11-48-0 (preplant) 50 lbs N + 50 lbs N (2 topdress)	3 (spud ditch)	25.0	28.0
Stanislaus Delgran Farms, Crows Landing	Common wheat	12/15/81	6/16/82	Vernalis clay loam	Beans	50 lbs N (topdress)	6 (flood-beds)	15.0	21.0
Merced San Juan Ranch, Dos Palos	Barley	2/4/82	6/18/82	Temple clay loam	Cotton	80 lbs N (preplant)	6 (flood)	7.9	13.9
Kings Jones Farm, Stratford	Common wheat Durum wheat Triticale Barley	12/8/81	6/29/82	Foster fine sandy loam	Cotton	450 lbs 20-6-0 (preplant) 70 lbs N (topdress)	16 (flood-2X)	5.9	21.9

Table 1. Site Characteristics for Regional Cereal Evaluation Tests, 1982 (continued)

Location	Test	Planting date	Harvest date	Soil type	1981 crop	Fertilization	Irrigation (inches)	Seasonal* rain (inches)	Irrigation + rain (inches)
Kern J. G. Boswell Co., Buena Vista Lake	Common wheat Barley	12/7/81	6/23/82	Sacramento clay	Cotton	170 lbs N (preplant) 65 lbs N (topdress)	16 (flood-4X)	6.1	22.1
San Luis Obispo White Ranch, Shandon	Common wheat Barley	11/25/81	7/6/82	Nacimiento- Los Osos complex	Fallow	200 lbs 19-9-0 (topdress)	None	13.0	13.0
Imperial U.C. Imperial Valley Field Station, El Centro	Durum wheat Triticale	12/15/81	6/3/82	Imperial clay	Sudan	100 lbs N, 60 1bs P <sub>2</sub> O <sub>5</sub> (pre- plant) 50 lbs N (tillering) 50 lbs N (early boot)	24 (flood 6X)	1.8	25.8
Tulelake U.C. Tulelake Field Station, Tulelake	Durum wheat	4/20/82	9/14/82	Organic	Wheat	166 lbs N (preplant)	13 (sprinkler 4X)	4.3	17.3

\*Rainfall from planting date to harvest date.

Table 2. 1982 Sutter Barley Test

Entry	Variety	Yield (lbs/acre)	Test weight (lbs/bu)	Thousand kernel weight (grams)	Lodging at harvest	Shatter	Days to heading from 3/1	Plant height (inches)	Scald
2	Briggs	4110 (19)	49.7	42.8	1.0	1.0	51	43	2.0
18	Sutter	6000 ( 4)	50.5	48.0	1.0	1.0	60	42	1.0
190	UC 566	4600 (14)	51.4	49.4	1.0	1.0	48	39	4.5
191	CM 72	3400 (21)	51.9	47.0	2.7	1.0	47	39	4.0
295	UC 295	3330 (22)	47.8	35.6	1.0	1.0	49	26	5.0
316	Prato	4100 (20)	52.6	43.8	1.0	1.0	53	40	1.8
337	UC 337	6030 ( 3)	52.7	44.6	1.0	1.0	51	41	1.0
355	Gus	6280 ( 1)	52.1	42.6	1.0	1.0	55	36	2.0
365	Sunbar Brand 400	4330 (16)	49.2	44.0	1.0	1.0	54	33	3.3
376	UC 376	4250 (18)	51.4	42.2	1.0	1.0	54	34	1.0
433	UC 433	4760 (10)	51.7	41.4	1.0	1.0	45	39	3.5
466	Sunbar Brand 401	4640 (12)	50.5	45.6	1.7	1.0	53	33	2.3
470	NK 41248	5990 ( 5)	49.1	39.8	1.0	1.0	54	28	1.0
471	NK 31275	5730 ( 6)	49.9	46.0	1.0	1.0	54	41	1.0
476	UC 476	5100 ( 9)	53.2	45.6	1.0	1.0	53	41	1.3
540	UC 540	4710 (11)	49.4	44.8	1.0	1.0	51	36	1.5
573	Multum	4470 (15)	53.3	46.2	1.0	1.0	55	40	2.0
577	Westbred 501	4630 (13)	52.7	42.4	1.0	2.0	54	33	1.8
579	Poco	1090 (24)	50.7	40.8	1.0	4.0	36	28	5.0
584	NK82B2	5120 ( 8)	49.1	45.0	1.0	1.0	56	36	1.0
585	NK 82B1	6270 ( 2)	51.0	44.4	1.0	1.0	56	35	1.0
617	NAPB 6B-79-3	4270 (17)	51.5	35.4	1.0	1.0	48	30	5.0
618	WPB 79-22	5650 ( 7)	54.6	44.8	1.0	1.0	56	33	3.0
624	Early 32	2560 (23)	49.2	41.8	2.7	2.0	42	38	4.0
GRAND MEAN		4640	51.1	43.5	1.2	1.2	51	36	2.4
CV		16.1	1.4	3.6	36.0	52.0	1.8	6.6	32.5
LSD (.05)		1230	1.5	3.3	0.7	1.0	1	3	1.1

Rating scale (1-8) 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%.

Diseases assessed but occurring in trace or less amounts: BYDV, leaf rust, net blotch, powdery mildew.

Numbers in parentheses indicate relative rank in column.

Table 3. 1982 U.C. Davis Barley Test

Entry	Variety	Yield (lbs/acre)	Test weight (lbs/bu)	Thousand kernel weight (grams)	Days to heading from 3/1	Plant height (inches)	Lodging		Net blotch	Scald	Powdery mildew
							Lodging on 5/17	at harvest			
2	Briggs	3880 (17)	47.8	45.4	58	37	2.3	3.3	5.8	1.3	2.3
18	Sutter	3990 (16)	45.3	36.8	70	44	3.0	4.3	1.0	1.0	1.0
190	UC 566	3680 (20)	49.3	46.6	57	36	4.3	6.0	2.8	1.0	4.0
191	CM 72	3510 (22)	48.6	44.0	55	36	7.5	8.0	2.0	1.0	4.0
295	UC 295	4420 (12)	44.9	35.8	59	26	1.0	1.0	2.8	1.0	4.3
316	Prato	5390 (2)	49.7	41.4	61	35	3.0	3.8	1.3	2.3	1.5
337	UC 337	5060 (8)	50.4	44.8	60	39	2.0	3.0	2.0	1.0	1.0
355	Gus	4330 (13)	46.6	38.4	65	35	1.0	1.0	2.0	1.0	1.5
365	Sunbar Brand 400	4140 (14)	44.9	41.4	66	32	1.0	1.8	3.8	1.0	1.0
376	UC 376	4870 (10)	47.1	40.0	63	32	1.0	1.0	3.0	1.8	1.0
433	UC 433	4910 (9)	48.8	42.2	57	37	2.8	3.0	2.8	1.3	1.8
466	Sunbar Brand 401	4870 (11)	48.2	42.6	66	31	1.0	1.0	1.3	1.0	1.3
470	NK 41248	5100 (6)	47.6	35.8	68	32	1.0	1.8	1.3	1.0	1.0
471	NK 31275	5370 (3)	46.7	42.8	64	34	1.0	1.0	4.0	1.5	1.0
476	UC 476	5620 (1)	47.2	43.0	63	34	1.5	1.5	1.3	1.0	4.5
540	UC 540	4110 (15)	46.1	41.8	59	31	1.0	1.0	3.8	1.0	1.0
573	Multum	3360 (24)	50.5	44.0	70	40	1.0	1.3	6.0	1.0	1.0
577	Westbred 501	3820 (18)	48.4	37.8	66	31	1.0	1.0	4.3	1.0	1.0
579	Poco	3220 (26)	46.3	32.8	52	24	1.0	1.5	2.0	1.0	5.3
584	NK 82B2	5340 (4)	46.6	43.6	65	36	1.0	1.0	2.8	1.8	1.0
585	NK 82B1	5290 (5)	46.8	40.6	67	35	1.3	1.0	1.8	1.0	1.0
617	NAPB 6B-79-3	3710 (19)	46.6	33.4	60	24	1.0	1.0	3.3	1.0	2.8
618	WPB 79-22	5070 (7)	49.7	39.2	68	32	1.0	1.3	1.8	1.3	1.8
619	CCII-F26	3140 (27)	45.6	40.6	63	40	6.0	8.0	5.8	1.0	1.8
620	CCII-F48	3080 (28)	46.0	43.2	65	42	5.0	8.0	5.8	1.0	1.0
621	CCV-F24	3420 (23)	47.4	42.2	63	42	5.5	7.5	5.3	1.3	1.0
622	CCV-F33	3650 (21)	46.7	43.8	63	43	5.0	8.0	5.3	1.3	1.5
623	CCXXI-F17	3330 (25)	45.8	41.2	61	39	4.5	7.3	4.3	1.3	1.3
624	Early 32	2350 (29)	45.3	40.2	53	34	3.3	7.0	4.3	1.0	4.0
GRAND MEAN		4210	47.3	40.9	62	35	2.4	3.3	3.2	1.2	1.9
CV		8.3	2.6	3.1	1.4	6.2	35.6	21.4	24.7	27.3	33.0
LSD (.05)		490	2.5	2.6	1	3	1.2	1.0	1.1	0.5	0.9
											37.6
											0.8

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

Diseases assessed but occurring in trace or less amounts: leaf rust.

Numbers in parentheses indicate relative rank in column.

BYDV ratings (see scale above) were based on percentage of plants showing foliar symptoms.

Table 4. 1982 Yolo Barley Test

Entry	Variety	Yield (lbs/acre)	Test weight (lbs/bu)	Thousand kernel weight (grams)	Plant height (inches)	BYDV	Net blotch	Scald
2	Briggs	1940 (21)	46.0	40.2	28	4.3	1.0	2.3
18	Sutter	2880 (4)	46.3	37.8	36	1.3	1.0	1.0
190	UC 566	2150 (17)	49.6	44.0	29	2.5	1.0	3.3
191	CM 72	2560 (9)	49.1	40.6	29	2.8	1.0	3.3
295	UC 295	1800 (24)	44.7	35.2	20	2.5	1.0	4.3
316	Prato	2700 (8)	48.7	40.8	26	2.0	1.3	1.5
337	UC 337	3320 (1)	48.6	40.2	29	1.8	1.0	1.3
355	Gus	2300 (13)	48.3	36.6	26	2.0	1.0	1.3
365	Sunbar Brand 400	2210 (16)	46.5	41.8	23	3.5	1.0	1.8
376	UC 376	2520 (10)	48.3	38.0	24	2.5	1.3	1.3
433	UC 433	2730 (7)	48.3	39.4	29	2.8	1.0	2.0
466	Sunbar Brand 401	2290 (14)	47.4	39.8	23	2.0	1.0	1.3
470	NK 41248	2310 (12)	47.2	35.4	23	1.0	1.0	1.0
471	NK 31275	2760 (6)	46.5	40.0	28	3.8	1.0	1.0
476	UC 476	2840 (5)	50.3	42.8	28	2.5	1.0	1.0
540	UC 540	2060 (18)	47.6	40.0	26	3.3	1.0	2.3
573	Multum	1380 (26)	48.4	40.8	31	5.0	1.0	1.0
577	Westbred 501	1760 (25)	48.4	35.6	23	3.3	1.0	1.0
579	Poco	1170 (28)	45.7	28.6	20	1.3	1.0	5.0
584	NK 82B2	2940 (2)	45.5	40.4	28	1.8	1.5	1.0
585	NK 82B1	2910 (3)	47.1	39.6	26	1.8	1.0	1.0
618	WPB 79-22	2310 (11)	49.0	36.0	22	2.5	1.0	1.3
619	CCII-F26	1840 (23)	46.0	40.0	32	4.5	1.0	1.0
620	CCII-F48	1970 (20)	45.4	41.4	35	5.3	1.0	1.0
621	CCV-F24	2240 (15)	47.5	40.0	35	4.5	1.3	1.0
622	CCV-F33	1980 (19)	47.6	43.2	33	4.3	1.0	1.0
623	CCXXI-F17	1860 (22)	46.9	39.0	35	4.8	1.0	1.0
624	Early 32	1350 (27)	46.4	38.0	29	2.8	1.0	3.3
GRAND MEAN		2250	47.4	39.1	28	2.9	1.0	1.7
CV		14.2	1.5	3.7	5.6	24.4	18.7	29.0
LSD (.05)		450	1.4	3.0	2	1.0	0.3	0.7

Rating scale (1-8) for diseases (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%.

Diseases assessed but occurring in trace or less amounts: leaf rust, powdery mildew.

Numbers in parentheses indicate relative rank in column.

BYDV ratings (see scale above) were based on percentage of plants showing foliar symptoms.

Table 5. 1982 Merced Barley Test

Entry	Variety	Yield (lbs/acre)	Test weight (lbs/bu)	Thousand kernel weight (grams)	Days to heading from 3/1	Plant height (inches)	Lodging on 5/18	Lodging at harvest			Leaf rust	Net blotch	Powdery mildew
2	Briggs	3090 (23)	45.1	39.6	56	37	3.3	3.0	1.0	1.8	1.8	1.0	1.0
18	Sutter	4310 (14)	45.0	35.6	65	47	4.8	4.0	1.0	1.3	1.0	1.0	1.0
190	UC 566	4310 (13)	48.7	46.6	56	44	6.0	4.3	1.0	1.8	1.0	2.0	2.8
191	CM 72	4800 (6)	49.7	47.6	51	42	5.5	4.5	1.0	1.3	1.0	2.0	1.3
295	UC 295	4960 (2)	44.7	37.4	58	34	1.0	1.0	1.0	2.0	1.3	1.0	1.8
316	Prato	4880 (3)	49.0	41.4	56	40	3.5	3.0	1.0	1.5	1.0	1.5	2.8
337	UC 337	4810 (5)	50.1	40.2	58	46	2.8	2.3	1.3	1.3	1.0	1.0	2.5
355	Gus	3720 (20)	44.6	31.8	58	42	1.5	3.5	1.0	1.3	3.8	1.0	1.5
365	Sunbar Brand 400	3980 (17)	45.1	39.8	58	41	4.0	4.3	1.0	2.3	1.3	1.0	2.5
376	UC 376	4320 (12)	48.0	39.0	56	40	1.5	1.3	1.3	2.3	2.0	1.0	1.0
433	UC 433	4640 (8)	49.0	41.2	56	43	1.3	1.0	1.5	2.0	1.0	1.0	1.0
466	Sunbar Brand 401	5260 (1)	47.5	40.2	57	39	3.0	2.5	1.0	1.0	1.0	1.0	2.3
470	NK 41248	4460 (11)	45.5	35.8	65	38	2.8	3.5	1.0	1.0	1.0	1.0	1.0
471	NK 31275	4760 (7)	46.8	39.2	58	44	1.8	1.8	1.5	2.8	1.0	1.0	1.8
476	UC 476	4020 (16)	48.5	40.4	58	44	4.0	3.0	1.0	1.3	1.3	1.3	1.3
540	UC 540	4250 (15)	45.8	39.8	57	38	4.3	2.8	1.3	1.8	1.8	1.3	1.5
573	Multum	3720 (19)	52.2	46.8	65	45	3.5	3.8	1.0	1.8	1.0	1.0	1.0
577	Westbred 501	3700 (21)	46.5	31.8	58	37	1.8	2.0	1.0	2.0	3.0	1.0	1.0
579	Poco	3580 (22)	45.0	29.4	50	29	1.0	3.3	1.0	1.0	3.8	1.3	1.0
584	NK 82B2	4600 (10)	46.2	40.8	57	40	4.8	3.3	1.3	2.0	1.0	1.8	1.0
585	NK 82B1	4830 (4)	43.1	32.4	60	42	2.8	3.5	1.0	1.8	1.3	1.3	1.0
617	NAPB 68-79-3	3720 (18)	45.4	29.4	56	32	1.5	2.8	1.0	2.8	2.8	1.0	1.8
618	WPB 79-22	4600 (9)	48.9	35.0	72	37	1.0	1.0	1.0	1.5	2.0	1.0	2.8
624	Early 32	2270 (24)	44.8	37.2	50	41	4.5	5.0	2.0	1.3	1.8	1.5	1.5
GRAND MEAN		4230	46.9	38.3	58	40	3.0	2.9	1.1	1.7	1.6	1.2	1.0
CV		15.7	1.9	6.9	1.1	6.4	59.1	58.4	28.0	33.4	28.9	22.8	38.0
LSD (.05)		940	1.9	5.5	1	4	2.5	2.4	0.4	0.8	0.7	0.4	0.8

Rating scale (1-8) 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%.

Diseases assessed but occurring in trace or less amounts: scald.

Numbers in parentheses indicate relative rank in column.

BYDV ratings (see scale above) were based on percentage of plants showing foliar symptoms.

Table 6. 1982 Kings Barley Test

Entry	Variety	Yield (lbs/acre)	Test weight (lbs/bu)	Thousand kernel weight (grams)	Plant height (inches)	Lodging on 5/4	Lodging at harvest	Shatter	Leaf rust	Net blotch	Powdery mildew
2	Briggs	4190 (22)	50.0	41.4	39	6.5	5.8	1.5	1.0	2.0	1.0
18	Sutter	5150 (14)	50.0	41.4	47	3.5	5.3	1.3	1.0	1.3	1.0
190	UC 566	5160 (13)	51.6	46.2	39	4.5	5.8	1.0	1.3	1.5	1.0
191	CM 72	4480 (20)	50.6	45.2	36	7.0	7.3	2.0	1.3	2.0	1.0
295	UC 295	6410 (1)	48.1	40.6	36	1.0	2.3	1.5	1.0	2.0	1.0
316	Prato	4600 (19)	51.6	38.6	38	4.3	4.0	1.0	1.3	2.3	1.0
337	UC 337	6080 (2)	51.3	40.0	41	2.8	3.5	1.0	1.0	2.0	2.5
355	Gus	4910 (16)	45.9	36.0	38	1.5	5.5	1.0	1.5	1.0	1.0
365	Sunbar Brand 400	4800 (18)	48.5	45.6	33	2.8	4.8	1.0	1.3	1.5	2.8
376	UC 376	5780 (4)	50.0	38.6	35	1.0	3.3	1.0	1.3	1.3	1.0
433	UC 433	5570 (7)	51.2	43.0	36	3.5	2.8	1.0	1.0	1.5	1.0
466	Sunbar Brand 401	5130 (15)	49.2	41.4	33	2.8	7.0	1.3	1.3	1.5	1.3
470	NK 41248	5540 (8)	48.8	34.8	31	2.3	3.3	1.5	1.0	1.0	1.0
471	NK 31275	5310 (11)	49.5	42.2	40	1.3	4.0	1.5	1.0	1.8	1.3
476	UC 476	5600 (5)	51.3	40.2	40	3.5	3.8	1.0	1.0	1.8	1.0
540	UC 540	5510 (10)	48.7	40.0	36	2.5	3.8	1.0	1.0	1.5	1.0
573	Multum	4020 (23)	54.7	44.4	39	3.3	3.5	1.0	1.3	1.0	1.0
577	Westbred 501	5230 (12)	51.0	37.4	36	1.5	4.5	1.0	1.8	1.0	1.3
579	Poco	2710 (24)	51.5	40.4	26	1.0	1.3	4.8	3.3	3.3	1.0
584	NK 82B2	6070 (3)	48.4	41.2	42	1.0	4.3	1.5	1.3	2.3	1.0
585	NK 82B1	5520 (9)	49.7	40.0	38	1.5	3.8	1.0	1.0	2.0	1.0
617	NAPB 6B-79-3	5570 (6)	52.0	36.0	31	1.0	1.3	1.0	2.5	1.0	1.0
618	WPB 79-22	4810 (17)	52.5	39.6	35	1.5	5.0	1.0	1.5	1.8	2.0
624	Early 32	4190 (21)	50.5	45.4	38	5.0	5.5	1.5	1.8	1.5	1.0
GRAND MEAN		5100	50.3	40.8	37	2.8	4.2	1.0	1.3	1.0	1.2
CV		13.4	2.4	6.4	7.1	44.5	33.8	38.8	31.8	34.1	50.2
LSD (.05)		970	2.5	5.4	4	1.7	2.0	0.7	0.6	0.8	0.9

Rating scale (1-8) 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%.

