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1989 REGIONAL BARLEY, COMMON AND DURUM WHEAT, TRITICALE, AND OAT PERFORMANCE TESTS IN CALIFORNIA[1]

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University of California Cooperative Extension regional cereal evaluation tests were conducted in the Sacramento, San Joaquin, and Imperial Valleys and in the south central coastal region in 1989. Entries in the tests included standard cultivars, new and soon-to-be released cultivars, and advanced breeding lines from the University of California, the International Maize and Wheat Improvement Center (CIMMYT), and several private companies. Barleys (35 entries) were evaluated at 9 locations; common wheats (49 entries), at 11 locations; durum wheats (25 entries), at 4 locations; triticales (14 entries), at 5 locations; and oats (18 entries), at 3 locations.

Tests were conducted on University of California Field Stations or in fields of cooperating growers. Irrigated tests were planted at a seeding rate of 1.2 million seeds per acre (requiring from 67 to 137 lb/ac for common wheat and from 84 129 lb/ac for barley, depending on the entry). Tests were set-up in randomized complete block designs with four replications; each plot was 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. Grain was harvested with a Wintersteiger Seedmaster 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. BYD assessments, however, were based on the percentage of plants showing symptoms. Black point and yellowberry of wheat were assessed on grain

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[1]These tests were conducted as a joint program of the University of California, Davis, Agronomy Department 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; and ADM Milling, Olathe, KS. Protein determinations were made by the California Wheat Commission. The assistance of growers and quality laboratories is acknowledged with appreciation. The regional testing program is supported in part by funds provided by the California Crop Improvement Association and the California Wheat Commission.

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samples after harvest. Yields, test weights, kernel weights, plant heights, days to heading and maturity, lodging, shattering, disease reactions, and grain quality were determined as indicated in the tables. Information (location, planting dates, soil types, previous crops, fertilization, irrigation, rainfall) regarding each site is given in Table 1.

The California Agricultural Statistics Service estimated statewide harvested barley acreage at 270,000 acres (the planted acreage was 320,000), down 4% from 1988, with an average yield of 1.39 tons/acre, 5% lower than in 1988. Winter wheat was forecast at 570,000 acres harvested (the planted acreage was 625,000), 24% higher than in 1988, with an average yield of 2.43 tons/acre, 2% lower than in 1988. Thirty-six percent of California's winter wheat was planted in the San Joaquin Valley, while 44% was planted in the Sacramento Valley. The most popular cultivars in the San Joaquin Valley were Yecora Rojo, Anza, Klasic, and Yolo, grown on 68.6, 16.7, 7.8, and 2.7% of the acreage, respectively. Yolo, Anza, Tadinia, and Klasic were grown on 44.4, 42.5, 4.4, and 3.3%, respectively, of the acreage in the Sacramento Valley. No cultivar acreage survey was conducted for barley in 1989.

Crop performance was mixed this season, with some areas of good production and other areas with disappointing performance. Rainfall was lower than normal in most areas. Northern California (Cascade and Sierra) and the northern Sacramento Valley were near normal, while the southern Sacramento Valley ranged from 70-80% of normal; the San Joaquin Valley, 50-70%; the Central Coast, 40-60%; and the South Coast, 30-50%. Areas of rainfed grain generally received insufficient moisture for normal yields.

Temperature extremes affected crop production in a number of areas of the state. There was some cold damage in mid-February, but it was severe only on the earliest plantings. Extremely cold temperatures in the 2nd week of February, followed by much warmer temperatures for two weeks, caused the normally safe window of application for phenoxy herbicides to result in phytotoxicity to wheat in many areas. A yield loss of about 9% was documented in Kern Co. by a grower who compared fields managed similarly with the exception of phenoxy application. Finally, yields of fields nearing the heading and flowering stages in early April were adversely affected by extremely hot temperatures (greater than 90 F) at that time.

Common foliar diseases generally were of low severity statewide. However, scald and net blotch were of moderate to high severity on several barley cultivars in the Regional Nurseries in the Sacramento Valley. In most areas diseases had a minimal effect on yield.

The Russian wheat aphid (RWA) remains an important concern in California and other western states. By the end of the 1989 season, 15 counties in California had reported findings of RWA, although yield losses were minimal except in the Antelope Valley of Los Angeles county.

BARLEY

Average yields for the 9 barley tests ranged from 1640 lb/ac (640-2170 lb/ac) at San Luis Obispo (rainfed) to 5140 lb/ac (2720-6740 lb/ac) at Merced (Tables 2-11). Entries NK BB-86-2 and NK BB-85 were the highest yielding in the Sacramento Valley; and NK BB-86-2, Gustoe, and UC 603 in the San Joaquin Valley. In the three-year period, 1987-89, entries NK BB-85, UC 603, and UC 337 were the highest yielding in the Sacramento Valley; UC 337, Gustoe, and UC 476, in the San Joaquin Valley; and Prato, Briggs, UC 337 and UC 476, in the rainfed areas.

Yields were low at the rainfed sites, Yolo and San Luis Obispo, because of low rainfall. Yields at Kings were low because of a shortage of water for irrigation, and also by poor emergence at that site. Bird damage occurred at the Sutter, Butte, and Santa Barbara sites, and was especially severe on the 2-row barleys (entries Klages, B1202, 2B84-8589, 2B84-8591, MT 81143, and MT 140523). Lodging was severe for most entries at Sutter, Butte, and UC Davis; UC 603 was least affected by lodging at these locations.

Diseases generally occurred only in low severities. However, net blotch was severe on Prato and Fiesta at UC Davis and Sutter. Scald was severe to moderately severe on all entries except Sigra, 8690/17, UC 603, NK BB-86-2, 8691/22, UC81026-1, NK BB-82-2, NK BB-85, 8690/31, and UC 337 at Butte. Powdery mildew was severe on several entries (including Sunbar 400, Gustoe, and B2601) at UC Davis.

COMMON WHEAT

Average yields for the 11 common wheat tests ranged from 1550 lb/ac (990-2020 lb/ac) at San Luis Obispo (rainfed) to 6920 lb/ac (1580-8280 lb/ac) at Imperial (Tables 12-23). Entries S8330501 and UC 784 were the highest yielding in the Sacramento Valley; and Klasic and S8330501, in the San Joaquin Valley. In the three year period 1987-89, entries S8330501, Yolo, Serra, Tadinia, and Klasic were the highest yielding in the Sacramento Valley; Klasic, S8330501, Serra, and Yolo, in the San Joaquin Valley; and Serra, in the rainfed areas.

Yields were low at the rainfed sites because of low rainfall. Yields were also low at Kings because of a shortage of water for irrigation. Lodging was severe for several entries (including Serra, Yecora Rojo, Probred, Klasic, Baker, FMC BR 5236, FMC BR 5450, FMC BR 5784, PB BR 5710, PB BR 5762, UC 849, UC 850, UC 851, and UC 852) at UC Davis and Sutter. Diseases generally occurred at low severities in 1989, and did not affect yields.

Quality analysis of grain samples from the 1988 tests at UC Davis, Sacramento-San Joaquin Delta, and Butte Co., performed by the USDA Western Wheat Quality Laboratory, Pullman, rated entries Serra, ESCA 1, ESCA 2, NK 85S318R, and FMC 5758 as promising from each location (Table 24). Entries Baker, NK 84S8148, NK 85S318W, UC 702, UC 786, and FMC 5745 were rated as promising from two of the three locations. ADM Milling rated most of the entries from the 1988 Kings Common Wheat test as having good to excellent milling quality (Table

25). However, the entries were rated only fair to poor for baking quality because of too open bread crumb grain structure. Entries that were rated fair for baking quality and that had good baking absorption, mixing time, and loaf volume scores included Klasic, Serra, Yecora Rojo, Probred, ESCA 1, ESCA 2, and UC 784. Average grain protein scores for the 1989 Common Wheat tests ranged from 9.99% at Sutter to 13.66% at Kern (Table 26). Entries ESCA 2, PB BR 5710, UC 849, and PB BR 5738 had the highest average protein scores. Quality analysis of grain samples from tests conducted in 1989 is in progress.

DURUM WHEAT

Average yields of the four durum wheat tests ranged from 3720 lb/ac (2480-4990 lb/ac) at Kings to 8370 lb/ac (7010-10060 lb/ac) at Imperial (Tables 27-31). Entries Westbred Turbo, Carcomun "S", and UC 781 were the highest yielding in 1989, while Yavaros 79, Westbred Turbo, Altar 84, and Aldura have been the highest yielding in the three-year period 1987-89.

Yields at Kings were low because of a shortage of water for irrigation. Test weights and kernel weights also were very low at Kings. Lodging was severe at UC Davis. Entries least affected by lodging included Aldura, PH 885-60, Nudura, FMC D5238, and Imperial. Diseases generally were at low levels, but black point was severe at Imperial. The nursery at Imperial averaged 10% black point, and only entries UC 782 and Septre had less than 5% black point.

Quality analysis of grain samples from the 1988 Durum tests performed by the USDA Hard Red Spring and Durum Wheat Quality Laboratory, Fargo, ND, showed that entries Imperial, NK 85D9699, PH 883-2, UC 742, FMC D5172, Westbred 881, and UC 743 had promise at each location (Table 32). Average protein scores for the 1989 tests at UC Davis and Sacramento-San Joaquin Delta were 14.21 and 14.61%, respectively (Table 33). Entries Westbred 881, Imperial, and Nudura had the highest protein scores. Entries PH 885-60, Nudura, FMC D5317, PH 884-11 and Westbred 881 had the highest sedimentation scores. Quality analysis of grain samples from tests conducted in 1989 is in progress.

TRITICALE

Average yields of the five triticale tests ranged from 3960 lb/ac (2850-4890 lb/ac) at Santa Barbara to 6710 lb/ac (5540-7430 lb/ac) at Imperial (Tables 34-39). Entries Eronga 83, Juan, and Platypuss "S" were the highest yielding in 1989, while Faro "S", Juan and UC 54 were the highest yielding in the three-year period 1987-89. Juan has yielded 116% of the common wheat Yolo from 1987-89.

Yields were low at Kings because of a shortage of water for irrigation. Lodging was severe at Sutter and Davis, where only entries SUN 403 and SUN R-084 had less than 50% lodging. Diseases were of little importance in 1989.

OAT

Average yields of the three oat grain tests ranged from 900 lb/ac (230-2030 lb/ac) at Yolo (rainfed) to 4030 lb/ac (1600-7610 lb/ac) at Butte (Tables 40-43). Entry 75Q-036-83-1D was the highest yielding in 1989 as well as in the three-year period, 1987-89.

Yields were low at Yolo (rainfed) because of low moisture availability. Lodging was moderate to severe at UC Davis on all entries except Ogle, A81-006, and 75Q-036-83-1D. Diseases occurred only in low severities, so did not affect yields.

Forage yields at Yolo (rainfed) were poor because of water stress, averaging 7040 lb/ac (dry wt.)(Table 45). Entry 75Q-036-83-1D was the highest yielding at Tulare (24,4400 lb/ac), while the hay barley BFC 79-18 was the highest yielding at Stanislaus (5640 lb/ac) (Table 48). Entries Kanota, Montezuma, Cal Red, and A82-0058 were the finest stemmed.

