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**1985 REGIONAL BARLEY, COMMON AND DURUM WHEAT, TRITICALE,
AND OAT PERFORMANCE TESTS IN CALIFORNIA**

L. F. Jackson², C. O. Qualset³, C. W. Schaller³, W. F. Lehman³,
 R. L. Wennig⁴, L. Prato⁵, H. Vogt⁴, L. K. Gibbs⁴, B. Coviello⁵,
 T. E. Kearney⁵, S. W. Kite⁵, D. J. Munier⁵, J. P. Orr⁵, M. J. Smith⁵,
 A. F. Van Maren⁵, R. Vargas⁵, B. Weir⁵, C. M. Wick⁵,
 J. F. Williams⁵, and S. D. Wright⁵

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 1985. Entries evaluated in the tests included standard cultivars, new and soon-to-be released cultivars, 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 (26 entries) were evaluated at 10 locations; common wheats (36 entries), at 11 locations; durum wheats (29 entries), at four locations; triticales (15 entries), at four locations; and oats (17 entries), at three 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 (60 pound rate for oats) 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 plots consisted of five rows, 16 feet long. Plots in the Sacramento-San Joaquin Delta were planted at the rate of 150 pounds of seed per acre. Grain was harvested with a Wintersteiger Seedmaster

¹These 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 Hard Red Spring and Durum Wheat Quality Laboratory, USDA, North Dakota State University, Fargo, North Dakota; the Western Wheat Quality Laboratory, USDA, Pullman, Washington; ConAgra Flour Milling Company, Omaha, Nebraska; and General Mills, Inc., Vallejo and Vernon, California. 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 and the California Wheat Commission.

²Extension Agronomist, ³Agronomists, ⁴Staff Research Associates, Department of Agronomy and Range Science, UC Davis, and ⁵University of California Cooperative Extension Advisors in Fresno, Yolo, Kings, Kern, Sacramento, San Luis Obispo, Imperial, Madera, Merced, Butte, Sutter, and Tulare Counties, respectively.

Universal 150 plot combine. 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. BYDV assessments, however, were based on the percentages of plants showing symptoms. Black point and yellow berry 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 dates, soil type, previous crop, fertilization, irrigation, and seasonal rainfall) regarding each site is given in Table 1.

The California Crop and Livestock Reporting Service estimated 1985 harvested wheat acreage at 840,000 acres (including 88,000 acres of durum wheat) and harvested barley acreage at 420,000 acres. Yields of wheat (excluding durum wheat) statewide were about 8% higher in 1985 than in 1984. Yecora Rojo (San Joaquin Valley) and Anza and Yolo (Sacramento Valley) were the most popular wheat cultivars. Barley acreage statewide was down 9% from 1984. CM 72, Prato, Steptoe, and Arivat were the most popular barley cultivars. The 1985 season for the most part was very favorable for high yields of irrigated grain because of a dryer than normal late winter and spring following a wetter than normal fall. Rainfall amounts at the end of November were about 150%, 130%, and 50% above average in the Sacramento Valley, San Joaquin Valley, and south-central coast, respectively. By the end of spring, however, rainfall amounts were 30-40% below normal in those regions. Temperatures were cooler than normal in the winter and near normal in the spring. Under these weather conditions foliar diseases were of little importance. Some spring frost damage was reported for early planted wheat, while the durum wheat crop in the Imperial Valley was damaged by high temperatures in mid-April during flowering. Losses of one-half ton per acre were estimated for the durum wheat crop.

Data for barley tests are given in Tables 2-12; common wheat tests, Tables 13-26; durum wheat tests, Tables 27-33; triticale tests, Tables 34-39, and oat tests, Tables 40-43.

BARLEY

Average yields for the 10 barley tests ranged from 1570 lb/a (1040-2510 lb/a) in the Tulare dryland to 7840 lb/a (5150-9790 lb/a) at Butte (Tables 2-12). Entries NK XBB-2, NK XBB-3, NK XBB-1, UC 400, and UC 408 were the highest yielding in the Sacramento Valley; entries UC 646, UC 408 and UC 337, in the San Joaquin Valley; and entries CM 72, 2-22-9, and UC 566, in dryland areas. In the three-year period 1983-85, UC 400, UC 408, and UC 337, all advanced breeding lines, were the highest yielding barleys in the Sacramento and San Joaquin Valleys and dryland areas.

Diseases of importance in 1985 included BYD (at Butte, Sutter, WSFS, and Kern) and scald (at UC Davis). Most entries showed adequate resistance to BYD, while entries Sutter, UC 603, UC 607, Lindy, WPB 583-10, NK XBB-1, NK XBB-2, NK XBB-3, and UC 707 were least affected by scald. Other diseases (net blotch, powdery mildew, and leaf rust) did not occur at yield-damaging levels.

Lodging was severe at Butte, Sutter, UC Davis, and Kern. Entries UC 603, NK BB-82-2, NK XBB-3, and UC 707 showed the best lodging resistance. Bushel weights and kernel weights were high in 1985, particularly at Butte, Sutter, WSFS, Kings, and Kern. Entries with high bushel weights included Menuet, Piston, WPB 583-10, and UC 337. Entries with high kernel weights included 2-22-1, CM 72, UC 566, NK BB-82-2, and NK XBB-3.

COMMON WHEAT

Average yields for the 11 common wheat tests ranged from 1020 lb/a (270-1540 lb/a) in the San Luis Obispo dryland to 9700 lb/a (8560-11,030 lb/a) at Butte (Tables 13-24). Entries UC 633 and Yolo were the highest yielding in the Sacramento Valley; UC 633, Probrand 775, Phoenix, and Yolo, in the San Joaquin Valley; and UC 632, UC 635, and Yecora Rojo, in the dryland areas. In the three-year period 1983-1985, Yolo was the highest yielding wheat in the Sacramento Valley and dryland areas; and Yolo and Klasic, in the San Joaquin Valley.

Diseases of importance in 1985 included septoria tritici blotch (at Sutter), stripe rust (at UC Davis), and BYD (at Madera). The stripe rust at UC Davis occurred when disease spread from nearby plots which had been inoculated for a disease resistance experiment. Entries least affected by septoria tritici blotch included the septoria-resistant entries Tadinia, UC 681, UC 682 and UC 683, as well as Yolo, UC 632, and UC 628. All entries except Yecora Rojo, NK 2437, Probrand 775, UC 627, and P982-83 had adequate resistance to stripe rust. All entries except Yecora Rojo, Probred, Klasic, NK 2437, UC 627, UC 637, IPRI 83501, MP302, MP325, and Veery 'S' had adequate resistance to BYD. Other diseases (leaf rust, powdery mildew) did not occur at yield-damaging levels in 1985.

Bushel weights and kernel weights were high in 1985, particularly at Butte, Sutter, Sacramento-San Joaquin Delta, and Kings. Entries with high bushel weights included Klasic, UC 634, UC 627 and UC 630. Entries with high kernel weights included Probred, Klasic, Yecora Rojo, NK 2437, Westbred 911, and P983-38. Yellow berry levels were high at Butte, Sutter, and Yolo in 1985, but low at the other locations, indicating higher grain protein levels and better quality than the 1984 crop. Entries with low yellow berry scores (an indication of higher grain protein content) included CM 43367, 903-1, Probred, and Yecora Rojo. Quality analyses of 1984 nurseries (Table 25) indicated low grain protein percentages. No entries from Sutter (1984) had high enough protein levels for breadmaking purposes, but all except Westbred 911, NK 505, CM 43367 and UC 634 were acceptable for milling purposes. Entries from Sacramento-San Joaquin Delta (1984) with promising overall quality (milling and baking) included NK 2437, Probrand 775, IPRI 8314, IPRI 8322, UC 628, UC 635, and CM 16076. Entries from the UC West Side Field Station, 1985 (Table 26) with good baking quality included Probred, Klasic, Westbred 911, 903-1, CM 16076, MP-325, and Calgene 1551. Grain protein levels ranged from 11.2-14.9% at UC West Side Field Station in 1985.

DURUM WHEAT

Average yields of the 4 durum wheat tests (Tables 27-31) ranged from 7100 lb/a (6160-8130 lb/a) at UC Davis to 8220 lb/a (6140-9580 lb/a) at the Sacramento-San Joaquin Delta. Mallard 'S' was the highest yielding entry in 1985 as well as in the two-year period 1984-1985. Stripe rust occurred at UC Davis when disease spread from nearby plots which had been inoculated. All entries except Modoc, P883-22, Yavaros, and Westbred 881 appeared to have adequate resistance. Other diseases (septoria tritici blotch, powdery mildew, leaf rust, and BYD) did not occur at yield-damaging levels in 1985.

Lodging was severe at Kings and Imperial. Entries showing high levels of lodging resistance included CD 25126, TL 75-409, P883-22, Loon, Aldura, Frigate 'S', and Yavaros. Bushel weights were very high at UC Davis, Sacramento-San Joaquin Delta, and Kings, with averages ranging from 62.3-63.7 lb/a and 51.5-55.8 g, respectively. Entries with high bushel weights included NK 79D893, CD 25126, Modoc, and Yavaros. Entries with high kernel weights included Stifftail 4, Mallard 'S', P883-15, Stifftail 3, and Westbred Turbo. Yellow berry scores were low in 1985, indicating a higher grain protein level and better quality than the 1984 crop. Quality analyses of the 1984 nurseries (Table 32) showed low grain protein content and poor quality for all entries. Westbred 881 had the best relative quality. Grain protein content of 1985 nurseries ranged from 10.1-14.9% at the Sacramento-San Joaquin Delta and from 9.8-13.2% at Kings (Table 33). Entries with high grain protein included Modoc, Westbred 881, CD 14472, Loon, P883-2, P883-15, and P883-22.

TRITICALE

Average yields in the 4 triticale tests ranged from 6220 lb/a (4850-7740 lb/a) at Imperial to 6980 lb/a (5470-8340 lb/a) at Sutter (Tables 34-38). Entries Juan, UC 54, and Beaguelita 'S' were the highest yielding entries in 1985, with Juan outyielding the common wheat Yolo by 3%. In the two-year period 1984-1985, Beaguelita 'S' and Juan were the highest yielding. Diseases were not important on triticales in 1985. Lodging was severe at Kings and Imperial, where entries C333, Juan, and Beaguelita 'S' showed the best lodging resistance. Bushel weights of triticales were lower than common wheats, averaging about 55 lb/bu. Entries with high bushel weights included UC 54 and C334. Kernel weights of triticales were higher than common wheats at Sutter, UC Davis, and Kings. Entries with high kernel weights included Juan, Wytch, C333, Juanillo 86, and Beaguelita 'S'. Triticale hay tests were conducted at three locations (Table 39) and highest dry matter yields were produced by Juan.

OAT

Yields of the three oat grain tests ranged from 1930 lb/a (1340-2320 lb/a) in the Yolo dryland to 4880 lb/a (2710-5520 lb/a) at Tulare (Tables 40-42). The highest yielding entries were 75Q-036-139-5D at UC Davis and 75Q-036-83-1D at Tulare and Yolo, although there were no significant differences in yield among the top 4-, 12-, and 10-ranked entries, respectively, at those locations. BYD occurred at UC Davis and Tulare and was most severe on entries Cal Red and Kanota. Other diseases did not occur at yield-damaging levels. In oat hay tests (Table 43) dry matter yields were highest for Jaycee at UC Davis, A82-0034 at Tulare, and Cayuse in the Yolo dryland, although there were no significant differences in yield among the top 3-, 14-, and 10-ranked entries, respectively, at those locations.

Table 1. Site Characteristics for UC Regional Cereal Evaluation Tests, 1985

Location	Test	Planting date	Soil type	1984 Crop	Fertilization	Irrigation	Rainfall	
							Seasonal	After planting
Butte County Dutton Ranch Chico	Common wheat Barley	11/5/84	Fairwell clay adobe	Sugarbeets	Preplant: 75# N(NH ₃ SO ₄ & urea) With seed: 100# 0-27-12-14S-1.5ZN Topdress: 50# N (urea)	Furrow (5' beds): barley: 2x (10" total) wheat: 3x (15" total)	18.95"	16.03"
					Alfalfa	Flood 6x (18" total)	1.66" 1.03"	
Imperial County UC IVAC El Centro	Durum wheat Triticale	12/19/84	Meloland clay loam	Cotton	Preplant: 100# N, 60#P ₂ O ₅ Water run: 100# N	Flood 6x (18" total)	4.5" 3.0"	
						Irrigated up Flood: wheat: 3x (9" total) barley: 2x (6" total)		
Kern County J.G. Boswell Buena Vista Ranch Buttonwillow	Common wheat Barley	12/4/84	Sacramento clay	Cotton	Preplant: 150# NH ₃ (wheat) 100# NH ₃ (barley) Water run: 50# NH ₃ (wheat) 30# NH ₃ (barley)	Flood wheat: 5x (26" total) barley: 2x (12" total)	4.85" 2.87"	
						Flood wheat: 5x (26" total) barley: 2x (12" total)		
Kings County J.G. Boswell Homeland Ranch Corcoran	Durum wheat Triticale Barley	12/11/84	Silty clay, clay loam	Cotton	Preplant: 175# NH ₃ (wheat) 125# NH ₃ (barley) 150# 11-48-0 (w/seed) Topdress: 150#NH ₄ NO ₃ (wheat) Water run: 82# NH ₃ (wheat), 53# NH ₃ (barley)	Flood wheat: 5x (26" total) barley: 2x (12" total)	4.85" 2.87"	
						Flood wheat: 5x (26" total) barley: 2x (12" total)		
Madera County Massaro Ranch Chowchilla	Common wheat	11/27/84	Orangeville fine, sandy loam	Wheat	Preplant: 60# N (NH ₃ SO ₄) Water run: 60# N (UN-32)	Flood wheat: 2x (20" total)	8.5" 6.1"	
						Flood wheat: 2x (20" total)		
Merced County San Felipe Ranch Atwater	Barley	11/27/84	Lewis clay sandy loam	Corn	Preplant: 160# 16-20-0+S Topdress: 70# N	Flood 2x (9.2" total)	8.80" 6.47"	
						Flood 2x (9.2" total)		

Table 1. Site Characteristics (Continued)

Location	Test	Planting date	Soil type	1984 Crop	Fertilization	Irrigation	Rainfall	
							Before planting	After planting
Sacramento County Lewellen Ranch Tyler Island Walnut Grove	Common wheat	1/2/85	Egbert muck	Corn	With seed: 92# 11-48-0-21S Topdress: 50# N (NH ₄ NO ₃)	Spud ditch 1x (6" total)	10.84"	3.02"
	Durum wheat							
San Luis Obispo Co. White Ranch Shandon	Common wheat	11/15/84	Nacemlento Los Osos complex	Fallow	At planting: 159# 16-20-0	None	7.80"	5.78"
	Barley							
Sutter County Newhall Land and Farming Meridian	Common wheat	11/5/84	Marvin silty clay loam	Sugarbeets	Preplant: 90# N (aqua)	Flood: 2" total	15.5"	10.1"
	Barley Triticale							
Tulare County ICI Farmersville	Oat	12/12/84	Foster fine sandy loam	Cucumber	Preplant: 55# N (urea) Topdress: 52# N (34-0-0)	Flood 3x (8.6" total)	9.54"	4.85"
	Triticale							
Tulare County Changata Ranch Ducor	Common wheat	12/5/84	Ducor adobe clay	Fallow	Preplant: 170# 11-53-0 (w/seed)	None	5.0"	3.0"
	Barley							
UC Davis Agronomy Farm Davis	Common wheat	1/4/85	Yolo fine	Beans	Preplant: 80# N (NH ₃) Topdress: (wheat and durum) 130# N (NH ₄ NO ₃)	Flood wheat: 3x (18" total) barley, triticale: 1x (6" total)	15.6"	13.9/6/3"
	Durum wheat	1/4/85	sandy loam					
	Triticale	11/7/84						
	Barley Oats	11/7/84 11/7/84						

Table 1. Site Characteristics (Continued)

Location	Test	Planting date	Soil type	1984 Crop	Fertilization	Irrigation	Rainfall Seasonal After planting
UC West Side Field Station Five Points	Common wheat Barley	1/16/85	Panoche clay loam	Cotton	Preplant: 150# N (NH ₃ SO ₄)	Preplant: 6.5" Flood: 5x (14.5" total)	1.38" 0.84"
Yolo County Durst Ranch Dunnigan	Common wheat Barley Oats Triticale	12/28/84	Sehorn-Balcom complex	Fallow	Broadcast after planting: (100# 11-53-0)	None	15.6" 5.4"

Table 2. Butte Barley Test

Entry	Yield (lb/a)	Lodging 4/29	Lodging at harvest	BYDV	Plant height (in)	Test weight (lb/bu)	Thousand kernel weight (grams)
2 Briggs	7430 (18)	2.8	3.8	2.8	42	51.4	45.3
18 Sutter	5880 (24)	4.5	5.3	2.0	46	49.7	42.5
190 UC 566	7660 (16)	3.8	5.0	3.3	43	52.3	45.3
191 CM 72	5180 (25)	7.3	8.0	2.3	41	53.4	46.5
316 Prato	8130 (13)	1.8	1.8	1.0	39	52.8	41.8
337 UC 337	7940 (15)	1.5	3.0	1.3	45	54.1	41.5
400 UC 400	8930 (7)	1.8	3.8	1.0	45	52.0	37.0
408 UC 408	9410 (5)	1.0	2.3	1.0	40	53.3	44.5
466 Sunbar Br 401	8120 (14)	1.0	3.3	1.0	36	51.4	44.3
476 UC 476	8430 (8)	1.3	2.0	1.0	39	53.1	43.0
584 NK BB-82-2	8380 (9)	1.0	2.3	1.0	42	51.9	45.8
603 UC 603	8300 (11)	1.0	1.3	1.8	35	51.9	37.5
607 UC 607	6580 (21)	3.0	4.8	3.3	38	49.0	42.0
618 Gustoe	9460 (4)	1.0	2.5	1.0	34	55.1	43.8
646 UC 646	8150 (12)	1.3	5.3	2.0	44	52.8	44.3
671 UC 671	7640 (17)	2.5	4.0	1.5	45	52.6	43.0
698 Piston	6740 (20)	2.0	3.0	2.0	40	55.7	41.3
699 Menuet	6500 (22)	2.8	4.5	1.8	38	58.4	39.3
700 Lindy	7180 (19)	4.0	5.0	1.5	49	53.6	46.6
701 2-22-1	6430 (23)	3.5	5.8	4.8	46	54.7	47.3
702 2-22-9	5150 (26)	6.5	7.5	4.0	45	51.2	44.0
703 WPB 583-10	8950 (6)	1.0	3.0	1.8	31	54.8	44.5
704 NK XBB-1	9790 (1)	1.0	2.0	1.0	36	50.2	42.1
705 NK XBB-2	9690 (2)	1.0	2.3	1.3	37	51.6	44.8
706 NK XBB-3	9470 (3)	1.0	1.5	1.0	37	52.1	45.8
707 UC 707	8310 (10)	1.0	1.3	1.3	38	50.3	37.3
Mean	7840	2.3	3.6	1.8	40	52.7	43.1
CV	10.2	35.2	29.0	37.5	4.2	1.9	3.1
LSD (.05)	1130	1.1	1.5	1.0	3	2.1	2.7

Rating scale 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, net blotch, scald, and powdery mildew

Numbers in parentheses indicate relative rank in column.