Diseases assessed but occurring in trace or less amounts: BYDV and scald.

Numbers in parentheses indicate relative rank in column.

Table 7. 1982 Kern Barley Test

Entry	Variety	Yield (lbs/acre)	Plant height (inches)	Test weight (lbs/bu)	Thousand kernel weight (grams)	Lodging on 5/6	Lodging at harvest	Leaf rust	Net blotch	Scald	Powdery mildew
2	Briggs	3020 (22)	41	44.5	39.0	7.0	7.8	1.5	2.0	1.0	2.3
18	Sutter	5180 (1)	47	47.5	41.2	4.5	5.5	1.0	1.0	1.0	1.3
190	UC 566	4060 (13)	41	50.1	44.4	4.5	5.8	1.0	1.8	3.5	3.0
191	CM 72	4620 (3)	41	48.9	45.4	7.8	6.8	1.0	2.5	1.3	2.3
295	UC 295	3970 (15)	34	50.0	38.2	1.0	5.5	1.0	1.5	7.0	1.0
316	Prato	4360 (7)	40	47.0	34.6	7.0	6.8	1.3	2.0	1.0	1.0
337	UC 337	4670 (2)	42	49.6	40.0	4.3	6.0	1.5	1.3	1.8	5.3
355	Gus	3540 (20)	42	47.6	32.8	2.0	7.5	2.8	1.3	2.0	3.8
365	Sunbar Brand 400	4070 (12)	40	45.7	42.2	4.0	7.8	1.3	1.5	1.8	5.0
376	UC 376	4520 (5)	40	48.3	38.0	3.0	5.3	1.8	2.0	1.0	1.3
433	UC 433	4130 (11)	39	47.7	38.2	4.0	3.3	2.0	1.0	1.0	4.3
466	Sunbar Brand 401	4240 (9)	34	46.9	40.2	3.3	6.0	1.3	2.3	2.5	3.0
470	NK 41248	4280 (8)	39	46.7	33.8	4.0	7.8	1.0	1.0	1.5	1.0
471	NK 31275	3870 (16)	43	47.0	39.2	5.5	5.3	1.0	2.0	2.0	4.3
476	UC 476	4200 (10)	41	47.0	41.0	6.8	6.5	1.0	1.8	1.5	1.8
540	UC 540	3980 (14)	36	48.1	42.8	4.5	5.8	1.8	1.5	1.0	3.8
573	Multum	3590 (19)	44	52.5	46.4	3.8	4.8	1.0	1.0	3.3	1.0
577	Westbred 501	3800 (18)	40	48.2	35.2	1.5	6.3	4.3	1.0	1.0	4.3
579	Poco	2320 (24)	31	48.0	33.8	1.3	8.0	1.3	1.0	6.8	1.0
584	NK 82B2	4590 (4)	44	47.0	38.8	2.8	5.3	1.0	1.8	1.0	2.5
585	NK 82B1	4490 (6)	42	46.6	37.8	2.0	5.5	1.0	2.3	1.5	1.0
617	NAPB 6B-79-3	3860 (17)	31	48.8	35.2	5.0	5.5	2.3	1.5	2.5	2.5
618	WPB 79-22	3160 (21)	39	47.6	33.4	3.0	7.0	1.0	2.0	3.8	4.3
624	Early 32	2530 (23)	39	49.0	44.8	6.0	7.3	2.3	1.0	1.3	3.5
GRAND MEAN		3960	40	47.9	39.0	4.1	6.2	1.5	1.6	2.2	2.7
CV		20.6	5.4	3.9	5.3	28.4	16.6	38.4	38.9	55.7	34.5
LSD (.05)		1150	3	4.3	4.3	1.6	1.4	0.8	0.9	1.7	1.3

Rating scale (1-8) for diseases (area of flag-1 leaf affected) and lodging: 1 = 0-3%; 2 = 4-14%; 3 = 15-29%; 4 = 30-49%;

5 = 50-69%; 6 = 70-84%; 7 = 85-95%; 8 = 96-100%.

Diseases assessed but occurring in trace or less amounts: BYDV

Numbers in parentheses indicate relative rank in column.

Table 8. 1982 San Luis Obispo Barley Test

Entry	Variety	Yield (lbs/acre)	Test weight (lbs/bu)	Thousand kernel weight (grams)	Scald
2	Briggs	2030 ( 2)	47.4	38.0	2.0
18	Sutter	1980 ( 3)	47.2	38.0	1.0
190	UC 566	1100 (26)	45.6	33.0	7.8
191	CM 72	1710 (16)	46.1	33.6	7.3
295	UC 295	480 (28)	44.8	37.8	7.8
316	Prato	1710 (17)	48.1	31.6	4.0
337	UC 337	1540 (21)	47.6	33.2	4.8
355	Gus	1120 (25)	47.4	32.6	4.0
365	Sunbar Brand 400	1800 (12)	45.0	36.6	7.8
376	UC 376	1670 (19)	48.1	36.0	3.8
433	UC 433	1600 (20)	47.5	35.0	5.3
466	Sunbar Brand 401	1730 (15)	46.1	34.4	7.8
470	NK 41248	1910 ( 8)	47.3	36.4	2.0
471	NK 31275	1840 (10)	47.1	36.0	4.5
476	UC 476	1930 ( 6)	48.7	34.2	3.0
540	UC 540	1500 (22)	45.1	33.6	3.8
573	Multum	2080 ( 1)	51.9	40.4	3.8
577	Westbred 501	1740 (14)	49.5	36.8	3.8
579	Poco	600 (27)	45.8	21.4	8.0
584	NK 82B2	1420 (23)	46.2	36.4	4.8
585	NK 82B1	1680 (18)	46.3	34.0	3.0
618	WPB 79-22	1810 (11)	49.4	33.8	4.0
619	CCII-F26	1920 ( 7)	48.3	42.8	2.5
620	CCII-F48	1770 (13)	47.9	41.4	1.5
621	CCV-F24	1880 ( 9)	47.7	39.2	2.5
622	CCV-F33	1940 ( 5)	48.6	41.2	2.0
623	CCXXI-F17	1980 ( 4)	48.7	39.2	2.0
624	Early 32	1400 (24)	46.1	33.8	7.8
GRAND MEAN		1640	47.3	35.7	4.3
CV		21.6	1.5	8.6	34.0
LSD (.05)		500	1.5	6.4	2.1

Rating scale (1-8) for diseases (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%.

Diseases assessed but occurring in trace or less amounts: BYDV, leaf rust, net blotch, powdery mildew.

Numbers in parentheses indicate relative rank in column.

Table 9. 1982 Barley Tests, Seven Location Yield Summary (lbs/acre)

Entry	Variety	7 Locations							San Luis Obispo
		Sutter	UCD	Yolo	Merced	Kings	Kern		
2	Briggs	3030 (21)	4110	3880	1940	3090	4190	3020	2030
18	Sutter	3910 (11)	6000	3990	2880	4310	5150	5180	1980
190	UC 566	3410 (17)	4600	3680	2150	4310	5160	4060	1100
191	CM 72	3610 (14)	3400	3510	2560	4800	4480	4620	1710
295	UC 295	3670 (12)	3330	4420	1800	4960	6410	3970	480
316	Prato	3940 ( 7)	4100	5390	2700	4880	4600	4360	1710
337	UC 337	4250 ( 1)	6030	5060	3320	4810	6080	4670	1540
355	Gus	3320 (19)	6280	4330	2300	3720	4910	3540	1120
365	Sunbar Brand 400	3500 (16)	4330	4140	2210	3980	4800	4070	1800
376	UC 376	3950 ( 6)	4250	4870	2520	4320	5780	4520	1670
433	UC 433	3930 ( 9)	4760	4910	2730	4640	5570	4130	1600
466	Sunbar Brand 401	3920 (10)	4640	4870	2290	5260	5130	4240	1730
470	NK 41248	3930 ( 8)	5990	5100	2310	4460	5540	4280	1910
471	NK 31275	3990 ( 5)	5730	5370	2760	4760	5310	3870	1840
476	UC 476	4030 ( 4)	5100	5620	2840	4020	5600	4200	1930
540	UC 540	3570 (15)	4710	4110	2060	4250	5510	3980	1500
573	Multum	3030 (20)	4470	3360	1380	3720	4020	3590	2080
577	Westbred 501	3340 (18)	4630	3820	1760	3700	5230	3800	1740
579	Poco	2270 (23)	1090	3220	1170	3580	2710	2320	600
584	NK 82B2	4160 ( 2)	5120	5340	2940	4600	6070	4590	1420
585	NK 82B1	4120 ( 3)	6270	5290	2910	4830	5520	4490	1680
617	NAPB 6B-79-3	--	4270	3710	--	3720	5570	3860	--
618	WPB 79-22	3630 (13)	5650	5070	2310	4600	4810	3160	1810
619	CCII-F26	--	--	3140	1840	--	--	--	1920
620	CCII-F48	--	--	3080	1970	--	--	--	1770
621	CCV-F24	--	--	3420	2240	--	--	--	1880
622	CCV-F33	--	--	3650	1980	--	--	--	1940
623	CCXXI-F17	--	--	3330	1860	--	--	--	1980
624	Early 32	2350 (22)	2560	2350	1350	2270	4190	2530	1400
GRAND MEAN		3600	4640	4210	2250	4230	5100	3960	1640
CV		16.0	16.1	8.3	14.2	15.7	13.4	20.6	21.6
LSD (.05)		330	1230	490	450	940	970	1150	500

Numbers in parentheses indicate relative rank in column.

Table 10. 1980-1982 Barley Tests, Yield Summary (1bs/acre)

Location	Year	Variety/Line													Test <sup>1</sup> mean	LSD (.05)
		Briggs	Sutter	UC 566	CM 72	Prato	Gus	Sunbar Brand 400	Sunbar Brand 401	NK 41248	NK 31275	Westbred 501				
<u>Irrigated Tests</u>																
Sutter	1980	5170	4570	4910	5230	6110	5200	4920	4770	6040	5890	5180	5080	770		
	1981	3660	3410	3270	3920	3970	4370	4580	5130	5780	5150	4930	4360	880		
	1982	4110	6000	4600	3400	4100	6280	4330	4640	5990	5730	4630	4640	1230		
UCD	1980	4340	4010	3840	3680	5890	4510	3790	4710	5620	5980	4360	4420	900		
	1981	3670	2370	3610	3160	3600	2530	2630	2950	2980	3400	2640	2980	810		
	1982	3880	3990	3680	3510	5390	4330	4140	4870	5100	5370	3820	4210	490		
Mean of Sacramento Valley		4140	4060	3980	3820	4840	4540	4060	4510	5250	5250	4260	4280			
Merced	1982	3090	4310	4310	4800	4880	3720	3980	5260	4460	4760	3700	4230	940		
Kings	1980	4000	2810	4920	4760	5040	3820	5150	4830	3850	5530	4390	4680	830		
	1981	2810	4000	3480	2870	4060	2860	3810	4020	4050	4570	3060	3510	900		
	1982	4190	5150	5160	4480	4600	4910	4800	5130	5540	5310	5230	5100	970		
WSFS <sup>2</sup>	1980	2360	2770	3180	3180	3790	2370	2430	2230	2540	2220	2660	2640	520		
	1981	2830	3170	2860	3090	2830	2670	2590	2740	2820	2830	2710	2760	ns		
Kern	1982	3020	5180	4060	4620	4360	3540	4070	4240	4280	3870	3800	3960	1150		
Mean of San Joaquin Valley		3190	3910	4000	3970	4220	3410	3830	4060	3930	4160	3650	3840			
<u>Dryland Tests</u>																
Yolo	1980	2270	3680	3020	3510	4210	3630	--	--	--	--	--	3700	770		
	1981	2640	2190	2580	2320	3000	2930	3370	2920	3880	3410	3640	2870	520		
	1982	1940	2880	2150	2560	2700	2300	2210	2290	2310	2760	1760	2250	450		
Stanislaus	1980	2080	2190	1380	1410	2250	1080	--	--	--	--	--	1970	1100		
Merced	1981	3420	3050	2580	2910	3230	2860	2730	2950	2860	3390	3390	2960	480		

Table 10. 1980-1982 Barley Tests, Yield Summary (lbs/acre) (continued)

Location	Year	Variety/Line												Test <sup>1</sup> mean	LSD (.05)
		Briggs	Sutter	UC 566	CM 72	Prato	Gus	Sunbar Brand 400	Sunbar Brand 401	NK 41248	NK 31275	Westbred 501			
SLO <sup>3</sup>	1980	3010	2940	2920	2860	3940	3080	--	--	--	--	--	3260	960	
	1981	4900	4990	4280	4350	4490	4030	3880	4150	4310	4110	4430	4320	710	
	1982	2030	1980	1100	1710	1710	1120	1800	1730	1910	1840	1740	1640	500	
Mean of dryland tests		2790	2990	2500	2700	3190	2630	--	--	--	--	--	2870		

<sup>1</sup>Tests included additional varieties and lines.<sup>2</sup>U.C. West Side Field Station, Five Points.<sup>3</sup>San Luis Obispo.

Table 11. 1982 U.C. Davis Durum Wheat Test

Entry	Variety	Yield (lbs/acre)	Test weight (lbs/bu)	Thousand kernel weight (grams)	Days to heading from 3/1	Days to maturity from 3/1	Plant height (inches)	Lodging	BYDV	Black point	Yellow- berry
162	Produra	3960 (32)	62.2	46.4	66	99	30	4.5	3.3	1.0	3.0
169	Mexicali 75	4700 (18)	61.1	51.0	64	99	34	5.3	4.0	1.0	2.0
254	Modoc	5210 (5)	64.4	45.0	64	105	33	4.3	2.8	1.0	2.5
410	Aldura	4740 (14)	63.0	49.2	53	105	31	3.3	2.0	1.5	2.5
416	TL 75-393	3460 (37)	63.6	46.2	71	108	37	6.3	3.8	1.0	1.5
422	TL 75-409	4240 (28)	60.4	43.8	71	105	36	6.3	4.0	1.5	2.0
481	D7911	4810 (12)	63.7	52.2	66	103	32	4.5	3.3	1.5	2.5
482	UC 482	3360 (38)	63.3	51.4	74	105	36	6.3	2.3	1.0	2.0
496	Yavaros	5130 (8)	64.3	55.2	66	105	32	3.8	3.0	1.5	2.5
498	Mallard 'S'	5470 (1)	62.5	54.6	63	105	32	5.8	2.5	1.5	3.5
499	Rokel 'S'	5220 (4)	60.9	43.8	63	103	31	4.0	3.5	1.0	2.0
505	Swan 'S'	4400 (24)	63.6	49.4	71	108	35	4.3	2.5	1.5	2.0
506	D8042	5300 (2)	62.7	49.0	68	102	37	5.8	2.5	1.0	2.5
507	D8055	4340 (26)	61.8	51.8	63	105	32	5.8	4.0	1.0	3.0
512	UC 512	3820 (33)	64.5	42.0	74	108	34	6.5	2.5	1.0	2.0
513	UC 513	4400 (25)	62.9	48.4	68	105	35	5.3	2.5	1.0	2.0
514	UC 514	5290 (3)	61.9	46.6	67	102	30	5.0	2.3	1.0	2.5
515	D8056	4160 (30)	61.9	52.6	67	108	36	6.8	4.3	1.0	2.0
516	D8057	4730 (15)	62.5	47.6	66	108	36	6.3	2.8	1.5	1.5
517	UC 517	4800 (13)	62.4	43.6	71	108	35	6.3	1.8	1.5	2.0
518	UC 518	4080 (31)	62.1	51.4	71	108	35	5.5	2.0	1.5	1.5
519	Westbred 1000D	4700 (17)	60.5	49.6	70	108	33	3.5	4.5	2.0	2.5
522	Westbred 881	4280 (27)	61.4	51.8	64	102	29	4.0	3.8	1.5	2.0
557	Nita*	3690 (35)	61.0	38.0	74	108	40	5.0	2.3	1.0	2.5
558	7702*	3140 (39)	60.7	43.8	67	102	37	5.0	4.8	1.0	1.0
559	UC 559	4910 (10)	62.4	45.0	66	108	37	4.8	2.8	1.0	2.5
560	UC 560	4430 (22)	60.8	46.2	68	108	34	7.0	2.5	1.0	2.0
561	D8118	4520 (20)	61.2	52.2	66	105	30	3.0	3.8	2.0	1.5
562	Njoro 231	4420 (23)	60.6	47.0	64	105	32	5.0	4.3	1.0	2.0
563	Kingfisher 'S'	4720 (16)	62.7	52.0	67	105	35	1.8	2.8	1.0	2.0
564	Mallard 'S'	4630 (19)	62.0	58.8	64	108	32	6.8	3.3	1.0	2.5
565	D8128	3810 (34)	61.6	46.0	68	102	28	1.5	4.8	1.0	3.0
566	TL 74-30	5020 (9)	62.7	43.8	74	108	34	2.3	2.3	1.0	2.0
567	TL 73-457	5170 (7)	62.7	46.6	71	108	34	4.3	2.0	1.0	2.0
568	TL 73-506	5180 (6)	63.5	53.0	64	102	32	6.3	2.8	1.0	2.5

Table 11. 1982 U.C. Davis Durum Wheat Test (continued)

Entry	Variety	Yield (lbs/acre)	Test weight (lbs/bu)	Thousand kernel weight (grams)	Days to heading from 3/1	Days to maturity from 3/1	Plant height (inches)	Lodging	BYDV	Black point	Yellow- berry
569	TL 73-471	4510 (21)	62.0	45.8	71	108	35	5.0	2.5	1.5	2.5
570	TL 73-468	4190 (29)	60.8	48.0	72	108	32	5.5	2.0	1.0	2.5
571	TL 73-16	3630 (36)	61.9	42.6	71	108	35	5.0	3.3	1.5	1.5
572	Ward	4910 (11)	59.9	38.4	76	108	39	6.0	1.0	1.0	1.5
GRAND MEAN		4500	62.2	47.9	68	106	34	4.9	3.0	1.2	2.2
CV		10.5	0.9	3.9	4.3	0.2	4.0	22.5	23.9	36.1	24.5
LSD (.05)		660	1.1	3.8	4	1	3	1.6	1.0	ns	1.1

\*Bread wheat.