TABLE 1. SITE CHARACTERISTICS FOR UC REGIONAL CEREAL EVALUATION TESTS, 1989.

Location	Test	Planting Date	Soil Type	1988 Crop	Fertilization	Irrigation	Rainfall Yr/After Plant
Butte Co. M&T Ranch Chico	Wheat Barley Oat	11/18/88	Columbia loam	Beans	Preplant: 82# N (NH_3) With seed: 70# 18-46-0 Topdress: 42# N (NH_4NO_3)	Flood 3x (15" total)	20.6"/17.2"
Sutter Co. Newhall Land & Farming Meridian	Wheat Barley Triticale	11/11/88	Capay silty clay	Sugar beets	Preplant: 105# N (aqua)	Flood 1x (7" total)	17.1"/16.8"
UC Davis Agronomy Farm Davis	Wheat Triticale Barley Oats	11/14/88 11/8/88	Yolo fine sandy loam	Beans	Wheat preplant: 120# N (NH_3) Barley preplant: 60# N (NH_3) With seed: 90# 11-52-0-2S Wheat topdress: 44# N (jointing) 36# N (anthesis) Barley topdress: 44# N (jointing)	Flood 1x (6" total)	12.0"/12.1"
Yolo Co. Vern Horgan Yolo	Wheat Barley Oat	11/9/88	Sehorn clay	Fallow	With seed: 90# 16-20-0-13S Topdress: 28# N (NH_4NO_3)	None	13.1"/13.0"
Sacramento Co. Lewallen Ranch Tyler Island	Wheat	11/30/88	Egbert muck	Corn	With seed: 100# 11-52-0-2S	Subsurface 1x, 6" total	8.0"/8.0"
Merced Co. San Juan Ranch Los Banos	Wheat Barley	11/16/88	Columbia clay loam	Cotton	Preplant: 90# N (urea)	Flood 3x (23.9" total)	4.9"/4.9"
Stanislaus Co. Don Ulm Modesto	Oat Hay	11/15/88	Modesto loam	Corn	None	Flood 1x (6" total)	
Tulare Co. ICI Americas Farmersville	Oat Hay	12/7/88	Foster fine sandy loam	Barley	Preplant: 100# N, 50# P_2O_5	Flood 2x (12" total)	8.0"/8.0"

Location	Test	Planting Date	Soil Type	1988 Crop	Fertilization	Irrigation	Rainfall Yr/After Plant
Kings Co. Newton Bros. Stratford	Wheat Triticale Barley	12/7/88	Tulare clay	Cotton	Wheat preplant: 173# N, 40# P_2O_5, 5# Zn (NH_3 + MAP) Barley preplant: 143# N, 40# P_2O_5, 5# Zn (NH_3 + MAP) Wheat topdress: 46# N (urea)	Flood 2x (12" total)	4.4"/2.7"
Kern Co. J.G. Boswell Kern Lake	Wheat	12/5/88	Merced clay loam	Cotton	Preplant: 157# N (NH_3), 150# 11-52-0 Topdress: 41# N (UN-32)	Flood 3x (19" total)	5.5"/4.5"
Kern Co. Fabri Bros. Delano	Barley	12/5/88	Traver loam	Cotton	Topdress: 120# N (NH_3 and UN-32)	Flood 6x (24" total)	5.5"/4.5"
San Luis Obispo White Ranch Shandon	Wheat Barley	11/28/88	Pico fine sandy loam	Fallow	With Seed: 150# 30-12-0-6S-2Zn-1.6Fe	None	6.2"/5.6"
Santa Barb. Co. Gainey Ranch Santa Ynez	Wheat Barley Triticale	11/29/88	Ballard Fine sandy loam	Alfalfa	Preplant: 90# N (aqua) Topdress: 40# N	Sprinkler 3x, 8" total	6.6"/6.0"
Imperial Co. IVAC El Centro	Wheat Triticale	12/15/88	Meloland clay loam	Sudan grass	Preplant: 100# N (urea); 60# P_2O_5 Topdress: 50# N (urea, tillering); 50# N (urea, boot)	Flood 6X (24" total)	0.85"/0.85"

TABLE 2. 1989 BUTTE BARLEY TEST.

ENTRY		YIELD	LODGING ON 5/10	LODGING AT HARVEST	SHATTER	NET BLOTCH	SCALD	POWDERY MILDEW	PLANT HEIGHT	TEST WEIGHT	THOUSAND KERNEL WEIGHT
		(lbs/acre)						(inches)	(lbs/bu)	(lbs/bu)	(grams)
2	BRIGGS	3650 (23)	7.3	6.8	3.0	1.3	4.0	1.0	41	43.1	39.8
191	CM 72	3590 (25)	7.8	8.0	2.0	1.0	4.5	1.0	41	43.6	40.7
209	KLAGES	3070 (30)	5.8	5.0	5.0	1.0	3.8	1.0	38	49.0	38.4
316	PRATO	4400 (14)	5.8	6.5	1.0	2.8	2.5	1.0	40	44.6	39.5
337	UC 337	4970 (5)	4.8	4.5	1.3	1.0	2.3	1.0	42	45.5	39.8
365	SUNBAR 400	3600 (24)	5.8	7.3	3.0	1.3	4.0	1.3	34	42.3	43.7
476	UC 476	4380 (17)	5.0	4.0	1.3	1.5	3.5	1.0	41	45.6	39.0
584	NK B8-82-2	5170 (4)	1.8	2.5	2.3	2.3	1.8	1.0	41	45.0	45.5
603	UC 603	5280 (3)	1.0	1.0	1.3	1.0	1.3	1.0	36	45.0	36.6
618	GUSTOE	4410 (13)	1.3	6.0	2.0	1.0	5.5	1.3	33	46.7	39.3
647	SUNBAR 458	4750 (8)	4.3	4.0	1.8	1.3	1.8	1.0	37	45.1	43.0
703	FIESTA	4640 (10)	1.5	5.5	1.8	1.5	4.8	1.0	33	46.5	43.2
705	NK BB-85	5410 (2)	2.5	4.0	2.0	1.0	1.8	1.0	37	44.2	40.3
730	NK BB-86-2	6910 (1)	1.8	2.3	1.0	1.3	1.3	1.0	35	45.2	43.5
757	PH 584-11	4790 (7)	1.0	7.0	1.8	1.0	4.0	1.0	35	46.5	43.2
771	B1202	3200 (29)	4.3	5.5	4.5	1.0	4.3	1.0	36	45.8	37.0
775	UC81026-1	4700 (9)	5.5	6.3	1.8	2.0	1.5	1.0	38	44.8	40.9
777	8690/12	4400 (15)	5.0	5.3	1.8	2.5	2.8	1.0	39	45.6	40.2
778	8690/14	4520 (12)	4.3	4.0	1.0	1.0	3.0	1.0	35	43.8	45.3
779	8690/17	4390 (16)	6.3	7.3	1.8	1.0	1.0	1.0	38	43.9	38.3
781	8690/31	4920 (6)	6.0	6.0	1.5	1.8	1.8	1.0	40	45.2	40.2
782	8690/37	3940 (19)	5.5	6.0	1.8	2.5	2.5	1.0	39	44.5	38.4
784	8691/22	3410 (26)	7.3	7.5	1.8	1.0	1.3	1.0	42	41.8	40.2
787	PH 585-6	4610 (11)	1.3	2.8	1.5	1.0	3.5	1.3	38	46.6	43.6
790	FMC 5041	4230 (18)	1.5	4.8	1.8	1.3	4.5	1.0	35	43.1	32.2
791	FMC 5068	2740 (33)	2.0	6.8	1.5	1.0	6.5	1.0	33	45.2	35.4
792	FMC 5072	3020 (31)	2.0	7.3	2.0	1.0	6.5	1.0	30	44.3	32.8
793	FMC 5120	2950 (32)	1.0	7.8	1.5	1.0	7.0	1.0	32	44.0	32.4
796	SIGRA	3350 (27)	3.3	3.3	2.5	1.0	1.0	1.0	43	45.3	41.8
797	B2601	3760 (22)	1.3	6.0	3.8	1.0	3.3	1.5	41	47.1	35.8
798	2B84-8589	3860 (20)	1.0	4.3	2.8	1.0	6.3	1.0	33	47.0	35.7
799	2B84-8591	3780 (21)	1.0	5.8	2.0	1.0	6.8	1.0	33	47.8	34.1
800	PH 586-2	3310 (28)	6.3	7.0	3.5	1.5	3.3	1.0	36	43.0	37.0
802	MT 81143	2400 (34)	5.3	4.3	4.3	1.0	5.5	1.0	41	48.3	41.7
803	MT 140523	2220 (35)	4.5	4.3	5.3	1.0	3.8	1.0	43	50.3	42.7
MEAN		4080	3.8	5.3	2.2	1.3	3.5	1.0	37	45.3	39.5
CV		14.6	30.7	18.1	43.7	27.1	23.0	21.5	4.1	2.1	4.1
LSD (.05)		840	1.6	1.3	1.4	0.5	1.1	NS	3	1.9	3.3

Rating scale for diseases (area of flag-1 leaf affected), lodging, and shatter: 1 = 0-3%, 2 = 4-14%; 3 = 15-29%; 4 = 30-49%; 5 = 50-69%; 6 = 70-84%; 7 = 85-95%; 8 = 96-100%.
Diseases assessed but occurring in trace or less amounts: BYDV and leaf rust.
Numbers in parentheses indicate relative rank in column.

TABLE 3. 1989 SUTTER BARLEY TEST.