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

Table 3. 1985 Sutter Barley Test

Entry	Yield (lb/a)	Lodging 4/29	Lodging at harvest	BYDV	Scald	Plant height (in)	Test weight (lb/bu)	Thousand kernel weight (grams)
2 Briggs	6010 (16)	4.0	4.8	2.8	1.0	39	51.4	43.3
18 Sutter	5160 (24)	4.0	4.5	1.3	1.0	47	49.3	39.0
190 UC 566	5570 (21)	4.3	5.0	3.3	1.3	41	52.5	46.8
191 CM 72	5430 (22)	5.8	6.3	3.0	1.0	39	52.7	45.8
316 Prato	6320 (14)	2.0	4.5	2.3	1.0	39	51.8	38.8
337 UC 337	6780 (5)	1.3	3.0	1.3	1.0	44	54.6	39.0
400 UC 400	6960 (4)	4.5	4.8	1.3	1.0	45	51.9	34.3
408 UC 408	6340 (13)	1.5	4.0	2.5	1.0	41	51.0	41.0
466 Sunbar Br 401	6400 (12)	1.0	3.8	2.0	1.0	35	51.2	40.3
476 UC 476	6130 (15)	2.5	2.8	1.5	1.0	41	54.0	38.3
584 NK BB-82-2	5850 (17)	1.0	2.0	1.0	1.0	42	48.8	39.0
603 UC 603	6960 (3)	1.0	2.0	1.5	1.0	35	51.9	37.8
607 UC 607	5820 (18)	3.5	5.5	2.3	1.0	37	48.0	39.5
618 Gustoe	7080 (1)	1.0	3.5	1.0	1.8	36	53.1	41.5
646 UC 646	6690 (8)	3.0	6.5	1.8	1.0	39	50.7	40.8
671 UC 671	6480 (10)	2.8	3.8	1.5	1.0	46	52.9	39.0
698 Piston	5760 (20)	3.3	4.8	1.3	1.5	37	56.5	34.8
699 Menuet	5410 (23)	5.0	6.5	1.3	1.0	41	56.0	36.0
700 LIndy	5770 (19)	5.3	5.3	2.0	1.0	47	52.0	41.3
701 2-22-1	3410 (26)	3.8	4.0	3.8	1.0	44	52.7	47.5
702 2-22-9	4070 (25)	5.3	6.0	2.8	1.0	42	51.1	45.0
703 WPB 583-10	6690 (7)	1.8	3.8	1.8	1.0	32	53.8	41.5
704 NK XBB-1	6430 (11)	1.0	2.3	2.0	1.0	37	51.4	36.3
705 NK XBB-2	6970 (2)	1.0	2.8	2.5	1.0	37	51.2	40.8
706 NK XBB-3	6730 (6)	1.0	2.5	1.3	1.0	37	52.8	41.3
707 UC 707	6560 (9)	1.0	3.0	1.3	1.0	36	51.8	35.8
Mean	6070	2.7	4.1	1.9	1.1	40	52.1	40.1
CV	9.9	39.5	24.8	37.1	23.1	5.2	2.1	2.6
LSD (.05)	850	1.5	1.4	1.0	0.3	4	2.3	2.1

Rating scale for diseases (area of flag-1 leaf affected) 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, net blotch, and powdery mildew.

Numbers in parentheses indicate relative rank in column.

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

Table 4. UC Davis Barley Test

Entry	Yield (lb/a)	Lodging 4/22	Lodging at harvest	Leaf rust	Leaf blotch	Scald	Powdery mildew	Days to heading (from 3/1)	Plant height (in)	Test weight (lb/bu)	Thousand kernel weight (grams)
2 Briggs	4220 (16)	5.5	6.3	1.8	1.8	4.0	1.3	34	40	47.2	36.0
18 Sutter	4150 (17)	5.3	6.3	1.0	1.0	1.0	1.0	44	44	47.3	34.0
190 UC 566	4090 (19)	5.0	4.8	1.0	1.0	6.3	1.0	30	42	47.7	34.5
191 CM 72	3530 (25)	7.3	7.8	1.3	1.0	4.0	1.0	30	40	45.2	34.5
316 Prato	4890 (8)	4.0	4.0	1.0	3.3	2.8	1.0	34	38	49.0	32.5
337 UC 337	4640 (12)	2.8	3.3	1.0	1.0	2.5	2.0	34	44	51.3	34.3
400 UC 400	4880 (9)	2.5	3.3	1.0	1.0	2.5	1.0	41	44	49.9	30.8
408 UC 408	5070 (7)	2.8	2.5	1.0	1.8	4.3	1.0	34	44	48.6	34.5
466 Sunbar Br 401	4260 (14)	1.0	5.8	1.0	1.0	4.0	1.0	38	36	49.3	36.0
476 UC 476	5080 (6)	2.5	3.0	1.0	1.0	3.8	1.0	35	36	49.7	32.8
584 NK BB-82-2	4740 (11)	1.0	1.0	1.0	1.3	2.8	1.3	36	43	49.3	37.5
603 UC 603	5310 (3)	1.0	1.0	1.3	1.3	2.0	1.3	31	38	50.7	33.5
607 UC 607	4570 (13)	5.5	6.8	1.5	1.5	2.0	1.3	30	38	46.3	34.3
618 Gustoe	3940 (20)	1.0	3.5	1.0	1.0	4.5	1.5	43	36	48.5	29.8
646 UC 646	3730 (23)	3.8	6.8	1.0	1.0	4.8	1.0	34	40	46.5	33.3
671 UC 671	4880 (10)	3.5	4.3	1.0	1.0	2.8	1.5	35	44	50.8	34.0
698 Piston	4230 (15)	2.8	4.0	1.0	1.0	4.5	1.0	37	39	53.3	31.8
699 Menuet	3530 (24)	3.5	4.5	1.0	1.0	4.3	1.3	36	38	55.3	34.0
700 Lindy	4110 (18)	4.3	4.3	1.0	1.0	1.3	1.0	47	49	48.8	35.5
701 2-22-1	3940 (21)	7.0	7.5	2.5	1.5	2.8	1.3	23	44	48.2	38.3
702 2-22-9	3420 (26)	7.0	7.8	1.8	1.3	4.3	1.3	23	42	44.3	32.3
703 WPB 583-10	3830 (22)	1.0	6.5	1.8	2.0	3.0	2.5	34	35	48.6	32.0
704 NK XBB-1	5130 (4)	1.3	4.8	1.3	1.0	1.8	1.5	40	38	48.2	34.5
705 NK XBB-2	5500 (2)	1.0	3.5	1.0	1.3	1.5	1.3	34	39	50.4	36.3
706 NK XBB-3	5790 (1)	1.0	2.5	1.5	1.0	2.0	1.0	36	39	51.4	36.5
707 UC 707	5110 (5)	1.0	1.8	1.0	1.5	1.8	1.3	34	37	49.9	32.0
Mean	4480	3.2	4.5	1.2	1.3	3.1	1.2	35	40	49.1	34.0
CV	12.6	26.9	22.1	24.9	37.7	22.4	42.0		5.2	1.7	4.9
LSD (.05)	790	1.2	1.4	0.4	0.7	1.0	0.7		4	1.8	3.4

Rating scale 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.

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

Table 5. 1985 Merced Barley Test

Entry	Yield (lb/a)	Days to heading (from 3/1)	Plant height (in)	Lodging (4/30)	Lodging at harvest	BYDV	Leaf rust	Net blotch	Test weight (lb/bu)	Thousand kernel weight (grams)
2 Briggs	5240 (11)	35	41	5.0	4.3	2.5	1.5	1.5	48.7	44.0
18 Sutter	3490 (25)	41	42	6.5	5.8	1.3	1.0	1.3	48.0	40.0
190 UC 566	5350 (7)	35	42	3.8	4.5	1.3	1.3	2.0	49.4	44.0
191 CM 72	4460 (21)	35	36	7.3	7.8	1.8	1.0	1.8	47.9	40.0
316 Prato	5280 (10)	36	38	2.3	1.5	1.5	1.3	1.8	50.9	41.0
337 UC 337	5910 (3)	37	38	1.5	1.0	1.0	1.0	1.3	51.7	41.5
400 UC 400	5300 (9)	41	38	2.5	1.8	1.0	1.0	1.3	49.3	34.0
408 UC 408	5880 (4)	36	36	1.5	1.5	1.0	1.3	2.0	51.7	41.8
466 Sunbar BR 401	5080 (15)	36	32	1.3	2.8	1.0	1.0	1.0	49.6	39.0
476 UC 476	5150 (13)	37	38	2.3	1.8	1.5	1.0	1.5	51.8	42.8
584 NK BB-82-2	5300 (8)	37	37	1.0	1.0	1.0	1.3	1.3	50.1	43.8
603 UC 603	5230 (12)	36	36	1.0	1.0	1.8	1.0	1.0	49.8	36.0
607 UC 607	4480 (20)	33	35	2.5	3.8	2.3	1.0	1.3	47.0	40.3
618 Gustoe	5450 (6)	39	32	1.0	1.0	1.0	2.0	1.3	51.6	38.8
646 UC 646	6010 (2)	36	34	2.5	4.3	1.3	1.3	1.5	51.1	39.5
671 UC 671	6040 (1)	36	40	2.0	2.0	1.0	1.0	1.3	53.4	39.3
698 Plston	5280 (10)	38	37	1.5	1.3	1.5	1.0	1.0	54.4	37.0
699 Menuet	4570 (19)	38	39	2.0	1.5	1.8	1.0	1.0	54.9	39.0
700 Lindy	4420 (22)	41	40	4.8	3.8	1.5	1.0	1.0	51.8	41.8
701 2-22-1	4250 (23)	26	38	4.5	5.3	2.8	1.5	1.3	49.5	44.3
702 2-22-9	4010 (24)	27	37	5.3	7.0	2.5	1.5	1.3	48.3	40.8
703 WPB 583-10	4700 (18)	26	35	1.5	1.8	1.0	1.5	1.5	52.5	41.0
704 NK XBB-1	4760 (17)	36	32	1.0	1.0	1.0	1.3	1.0	47.9	41.0
705 NK XBB-2	5560 (5)	36	34	1.0	1.0	1.0	1.3	1.0	50.1	40.0
706 NK XBB-3	5120 (14)	36	37	1.0	1.0	1.3	1.3	1.0	50.8	44.0
707 UC 707	4900 (16)	36	35	1.3	1.0	1.5	1.0	1.0	48.6	36.3
Mean	5050	35	37	2.6	2.7	1.5	1.2	1.3	50.4	40.4
CV	9.9	3.2	10.5	44.7	43.0	30.9	32.1	31.8	2.3	4.1
LSD (.05)	710	2	5	1.6	1.6	0.6	0.5	0.6	2.4	3.4

Rating scale for diseases (area of flag-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: scald and powdery mildew.

Numbers in parentheses indicate relative rank in column.

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

Table 6. 1985 UC West Side Field Station Barley Test

Entry	Yield (lb/a)	Lodging at harvest	BYDV	Powdery mildew	Plant height (in)	Test weight (lb/bu)	Thousand kernel weight (grams)
2 Briggs	5940 (21)	3.0	3.0	1.0	30	51.0	44.8
18 Sutter	6330 (20)	3.8	1.0	1.0	36	52.6	44.0
190 UC 566	7190 (14)	2.3	1.0	1.0	27	54.5	49.3
191 CM 72	6490 (19)	2.5	1.5	1.0	30	54.6	47.8
316 Prato	7300 (11)	1.8	1.0	1.0	26	54.6	45.3
337 UC 337	8100 (2)	2.3	1.0	1.5	30	56.0	43.8
400 UC 400	7930 (3)	2.5	1.0	1.0	32	54.4	38.5
408 UC 408	7880 (4)	1.8	1.0	1.0	27	55.3	49.5
466 Sunbar BR 401	7580 (9)	2.8	1.0	1.5	26	53.5	47.5
476 UC 476	8120 (1)	1.5	1.0	1.0	27	55.0	47.5
584 NK BB-82-2	7210 (13)	1.3	1.5	1.8	27	52.9	46.0
603 UC 603	6660 (18)	1.0	1.0	1.0	26	54.9	38.5
607 UC 607	6950 (15)	1.5	1.0	1.0	24	51.8	44.3
618 Gustoe	7790 (5)	2.3	1.0	2.8	25	55.9	42.3
646 UC 646	7770 (6)	1.8	1.0	1.0	24	54.8	46.8
671 UC 671	7760 (7)	2.3	1.0	1.0	27	55.2	41.3
698 Piston	5900 (22)	1.5	3.8	1.0	32	57.0	38.0
699 Menuet	5210 (26)	1.3	3.5	1.0	31	55.7	40.5
700 Lindy	5650 (24)	2.8	3.0	1.0	36	53.3	46.5
701 2-22-1	5240 (25)	3.0	3.0	1.0	35	54.6	49.8
702 2-22-9	5720 (23)	3.0	1.8	1.0	30	53.5	43.0
703 WPB 583-10	6740 (17)	1.5	1.0	1.0	25	56.6	46.8
704 NK XBB-1	7610 (8)	1.8	1.3	2.0	30	54.0	43.5
705 NK XBB-2	7260 (12)	1.8	1.3	1.0	28	54.7	45.3
706 NK XBB-3	7480 (10)	1.5	1.0	1.0	28	54.5	47.5
707 UC 707	6890 (16)	1.0	1.0	1.0	26	54.2	39.8
Mean	6950	2.0	1.5	1.2	29	54.4	44.5
CV	7.1	36.	25.9	22.3	5.7	1.5	2.5
LSD (.05)	690	1.0	0.6	0.4	3	1.7	2.3

Rating scale 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, net blotch and scald.

Numbers in parentheses indicate relative rank in column.

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

Table 7. 1985 Kings Barley Test

Entry	Yield (lb/a)	Lodging 5/2	Lodging at harvest	Plant height (in)	Test weight (lb/bu)	Thousand kernel weight (grams)
2 Briggs	5320 (20)	4.8	4.8	43	52.5	41.3
18 Sutter	4220 (23)	6.5	6.5	41	49.7	35.0
190 UC 566	5400 (18)	5.8	5.8	38	52.3	41.5
191 CM 72	3670 (26)	7.3	7.3	36	54.1	41.8
316 Prato	5400 (17)	5.0	5.0	40	54.5	38.0
337 UC 337	6330 (5)	2.3	2.3	39	56.0	37.5
400 UC 400	6720 (3)	3.0	3.0	41	54.0	34.5
408 UC 408	7110 (1)	3.5	3.5	40	56.4	40.5
466 Sunbar BR 401	5530 (15)	1.3	1.3	36	53.3	42.3
476 UC 476	5550 (14)	2.3	2.3	39	56.4	40.0
584 NK BB-82-2	5820 (11)	1.0	1.0	42	54.1	44.8
603 UC 603	6220 (7)	1.0	1.0	34	54.7	34.0
607 UC 607	6190 (8)	3.5	3.5	37	52.0	40.3
618 Gustoe	5750 (12)	1.0	1.0	33	55.5	42.0
646 UC 646	7040 (2)	2.8	2.8	35	54.6	41.8
671 UC 671	5980 (9)	2.0	2.0	40	53.7	36.3
698 Piston	4430 (21)	2.8	2.8	40	56.3	35.8
699 Menuet	4170 (24)	2.3	2.3	42	57.7	38.5
700 Lindy	4410 (22)	3.5	3.5	44	52.7	41.8
701 2-22-1	4130 (25)	6.0	6.0	40	53.8	40.8
702 2-22-9	5360 (19)	5.5	5.5	42	51.6	44.8
703 WPB 583-10	5620 (13)	1.0	1.0	30	56.6	39.8
704 NK XBB-1	5890 (10)	1.0	1.0	38	54.5	36.3
705 NK XBB-2	6230 (6)	1.0	1.0	36	54.7	37.3
706 NK XBB-3	5490 (16)	1.0	1.0	36	53.2	41.0
707 UC 707	6560 (4)	1.0	1.0	35	54.0	34.3
Mean	5560	3.0	3.0	38	54.2	39.3
CV	14.6	30.2	30.2	4.7	2.4	3.1
LSD (.05)	1140	1.3	1.3	4	2.6	2.5

Rating scale for 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, leaf rust,
net blotch, scald and powdery mildew.

Numbers in parentheses indicate relative rank in column.