Rating scale (1-8) for diseases (area of flag-1 leaf affected), lodging, 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%.

Diseases assessed but occurring in trace or less amounts: leaf rust, stripe rust, Septoria, powdery mildew.

Numbers in parentheses indicate relative rank in column.

BYDV ratings (see scale above) based on percentage of plants showing foliar symptoms.

Table 12. 1982 Delta Durum Wheat Test

Entry	Variety	Yield (lbs/acre)	Test weight (lbs/bu)	Thousand kernel weight (grams)	Plant height (inches)	Shatter	BYDV	Yellow- berry
162	Produra	6050 (38)	62.6	54.6	33	1.0	1.3	2.0
169	Mexicali 75	7790 (11)	62.5	58.8	36	1.3	1.0	4.0
254	Modoc	6370 (37)	64.3	52.8	34	1.0	1.3	2.0
410	Aldura	7460 (24)	62.5	52.8	29	1.0	1.5	2.5
416	TL 75-393	6630 (35)	64.2	53.4	39	1.0	1.0	4.5
422	TL 75-409	8250 (5)	62.1	50.6	37	1.0	1.0	3.5
481	D7911	8660 (1)	64.2	56.4	32	1.3	1.5	5.0
482	UC 482	7410 (25)	64.0	54.2	40	1.3	1.0	3.0
496	Yavaros	7790 (10)	64.5	55.2	32	1.0	1.8	5.0
498	Mallard 'S'	7720 (13)	62.7	53.2	35	1.3	1.0	6.0
499	Rokel 'S'	7530 (21)	62.5	53.2	32	1.0	1.0	3.5
505	Swan 'S'	7610 (18)	64.2	54.0	38	1.3	1.3	4.0
506	D8042	7280 (31)	62.4	56.0	34	1.5	1.0	5.0
507	D8055	7640 (17)	62.4	52.4	34	1.0	1.0	2.5
512	UC 512	7330 (28)	64.3	47.6	33	1.0	1.0	5.5
513	UC 513	7580 (19)	62.9	49.2	35	1.0	1.0	6.0
514	UC 514	7990 (8)	62.6	49.6	31	1.0	1.0	4.5
515	D8056	7470 (23)	63.0	48.8	38	1.0	1.3	3.0
516	D8057	7670 (15)	62.0	51.0	35	1.0	1.0	3.0
517	UC 517	7990 (9)	62.8	49.0	34	1.0	1.0	6.0
518	UC 518	8450 (3)	62.8	52.6	35	1.0	1.0	2.5
519	Westbred 1000D	7250 (32)	59.8	49.8	34	1.0	1.5	5.5
522	Westbred 881	7190 (33)	63.2	58.4	33	1.0	1.0	1.0
557	Nita*	7390 (26)	60.9	39.0	44	1.3	1.0	6.5
558	7702*	5210 (39)	61.6	47.4	40	3.0	1.8	2.5
559	UC 559	7650 (16)	64.0	52.2	36	1.0	1.0	6.0
560	UC 560	8270 (4)	63.1	52.0	33	1.0	1.0	2.5
561	D8118	6440 (36)	62.9	51.6	31	1.0	1.5	3.5
562	Njoro 231	7320 (29)	62.3	48.6	28	1.0	1.5	2.0
563	Kingfisher 'S'	7790 (12)	63.3	52.6	35	1.3	1.3	3.0
564	Mallard 'S'	7540 (20)	62.6	57.6	34	1.0	1.3	5.0
565	D8128	7520 (22)	62.1	47.0	32	1.0	2.0	4.0
566	TL 74-30	7720 (14)	62.1	47.2	34	1.0	1.0	3.5
567	TL 73-457	8120 (6)	63.2	50.8	37	1.0	1.0	4.0
568	TL 73-506	7050 (34)	64.5	54.8	33	1.0	1.0	2.5
569	TL 73-471	8530 (2)	62.2	51.4	35	1.0	1.0	6.5
570	TL 73-468	8070 (7)	61.5	53.8	33	1.0	1.0	3.0
571	TL 73-16	7320 (30)	62.1	47.2	36	1.5	1.0	3.5
572	Ward	7350 (27)	61.2	43.6	38	1.0	1.0	3.5
GRAND MEAN		7500	62.8	51.5	35	1.1	1.2	3.9
CV		11.5	1.0	4.4	5.6	22.2	26.1	25.0
LSD (.05)		1210	1.2	4.6	3	0.3	0.4	2.0

\*Bread wheat.

Rating scale (1-8) for diseases (area of flag-1 leaf affected), shatter, 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%.

Diseases assessed but occurring in trace or less amounts: leaf rust, stripe rust, septoria, powdery mildew, black point.

Numbers in parentheses indicate relative rank in column.

BYDV ratings (see scale above) were based on percentage of plants showing foliar symptoms.

Table 13. 1982 Kings Durum Wheat Test

Entry	Variety	Yield (lbs/acre)	Test weight (lbs/bu)	Thousand kernel weight (grams)	Plant height (inches)	Lodging at harvest	BYDV	Yellow- berry
162	Produra	5740 (27)	63.9	52.0	35	1.0	1.0	2.5
169	Mexicali 75	6730 (7)	63.0	59.4	42	1.8	1.0	3.0
254	Modoc	4840 (38)	64.4	54.2	38	1.3	1.3	1.5
410	Aldura	6350 (15)	64.3	51.8	33	1.0	1.0	2.0
416	TL 75-393	5090 (34)	64.7	52.8	42	1.0	1.0	4.0
422	TL 75-409	5560 (30)	62.2	48.6	37	1.0	1.3	3.5
481	D7911	6950 (4)	64.5	54.8	38	1.0	1.3	2.5
482	UC 482	5030 (36)	63.1	48.0	43	1.0	1.0	1.5
496	Yavaros	7500 (1)	65.0	57.2	39	1.3	1.0	3.5
498	Mallard 'S'	7170 (2)	63.3	59.0	40	1.3	1.0	4.5
499	Rokel 'S'	6640 (9)	63.0	56.0	36	1.0	1.3	5.0
505	Swan 'S'	5910 (24)	65.1	55.8	41	1.0	1.0	4.0
506	D8042	6930 (5)	63.0	51.4	40	1.0	1.0	5.0
507	D8055	5690 (29)	62.5	54.2	39	1.0	1.8	3.5
512	UC 512	6280 (16)	65.6	47.2	39	1.0	1.0	2.0
513	UC 513	6510 (14)	63.5	48.2	38	1.0	1.0	2.5
514	UC 514	6550 (12)	62.4	50.4	35	1.0	1.3	2.5
515	D8056	5380 (33)	64.5	56.2	41	1.8	1.3	2.5
516	D8057	6540 (13)	63.8	52.2	41	1.5	1.3	2.5
517	UC 517	6060 (21)	64.6	45.2	37	1.0	1.0	3.0
518	UC 518	5950 (23)	63.9	50.6	39	1.0	1.0	2.5
519	Westbred 1000D	6090 (18)	61.2	51.0	35	1.0	1.0	6.5
522	Westbred 881	4620 (39)	63.6	61.2	39	1.0	1.0	1.5
557	Nita*	5470 (31)	61.5	34.6	45	1.5	1.0	3.5
558	7702*	6560 (11)	62.8	49.0	41	1.0	1.5	2.0
559	UC 559	5740 (28)	63.9	51.2	40	1.5	1.3	1.5
560	UC 560	5760 (26)	63.1	52.2	38	1.0	1.5	2.5
561	D8118	7040 (3)	63.3	53.4	36	1.0	1.8	2.5
562	Njoro 231	6710 (8)	62.3	49.2	38	1.0	1.3	2.0
563	Kingfisher 'S'	6610 (10)	64.3	56.6	39	1.0	1.0	3.0
564	Mallard 'S'	6880 (6)	63.0	56.6	37	2.0	1.0	3.0
565	D8128	6260 (17)	63.4	47.8	37	1.0	1.3	3.5
566	TL 74-30	5870 (25)	63.2	46.4	37	1.0	1.5	2.0
567	TL 73-457	5460 (32)	63.9	48.2	40	1.0	1.0	1.5
568	TL 73-506	6090 (19)	64.4	56.2	38	1.0	1.3	2.5

Table 13. 1982 Kings Durum Wheat Test (continued)

Entry	Variety	Yield (lbs/acre)	Test weight (lbs/bu)	kernel weight (grams)	Plant height (inches)	Lodging at harvest	BYDV	Yellow- berry
569	TL 73-471	6070 (20)	62.6	48.6	38	1.0	1.0	5.0
570	TL 73-468	6010 (22)	62.0	51.0	36	1.0	1.0	3.0
571	TL 73-16	5090 (35)	63.4	49.2	37	1.0	1.0	5.5
572	Ward	4900 (37)	61.9	44.0	42	1.0	1.0	3.0
GRAND MEAN		6070	63.4	51.6	38	1.1	1.1	3.0
CV		10.4	1.0	4.5	4.3	33.3	27.6	35.4
LSD (.05)		890	1.3	4.7	2	0.5	0.4	2.2

\*Bread wheat.

Rating scale (1-8) for diseases (area of flag-1 leaf affected), lodging 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%.

Diseases assessed but occurring in trace or less amounts: leaf rust, stripe rust, Septoria,  
 powdery mildew, and black point.

Numbers in parentheses indicate relative rank in column.

BYDV ratings (see scale above) were based on percentage of plants showing foliar symptoms.

Table 14. 1982 Imperial Durum Wheat Test

Entry	Variety	Yield (lbs/acre)	Thousand kernel weight (grams)	Days to heading	Days to maturity	Plant height (inches)	Lodging on 5/5	Lodging at harvest	Powdery mildew	Yellow- berry	Test weight (lbs/bu)
112	Yecora Rojo*	6200 (30)	48.0	89	142	28	1.5	3.0	1.0	1.3	65
169	Mexicali 75	7480 (12)	57.6	88	146	37	2.5	6.5	1.0	1.8	64
254	Modoc	6660 (23)	46.0	91	145	31	1.3	3.5	4.3	1.3	64
410	Aldura	7560 (11)	46.4	97	151	31	1.0	5.0	1.5	1.8	64
416	TL 75-393	5900 (36)	45.6	111	157	36	1.3	4.3	1.8	1.8	61
422	TL 75-409	6210 (29)	39.6	113	158	34	1.0	4.0	1.0	2.0	59
481	D7911	8280 (4)	54.1	98	150	34	1.3	5.3	1.0	2.8	67
482	UC 482	6100 (32)	42.9	119	158	38	3.3	5.3	2.0	1.3	62
496	Yavaros	8540 (2)	56.8	95	148	34	1.3	5.3	1.0	3.3	65
498	Mallard 'S'	9080 (1)	64.8	92	148	35	1.8	5.8	1.0	3.8	64
499	Rokel 'S'	7970 (6)	52.3	92	146	32	1.3	3.5	1.0	1.8	63
505	Swan 'S'	7810 (9)	56.5	101	152	39	1.0	4.3	1.3	2.0	64
506	D8042	6830 (21)	49.0	97	150	37	4.3	6.8	1.8	1.8	63
507	D8055	7370 (13)	50.6	89	146	36	3.0	5.0	1.0	1.8	60
512	UC 512	6480 (26)	39.6	112	153	33	1.8	5.3	1.3	2.3	63
513	UC 513	8130 (5)	45.3	103	151	36	1.0	4.5	1.0	2.5	63
514	UC 514	7820 (8)	49.3	96	147	31	1.5	6.3	1.0	1.3	62
515	D8056	6900 (19)	55.5	91	147	38	4.8	6.0	2.5	1.0	64
516	D8057	6960 (18)	48.0	92	145	37	2.8	5.0	1.5	1.5	62
517	UC 517	6850 (20)	41.0	114	156	34	1.0	3.5	1.0	2.8	63
518	UC 518	5970 (34)	43.4	113	157	35	1.0	5.0	2.8	2.0	61
519	Westbred 10000	6440 (27)	46.3	107	154	33	1.0	3.3	1.0	2.0	-
522	Westbred 881	6620 (24)	57.9	90	147	33	1.0	3.5	1.0	1.5	63
557	Nita*	7210 (15)	--	115	155	42	5.5	6.3	1.0	0.0	59
558	7702*	5110 (39)	51.5	92	146	34	1.0	3.8	1.0	2.3	61
559	UC 559	6980 (17)	43.0	95	149	34	1.0	4.0	1.0	2.3	64
560	UC 560	7740 (10)	46.6	97	150	33	1.0	5.8	1.0	2.8	62
561	D8118	5900 (35)	53.5	95	150	30	1.3	4.0	1.5	3.3	61
562	Njoro 231	7170 (16)	47.9	94	146	33	3.0	5.8	1.0	1.3	61
563	Kingfisher 'S'	7340 (14)	52.5	97	149	35	1.3	5.0	1.3	2.0	64
564	Mallard 'S'	8320 (3)	57.3	94	149	31	2.3	4.0	1.0	2.8	63
565	D8128	7860 (7)	47.6	96	150	31	1.0	3.3	2.0	1.8	65
566	TL 74-30	6590 (25)	38.8	114	158	33	1.0	3.5	1.0	1.8	63
567	TL 73-457	6080 (33)	38.9	102	156	35	1.0	3.8	1.3	2.8	61
568	TL 73-506	6730 (22)	53.0	93	149	33	1.0	4.0	1.0	2.5	63
569	TL 73-471	6300 (28)	40.0	111	157	33	1.3	3.8	1.3	3.0	59

Table 14. 1982 Imperial Durum Wheat Test (continued)

Entry	Variety	Yield (lbs/acre)	Thousand kernel weight (grams)		Days to heading	Days to maturity	Plant height (inches)	Lodging on 5/5	Lodging at harvest	Powdery mildew	Yellow- berry	Test weight (lbs/bu)
570	TL 73-468	6110 (31)	41.0		116	158	31	1.0	3.5	1.0	2.5	56
571	TL 73-16	5690 (37)	--		113	156	34	1.3	3.0	1.0	0.0	--
572	Ward	5530 (38)	39.4		119	158	38	1.0	4.5	1.8	1.8	58
GRAND MEAN		6940	48.3		100	151	34	1.7	4.5	1.3	2.1	
CV		12.5	7.7		2.0	0.9	4.9	48.1	18.7	52.2	31.0	
LSD (.05)		1220	5.2		3	2	2	1.1	1.2	1.0	0.9	

\*Bread wheat.

Rating scale (1-8) for diseases (area of flag-1 leaf affected), lodging 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%.

Diseases assessed but occurring in trace or less amounts: BYDV, leaf rust, stripe rust, septoria.

Numbers in parentheses indicate relative rank in column.

BYDV ratings (see scale above) were based on percentage of plants showing foliar symptoms.

Table 15. 1982 Tulelake Durum Wheat Test

Entry	Variety	Yield (lbs/acre)	Test weight (lbs/bu)
162	Produra	8040 (25)	61.7
169	Mexicali 75	8390 (13)	60.0
254	Modoc	7620 (35)	62.4
410	Aldura	7880 (28)	60.7
416	TL 75-393	7740 (31)	62.5
422	TL 75-409	8710 (7)	58.0
481	D7911	7950 (26)	62.3
482	UC 482	7930 (27)	59.0
496	Yavaros	8670 (8)	61.6
498	Mallard 'S'	8770 (6)	62.6
499	Rokel 'S'	9070 (2)	58.7
505	Swan 'S'	8890 (4)	63.7
506	D8042	8120 (19)	61.6
507	D8055	7300 (36)	59.0
512	UC 512	8050 (24)	63.8
513	UC 513	7080 (37)	62.1
514	UC 514	8540 (10)	61.4
515	D8056	8230 (16)	61.7
516	D8057	7750 (30)	60.2
517	UC 517	8300 (15)	60.1
518	UC 518	6870 (38)	60.2
519	Westbred 1000D	8150 (18)	57.1
522	Westbred 881	6570 (39)	60.2
557	Nita*	7650 (33)	57.9
558	7702*	8050 (23)	58.1
559	UC 559	8360 (14)	61.7
560	UC 560	9210 (1)	58.9
561	D8118	7710 (32)	58.5
562	Njoro 231	8100 (20)	58.7
563	Kingfisher 'S'	7630 (34)	61.3
564	Mallard 'S'	8090 (21)	62.2
565	D8128	8800 (5)	61.5
566	TL 74-30	8660 (9)	62.3
567	TL 73-457	8520 (11)	62.5
568	TL 73-506	8990 (3)	62.2
569	TL 73-471	7870 (29)	61.0
570	TL 73-468	8480 (12)	59.3
571	TL 73-16	8060 (22)	59.8
572	Ward	8210 (17)	60.0
GRAND MEAN		8130	60.7
CV		8.8	2.0
LSD (.05)		1000	2.4

\*Bread wheat.

Numbers in parentheses indicate relative rank in column.