ENTRY		YIELD	LODGING ON 5/1	LODGING AT HARVEST	SHATTER	BYDV	NET BLOTCH	SCALD	POWDERY MILDEW	PLANT HEIGHT	TEST WEIGHT	THOUSAND KERNEL WEIGHT
		(lbs/acre)								(inches)	(lbs/bu)	(grams)
2	BRIGGS	3500 (27)	6.3	6.5	2.8	1.0	1.8	2.3	1.0	43	44.6	40.6
191	CM 72	3190 (30)	6.5	7.0	3.5	1.0	2.0	1.3	1.3	40	46.0	42.5
209	KLAGES	2380 (33)	5.8	4.8	5.0	1.5	1.0	1.0	1.0	42	49.1	38.5
316	PRATO	4340 (19)	6.8	6.8	1.5	1.3	3.0	1.0	1.0	43	44.6	38.5
337	UC 337	4430 (13)	6.5	5.0	1.8	1.0	1.5	1.3	1.5	42	46.5	41.3
365	SUNBAR 400	4610 (11)	6.5	7.5	3.5	1.0	1.5	1.5	2.5	37	43.1	42.1
476	UC 476	4380 (17)	6.0	6.0	2.0	1.3	1.8	1.0	1.0	40	46.2	40.1
584	NK BB-82-2	4400 (14)	5.8	5.5	1.5	1.0	1.8	1.0	1.8	40	43.3	40.6
603	UC 603	5300 (3)	3.3	3.8	1.8	1.0	1.5	1.0	1.0	37	46.7	35.5
618	GUSTOE	4770 (9)	2.0	7.0	2.0	1.0	2.0	2.0	2.5	34	47.5	40.6
647	SUNBAR 458	5160 (4)	3.8	4.3	2.0	2.0	1.3	1.0	1.0	38	44.2	42.3
703	FIESTA	4200 (21)	4.8	6.0	2.3	1.0	5.0	1.0	1.3	34	46.7	43.0
705	NK BB-85	5500 (1)	4.5	6.0	1.3	2.0	1.5	1.0	1.0	37	43.2	39.2
730	NK BB-86-2	5360 (2)	5.5	6.0	2.3	1.0	1.5	1.0	1.5	37	46.0	37.3
757	PH 584-11	4380 (16)	1.8	6.0	1.8	1.0	2.3	1.8	1.0	35	46.2	42.0
771	B1202	2790 (32)	7.0	6.5	5.0	1.5	1.0	1.5	1.0	39	46.4	35.5
775	UC81026-1	4760 (10)	6.3	6.0	1.8	1.0	1.5	2.0	2.3	40	43.8	39.0
777	8690/12	4190 (22)	6.5	6.5	3.8	1.0	2.3	1.0	1.0	40	44.6	35.2
778	8690/14	4960 (5)	4.8	6.0	2.0	1.8	1.5	1.0	1.0	38	45.7	46.5
779	8690/17	4360 (18)	5.8	7.8	2.0	1.0	1.0	1.0	1.0	38	42.2	33.6
781	8690/31	4320 (20)	6.3	7.8	1.8	1.3	1.5	1.0	1.0	43	43.9	37.8
782	8690/37	3870 (25)	6.8	6.0	3.5	1.3	1.5	1.3	1.0	41	42.5	33.5
784	8691/22	4560 (12)	7.3	7.0	1.0	1.0	1.3	1.0	1.0	41	41.7	40.2
787	PH 585-6	4870 (8)	4.3	4.8	1.5	1.0	1.3	1.5	1.8	35	47.7	42.4
790	FMC 5041	4880 (7)	3.0	6.8	1.0	1.3	1.8	2.0	1.3	35	42.2	33.5
791	FMC 5068	4130 (24)	3.3	8.0	1.0	1.0	1.0	2.8	2.3	30	44.5	34.8
792	FMC 5072	3570 (26)	3.8	6.8	1.5	1.0	1.5	2.0	2.5	29	41.5	31.8
793	FMC 5120	3460 (28)	4.5	7.3	1.0	1.0	1.0	1.8	2.3	30	41.9	31.7
796	SIGRA	3300 (29)	3.3	3.3	1.0	1.3	1.0	1.0	1.0	42	45.3	39.5
797	B2601	4910 (6)	2.8	8.0	2.8	1.0	1.0	1.5	3.0	40	47.3	34.2
798	2B84-8589	4160 (23)	2.5	7.5	3.0	1.3	1.5	1.8	1.0	34	47.0	32.9
799	2B84-8591	4400 (15)	1.5	6.3	2.5	2.0	1.5	3.5	1.0	32	48.4	34.0
800	PH 586-2	2810 (31)	7.0	7.3	3.0	1.0	2.5	1.3	1.3	36	39.9	31.9
802	MT 81143	2320 (34)	4.5	3.3	5.5	1.8	1.0	2.3	1.0	45	52.0	45.8
803	MT 140523	1810 (35)	4.5	3.0	7.0	2.0	1.3	1.0	1.0	45	50.6	43.3
MEAN		4120	4.9	6.1	2.5	1.2	1.6	1.5	1.4	38	45.2	38.3
CV		17.2	25.4	20.1	55.6	33.1	34.0	64.4	31.6	4.4	1.7	4.8
LSD (.05)		1000	1.7	1.7	1.9	0.6	0.8	1.3	0.6	3	1.6	3.7

Rating scale for diseases (area of flag-1 leaf affected), lodging, and shatter: 1 = 0-3%, 2 = 4-14%; 3 = 15-29%; 4 = 30-49%; 5 = 50-69%; 6 = 70-84%; 7 = 85-95%; 8 = 96-100%.
Diseases assessed but occurring in trace or less amounts: leaf rust.
Numbers in parentheses indicate relative rank in column.
BYDV ratings (see scale above) were based on percentage of plants showing foliar symptoms.

TABLE 4. 1989 UC DAVIS BARLEY TEST.

ENTRY		YIELD	LODGING ON 4/27	LODGING AT HARVEST	SHATTER	BYDV	LEAF RUST	NET BLOTCH	SCALD	POWDERY MILDEW	DAYS TO HEADING AFTER 3/1	DAYS TO MATURITY AFTER 3/1	PLANT HEIGHT	TEST WEIGHT	THOUSAND KERNEL WEIGHT
		(lbs/acre)											(inches)	(lbs/bu)	(grams)
2	BRIGGS	4970 (11)	6.3	6.5	2.0	1.3	1.3	3.8	1.3	1.0	34	75	43	40.7	36.8
191	CM 72	4640 (18)	7.5	8.0	2.0	1.8	1.0	2.0	3.3	1.5	32	74	42	45.5	39.8
209	KLAGES	4780 (15)	6.3	5.3	2.8	1.5	1.0	1.0	2.0	1.3	37	74	45	50.9	38.5
316	PRATO	4160 (25)	6.5	7.5	1.5	1.0	1.5	5.3	1.0	1.3	35	75	41	43.7	34.2
337	UC 337	4940 (12)	6.8	5.8	2.3	1.0	1.3	1.0	1.3	2.5	36	77	46	47.0	37.6
365	SUNBAR 400	3770 (30)	6.0	7.5	1.3	1.0	1.3	1.0	3.0	4.3	35	73	37	44.9	39.4
476	UC 476	5290 (7)	5.8	4.5	1.8	1.3	1.8	3.0	1.5	1.5	40	77	42	45.1	36.8
584	NK BB-82-2	5300 (6)	1.5	4.0	2.3	1.3	1.3	2.8	1.0	3.8	37	75	43	45.0	41.3
603	UC 603	5290 (8)	1.0	1.8	1.0	1.3	1.0	1.5	1.0	1.5	32	77	39	47.2	36.7
618	GUSTOE	4630 (19)	1.0	7.0	2.0	1.0	2.3	2.3	3.5	4.8	42	75	34	42.3	28.0
647	SUNBAR 458	5440 (5)	1.8	3.3	1.5	1.0	1.8	1.3	1.0	2.0	39	75	40	44.9	39.1
703	FIESTA	4160 (26)	1.3	7.3	3.0	1.0	1.0	4.3	1.8	1.8	30	75	36	49.1	42.1
705	NK BB-85	5960 (1)	1.3	4.5	2.0	1.0	1.5	1.8	1.0	2.3	34	76	38	44.6	38.1
730	NK BB-86-2	5780 (3)	1.0	7.3	1.5	1.5	1.0	1.0	1.0	2.3	33	77	38	46.5	37.2
757	PH 584-11	4660 (17)	1.0	6.0	2.5	1.0	1.0	2.5	1.8	2.8	42	75	35	42.5	34.0
771	B1202	4280 (23)	6.8	8.0	3.8	1.0	1.0	2.5	2.8	1.0	36	73	41	47.2	35.3
775	UC81026-1	4570 (20)	7.0	7.8	1.5	1.0	1.3	2.8	1.3	2.0	36	75	43	43.4	34.0
777	8690/12	4570 (21)	5.3	7.0	1.0	1.0	1.3	3.5	1.0	1.0	35	75	43	46.2	36.3
778	8690/14	5850 (2)	2.5	4.3	1.3	1.0	1.5	2.8	1.0	1.5	36	75	41	46.8	46.1
779	8690/17	4910 (13)	6.8	6.5	2.5	1.3	1.3	1.3	1.3	1.0	34	73	41	41.8	32.1
781	8690/31	4870 (14)	6.8	6.5	1.8	1.5	1.0	2.0	1.3	2.3	35	73	43	41.6	32.0
782	8690/37	4390 (22)	4.8	6.5	2.8	1.0	1.0	2.3	1.8	1.0	38	74	44	42.9	31.0
784	8691/22	4230 (24)	6.8	7.0	1.3	1.0	1.5	1.5	1.0	1.3	39	77	42	45.4	37.0
787	PH 585-6	5460 (4)	1.3	3.5	1.5	1.3	1.3	1.5	1.5	2.3	42	82	40	47.1	37.5
790	FMC 5041	4690 (16)	1.0	5.3	1.3	1.0	3.3	2.3	2.0	2.3	42	74	34	43.8	28.8
791	FMC 5068	3700 (31)	1.0	8.0	1.3	1.0	3.0	1.5	1.8	3.3	47	76	29	42.5	28.8
792	FMC 5072	3120 (34)	1.0	7.5	1.3	1.3	3.5	2.3	3.5	3.5	53	77	29	43.8	30.0
793	FMC 5120	3840 (29)	1.0	8.0	1.0	1.0	2.8	1.3	3.8	3.3	49	75	28	41.2	27.5
796	SIGRA	2630 (35)	3.8	4.5	2.8	2.0	1.0	1.0	1.0	1.5	52	79	46	44.8	33.8
797	B2601	3540 (32)	1.0	7.0	3.3	2.0	1.0	1.0	1.5	4.8	46	77	41	46.8	29.8
798	2B84-8589	3890 (28)	1.0	2.8	1.3	1.8	2.0	2.0	2.8	1.3	60	80	33	46.4	30.1
799	2B84-8591	3970 (27)	1.0	4.0	1.3	1.3	1.5	1.0	4.8	2.3	60	79	30	46.7	30.4
800	PH 586-2	3450 (33)	5.8	7.5	4.5	1.0	1.0	3.0	1.8	1.5	45	77	37	40.5	29.0
802	MT 81143	5110 (9)	6.3	5.8	2.5	1.3	1.5	1.8	2.0	1.3	32	76	47	52.7	41.0
803	MT 140523	4980 (10)	7.8	7.8	2.0	2.0	1.0	1.0	1.5	1.0	38	75	45	50.7	38.5
MEAN		4570	3.8	6.0	2.0	1.2	1.5	2.1	1.8	2.1	40	76	39	45.2	35.1
CV		17.7	20.2	18.5	44.9	35.2	36.4	26.2	46.4	32.0	5.5	2.2	4.9	3.4	5.6
LSD (.05)		1140	1.1	1.6	1.2	0.6	0.8	0.8	1.2	0.9	4	3	4	3.2	4.0

Rating scale for diseases (area of flag-1 leaf affected), lodging, and shatter: 1 = 0-3%, 2 = 4-14%; 3 = 15-29%; 4 = 30-49%; 5 = 50-69%; 6 = 70-84%; 7 = 85-95%; 8 = 96-100%.
Numbers in parentheses indicate relative rank in column.
BYDV ratings (see scale above) were based on percentage of plants showing foliar symptoms.

TABLE 5. 1989 MERCED BARLEY TEST.