Table 8. 1985 Kern Barley Test

Entry	Yield (lb/a)	Lodging 4/26	Lodging at harvest	BYDV	Powdery mildew	Test weight (lb/bu)	Thousand kernel weight (grams)
2 Briggs	5980 (14)	6.0	7.8	1.8	1.0	50.2	44.3
18 Sutter	5620 (19)	4.3	7.3	1.0	1.0	50.1	41.0
190 UC 566	5920 (15)	7.3	8.0	1.0	1.0	51.4	49.5
191 CM 72	5450 (22)	6.5	7.8	1.5	1.0	51.2	46.8
316 Prato	6160 (12)	6.0	7.8	1.3	1.0	52.5	42.3
337 UC 337	6140 (13)	4.8	7.5	1.0	1.8	52.7	42.5
400 UC 400	6360 (8)	4.5	7.5	2.0	1.0	51.2	35.8
408 UC 408	6240 (11)	5.3	6.8	1.0	1.0	50.7	42.3
466 Sunbar BR-401	5280 (25)	5.5	7.5	1.0	1.3	49.3	44.3
476 UC 476	6470 (7)	5.0	6.8	1.3	1.0	52.1	44.0
584 NK BB-82-2	6320 (9)	4.5	7.0	1.3	1.0	51.7	44.3
603 UC 603	6900 (2)	5.3	6.3	1.8	1.0	51.8	38.3
607 UC 607	5660 (18)	6.0	7.8	2.0	1.0	48.1	39.5
618 Gustoe	5340 (24)	3.0	7.8	1.0	2.0	52.7	39.8
646 UC 646	7670 (1)	7.0	8.0	1.0	1.0	49.1	43.5
671 UC 671	6550 (4)	5.3	7.5	1.0	1.3	51.6	37.5
698 Pliston	5770 (17)	3.0	6.5	1.0	1.0	52.4	37.3
699 Menuet	5540 (21)	3.5	8.0	1.3	1.0	53.0	38.3
700 Lindy	6480 (6)	3.8	6.8	1.0	1.0	51.5	46.0
701 2-22-1	5410 (23)	8.0	8.0	4.8	1.0	50.1	40.3
702 2-22-9	5250 (26)	7.5	8.0	3.5	1.0	51.0	46.5
703 WPB 583-10	5600 (20)	7.0	8.0	1.0	1.3	54.0	42.0
704 NK XBB-1	5880 (16)	4.3	7.8	1.0	1.0	49.6	40.0
705 NK XBB-2	6250 (10)	4.8	7.5	1.3	1.0	50.3	40.5
706 NK XBB-3	6730 (3)	4.8	7.5	1.5	1.0	52.3	44.0
707 UC 707	6510 (5)	5.3	7.8	1.5	1.3	49.8	37.5
Mean	6060	5.3	7.5	1.5	1.1	51.2	41.8
CV	17.0	18.5	7.3	42.3	20.1	2.6	5.0
LSD (.05)	NS	1.4	0.8	0.9	0.3	2.8	4.4

Rating scale 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, scald, and net blotch.

Numbers in parentheses indicate relative rank in column.

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

Table 9. Yolo Dryland Barley Test

Entry	Yield (lb/a)	Plant height (in)	Test weight (lb/bu)	Thousand kernel weight (grams)
2 Briggs	2160 (15)	26	50.3	39.0
18 Sutter	2120 (19)	28	50.3	36.5
190 UC 566	2380 (6)	27	51.7	40.0
191 CM 72	2370 (7)	26	51.0	42.3
316 Prato	1960 (24)	25	51.4	38.5
337 UC 337	2540 (3)	30	51.4	37.5
400 UC 400	2320 (12)	30	51.3	32.5
408 UC 408	2380 (5)	28	51.5	40.8
466 Sunbar Br 401	2350 (10)	21	50.2	39.3
476 UC 476	2360 (9)	25	51.6	38.0
584 NK BB-82-2	2110 (20)	24	49.6	40.3
603 UC 603	2370 (8)	25	52.0	37.0
607 UC 607	2280 (13)	23	48.9	39.3
618 Gustoe	1950 (25)	23	54.8	35.8
646 UC 646	2570 (2)	26	50.5	40.3
671 UC 671	2220 (14)	24	49.3	36.5
698 Piston	2150 (17)	23	53.1	36.3
699 Menuet	2320 (11)	25	55.1	37.0
700 Lindy	2020 (22)	31	49.6	40.8
701 2-22-1	2150 (18)	30	50.7	42.8
702 2-22-9	2630 (1)	32	50.1	40.5
703 WPB 583-10	2030 (21)	22	50.4	38.0
704 NK XBB-1	2160 (16)	22	51.0	38.5
705 NK XBB-2	2010 (23)	22	50.0	37.8
706 NK XBB-3	1770 (26)	23	50.9	39.8
707 UC 707	2490 (4)	28	51.2	38.3
Mean	2240	26	51.1	38.6
CV	11.7	10.9	2.3	4.7
LSD (.05)	370	6	2.4	3.7

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

Numbers in parentheses indicate relative rank in column.

Table 10. 1985 San Luis Obispo Dryland Barley Test

Entry	Yield (lb/a)	Plant height (in)	Scald
2 Briggs	1710 (21)	31	1.0
18 Sutter	1860 (17)	31	1.0
190 UC 566	2150 (7)	29	2.8
191 CM 72	2600 (1)	29	1.8
316 Prato	1380 (24)	29	1.3
337 UC 337	1860 (18)	24	1.0
400 UC 400	1860 (15)	27	1.8
408 UC 408	2140 (8)	28	1.3
466 Sunbar Br 401	1980 (12)	22	1.3
476 UC 476	1730 (20)	27	1.0
584 NK BB-82-2	1590 (22)	28	1.3
603 UC 603	1740 (19)	28	1.0
607 UC 607	2020 (10)	26	1.3
618 Gustoe	1340 (26)	20	1.8
646 UC 646	2190 (4)	24	1.5
671 UC 671	2190 (5)	26	1.0
698 Plston	2280 (2)	27	1.5
699 Menuet	2150 (6)	26	1.0
700 Lindy	1370 (25)	29	1.3
701 2-22-1	1390 (23)	32	1.0
702 2-22-9	1860 (16)	34	1.3
703 WPB 583-10	1900 (14)	23	1.5
704 NK XBB-1	2000 (11)	25	1.0
705 NK XBB-2	2250 (3)	26	1.0
706 NK XBB-3	2120 (9)	25	1.8
707 UC 707	1930 (13)	28	1.0
Mean	1910	27	1.3
CV	16.8	8.0	37.2
LSD (.05)	450	3	0.7

Rating scale 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, and powdery mildew.

Numbers in parentheses indicate relative rank in column.

Table 11. 1985 Tulare Dryland Barley Test

Entry	Yield (lb/a)	Plant height (in)	Test weight (lb/bu)	Thousand kernel weight (grams)
2 Briggs	1660 (10)	20	44.0	31.0
18 Sutter	1100 (24)	22	45.8	28.0
190 UC 566	2060 (3)	21	46.4	34.5
191 CM 72	2210 (2)	24	45.9	31.8
316 Prato	1930 (6)	19	46.2	27.0
337 UC 337	1420 (16)	19	44.4	27.3
400 UC 400	1320 (19)	19	45.0	25.3
408 UC 408	1450 (14)	19	45.0	29.5
466 Sunbar Br. 401	1150 (22)	18	45.7	32.0
476 UC 476	1150 (23)	20	46.5	30.5
584 NK BB-82-2	1560 (12)	18	43.8	30.3
603 UC 603	1570 (11)	20	45.8	27.0
607 UC 607	1890 (7)	20	43.7	29.8
618 Gustoe	1040 (26)	19	47.8	27.0
646 UC 646	1540 (13)	18	43.8	31.0
671 UC 671	1320 (17)	19	44.6	26.5
698 Piston	1930 (5)	21	52.5	31.3
699 Menuet	1980 (4)	19	52.6	31.0
700 Lindy	1430 (15)	22	48.8	36.0
701 2-22-1	1810 (8)	21	45.8	33.8
702 2-22-9	2510 (1)	19	48.2	32.5
703 WPB 583-10	1320 (18)	17	46.1	28.3
704 NK XBB-1	1090 (25)	19	44.7	29.8
705 NK XBB-2	1810 (9)	19	46.5	29.0
706 NK XBB-3	1300 (20)	18	47.4	31.0
707 UC 707	1160 (21)	19	46.2	28.5
Mean	1570	19	46.3	30.0
CV	18.2	11.2	3.0	3.5
LSD (.05)	590	NS	2.9	2.2

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

Numbers in parentheses indicate relative rank in column.

Table 12. 1985 and 1983-1985 Barley Yield Summary (lb/a)

	Sacramento Valley		San Joaquin Valley		Dryland	
	1985	1983-85	1985	1983-85	1985	1983-85
	3 Locations		4 Locations		3 Locations	
2 Briggs	5890 (17)	4300	5620 (19)	4390	1840 (14)	1680
18 Sutter	5060 (23)	4340	4920 (24)	4220	1690 (24)	1830
190 UC 566	5770 (18)	3890	5970 (15)	4640	2200 (3)	1540
191 CM 72	4710 (24)	3460	5020 (23)	4050	2390 (1)	1750
316 Prato	6440 (12)	4670	6030 (13)	4970	1760 (18)	1770
337 UC 337	6450 (11)	4950	6620 (3)	5370	1940 (10)	1800
400 UC 400	6920 (5)	5330	6580 (5)	5430	1830 (15)	1880
408 UC 408	6940 (4)	5030	6780 (2)	5520	1990 (9)	1880
466 Sunbar Br 401	6260 (15)	4400	5870 (16)	4910	1830 (16)	1580
476 UC 476	6550 (9)	4880	6320 (7)	5100	1750 (19)	1610
584 NK BB-82-2	6330 (14)	4570	6160 (11)	5040	1750 (20)	1680
603 UC 603	6860 (6)	-	6250 (8)	-	1890 (12)	-
607 UC 607	5650 (20)	-	5820 (17)	-	2060 (7)	-
618 Gustoe	6830 (7)	4810	6080 (12)	4830	1440 (26)	1460
646 UC 646	6190 (16)	-	7120 (1)	-	2100 (6)	-
671 UC 671	6330 (13)	-	6580 (4)	-	1910 (11)	-
698 Pliston	5570 (21)	-	5340 (20)	-	2120 (5)	-
699 Menuet	5150 (22)	-	4870 (25)	-	2150 (4)	-
700 Lindy	5690 (19)	-	5240 (21)	-	1610 (25)	-
701 2-22-1	4590 (25)	-	4760 (26)	-	1780 (17)	-
702 2-22-9	4210 (26)	-	5080 (22)	-	2330 (2)	-
703 WPB 583-10	6490 (10)	-	5670 (18)	-	1750 (21)	-
704 NK XBB-1	7120 (3)	-	6030 (14)	-	1750 (22)	-
705 NK XBB-2	7390 (1)	-	6330 (6)	-	2020 (8)	-
706 NK XBB-3	7330 (2)	-	6200 (10)	-	1730 (23)	-
707 UC 707	6660 (8)	-	6210 (9)	-	1860 (13)	-
Mean	6130	4550	5900	4870	1900	1700
CV	10.8	-	12.3	-	14.0	-
LSD (.05)	533.3	-	506.5	-	285.8	-

Numbers in parentheses indicate relative rank in column.

Table 13. 1985 Butte Common Wheat Test

Entry	Yield (lb/a)	Plant height (in)	Test weight (lb/bu)	Yellow- berry	Thousand kernel weight (grams)
20 Anza	10180 (7)	37	63.2	8.0	40.0
112 Yecora Rojo	9360 (28)	32	64.4	2.5	51.8
221 Phoenix	9820 (16)	38	63.2	8.0	41.3
243 Probred	9540 (21)	34	64.0	2.5	52.8
353 Yolo	11020 (2)	38	63.6	8.0	40.0
415 Klasic	10180 (6)	33	65.6	3.0	52.5
521 Westbred 911	9850 (15)	34	63.0	6.0	48.8
536 NK 2437	9380 (27)	33	64.2	3.0	51.3
538 Probrand 775	10120 (8)	31	62.4	8.0	43.8
544 TadInla	10040 (10)	40	62.0	8.0	42.5
619 IPRI 8314	8950 (31)	38	63.1	5.5	48.8
620 IPRI 8322	9410 (26)	39	63.3	3.5	44.3
623 9031	9330 (29)	36	63.8	1.0	36.0
624 WRE 80-34	9920 (12)	42	63.0	4.0	42.3
627 UC 627	9720 (18)	38	65.6	3.5	45.8
628 UC 628	9800 (17)	37	64.7	4.0	43.8
629 UC 629	9410 (25)	37	64.1	7.0	41.5
630 UC 630	9660 (19)	39	64.5	7.0	39.8
631 CM 43367	8590 (35)	44	64.4	1.5	45.3
632 LRR Anza	9860 (13)	36	63.4	8.0	40.5
633 UC 633	11000 (3)	35	63.4	8.0	41.8
634 UC 634	9930 (11)	37	65.0	6.0	43.3
635 UC 635	9440 (24)	36	63.9	4.5	41.8
636 UC 636	9170 (30)	38	63.6	5.0	40.3
637 UC 637	9650 (20)	41	64.5	6.5	42.3
638 CM 16076	10070 (9)	40	63.5	8.0	45.8
671 IPRI 83501	10640 (4)	41	63.2	1.5	42.8
672 P982-38	9860 (14)	34	63.1	6.5	48.3
673 P982-83	9490 (22)	33	63.8	6.0	49.3
678 MP-302	8830 (33)	30	63.6	5.0	41.0
679 MP-325	8610 (34)	46	63.7	4.0	50.0
680 Calgene 1551	9480 (23)	33	62.5	2.0	49.5
681 UC 681	8560 (36)	40	63.0	6.0	42.8
682 UC 682	8940 (32)	40	62.9	7.0	43.5
683 UC 683	11030 (1)	37	63.2	7.5	45.8
684 Veery 'S'	10260 (5)	38	63.4	3.0	41.8
Mean	9700	37	63.6	5.2	44.5
CV	4.1	3.3	0.5	17.0	2.1
LSD (.05)	560	3	0.6	1.8	1.9

Rating scale 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 blotch, powdery mildew, and black point.

Numbers in parentheses indicate relative rank in column.

Table 14. 1985 Sutter Common Wheat Test

Entry	Yield (lb/a)	Lodging at harvest 5/2	BYDV Septoria	Plant height (in)	Test weight (lb/bu)	Yellow weight (grams)	LSD (.05)	
							CV	Mean
20 Anza	7100 (5)	1.0	1.0	2.3	38	62.6	8.0	38.3
112 Yecora Rojo	5510 (33)	1.0	1.0	6.0	33	64.9	2.0	51.8
221 Phoenix	7460 (3)	1.0	1.0	1.8	39	62.5	8.0	38.8
243 Probred	5440 (34)	1.0	1.0	4.0	35	64.4	1.5	52.8
353 Yolo	7610 (1)	1.0	1.0	1.3	38	63.5	8.0	38.5
415 Klasic	6530 (14)	1.0	1.0	1.3	34	65.5	2.0	54.0
521 Westbred 911	6750 (10)	1.0	1.0	4.5	38	62.3	8.0	45.3
536 NK 2437	6270 (20)	1.0	1.0	5.3	35	64.8	1.5	52.0
538 Probrand 775	6230 (22)	1.0	1.0	5.8	32	63.1	7.0	44.3
544 Tadinla	6820 (8)	1.0	1.0	1.0	41	62.2	8.0	41.5
619 IPRI 8314	6070 (26)	1.0	1.3	2.0	42	63.5	4.5	48.0
620 IPRI 8322	6120 (25)	1.0	1.8	3.8	38	64.2	3.5	44.5
623 9031	5910 (29)	1.0	1.3	2.8	38	64.5	2.5	35.0
624 WRE 80-34	5880 (30)	1.0	1.0	4.5	41	63.6	3.5	40.5
627 UC 627	6030 (27)	1.5	1.8	2.3	37	65.1	2.5	41.0
628 UC 628	6170 (24)	1.0	1.0	1.5	38	64.7	3.5	40.8
629 UC 629	6720 (12)	1.0	1.0	1.8	39	63.5	8.0	38.5
630 UC 630	6440 (17)	1.0	1.0	2.8	38	64.0	7.5	37.3
631 CM 43367	5580 (32)	1.5	1.8	2.3	44	64.3	1.5	41.0
632 LRR Anza	6410 (18)	1.0	1.0	1.3	38	63.0	8.0	38.0
633 UC 633	7440 (4)	1.0	1.0	2.5	38	62.6	8.0	38.5
634 UC 634	6360 (19)	1.0	1.0	3.0	35	65.2	7.0	41.8
635 UC 635	6780 (9)	1.0	1.0	4.8	37	64.3	5.5	38.8
636 UC 636	6250 (21)	1.0	1.3	3.5	38	64.0	4.5	38.3
637 UC 637	6210 (23)	1.0	1.0	2.3	39	64.3	7.0	41.0
638 CM 16076	6930 (6)	2.0	1.8	2.3	43	63.0	8.0	46.3
671 IPRI 83501	6530 (15)	1.0	1.0	2.0	40	63.2	3.5	40.3
672 P982-38	6730 (11)	1.0	1.0	4.3	35	62.0	8.0	45.5
673 P982-83	6640 (13)	1.0	1.0	4.0	36	62.1	8.0	43.5
678 MP-302	4020 (36)	1.0	1.0	5.0	29	64.5	1.5	40.3
679 MP-325	5210 (35)	2.8	3.0	2.0	42	63.2	7.0	49.8
680 Calgene 1551	6910 (7)	1.0	1.0	2.5	34	62.9	3.5	49.3
681 UC 681	5930 (28)	1.0	1.0	1.0	40	62.7	8.0	40.3
682 UC 682	5590 (31)	1.0	1.0	1.3	42	62.7	8.0	40.5
683 UC 683	7600 (2)	1.0	1.0	1.3	41	62.8	8.0	43.8
684 Veery 'S'	6440 (16)	1.0	1.0	2.0	40	63.3	5.0	39.8
Mean	6350	1.1	1.1	1.4	38	63.6	5.5	42.7
CV	6.6	25.8	21.1	33.5	3.7	0.4	19.7	1.8
LSD (.05)	590	0.4	0.3	0.7	1.1	0.5	2.2	1.5

Rating scale for diseases (area of flag-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, and black point.

Numbers in parentheses indicate relative rank in column.