Table 16. 1982 Durum Wheat Tests, Four Location Yield Summary (lbs/acre)

Entry	Variety	4 Locations	Kings	Delta	Imperial	UCD
162	Produra	--	5740	6050	--	3960
169	Mexicali 75	6680 ( 7 )	6730	7790	7480	4700
254	Modoc	5770 (32)	4840	6370	6660	5210
410	Aldura	6530 (12)	6350	7460	7560	4740
416	TL 75-393	5270 (37)	5090	6630	5900	3460
422	TL 75-409	6060 (27)	5560	8250	6210	4240
481	D7911	7180 ( 3 )	6950	8660	8280	4810
482	UC 482	5470 (35)	5030	7410	6100	3360
496	Yavaros	7240 ( 2 )	7500	7790	8540	5130
498	Mallard 'S'	7360 ( 1 )	7170	7720	9080	5470
499	Rokel 'S'	6840 ( 6 )	6640	7530	7970	5220
505	Swan 'S'	6430 (14)	5910	7610	7810	4400
506	D8042	6580 (10)	6930	7280	6830	5300
507	D8055	6260 (22)	5690	7640	7370	4340
512	UC 512	5980 (28)	6280	7330	6480	3820
513	UC 513	6650 ( 8 )	6510	7580	8130	4400
514	UC 514	6910 ( 4 )	6550	7990	7820	5290
515	D8056	5980 (29)	5380	7470	6900	4160
516	D8057	6470 (13)	6540	7670	6960	4730
517	UC 517	6420 (15)	6060	7990	6850	4800
518	UC 518	6110 (25)	5950	8450	5970	4080
519	Westbred 1000D	6120 (24)	6090	7250	6440	4700
522	Westbred 881	5680 (33)	4620	7190	6620	4280
557	Nita*	5940 (31)	5470	7390	7210	3690
558	7702*	5010 (38)	6560	5210	5110	3140
559	UC 559	6320 (19)	5740	7650	6980	4910
560	UC 560	6550 (11)	5760	8270	7740	4430
561	D8118	5980 (30)	7040	6440	5900	4520
562	Njoro 231	6410 (16)	6710	7320	7170	4420
563	Kingfisher 'S'	6610 ( 9 )	6610	7790	7340	4720
564	Mallard 'S'	6840 ( 5 )	6880	7540	8320	4630
565	D8128	6360 (17)	6260	7520	7860	3810
566	TL 74-30	6300 (20)	5870	7720	6590	5020
567	TL 73-457	6210 (23)	5460	8120	6080	5170
568	TL 73-506	6260 (21)	6090	7050	6730	5180
569	TL 73-471	6350 (18)	6070	8530	6300	4510
570	TL 73-468	6100 (26)	6010	8070	6110	4190
571	TL 73-16	5430 (36)	5090	7320	5690	3630
572	Ward	5670 (34)	4900	7350	5530	4910
GRAND MEAN		6270	6070	7500	6940	4500
CV		11.5	10.4	11.5	12.5	10.5
LSD (.05)		500	890	1210	1220	660

\*Bread wheat.

Numbers in parentheses indicate relative rank in column.

Table 17. 1981 Kings Durum Wheat Test, Quality Evaluation. (Evaluation was performed by the Hard Red Spring and Durum Wheat Quality Laboratory, USDA and North Dakota State University, Fargo, North Dakota.)

Entry	Variety/Line	TW	1000 KW	WHT PRO	TOT EXT	SEMO EXT	DUS	MX	SPK	SEMO MIN	FALL NO	SEMO PRO	VI	FIRM	RES
169	Mexicali 75	61.7	43.1	12.7	75.6	54.5	135	5	30	.71	556	10.9	10.5	5.64	5.8
410	Aldura	63.8	43.5	12.1	75.6	55.6	150	3	20	.63	525	11.1	11.0	3.84	5.9
481	D7911	64.4	41.0	11.7	66.7	46.4	130	3	13	.58	439	10.4	10.0	--	--
482	UC 482	63.3	40.0	12.4	73.6	53.6	125	3	30	.69	570	11.5	9.5	6.87	6.1
496	Yavaros	64.5	41.7	11.9	74.8	55.1	140	3	23	.59	524	10.3	9.5	5.12	6.1
498	Mallard 'S'	63.8	44.8	11.4	75.6	52.7	145	4	33	.62	467	10.1	10.5	6.29	5.9
499	Rokel 'S'	61.7	37.0	12.6	74.7	54.9	155	4	13	.64	553	11.7	9.0	6.11	5.6
505	Swan 'S'	63.1	37.3	12.8	74.7	56.3	125	3	20	.61	537	11.5	9.0	5.94	5.7
506	D8042	63.5	42.0	10.7	73.8	53.6	130	3	23	.62	450	9.5	9.0	5.27	6.0
507	D8055	61.1	40.3	12.5	75.1	56.7	115	3	33	.60	495	11.1	9.5	5.25	6.2
512	UC 512	65.2	35.0	12.3	74.2	52.0	140	2	23	.62	484	11.3	10.5	4.73	5.8
513	UC 513	63.7	41.5	12.2	75.2	52.6	135	2	27	.60	458	11.5	10.5	4.06	5.8
514	UC 514	62.9	40.2	12.3	75.5	54.2	160	2	27	.63	475	11.4	11.0	6.03	5.8
515	D8056	64.1	39.7	12.1	76.2	55.1	140	3	17	.62	524	10.8	9.5	5.05	5.8
516	D8057	63.7	42.0	12.1	73.7	54.3	125	3	27	.63	488	10.9	9.0	5.44	6.1
517	UC 517	62.9	33.7	12.3	73.6	54.8	135	2	17	.65	439	11.5	10.5	4.71	6.2
518	UC 518	62.8	40.8	12.3	73.1	52.8	150	3	30	.68	536	12.0	10.5	5.94	6.0
522	Westbred 881	61.4	41.3	13.6	73.2	54.0	165	3	10	.70	590	12.6	11.5	5.59	5.9

TW: Test weight in pounds per bushel.

1000 KW: 1000 kernel weight in grams.

WHT PRO: Wheat protein percentage, 14% moisture basis.

TOT EXT: Total extraction percentage, semolina plus flour.

SEMO EXT: Semolina extraction percentage.

DUS: Semolina dust color score (high score is desirable).

MX: Mixograph score (higher number = stronger curve).

SPK: Semolina speck count.

SEMO MIN: Semolina mineral.

FALL NO: Semolina falling number (values above 300 are desired).

SEMO PRO: Semolina protein percentage.

VI: Spaghetti visual color score (higher score = more desirable).

FIRM: Cooked spaghetti firmness score (6.50-8.50 = desirable).

RES: Residue of cooked spaghetti in water.

Table 18. 1982 Delta Durum Wheat Test\*, Quality Evaluation. (Evaluation was performed by General Mills, Inc., Vallejo, California.)

Entry	Variety/Line	Wheat			Flour			Coloration	
		PRO	M	YLD	PRO	ASH	HVAC	b	Δ b
162	Produra	12.6	9.8	61.3	11.4	.58	95	14.4	-3.0
169	Mexicali 75	10.4	9.6	70.4	9.6	.52	45	16.2	-1.2
254	Modoc	13.3	9.7	62.5	12.3	.62	98	16.9	-0.6
410	Aldura	11.0	9.2	61.6	9.6	.55	73	18.5	+1.1
416	TL 75-393	10.6	9.6	69.0	9.8	.54	40	17.6	+0.3
422	TL 75-422	11.1	9.5	64.0	10.1	.60	77	17.6	+0.3
481	D7911	10.1	9.9	62.9	9.1	.50	40	12.3	-5.0
482	UC 482	11.0	10.1	66.2	10.2	.57	60	15.5	-1.8
496	Yavaros	9.4	9.9	66.7	9.1	.38	45	14.9	-2.4
498	Mallard 'S'	10.4	10.3	60.5	10.4	.50	35	16.4	-1.0
499	Rokel 'S'	10.7	9.6	69.7	9.5	.48	67	18.3	+1.0
505	Swan 'S'	11.3	10.4	69.1	10.2	.46	50	13.3	-4.1
506	D8042	10.5	9.6	68.2	9.5	.48	44	14.4	-2.9
507	D8055	11.1	9.4	66.7	10.2	.51	75	11.9	-5.5
512	UC 512	9.9	9.4	71.2	9.1	.50	30	16.2	-1.1
513	UC 513	9.5	10.3	72.7	9.3	.48	55	15.4	-1.9
514	UC 514	10.1	9.8	63.9	9.5	.48	70	16.6	-0.8
515	D8056	11.0	9.7	68.1	10.1	.62	70	16.2	-1.2
516	D8057	11.4	10.0	70.4	10.6	.57	80	15.5	-1.8
517	UC 517	10.2	9.9	69.7	9.2	.54	20	15.8	-1.5
518	UC 518	11.1	9.7	65.6	10.0	.53	78	16.8	-0.5
519	Westbred 1000D	10.7	10.3	71.1	10.1	.62	40	14.6	-2.8
522	Westbred 881	12.2	9.3	64.0	10.7	.54	90	18.8	+1.5
559	UC 559	10.0	9.9	66.4	9.2	.50	50	15.8	-1.5
560	UC 560	10.9	9.5	63.6	9.9	.54	85	15.5	-1.9
561	D8118	11.3	9.3	66.4	9.9	.56	62	16.5	-0.8
562	Njoro 231	11.0	9.7	62.6	10.1	.42	90	16.0	-1.3
563	Kingfisher 'S'	11.7	10.1	64.1	10.3	.54	70	14.5	-2.9
564	Mallard 'S'	11.1	9.9	64.8	9.5	.58	35	15.8	-1.6
565	D8128	10.5	9.9	68.4	9.5	.44	90	13.9	-3.4
566	TL 74-30	11.6	9.5	63.6	9.6	.58	90	16.3	-1.1
567	TL 73-457	10.3	9.4	67.8	9.3	.55	66	17.3	-0.1
568	TL 73-506	11.8	9.6	66.3	10.4	.55	80	16.5	-0.8
569	TL 73-471	10.0	9.9	68.5	9.3	.50	25	13.6	-3.7
570	TL 73-468	10.8	9.3	66.5	9.6	.42	60	18.6	+1.3
571	TL 73-16	10.6	10.0	67.0	9.9	.49	60	18.2	+0.9
572	Ward	10.4	10.2	68.5	9.6	.56	80	16.9	-0.5

PRO: Protein percentage; M = moisture percentage; YLD = flour extraction percentage.

ASH: Flour ash at 62% extraction.

HVAC: Percentage hard and vitreous kernels with amber color.

\* See Table 12 for grain yield data.

Table 19. 1982 Sutter Common Wheat Test

Entry	Variety	Yield (lbs/acre)	Test weight (lbs/bu)	Thousand kernel weight (grams)	Plant height (inches)	Shatter	BYDV	Septoria	Yellow- berry
4	Siete Cerros 66	4540 (18)	62.7	42.0	36	1.0	1.3	2.0	4.5
11	INIA 66R	4070 (28)	64.1	46.0	39	1.0	1.0	1.0	1.0
20	Anza	5500 (1)	63.2	39.8	32	1.0	1.3	1.0	5.5
112	Yecora Rojo	2820 (45)	63.3	48.2	31	2.0	1.0	1.3	2.0
205	Shasta	5050 (8)	64.4	42.2	39	1.0	1.0	1.0	2.0
221	Phoenix	5250 (5)	62.6	39.6	32	1.0	1.0	1.5	7.0
243	Probred	3120 (42)	62.9	50.8	34	1.0	1.0	1.5	1.5
353	Yolo	5460 (2)	62.6	36.8	35	1.0	1.0	1.0	7.0
360	UC 360	4920 (10)	62.4	36.4	35	1.0	1.0	1.3	7.5
412	Probrand 771	4500 (19)	61.7	42.8	33	1.0	1.0	1.3	2.0
415	Klasic	4000 (32)	64.3	48.8	34	1.0	1.0	1.5	2.0
434	Aim	3980 (33)	63.7	35.8	39	1.0	1.0	1.3	3.0
436	Oslo	4400 (22)	63.3	43.2	41	1.0	1.5	2.3	3.0
439	D7901	4750 (15)	62.7	35.2	36	1.0	1.3	1.0	5.0
485	UC 485	5120 (7)	64.2	40.4	33	1.0	1.0	1.5	5.5
486	UC 486	4040 (31)	63.8	40.0	37	1.0	1.0	2.3	4.0
487	UC 487	3860 (35)	63.6	36.4	34	1.0	1.0	1.5	4.5
488	UC 488	4880 (13)	64.1	42.8	35	1.0	1.3	1.8	2.0
489	UC 489	4870 (14)	64.3	44.6	39	1.0	1.3	1.0	4.5
490	Pima 77	3900 (34)	61.2	38.4	37	1.0	1.0	2.3	5.5
491	Genero F81	4410 (21)	62.2	39.0	34	1.0	1.0	1.8	2.5
492	D8021	3540 (40)	58.7	39.4	32	1.0	1.3	1.3	5.0
493	Imuris T79	4910 (11)	61.9	41.2	33	1.0	1.3	1.5	6.0
494	CIANO T79	5410 (3)	62.7	39.8	34	1.0	1.8	1.3	3.0
495	Tesia F79	4890 (12)	63.7	39.8	36	1.0	1.0	1.0	1.5
497	UC 497	5260 (4)	64.5	37.8	37	1.0	1.0	1.0	2.5
521	Westbred 911	3650 (39)	62.9	44.0	26	1.0	1.5	1.5	4.0
536	NK 2437	4050 (30)	63.9	50.2	34	1.0	1.0	1.0	2.0
537	NK 3940	4290 (23)	62.8	40.4	37	1.0	1.3	1.3	4.5
538	NK 4236	4110 (27)	62.1	39.6	32	1.0	1.0	2.5	5.5
540	WS 3974	2840 (44)	61.6	42.8	33	1.0	1.0	1.0	3.5
541	WS 4071	2950 (43)	61.5	35.4	37	1.0	1.0	1.0	2.5
542	SGW 069B	4070 (29)	64.2	39.2	38	1.0	1.0	1.5	2.5
543	SGY 022	3140 (41)	63.8	50.2	32	1.0	1.3	1.3	2.5
544	UC 544	4600 (16)	61.6	40.2	37	1.0	1.5	1.0	6.0

Table 19. 1982 Sutter Common Wheat Test

Entry	Variety	Yield (lbs/acre)	Test weight (lbs/bu)	Thousand kernel weight (grams)	Plant height (inches)	Shatter	BYDV	Septoria	Yellow- berry
545	UC 545	4440 (20)	61.8	42.8	35	1.0	1.0	1.0	4.5
546	UC 546	5160 (6)	62.3	39.0	35	1.0	1.3	1.0	5.5
547	UC 547	4230 (24)	60.9	40.2	34	1.0	1.0	1.0	5.5
548	Glennson M81	4210 (26)	63.4	43.6	34	1.0	1.8	1.8	2.0
549	Ures T81	4210 (25)	62.6	39.4	35	1.0	1.3	1.3	3.0
551	D8115	4540 (17)	62.6	39.8	36	1.0	2.0	1.3	2.5
552	UC 552	5020 (9)	63.6	40.4	36	1.0	1.0	3.0	2.0
554	Tonichi S81	3690 (38)	61.7	43.0	33	1.0	1.0	2.8	4.0
555	Sonoita F81	3860 (36)	62.8	44.8	32	1.0	1.3	1.8	5.5
556	D8106	3760 (37)	62.5	43.6	36	1.0	1.3	2.5	6.0
GRAND MEAN		4320	62.8	41.5	35	1.0	1.2	1.5	3.8
CV		14.8	0.5	2.9	4.4	29.2	28.1	31.8	22.8
LSD (.05)		890	0.6	2.5	2	ns	0.5	0.7	1.8

Rating scale (1-8) for diseases (area of flag-1 leaf affected), shatter 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%.

Diseases assessed but occurring in trace or less amounts: leaf rust, stripe rust, powdery mildew, black point.  
 Numbers in parentheses indicate relative rank in column.

BYDV ratings (see scale above) based on percentage of plants showing foliar symptoms.

Table 20. 1982 U.C. Davis Common Wheat Test

Entry	Variety	Yield (lbs/acre)	Test weight (lbs/bu)	Thousand kernel weight (grams)	Days to heading from 3/1	Plant height (inches)	Lodging at harvest	BYDV	Leaf rust	Stripe rust	Septoria	Yellow- berry
4	Siete Cerros 66	3670 (36)	61.8	33.6	68	35	3.0	3.5	1.0	1.0	1.0	2.0
11	INIA 66R	3470 (42)	61.9	37.6	59	32	4.5	5.8	2.3	1.0	1.0	1.5
20	Anza	4430 (10)	62.0	35.4	68	32	2.8	2.8	2.5	1.0	1.0	4.5
112	Yecora Rojo	4570 (4)	62.3	38.4	61	27	2.5	4.8	1.0	1.0	2.0	2.0
205	Shasta	4020 (23)	63.0	37.8	64	37	2.8	3.8	1.5	1.0	1.0	1.0
221	Phoenix	4540 (7)	62.3	35.4	70	31	2.5	3.0	2.3	1.0	1.0	5.5
243	Probred	4390 (11)	61.6	33.2	61	29	1.5	5.3	1.0	1.0	1.0	1.5
353	Yolo	4550 (5)	62.9	33.6	67	34	2.8	3.3	1.3	1.0	1.0	3.0
360	UC 360	3780 (34)	62.4	31.4	66	30	3.5	3.8	2.8	1.0	1.0	5.5
412	Probrand 771	4120 (17)	60.0	36.8	66	28	2.8	4.5	1.0	1.0	1.0	1.5
415	Klasic	4240 (13)	63.0	42.2	61	27	1.5	4.5	1.0	1.0	1.0	2.0
434	Aim	4060 (21)	61.5	35.2	66	36	2.3	2.5	1.0	1.0	1.0	2.0
436	Oslo	3640 (38)	60.7	35.4	63	34	1.8	4.0	1.0	1.3	1.0	2.0
439	D7901	4200 (14)	62.1	33.2	63	34	1.8	3.5	1.0	1.0	1.3	3.5
485	UC 485	4540 (6)	64.4	37.6	66	33	1.5	2.5	1.0	1.0	1.0	3.0
486	UC 486	4800 (1)	62.9	36.2	63	33	2.8	3.8	2.5	1.0	1.3	2.5
487	UC 487	3570 (41)	62.5	33.6	65	31	3.0	4.0	2.5	1.0	1.0	2.5
488	UC 488	3790 (32)	61.9	34.2	64	31	2.5	3.8	1.3	1.0	1.0	2.0
489	UC 489	4370 (12)	62.5	38.4	66	33	2.5	2.8	4.3	1.0	1.0	2.5
490	Pima 77	3430 (43)	60.7	33.2	66	33	3.0	5.0	1.0	1.0	1.0	2.5
491	Genero F81	4030 (22)	61.3	34.8	66	32	2.3	4.5	1.0	1.0	1.0	2.0
492	D8021	2790 (45)	58.1	33.8	70	39	4.3	4.0	1.0	1.0	1.5	1.5
493	Imuris T79	3280 (44)	58.9	32.8	68	32	3.3	4.5	1.0	1.0	1.0	2.0
494	CIANO T79	3700 (35)	60.5	33.0	67	30	3.5	3.3	1.0	1.0	1.0	3.5
495	Tesia F79	3930 (28)	61.2	34.6	65	33	1.3	4.8	1.0	1.0	1.0	4.0
497	UC 497	3970 (26)	63.5	35.2	65	33	3.8	3.5	1.0	1.0	1.0	2.0
521	Westbred 911	4740 (2)	62.2	42.0	68	30	2.0	2.5	1.8	1.0	1.0	2.5
536	NK 2437	4470 (8)	62.1	40.0	63	28	1.8	4.5	1.0	1.0	1.0	3.0
537	NK 3940	3630 (40)	60.5	32.0	63	34	1.8	3.0	1.0	1.0	1.0	2.5
538	NK 4236	4680 (3)	59.4	33.2	63	28	1.8	3.3	2.5	1.0	1.8	3.0
540	WS 3974	3980 (25)	59.5	36.2	62	30	2.0	4.8	1.0	1.0	1.3	3.5
541	WS 4071	3840 (29)	61.0	33.2	64	35	2.3	4.5	1.8	1.0	1.0	2.5
542	SGW 0698	3790 (31)	63.0	37.8	62	31	2.8	3.8	1.0	1.0	1.3	2.5
543	SGY 022	4460 (9)	62.8	39.8	62	27	1.8	5.0	1.0	1.0	1.0	2.5
544	UC 544	4070 (19)	60.7	33.6	65	36	1.5	4.3	1.5	1.0	1.0	3.0