ENTRY		YIELD	LODGING ON 4/24	LODGING AT HARVEST	SHATTER	LEAF RUST	PLANT HEIGHT	TEST WEIGHT	THOUSAND KERNEL WEIGHT
		(lbs/acre)					(inches)	(lbs/bu)	(grams)
2	BRIGGS	5570 (10)	3.0	4.3	1.5	1.0	41	49.1	44.9
191	CM 72	5630 (6)	4.8	5.0	1.8	1.0	32	49.6	46.0
209	KLAGES	4270 (32)	1.8	1.8	2.5	1.3	41	54.7	44.7
316	PRATO	4560 (27)	3.5	4.3	1.0	1.5	34	48.5	40.8
337	UC 337	5490 (13)	2.5	2.3	2.0	1.0	41	49.7	41.3
365	SUNBAR 400	5550 (11)	1.8	3.8	1.5	1.3	32	47.1	50.3
476	UC 476	4870 (25)	2.0	1.8	1.3	1.0	34	50.0	41.8
584	NK BB-82-2	5400 (16)	1.3	1.8	1.8	1.0	38	46.7	44.3
603	UC 603	5690 (4)	1.0	1.0	1.0	1.3	33	49.8	37.7
618	GUSTOE	5430 (15)	1.0	5.3	1.3	2.0	33	48.5	39.2
647	SUNBAR 458	5520 (12)	1.3	2.3	1.0	1.5	34	48.9	39.3
703	FIESTA	5490 (14)	1.0	1.8	1.5	1.3	29	52.3	50.0
705	NK BB-85	5620 (7)	1.3	1.5	1.0	1.0	31	47.9	42.7
730	NK BB-86-2	6740 (1)	1.0	2.0	1.0	1.0	35	47.4	42.3
757	PH 584-11	5050 (23)	1.0	2.3	1.5	1.5	30	49.8	47.9
771	B1202	4600 (26)	3.0	3.8	1.5	1.5	40	52.2	42.4
775	UC81026-1	6330 (2)	2.3	3.3	1.8	1.0	34	47.7	41.4
777	8690/12	5590 (8)	1.5	1.5	1.0	1.0	35	48.6	40.5
778	8690/14	5580 (9)	1.3	1.3	1.5	1.0	31	47.1	47.5
779	8690/17	5360 (17)	2.5	3.5	1.8	1.0	34	46.6	39.3
781	8690/31	5850 (3)	2.3	2.5	1.8	1.3	41	49.5	44.0
782	8690/37	5350 (18)	1.5	1.8	1.3	1.0	39	46.8	37.8
784	8691/22	5000 (24)	2.5	3.5	1.8	1.3	41	44.1	40.3
787	PH 585-6	5670 (5)	1.0	1.5	1.3	1.3	31	51.6	45.1
790	FMC 5041	5250 (20)	1.0	2.8	1.0	2.0	29	47.9	37.0
791	FMC 5068	4410 (31)	1.0	5.5	1.5	2.5	29	46.1	34.7
792	FMC 5072	4460 (29)	1.0	4.5	1.0	2.5	27	45.4	31.9
793	FMC 5120	4430 (30)	1.3	4.0	1.0	2.5	27	46.5	33.8
796	SIGRA	2720 (35)	2.8	3.3	4.3	1.0	48	46.6	38.6
797	B2601	5340 (19)	1.0	3.3	2.3	1.5	39	51.2	39.7
798	2B84-8589	4270 (33)	1.0	1.8	1.3	1.8	29	51.6	38.3
799	2B84-B591	5220 (21)	1.0	1.8	1.3	1.8	26	52.3	37.3
800	PH 586-2	5070 (22)	2.3	5.8	1.5	1.0	35	46.3	37.7
802	MT 81143	4500 (28)	2.3	2.3	1.5	1.3	38	54.9	43.9
803	MT 140523	4120 (34)	2.8	3.3	3.5	1.3	42	54.7	43.4
MEAN		5140	1.8	2.9	1.6	1.4	35	49.1	41.4
CV		13.7	58.4	62.2	40.9	33.1	10.2	2.4	5.9
LSD (.05)		990	1.5	2.5	0.9	0.6	7	2.4	5.0

Rating scale for diseases (area of flag-1 leaf affected), lodging, and shatter: 1 = 0-3%; 2 = 4-14%; 3 = 15-29%; 4 = 30-49%; 5 = 50-69%; 6 = 70-84%; 7 = 85-95%; 8 = 96-100%.
Diseases assessed but occurring in trace or less amounts: BYDV, net blotch, scald, and powdery mildew.
Numbers in parentheses indicate relative rank in column.

TABLE 6. 1989 KINGS BARLEY TEST.

ENTRY		YIELD	BYDV	LEAF RUST	PLANT HEIGHT	TEST WEIGHT	THOUSAND KERNEL WEIGHT
		(lbs/acre)			(inches)	(lbs/bu)	(grams)
2	BRIGGS	2610 (11)	2.5	1.0	23	46.4	42.3
191	CM 72	2200 (23)	1.8	1.0	20	48.0	41.4
209	KLAGES	1950 (31)	2.5	1.0	24	53.5	39.0
316	PRATO	2360 (17)	2.5	1.0	20	48.7	40.9
337	UC 337	2310 (18)	1.3	1.0	19	47.2	34.8
365	SUNBAR 400	2290 (19)	2.5	1.0	21	48.3	43.8
476	UC 476	2160 (25)	1.3	1.0	21	49.5	40.8
584	NK BB-82-2	2990 (5)	1.8	1.0	22	47.2	43.3
603	UC 603	2950 (6)	1.0	1.0	23	49.9	36.7
618	GUSTOE	3120 (3)	1.3	1.0	19	49.9	34.8
647	SUNBAR 458	2240 (22)	2.0	1.0	20	49.9	43.3
703	FIESTA	1060 (35)	1.0	1.0	19	47.8	38.7
705	NK BB-85	2290 (20)	1.5	1.0	19	48.5	41.0
730	NK BB-86-2	2700 (10)	3.0	1.0	20	47.5	39.5
757	PH 584-11	2140 (28)	1.5	1.0	18	48.4	37.1
771	B1202	2590 (12)	1.3	1.0	24	51.9	39.2
775	UC81026-1	2260 (21)	1.0	1.0	19	47.7	41.8
777	8690/12	2010 (30)	2.3	1.0	18	48.9	41.1
778	8690/14	2150 (27)	1.0	1.0	19	49.8	43.5
779	8690/17	2050 (29)	1.0	1.0	20	47.2	40.8
781	8690/31	2550 (14)	2.8	1.0	22	46.5	37.0
782	8690/37	2160 (26)	2.0	1.0	19	47.2	36.5
784	8691/22	3080 (4)	1.3	1.0	23	46.8	43.4
787	PH 585-6	2400 (16)	1.0	1.0	19	51.0	38.1
790	FMC 5041	3290 (2)	1.5	1.0	17	49.4	35.0
791	FMC 5068	2700 (9)	1.3	1.5	18	50.0	34.9
792	FMC 5072	2760 (7)	1.0	1.3	19	50.6	35.3
793	FMC 5120	2750 (8)	1.0	1.0	19	49.1	32.3
796	SIGRA	1100 (34)	1.0	1.0	26	46.0	34.3
797	B2601	2580 (13)	2.8	1.0	23	50.7	34.6
798	2B84-8589	1900 (32)	1.8	1.0	20	49.3	31.8
799	2B84-8591	1470 (33)	1.0	1.0	19	51.1	32.5
800	PH 586-2	3400 (1)	1.3	1.0	22	47.2	37.2
802	MT 81143	2180 (24)	2.0	1.0	24	54.2	42.3
803	MT 140523	2400 (15)	1.5	1.0	26	54.9	41.4
MEAN		2380	1.6	1.0	21	49.1	38.6
CV		17.0	39.6	12.7	6.9	2.1	5.5
LSD (.05)		570	0.9	0.2	3	2.1	4.3

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 = 95-100%.
Diseases assessed but occurring in trace or less amounts: net blotch, scald, and powdery mildew.
Numbers in parentheses indicate relative rank in column.
BYDV ratings (see scale above) were based on percentage of plants showing foliar symptoms.

TABLE 7. 1989 KERN BARLEY TEST.

ENTRY		YIELD	PLANT HEIGHT	LODGING ON 5/3	LODGING AT HARVEST	SHATTER	BYDV	LEAF RUST	NET BLOTCH	TEST WEIGHT	THOUSAND KERNEL WEIGHT
		(lbs/acre)	(inches)							(lbs/bu)	(grams)
2	BRIGGS	4760 (20)	39	4.0	5.3	1.5	1.3	1.0	1.0	48.5	43.8
191	CM 72	4030 (32)	38	6.0	7.8	2.3	1.0	1.0	1.0	47.3	41.0
209	KLAGES	3980 (34)	41	2.5	2.5	1.8	2.5	1.0	1.0	54.8	43.3
316	PRATO	4520 (23)	35	2.5	2.5	1.0	1.3	1.0	1.0	45.2	34.5
337	UC 337	4560 (22)	40	5.0	7.0	1.0	1.0	1.0	1.0	48.3	37.7
365	SUNBAR 400	4170 (29)	29	2.8	4.0	1.0	1.3	1.0	1.0	47.1	49.8
476	UC 476	4640 (21)	38	3.3	3.3	1.0	1.8	1.0	1.0	49.9	42.2
584	NK BB-82-2	5200 (11)	34	1.0	1.0	1.0	1.8	1.0	1.0	45.0	40.5
603	UC 603	5470 (6)	34	1.0	1.0	1.0	2.0	1.0	1.0	49.2	37.2
618	GUSTOE	6170 (1)	31	1.0	1.0	1.0	2.0	1.5	1.3	51.3	42.0
647	SUNBAR 458	4800 (19)	34	1.0	1.0	1.0	2.5	1.0	1.0	49.1	45.7
703	FIESTA	5870 (2)	31	1.3	1.0	1.0	1.5	1.3	1.3	50.1	46.6
705	NK BB-85	5820 (3)	34	1.0	1.0	1.0	1.3	1.3	1.0	47.7	41.7
730	NK BB-86-2	5620 (4)	32	1.5	2.5	1.0	1.3	1.3	1.0	49.8	42.0
757	PH 584-11	4470 (25)	31	1.3	1.0	1.0	1.5	1.0	1.0	41.2	32.0
771	B1202	4380 (27)	40	1.5	1.5	1.3	1.5	1.0	1.0	55.1	47.8
775	UC81026-1	4830 (18)	36	2.0	1.3	1.0	1.0	1.0	1.0	44.9	36.6
777	8690/12	5120 (13)	35	2.5	2.8	1.0	1.5	1.0	1.0	49.7	40.3
778	8690/14	5400 (8)	32	1.0	1.0	1.0	1.0	1.0	1.0	48.1	47.5
779	8690/17	5020 (16)	36	1.0	2.0	1.0	1.0	1.0	1.0	44.5	35.6
781	8690/31	5090 (14)	39	2.5	3.0	1.0	1.3	1.0	1.0	46.5	38.8
782	8690/37	3980 (33)	35	3.3	3.5	1.3	1.0	1.0	1.0	45.0	32.2
784	8691/22	5000 (17)	36	5.0	5.3	1.0	1.0	1.0	1.0	46.4	43.2
787	PH 585-6	5250 (9)	33	1.0	2.5	1.0	1.3	1.0	1.0	51.5	42.8
790	FMC 5041	5540 (5)	30	1.0	1.0	1.0	1.5	1.5	1.0	48.9	38.2
791	FMC 5068	5420 (7)	30	1.3	2.3	1.0	1.5	1.8	1.8	48.4	36.7
792	FMC 5072	4200 (28)	26	1.0	2.8	1.0	1.3	1.5	1.0	45.5	30.0
793	FMC 5120	5150 (12)	27	1.0	1.8	1.0	2.0	1.8	1.0	48.4	36.7
796	SIGRA	3850 (35)	41	2.5	3.5	2.8	1.0	1.0	1.0	45.6	37.8
797	B2601	5020 (15)	33	1.0	1.5	1.3	2.3	1.3	1.0	52.2	39.5
798	2B84-8589	4450 (26)	29	1.0	1.5	1.0	2.8	1.8	1.0	51.7	37.1
799	2B84-8591	4070 (31)	28	1.0	1.0	1.0	2.5	1.5	1.0	53.7	44.2
800	PH 586-2	5220 (10)	34	1.0	1.8	1.0	1.3	1.0	1.3	47.2	40.5
802	MT 81143	4160 (30)	40	1.0	1.0	1.0	1.5	1.0	1.0	54.7	46.3
803	MT 140523	4480 (24)	42	2.8	2.3	1.0	2.3	1.0	1.0	55.2	46.0
MEAN		4850	34	2.0	2.4	1.1	1.5	1.1	1.0	48.8	40.5
CV		14.3	7.3	72.6	68.6	25.8	37.3	25.8	20.7	4.1	9.0
LSD (.05)		970	4	2.0	2.3	0.4	0.8	0.4	0.3	4.1	7.4

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

TABLE 8. 1989 SANTA BARBARA BARLEY TEST.