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

Table 15. 1985 UC Davis Common Wheat Test

Entry	Yield (lb/a)	BYDV	Stripe Rust	Plant height (in)	Days to heading (after 3/1)	Test weight (lb/bu)	Yellow- berry	Thousand kernel weight (grams)
20 Anza	5690 (26)	2.0	1.3	34	58	62.0	3.5	36.3
112 Yecora Rojo	6630 (10)	2.8	3.0	33	53	61.9	1.0	45.3
221 Phoenix	5940 (21)	2.3	1.8	34	59	61.8	2.0	37.0
243 Probred	6900 (7)	3.0	2.3	31	55	61.6	1.0	47.5
353 Yolo	6880 (8)	2.3	1.5	37	57	62.2	1.5	35.8
415 Klasic	7390 (1)	2.0	1.5	31	54	63.6	1.0	47.0
521 Westbred 911	6170 (17)	1.5	2.0	30	60	61.0	1.0	44.8
536 NK 2437	6270 (15)	3.3	3.3	31	56	61.3	1.0	45.3
538 Probrand 775	5720 (25)	2.0	4.3	30	55	58.9	1.0	35.8
544 Tadinla	5070 (35)	3.0	1.0	39	60	60.3	4.5	37.5
619 IPRI 8314	5260 (32)	3.0	1.0	40	57	60.3	1.0	45.3
620 IPRI 8322	5940 (20)	2.0	1.0	36	56	61.1	1.0	42.3
623 9031	5730 (24)	1.0	1.0	36	56	62.0	1.0	38.0
624 WRE 80-34	5490 (30)	2.8	1.0	37	61	60.1	1.0	39.0
627 UC 627	6490 (11)	2.5	3.0	37	61	64.2	1.0	45.0
628 UC 628	6350 (12)	2.3	1.3	35	56	62.5	1.0	40.0
629 UC 629	5890 (22)	1.8	1.0	34	61	62.6	1.0	37.3
630 UC 630	5260 (31)	2.5	2.0	36	61	63.3	2.0	37.5
631 CM 43367	6340 (13)	3.8	1.0	41	58	62.4	1.0	43.3
632 LRR Anza	5780 (23)	2.0	1.3	34	60	61.9	2.5	36.5
633 UC 633	7270 (3)	2.0	1.8	37	58	62.6	2.0	37.3
634 UC 634	6760 (9)	2.3	2.8	37	57	63.5	1.0	39.3
635 UC 635	6220 (16)	2.8	2.5	37	55	62.6	1.0	36.3
636 UC 636	6140 (18)	2.5	2.5	38	59	62.5	1.0	38.0
637 UC 637	7370 (2)	1.8	1.3	36	56	63.5	1.0	39.8
638 CM 16076	7040 (6)	1.5	1.0	39	60	62.0	1.0	41.5
671 IPRI 83501	7130 (4)	2.0	1.3	38	55	62.0	1.0	42.3
672 P982-38	6280 (14)	1.5	2.3	30	61	60.3	1.0	44.5
673 P982-83	6050 (19)	2.0	3.3	35	62	60.8	1.0	43.3
678 MP-302	5580 (28)	2.8	1.0	29	53	61.2	1.0	34.8
679 MP-325	5230 (33)	4.0	2.5	42	58	61.4	1.0	47.0
680 Calgene 1551	5620 (27)	2.8	1.0	31	56	58.7	1.0	44.8
681 UC 681	4920 (36)	4.3	1.0	39	59	61.0	1.0	38.5
682 UC 682	5130 (34)	4.5	1.0	39	56	61.7	1.0	40.5
683 UC 683	5530 (29)	2.8	1.0	36	60	60.7	1.0	39.5
684 Veery 'S'	7110 (5)	2.0	1.3	38	56	61.9	1.0	42.8
Mean	6130	2.5	1.7	35	58	61.7	1.3	40.7
CV	5.3	20.8	27.0	3.7	-	0.5	17.3	2.7
LSD (.05)	450	0.7	0.7	3	-	0.6	0.5	2.2

Rating scale 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, septoria, powdery mildew, and black point.

Numbers in parentheses indicate relative rank in column.

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

Table 16. 1985 Sacramento - San Joaquin Delta Common Wheat Test

Entry	Yield (lb/a)	BYDV	Powdery mildew	Plant height (in)	Test weight (lb/bu)	Yellow- berry	Thousand kernel weight (grams)
20 Anza	7670 (19)	1.3	1.3	32	63.8	2.5	40.0
112 Yecora Rojo	7640 (20)	2.0	1.8	25	63.7	1.0	46.8
221 Phoenix	8030 (16)	1.5	1.0	32	63.9	3.0	41.5
243 Probred	8480 (5)	2.0	1.3	24	63.3	1.0	48.3
353 Yolo	8910 (2)	1.0	1.0	32	64.0	5.0	38.8
415 Klasic	7750 (18)	2.5	1.0	25	64.6	1.0	49.8
521 Westbred 911	8640 (4)	1.0	1.0	28	63.7	3.0	51.3
536 NK 2437	8320 (7)	2.3	1.3	25	63.1	1.0	49.3
538 Probrand 775	8330 (6)	1.8	2.3	26	61.6	2.0	41.0
544 Tadinia	7050 (29)	1.3	1.0	32	63.4	4.5	40.8
619 IPRI 8314	6960 (30)	1.8	1.0	35	62.7	1.0	46.0
620 IPRI 8322	7070 (28)	1.5	1.0	32	62.7	1.0	42.0
623 9031	8150 (9)	1.3	1.0	32	63.9	1.0	37.8
624 WRE 80-34	6690 (33)	2.0	1.0	31	61.8	1.0	39.8
627 UC 627	7390 (25)	1.3	1.0	34	64.2	1.0	47.0
628 UC 628	6640 (34)	2.0	1.0	31	63.2	1.0	43.8
629 UC 629	7540 (22)	1.5	1.0	32	64.2	4.0	42.0
630 UC 630	7440 (24)	1.0	1.0	33	65.1	4.0	40.8
631 CM 43367	6820 (32)	2.5	1.0	34	63.7	1.0	44.8
632 LRR Anza	8220 (8)	1.3	1.0	31	63.6	5.5	41.0
633 UC 633	8960 (1)	1.0	1.0	32	63.8	4.5	39.5
634 UC 634	8110 (11)	1.3	1.3	30	64.7	1.0	41.5
635 UC 635	7550 (21)	1.8	2.5	33	63.7	1.0	38.8
636 UC 636	6950 (31)	2.0	2.5	31	63.3	1.0	38.3
637 UC 637	8050 (14)	1.0	1.3	33	63.8	1.0	42.0
638 CM 16076	8730 (3)	1.0	1.3	32	63.8	5.0	44.3
671 IPRI 83501	7830 (17)	2.0	1.0	32	62.4	1.0	42.5
672 P982-38	8120 (10)	1.3	1.0	29	63.0	2.0	50.8
673 P982-83	8110 (12)	1.5	1.0	29	63.5	2.0	48.8
678 MP-302	6230 (35)	2.5	1.0	26	62.8	1.0	36.5
679 MP-325	6220 (36)	3.3	1.0	34	62.7	2.0	49.8
680 Calgene 1551	7450 (23)	1.8	1.0	28	61.5	1.0	49.0
681 UC 681	7220 (26)	2.3	1.0	34	63.6	2.0	41.3
682 UC 682	7130 (27)	1.5	1.0	34	63.7	3.5	42.5
683 UC 683	8040 (15)	2.0	1.0	32	62.8	2.5	42.5
684 Veery 'S'	8100 (13)	1.8	1.0	34	63.1	1.5	42.0
Mean	7680	1.7	1.2	30	63.4	2.1	43.4
CV	6.6	35.0	25.8	3.7	0.5	48.0	3.0
LSD (.05)	710	0.8	0.4	2	0.6	2.1	2.6

Rating scale 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, and black point.

Numbers in parentheses indicate relative rank in column.

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

Table 17. 1985 Madera Common Wheat Test

Entry	Yield (lb/a)	Lodging 5/22	Lodging at harvest	BYDV	Plant height (in)	Test weight (lb/bu)	Black point	Yellow berry	Thousand kernel weight (grams)
20 Anza	7260 (5)	2.3	3.8	1.0	37	63.9	2.0	2.0	40.5
112 Yecora Rojo	5980 (30)	2.8	4.0	4.8	32	64.2	2.0	1.0	50.3
221 Phoenix	7220 (7)	2.0	3.0	1.0	35	63.2	1.5	7.0	41.5
243 Probred	5120 (36)	2.0	2.8	5.0	31	63.3	1.5	1.0	51.8
353 Yolo	7600 (3)	1.3	2.5	1.3	37	63.8	1.0	3.0	38.5
415 Klasic	5610 (33)	1.0	1.8	5.0	32	65.1	2.0	1.0	53.0
521 Westbred 911	7250 (6)	1.8	2.3	1.3	34	64.2	1.0	1.0	52.0
536 NK 2437	6220 (25)	1.0	1.5	5.0	30	64.3	1.5	1.0	50.8
538 Probrand 775	6810 (15)	1.0	1.3	3.0	32	62.4	1.5	2.0	42.0
544 Tadinla	6230 (24)	2.0	2.8	1.3	37	63.7	1.0	2.5	43.3
619 IPRI 8314	6200 (26)	2.0	3.5	2.0	38	63.9	1.0	1.0	50.3
620 IPRI 8322	6850 (13)	4.3	4.8	2.3	36	63.7	1.0	1.0	43.5
623 9031	6300 (22)	1.0	2.8	1.3	40	63.5	1.0	1.0	37.8
624 WRE 80-34	6800 (16)	2.3	2.8	1.5	39	63.5	1.0	1.0	41.8
627 UC 627	5490 (34)	4.3	4.3	3.3	37	64.5	1.5	1.0	45.0
628 UC 628	6640 (19)	2.5	3.3	1.0	37	63.9	1.0	1.0	42.3
629 UC 629	6940 (11)	1.0	1.0	1.0	39	64.5	1.5	3.5	44.5
630 UC 630	6750 (17)	1.0	1.3	1.3	37	65.1	1.0	2.0	40.3
631 CM 43367	6010 (28)	3.3	4.0	1.3	38	64.3	1.0	1.0	46.0
632 LRR Anza	6930 (12)	1.5	1.5	1.0	38	64.3	1.0	2.5	42.8
633 UC 633	7760 (2)	1.3	2.0	2.0	37	64.1	1.0	3.5	41.8
634 UC 634	6290 (23)	3.5	4.0	1.3	36	65.3	1.5	1.5	43.8
635 UC 635	7090 (9)	1.3	1.5	2.5	36	64.7	1.5	1.0	42.5
636 UC 636	7110 (8)	1.0	2.0	2.3	38	64.1	1.0	2.0	40.3
637 UC 637	5930 (31)	3.0	4.0	3.5	37	64.8	1.0	1.5	42.3
638 CM 16076	6720 (18)	5.3	5.3	1.0	38	64.0	1.0	2.0	47.3
671 IPRI 83501	6580 (20)	4.5	5.8	4.3	35	62.7	1.0	1.0	40.3
672 P982-38	7810 (1)	1.0	1.0	2.0	36	63.4	1.0	1.0	50.0
673 P982-83	7010 (10)	1.0	1.5	2.0	32	64.0	1.0	2.0	47.8
678 MP-302	5330 (35)	1.0	1.3	4.0	29	63.9	2.0	1.0	38.8
679 MP-325	5840 (32)	4.3	4.8	3.3	40	63.5	1.0	1.5	49.5
680 Calgene 1551	6470 (21)	1.5	2.3	2.8	31	62.6	1.5	1.0	50.0
681 UC 681	5980 (29)	1.0	1.3	2.0	39	64.3	1.0	2.5	42.8
682 UC 682	6130 (27)	1.5	2.0	1.8	38	64.3	1.0	2.0	42.8
683 UC 683	7290 (4)	1.0	1.3	1.8	37	63.5	1.5	1.5	44.0
684 Veery 'S'	6840 (14)	1.5	2.3	3.3	38	63.5	1.0	1.0	44.5
Mean	6570	2.0	2.7	2.3	36	63.9	1.3	1.7	44.6
CV	9.1	63.4	60.2	40.1	4.7	0.8	29.6	45.8	4.4
LSD (.05)	840	1.8	2.3	1.3	3	1.0	0.8	1.6	3.9

Rating scale for diseases (area of flag-1 leaf affected), lodging, 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: leaf rust, stripe rust, septoria and powdery mildew.

Table 18. 1985 UC West Side Field Station Common Wheat Test

Entry	Yield (lb/a)	BYDV	Plant height (in)	Test weight (lb/bu)	Yellow berry	Thousand kernel weight (grams)
20 Anza	7180 (4)	1.5	34	63.4	4.0	37.0
112 Yecora Rojo	6470 (21)	2.8	28	60.7	1.0	36.0
221 Phoenix	6940 (9)	2.0	33	62.6	5.0	34.5
243 Probred	6410 (23)	2.5	29	61.8	1.0	42.5
353 Yolo	6990 (8)	1.8	36	63.7	3.0	36.3
415 Klasic	6910 (10)	2.5	28	62.3	1.0	38.5
521 Westbred 911	6600 (17)	1.5	30	62.4	1.0	42.8
536 NK 2437	6510 (20)	2.3	30	61.9	1.0	40.5
538 Probrand 775	7750 (2)	2.3	30	61.5	1.5	37.0
544 Tadinla	6190 (27)	2.8	36	59.9	3.0	33.0
619 IPRI 8314	5700 (32)	2.5	35	60.6	1.0	41.0
620 IPRI 8322	6550 (18)	1.5	33	60.9	1.5	37.3
623 9031	6450 (22)	1.0	30	62.3	1.0	35.5
624 WRE 80-34	5970 (30)	2.5	35	61.2	1.0	36.5
627 UC 627	6660 (14)	2.5	34	64.1	1.0	40.5
628 UC 628	7020 (7)	1.5	34	63.2	1.0	39.3
629 UC 629	6510 (19)	3.0	34	63.8	3.0	36.5
630 UC 630	6310 (25)	2.5	35	63.9	4.0	36.5
631 CM 43367	6070 (29)	2.5	37	63.2	1.0	38.3
632 LRR Anza	7280 (3)	1.3	33	63.7	4.0	35.8
633 UC 633	8030 (1)	1.5	34	64.2	4.5	38.8
634 UC 634	7150 (5)	1.3	31	64.2	1.5	36.5
635 UC 635	6360 (24)	2.5	34	62.4	1.0	34.3
636 UC 636	6650 (15)	2.0	35	63.5	1.0	36.0
637 UC 637	6820 (12)	1.3	34	63.2	1.0	36.5
638 CM 16076	6630 (16)	1.0	36	62.5	1.0	39.0
671 IPRI 83501	6850 (11)	3.0	33	62.5	1.0	39.0
672 P982-38	7050 (6)	1.8	28	62.3	1.0	41.3
673 P982-83	6240 (26)	2.3	28	61.2	1.0	36.0
678 MP-302	5200 (34)	3.3	26	61.2	1.0	33.8
679 MP-325	5230 (33)	5.0	35	61.4	1.0	42.5
680 Calgene 1551	6150 (28)	1.8	28	60.2	1.0	39.8
681 UC 681	4650 (36)	2.8	34	62.0	1.5	35.3
682 UC 682	4730 (35)	2.8	36	62.3	3.0	34.5
683 UC 683	5710 (31)	3.5	32	61.6	1.5	34.8
684 Veery 'S'	6690 (13)	2.3	35	62.2	1.0	39.0
Mean	6460	2.2	33	62.3	1.8	37.5
CV	8.8	33.5	4.5	1.3	36.8	4.6
LSD (.05)	800	1.0	3	1.6	1.3	3.5

Rating scale 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, and black point.

Numbers in parentheses indicate relative rank in column.

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

Table 19. 1985 Kings Common Wheat Test

Entry	Yield (lb/a)	Lodging 5/22	Lodging at harvest	Plant height (in)	Test weight (lb/a)	Yellow berry	Thousand kernel weight (grams)
20 Anza	8010 (12)	1.0	1.0	43	64.2	3.5	40.3
112 Yecora Rojo	7630 (22)	1.0	1.0	38	63.5	1.0	47.5
221 Phoenix	8020 (11)	1.0	1.0	43	64.1	5.5	40.8
243 Probred	7870 (17)	1.0	1.0	38	63.2	1.0	48.3
353 Yolo	8580 (3)	1.0	1.3	45	64.1	3.5	37.0
415 Klasic	8350 (8)	1.0	1.0	37	64.0	1.0	46.3
521 Westbred 911	7660 (21)	1.0	1.0	37	63.9	1.0	48.5
536 NK 2437	7760 (19)	1.0	1.0	37	63.5	1.0	46.8
538 Probrand 775	7940 (16)	1.0	1.0	35	61.5	2.5	39.8
544 Tadinia	7950 (15)	1.0	1.0	45	62.6	5.0	40.8
619 IPRI 8314	7580 (24)	1.3	2.0	47	63.1	1.0	46.0
620 IPRI 8322	7810 (18)	1.0	1.0	44	63.5	2.0	43.0
623 9031	7950 (14)	1.0	1.0	42	63.1	1.0	37.0
624 WRE 80-34	7670 (20)	1.0	1.0	47	62.8	1.0	40.5
627 UC 627	7340 (29)	3.5	3.3	45	64.9	1.0	44.0
628 UC 628	7510 (25)	1.0	1.0	44	63.5	1.0	41.8
629 UC 629	7480 (26)	1.0	1.0	40	64.3	2.0	41.0
630 UC 630	7480 (27)	1.0	1.0	43	64.8	2.0	39.5
631 CM 43367	7470 (28)	2.0	1.5	48	64.0	1.0	45.0
632 LRR Anza	7310 (30)	1.0	1.3	43	64.1	3.5	39.5
633 UC 633	8880 (2)	1.0	1.0	43	63.8	4.5	39.8
634 UC 634	9050 (1)	1.0	1.0	44	65.4	1.5	41.5
635 UC 635	8430 (6)	1.0	1.0	45	64.2	1.0	39.0
636 UC 636	8410 (7)	1.0	1.0	44	64.0	1.0	39.5
637 UC 637	8050 (10)	1.3	1.5	44	64.5	1.0	41.3
638 CM 16076	8510 (5)	2.0	3.3	48	64.2	2.5	45.3
671 IPRI 83501	8530 (4)	1.0	1.0	43	63.3	1.0	42.8
672 P982-38	7610 (23)	1.5	1.0	39	63.1	1.0	49.0
673 P982-83	7280 (31)	1.0	1.0	36	63.8	1.0	48.3
678 MP-302	6820 (36)	1.0	1.0	33	62.9	1.0	35.5
679 MP-325	7190 (33)	3.5	3.8	47	63.0	1.0	47.5
680 Calgene 1551	7260 (32)	1.0	1.0	38	61.1	1.0	48.3
681 UC 681	7050 (35)	1.0	1.0	45	63.6	3.5	39.0
682 UC 682	7110 (34)	1.0	1.3	44	63.7	3.5	40.8
683 UC 683	7970 (13)	1.0	1.0	44	63.6	2.5	45.5
684 Veery 'S'	8320 (9)	1.0	1.0	44	63.4	1.0	41.3
Mean	7830	1.2	1.3	42	63.6	1.9	42.7
CV	4.6	42.3	34.0	2.3	0.5	27.8	2.1
LSD (.05)	500	0.7	0.6	2	0.7	1.1	1.8

Rating scale for 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, powdery mildew, and black point.