Table 20. 1982 U.C. Davis Common Wheat Test (continued)

Entry	Variety	Yield (lbs/acre)	Test weight (lbs/bu)	Thousand kernel weight (grams)	Days to heading from 3/1	Plant height (inches)	Lodging at harvest		Leaf rust	Stripe rust	Septoria	Yellow- berry
							BYDV					
545	UC 545	3990 (24)	60.8	37.6	65	30	2.0	3.3	2.0	1.0	1.0	3.0
546	UC 546	4150 (16)	60.6	35.4	67	35	1.8	3.5	2.3	1.0	1.0	4.0
547	UC 547	3930 (27)	60.7	34.0	67	36	3.3	3.8	1.0	1.0	1.0	4.0
548	Glennson M81	3630 (39)	61.6	35.0	66	34	1.3	3.8	1.0	1.0	1.0	1.5
549	Ures T81	4080 (18)	61.4	34.4	64	31	2.0	4.5	1.3	1.0	1.0	2.0
551	D8115	4190 (15)	60.9	34.6	66	30	2.5	4.0	1.0	1.0	1.0	1.5
552	UC 552	4070 (20)	63.0	36.0	65	34	3.0	3.5	2.3	1.3	1.5	2.0
554	Tonichi S81	3840 (30)	60.7	37.0	68	29	1.5	4.0	1.0	1.0	1.3	2.5
555	Sonoita F81	3650 (37)	62.2	38.8	64	30	3.0	4.3	1.0	1.0	1.3	2.5
556	D8106	3780 (33)	60.4	37.4	66	38	1.5	4.8	1.0	1.0	1.0	1.5
GRAND MEAN		4020	61.5	35.7	65	32	2.4	3.9	1.5	1.0	1.1	2.6
CV		9.2	1.0	5.5	0.7	4.0	35.7	19.0	27.8	10.5	21.3	28.6
LSD (.05)		520	1.2	3.9	1	3	1.2	1.0	0.6	ns	0.3	1.5

Rating scale (1-8) for diseases (area of flag-1 leaf affected), lodging 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%.

Diseases assessed but occurring in trace or less amounts: stripe rust, powdery mildew, black point.

Numbers in parentheses indicate relative rank in column.

BYDV ratings (see scale above) were based on percentage of plants showing foliar symptoms.

Table 21. 1982 Yolo Common Wheat Test

Entry	Variety	Yield (lbs/acre)	Test weight (lbs/bu)	Thousand kernel weight (grams)	Plant height (inches)	BYDV	Yellow- berry
4	Siete Cerros 66	2010 (26)	59.0	30.6	30	2.3	3.5
11	INIA 66R	1710 (36)	61.2	32.8	30	3.0	2.0
20	Anza	2560 (5)	60.7	31.2	28	1.5	5.0
112	Yecora Rojo	2270 (15)	59.0	33.2	25	3.3	1.0
205	Shasta	2070 (23)	61.8	34.0	31	1.8	2.0
221	Phoenix	2460 (10)	60.3	32.0	27	1.5	5.0
243	Probred	2130 (21)	58.6	33.2	25	3.0	1.5
353	Yolo	2670 (3)	60.9	30.4	29	1.5	3.5
360	UC 360	2540 (7)	60.3	31.2	28	1.3	6.5
412	Probrand 771	2580 (4)	56.9	31.8	26	3.0	1.5
415	Klasic	1720 (35)	59.5	32.0	25	3.3	1.0
434	Aim	2100 (22)	60.1	28.8	31	2.0	2.0
436	Oslo	1910 (29)	59.3	32.8	31	3.0	2.5
439	D7901	2310 (14)	59.7	28.2	30	2.5	3.5
485	UC 485	2410 (12)	61.3	31.4	27	1.5	3.5
486	UC 486	2730 (2)	61.8	34.6	30	1.5	2.5
487	UC 487	2210 (16)	60.1	29.2	30	1.5	3.0
488	UC 488	1770 (33)	60.8	32.0	28	1.8	3.0
489	UC 489	2540 (6)	62.6	37.0	32	1.3	4.5
490	Pima 77	1590 (37)	59.0	28.6	31	2.8	3.5
491	Genero F81	2160 (20)	57.6	27.4	28	2.8	1.5
492	D8021	1380 (38)	57.1	29.2	31	3.5	6.0
493	Imuris T79	2200 (18)	58.2	29.4	27	1.8	5.0
494	CIANO T79	1910 (28)	58.9	30.2	27	2.5	5.0
495	Tesia F79	1750 (34)	57.1	27.8	28	3.0	2.0
497	UC 497	2820 (1)	61.9	32.6	30	1.3	3.5
521	Westbred 911	2530 (8)	60.4	36.2	24	2.5	3.0
536	NK 2437	2430 (11)	59.6	34.6	26	3.0	1.5
537	NK 3940	1950 (27)	60.0	30.0	30	2.5	3.5
538	NK 4236	2210 (17)	58.2	30.0	25	3.3	2.5
542	SGW 069B	2370 (13)	60.8	31.2	29	2.0	1.5
543	SGY 022	2510 (9)	60.2	35.4	25	3.0	2.5
544	UC 544	2050 (24)	58.3	31.4	30	2.0	4.0
548	Glennson M81	1830 (32)	59.5	30.6	28	3.0	1.0
549	Ures T81	2190 (19)	60.0	31.2	29	2.3	2.0
554	Tonichi S81	2020 (25)	56.7	30.4	26	2.3	2.5
555	Sonoita F81	1860 (30)	58.5	31.8	26	3.5	2.5
556	D8106	1850 (31)	59.4	33.6	32	2.8	4.5
GRAND MEAN		2170	59.6	31.5	28	2.4	3.0
CV		19.9	1.5	5.4	5.2	30.2	23.6
LSD (.05)		610	1.8	3.5	2	1.0	1.4

Rating scale (1-8) for diseases (area of flag-1 leaf affected) 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%.

Diseases assessed but occurring in trace or less amounts: leaf rust, stripe rust,  
 Septoria, powdery mildew, black point.

Numbers in parentheses indicate relative rank in column.

BYDV ratings (see scale above) based on percentage of plants showing foliar symptoms.

Table 22. 1982 Delta Common Wheat Test

Entry	Variety	Yield (lbs/acre)	Test weight (lbs/bu)	Thousand kernel weight (grams)	Plant height (inches)	Shatter	BYDV	Septoria	Powdery mildew	Yellow- berry
4	Siete Cerros 66	3070 (43)	60.4	32.6	40	4.8	1.0	2.0	1.0	2.5
11	INIA 66R	4190 (40)	61.1	46.4	37	1.5	1.0	1.0	1.0	1.0
20	Anza	7130 (5)	62.4	38.2	35	1.3	1.0	1.0	1.0	5.0
112	Yecora Rojo	5950 (23)	62.5	52.0	31	1.0	1.0	1.0	1.3	1.5
205	Shasta	4810 (34)	61.5	46.4	39	2.8	1.0	1.0	1.5	1.5
221	Phoenix	7300 (4)	61.7	37.4	35	1.0	1.0	1.0	1.0	5.5
243	Probred	4930 (33)	61.9	50.4	30	1.0	1.5	1.0	1.0	1.5
353	Yolo	8240 (1)	61.7	35.4	35	1.0	1.0	1.0	1.3	3.5
360	UC 360	7680 (2)	62.2	39.4	33	1.0	1.0	1.0	1.3	5.5
412	Probrand 771	7060 (6)	60.6	43.4	32	1.0	1.0	1.0	1.3	1.0
415	Klasic	6450 (14)	64.1	53.4	31	1.0	1.0	1.0	1.5	1.5
434	Aim	4540 (38)	62.6	34.8	40	2.8	1.0	1.0	1.5	2.0
436	Oslo	5010 (32)	62.0	45.4	39	2.0	1.0	1.0	1.3	1.0
439	D7901	6100 (19)	61.0	36.2	38	1.5	1.0	1.0	1.0	1.0
485	UC 485	7390 (3)	63.1	38.8	35	2.0	1.3	1.0	1.0	2.5
486	UC 486	5850 (26)	62.5	38.6	35	1.3	1.0	1.0	1.3	1.5
487	UC 487	6680 (10)	62.5	40.2	35	2.0	1.0	1.0	1.3	2.5
488	UC 488	6240 (17)	62.5	40.4	33	1.3	1.0	1.0	1.0	1.5
489	UC 489	6450 (13)	62.5	45.8	37	1.3	1.0	1.0	1.8	2.0
490	Pima 77	4700 (35)	58.9	35.0	38	1.3	1.3	1.0	1.3	2.5
491	Genero F81	6340 (15)	61.4	39.4	37	1.0	1.5	1.0	1.0	1.5
492	D8021	4120 (41)	54.8	33.0	42	3.3	1.5	1.8	1.0	2.5
493	Imuris T79	5900 (25)	59.1	37.4	36	1.0	2.0	1.8	1.0	3.5
494	CIANO T79	5630 (27)	61.7	38.6	37	1.5	2.3	1.5	1.3	4.0
495	Tesia F79	4690 (36)	61.4	39.4	34	2.0	1.0	1.0	1.3	2.0
497	UC 497	6950 (8)	62.9	37.8	39	2.0	1.0	1.0	1.3	2.5
521	Westbred 911	6080 (21)	61.8	44.6	29	1.0	1.0	1.8	1.0	2.0
536	NK 2437	6120 (18)	61.9	48.0	32	1.0	1.0	1.0	1.0	1.5
537	NK 3940	5970 (22)	61.9	43.0	39	1.0	1.0	1.0	1.3	2.0

Table 22. 1982 Delta Common Wheat Test (continued)

Entry	Variety	Yield (lbs/acre)	Test weight (lbs/bu)	Thousand kernel weight (grams)	Plant height (inches)	Shatter	BYDV	Septoria	Powdery mildew	Yellow- berry
538	NK 4236	5110 (30)	59.7	40.2	30	1.0	1.0	1.0	1.0	1.5
540	WS 3974	4550 (37)	59.5	43.8	34	1.0	1.0	1.0	1.0	1.0
541	WS 4071	4300 (39)	61.7	38.8	40	3.5	1.0	1.0	1.3	1.5
542	SGW 069B	3690 (42)	62.0	41.0	37	1.8	1.0	1.0	1.5	1.0
543	SGY 022	5410 (29)	61.7	51.0	31	1.0	1.0	1.0	1.0	1.5
544	UC 544	7010 (7)	61.7	40.2	36	1.3	1.3	1.0	1.0	2.5
545	UC 545	6670 (11)	62.5	45.4	35	1.0	1.3	1.0	1.0	1.5
546	UC 546	6640 (12)	59.6	35.4	36	1.8	1.0	1.0	1.0	3.0
547	UC 547	6770 (9)	59.9	38.6	36	1.3	1.0	1.0	1.3	3.5
548	Glennson M81	5900 (24)	62.7	44.4	36	1.0	1.5	2.0	1.0	1.5
549	Ures T81	6280 (16)	62.7	40.2	36	1.8	1.3	1.0	1.0	1.5
554	Tonichi S81	6090 (20)	60.0	39.6	35	1.0	1.0	1.0	1.0	2.0
555	Sonoita F81	5540 (28)	62.8	44.2	31	1.0	1.3	1.0	1.0	1.0
556	D8106	5100 (31)	61.5	40.6	39	1.8	1.5	1.0	1.3	2.5
GRAND MEAN		5830	61.5	41.3	35	1.5	1.1	1.1	1.2	2.2
CV		10.3	1.3	4.2	4.6	36.3	24.4	24.4	30.9	31.2
LSD (.05)		840	1.6	3.5	2	0.8	0.4	0.4	NS	1.4

Rating scale (1-8) for diseases (area of flag-1 leaf affected), shatter, 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%.

Diseases assessed but occurring in trace or less amounts: leaf rust, stripe rust, black point.

Numbers in parentheses indicate relative rank in column.

BYDV ratings (see scale above) were based on percentage of plants showing foliar symptoms.

Table 23. 1982 Stanislaus Common Wheat Test

Entry	Variety	Yield (1bs/acre)	Test weight (1bs/bu)	Thousand kernel weight (grams)	Days to heading from 3/1	Plant height (inches)	BYDV	Yellow- berry
4	Siete Cerros 66	4780 (29)	59.3	31.8	54	45	2.5	2.5
11	INIA 66R	4180 (38)	62.6	39.2	45	43	3.0	1.5
20	Anza	5890 ( 3)	61.7	34.0	54	38	1.3	6.0
112	Yecora Rojo	5010 (23)	62.1	45.4	48	37	2.3	1.0
205	Shasta	5460 (10)	61.7	36.2	52	47	1.8	2.0
221	Phoenix	5360 (14)	61.2	31.6	53	38	1.8	5.5
243	Probred	4020 (40)	61.4	47.4	47	37	2.3	1.0
353	Yolo	6220 ( 2)	60.2	30.0	53	39	1.5	5.0
360	UC 360	5630 ( 7)	61.7	32.2	51	37	1.0	5.5
412	Probrand 771	5100 (20)	60.2	41.0	52	38	1.8	1.0
415	Klasic	5700 ( 5)	63.6	46.2	47	35	1.8	1.5
434	Aim	5310 (15)	61.1	29.0	52	47	1.8	2.0
436	Oslo	5220 (16)	61.7	37.2	49	44	2.3	2.5
439	D7901	4650 (33)	60.7	30.8	51	43	2.0	2.5
485	UC 485	6360 ( 1)	63.3	37.0	53	39	1.0	4.5
486	UC 486	5540 ( 9)	62.3	35.2	51	40	1.0	1.5
487	UC 487	5080 (21)	61.5	31.2	53	39	1.8	3.0
488	UC 488	5070 (22)	62.0	34.8	51	38	1.8	3.5
489	UC 489	5450 (11)	62.9	39.6	51	43	1.8	5.0
490	Pima 77	4930 (27)	61.7	33.8	53	41	2.0	3.5
491	Genero F81	4710 (30)	60.4	32.4	52	41	3.8	1.5
492	D8021	3280 (43)	55.6	32.2	55	44	3.5	4.5
493	Imuris T79	3910 (41)	57.9	29.2	56	38	3.5	4.5
494	CIANO T79	4380 (36)	59.8	29.6	53	40	3.0	3.5
495	Tesia F79	4680 (31)	61.4	32.8	51	38	2.0	2.5
497	UC 497	5550 ( 8)	62.9	33.0	55	42	1.5	2.0
521	Westbred 911	5870 ( 4)	61.5	39.0	54	37	2.0	4.0
536	NK 2437	4830 (28)	62.6	45.2	48	38	2.3	1.0
537	NK 3940	4520 (35)	60.5	34.4	50	42	2.5	4.0
538	NK 4236	5360 (13)	61.8	41.4	48	34	1.5	2.5
540	WS 3974	3590 (42)	59.7	36.6	47	36	1.0	2.0
541	WS 4071	5140 (18)	60.5	31.4	50	46	1.0	2.0
542	SGW 069B	4680 (32)	62.8	35.8	48	42	2.5	2.0
543	SGY 022	5210 (17)	61.9	45.8	48	36	1.8	1.5

Table 23. 1982 Stanislaus Common Wheat Test (continued)

Entry	Variety	Yield (lbs/acre)	Test weight (lbs/bu)	Thousand kernel weight (grams)	Days to heading from 3/1	Plant height (inches)	BYDV	Yellow- berry
544	UC 544	5640 ( 6 )	60.6	34.4	54	43	1.8	5.0
545	UC 545	5420 (12)	61.1	39.8	52	40	2.0	2.5
546	UC 546	5140 (19)	60.3	32.6	54	41	1.5	5.0
547	UC 547	4970 (24)	58.9	32.2	40	53	1.0	4.0
548	Glennson M81	4290 (37)	61.1	35.0	43	54	3.8	1.5
549	Ures T81	4970 (25)	61.1	34.0	42	53	3.8	1.5
554	Tonichi S81	4960 (26)	59.8	35.6	41	55	1.3	3.5
555	Sonoita F81	4170 (39)	60.8	38.0	36	49	4.0	2.0
556	D8106	4560 (34)	60.6	37.0	47	53	2.5	2.5
GRAND MEAN		5000	61.1	35.8		40	2.1	2.9
CV		9.2	1.0	5.2		3.4	21.1	30.3
LSD (.05)		640	1.2	3.8		2	0.6	1.8

Rating scale (1-8) for diseases (area of flag-1 leaf affected) 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%.

Diseases assessed but occurring in trace or less amounts: leaf rust, stripe rust, Septoria, powdery mildew, black point.

Numbers in parentheses indicate relative rank in column.

BYDV ratings (see scale above) were based on percentage of plants showing foliar symptoms.