ENTRY		YIELD	LODGING ON 4/25	LODGING AT HARVEST	SHATTER	LEAF RUST	SCALD	POWDERY MILDEW	PLANT HEIGHT	TEST WEIGHT	THOUSAND KERNEL WEIGHT
		(lbs/acre)							(inches)	(lbs/bu)	(grams)
2	BRIGGS	3240 (12)	1.5	2.3	1.8	1.8	3.0	1.0	36	48.4	44.8
191	CM 72	2600 (28)	3.0	5.8	1.8	1.0	2.5	1.0	34	46.1	40.3
209	KLAGES	2680 (24)	1.0	1.3	2.0	1.0	3.5	1.0	32	52.2	37.3
316	PRATO	2600 (27)	1.5	1.5	1.3	2.0	2.8	1.8	34	45.2	37.1
337	UC 337	3340 (9)	1.0	1.3	1.0	1.3	2.3	2.0	34	47.9	39.3
365	SUNBAR 400	3260 (10)	1.5	4.3	1.0	1.8	2.0	2.5	34	45.4	43.5
476	UC 476	2920 (19)	1.0	1.3	1.0	1.8	2.3	1.5	33	49.8	42.2
584	NK BB-82-2	3120 (13)	1.0	1.3	1.5	1.5	3.3	1.3	33	47.4	43.8
603	UC 603	3640 (6)	1.0	1.3	1.3	2.0	3.0	1.0	32	49.0	37.3
618	GUSTOE	3590 (7)	1.0	1.8	1.0	1.8	2.0	1.8	26	50.0	37.6
647	SUNBAR 458	3090 (14)	1.0	1.0	1.0	1.5	2.5	1.0	31	46.8	41.9
703	FIESTA	3850 (2)	1.0	1.3	1.0	1.8	1.5	2.0	26	50.4	43.5
705	NK BB-85	3840 (3)	1.0	1.5	1.0	1.5	2.5	1.0	31	47.1	38.3
730	NK BB-86-2	3930 (1)	1.0	4.5	1.0	1.3	1.3	1.0	33	47.7	37.8
757	PH 584-11	2800 (21)	1.0	1.5	1.0	1.0	2.5	1.0	25	49.3	40.0
771	B1202	3700 (5)	2.5	3.3	1.8	1.5	2.8	1.0	33	51.9	42.3
775	UC81026-1	3390 (8)	1.0	1.5	1.0	1.8	2.3	2.5	30	46.5	40.0
777	8690/12	2300 (30)	1.0	1.3	1.0	1.5	3.3	1.0	32	45.2	32.9
778	8690/14	3710 (4)	1.3	1.3	1.0	1.5	2.0	1.0	33	46.4	42.1
779	8690/17	3050 (16)	1.5	3.3	1.0	1.3	1.8	1.0	35	46.1	37.9
781	8690/31	2930 (18)	1.5	3.0	1.3	1.3	3.0	2.3	37	47.2	41.1
782	8690/37	1680 (32)	1.3	2.3	2.8	1.3	3.3	1.0	31	48.0	37.1
784	8691/22	3050 (15)	2.0	1.5	1.0	1.0	2.8	1.0	35	45.7	39.3
787	PH 585-6	2960 (17)	1.0	1.0	1.0	1.3	1.8	1.0	28	48.2	38.0
790	FMC 5041	2610 (26)	1.0	1.0	1.0	1.5	3.5	1.0	29	51.6	32.2
791	FMC 5068	2660 (25)	1.0	1.0	1.0	2.0	3.0	1.3	28	49.4	36.3
792	FMC 5072	1670 (33)	1.0	1.0	1.0	1.5	3.0	1.3	28	49.3	35.1
793	FMC 5120	1150 (34)	1.3	2.5	1.3	2.0	3.0	1.8	28	49.6	37.0
796	SIGRA	1090 (35)	3.3	4.8	6.0	1.0	1.5	1.0	42	47.6	35.1
797	B2601	2760 (23)	1.0	2.0	1.0	1.5	2.5	1.5	29	51.4	35.5
798	2B84-8589	2570 (29)	1.0	1.0	1.3	1.3	1.8	1.0	24	51.2	35.6
799	2B84-8591	2770 (22)	1.0	1.3	1.3	2.0	3.0	1.0	24	53.0	34.8
800	PH 586-2	2880 (20)	1.0	2.5	1.3	1.0	2.5	1.8	26	47.1	37.3
802	MT 81143	3250 (11)	1.0	3.3	1.3	1.8	2.3	1.0	35	53.4	41.4
803	MT 140523	1890 (31)	1.3	4.5	7.0	1.3	1.8	1.0	35	52.6	39.5
MEAN		2870	1.3	2.1	1.5	1.5	2.5	1.3	31	48.7	38.7
CV		25.6	47.8	69.8	54.1	37.5	34.1	59.5	9.3	2.9	5.2
LSD (.05)		1030	0.9	2.1	1.2	0.8	1.2	1.1	6	2.8	4.1

Rating scale for diseases (area of flag-1 leaf affected), lodging, and shatter: 1 = 0-3%, 2 = 4-14%; 3 = 15-29%; 4 = 30-49%; 5 = 50-69%; 6 = 70-84%; 7 = 85-95%; 8 = 96-100%.
Diseases assessed but occurring in trace or less amounts: BYDV and net blotch.
Numbers in parentheses indicate relative rank in column.

TABLE 9. 1989 YOLO DRYLAND BARLEY TEST.

ENTRY		YIELD	LODGING AT HARVEST	SHATTER	PLANT HEIGHT	TEST WEIGHT	THOUSAND KERNEL WEIGHT
		(lbs/acre)			(inches)	(lbs/bu)	(grams)
2	BRIGGS	2920 (1)	1.5	1.3	37	43.6	32.2
191	CM 72	2670 (6)	1.8	1.0	27	43.7	29.7
209	KLAGES	2040 (24)	1.0	1.0	31	45.3	22.2
316	PRATO	2720 (3)	1.0	1.0	30	41.3	26.4
337	UC 337	2460 (13)	1.0	1.0	31	39.3	22.9
365	SUNBAR 400	2680 (5)	1.3	1.0	25	39.8	27.8
476	UC 476	2600 (8)	1.0	1.0	31	43.2	28.8
584	NK BB-82-2	2480 (12)	1.0	1.3	30	39.7	27.7
603	UC 603	1850 (29)	1.0	1.0	30	44.7	26.3
618	GUSTOE	1850 (28)	1.0	1.0	20	40.5	21.1
647	SUNBAR 458	2250 (19)	1.0	1.0	28	40.9	26.6
703	FIESTA	2040 (25)	1.0	1.0	20	41.8	25.5
705	NK BB-85	2520 (11)	1.0	1.0	27	40.4	26.9
730	NK BB-86-2	2150 (22)	1.3	1.0	26	39.7	25.9
757	PH 584-11	1390 (35)	1.0	1.0	21	35.1	19.6
771	B1202	2430 (15)	1.0	1.0	33	43.7	24.7
775	UC81026-1	2610 (7)	1.0	1.0	31	42.6	28.0
777	8690/12	2700 (4)	1.0	1.0	31	41.8	26.5
778	8690/14	2540 (9)	1.0	1.0	28	40.7	28.4
779	8690/17	2280 (18)	1.3	1.0	30	39.4	24.4
781	8690/31	2420 (16)	1.0	1.0	33	42.4	28.7
782	8690/37	2450 (14)	1.3	1.0	31	39.1	24.0
784	8691/22	2350 (17)	1.0	1.0	31	37.8	25.3
787	PH 585-6	1850 (30)	1.0	1.0	20	41.3	24.6
790	FMC 5041	2100 (23)	1.0	1.0	26	38.1	20.8
791	FMC 5068	1640 (32)	1.0	1.0	19	38.1	21.0
792	FMC 5072	2200 (20)	1.0	1.0	19	41.0	23.0
793	FMC 5120	1470 (34)	1.0	1.0	18	39.1	21.4
796	SIGRA	1850 (27)	1.0	1.0	27	41.1	22.9
797	B2601	1910 (26)	1.5	1.3	29	44.7	23.4
798	2B84-8589	1830 (31)	1.0	1.3	20	45.4	22.0
799	2B84-8591	1610 (33)	1.0	1.3	23	45.7	21.5
800	PH 586-2	2160 (21)	1.3	1.0	23	33.2	20.1
802	MT 81143	2530 (10)	1.0	1.0	32	47.1	27.2
803	MT 140523	2770 (2)	1.0	1.3	32	47.4	27.9
MEAN		2240	1.1	1.0	27	41.4	25.0
CV		19.8	25.8	19.8	4.8	3.5	8.0
LSD (.05)		620	0.4	NS	3	3.0	4.0

Rating scale for lodging and shatter: 1 = 0-3%, 2 = 4-14%; 3 = 15-29%; 4 = 30-49%; 5 = 50-69%; 6 = 70-84%; 7 = 85-95%; 8 = 96-100%.
Diseases assessed but occurring in trace or less amounts: BYDV, leaf rust, net blotch, scald, powdery mildew.
Numbers in parentheses indicate relative rank in column.

TABLE 10. 1989 SAN LUIS OBISPO DRYLAND BARLEY TEST.