Numbers in parentheses indicate relative rank in column.

Table 20. 1985 Kern Common Wheat Test

Entry	Yield (lb/a)	Lodging 4/26	Lodging at harvest	BYDV	Test weight (lb/bu)	Black point	Yellow- berry	Thousand kernel weight (grams)
20 Anza	7400 (16)	1.0	5.3	1.0	62.9	1.0	3.5	38.5
112 Yecora Rojo	7600 (13)	1.0	5.3	1.5	62.5	2.0	1.0	49.0
221 Phoenix	8300 (4)	1.0	6.8	1.0	61.7	1.5	1.5	37.0
243 Probred	6010 (34)	1.0	7.0	1.3	61.2	1.5	1.0	46.0
353 Yolo	7290 (21)	1.5	6.3	1.0	62.2	1.0	2.0	39.3
415 Klasic	8260 (5)	1.0	5.3	1.3	63.2	1.5	1.0	48.8
521 Westbred 911	6940 (27)	1.0	4.3	1.0	61.7	1.5	1.0	46.8
536 NK 2437	7140 (25)	1.0	4.0	1.5	62.3	1.0	1.0	46.3
538 Probrand 775	8130 (7)	1.0	2.3	1.0	60.5	2.0	1.0	39.8
544 Tadinia	6750 (30)	1.0	5.8	1.3	61.6	1.0	2.5	39.5
619 IPRI 8314	6830 (29)	3.3	6.8	1.0	60.3	1.5	1.0	41.5
620 IPRI 8322	7330 (20)	1.0	5.3	1.0	61.3	1.0	1.0	39.8
623 9031	8360 (3)	1.0	3.3	1.0	61.9	1.0	1.0	33.8
624 WRE 80-34	7420 (15)	1.5	6.8	1.0	60.6	1.0	1.0	35.0
627 UC 627	5900 (36)	4.5	6.0	1.0	62.8	1.5	1.0	45.0
628 UC 628	7350 (19)	1.0	7.0	1.0	61.8	1.0	1.0	37.8
629 UC 629	7650 (12)	1.0	4.8	1.0	62.7	2.0	1.5	39.8
630 UC 630	7950 (9)	1.0	5.0	1.0	63.8	1.0	1.5	39.0
631 CM 43367	6000 (35)	3.5	6.3	1.0	62.3	2.0	1.0	41.5
632 LRR Anza	6870 (28)	1.0	6.0	1.3	62.8	1.0	2.0	37.5
633 UC 633	7380 (18)	1.8	5.3	1.3	63.3	1.0	3.0	39.0
634 UC 634	6980 (26)	2.0	6.5	1.3	62.9	2.0	1.0	39.8
635 UC 635	8140 (6)	1.0	6.5	1.0	62.6	1.0	1.0	35.8
636 UC 636	7530 (14)	1.0	5.3	1.0	62.3	1.0	1.0	36.8
637 UC 637	6680 (32)	3.8	6.5	1.0	61.8	1.0	1.0	41.3
638 CM 16076	6700 (31)	3.3	6.3	1.0	62.2	2.0	1.0	42.3
671 IPRI 83501	7860 (10)	1.0	5.5	1.3	61.8	1.0	1.0	40.8
672 P982-38	7760 (11)	1.0	2.0	1.0	60.9	2.0	1.0	46.8
673 P982-83	7280 (23)	1.0	2.0	1.0	61.3	1.5	1.0	47.0
678 MP-302	6610 (33)	1.0	3.8	1.0	62.2	1.0	1.0	35.0
679 MP-325	7380 (17)	2.5	6.3	1.5	61.3	1.0	1.0	45.0
680 Calgene 1551	7290 (22)	1.0	6.0	1.0	59.8	1.0	1.0	41.5
681 UC 681	7970 (8)	1.3	5.0	1.3	62.5	1.0	2.5	41.3
682 UC 682	7260 (24)	1.0	6.0	2.0	61.8	1.0	1.0	38.8
683 UC 683	8570 (1)	1.0	3.8	1.3	61.6	1.0	1.5	43.3
684 Veery 'S'	8380 (2)	1.8	6.3	1.0	61.8	1.0	1.0	38.8
Mean	7370	1.5	5.3	1.1	62.0	1.3	1.3	40.9
CV	11.0	34.4	22.5	26.2	0.8	24.4	38.8	3.1
LSD (.05)	1130	0.7	1.7	0.4	1.1	0.6	1.0	2.6

Rating scale 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, and powdery mildew.

Numbers in parentheses indicate relative rank in column.

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

Table 21. 1985 Yolo Dryland Common Wheat Test

Entry	Yield (lb/a)	Plant height (in)	Test weight (lb/bu)	Yellow- berry	Thousand kernel weight (grams)
20 Anza	3100 (15)	31	64.1	6.5	34.3
112 Yecora Rojo	3010 (25)	27	63.7	4.5	39.5
221 Phoenix	3070 (18)	32	63.2	7.5	35.0
243 Probred	3340 (5)	28	62.6	3.5	41.5
353 Yolo	3050 (21)	33	62.9	6.5	31.0
415 Klasic	3080 (17)	30	63.9	5.5	40.0
521 Westbred 911	3060 (20)	26	62.4	4.5	36.5
536 NK 2437	3130 (14)	28	63.2	4.0	39.3
538 Probrand 775	3210 (10)	29	61.6	7.0	35.0
544 Tadinla	3090 (16)	34	61.2	8.0	36.0
619 IPRI 8314	2790 (31)	34	62.6	4.0	38.0
620 IPRI 8322	3270 (7)	31	62.3	5.5	38.0
623 9031	2780 (32)	33	62.9	2.5	32.5
624 WRE 80-34	3070 (19)	35	63.5	4.5	37.3
627 UC 627	3190 (11)	31	65.8	3.5	39.5
628 UC 628	2720 (33)	33	63.5	4.0	34.5
629 UC 629	2940 (27)	33	64.7	4.0	35.8
630 UC 630	2570 (34)	30	64.1	6.5	33.0
631 CM 43367	2860 (28)	33	64.2	2.5	38.5
632 LRR Anza	3180 (13)	32	63.3	7.5	34.3
633 UC 633	3390 (4)	34	63.2	7.5	32.5
634 UC 634	3030 (22)	31	63.0	5.0	33.3
635 UC 635	3390 (3)	33	63.3	6.5	34.5
636 UC 636	3430 (2)	34	63.2	8.0	34.3
637 UC 637	3030 (23)	34	63.7	6.0	35.5
638 CM 16076	3510 (1)	34	62.4	7.5	38.3
671 IPRI 83501	3340 (6)	32	63.0	3.5	33.8
672 P982-38	3190 (12)	24	62.7	4.5	39.5
673 P982-83	2850 (29)	26	62.8	5.5	38.3
678 MP-302	2840 (30)	24	63.5	5.5	36.5
679 MP-325	3010 (24)	37	63.0	6.0	40.0
681 UC 681	2540 (35)	32	62.5	6.5	33.8
682 UC 682	2960 (26)	32	62.6	6.5	35.3
683 UC 683	3270 (8)	33	63.3	6.0	35.8
684 Veery 'S'	3220 (9)	31	62.9	4.5	34.8
Mean	3070	31	63.2	5.5	36.1
CV	11.2	5.0	0.8	15.1	3.9
LSD (.05)	480	3	1.1	1.7	2.9

Rating scale 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, and black point.

Numbers in parentheses indicate relative rank in column.

Table 22. 1985 San Luis Obispo Dryland Common Wheat Test

Entry	Yield (lb/a)	Plant height (in)
20 Anza	1240 (7)	24
112 Yecora Rojo	1080 (17)	22
221 Phoenix	920 (25)	25
243 Probred	750 (32)	21
353 Yolo	1140 (12)	25
415 Klasic	1540 (1)	23
521 Westbred 911	470 (33)	19
536 NK 2437	1260 (5)	21
538 Probrand 775	1370 (2)	23
544 Tadinia	940 (23)	27
619 IPRI 8314	760 (31)	25
620 IPRI 8322	780 (29)	25
623 9031	920 (24)	25
624 WRE 80-34	1100 (16)	27
627 UC 627	1140 (13)	26
628 UC 628	1030 (20)	26
629 UC 629	1000 (22)	25
630 UC 630	1240 (8)	24
631 CM 43367	270 (35)	27
632 LRR Anza	1260 (6)	24
633 UC 633	1120 (15)	22
634 UC 634	1200 (10)	23
635 UC 635	1310 (3)	26
636 UC 636	1050 (18)	25
637 UC 637	1210 (9)	25
638 CM 16076	1200 (11)	24
671 IPRI 83501	1020 (21)	24
672 P982-38	780 (30)	18
673 P982-83	450 (34)	20
678 MP-302	910 (26)	21
679 MP-325	1270 (4)	31
681 UC 681	890 (27)	25
682 UC 682	1040 (19)	26
683 UC 683	1130 (14)	26
684 Veery 'S'	790 (28)	24
Mean	1020	24
CV	29.0	6.2
LSD (.05)	410	2

Numbers in parentheses indicate relative rank in column.

Table 23. 1985 Tulare Dryland Common Wheat Test

Entry	Yield (lb/a)	Plant height (in)	Test weight (lb/bu)	Yellow- berry	Thousand kernel weight (grams)
20 Anza	1560 (11)	22	63.5	2.0	32.5
112 Yecora Rojo	2200 (1)	24	63.0	1.0	39.0
221 Phoenix	1240 (24)	22	61.6	1.0	28.5
243 Probred	1440 (16)	24	60.9	1.0	35.5
353 Yolo	1180 (30)	24	62.0	1.0	26.3
415 Klasic	1220 (27)	19	62.6	1.0	36.0
521 Westbred 911	1240 (25)	22	62.7	1.0	38.5
536 NK 2437	1530 (14)	24	61.7	1.0	35.0
538 Probrand 775	1420 (18)	20	61.3	1.5	32.5
544 TadInla	1220 (26)	20	60.3	1.5	29.8
619 IPRI 8314	1250 (23)	25	59.6	1.0	33.5
620 IPRI 8322	1850 (3)	28	61.6	1.0	36.3
623 90311	810 (35)	20	61.3	1.0	29.0
624 WRE 80-34	1410 (19)	24	61.8	1.0	34.0
627 UC 627	1480 (15)	21	63.7	1.0	37.0
628 UC 628	1210 (29)	23	62.1	1.0	31.5
629 UC 629	1580 (10)	27	63.6	1.5	33.5
630 UC 630	1640 (6)	22	63.5	1.0	30.5
631 CM 43367	1360 (22)	24	61.8	1.0	37.0
632 LRR Anza	2060 (2)	22	63.7	1.0	31.8
633 UC 633	1130 (32)	23	61.7	1.5	27.3
634 UC 634	1370 (21)	21	62.3	1.0	30.3
635 UC 635	1770 (4)	24	61.3	1.0	28.0
636 UC 636	1650 (5)	21	62.1	1.0	28.8
637 UC 637	1600 (9)	18	61.8	1.0	31.3
638 CM 16076	1530 (13)	17	61.1	1.5	31.8
671 IPRI 83501	1600 (8)	25	60.1	1.0	29.5
672 P982-38	1220 (28)	24	62.0	1.0	39.0
673 P982-83	1130 (33)	29	62.5	1.0	38.5
678 MP-302	1170 (31)	19	62.7	1.0	33.9
679 MP-325	1410 (20)	21	62.2	1.0	36.5
681 UC 681	1020 (34)	25	60.6	1.0	30.0
682 UC 682	1610 (7)	21	61.0	1.0	31.5
683 UC 683	1440 (17)	24	61.3	1.0	30.8
684 Veery 'S'	1550 (12)	24	60.0	1.0	31.0
Mean	1430	23	61.9	1.1	32.7
CV	17.1	15.5	0.9	33.1	3.6
LSD (.05)	500	NS	1.1	NS	2.4

Rating scale 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, and black point.

Numbers in parentheses indicate relative rank in column.

Table 24. 1985 and 1983-1985 Common Wheat Yield Summary (lb/a)

Entry	Sacramento Valley		San Joaquin Valley		Dryland	
	1985 4 locations	1983-85	1985 4 locations	1983-85	1985 3 locations	1983-85
20 Anza	7660 (13)	5680	7460 (8)	6460	1970 (8)	2090
112 Yecora Rojo	7280 (23)	4980	6920 (24)	6090	2100 (3)	1910
221 Phoenix	7810 (10)	5690	7620 (3)	6580	1740 (26)	2050
243 Probred	7590 (15)	-	6350 (33)	-	1840 (21)	-
353 Yolo	8610 (2)	6210	7620 (4)	6860	1790 (24)	2270
415 Klasic	7960 (7)	5560	7280 (13)	6800	1950 (11)	2010
521 Westbred 911	7850 (8)	5560	7110 (20)	6210	1590 (31)	1690
536 NK 2437	7560 (18)	5260	6910 (25)	6070	1970 (9)	1910
538 Probrand 775	7600 (14)	5330	7660 (2)	6620	2000 (6)	1990
544 Tadinia	7240 (25)	5770	6780 (28)	6180	1750 (25)	2140
619 IPRI 8314	6810 (32)	-	6580 (29)	-	1600 (30)	-
620 IPRI 8322	7130 (28)	-	7140 (17)	-	1970 (10)	-
623 9031	7280 (24)	-	7260 (14)	-	1500 (32)	-
624 WRE 80-34	6990 (30)	-	6960 (22)	-	1860 (19)	-
627 UC 627	7410 (20)	-	6350 (34)	-	1940 (14)	-
628 UC 628	7240 (26)	-	7130 (18)	-	1650 (28)	-
629 UC 629	7390 (21)	-	7140 (15)	-	1840 (22)	-
630 UC 630	7200 (27)	-	7120 (19)	-	1820 (23)	-
631 CM 43367	6830 (31)	-	6390 (32)	-	1500 (33)	-
632 LRR Anza	7570 (17)	-	7100 (21)	-	2170 (1)	-
633 UC 633	8670 (1)	-	8010 (1)	-	1880 (16)	-
634 UC 634	7790 (11)	-	7370 (12)	-	1870 (17)	-
635 UC 635	7500 (19)	-	7500 (7)	-	2160 (2)	-
636 UC 636	7130 (29)	-	7420 (10)	-	2040 (5)	-
637 UC 637	7820 (9)	-	6870 (26)	-	1950 (12)	-
638 CM 16076	8190 (3)	-	7140 (16)	-	2080 (4)	-
671 IPRI 83501	8030 (5)	-	7450 (9)	-	1990 (7)	-
672 P982-38	7750 (12)	-	7560 (6)	-	1730 (27)	-
673 P982-83	7570 (16)	-	6950 (23)	-	1480 (34)	-
678 MP-302	6170 (36)	-	5990 (36)	-	1640 (29)	-
679 MP-325	6320 (35)	-	6410 (31)	-	1900 (15)	-
680 Calgene 1551	7360 (22)	-	6790 (27)	-	-	-
681 UC 681	6660 (34)	-	6410 (30)	-	1480 (34)	-
682 UC 682	6700 (33)	-	6310 (35)	-	1870 (18)	-
683 UC 683	8050 (4)	-	7390 (11)	-	1950 (13)	-
684 Veery 'S'	7980 (6)	-	7560 (5)	-	1850 (20)	-
Mean	7460	5550	7060	6430	1840	2010
CV	5.6	-	8.4	-	15.7	-
LSD (.05)	290.3	-	409.8	-	316.6	-

Numbers in parentheses indicate relative rank in column.

Table 25. 1984 Common Wheat Quality Tests*

	Flour				Mixograph		Baking			
	YLD	ASH	MSC	PRO	ABS	TJ	ABS	MT	LYOL	BC
<u>Sacramento - San Joaquin, 1984</u>										
20 Anza	71.6	0.35	88.7	8.8	58.1	2M	58.8	1.8	814	9
112 Yecora Rojo	70.5	0.36	87.0	10.2	62.0	5H	64.7	5.2	853	2
221 Phoenix	71.6	0.36	88.2	8.7	58.2	3M	58.9	2.0	906	8
353 Yolo	71.9	0.34	89.6	8.8	60.0	3M	59.7	1.8	924	8
415 Klasic	72.3	0.34	89.9	9.4	61.2	5H	64.9	4.5	937	3
521 Westbred 911	66.8	0.37	82.6	8.7	60.5	4H	64.4	3.6	921	5
536 NK 2437	69.6	0.36	86.1	9.9	60.4	8M	63.3	4.0	881	3
538 Probrand 775	71.4	0.37	87.8	9.5	64.2	4H	66.1	3.2	901	2
544 Tadinia	71.5	0.35	88.9	8.8	57.1	2M	57.3	1.2	774	9
546 UC 546	71.4	0.34	89.0	8.4	57.4	2M	57.6	1.1	794	9
547 UC 547	71.6	0.36	88.2	9.6	57.2	3M	59.4	2.8	790	9
619 IPRI 8314	70.8	0.36	87.5	10.3	64.4	4H	68.3	3.7	876	3
620 IPRI 8322	68.8	0.36	85.5	10.2	63.1	4H	67.0	3.6	813	3
623 903-1	69.2	0.37	86.2	10.8	63.2	4H	66.9	3.2	810	6
624 WRE 80-34	68.7	0.36	85.2	9.9	62.8	3H	65.7	2.9	866	6
625 NK 505	68.7	0.36	85.1	9.9	61.2	4M	64.9	2.5	826	5
627 UC 627	69.8	0.33	88.2	9.9	59.3	3M	62.0	2.5	781	8
628 UC 628	70.6	0.36	87.5	10.3	61.9	2H	64.1	2.1	906	3
629 UC 629	72.3	0.38	87.8	9.1	61.1	3M	64.3	2.8	856	6
630 UC 630	72.0	0.33	90.3	9.9	62.1	3M	65.3	1.5	891	6
631 CM 43367	67.9	0.37	83.7	10.1	56.5	1H	58.2	2.1	699	9
632 LRR Anza	71.3	0.35	88.7	9.0	55.8	2M	59.5	2.1	782	9
633 UC 633	72.4	0.35	89.7	8.1	57.5	3M	59.2	1.8	873	9
634 UC 634	69.7	0.38	85.5	9.7	57.3	4M	61.5	2.1	829	4
635 UC 635	71.9	0.38	87.6	10.5	58.7	3M	60.4	2.1	804	3
636 UC 636	72.5	0.36	89.1	9.5	57.6	2M	59.3	1.8	796	9
637 UC 637	71.0	0.38	86.7	10.3	57.9	3M	60.6	2.0	806	8
638 CM 16076	72.9	0.38	88.8	8.4	58.4	8M	63.1	4.7	924	3

Table 25. Common Wheat (Continued)

	Flour				Mixograph		Baking			
	YLD	ASH	MSC	PRO	ABS	TY	ABS	MT	LVOL	BC
Sutter, 1984										
20 Anza	70.5	0.39	85.5	7.7	56.2	2L				
112 Yecora Rojo	69.6	0.40	84.2	8.8	56.7	8M				
221 Phoenix	71.7	0.40	86.5	7.2	55.1	2L				
353 Yolo	70.8	0.37	87.0	6.9	53.1	3L				
415 Klasic	70.6	0.39	85.6	7.8	57.1	8L				
521 Westbred 911	66.0	0.45	77.8	7.4	58.0	8L				
536 NK 2437	68.5	0.39	83.4	8.4	58.6	8L				
538 Probrand 775	70.2	0.39	85.5	7.6	57.9	8L				
544 Tadinia	71.1	0.35	88.5	6.6	53.9	2L				
546 UC 546	71.1	0.35	88.3	7.1	52.9	2L				
547 UC 547	71.0	0.39	85.9	7.8	53.5	2L				
619 IPRI 8314	69.1	0.39	84.3	8.7	60.3	8M				
620 IPRI 8322	67.5	0.39	82.5	8.3	60.1	6L				
623 903-1	67.5	0.39	83.3	8.9	61.4	5M				
624 WRE 80-34	68.5	0.38	84.2	8.0	59.4	3L				
625 NK 505	67.5	0.43	80.3	7.3	58.0	3L				
627 UC 627	68.3	0.38	83.7	7.3	56.6	2L				
628 UC 628	70.1	0.41	84.3	8.2	56.6	3M				
629 UC 629	71.0	0.40	85.5	8.0	57.8	2L				
630 UC 630	70.3	0.38	85.7	7.7	57.1	2L				
631 CM 43367	67.8	0.42	81.4	8.2	54.6	2L				
632 LRR Anza	70.1	0.39	85.4	7.4	54.8	1L				
633 UC 633	70.9	0.37	87.1	6.6	53.8	1L				
634 UC 634	67.2	0.41	81.1	7.4	54.6	2L				
635 UC 635	69.5	0.41	83.6	7.3	54.6	2L				
636 UC 636	70.5	0.39	85.6	8.3	54.9	3L				
637 UC 637	68.9	0.39	83.7	8.0	56.5	3L				
638 CM 16076	71.6	0.39	86.6	7.1	54.2	8L				

*See Agronomy Progress Report No. 155 for yield data. Quality analyses were performed by the Western Wheat Quality Laboratory, USDA, Pullman, WA.