Table 24. 1982 Kings Common Wheat Test

Entry	Variety	Yield (lbs/acre)	Test weight (lbs/bu)	Thousand kernel weight (grams)	Plant height (inches)	Lodging at harvest	BYDV	Septoria	Yellow- berry
4	Siete Cerros 66	6590 ( 4)	62.7	39.4	45	1.3	1.5	1.3	5.0
11	INIA 66R	5060 (42)	64.7	46.2	42	1.5	1.8	1.3	1.0
20	Anza	6440 ( 9)	63.6	38.2	37	1.0	1.0	1.0	6.5
112	Yecora Rojo	5680 (35)	64.2	50.8	33	1.0	1.5	1.3	1.0
205	Shasta	6310 (13)	64.8	43.4	44	1.0	1.0	1.0	3.0
221	Phoenix	6490 ( 6)	63.6	38.0	37	1.0	1.0	1.0	6.5
243	Probred	5910 (30)	64.3	53.8	36	1.0	1.0	1.5	1.5
353	Yolo	6430 (10)	63.8	38.8	37	1.0	1.3	1.0	6.0
360	UC 360	6650 ( 2)	63.4	36.8	36	1.0	1.0	1.0	7.0
412	Probrand 771	5260 (39)	62.5	47.0	34	1.0	1.0	1.3	3.0
415	Klasic	6040 (26)	65.6	52.4	35	1.0	1.3	2.3	2.5
434	Aim	6150 (18)	64.4	37.0	44	1.3	1.3	1.0	1.5
436	Oslo	6180 (17)	64.0	45.2	43	1.0	1.5	1.0	2.0
439	D7901	6470 ( 8)	64.3	37.2	41	1.0	1.3	1.0	4.0
485	UC 485	6580 ( 5)	64.8	41.0	41	1.0	1.0	1.0	3.5
486	UC 486	5740 (34)	64.3	40.4	41	1.0	1.0	1.0	1.5
487	UC 487	5500 (38)	64.2	37.8	37	1.0	1.0	1.0	5.5
488	UC 488	5770 (33)	64.6	41.0	38	1.0	1.3	1.0	4.5
489	UC 489	5830 (31)	65.0	43.8	40	1.0	1.0	1.0	3.0
490	Pima 77	6080 (22)	62.5	39.6	39	1.0	1.8	1.3	6.5
491	Genero F81	6100 (20)	64.1	43.4	39	1.0	1.0	1.0	2.5
492	D8021	5580 (36)	60.5	41.6	47	1.0	1.3	1.0	4.0
493	Imuris T79	5800 (32)	61.7	40.6	37	1.0	2.0	1.0	3.0
494	CIANO T79	6140 (19)	62.2	38.8	39	1.0	1.5	1.0	2.5
495	Tesia F79	6040 (25)	63.5	39.0	37	1.0	1.0	1.0	1.5
497	UC 497	6070 (23)	64.6	37.6	41	1.0	1.0	1.0	2.0
521	Westbred 911	6650 ( 3)	63.7	49.0	33	1.0	1.0	1.0	3.0
536	NK 2437	5960 (28)	64.7	50.4	36	1.0	1.0	1.5	2.5
537	NK 3940	6060 (24)	63.8	41.6	44	1.0	1.8	1.0	2.5
538	NK 4236	5950 (29)	63.2	43.2	31	1.0	1.0	1.8	5.5
540	WS 3974	4630 (44)	61.4	42.6	35	1.3	1.5	1.0	6.5
541	WS 4071	5120 (41)	63.0	37.4	45	1.3	1.0	1.0	2.5
542	SGW 069B	5210 (40)	64.5	41.0	40	1.0	1.8	1.0	1.0
543	SGY 022	6480 ( 7)	64.2	50.6	35	1.0	1.3	2.0	1.5
544	UC 544	6870 ( 1)	63.0	41.2	42	1.0	1.0	1.0	6.5

Table 24. 1982 Kings Common Wheat Test (continued)

Entry	Variety	Yield (lbs/acre)	Test weight (lbs/bu)	Thousand kernel weight (grams)	Plant height (inches)	Lodging at harvest	BYDV	Septoria	Yellow- berry
545	UC 545	6320 (12)	63.3	44.4	37	1.0	1.8	1.0	2.5
546	UC 546	6010 (27)	62.7	40.0	39	1.0	1.5	1.0	7.0
547	UC 547	6090 (21)	62.3	41.4	39	1.0	1.0	1.0	5.5
548	Glennson M81	5520 (37)	63.7	44.8	39	1.0	1.3	1.0	1.5
549	Ures T81	6350 (11)	64.0	41.6	39	1.0	1.5	1.0	1.5
551	D8115	6220 (15)	63.2	40.8	39	1.0	1.0	1.0	2.0
554	Tonichi S81	6250 (14)	62.5	43.8	39	1.0	1.0	1.0	3.0
555	Sonoita F81	6180 (16)	64.6	48.4	35	1.0	2.0	1.3	2.5
556	D8106	4640 (43)	63.2	46.2	44	1.0	1.0	1.0	7.0
GRAND MEAN		5990	63.6	42.7	39	1.0	1.3	1.1	3.5
CV		8.7	0.6	2.8	4.2	16.5	35.9	26.8	24.8
LSD (.05)		730	0.7	2.5	2	0.2	0.6	0.4	1.8

Rating scale (1-8) for diseases (area of flag-1 leaf affected), lodging 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%.

Diseases assessed but occurring in trace or less amounts: leaf rust, stripe rust, powdery mildew,  
 black point.

Numbers in parentheses indicate relative rank in column.

BYDV ratings (see scale above) were based on percentage of plants showing foliar symptoms.

Table 25. 1982 Kern Common Wheat Test

Entry	Variety	Yield (lbs/acre)	Test weight (lbs/bu)	Thousand kernel weight (grams)	Plant height (inches)	Lodging on 5/6	Lodging at harvest	Shatter	BYDV	Black point	Yellow- berry
4	Siete Cerros 66	5700 (40)	62.3	38.0	44	2.3	5.0	1.5	1.5	1.0	1.5
11	INIA 66R	5650 (41)	64.3	45.8	43	1.0	4.3	1.3	1.0	1.0	1.0
20	Anza	7290 (6)	63.6	37.6	39	1.0	2.0	1.0	1.3	1.0	3.0
112	Yecora Rojo	6070 (30)	63.7	49.0	35	1.0	2.8	1.0	1.0	1.0	1.0
205	Shasta	6180 (27)	64.5	43.2	45	1.5	3.5	1.3	1.3	1.0	1.0
221	Phoenix	6490 (19)	62.6	35.8	40	1.0	4.5	1.0	1.5	1.0	2.0
243	Probred	5860 (35)	62.6	44.6	37	1.5	4.5	1.3	1.3	1.0	1.0
353	Yolo	7670 (1)	63.2	35.6	41	1.0	2.3	1.0	1.0	1.0	2.5
360	UC 360	6610 (17)	63.3	34.0	35	2.3	4.3	1.0	1.5	1.0	2.5
412	Probrand 771	6840 (11)	62.4	45.6	38	1.0	5.0	1.0	1.0	1.5	1.0
415	Klasic	7650 (3)	64.7	50.8	36	1.0	3.8	1.5	1.0	2.0	1.0
434	Aim	5920 (33)	63.0	35.6	42	2.0	2.8	1.0	1.3	1.5	1.0
436	Oslo	7110 (7)	64.6	44.0	44	1.5	2.0	1.0	1.8	1.0	1.5
439	D7901	6710 (13)	63.2	34.4	42	1.0	2.3	1.0	1.0	1.0	1.0
485	UC 485	6060 (32)	63.7	39.0	40	1.5	5.8	1.0	1.3	1.0	1.0
486	UC 486	6690 (15)	64.3	39.8	41	1.5	5.0	1.0	1.3	1.0	1.5
487	UC 487	6440 (20)	63.2	34.8	40	1.0	4.0	1.0	1.8	1.0	1.0
488	UC 488	6400 (22)	64.5	39.4	39	1.0	2.3	1.0	1.0	1.0	1.0
489	UC 489	6570 (18)	63.4	42.2	43	1.0	1.5	1.0	1.5	1.0	1.0
490	Pima 77	6070 (31)	60.7	35.6	40	1.8	4.8	1.0	2.0	1.0	1.5
491	Genero F81	7020 (8)	62.6	41.0	40	1.0	2.3	1.0	1.8	1.0	1.0
492	D8021	5500 (42)	58.3	39.4	49	1.0	6.5	2.0	1.3	1.0	1.5
493	Imuris T79	6320 (25)	62.8	41.6	40	1.0	1.3	1.0	1.0	1.5	2.0
494	CIANO T79	5820 (36)	61.4	36.0	42	1.0	3.0	1.0	1.3	1.0	2.0
495	Tesia F79	5820 (37)	62.6	38.6	40	1.0	2.5	1.3	1.3	1.5	1.0
497	UC 497	6110 (29)	63.7	35.8	42	2.0	2.8	1.0	1.8	1.0	1.0
521	Westbred 911	6990 (9)	63.4	47.0	37	1.0	1.0	1.0	1.8	1.5	1.0
536	NK 2437	6780 (12)	64.5	48.8	37	1.5	2.0	1.0	1.0	1.5	1.0
537	NK 3940	7660 (2)	63.2	40.4	45	1.0	1.3	1.0	1.5	1.0	1.0
538	NK 4236	7300 (4)	62.1	38.8	34	1.0	1.3	1.0	1.0	1.0	1.0
540	WS 3974	4950 (44)	61.9	41.0	39	1.0	1.0	1.0	1.0	1.0	1.0
541	WS 4071	5800 (39)	62.2	36.4	44	2.0	3.8	1.3	1.0	1.0	2.5
542	SGW 069B	5190 (43)	64.5	40.8	41	1.0	2.8	1.3	1.0	2.0	1.0
543	SGY 022	6380 (23)	64.1	50.6	37	1.0	2.8	1.0	1.0	2.0	1.5

Table 25. 1982 Kern Common Wheat Test (continued)

Entry	Variety	Yield (lbs/acre)	Test weight (lbs/bu)	Thousand kernel weight (grams)	Plant height (inches)	Lodging on 5/6	Lodging at harvest	Shatter	BYDV	Black point	Yellow- berry
544	UC 544	7290 ( 5)	62.3	38.0	43	1.0	1.8	1.3	1.3	1.0	3.0
545	UC 545	6680 (16)	62.5	40.4	39	1.0	1.0	1.3	1.3	1.0	1.0
546	UC 546	6410 (21)	62.3	38.0	42	1.0	1.8	1.0	1.5	1.0	1.5
547	UC 547	6130 (28)	61.4	35.6	41	1.5	5.0	1.0	1.3	1.5	1.5
548	Glennson M81	5890 (34)	62.7	42.2	41	1.0	2.0	1.3	2.3	1.5	1.0
549	Ures T81	6950 (10)	62.5	38.4	40	1.0	3.0	1.0	1.8	1.0	1.0
551	D8115	6330 (24)	60.0	41.6	41	1.0	3.8	1.0	2.3	1.0	1.0
554	Tonichi S81	6710 (14)	62.8	44.4	40	1.0	2.0	1.0	1.5	1.0	2.0
555	Sonoita F81	6280 (26)	62.7	42.8	36	1.3	1.5	1.0	1.5	1.5	1.0
556	D8106	5810 (38)	63.5	45.0	47	1.0	1.0	1.0	1.3	1.5	1.0
GRAND MEAN		6410	62.9	40.6	40	1.2	2.9	1.1	1.4	1.2	1.4
CV		10.8	1.8	6.0	3.0	47.1	48.0	34.2	43.7	28.9	26.0
LSD (.05)		970	2.2	4.9	2	0.8	2.0	ns	0.8	0.7	0.7

Rating scale (1-8) for diseases (area of flag-1 leaf affected), lodging, shatter, 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%.

Diseases assessed but occurring in trace or less amounts: leaf rust, stripe rust, Septoria, powdery mildew.

Numbers in parentheses indicate relative rank in column.

BYDV ratings (see scale above) were based on percentage of plants showing foliar symptoms.

Table 26. 1982 San Luis Obispo Common Wheat Test

Entry	Variety	Yield (lbs/acre)	Test weight (lbs/bu)	Thousand kernel weight (grams)	Yellow- berry
4	Siete Cerros 66	1860 (37)	61.1	39.0	4.5
11	INIA 66R	1690 (38)	61.6	36.4	5.0
20	Anza	3510 (1)	61.0	37.0	7.0
112	Yecora Rojo	2700 (17)	62.3	45.4	2.0
205	Shasta	3380 (3)	62.0	37.6	6.5
221	Phoenix	2470 (23)	61.5	37.4	8.0
243	Probred	2250 (32)	59.2	42.4	3.0
353	Yolo	3150 (5)	61.5	33.2	7.0
360	UC 360	2890 (10)	61.2	34.2	7.0
412	Probrand 771	2430 (25)	59.4	38.6	5.5
415	Klasic	2720 (16)	63.1	45.8	5.5
434	Aim	2720 (15)	62.5	34.6	3.0
436	Oslo	3400 (2)	61.4	37.8	7.0
439	D7901	3060 (6)	61.4	32.4	6.5
485	UC 485	2450 (24)	63.3	38.8	4.0
486	UC 486	2840 (12)	63.4	36.8	5.0
487	UC 487	2560 (22)	61.4	32.6	5.5
488	UC 488	2190 (34)	60.6	35.0	6.0
489	UC 489	3210 (4)	61.4	40.8	6.5
490	Pima 77	2610 (21)	60.1	35.8	6.0
491	Genero F81	2920 (8)	61.6	34.6	5.0
492	D8021	2150 (35)	59.3	33.0	7.5
493	Imuris T79	2660 (19)	59.3	36.0	6.5
494	CIANO T79	2420 (26)	60.8	35.6	7.0
495	Tesia F79	2400 (27)	61.2	34.6	3.0
497	UC 497	2740 (14)	62.6	35.2	4.5
521	Westbred 911	3020 (7)	61.5	42.6	6.0
536	NK 2437	2190 (33)	62.5	43.0	3.0
537	NK 3940	2680 (18)	60.2	33.6	7.0
538	NK 4236	2270 (31)	61.1	40.2	5.5
542	SGW 0698	1860 (36)	59.9	34.2	4.5
543	SGY 022	2300 (30)	62.2	42.2	3.5
544	UC 544	2910 (9)	59.9	37.0	7.5
548	Glennson M81	2860 (11)	59.6	38.4	4.0
549	Ures T81	2370 (29)	61.4	34.4	4.0
554	Tonichi S81	2370 (28)	58.3	37.4	6.5
555	Sonoita F81	2650 (20)	62.6	43.0	6.0
556	D8106	2800 (13)	61.0	41.6	7.0
GRAND MEAN		2620	61.2	37.6	5.5
CV		26.7	2.0	5.9	20.0
LSD (.05)		980	2.5	4.5	2.2

Rating scale (1-8) for 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%.

Diseases assessed but occurring in trace or less amounts: BYDV, leaf rust, stripe  
 rust, septoria, powdery mildew, black point.

Numbers in parentheses indicate relative rank in column.

Table 27. 1982 Common Wheat Tests, Eight Location Yield Summary (lbs/acre)

Entry	Variety	8								Yolo	UCD
		Locations	Sutter	Stanislaus	Delta	Kern	Kings	San Luis Obispo			
4	Siete Cerros 66	4030 (35)	4540	4780	3070	5700	6590	1860	2010	3670	
11	INIA 66R	3750 (37)	4070	4180	4190	5650	5060	1690	1710	3470	
20	Anza	5340 (2)	5500	5890	7130	7290	6440	3510	2560	4430	
112	Yecora Rojo	4380 (26)	2820	5010	5950	6070	5680	2700	2270	4570	
205	Shasta	4660 (16)	5050	5460	4810	6180	6310	3380	2070	4020	
221	Phoenix	5050 (6)	5250	5360	7300	6490	6490	2470	2460	4540	
243	Probred	4080 (33)	3120	4020	4930	5860	5910	2250	2130	4390	
353	Yolo	5550 (1)	5460	6220	8240	7670	6430	3150	2670	4550	
360	UC 360	5090 (4)	4920	5630	7680	6610	6650	2890	2540	3780	
412	Probrand 771	4740 (13)	4500	5100	7060	6840	5260	2430	2580	4120	
415	Klasic	4820 (10)	4000	5700	6450	7650	6040	2720	1720	4240	
434	Aim	4350 (28)	3980	5310	4540	5920	6150	2720	2100	4060	
436	Oslo	4610 (18)	4400	5220	5010	7110	6180	3400	1910	3640	
439	D7901	4780 (11)	4750	4650	6100	6710	6470	3060	2310	4200	
485	UC 485	5110 (3)	5120	6360	7390	6060	6580	2450	2410	4540	
486	UC 486	4780 (12)	4040	5540	5850	6690	5740	2840	2730	4800	
487	UC 487	4490 (23)	3860	5080	6680	6440	5500	2560	2210	3570	
488	UC 488	4510 (21)	4880	5070	6240	6400	5770	2190	1770	3790	
489	UC 489	4910 (9)	4870	5450	6450	6570	5830	3210	2540	4370	
490	Pima 77	4160 (32)	3900	4930	4700	6070	6080	2610	1590	3430	
491	Genero F81	4710 (14)	4410	4710	6340	7020	6100	2920	2160	4030	
492	D8021	3540 (38)	3540	3280	4120	5500	5580	2150	1380	2790	
493	Imuris T79	4370 (27)	4910	3910	5900	6320	5800	2660	2200	3280	
494	CIANO T79	4430 (25)	5410	4380	5630	5820	6140	2420	1910	3700	
495	Tesia F79	4270 (30)	4890	4680	4690	5820	6040	2400	1750	3930	
497	UC 497	4930 (8)	5260	5550	6950	6110	6070	2740	2820	3970	
521	Westbred 911	4940 (7)	3650	5870	6080	6990	6650	3020	2530	4740	
536	NK 2437	4600 (19)	4050	4830	6120	6780	5960	2190	2430	4470	

Table 27. 1982 Common Wheat Tests, Eight Location Yield Summary (lbs/acre) (Continued)

Entry	Variety	8 Locations		Sutter	Stanislaus	Delta	Kern	Kings	San Luis Obispo	Yolo	UCD
537	NK 3940	4600	(20)	4290	4520	5970	7660	6060	2680	1950	3630
538	NK 4236	4620	(17)	4110	5360	5110	7300	5950	2270	2210	4680
540	WS 3974	--		2840	3590	4550	4950	4630	--	--	3980
541	WS 4071	--		2950	5140	4300	5800	5120	--	--	3840
542	SGW 069B	3850	(36)	4070	4680	3690	5190	5210	1860	2370	3790
543	SGY 022	4490	(24)	3140	5210	5410	6380	6480	2300	2510	4460
544	UC 544	5060	( 5 )	4600	5640	7010	7290	6870	2910	2050	4070
545	UC 545	--		4440	5420	6670	6680	6320	--	--	3990
546	UC 546	--		5160	5140	6640	6410	6010	--	--	4150
547	UC 547	--		4230	4970	6770	6130	6090	--	--	3930
548	Glennson M81	4270	( 31 )	4210	4290	5900	5890	5520	2860	1830	3630
549	Ures T81	4670	(15)	4210	4970	6280	6950	6350	2370	2190	4080
551	D8115	--		4540	--	--	6330	6220	--	--	4190
552	UC 552	--		5020	--	--	--	--	--	--	4070
554	Tonichi S81	4490	(22)	3690	4960	6090	6710	6250	2370	2020	3840
555	Sonoita F81	4280	(29)	3860	4170	5540	6280	6180	2650	1860	3650
556	D8106	4040	(34)	3760	4560	5100	5810	4640	2800	1850	3780
GRAND MEAN		4560		4320	5000	5830	6410	5990	2620	2170	4020
CV		12.5		14.8	9.2	10.3	10.8	8.7	26.7	19.9	9.2
LSD (.05)		280		890	640	840	970	730	980	610	520

Numbers in parentheses indicate relative rank in column.