ENTRY		YIELD	LODGING ON 4/25	LODGING AT HARVEST	PLANT HEIGHT	TEST WEIGHT	THOUSAND KERNEL WEIGHT
		(lbs/acre)			(inches)	(lbs/bu)	(grams)
2	BRIGGS	2010 (9)	1.0	1.0	26	46.3	33.9
191	CM 72	1900 (13)	3.0	3.3	25	48.0	28.6
209	KLAGES	1090 (30)	1.0	1.0	27	53.9	35.3
316	PRATO	1760 (17)	1.0	1.0	23	47.1	30.6
337	UC 337	2030 (8)	1.0	1.0	23	48.2	28.4
365	SUNBAR 400	2160 (2)	1.0	1.0	21	45.4	32.6
476	UC 476	1810 (16)	1.0	1.0	22	50.0	34.3
584	NK BB-82-2	2140 (3)	1.0	1.0	25	47.4	32.2
603	UC 603	1600 (23)	1.0	1.0	25	48.5	29.7
618	GUSTOE	1750 (18)	1.0	1.0	17	52.4	28.9
647	SUNBAR 458	1610 (22)	1.0	1.0	22	48.5	31.5
703	FIESTA	2040 (6)	1.0	1.0	20	48.5	28.2
705	NK BB-85	1980 (11)	1.0	1.0	21	47.2	29.5
730	NK BB-86-2	1980 (10)	1.0	1.0	21	46.4	31.0
757	PH 584-11	2040 (7)	1.0	1.0	17	50.7	28.3
771	B1202	1850 (14)	1.0	1.0	25	52.9	32.5
775	UC81026-1	2080 (4)	1.0	1.0	25	47.9	33.5
777	B690/12	1600 (24)	1.0	1.0	24	47.7	32.8
778	8690/14	1970 (12)	1.0	1.0	23	47.2	34.3
779	8690/17	1820 (15)	1.0	1.0	25	44.7	33.0
781	8690/31	1520 (26)	1.0	1.0	24	47.3	35.0
782	8690/37	1250 (29)	1.0	1.0	22	47.4	29.5
784	8691/22	810 (31)	1.0	1.0	26	45.1	32.9
787	PH 585-6	1590 (25)	1.0	1.0	19	51.5	29.2
790	FMC 5041	1640 (21)	1.0	1.0	20	50.2	24.9
791	FMC 5068	720 (33)	1.0	1.0	14	49.5	26.4
792	FMC 5072	790 (32)	1.0	1.0	13	50.6	25.8
793	FMC 5120	670 (34)	1.0	1.0	13	50.8	27.3
796	SIGRA	640 (35)	1.0	1.0	23	49.8	30.8
797	B2601	1740 (19)	1.0	1.0	25	52.6	28.0
798	2B84-8589	1490 (27)	1.0	1.0	19	52.5	31.3
799	2B84-8591	1470 (28)	1.0	1.0	20	53.7	29.7
800	PH 586-2	1720 (20)	1.0	1.0	19	46.7	29.5
802	MT 81143	2170 (1)	1.0	1.0	26	55.6	35.6
803	MT 140523	2070 (5)	1.0	1.0	29	55.6	34.4
MEAN		1640	1.1	1.1	22	49.4	30.8
CV		16.7	0.0	7.9	6.5	2.1	4.7
LSD (.05)		380	0.0	0.1	3	2.1	2.9

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 11. 1989 AND 1987-89 BARLEY YIELD SUMMARY (LB/ACRE).

ENTRY		SACRAMENTO VALLEY			SAN JOAQUIN VALLEY			DRYLAND		
		1989 3 LOC	1988-89 6 LOC/YR	1987-89 9 LOC/YR	1989 3 LOC	1988-89 6 LOC/YR	1987-89 9 LOC/YR	1989 2 LOC	1988-89 4 LOC/YR	1987-89 6 LOC/YR
2	BRIGGS	4040 (23)	4610 (19)	4880 (10)	4310 (14)	4130 (13)	4410 (5)	2470 (1)	2910 (5)	2450 (2)
191	CM 72	3810 (26)	4340 (21)	4480 (11)	3960 (23)	3920 (21)	4100 (10)	2290 (7)	2240 (21)	2060 (9)
209	KLAGES	3410 (30)	3710 (25)	4080 (12)	3400 (34)	3350 (25)	3510 (12)	1570 (30)	2230 (22)	1860 (12)
316	PRATO	4300 (18)	4860 (15)	5200 (9)	3810 (28)	4090 (17)	4280 (9)	2240 (11)	3080 (1)	2480 (1)
337	UC 337	4780 (8)	5330 (4)	5780 (3)	4120 (20)	4560 (2)	4870 (1)	2250 (9)	2980 (3)	2440 (4)
365	SUNBAR 400	3990 (24)	4550 (20)		4000 (22)	3640 (24)		2420 (3)	2720 (11)	
476	UC 476	4680 (10)	5170 (8)	5430 (6)	3890 (24)	4470 (4)	4630 (3)	2200 (12)	3080 (2)	2450 (3)
584	NK BB-82-2	4960 (7)	5150 (10)	5610 (4)	4530 (7)	4390 (6)	4540 (4)	2310 (6)	2860 (7)	2310 (6)
603	UC 603	5290 (3)	5830 (1)	5910 (2)	4710 (3)	4060 (20)	4310 (8)	1730 (25)	2540 (15)	2100 (8)
618	GUSTOE	4610 (13)	4980 (12)	5410 (7)	4910 (2)	4760 (1)	4650 (2)	1800 (24)	2510 (17)	2000 (10)
647	SUNBAR 458	5120 (4)			4180 (16)			1930 (20)		
703	FIESTA	4330 (17)	4920 (13)	5300 (8)	4140 (19)	3710 (23)	4080 (11)	2040 (17)	2710 (12)	2210 (7)
705	NK BB-85	5630 (2)	5810 (2)	6100 (1)	4580 (5)	4140 (12)	4340 (6)	2250 (10)	2800 (8)	2350 (5)
730	NK BB-86-2	6010 (1)			5020 (1)			2070 (15)		
757	PH 584-11	4610 (12)	5170 (9)	5530 (5)	3890 (25)	4060 (19)	4320 (7)	1710 (27)	2380 (19)	1890 (11)
771	B1202	3420 (28)			3850 (26)			2140 (14)		
775	UC81026-1	4680 (11)	5210 (7)		4470 (9)	4120 (15)		2350 (5)	2950 (4)	
777	8690/12	4380 (16)	4700 (18)		4240 (15)	4370 (7)		2150 (13)	2790 (9)	
778	8690/14	5110 (5)	5250 (6)		4380 (11)	4430 (5)		2260 (8)	2780 (10)	
779	8690/17	4550 (15)	4980 (11)		4140 (18)	3890 (22)		2050 (16)	2690 (13)	
781	8690/31	4700 (9)	5290 (5)		4500 (8)	4530 (3)		1970 (18)	2870 (6)	
782	8690/37	4070 (20)	4770 (17)		3830 (27)	4060 (18)		1850 (22)	2660 (14)	
784	8691/22	4070 (21)	4820 (16)		4360 (12)	4300 (10)		1580 (29)	2250 (20)	
787	PH 585-6	4980 (6)	5490 (3)		4440 (10)	4340 (9)		1720 (26)	2520 (16)	
790	FMC 5041	4600 (14)	4890 (14)		4690 (4)	4360 (8)		1870 (21)	2500 (18)	
791	FMC 5068	3520 (27)	3810 (24)		4180 (17)	4100 (16)		1180 (34)	2200 (23)	
792	FMC 5072	3230 (32)	4280 (22)		3810 (29)	4120 (14)		1500 (32)	2000 (25)	
793	FMC 5120	3420 (29)	3890 (23)		4110 (21)	4230 (11)		1070 (35)	2120 (24)	
796	SIGRA	3090 (34)			2560 (35)			1250 (33)		
797	B2601	4070 (19)			4320 (13)			1830 (23)		
798	2B84-8589	3970 (25)			3540 (33)			1660 (28)		
799	2B84-8591	4050 (22)			3590 (32)			1540 (31)		
800	PH 586-2	3190 (33)			4560 (6)			1940 (19)		
802	MT 81143	3270 (31)			3610 (31)			2350 (4)		
803	MT 140523	3000 (35)			3670 (30)			2420 (2)		
MEAN		4260	4870	5310	4120	4160	4340	1940	2610	2220
CV		16.7	13.7	10.7	14.9	15.2	14.1	19.0	13.7	14.5
LSD (.05)		570	380	260	490	360	280	360	250	180

Numbers in parentheses indicate relative rank in column.

TABLE 12. 1989 BUTTE COMMON WHEAT TEST.