**All entries are HRS except Phoenix (HWW), Klasic (HWS), and CM 43367 (HWS) YLD = percent of flour obtained; ASH = flour ash percent, 14% moisture basis; MSC = milling score; PRO = flour protein, 14% moisture basis; ABS = absorption at 14% moisture corrected to 10% protein (Delta) and 8% protein (Sutter); TY = mixograph type; MT = optimum mixing time in minutes; LVOL = bread loaf volume (cc) corrected to 10% protein (Delta) and 8% protein (Sutter).

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

Table 26. 1985 Common Wheat Quality Test

ENTRY	WHEAT		VISCOS	FLOUR		FARINOGRAPH			BREAD	
	M	PRO		ASH	YIELD	ABSP	PK	MTI	VOL	BAKE SCORE
<u>UC West Side Field Station, 1985</u>										
20 Anza	9.7	12.2	64	.45	73.3	68.0	2	120	2000	60
112 Yecora Rojo	9.8	13.2	142	.48	70.6	65.1	9	30	2650	78
221 Phoenix	9.4	12.1	89	.45	72.0	66.3	4	50	2100	65
243 Probred	9.9	13.1	142	.47	72.0	65.9	8	30	2750	82
353 Yolo	9.5	12.8	86	.42	73.7	66.2	3	70	2000	60
415 Klasic	9.9	13.0	143	.42	72.1	61.6	12	10	2700	80
521 Westbred 911	9.7	13.2	117	.48	69.8	68.1	8	30	2650	80
536 NK 2437	10.0	13.4	136	.47	70.3	64.9	10	20	2675	78
538 Probrand 775	10.1	12.0	93	.46	73.0	64.9	4	20	2600	76
544 Tadinia	10.0	13.7	79	.45	71.0	63.6	3	60	2100	60
619 IPRI 8314	10.0	13.6	134	.44	72.0	67.3	10	20	2600	78
620 IPRI 8322	10.0	13.3	123	.44	69.2	67.1	9	20	2650	75
623 903-1	9.2	12.9	124	.51	72.3	68.2	8	30	2600	80
624 WRE 80-34	9.2	13.5	120	.45	71.8	67.5	6	40	2300	70
627 UC 627	9.2	13.6	106	.40	72.1	67.9	3	60	2000	60
628 UC 628	9.5	11.5	97	.45	73.4	67.2	4	70	2100	62
629 UC 629	9.5	13.0	93	.46	74.0	68.2	4	60	2150	65
630 UC 630	9.3	11.2	95	.40	73.1	68.0	2	70	1900	60
631 CM 43367	9.3	13.2	97	.47	68.6	68.6	3	70	2000	65
632 LRR Anza	9.6	12.4	87	.41	71.3	68.8	2	80	1900	60
633 UC 633	9.6	11.2	67	.39	74.2	66.9	3	70	1800	60
634 UC 634	9.6	13.0	98	.42	68.5	68.8	5	60	2200	70
635 UC 635	10.8	13.5	111	.47	72.8	67.2	5	50	2300	72
636 UC 636	9.8	13.1	101	.42	73.2	66.9	4	60	2200	68
637 UC 637	10.1	13.8	112	.42	72.8	67.2	5	50	2400	60
638 CM 16076	10.3	13.5	136	.44	73.1	62.1	10	20	2800	84
671 IPRI 83501	10.1	13.3	101	.49	71.9	68.7	7	40	2300	65
672 P982-38	10.0	13.0	112	.49	69.9	70.8	8	40	2400	71
673 P982-83	10.3	13.9	128	.49	68.5	71.7	9	30	2600	77
678 MP-302	10.3	13.6	117	.51	71.7	68.8	8	30	2650	77
679 MP-325	10.1	14.9	141	.52	72.6	68.7	7	40	2700	82
680 Calgene 1551	10.0	13.9	120	.52	69.2	68.4	10	20	2650	80
681 UC 681	10.0	13.3	120	.45	69.7	68.5	5	50	2400	75
682 UC 682	10.0	13.3	118	.44	69.4	68.3	7	40	2650	78
683 UC 683	10.2	13.6	89	.45	65.8	69.7	2	80	1800	60
684 Veery 'S'	13.5	12.8	81	.79	71.5	68.0	3	70	2100	62

Quality analysis was performed by the Con Agra Flour Milling Company, Omaha, NE

M = moisture percentage; PRO = protein percentage; VISC = mac michael viscosity; ASH = flour ash percentage; YIELD = flour extraction percentage; ABSP = water absorption percentage; PK = peak (minutes); MTI = mixing tolerance index; BAKE SCORE = 60-69: poor; 70-79: fair; 80-89: good; 90-100: excellent.

Table 27. 1985 UC Davis Durum Wheat Test

Entry	Yield (lb/a)	Lodging at harvest		Stripe rust	Powdery mildew	Plant height (in)	Days to head (from 3/1)	Test weight (lb/bu)	Black point	Yellow- berry	Thousand kernel weight (grams)
		BYDV									
112 Yecora Rojo	6490 (25)	1.0	3.0	3.0	1.0	32	54	62.4	1.0	1.0	49.8
169 Mexicali	6840 (20)	1.3	3.0	1.3	1.0	37	52	61.3	1.0	1.0	59.5
254 Modoc	6760 (21)	1.3	2.5	4.5	2.8	35	55	64.1	1.0	1.0	51.0
410 Aldura	7950 (3)	1.0	1.0	1.0	1.0	33	58	62.1	1.5	1.0	53.5
422 TL 75-409	6860 (19)	1.0	2.3	1.5	1.0	40	60	60.6	1.0	1.0	48.8
496 Yavaros	6680 (22)	1.0	2.0	4.0	1.5	37	54	63.6	1.0	1.0	50.0
498 Mallard 'S'	8130 (1)	1.5	1.3	1.0	1.3	38	54	62.8	2.0	2.0	64.0
499 Rokel 'S'	7580 (6)	1.0	2.0	1.0	1.0	37	54	61.5	1.0	1.0	57.0
522 Westbred 811	6160 (30)	1.0	2.0	3.8	1.0	37	56	60.5	1.0	1.0	57.3
605 D8204	6970 (17)	1.3	2.5	1.0	1.0	38	57	59.5	1.0	1.0	57.0
606 Frigate 'S'	7760 (5)	1.0	1.5	1.0	1.0	38	56	63.0	1.0	1.0	56.3
607 D8209	7580 (7)	1.0	1.8	1.3	1.0	37	55	62.6	1.0	1.5	52.8
626 NK 79D893	6490 (26)	1.0	1.3	2.5	2.8	35	59	63.6	1.0	1.0	44.3
639 UC 639	7840 (4)	1.3	1.8	1.0	1.5	36	57	62.0	1.0	1.0	55.8
640 UC 640	7290 (13)	1.3	1.5	1.0	1.8	40	58	61.8	1.0	1.0	59.0
641 CD 4071	7480 (8)	3.0	1.8	2.0	1.0	35	53	62.9	1.0	1.0	52.0
642 Gediz 1	7140 (15)	1.5	2.8	1.3	1.3	39	57	62.9	1.5	1.0	56.8
643 CD 14472	6560 (23)	1.3	2.3	2.0	1.3	40	60	62.9	1.5	1.0	57.3
644 UC 644	7380 (11)	1.8	1.8	1.0	1.8	41	60	62.0	1.0	1.0	53.8
645 CD 3935	6500 (24)	1.0	1.8	2.0	1.0	41	56	62.1	1.0	1.0	54.3
646 Stiffball 3	7060 (16)	1.5	1.5	1.3	1.0	38	53	62.8	1.0	1.0	65.0
647 Stiffball 4	7350 (12)	1.0	1.8	1.0	1.0	37	57	63.3	1.0	1.0	62.8
648 Loon	6910 (18)	1.0	1.8	1.0	1.3	37	60	61.8	1.0	1.0	51.8
649 CD 8130	7480 (9)	2.3	1.8	1.0	1.0	38	57	62.3	1.0	1.0	57.8
674 P882-21	8020 (2)	1.3	1.3	1.3	1.3	38	60	62.6	1.0	1.0	62.0
675 P883-2	6470 (27)	1.5	2.3	1.8	1.3	36	49	62.7	1.0	1.0	59.8
676 P883-15	6330 (29)	1.0	3.0	1.3	1.0	41	55	59.6	1.0	1.0	62.3
677 P883-22	6440 (28)	1.0	2.0	4.3	1.3	37	55	60.8	1.0	1.0	53.5
685 L-0162	7420 (10)	2.5	2.3	2.0	1.0	41	55	62.9	1.0	1.0	59.0
686 CD 25126	7150 (14)	1.0	1.3	1.0	1.0	35	60	64.7	1.0	1.0	51.3
Mean	7100	1.3	1.9	1.8	1.3	37	56	62.3	1.1	1.0	55.8
CV	4.7	39.1	26.9	19.9	26.8	2.6	-	0.5	19.9	12.3	2.4
LSD (.05)	470	0.7	0.7	0.5	0.5	2	-	0.6	0.4	0.3	2.8

Rating scale 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, and septoria.

Numbers in parentheses indicate relative rank in column.

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

Table 28. 1985 Sacramento-San Joaquin Delta Durum Wheat Test

Entry	Yield (lb/a)	Lodging at harvest	BYDV	Stripe rust	Powdery mildew	Plant height (in)	Test weight (lb/bu)	Yellow- berry	Thousand kernel weight (grams)
112 Yecora Rojo	7760 (22)	1.3	2.0	1.0	1.0	25	63.7	1.0	48.3
169 Mexicali	7420 (27)	1.0	2.8	1.0	1.0	36	62.3	1.5	56.5
254 Modoc	7430 (26)	1.0	2.3	1.0	1.5	35	65.2	1.0	50.5
410 Aldura	8890 (7)	1.0	1.0	1.0	1.3	30	63.9	1.5	52.3
422 TL 75-409	8720 (9)	1.0	1.0	1.0	1.0	33	63.0	1.5	48.5
496 Yaveros	7300 (29)	1.0	2.3	1.0	1.3	35	65.0	1.0	50.8
498 Mallard 'S'	9580 (1)	1.3	1.0	1.0	1.0	33	63.4	3.5	59.3
499 Rokel 'S'	8470 (12)	1.0	2.0	1.0	1.0	33	62.7	1.5	56.3
522 Westbred 881	7450 (25)	1.0	1.5	2.0	1.0	35	62.4	1.0	58.8
605 D8204	8910 (6)	1.0	1.8	1.0	1.0	34	61.7	4.0	57.3
606 Frigate 'S'	8330 (15)	1.0	2.5	1.0	1.0	33	64.0	1.0	54.3
607 D8209	8940 (5)	1.0	1.5	1.0	1.0	32	64.1	2.5	50.0
626 NK 79D893	8420 (14)	1.0	1.0	1.0	2.3	32	65.6	1.0	47.0
639 UC 639	8460 (13)	1.3	1.0	1.0	2.5	31	62.8	1.0	54.8
640 UC 640	8830 (8)	1.5	1.5	1.0	1.0	34	63.3	2.0	58.8
641 CD 4071	8610 (11)	2.5	1.5	1.0	1.0	30	64.2	1.5	52.8
642 Gediz 1	8200 (16)	1.3	1.3	1.0	1.0	35	64.2	1.0	54.5
643 CD 14472	7910 (21)	1.0	2.0	1.0	1.0	34	63.9	1.0	56.3
644 UC 644	7980 (19)	1.8	1.5	1.0	1.3	34	63.4	2.0	50.8
645 CD 3935	7950 (20)	1.0	1.3	1.0	1.0	37	64.4	1.0	54.3
646 Stiffball 3	7580 (23)	1.5	2.3	1.0	1.0	30	64.1	1.5	62.0
647 Stiffball 4	9130 (3)	1.0	1.0	1.0	1.0	32	64.3	1.0	61.0
648 Loon	8100 (17)	1.3	1.3	1.0	1.5	31	63.2	1.0	52.3
649 CD 8130	7350 (28)	1.8	2.0	1.0	1.3	32	63.8	1.0	57.5
674 P882-21	9090 (4)	1.0	1.0	1.0	1.5	36	64.4	1.5	59.5
675 P883-2	6140 (30)	1.0	3.0	1.0	1.0	35	62.6	1.0	57.0
676 P883-15	7550 (24)	1.0	3.5	1.0	1.0	36	61.8	1.0	60.5
677 P883-22	8020 (18)	1.0	1.5	1.5	1.0	34	62.4	1.0	55.0
685 L-0162	8650 (10)	1.8	1.3	1.0	1.0	33	65.2	2.0	58.8
686 CD 25126	9390 (2)	1.0	1.0	1.0	1.3	31	64.9	1.0	49.5
Mean	8220	1.2	1.7	1.0	1.2	33	63.7	1.5	54.8
CV	4.2	26.5	39.0	22.1	28.6	4.2	0.5	30.5	2.5
LSD (.05)	490	0.4	0.9	0.3	0.5	3	0.6	0.9	2.8

Rating scale 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, septoria, and black point. Numbers in parentheses indicate relative rank in column.

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

Table 29. 1985 Kings Durum Wheat Test

Entry	Yield (lb/a)	Lodging 5/22	Lodging at harvest	Plant height (in)	Test weight (lb/bu)	Yellow- berry	Thousand kernel weight (grams)
112 Yecora Rojo	7600 (19)	1.0	2.0	37	62.9	1.0	45.5
169 Mexicali	7730 (16)	4.0	6.0	46	62.7	3.0	54.3
254 Modoc	7500 (22)	3.5	5.3	46	64.5	1.0	46.5
410 Aldura	7720 (17)	1.0	2.3	38	63.5	1.0	50.5
422 TL 75-409	7600 (20)	1.0	2.5	43	62.1	2.5	48.8
496 Yavaros	8090 (8)	1.3	2.8	45	64.9	2.0	48.0
498 Mallard 'S'	9100 (2)	1.3	4.3	45	62.8	7.0	56.8
499 Rokei 'S'	8460 (5)	1.5	5.0	44	62.7	2.0	50.3
522 Westbred 881	7740 (15)	1.0	3.3	46	62.3	1.0	55.0
605 D8204	8740 (4)	2.5	5.3	48	62.0	3.0	56.3
606 Frigate 'S'	8770 (3)	1.3	2.3	46	64.4	2.0	52.0
607 D8209	8030 (9)	2.3	6.0	46	63.4	5.0	48.0
626 NK 79D893	7560 (21)	1.0	3.5	43	65.4	3.5	47.0
639 UC 639	7950 (10)	1.5	4.8	44	62.7	2.0	50.8
640 UC 640	7740 (14)	1.3	5.0	46	62.8	1.5	54.8
641 CD 4071	7010 (28)	5.5	6.5	45	63.1	1.0	47.0
642 Gediz 1	8220 (6)	1.0	4.5	45	63.0	1.0	49.8
643 CD 14472	7240 (27)	1.0	4.5	44	64.9	1.0	54.3
644 UC 644	6470 (29)	5.3	6.3	48	62.0	1.0	46.3
645 CD 3935	7360 (25)	2.8	5.5	48	63.7	1.0	54.5
646 Stifftail 3	7410 (24)	4.8	6.5	51	63.0	1.5	55.3
647 Stifftail 4	8100 (7)	1.3	5.0	45	64.6	1.0	57.8
648 Loon	7330 (26)	1.5	2.5	47	63.2	1.5	50.8
649 CD 8130	5260 (30)	6.8	7.5	49	62.2	1.0	48.8
674 P882-21	9240 (1)	1.0	3.0	45	64.2	1.5	56.0
675 P883-2	7870 (12)	1.0	5.8	46	62.7	1.0	49.8
676 P883-15	7660 (18)	2.3	5.3	46	61.6	1.0	57.3
677 P883-22	7760 (13)	1.0	2.5	46	62.3	1.0	50.3
685 L-0162	7500 (23)	2.8	6.0	51	64.3	1.5	54.3
686 CD 25126	7870 (11)	1.0	2.8	41	65.0	1.0	48.0
Mean	7750	2.1	4.5	45	63.3	1.8	51.5
CV	10.2	72.0	33.0	1.7	0.8	39.2	2.5
LSD (.05)	1110	2.2	2.1	2	1.0	1.5	2.7

Rating scale 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, and black point.