Table 28. 1980-1982 Common Wheat Tests, Yield Summary (lbs/acre)

Location	Year	Variety/Line										Test <sup>1</sup> mean	LSD (.05)	
		Siete Cerros 66	INIA 66R	Anza	Yecora Rojo	Shasta	Yolo	UC 360	Probrand 771	Klasic	Oslo	Westbred 911		
<u>Irrigated Tests</u>														
Sutter	1980	6420	5190	7120	6470	6480	8130	7160	6420	6170	6810	7680	6710	580
	1981	5790	5110	6450	5040	5940	6310	6180	5890	6000	6380	5780	5780	580
	1982	4540	4070	5500	2820	5050	5460	4920	4500	4000	4400	3650	4320	890
UCD	1980	6960	5510	8040	7050	6900	9330	7690	7420	8190	7070	7430	7140	620
	1981	2810	4630	4970	4940	4720	5350	4740	4420	5400	5170	4730	4680	590
	1982	3670	3470	4430	4570	4020	4550	3780	4120	4240	3640	4740	4020	520
Delta	1981	6450	4560	7280	5890	5680	5910	6400	6370	5100	6580	6670	5530	1170
	1982	3070	4190	7130	5950	4810	8240	7680	7060	6450	5010	6080	5830	840
Mean of Sacramento Valley		4960	4590	6370	5340	5450	6660	6070	5780	5690	5630	5840	5500	
Stanislaus	1982	4780	4180	5890	5010	5460	6220	5630	5100	5700	5220	5870	5000	640
WSFS <sup>2</sup>	1980	2850	2990	3280	3130	3250	3940	3440	3110	3210	3110	3370	3220	370
	1981	2360	3520	3550	2820	3140	2780	3640	2720	3330	3800	2290	2950	750
Kings	1980	6300	6540	6890	6630	6000	6960	7070	7270	7560	6690	6130	6630	820
	1981	3090	2620	3950	3850	3440	4330	3660	4510	4660	3250	3390	3700	640
	1982	6590	5060	6440	5680	6310	6430	6650	5260	6040	6180	6650	5990	730
Kern	1982	5700	5650	7290	6070	6180	7670	6610	6840	7650	7110	6990	6410	970
Mean of San Joaquin Valley		4520	4370	5330	4740	4830	5480	5240	4970	5450	5050	4960	4840	
<u>Dryland Tests</u>														
Yolo	1980	3830	2850	4140	3450	4150	4470	--	4320	3550	3490	--	3750	980
	1981	3540	4640	5280	5050	4770	5260	5120	5110	5150	4920	5360	4900	490
	1982	2010	1710	2560	2270	2070	2670	2540	2580	1720	1910	2530	2170	610

Table 28. 1980-1982 Common Wheat Tests, Yield Summary (lbs/acre) (continued)

Location	Year	Variety/Line											Test <sup>1</sup> mean	LSD (.05)
		Siete Cerros	INTA 66	INTA 66R	Anza	Yecora Rojo	Shasta	Yolo	UC 360	Probrand 771	Klasic	Oslo	Westbred 911	
SL0 <sup>3</sup>	1980	2110	2240	2740	2900	2830	2740	--	3550	--	3940	--	2850	1000
	1981	3890	4390	4330	4340	4980	3830	4240	4010	4190	4550	4460	4300	ns
	1982	1860	1690	3510	2700	3380	3150	2890	2430	2720	3400	3020	2620	980
Mean of dryland tests		2870	2920	3760	3450	3700	3690	--	3670	--	3700	--	3430	

<sup>1</sup>Tests included additional varieties and lines.<sup>2</sup>U.C. West Side Field Station, Five Points.<sup>3</sup>San Luis Obispo.

Table 29. 1982 Yolo Common Wheat Test\*, Quality Evaluation. (Evaluation was performed by ConAgra Flour Milling Company, Omaha, Nebraska.)

Entry	Variety/Line	Grain color	Wheat			Flour		Farinograph			MacMichael Viscosity
			TW	PRO	M	YLD	ASH	ABSP	PK	MTI	
20	Anza	R	61.8	11.0	11.1	71.3	.39	57.3	1.5	50	82
112	Yecora Rojo	R	59.8	11.4	11.1	69.1	.42	57.8	1.5	50	138
221	Phoenix	W	61.5	10.9	11.0	70.1	.41	55.4	1.5	50	78
353	Yolo	R	61.6	10.3	11.5	70.5	.38	54.4	2.0	40	76
360	UC 360	W	61.3	10.3	11.3	68.1	.39	53.5	1.5	50	72
412	Probrand 771	R	57.8	11.1	11.5	70.1	.39	55.3	2.0	50	121
415	Klasic	W	60.5	11.1	11.0	69.7	.39	53.4	2.0	50	126
436	Oslo	R	60.1	11.6	11.3	71.1	.42	58.6	5.0	30	113
485	UC 485	R	62.3	10.2	11.4	66.2	.43	58.3	3.0	50	90
487	UC 487	R	61.0	11.6	10.4	67.8	.37	55.7	7.0	30	118
488	UC 488	R	62.6	10.9	11.5	67.6	.43	57.8	3.0	50	102
489	UC 489	R	63.5	10.4	11.1	68.8	.41	56.6	3.0	40	85
491	Genero F81	R	58.9	11.9	11.0	66.8	.48	57.7	3.0	40	90
521	Westbred 911	R	61.1	11.1	11.3	65.7	.44	60.5	3.0	60	90
536	NK 2437	R	60.6	11.2	11.1	68.9	.43	54.7	3.0	60	121
537	NK 3940	R	61.3	10.9	11.3	70.2	.42	57.2	4.0	30	98
538	NK 4236	R	59.4	11.0	11.1	69.6	.45	56.2	2.0	40	91
542	SGW 0693	R	61.8	12.2	10.2	64.1	.39	55.2	5.0	25	119
544	UC 544	R	59.2	11.0	10.6	67.1	.38	53.9	2.0	50	79
548	Glennson M81	R	60.2	11.3	11.5	66.7	.48	58.4	3.0	40	93
549	Ures T81	R	60.8	10.7	11.6	61.0	.43	57.9	2.5	50	77
556	D8106	W	60.3	11.7	11.1	67.5	.44	56.7	1.5	50	78

Grain color: R = red; W = white.

TW = Test weight in pounds per bushel.

PRO = protein percentage.

M = moisture percentage.

YLD = flour extraction percentage.

ASH = flour ash percentage.

ABSP = water absorption percentage.

PK = peak (minutes).

MTI = mixing tolerance index.

\*See Table 21 for grain yield data.

Table 30. 1982 Kern Common Wheat Test\*, Quality Evaluation. (Evaluation was performed by Centennial Mills, Los Angeles, California.)

Entry	Variety/Line	Grain color	Wheat			Flour			Farinograph			Baking			
			PRO	M	YLD	PRO	ASH	ABSP	PK	MTI	ABSP	MTIM	VOL	GR	TX
20	Anza	R	12.8	9.4	72.2	10.6	.44	64.9	2.5	50	65	4	2600	P	C,0
112	Yecora Rojo	R	14.4	9.6	75.3	12.7	.44	63.8	6.0	30	64	7	3325	G	S1.0
221	Phoenix	W	12.9	9.2	73.7	10.8	.48	62.8	3.5	50	62	4	2600	F	F
353	Yolo	R	12.3	9.4	72.3	11.0	.44	62.3	3.0	40	62	4	2600	P	C,0
360	UC 360	W	12.7	9.2	74.2	10.6	.47	61.8	2.5	90	62	4	--	VP	VP
412	Probrand 771	R	13.6	9.1	75.1	11.9	.41	61.4	5.5	30	62	5	3000	F	F
415	Klasic	W	14.1	9.5	75.3	12.6	.42	62.7	8.5	24	63	7	3300	G	S1.w
436	Oslo	R	13.5	9.1	75.4	11.6	.41	62.2	4.5	35	63	6	3050	G	G
485	UC 485	R	13.5	9.3	72.5	11.2	.45	64.6	3.5	45	64	4	2700	VP	C,0
487	UC 487	R	13.6	9.2	73.8	11.3	.44	64.1	4.0	40	64	5	2600	P	O
488	UC 488	R	12.8	9.4	74.8	11.1	.46	66.9	3.5	35	66	5	2700	P	C,0
489	UC 489	R	13.7	9.5	71.2	11.5	.41	64.7	3.5	40	65	5	2700	P	C,0
491	Genero F81	R	13.5	9.4	72.9	11.7	.46	57.7	6.0	45	58	6	2600	P	C,0
521	Westbred 911	R	13.8	9.2	69.6	11.3	.45	67.4	6.0	40	65	7	2900	F	O
536	NK 2437	R	13.8	9.6	69.7	11.7	.38	61.9	6.5	35	62	6	3225	F	S1.0
537	NK 3940	R	14.1	9.4	72.4	11.7	.40	61.8	4.0	60	61	4	2825	G	G
538	NK 4236	R	13.4	9.2	72.2	11.2	.44	63.2	6.5	40	65	6	3100	G	G
540	WS 3974	R	14.0	9.4	71.0	12.3	.40	61.5	5.0	40	62	5	3150	G	G
541	WS 4071	R	15.4	9.5	72.2	13.3	.50	65.5	6.5	40	65	5	3300	F	F
542	SGW 069B	R	15.1	9.3	73.1	13.0	.43	65.6	5.5	30	64	5	3000	F	O
543	SGY 022	W	13.7	9.4	73.1	11.6	.43	63.3	6.5	35	63	6	3150	F	F
544	UC 544	R	13.1	9.3	73.6	11.0	.43	61.4	2.5	50	62	4	2750	F	F
545	UC 545	R	12.7	9.1	70.1	10.8	.38	60.0	3.0	25	62	5	3150	VG	VG
546	UC 546	R	12.7	9.8	74.0	11.3	.43	60.7	3.0	75	60	4	3125	--	O,S1.c
547	UC 547	R	13.2	9.2	74.7	11.3	.45	63.8	5.0	40	63	5	3100	G	G
548	Glennson M81	R	14.0	9.8	72.3	12.6	.48	61.9	4.0	80	61	4	3200	F	F
549	Ures T81	R	14.0	9.5	70.5	11.7	.48	66.0	5.0	40	66	5	2850	P	C,0
551	D8115	R	13.6	9.7	73.2	11.8	.46	67.3	6.0	40	65	6	2700	P	P
554	Tonichi S81	W	11.8	9.4	72.7	10.2	.42	59.0	2.5	30	61	5	2650	F	F
555	Sonoita F81	W	13.3	9.6	72.7	11.1	.45	63.5	5.5	35	60	4	2725	F	F
556	D8106	W	13.7	9.8	73.7	11.7	.45	65.4	5.5	50	65	6	2725	--	C,0

Grain color: R = red; W = white.

PRO = protein percentage; M = moisture percentage; YLD = flour extraction percentage; ASH = flour ash percentage; ABSP = water absorption percentage; PK = peak (minutes); MTI = mixing tolerance index; MTIM = mixing time (minutes); VOL = loaf volume (cc). GR = Grade: VG = very good; G = good; F = fair; P = poor; VP = very poor.

TX = Texture: C = coarse; O = open; S1.o = slightly open; S1.w = slightly weak; S1.c = slightly coarse.

\* See Table 25 for grain yield data.

Table 31. 1982 Sutter and Kings Common Wheat Tests\*, Quality Evaluation. (Evaluation was performed by the Western Wheat Quality Laboratory, USDA, Pullman, Washington.)

Entry	Variety/Line	Grain color	TW	YLD	ASH	MSCOR	PRO	Mixograph ABS	TYPE	Baking ABS	MTIM	LVOL	BGRG	Marraqueta rating	Arabic pocket bread rating
<b>Sutter - 1982</b>															
20	Anza	R	65.2	74.1	.42	87.6	8.0	56.8	2L	58.0	1.8	740	8	P	E
112	Yecora Rojo	R	66.0	71.8	.48	82.3	9.9	59.2	8M	63.0	5.1	935	2	P	F-G
221	Phoenix	W	64.0	72.8	.43	86.1	7.4	55.4	3L	56.3	2.5	760	8	G	E
353	Yolo	R	64.8	72.5	.40	87.0	6.9	54.4	5L	54.5	2.2	775	8	P	F-G
360	UC 360	W	64.0	70.2	.40	84.7	7.0	55.6	2L	54.1	1.7	710	9	VP	F
412	Probrand 771	R	63.6	71.5	.40	86.2	9.0	54.2	7M	57.9	4.6	915	2	G-E	F
415	Klasic	W	66.4	72.2	.40	87.0	9.4	57.1	8M	61.7	6.6	935	2	F	F-G
436	Oslo	R	65.6	73.0	.38	88.6	9.0	55.6	6L	56.8	3.3	930	2	G	E
485	UC 485	R	66.4	69.3	.43	82.2	7.4	56.9	5M	59.0	3.2	675	9	G	G
487	UC 487	R	65.6	72.2	.40	86.8	7.9	57.2	5M	58.8	2.8	825	4	G	G
488	UC 488	R	66.8	72.6	.41	86.6	8.5	57.5	4M	60.7	3.4	840	4	G-E	G-E
489	UC 489	R	67.2	69.3	.43	82.3	7.7	56.7	2L	58.6	3.0	700	9	G-E	E
491	Genero F81	R	65.2	70.4	.45	82.6	8.2	56.0	4L	57.4	3.9	725	8	G-E	E
521	Westbred 911	R	64.8	68.1	.47	78.8	7.5	58.5	6L	61.2	6.2	720	7	G	G
536	NK 2437	R	66.0	71.1	.43	84.0	9.1	58.4	8M	62.7	5.7	895	2	F	E
537	NK 3940	R	65.6	71.7	.42	85.3	8.5	56.0	4L	56.7	2.9	875	2	G	E
538	NK 4236	R	65.2	71.6	.42	85.2	7.2	58.3	6L	58.7	4.0	795	6	P-F	F-G
540	WS 3974	R	63.6	69.8	.37	85.9	10.6	56.2	7M	60.0	3.7	960	1	F-G	F-G
541	WS 4071	R	64.0	69.4	.49	79.4	8.8	58.2	8M	61.2	8.4	850	4	P-F	P-F
542	SGW 069B	R	66.4	70.2	.37	86.1	10.6	56.1	7M	60.4	3.1	910	2	G	G
543	SGY 022	W	65.6	70.6	.42	84.0	9.0	57.6	8M	61.3	5.4	880	3	G	G-E
544	UC 544	R	64.4	72.3	.38	88.1	7.4	53.8	3L	54.4	3.5	805	8	G	G
545	UC 545	R	64.4	72.4	.39	88.6	8.5	50.9	5L	54.9	3.7	900	2	P-F	P-F
546	UC 546	R	64.4	72.4	.48	82.9	7.9	52.6	3L	55.0	3.5	825	5	G	P
547	UC 547	R	63.2	71.8	.42	85.4	7.9	54.2	3L	55.1	3.1	790	9	G	P-F
548	Glennson M81	R	66.0	69.7	.49	79.4	8.4	54.2	6M	57.3	4.0	790	9	G	G
549	Ures T81	R	65.6	68.2	.45	79.9	8.3	54.3	6L	59.1	4.4	635	9	G	G
551	D8115	R	65.2	70.6	.46	81.9	8.6	55.0	6L	58.8	3.5	695	9	G	F-G
552	UC 552	W	66.4	71.5	.44	83.9	8.4	52.4	2M	53.8	1.8	735	9	P	F-G
554	Tonichi S81	W	64.8	73.1	.48	83.9	8.4	52.0	5L	53.9	3.7	820	7	P	F-G
555	Sonoita F81	W	66.0	70.0	.47	80.9	7.2	56.9	6L	58.8	5.6	725	8	F-G	F-G
556	D8106	W	65.2	70.6	.49	80.6	7.6	55.4	6L	57.2	4.3	720	9	G	F-G
<b>Kings - 1982</b>															
20	Anza	R	65.2	73.4	.42	86.9	8.7	55.4	1L	56.3	1.5	710	8		
112	Yecora Rojo	R	66.0	70.8	.45	82.7	9.9	56.9	6M	61.0	4.1	900	2		

Table 31. 1982 Sutter and Kings Common Wheat Tests\*, Quality Evaluation. (Evaluation was performed by the Western Wheat Quality Laboratory, USDA, Pullman, Washington.) (continued)

Entry	Variety/Line	Grain color	Flour			Mixograph		Baking			Marraqueta rating	Arabic pocket bread rating	
			TW	YLD	ASH	MSCOR	PRO	ABS	TYPE	ABS	MTIM	LVOL	BGRG
221	Phoenix	W	65.2	72.5	.42	86.0	9.1	54.4	2M	56.7	2.4	805	6
353	Yolo	R	65.6	72.7	.40	87.3	8.0	54.1	2M	54.1	1.5	770	8
360	UC 360	W	65.2	69.7	.40	84.4	8.0	52.8	1L	53.8	1.0	605	9
412	Probrand 771	R	63.6	70.9	.40	85.6	8.6	54.2	6L	57.0	4.1	840	3
415	Klasic	W	66.0	72.8	.42	86.6	8.7	55.5	6L	58.9	5.6	865	3
436	Oslo	R	66.0	74.4	.39	89.8	10.7	55.5	5M	58.4	2.2	950	2
485	UC 485	R	66.8	70.2	.44	82.7	9.0	54.0	2M	58.2	2.5	645	9
487	UC 487	R	65.6	71.5	.43	84.5	8.1	57.6	2M	58.9	2.2	775	9
488	UC 488	R	65.6	72.1	.43	85.4	8.3	55.8	2M	58.8	2.7	715	9
489	UC 489	R	66.8	70.6	.41	84.8	9.0	55.8	2M	59.0	2.6	770	8
491	Genero F81	R	66.0	69.6	.48	80.1	8.8	54.7	3L	58.7	3.3	640	9
521	Westbred 911	R	65.6	68.6	.43	81.5	8.6	56.6	6L	60.4	4.3	795	3
536	NK 2437	R	66.4	70.4	.42	84.1	9.3	55.2	6M	59.7	4.0	865	2
537	NK 3940	R	66.0	74.0	.41	88.1	10.9	56.9	2M	60.0	1.7	940	2
538	NK 4236	R	64.8	71.6	.44	84.3	7.6	56.2	4L	58.0	3.4	750	8
540	WS 3974	R	62.8	71.2	.40	86.1	9.9	56.1	4L	58.2	3.0	930	1
541	WS 4071	R	64.4	70.5	.49	80.3	12.0	57.9	3H	63.1	2.9	1005	2
542	SGW 069B	R	66.0	70.9	.34	88.4	11.5	57.2	3M	61.9	2.5	940	3
543	SGY 022	W	66.0	71.8	.43	85.0	10.4	54.6	6M	59.2	3.6	900	2
544	UC 544	R	64.8	73.9	.38	89.9	8.6	53.1	2L	55.2	2.0	755	8
545	UC 545	R	65.6	72.4	.37	89.9	9.3	50.4	2L	52.7	2.3	855	4
546	UC 546	R	64.0	73.1	.38	88.6	8.2	52.5	2L	54.2	1.8	735	8
547	UC 547	R	63.6	72.5	.41	86.6	9.2	53.4	1L	56.1	2.2	785	8
548	Glennson M81	R	66.0	71.5	.51	80.4	9.1	54.1	2L	58.4	2.7	830	4
549	Ures T81	R	66.4	70.0	.48	80.3	8.6	55.2	3M	59.0	2.6	600	9
551	D8115	R	65.6	70.7	.45	82.5	9.5	53.7	2M	58.4	2.8	725	9
554	Tonichi S81	W	64.8	73.3	.45	85.8	9.0	50.9	2L	53.4	1.3	810	8
555	Sonoita F81	W	66.4	71.0	.40	85.4	9.5	55.6	3L	58.3	2.9	890	8
556	D8106	W	64.4	71.2	.45	83.1	8.5	54.6	2L	56.8	1.7	765	8

Grain color: R = red; W = white.