ENTRY		YIELD	LODGING ON 5/22	LODGING AT HARVEST	SHATTER	SEPTORIA	PLANT HEIGHT	TEST WEIGHT	BLACK POINT	YELLOW-BERRY	THOUSAND KERNEL WEIGHT
		(lbs/acre)					(inches)	(lbs/bu)			(grams)
20	ANZA	6590 (20)	1.3	1.3	1.0	1.0	38	62.0	3.5	3.5	35
112	YECORA ROJO	6270 (34)	1.5	1.5	1.3	1.5	33	61.9	2.5	1.5	46
221	PHOENIX	7090 (2)	1.0	1.0	1.0	2.3	37	62.0	2.0	6.0	37
243	PROBRED	6400 (30)	1.3	1.5	1.3	1.3	34	61.4	2.0	2.0	48
353	YOLO	6610 (18)	1.5	1.8	1.0	1.0	40	62.2	1.0	4.0	36
415	KLASIC	6930 (6)	1.3	1.3	1.0	1.3	35	63.4	3.0	2.0	48
538	PROBRAND 775	5500 (47)	1.0	1.0	1.0	4.3	32	59.4	2.0	3.5	36
544	TADINIA	6860 (8)	1.0	1.0	1.0	1.0	40	63.0	1.0	5.0	41
638	SERRA	6820 (10)	4.3	5.3	1.0	1.3	43	62.7	2.0	1.5	41
671	S8330501	6990 (5)	1.5	2.3	1.0	1.0	37	61.5	1.0	1.0	39
716	BAKER	6560 (21)	1.5	1.8	1.0	2.5	33	62.1	3.0	1.5	46
776	ESCA 2	6510 (24)	1.0	1.0	1.3	1.0	41	62.2	2.0	2.0	43
778	ESCA 4	6760 (11)	1.0	1.0	1.3	1.0	36	62.4	1.5	1.5	42
779	ESCA 5	7180 (1)	1.0	1.0	1.0	1.0	41	62.9	1.5	1.0	42
784	UC 784	6860 (7)	1.0	1.0	1.0	1.0	33	62.7	4.0	1.0	49
785	UC 785	6160 (37)	1.0	1.0	1.0	1.0	35	62.4	3.0	1.5	44
786	UC 786	6830 (9)	1.8	1.8	1.0	1.0	36	62.3	1.0	2.0	39
788	OA 984-034	6690 (13)	1.0	1.3	1.0	1.0	40	62.4	1.0	2.0	42
804	FMC BR 5144	6540 (22)	1.5	1.8	1.0	1.0	39	62.2	2.0	4.5	39
821	FMC BR 5236	6680 (14)	1.5	1.5	1.0	1.5	38	60.7	2.0	1.5	40
822	FMC BR 5450	6120 (39)	1.0	1.0	1.0	2.0	34	63.6	3.0	1.0	45
823	FMC BR 5678	6670 (16)	1.5	1.8	1.0	1.8	34	61.2	3.5	1.0	45
824	FMC BR 5784	6290 (32)	1.3	1.0	1.0	1.0	37	59.7	2.5	3.0	41
825	OA 984-146	6100 (40)	1.0	1.0	1.0	1.8	37	59.6	3.0	1.5	35
826	OA 984-039	6740 (12)	1.0	1.0	1.3	1.0	41	62.8	1.5	1.0	41
827	PB BR 5702	6670 (15)	1.5	1.8	1.3	1.5	35	61.2	2.0	1.0	46
828	PB BR 5710	6200 (36)	1.8	2.0	1.0	1.5	33	61.7	2.0	1.0	45
829	PB BR 5738	5960 (42)	1.0	1.0	1.0	2.3	30	61.2	1.0	1.0	44
830	PB BR 5762	6420 (29)	4.8	5.8	1.0	1.5	37	59.9	1.5	1.5	42
834	QT 555	6300 (31)	1.3	1.3	1.5	1.0	45	61.6	1.5	5.5	40
835	QT 562	6490 (25)	2.5	2.8	1.0	1.0	44	61.4	1.0	5.5	39
836	QT 574	5260 (49)	4.3	5.0	1.5	1.0	44	61.1	1.5	4.0	38
837	QT 578	6240 (35)	1.3	1.3	1.0	1.0	38	61.9	2.0	4.5	40
838	QT 588	6630 (17)	1.5	1.8	1.0	1.3	39	61.8	2.5	4.5	45
839	UC 839	6130 (38)	1.0	1.0	1.0	1.0	29	60.8	1.5	2.0	37
840	UC 840	7040 (4)	1.0	1.0	1.3	1.0	28	61.8	2.5	2.5	47
841	UC 841	5270 (48)	1.0	1.0	1.3	1.0	30	58.8	1.0	2.0	37
842	UC 842	5900 (44)	1.0	1.0	1.0	1.0	31	59.9	1.0	1.0	40
843	UC 843	5920 (43)	1.0	1.0	1.0	1.0	29	60.4	1.0	1.0	41
844	UC 844	5870 (45)	1.0	1.0	1.0	1.0	34	60.1	2.0	3.0	39
845	UC 845	6270 (33)	1.0	1.0	1.0	1.0	40	62.3	2.5	1.0	42
846	UC 846	6460 (27)	1.8	2.0	1.0	1.3	41	61.9	2.0	1.0	39
847	UC 847	7080 (3)	3.3	4.0	2.0	1.8	43	62.7	2.5	1.5	47
848	YECORA ROJO 87W	6540 (23)	1.0	1.0	1.0	2.0	32	61.9	2.0	1.5	42
849	UC 849	5780 (46)	1.5	1.8	1.0	1.5	35	60.4	2.0	6.5	36
850	UC 850	6590 (19)	3.3	5.0	2.0	2.3	40	61.0	3.0	7.0	37
851	UC 851	6450 (28)	3.5	3.8	1.8	1.3	45	61.6	1.0	1.5	41
852	UC 852	6480 (26)	2.3	3.5	1.8	2.0	39	60.2	2.5	7.0	38
853	ESCA 32	6010 (41)	1.0	1.0	1.0	4.3	34	59.9	4.0	1.0	38
MEAN		6420	1.6	1.8	1.1	1.4	37	61.5	2.0	2.5	41
CV		5.6	43.3	47.9	24.7	36.2	4.6	0.8	20.0	30.2	2.9
LSD (.05)		510	1.0	1.2	0.4	0.7	3	1.0	0.8	1.5	2

Rating scale for diseases (area of flag-1 leaf affected), lodging, shatter, and yellowberry: 1 = 0-3%, 2 = 4-14%; 3 = 15-29%; 4 = 30-49%; 5 = 50-69%; 6 = 70-84%; 7 = 85-95%; 8 = 96-100%.
Diseases assessed but occurring in trace or less amounts: BYDV, leaf rust, stripe rust, and powdery mildew.
Numbers in parentheses indicate relative rank in column.

TABLE 13. 1989 SUTTER COMMON WHEAT TEST.

ENTRY		YIELD	LODGING ON 5/10	LODGING AT HARVEST	BYDV	SEPTORIA	PLANT HEIGHT	TEST WEIGHT	BLACK POINT	YELLOW-BERRY	THOUSAND KERNEL WEIGHT
		(lbs/acre)					(inches)	(lbs/bu)			(grams)
20	ANZA	6090 (14)	1.0	2.3	1.0	1.0	39	62.7	3.0	6.0	36.7
112	YECORA ROJO	5700 (31)	3.3	4.0	1.5	1.3	37	62.1	3.5	1.0	46.6
221	PHOENIX	6100 (12)	1.5	3.0	1.0	1.0	38	62.5	2.0	7.5	37.4
243	PROBRED	5990 (17)	3.5	5.3	1.3	1.0	38	61.8	3.5	1.5	46.0
353	YOLO	6320 (8)	1.3	2.3	1.0	1.0	39	62.8	1.0	6.0	35.6
415	KLASIC	5810 (24)	2.3	3.0	2.3	1.3	37	63.2	4.0	1.5	44.2
538	PROBRAND 775	5730 (28)	1.0	1.0	1.0	2.8	32	58.8	2.5	1.5	35.3
544	TADINIA	6000 (16)	2.0	2.0	1.3	1.0	42	61.9	1.0	6.5	39.0
638	SERRA	5260 (41)	6.3	7.8	1.0	1.0	42	61.6	2.5	4.5	39.8
671	S8330501	6170 (10)	1.8	4.5	1.0	1.0	41	62.4	1.0	2.0	38.1
716	BAKER	5110 (44)	3.8	5.0	1.0	1.3	36	62.1	4.5	1.0	43.0
776	ESCA 2	5500 (34)	2.3	3.3	1.0	1.0	42	62.6	2.0	4.5	41.5
778	ESCA 4	6130 (11)	2.0	2.8	1.0	1.0	41	62.3	1.5	1.5	40.1
779	ESCA 5	6590 (2)	2.3	2.5	1.0	1.0	41	62.9	2.0	1.0	41.0
784	UC 784	6510 (4)	1.5	1.5	1.0	1.3	38	62.8	3.5	1.0	47.3
785	UC 785	6350 (6)	1.0	1.0	1.0	1.0	36	63.1	3.0	1.0	45.7
786	UC 786	6560 (3)	1.3	2.0	1.0	1.3	38	62.9	1.5	3.0	42.3
788	DA 984-034	6370 (5)	1.8	2.5	1.0	1.0	42	63.0	2.0	2.5	40.8
804	FMC BR 5144	6660 (1)	1.5	2.8	1.0	1.0	41	62.7	1.5	6.5	37.3
821	FMC BR 5236	5480 (35)	4.8	6.5	2.0	1.0	40	61.0	2.0	2.5	41.8
822	FMC BR 5450	5080 (45)	4.0	5.0	1.0	1.0	37	63.2	3.0	1.0	41.5
823	FMC BR 5678	5910 (20)	2.0	3.8	1.0	1.0	36	61.2	5.0	1.0	44.2
824	FMC BR 5784	5700 (30)	2.0	3.3	1.3	1.3	39	59.5	1.0	2.5	38.7
825	DA 984-146	6020 (15)	1.0	1.3	1.3	1.5	39	60.6	1.5	3.0	35.3
826	DA 984-039	6100 (13)	2.3	3.5	1.0	1.0	40	63.1	1.5	1.5	40.5
827	PB BR 5702	5790 (25)	2.8	3.5	1.0	1.0	38	62.1	3.5	1.0	46.5
828	PB BR 5710	5340 (38)	4.5	5.5	1.5	1.0	37	62.3	2.5	1.0	44.8
829	PB BR 5738	5710 (29)	1.3	1.5	1.3	2.0	33	62.3	1.5	1.0	39.1
830	PB BR 5762	4880 (47)	7.3	8.0	1.3	1.0	40	59.5	2.0	1.0	39.0
834	QT 555	5370 (37)	1.0	1.3	1.3	1.0	44	61.6	1.0	7.0	39.4
835	QT 562	5160 (43)	2.0	3.0	1.0	1.0	46	60.6	1.0	7.0	35.8
836	QT 574	4550 (49)	3.0	3.5	1.0	1.0	44	61.2	1.0	4.5	36.7
837	QT 578	5760 (26)	1.0	1.5	1.0	1.0	40	62.0	1.5	6.5	36.6
838	QT 588	6320 (7)	1.0	1.8	1.0	1.0	39	62.0	1.5	7.0	41.3
839	UC 839	5530 (33)	1.0	1.0	1.0	1.0	30	61.1	1.5	2.5	35.4
840	UC 840	6300 (9)	1.3	1.5	1.0	1.3	29	61.2	3.0	1.5	44.5
841	UC 841	5320 (39)	1.0	1.0	1.3	1.0	32	60.2	1.5	2.5	34.1
842	UC 842	5960 (19)	1.0	1.0	1.0	1.0	32	60.9	2.0	1.5	37.8
843	UC 843	5730 (27)	1.0	1.0	1.3	1.0	31	60.8	2.0	2.0	38.8
844	UC 844	5830 (23)	1.0	1.0	1.3	1.0	34	61.0	3.0	2.0	37.5
845	UC 845	5900 (21)	2.5	3.3	1.0	1.0	42	63.5	3.5	1.0	41.4
846	UC 846	5310 (40)	3.3	5.5	1.5	1.0	41	62.5	3.0	1.0	37.9
847	UC 847	5610 (32)	4.3	5.3	1.3	1.0	43	63.4	3.0	2.0	45.8
848	YECORA ROJO 87W	5990 (18)	1.0	2.0	1.8	1.0	35	63.1	2.5	1.5	41.8
849	UC 849	4930 (46)	3.3	5.3	1.0	1.3	38	61.9	3.5	5.0	32.5
850	UC 850	5240 (42)	3.0	6.8	1.0	1.0	40	61.4	3.5	8.0	35.7
851	UC 851	5470 (36)	4.8	5.8	1.0	1.3	44	61.2	2.0	5.5	38.8
852	UC 852	4600 (48)	4.8	6.8	1.0	2.0	39	60.6	3.0	7.5	33.0
853	ESCA 32	5890 (22)	1.0	1.0	1.5	2.0	36	60.8	2.0	1.0	35.8
MEAN		5750	2.3	3.2	1.2	1.2	38	61.8	2.3	3.1	39.8
CV		7.4	44.8	36.1	34.5	30.5	3.2	0.7	22.8	23.9	3.3
LSD (.05)		590	1.5	1.6	0.6	0.5	2	0.9	1.1	1.5	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, and powdery mildew.
Numbers in parentheses indicate relative rank in column.
BYDV ratings (see scale above) were based on percentage of plants showing foliar symptoms.

TABLE 14. 1989 UC DAVIS COMMON WHEAT TEST.