Numbers in parentheses indicate relative rank in column.

Table 30. 1985 Imperial Durum Wheat Test

Entry	Yield (lb/a)	Days to heading	Days to maturity	Plant height (in)	Lodging at harvest	BYDY	Black point	Yellow- berry	Thousand kernel weight (grams)
112 Yecora Rojo	7200 (28)	98	141	34	1.5	1.0	1.0	1.0	41.8
169 Mexicali	8130 (11)	99	142	39	4.3	1.0	1.5	1.0	52.5
254 Modoc	7360 (27)	99	141	37	2.0	1.0	1.0	1.0	47.0
410 Aldura	7850 (17)	104	148	34	2.3	1.0	2.5	1.0	44.8
422 TL 75-409	7970 (15)	109	151	38	1.8	1.0	1.0	1.0	40.3
496 Yavaros	7600 (23)	99	142	37	2.5	1.0	1.0	1.0	44.5
498 Mallard 'S'	8880 (5)	101	145	37	4.0	1.0	1.0	1.5	56.3
499 Rokel 'S'	8460 (7)	99	143	36	3.0	1.0	1.0	1.0	45.5
522 Westbred 881	7510 (25)	100	143	37	2.0	1.0	1.0	1.0	54.8
605 D8204	8900 (4)	102	143	39	2.5	1.5	1.5	2.0	50.5
606 Frigate 'S'	8210 (10)	102	143	39	2.5	1.0	1.0	1.0	46.0
607 D8209	7860 (16)	102	146	37	6.8	1.0	1.0	1.0	43.8
626 NK 79D893	8090 (13)	105	148	37	3.0	1.0	1.0	1.0	41.5
639 UC 639	7650 (22)	102	144	35	5.0	1.0	1.5	1.0	46.0
640 UC 640	7560 (24)	101	143	40	4.3	1.0	1.0	1.0	52.8
641 CD 4071	7170 (29)	99	142	38	5.8	1.3	1.0	1.0	44.3
642 Gediz 1	8410 (8)	101	142	40	2.8	1.3	2.5	1.0	51.5
643 CD 14472	7770 (18)	104	146	39	5.5	1.0	1.5	1.0	51.0
644 UC 644	7990 (14)	104	146	39	5.5	1.0	2.0	1.0	43.5
645 CD 3935	7670 (21)	101	143	41	5.5	1.0	1.0	1.0	49.8
646 Stifftail 3	8470 (6)	101	142	42	5.3	1.0	1.0	1.0	55.0
647 Stifftail 4	7710 (20)	106	149	38	5.3	1.0	1.0	1.5	53.5
648 Loon	8360 (9)	105	147	38	2.0	1.0	1.0	1.0	47.3
649 CD 8130	6050 (30)	102	142	41	6.0	2.5	1.0	1.0	44.8
674 P882-21	10220 (1)	105	147	38	2.8	1.0	1.5	1.0	55.0
675 P883-2	8110 (12)	96	141	38	2.5	1.0	1.0	1.0	48.3
676 P883-15	8910 (3)	102	145	39	3.0	1.0	1.5	1.0	55.5
677 P883-22	7410 (26)	99	144	36	1.8	1.0	1.5	1.0	50.3
685 L-0162	7720 (19)	100	142	40	4.5	1.0	1.5	1.0	53.5
686 CD 25126	9160 (2)	106	150	36	1.3	1.0	1.5	1.0	45.5
Mean	8010	102	144	38	3.5	1.1	1.3	1.1	48.5
CV	6.9	1.2	1.3	3.3	33.4	26.9	31.3	16.8	2.9
LSD (.05)	780	2	3	2	1.7	0.4	0.8	0.4	2.9

Rating scale 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, and powdery mildew.

Numbers in parentheses indicate relative rank in column.

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

Table. 31 1985 and 1984-85 Durum Wheat Yield Summary (lb/a)

Entry	1985 4 locations	1984-85
112 Yecora Rojo*	7260 (26)	-
169 Mexicali	7530 (20)	7140
254 Modoc	7260 (27)	6930
410 Aldura	8100 (8)	7470
422 TL 75-409	7790 (14)	7150
496 Yavaros	7420 (22)	7060
498 Mallard 'S'	8920 (2)	8320
499 Rokel 'S'	8240 (6)	7750
522 Westbred 881	7210 (28)	6980
605 D8204	8380 (4)	7860
606 Frigate 'S'	8270 (5)	7800
607 D8209	8100 (7)	7540
626 NK 79D893	7640 (16)	7090
639 UC 639	7980 (11)	7500
640 UC 640	7850 (12)	7260
641 CD 4071	7570 (19)	7220
642 Gediz 1	7990 (10)	7310
643 CD 14472	7370 (24)	6990
644 UC 644	7450 (21)	7040
645 CD 3935	7370 (25)	7130
646 Stifftail 3	7630 (17)	7220
647 Stifftail 4	8070 (9)	7590
648 Loon	7670 (15)	7260
649 CD 8130	6540 (30)	6660
674 P882-21	9150 (1)	-
675 P883-2	7150 (29)	-
676 P883-15	7610 (18)	-
677 P883-22	7410 (23)	-
685 L-0162	7820 (13)	-
686 CD 25126	8390 (3)	-
Mean	7770	7320
CV	6.9	-
LSD (.05)	370	-

*Common wheat

Numbers in parentheses indicate relative rank
in column.

Table 32. 1984 Durum Wheat Quality Tests*

ENTRY	WHT PRO	TOT EXT	SEMO EXT	DUS	MX	SPK	SEMO MIN	FALL NO	SEMO PRO	VI	FIRM	RES
Sacramento - San Joaquin Delta, 1984												
169 Mexicall	10.5	83.3	64.4	80	6	37	0.64	400	9.3	8.0	5.42	6.8
254 Modoc	11.6	80.4	60.4	80	5	40	0.63	400	10.3	8.0	6.61	8.5
410 Aldura	10.6	84.4	63.2	95	3	20	0.61	400	9.6	9.5	5.79	7.8
422 TL 75-409	10.3	81.3	60.8	90	3	70	0.54	400	9.6	9.0	6.39	6.7
496 Yavaros	11.7	82.2	60.6	80	7	30	0.65	400	10.4	8.0	6.64	8.8
498 Mallard 'S'	10.4	81.5	62.2	85	6	30	0.67	400	9.7	8.0	6.57	7.7
499 Rokej 'S'	10.4	82.3	63.7	90	4	40	0.61	400	9.6	8.0	6.31	8.1
522 Westbred 881	12.1	82.8	63.2	90	7	37	0.61	400	10.7	8.0	6.65	7.8
560 UC 560	10.4	83.2	64.4	75	3	57	0.64	400	9.7	8.0	6.65	6.7
562 Njoro 231	10.4	82.9	63.8	75	3	33	0.59	400	9.4	8.0	5.23	7.5
563 Kingfisher 'S'	10.5	82.6	63.4	65	3	23	0.60	400	9.4	8.0	5.49	7.9
566 TL 74-30	10.4	81.9	61.9	80	3	20	0.65	400	9.6	8.0	6.22	7.3
569 TL 73-47	10.3	83.2	60.3	70	4	27	0.61	400	9.5	7.5	6.37	8.4
570 TL 73-468	10.8	83.0	61.8	75	3	23	0.63	400	9.9	8.0	5.62	9.0
605 D8204	9.1	78.3	59.4	85	3	17	0.66	400	8.6	8.0	5.70	8.6
606 Frigate 'S'	10.9	83.8	64.0	90	4	37	0.61	400	10.0	9.0	6.18	7.4
607 D8209	10.0	80.2	60.9	85	3	47	0.60	400	9.5	8.0	-	-
621 P 881-660	9.6	81.1	61.9	85	4	17	0.63	400	9.1	8.0	-	-
622 P 881-738	10.7	81.5	61.2	105	4	47	0.60	400	10.0	8.0	7.11	8.3
626 NK 79D893	10.4	81.7	61.9	95	3	27	0.57	400	9.4	9.0	6.20	8.0
639 UC 639	10.6	84.0	64.7	65	6	30	0.62	400	9.4	7.5	6.18	7.1
640 UC 640	9.8	81.6	63.6	85	3	47	0.64	400	9.2	9.0	5.55	7.2
641 CD 407-1	10.9	83.7	64.7	75	5	17	0.60	400	9.9	7.5	7.08	7.8
642 Gediz 1	11.2	82.3	61.2	85	4	30	0.57	400	10.0	9.0	6.00	7.8
643 CD 14472	10.9	83.8	63.9	75	3	43	0.61	400	10.0	7.5	-	-
644 UC 644	10.2	82.4	62.4	60	4	53	0.64	400	9.4	7.0	6.03	7.0
645 CD 3935	11.1	81.3	62.6	75	4	33	0.64	400	10.3	8.0	7.00	7.7
646 Stifftail 3	11.0	82.9	64.5	80	6	33	0.59	400	9.9	8.5	5.96	7.7
647 Stifftail 4	10.5	83.2	64.8	75	5	27	0.56	400	9.5	7.5	5.75	6.5
648 Loon	10.9	82.5	61.4	60	4	50	0.61	400	9.9	7.5	6.35	7.0
649 CD 8130	10.5	83.6	64.1	60	4	23	0.61	400	9.6	7.5	6.09	8.8

Table 32. 1984 Durum Wheat (Continued)

ENTRY	WHT PRO	TOT EXT	SEMO EXT	DUS	MX	SPK	SEMO MIN	FALL NO	SEMO PRO	VI	FIRM	RES
<u>Kings, 1984</u>												
169 Mexical I	8.9	78.4	61.3	85	4	50	0.68	400	7.8	9.0	4.84	9.2
254 Modoc	9.7	81.8	62.1	85	3	98	0.69	400	8.6	9.5	6.24	7.8
410 Aldura	8.6	80.7	61.4	95	2	33	0.63	400	7.6	9.5	5.16	7.7
422 TL 74-409	8.7	77.9	58.7	90	2	30	0.65	400	8.0	9.5	5.16	8.2
496 Yaveros	10.3	81.9	61.7	85	3	47	0.68	400	9.2	9.0	6.59	7.6
498 Mallard 'S'	8.1	76.3	57.8	80	3	40	0.71	400	7.4	9.5	4.49	8.3
499 Rokel 'S'	7.8	74.2	57.2	85	3	27	0.63	400	7.2	9.5	5.46	7.8
522 Westbred 881	9.8	83.2	64.0	95	5	50	0.66	400	8.8	9.5	6.87	8.0
560 UC 560	9.2	81.4	61.6	75	2	50	0.71	400	8.2	8.0	5.64	7.8
562 Njoro 231	9.0	79.7	61.1	75	1	37	0.61	400	8.3	8.5	5.18	8.0
563 Kingfisher 'S'	8.6	79.0	60.3	65	1	23	0.63	400	8.0	-	-	-
566 TL 74-30	9.3	83.8	62.9	80	2	27	0.68	400	8.4	9.0	6.03	7.6
569 TL 73-471	8.4	77.9	58.7	75	3	47	0.73	400	8.0	8.0	5.10	9.5
570 TL 73-468	9.3	81.3	60.7	95	2	37	0.67	400	8.4	10.0	5.36	9.0
605 D8204	8.5	75.9	57.3	85	4	63	0.64	400	7.7	10.0	4.75	10.0
606 Frigate 'S'	8.7	77.8	59.5	85	2	27	0.66	400	8.0	9.0	5.10	7.5
607 D8209	8.3	73.7	55.5	85	2	37	0.64	400	7.8	9.5	4.77	8.9
621 P881-660	9.0	82.6	63.1	95	3	33	0.66	400	8.3	9.5	5.23	8.9
622 P882-738	9.1	79.9	60.2	100	3	43	0.70	400	8.4	9.5	5.29	8.8
626 NK 79D893	8.9	78.6	58.7	95	3	37	0.67	400	8.0	9.0	5.70	8.2
639 UC 639	8.3	79.2	60.7	65	3	33	0.70	400	7.6	8.0	4.58	8.6
640 UC 640	8.9	81.7	62.9	85	1	43	0.67	400	7.9	9.0	4.60	8.2
641 CD 4071	9.0	88.5	63.0	75	3	13	0.65	400	8.0	9.0	5.85	7.6
642 Gediz 1	8.4	80.0	61.4	90	2	60	0.61	400	7.6	8.0	5.94	8.3
643 CD 14472	9.4	83.5	63.7	75	2	23	0.63	400	8.5	8.0	5.14	8.3
644 UC 644	9.1	81.0	61.7	60	3	47	0.67	400	8.3	8.0	5.14	7.6
645 CD 3935	9.1	82.2	63.7	80	3	53	0.65	400	8.2	9.0	5.55	8.6
646 Stifftail 3	8.8	80.3	62.3	80	1	50	0.61	400	8.0	8.5	5.81	7.7
647 Stifftail 4	8.5	82.3	63.5	75	4	13	0.64	400	7.7	9.0	6.57	8.5
648 Loon	10.1	82.9	62.9	65	3	63	0.65	400	9.1	9.5	4.97	9.0
649 CD 8130	8.8	79.0	59.7	65	3	20	0.62	400	8.0	8.0	5.12	7.9

*See Agronomy Progress Report No. 155 for yield data. Quality analyses were performed by the Hard Red Spring and Durum Wheat Quality Laboratory, USDA, North Dakota State University, Fargo, North Dakota

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 desirable); MX = mixograph score (higher score = stronger curve); SPK = semolina speck count; SEMO MIN = semolina mineral; FALL NO = semolina falling number value (values above 300 are desirable); 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 in water of cooked spaghetti.

Table 33. 1985 Durum Wheat Quality Tests

Entry	Test weight (lb/bu)	1000 kwt (g)	Protein %	Moisture %	Ash %	Fall No. (sec)
<u>Sacramento-San Joaquin Delta 1985</u>						
169 Mexicall	63.6	59.9	12.3	8.9	1.38	400
254 Modoc	66.3	52.6	13.1	9.0	1.56	400
410 Aldura	65.0	52.6	12.2	9.0	1.42	400
422 TL 75-409	64.4	48.3	12.3	9.0	1.34	400
496 Yavaros	66.0	50.0	13.3	9.0	1.55	400
498 Mallard 'S'	64.5	63.3	11.7	9.0	1.36	400
499 Rokel 'S'	64.0	55.9	12.2	8.9	1.40	400
522 Westbred 881	64.3	59.5	13.4	8.9	1.51	400
605 D-8204	63.1	57.3	10.1	9.1	1.29	400
606 Frigate 'S'	65.1	53.8	12.7	8.9	1.41	400
607 D-8209	65.3	51.5	11.4	9.1	1.37	400
626 NK 79D893	66.6	46.3	12.2	9.1	1.47	400
639 UC 639	64.1	54.3	12.4	9.1	1.44	400
640 UC 640	64.6	59.9	11.6	9.1	1.35	400
641 CD 4071	65.4	52.6	11.9	9.1	1.34	400
642 Gediz 1	65.4	54.9	12.4	8.9	1.41	400
643 CD 14472	65.1	53.5	13.2	8.9	1.42	400
644 UC 644	64.7	50.8	11.5	9.2	1.40	400
645 CD 3935	65.5	55.6	12.4	9.0	1.40	400
646 Stifftail 3	65.1	61.7	11.5	9.0	1.30	400
647 Stifftail 4	65.5	60.2	12.6	8.9	1.28	400
648 Loon	64.7	53.8	13.0	8.8	1.34	400
649 CD 8130	64.8	56.5	12.3	9.0	1.39	400
674 Westbred Turbo	65.5	60.2	11.5	9.0	1.34	400
675 P 883-2	63.8	58.5	14.9	9.0	1.55	400
676 P 883-15	62.4	62.1	14.9	8.8	1.65	400
677 P 883-22	64.1	54.1	13.7	8.9	1.49	400
685 L-0162	65.9	58.5	12.0	9.1	1.37	400
686 CD 25126	66.0	49.0	11.9	9.2	1.33	400
<u>Kings, 1985</u>						
169 Mexicall	64.0	54.3	11.0	8.7	1.35	400
254 Modoc	65.8	48.1	12.0	8.7	1.47	400
410 Aldura	64.7	50.5	11.8	8.8	1.38	400
422 TL 75-409	63.7	47.8	11.5	9.0	1.38	400
496 Yavaros	66.0	47.8	11.5	8.9	1.46	400
498 Mallard 'S'	63.9	57.8	9.8	8.9	1.31	400
499 Rokel 'S'	63.9	50.8	11.5	8.7	1.42	400
522 Westbred 881	64.2	56.8	12.2	8.9	1.40	400
605 D-8204	63.0	57.1	10.2	8.9	1.36	400
606 Frigate 'S'	65.4	52.9	11.6	8.7	1.41	400
607 D-8209	64.8	48.1	10.3	9.1	1.37	400
626 NK 79D893	66.6	44.6	10.8	9.1	1.46	400
639 UC 639	64.4	50.8	11.0	9.0	1.43	400
640 UC 640	64.2	56.2	10.9	8.9	1.35	400
641 CD 4071	64.1	47.1	12.0	8.9	1.42	400
642 Gediz 1	64.1	54.1	11.8	8.7	1.42	400
643 CD 14472	65.4	54.9	12.0	8.7	1.41	400
644 UC 644	63.1	46.9	12.0	8.8	1.57	400
645 CD 3935	64.5	54.6	11.5	8.9	1.37	400
646 Stifftail 3	63.9	55.6	11.5	8.8	1.35	400
647 Stifftail 4	65.3	60.2	12.3	8.8	1.33	400
648 Loon	64.4	51.0	12.3	8.5	1.42	400
649 CD 8130	62.9	51.8	11.9	8.7	1.45	400
674 Westbred Turbo	65.4	57.8	10.8	9.0	1.36	400
675 P 883-2	64.1	51.0	12.4	8.8	1.46	400
676 P 883-15	62.4	57.8	13.2	8.7	1.59	400
677 P 883-22	63.9	51.5	12.1	8.7	1.45	400
685 L-0162	65.0	54.9	11.7	8.7	1.39	400
686 CD 25126	65.7	48.5	11.6	9.1	1.37	400

Quality analyses were performed by the Hard Red Spring and Durum Wheat Quality Laboratory, USDA, North Dakota State University, Fargo, ND
 PROTEIN % and ASH % AT 14% moisture basis.