TW = test weight (lbs/bu); YLD = flour extraction percentage; ASH = flour ash percentage, 14% moisture basis; MSCOR = milling score; PRO = flour protein percentage, 14% moisture basis; ABS = absorption percentage; TYPE = mixograph type; MTIM = optimum mixing time in minutes; LVOL = bread loaf volume.

BGRG = bread crumb grain rating: 1 = excellent; 2 = satisfactory; 4 = questionable-satisfactory; 6 = questionable; 8 = questionable-unsatisfactory; 9 = unsatisfactory.

Marraqueta and Arabic pocket bread ratings: VP = very poor; P = poor; F = Fair; G = Good; E = excellent.

\*See Tables 19 and 24 for grain yield data.

Table 32. 1982 Sutter Triticale Test

Entry	Variety	Yield (lbs/acre)	Test weight (lbs/bu)	Thousand kernel weight (grams)	Days to heading from 3/1	Plant height (inches)	BYDV
1	Siskiyou	3390 (31)	56.7	55	43.4	44	2.8
2	Beagle	6200 (4)	56.3	51	55.6	52	1.3
3	Cananea 79	4020 (30)	57.6	49	45.2	42	2.0
4	Caborca 79	4570 (25)	56.5	49	50.6	42	1.5
5	X2802	5300 (15)	57.3	46	46.8	43	1.5
6	X14920	4350 (29)	57.7	50	50.0	46	1.0
7	Delfin 99	5030 (17)	58.4	51	52.4	53	1.0
8	Delfin 69	4680 (22)	58.5	52	51.4	52	1.3
9	Topo 120	5410 (11)	59.1	54	55.4	46	1.5
10	X17077	5150 (16)	56.2	48	48.6	44	1.3
11	Juanillo 97	6480 (3)	57.8	51	56.8	53	2.3
12	Juanillo 168	6640 (1)	57.3	52	59.2	52	1.8
13	Beaguelita 'S'	6520 (2)	55.8	51	54.0	48	1.5
14	X22725	4390 (28)	56.7	50	46.8	48	1.5
15	X29340	4410 (27)	58.0	52	46.4	42	1.5
16	X31731	4970 (18)	59.9	53	46.6	46	1.0
17	X33247	5460 (10)	58.1	48	52.8	52	1.0
18	X36518	4790 (21)	59.0	49	43.4	42	1.8
19	L.O. Bulk	5650 (8)	56.9	51	56.4	50	2.0
20	X15673	4610 (24)	57.3	52	54.2	49	1.8
21	X21298	5880 (6)	55.4	50	56.0	51	2.3
22	Beaguelita 'S'	5910 (5)	54.3	52	56.2	47	1.5
23	X27947	4940 (20)	58.7	52	49.2	44	1.5
24	Maya-Arm	5300 (14)	58.2	44	54.4	43	2.3
25	Chapala-Snoopy	4940 (19)	57.4	44	50.0	45	2.0
26	X2142	4680 (23)	55.4	51	48.8	41	1.3
27	X15733	5570 (9)	56.2	53	55.4	51	1.8
28	X15733	5380 (12)	56.3	51	56.2	50	1.8
29	DEX PB 123	5320 (13)	52.9	55	50.0	48	1.3
30	DEX PB 131	5690 (7)	55.7	53	50.4	51	1.5
31	DEX PB 698	4450 (26)	51.5	45	44.8	47	1.3
GRAND MEAN		5160	56.9	51	51.2	47	1.6
CV		12.1	1.0	1.8	3.9	3.6	29.6
LSD (.05)		880	1.1	1	4.0	2	0.7

Rating scale (1-8) for diseases (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%.

Diseases assessed but occurring in trace or less amounts: leaf rust, stripe rust, septoria,  
 powdery mildew.

Numbers in parentheses indicate relative rank in column.

BYDV ratings (see scale above) were based on percentage of plants showing foliar symptoms.

Table 33. 1982 U.C. Davis Triticale Test

Entry	Variety	Yield (lbs/acre)	Test weight (lbs/bu)	Thousand kernel weight (grams)	Days to heading from 3/1	Plant height (inches)	Lodging at harvest	BYDV
1	Siskiyou	2480 (31)	54.4	43.2	67	50	4.3	4.0
2	Beagle	3990 (13)	52.9	44.2	64	47	5.8	2.8
3	Cananea 79	4110 (10)	54.4	38.6	58	40	2.5	3.3
4	Caborca 79	3650 (24)	53.7	42.4	59	36	4.0	4.8
5	X2802	3710 (21)	53.3	41.6	57	38	3.0	5.0
6	X14920	3270 (28)	54.9	44.8	61	39	5.8	3.3
7	Delfin 99	4040 (12)	56.0	41.4	62	47	3.3	2.8
8	Delfin 69	4280 (8)	55.1	44.6	62	49	3.8	2.8
9	Topo 120	3730 (20)	55.4	44.6	64	43	4.3	3.8
10	X17077	4350 (6)	52.7	41.8	58	39	4.8	4.3
11	Juanillo 97	4120 (9)	55.1	52.0	61	47	4.3	3.0
12	Juanillo 168	4400 (5)	54.5	46.4	64	48	5.8	2.5
13	Beaguelita 'S'	4510 (2)	52.0	47.8	63	45	3.3	2.8
14	X22725	3530 (27)	54.0	41.6	62	44	5.5	4.3
15	X29340	3670 (23)	54.3	37.2	60	40	3.0	5.0
16	X31731	3600 (26)	56.1	38.2	64	41	4.3	4.3
17	X33247	4500 (3)	55.9	44.8	60	45	6.8	3.0
18	X36518	3710 (22)	55.6	39.4	59	36	3.0	3.8
19	L.O. Bulk	3860 (17)	54.6	48.6	63	48	6.0	2.8
20	X15673	3970 (15)	54.8	46.0	64	48	5.0	2.3
21	X21298	3780 (19)	53.4	49.8	61	46	5.8	2.8
22	Beaguelita 'S'	5040 (1)	51.3	46.2	67	42	4.5	3.0
23	X27947	3910 (16)	55.1	40.2	62	44	6.0	3.8
24	Maya-Arm	4090 (11)	54.9	39.8	55	40	3.8	5.0
25	Chapala-Snoopy	3790 (18)	54.3	43.4	55	40	4.0	5.0
26	X2142	3620 (25)	52.9	44.0	60	36	4.8	4.3
27	X15733	4500 (4)	53.7	44.2	64	50	5.3	3.0
28	X15733	3990 (14)	54.4	51.0	62	47	5.3	2.3
29	DEX PB 123	2890 (30)	52.7	42.2	68	50	6.5	2.8
30	DEX PB 131	2910 (29)	51.9	40.4	65	53	6.8	3.3
31	DEX PB 698	4310 (7)	48.1	38.4	81	50	2.3	1.3
GRAND MEAN		3880	53.9	43.5	62	44	4.6	3.4
CV		12.6	2.4	5.2	2.9	5.1	23.1	19.2
LSD (.05)		690	2.6	4.6	3	5	1.5	0.9

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

Diseases assessed but occurring in trace or less amounts: leaf rust, stripe rust, Septoria, powdery mildew.

Numbers in parentheses indicate relative rank in column.

BYDV ratings (see scale above) based on percentage of plants showing foliar symptoms.

Table 34. 1982 Kings Triticale Test

Entry	Variety	Yield (lbs/acre)	Test weight (lbs/bu)	Thousand kernel weight (grams)	Plant height (inches)	Lodging on 5/4	Lodging at harvest	BYDV	Septoria
1	Siskiyou	4200 (30)	55.9	46.2	52	1.0	1.0	1.5	1.0
2	Beagle	5380 (23)	52.5	43.2	55	1.8	3.8	1.3	1.0
3	Cananea 79	5850 (10)	57.0	42.0	47	1.3	1.3	1.3	1.0
4	Caborca 79	5160 (26)	55.4	47.8	46	1.3	1.3	1.3	1.3
5	X2802	5680 (15)	55.2	44.8	46	1.8	3.0	1.8	1.0
6	X14920	5520 (18)	55.1	43.6	48	1.3	1.8	1.0	1.0
7	Delfin 99	5420 (20)	56.4	43.4	56	1.8	2.8	1.0	1.0
8	Delfin 69	5320 (24)	56.7	44.0	56	1.8	3.8	1.3	1.0
9	Topo 120	5780 (12)	57.1	45.4	51	1.5	2.3	1.3	1.0
10	X17077	5480 (19)	55.2	46.4	46	1.0	1.8	1.5	1.0
11	Juanillo 97	6340 ( 4)	55.9	54.2	53	1.0	3.5	1.3	1.0
12	Juanillo 168	6290 ( 5)	55.5	52.6	55	1.5	2.0	1.0	1.0
13	Beaguelita 'S'	7080 ( 1)	51.3	44.2	52	1.0	1.5	1.0	1.0
14	X22725	5380 (21)	55.6	43.6	49	1.0	1.0	1.5	1.0
15	X29340	5380 (22)	56.6	45.4	48	1.0	1.0	1.3	1.0
16	X31731	5020 (28)	57.2	43.0	50	1.0	1.0	1.0	1.0
17	X33247	5800 (11)	56.4	47.8	55	1.8	3.3	1.3	1.0
18	X36518	6020 ( 9)	57.5	42.2	46	1.0	1.3	1.5	1.0
19	L.O. Bulk	6450 ( 2)	55.4	52.0	53	1.0	1.0	1.0	1.0
20	X15673	5760 (14)	55.5	44.0	55	1.3	2.0	1.3	1.0
21	X21298	5530 (17)	53.9	48.6	52	1.8	2.5	1.0	1.0
22	Beaguelita 'S'	6390 ( 3)	49.8	43.8	49	1.0	1.3	1.5	1.3
23	X27947	6150 ( 7)	57.3	44.0	50	1.0	2.0	1.0	1.0
24	Maya-Arm	5280 (25)	56.2	43.6	46	1.3	1.5	2.3	1.0
25	Chapala-Snoopy	6060 ( 8)	55.9	46.8	48	1.5	2.0	2.5	1.0
26	X2142	5610 (16)	53.6	46.8	47	1.3	1.3	1.0	1.3
27	X15733	5770 (13)	53.5	47.2	57	1.0	1.3	1.0	1.0
28	X15733	6280 ( 6)	55.3	48.8	54	1.0	1.3	1.3	1.0
29	DEX PB 123	5060 (27)	50.3	49.2	58	1.8	3.3	1.0	1.0

Table 34. 1982 Kings Triticale Test (continued)

Entry	Variety	Yield (lbs/acre)	Test weight (lbs/bu)	Thousand kernel weight (grams)	Plant height (inches)	Lodging on 5/4	Lodging at harvest	BYDV	Septoria
30	DEX PB 131	4990 (29)	52.5	45.0	58	1.8	3.0	1.0	1.0
31	DEX PB 698	3730 (31)	49.6	38.0	60	1.0	1.3	2.3	1.3
GRAND MEAN		5620	54.9	45.7	51	1.3	2.0	1.3	1.0
CV		10.9	1.2	5.4	4.5	44.8	52.2	37.7	17.5
LSD (.05)		860	1.3	5.1	3	ns	1.4	0.7	ns

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

Diseases assessed but occurring in trace or less amounts: leaf rust, stripe rust, powdery mildew.

Numbers in parentheses indicate relative rank in column.

BYDV ratings (see scale above) were based on percentage of plants showing foliar symptoms.

Table 35. 1982 Imperial Triticale Test

Entry	Variety	Yield (lbs/acre)	Test weight (lbs/bu)	Days to heading from planting	Days to maturity from planting	Plant height (inches)	Lodging on 5/5	Lodging at harvest	BYDV
1	Siskiyou	5340 (24)	56	97	150	47	3.3	4.8	1.3
2	Beagle	6550 (2)	54	96	149	48	1.3	5.3	1.3
3	Cananea 79	5730 (15)	56	93	150	42	4.0	5.3	1.5
4	Caborca 79	5440 (23)	55	94	148	39	3.3	4.8	1.3
5	X2802	5570 (21)	54	92	149	42	3.5	4.8	1.0
6	X14920	5290 (27)	57	95	149	42	4.5	5.8	1.3
7	Delfin 99	6510 (3)	57	98	150	50	1.5	5.5	1.0
8	Delfin 69	6030 (11)	57	95	151	50	2.0	6.3	1.3
9	Topo 120	6900 (1)	58	101	151	45	1.0	4.8	1.0
10	X17077	6220 (6)	58	94	149	40	4.0	5.3	1.3
11	Juanillo 97	5580 (20)	57	95	149	49	1.5	4.5	1.0
12	Juanillo 168	6430 (4)	56	95	149	50	1.5	4.8	1.3
13	Beaguelita 'S'	6050 (10)	54	95	149	45	1.3	4.5	1.0
14	X22725	5550 (22)	55	95	151	41	3.0	5.5	1.3
15	X29340	5040 (28)	53	95	152	40	5.8	5.5	1.0
16	X31731	5860 (13)	56	98	150	41	1.0	5.0	1.0
17	X33247	5600 (19)	58	96	149	44	1.0	6.3	1.0
18	X36518	5290 (26)	58	94	150	39	1.8	4.8	1.0
19	L.O. Bulk	5950 (12)	55	97	149	50	1.3	4.5	1.0
20	X15673	4860 (31)	57	99	155	48	3.3	6.3	1.0
21	X21298	6090 (8)	56	94	150	49	1.5	5.3	1.3
22	Beaguelita 'S'	5760 (14)	50	90	149	41	1.3	4.3	1.3
23	X27947	4960 (30)	55	97	150	43	4.8	5.0	1.0
24	Maya-Arm	6210 (7)	55	90	149	40	3.3	5.0	1.3
25	Chapala-Snoopy	5030 (29)	55	91	149	44	3.3	5.5	1.8
26	X2142	5320 (25)	53	97	152	39	4.0	5.0	1.0
27	X15733	6270 (5)	52	97	150	47	1.5	6.0	1.0
28	X15733	6060 (9)	54	95	151	47	2.0	5.3	1.3
29	DEX PB 123	5640 (17)	48	100	154	50	5.8	6.5	1.0
30	DEX PB 131	5680 (16)	55	99	154	51	4.5	5.8	1.0
31	DEX PB 698	3770 (32)	45	115	158	51	4.0	6.0	1.0

Table 35. 1982 Imperial Triticale Test (continued)

Entry	Variety	Yield (lbs/acre)	Test weight (lbs/bu)	Days to heading from planting	Days to maturity from planting	Plant height (inches)	Lodging on 5/5	Lodging at harvest	BYDV
	Anza*	5620 (18)	60	102	156	34	3.3	5.8	1.0
	Grand Mean	5690	55	96	150	45	2.8	5.3	1.1
CV		13.0		1.4	0.8	4.9	28.3	11.7	29.7
LSD (.05)		1040		2	2	3	1.1	0.9	ns

\*Bread wheat.

Rating scale (1-8) for diseases (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%.

Diseases assessed but occurring in trace or less amounts: leaf rust, stripe rust, septoria, powdery mildew.

Numbers in parentheses indicate relative rank in column.

BYDV ratings (see scale above) were based on percentage of plants showing foliar symptoms.

Table 36. 1982 Triticale Tests, Four Location Yield Summary (lbs/acre)

Entry	Variety	Locations	4			
			Imperial	UCD	Kings	Sutter
1	Siskiyou	3850 (31)	5340	2480	4200	3390
2	Beagle	5530 (5)	6550	3990	5380	6200
3	Cananea 79	4930 (20)	5730	4110	5850	4020
4	Caborca 79	4700 (27)	5440	3650	5160	4570
5	X2802	5070 (16)	5570	3710	5680	5300
6	X14920	4610 (29)	5290	3270	5520	4350
7	Delfin 99	5250 (13)	6510	4040	5420	5030
8	Delfin 69	5080 (15)	6030	4280	5320	4680
9	Topo 120	5460 (8)	6900	3730	5780	5410
10	X17077	5300 (12)	6220	4350	5480	5150
11	Juanillo 97	5630 (4)	5580	4120	6340	6480
12	Juanillo 168	5940 (2)	6430	4400	6290	6640
13	Beaguelita 'S'	6040 (1)	6050	4510	7080	6520
14	X22725	4710 (26)	5550	3530	5380	4390
15	X29340	4630 (28)	5040	3670	5380	4410
16	X31731	4860 (21)	5860	3600	5020	4970
17	X33247	5340 (10)	5600	4500	5800	5460
18	X36518	4950 (18)	5290	3710	6020	4790
19	L.O. Bulk	5480 (7)	5950	3860	6450	5650
20	X15673	4800 (24)	4860	3970	5760	4610
21	X21298	5320 (11)	6090	3780	5530	5880
22	Beaguelita 'S'	5770 (3)	5760	5040	6390	5910
23	X27947	4990 (17)	4960	3910	6150	4940
24	Maya-Arm	5220 (14)	6210	4090	5280	5300
25	Chapala-Snoopy	4950 (19)	5030	3790	6060	4940
26	X2142	4810 (23)	5320	3620	5610	4680
27	X15733	5530 (6)	6270	4500	5770	5570
28	X15733	5420 (9)	6060	3990	6280	5380
29	DEX PB 123	4730 (25)	5640	2890	5060	5320
30	DEX PB 131	4820 (22)	5680	2910	4990	5690
31	DEX PB 698	4060 (30)	3770	4310	3730	4450
GRAND MEAN		5090	5690	3880	5620	5160
CV		12.1	13.0	12.6	10.9	12.1
LSD (.05)		430	1040	690	860	880

Numbers in parentheses indicate relative rank in column.