Table 34. 1985 Sutter Triticale Test

Entry	Yield (lb/a)	Lodging at harvest	BYDV	Plant height (in.)	Test weight (lb/bu)	Thousand kernel weight (grams)
1 Siskiyou	5730 (14)	1.3	1.0	55	57.0	48.9
2 Beagle	6660 (10)	2.0	1.0	53	53.8	51.8
12 Juan	8030 (2)	1.3	1.3	53	56.0	56.5
22 Beaguellita 'S'	8340 (1)	1.3	1.3	48	52.6	55.0
38 Juanillo 86	7630 (3)	2.3	1.3	54	56.0	56.3
41 Grace	7380 (6)	1.0	1.0	61	54.8	50.0
42 Wytch	7310 (7)	2.0	1.3	54	53.8	53.3
43 C333	5470 (15)	1.3	2.0	45	54.4	56.5
44 C334	6840 (9)	1.3	2.8	52	59.0	45.8
51 UC 51	6640 (11)	1.0	1.0	48	53.8	46.3
52 UC 52	6950 (8)	1.8	1.3	51	55.3	49.3
53 UC 53	6290 (13)	1.0	1.3	50	51.8	45.4
54 CIN-CNO*BGL/Merino 'S'	7520 (4)	1.3	1.0	54	60.5	47.5
55 UC 55	6590 (12)	2.8	1.5	54	56.9	47.3
353 Yolo (Common wheat)	7390 (5)	1.0	1.0	40	63.0	39.3
Mean	6980	1.5	1.3	51	55.9	49.9
CV	6.5	44.0	42.7	5	1.2	3.4
LSD (.05)	650	0.9	0.8	6	1.4	3.7

Rating scale 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, and powdery mildew.

Numbers in parentheses indicate relative rank in column.

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

Table 35. 1985 UC Davis Triticale Test

Entry	Yield (lb/a)	Lodging 5/7	BYDV	Days to heading (from 3/1)	Plant height (in)	Test weight (lb/bu)	Thousand kernel weight (grams)
1 Siskiyou	4590 (15)	1.3	2.3	42	57	54.5	44.3
2 Beagle	6860 (6)	2.5	1.3	36	53	54.0	48.5
12 Juan	7360 (4)	1.8	1.5	34	51	54.4	48.5
22 Beaguellita 'S'	7190 (5)	1.3	1.0	34	44	50.5	48.0
38 Juanillo 86	7510 (3)	2.5	1.3	34	54	56.2	52.5
41 Grace	5270 (14)	1.0	1.0	46	57	52.9	45.0
42 Wytch	6840 (7)	1.8	1.3	37	51	52.4	49.8
43 C333	6080 (12)	1.0	1.8	27	45	53.2	53.8
44 C334	6740 (8)	1.0	1.5	32	44	55.2	40.5
51 UC 51	6260 (11)	1.0	1.3	43	45	53.3	42.3
52 UC 52	6560 (9)	1.0	1.0	44	48	54.4	46.5
53 UC 53	5420 (13)	1.0	1.0	39	48	51.5	46.8
54 CIN-CNO*BGL/Merino 'S'	7560 (2)	1.0	1.0	41	55	58.4	45.3
55 UC 55	6460 (10)	2.3	1.0	42	53	56.0	42.5
353 Yolo (Common wheat)	7630 (1)	1.0	1.0	41	40	62.3	36.8
Mean	6560	1.4	1.3	38	50	54.6	46.0
CV	9.9	43.3	35.0	7.7	3.4	1.4	4.4
LSD (.05)	930	0.9	0.6	6	4	1.7	4.3

Rating scale 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, and powdery mildew.

Numbers in parentheses indicate relative rank in column.

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

Table 36. 1985 Kings Triticale Test

Entry	Yield (lb/a)	Lodging 5/2	Lodging at harvest	BYDV	Plant height (in)	Test weight (lb/bu)	Thousand kernel weight (grams)
1 Siskiyou	4590 (15)	2.0	5.0	2.3	56	53.6	44.3
2 Beagle	6380 (8)	1.8	4.3	1.3	58	51.8	46.0
12 Juan	7880 (2)	1.0	2.0	1.5	61	56.4	51.3
22 Beaguelita 'S'	7770 (4)	1.0	2.3	1.0	55	52.7	49.0
38 Juanillo 86	6270 (9)	1.0	4.8	1.0	61	56.1	45.8
41 Grace	5960 (11)	1.8	4.5	1.8	52	53.5	45.5
42 Wytch	6870 (6)	1.5	4.8	1.3	59	53.5	47.3
43 C333	6530 (7)	1.0	1.8	1.0	50	53.8	50.3
44 C334	6870 (5)	1.0	3.0	1.0	53	55.2	38.5
51 UC 51	6170 (10)	1.0	4.0	1.0	51	54.1	45.5
52 UC 52	5130 (14)	1.0	4.8	1.0	53	53.6	47.8
53 UC 53	5870 (12)	1.0	3.3	1.5	51	50.5	46.8
54 CIN-CNO*BGL/Merino 'S'	8530 (1)	1.0	3.0	1.0	60	58.1	44.3
55 UC 55	5160 (13)	2.5	6.3	1.0	55	54.5	42.5
353 Yolo	7830 (3)	1.0	1.5	1.0	44	62.1	35.8
Mean	6520	1.3	3.7	1.2	55	54.6	45.4
CV	10.5	42.6	29.5	27.0	2.5	1.4	4.4
LSD (.05)	980	0.8	1.5	0.5	3	1.7	4.3

Rating scale 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 above scale) were based on percentage of plants showing folia symptoms.

Table 37. 1985 Imperial Triticale Test

Entry	Yield (lb/a)	Days to heading	Days to maturity	Plant height (in)	Lodging at harvest	BYDV	Thousand kernel weight (grams)
1 Siskiyou	5070 (13)	102	145	51	4.5	1.3	45.2
2 Beagle	5760 (11)	100	144	50	5.5	1.3	40.0
12 Juan	7740 (1)	101	145	53	2.3	1.0	49.8
22 Beaguelita 'S'	6970 (4)	98	142	45	2.5	1.0	41.8
38 Juanillo 86	6950 (5)	101	144	52	5.5	1.0	42.5
41 Grace	6070 (8)	112	153	50	2.3	1.0	41.8
42 Wytch	6750 (6)	99	143	51	6.5	2.0	41.0
43 C333	6690 (7)	97	143	42	1.8	1.0	45.8
44 C334	5780 (10)	98	142	44	3.3	1.3	36.5
51 UC 51	5980 (9)	106	149	38	2.5	1.0	36.8
52 UC 52	5200 (12)	107	149	44	4.8	1.0	40.2
53 UC 53	4870 (14)	107	149	44	1.8	1.5	40.0
54 CIN-CNO*BGL/Merino 'S'	7360 (2)	100	143	50	4.3	1.0	41.2
55 UC 55	4850 (15)	105	148	49	7.0	1.0	36.2
353 Yolo (Common wheat)	7320 (3)	102	144	38	2.0	1.0	31.0
Mean	6220	102	145	47	3.8	1.1	40.6
CV	11.4	0.9	0.9	2.8	34.3	39.8	4.1
LSD (.05)	1010	1	2	2	1.8	NS	3.6

Rating scale 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, and powdery mildew.

Numbers in parentheses indicate relative rank in column.

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

Table 38. 1985 and 1984-85 Triticale Yield Summary (lb/a)

Entry	1985 4 locations	1984-85
1 Siskiyou	4990 (15)	4120
2 Beagle	6410 (8)	4880
12 Juan	7750 (1)	6760
22 Beaguelita 'S'	7570 (3)	6860
38 Juanillo 86	7090 (5)	6360
41 Grace	6170 (11)	-
42 Wytch	6940 (6)	-
43 C333	6190 (10)	-
44 C334	6560 (7)	-
51 UC 51	6260 (9)	-
52 UC 52	5960 (12)	-
53 UC 53	5610 (14)	-
54 CIN-CNO*BGL/Merino 'S'	7740 (2)	-
55 UC 55	5770 (13)	-
353 Yolo (Common wheat)	7540 (4)	6960
Mean	6570	6160
CV	9.6	
LSD (.05)	440	

Numbers in parentheses indicate relative rank in column.

Table 39. 1985 Triticale Hay Tests

	UC Davis				Tulare				
	Yield dry wt (lb/a)	Lodging 5/7	BYDV	Plant height (in)	Yield Dry wt (lb/a)	Plant height (in)	Lodging 5/9	Lodging at harvest	BYDV
1 Siskiyou	16690 (4)	1.0	2.5	54	15830 (4)	53	2.0	2.3	3.3
12 Juan	22720 (1)	3.0	1.5	52	17230 (1)	51	1.3	1.0	2.5
45 Peace	16040 (5)	1.0	1.3	56	14300 (6)	57	1.3	1.5	2.3
46 B764	14220 (7)	1.0	1.3	59	16600 (3)	50	1.0	1.3	1.8
47 B943	14490 (6)	1.0	1.3	54	12550 (8)	63	1.0	1.0	1.8
48 C174	21730 (2)	2.8	1.5	52	14310 (5)	53	1.0	1.0	2.0
49 C328	19240 (3)	2.0	1.3	67	16670 (2)	64	3.5	4.3	2.8
50 B568-14	14070 (8)	1.0	1.0	54	14080 (7)	54	1.0	1.0	1.0
Mean	17400	1.6	1.4	56	15200	55	1.5	1.7	2.2
CV	13.6	46.4	37.0	3.0	12.0	4.6	47.1	52.1	21.2
LSD (.05)	3500	1.1	0.8	4	2690	4	1.0	1.3	0.7

Rating scale 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 above scale) were based on percentage of plants showing foliar symptoms.

Table 40. 1985 UC Davis Oat Grain Test

Entry	Yield (lb/a)	Lodging 5/7	BYDV	Powdery mildew	Plant height (in)	Test weight (lb/bu)	Thousand kernel weight (grams)
1 Curt	2970 (11)	4.8	3.0	1.8	49	34.7	29.8
2 Sierra	4490 (3)	4.3	2.3	1.3	56	38.3	29.8
3 Montezuma	3350 (9)	5.3	2.5	1.8	46	40.2	29.0
4 Cal Red	1600 (17)	3.3	3.0	1.0	51	35.9	23.3
6 Kanota	2380 (16)	5.0	3.0	1.5	50	40.7	26.5
10 Swan	3560 (7)	2.3	1.3	1.8	48	42.7	38.5
22 Cayuse	2770 (14)	2.3	1.8	1.0	54	34.5	24.5
35 Jaycee	3250 (10)	2.0	1.5	1.0	49	38.6	26.8
64 76E5	3710 (6)	2.0	1.3	1.0	55	42.1	27.0
88 Appaloosa	2830 (13)	1.8	2.0	1.0	47	32.6	21.3
89 MO 06072	2510 (15)	4.0	1.5	1.8	50	38.0	18.8
90 75Q 036-139-5D	5030 (1)	1.0	1.5	1.8	52	39.5	23.5
93 Salem/TX71C3093	2900 (12)	1.3	1.0	1.3	50	36.3	20.8
94 75Q 036-22	4370 (4)	1.3	2.0	1.5	48	37.2	21.8
95 75Q 036-83-1D	4890 (2)	2.0	1.0	2.3	46	40.9	29.3
97 Eian	3460 (8)	2.3	1.3	1.8	46	38.1	25.3
98 A82-0034(C19221 cross)	3810 (5)	1.3	1.0	2.3	53	42.3	26.5
Mean	3400	2.7	1.8	1.5	50	38.4	26.0
CV	19.2	38.7	9.8	40.2	10.1	2.9	7.0
LSD (.05)	930	1.5	0.8	0.9	NS	2.3	3.9

Rating scale 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: crown rust and stem rust.

Numbers in parentheses indicate relative rank in column.

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

Table 41. 1985 Tulare Oat Grain Test

Entry	Yield (lb/a)	Test weight (lb/bu)	Plant height (in)	Lodging 5/9	BYDV
1 Curt	3640 (16)	34.3	36	1.0	1.8
2 Sierra	5370 (6)	36.0	55	1.0	2.3
3 Montezuma	5240 (7)	37.5	44	1.0	2.0
4 Cal Red	2710 (17)	31.8	62	1.0	4.8
6 Kanota	5040 (10)	38.0	51	2.5	2.5
10 Swan	5390 (5)	38.5	48	1.0	1.8
22 Cayuse	5470 (4)	33.8	57	1.0	2.0
35 Jaycee	5050 (8)	39.8	49	1.0	1.5
64 76E5	4320 (15)	41.0	46	1.0	1.3
88 Appaloosa	5050 (9)	30.5	55	1.0	1.8
89 MO 06072	5490 (3)	40.0	56	1.0	1.0
90 75Q 036-139-5D	4530 (13)	36.8	40	1.0	2.0
93 Salem/TX71C309	4430 (14)	35.5	44	1.0	1.0
95 75Q 036-83-1D	5520 (2)	36.0	42	1.0	1.3
98 A82-0034	4930 (11)	39.3	49	1.0	1.3
316 Prato (barley)	4840 (12)	46.5	36	1.3	2.0
353 Yolo (common wheat)	6000 (1)	58.3	37	1.0	1.8
Mean	4880	38.4	47	1.1	1.9
CV	12.6	5.8	5.9	16.5	25.4
LSD (.05)	880	3.2	4	0.3	0.7

Rating scale 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: crown rust,
 stem rust, powdery mildew.

Numbers in parentheses indicate relative rank in column.

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

Table 42. 1985 Yolo Dryland Oat Grain Test

Entry	Yield (lb/a)	Plant height (in)	Test weight (lb/bu)	Thousand kernel weight (grams)
1 Curt	1660 (14)	34	37.8	34.5
2 Sierra	1990 (10)	38	36.9	27.3
3 Montezuma	2300 (2)	36	39.9	38.3
4 Cal Red	1580 (16)	40	40.4	28.8
6 Kanota	1340 (17)	41	38.7	28.0
10 Swan	2100 (6)	39	43.0	38.5
22 Cayuse	1860 (11)	36	34.7	27.0
35 Jaycee	1750 (12)	38	39.5	25.8
64 76E5	2020 (9)	35	38.5	26.8
88 Appaloosa	2050 (7)	35	33.0	28.3
89 MO 06072	1590 (15)	35	38.9	21.8
90 75Q 036-139-5D	2140 (4)	28	38.6	28.8
93 SALEM/TX71C3093	2270 (3)	32	34.4	25.3
94 75Q 036-22	2110 (5)	26	38.1	24.3
95 75Q 036-83-1D	2320 (1)	31	40.5	32.5
97 Elan	2040 (8)	31	37.9	31.5
98 A82-0034 (C19221 cross)	1670 (13)	36	38.1	32.3
Mean	1930	35	38.2	29.4
CV	14.9	9.7	3.4	4.3
LSD (.05)	410	7	2.8	2.7

Numbers in parentheses indicate relative rank in column.

Table 43. 1985 Oat Hay Tests

	Yolo Dryland		UC Davis				Tulare			
	Yield dry wt. (lb/a)	Yield dry wt. (lb/a)	Lodging 5/7	BYDV	Powdery mildew	Plant height (ln)	Yield dry wt. (lb/a)	Plant height (ln)	Lodging 5/9	BYDV
1 Curt	4310 (16)	15300 (12)	6.0	3.8	2.3	42	13270 (13)	37	1.0	2.0
2 Sierra	4870 (12)	17320 (5)	5.3	2.3	1.3	48	14620 (7)	58	2.5	2.8
3 Montezuma	4330 (15)	16670 (6)	5.8	3.3	1.0	46	12700 (15)	44	1.3	2.3
4 Cal Red	4970 (11)	13220 (17)	4.8	3.8	1.0	47	14860 (6)	63	1.5	4.3
6 Kanota	4480 (13)	15440 (11)	5.3	3.3	1.3	46	13830 (11)	54	2.8	2.0
10 Swan	5360 (9)	17750 (3)	3.8	1.8	1.8	51	15080 (4)	50	1.0	2.3
22 Cayuse	6800 (1)	17330 (4)	1.0	2.0	1.0	59	13930 (10)	64	1.5	2.0
35 Jaycee	5740 (5)	20670 (1)	2.0	1.8	1.0	53	12030 (16)	54	1.0	1.5
64 76E5	5980 (4)	16360 (8)	1.8	1.5	1.0	57	15120 (3)	50	1.0	1.3
88 Appaloosa	6080 (3)	16510 (7)	1.5	1.8	1.0	50	15080 (5)	59	1.0	2.0
89 MO 06072	5470 (6)	14720 (13)	3.5	1.5	1.0	55	14270 (8)	58	2.0	1.5
90 75Q 036-139-5D	5210 (10)	19190 (2)	2.0	2.0	2.3	44	-	-	-	-
93 Salem/TX71C309	5470 (7)	13290 (16)	2.0	1.0	1.3	53	10990 (17)	47	1.3	1.0
94 75Q 036-22	-	15690 (10)	1.5	2.8	1.3	41	-	-	-	-
95 75Q 036-83-1D	6090 (2)	14170 (15)	1.8	1.0	2.3	48	13510 (12)	45	1.0	1.3
97 Elan	5470 (8)	15830 (9)	4.5	2.0	1.5	48	-	-	-	-
98 A82-0034	4380 (14)	14210 (14)	1.5	1.5	1.3	49	15240 (2)	50	1.3	1.3
316 Prato (barley)	-	-	-	-	-	-	13120 (14)	37	3.3	2.0
353 Yolo (wheat)	-	-	-	-	-	-	15590 (1)	37	1.0	1.5
900 Briggs (barley)	-	-	-	-	-	-	14270 (9)	39	5.8	1.3
Mean	5310	16100	3.2	2.2	1.4	49	13970	50	1.8	1.9
CV	18.4	13.9	25.4	32.5	47.3	6.3	13.5	6.1	45.9	31.5
LSD (.05)	1390	3180	1.1	1.0	0.9	7	2680	4	1.2	0.8

Rating scale 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: crown rust and stem rust.

Numbers in parentheses indicate relative rank in column.

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