ENTRY	YIELD	LODGING ON 5/12	LODGING AT HARVEST	SHATTER	BYDV	STRIPE RUST	SEPTORIA	DAYS TO HEADING AFTER 3/1	DAYS TO MATURITY AFTER 3/1	PLANT HEIGHT	TEST WEIGHT	BLACK POINT	YELLOW-BERRY	THOUSAND KERNEL WEIGHT
	(lbs/acre)									(inches)	(lbs/bu)			(grams)
20 ANZA	5780 (29)	2.5	4.5	1.0	1.3	1.0	1.3	47	89	34	63.5	1.0	1.0	34.8
112 YECORA ROJO	5840 (27)	4.5	7.0	1.8	1.0	1.0	1.0	40	83	31	62.3	1.5	1.0	43.0
221 PHOENIX	5490 (37)	3.0	4.5	1.5	1.0	1.0	1.0	48	93	34	62.2	1.0	1.0	31.9
243 PROBRED	5870 (23)	4.5	7.0	2.8	1.0	1.0	1.0	41	84	31	62.7	1.5	1.0	44.5
353 YOLO	6680 (2)	3.8	5.5	1.0	1.0	1.0	1.0	47	92	33	63.9	1.0	1.0	36.1
415 KLASIC	6010 (17)	6.5	7.0	2.0	1.0	1.0	1.3	39	84	34	63.0	1.5	1.0	44.5
538 PROBRAND 775	5860 (25)	1.3	2.0	1.0	1.3	1.8	2.5	46	85	29	57.5	1.0	1.0	31.6
544 TADINIA	6620 (3)	1.5	1.8	2.3	1.0	1.0	1.0	43	86	38	62.0	1.0	2.5	35.2
638 SERRA	5950 (19)	6.5	7.5	2.0	1.3	1.0	1.0	47	93	37	62.5	1.5	1.0	37.4
671 S8330501	7240 (1)	2.5	3.3	1.0	1.0	1.0	1.0	41	85	38	61.3	1.0	1.0	38.5
716 BAKER	5470 (38)	5.5	7.0	2.5	1.0	1.0	1.3	40	84	33	62.5	1.5	1.0	44.7
776 ESCA 2	4560 (46)	4.8	5.8	1.8	1.5	1.3	1.0	48	91	37	59.9	1.5	1.0	37.8
778 ESCA 4	5840 (26)	2.3	3.5	2.0	1.0	1.0	1.0	43	85	39	63.0	1.0	1.0	39.2
779 ESCA 5	6360 (8)	1.3	2.3	1.5	1.3	1.0	1.0	43	87	37	63.3	1.0	1.0	39.7
784 UC 784	6610 (4)	3.8	4.5	1.8	1.0	1.0	1.3	40	85	31	62.3	1.5	1.0	42.7
785 UC 785	5710 (30)	1.0	1.8	1.5	1.3	1.0	1.0	47	71	32	61.1	1.0	1.0	37.9
786 UC 786	5870 (22)	2.5	3.5	1.0	1.5	1.3	1.3	47	85	33	61.6	1.0	1.0	37.3
788 DA 984-034	6540 (5)	1.5	1.8	2.5	1.0	1.0	1.0	42	85	41	63.0	1.0	1.0	39.4
804 FMC BR 5144	6380 (7)	2.5	4.3	1.5	1.0	1.3	1.0	47	88	37	63.9	1.0	2.0	36.8
821 FMC BR 5236	5090 (43)	4.5	6.0	2.8	1.0	1.0	1.0	45	85	33	59.7	1.0	1.0	37.2
822 FMC BR 5450	5970 (18)	5.8	7.5	2.0	1.0	1.3	1.3	40	84	27	62.5	1.5	1.0	41.3
823 FMC BR 5678	5790 (28)	4.0	5.8	2.5	1.0	1.3	1.5	41	85	34	62.4	1.5	1.0	43.3
824 FMC BR 5784	5210 (42)	5.3	6.5	2.3	2.0	1.0	1.0	48	89	33	59.4	1.0	1.0	37.8
825 DA 984-146	6030 (16)	1.0	1.0	1.5	2.3	1.3	1.5	48	93	35	61.3	1.0	1.0	34.0
826 DA 984-039	6290 (10)	1.5	1.8	2.3	1.3	1.0	1.0	42	85	40	61.7	1.0	1.0	37.7
827 PB BR 5702	5700 (31)	4.5	5.3	2.8	1.0	1.3	1.3	40	80	31	61.0	1.5	1.0	42.2
828 PB BR 5710	5390 (41)	6.3	7.3	2.5	1.0	1.0	1.8	41	82	33	62.8	1.0	1.0	44.1
829 PB BR 5738	6540 (6)	1.0	2.0	1.3	1.0	1.8	2.3	41	84	30	63.4	1.0	1.0	41.3
830 PB BR 5762	5390 (40)	7.0	8.0	2.5	1.0	2.0	2.3	41	86	33	60.2	1.0	1.0	39.1
834 QT 555	3650 (48)	2.8	3.5	2.3	2.0	2.0	1.0	58	94	38	61.7	1.0	1.0	33.5
835 QT 562	3780 (47)	3.5	5.0	2.3	1.3	2.5	1.0	58	95	41	61.2	1.0	1.5	31.8
836 QT 574	3570 (49)	4.0	5.0	1.8	1.8	1.0	1.0	51	90	38	60.0	1.0	1.0	33.5
837 QT 578	5020 (44)	2.0	3.0	1.0	1.3	1.0	1.0	52	93	36	62.7	1.0	1.5	35.5
838 QT 588	5690 (32)	1.3	3.3	1.3	1.3	3.8	1.0	50	93	34	63.3	1.0	3.0	37.0
839 UC 839	5870 (24)	1.0	1.0	1.0	2.0	1.8	1.0	54	94	32	61.9	1.0	1.0	33.4
840 UC 840	5940 (20)	1.0	2.3	1.8	2.3	1.0	1.0	46	84	27	60.3	1.0	1.0	40.3
841 UC 841	6150 (15)	1.0	1.0	2.0	1.0	1.0	1.0	47	90	31	61.8	1.0	1.0	33.7
842 UC 842	6260 (14)	1.0	1.0	1.5	1.0	1.0	1.0	43	86	32	61.9	1.0	1.0	37.9
843 UC 843	6280 (11)	1.0	1.5	1.3	1.0	2.8	1.0	42	85	30	61.3	1.0	1.0	40.0
844 UC 844	5670 (33)	1.0	1.5	1.0	1.3	1.0	1.0	45	87	29	61.9	1.0	1.0	35.0
845 UC 845	5920 (21)	1.8	3.5	1.8	1.0	1.0	1.0	38	84	38	63.8	1.0	1.0	40.0
846 UC 846	6270 (12)	2.8	5.0	1.0	1.0	1.0	1.0	34	84	38	63.8	1.0	1.0	36.7
847 UC 847	5630 (35)	4.3	5.5	3.5	2.3	1.8	1.5	40	84	40	62.6	1.0	1.0	43.4
848 YECORA ROJO 87W	6270 (13)	1.3	2.8	2.3	1.0	1.0	1.0	44	86	32	64.3	1.0	1.0	40.9
849 UC 849	5650 (34)	4.5	6.3	2.3	1.0	1.0	1.5	38	81	33	62.3	1.0	1.0	32.2
850 UC 850	5420 (39)	6.0	7.3	2.8	1.3	1.0	1.0	44	84	36	62.4	1.0	1.0	32.2
851 UC 851	4880 (45)	7.0	7.8	4.0	1.8	1.0	1.3	47	91	39	62.0	1.0	1.0	37.5
852 UC 852	5490 (36)	7.3	8.0	2.5	1.0	1.0	1.0	45	87	35	62.8	1.0	1.0	34.0
853 ESCA 32	6310 (9)	1.0	1.0	1.0	1.3	1.5	2.3	48	92	30	61.9	1.0	1.0	35.2
MEAN	5750	3.2	4.3	1.9	1.3	1.3	1.2	44	87	34	62.0	1.1	1.1	37.8
CV	7.7	29.3	25.6	35.5	31.8	26.9	33.5	2.0	3.6	8.1	1.8	28.8	24.2	6.1
LSD (.05)	620	1.3	1.5	0.9	0.6	0.5	0.6	2	6	6	2.2	NS	0.5	4.7

Rating scale for diseases (area of flag-1 leaf affected), lodging, shatter, and yellowberry: 1 = 0-3%, 2 = 4-14%; 3 = 15-29%; 4 = 30-49%; 5 = 50-69%; 6 = 70-84%; 7 = 85-95%; 8 = 96-100%.
Diseases assessed but occurring in trace or less amounts: leaf rust and powdery mildew.
Numbers in parentheses indicate relative rank in column.
BYDV ratings (see scale above) were based on percentage of plants showing foliar symptoms.

TABLE 15. 1989 SACRAMENTO-SAN JOAQUIN DELTA COMMON WHEAT TEST.

ENTRY	YIELD	LODGING ON 5/17	LODGING AT HARVEST	SHATTER	BYDV	LEAF RUST	STRIPE RUST	POWDERY MILDEW	PLANT HEIGHT	TEST WEIGHT	BLACK POINT	YELLOW-BERRY	THOUSAND KERNEL WEIGHT
	(lbs/acre)								(inches)	(lbs/bu)			(grams)
20 ANZA	6880 (9)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	38	64.1	2.0	2.0	39.8
112 YECORA ROJO	6040 (35)	1.0	1.0	1.0	1.5	1.0	1.0	1.8	33	63.6	1.5	1.0	45.6
221 PHOENIX	7370 (2)	1.0	1.0	1.3	1.0	1.0	1.0	1.0	38	64.0	1.5	1.0	38.7
243 PROBRED	6400 (21)	1.0	1.8	1.0	1.8	1.0	1.0	1.8	35	63.2	2.0	1.0	45.6
353 YOLO	6440 (20)	1.0	1.3	2.0	1.0	1.0	1.0	1.0	40	63.9	1.0	2.5	36.8
415 KLASIC	6000 (36)	1.0	1.3	1.0	1.3	1.8	1.0	2.0	36	64.4	2.0	1.0	49.4
538 PROBRAND 775	6740 (13)	1.0	1.0	1.0	3.0	1.0	1.3	2.0	33	60.7	1.0	1.0	36.2
544 TADINIA	6940 (8)	1.0	1.0	1.8	1.0	1.0	1.0	1.0	41	63.6	1.0	2.0	39.3
638 SERRA	6190 (27)	1.0	3.5	2.0	1.3	1.0	1.0	1.3	45	63.3	1.0	1.0	42.0
671 S8330501	7010 (7)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	41	62.3	1.0	1.0	40.3
716 BAKER	5380 (39)	1.0	1.5	1.3	2.0	1.0	1.0	2.3	35	63.4	1.0	1.0	46.6
776 ESCA 2	4810 (45)	1.0	1.0	2.3	2.0	1.0	1.0	1.0	42	63.0	1.0	1.5	45.5
778 ESCA 4	5340 (40)	1.0	1.0	2.0	1.5	1.0	1.0	1.0	41	63.2	1.0	1.0	43.8
779 ESCA 5	6240 (26)	1.0	1.0	1.3	1.5	1.0	1.0	1.0	40	63.2	1.0	1.0	43.0
784 UC 784	7200 (5)	1.0	1.3	1.0	1.5	1.3	1.3	1.8	35	63.5	1.0	1.0	48.3
785 UC 785	7330 (3)	1.0	1.0	1.0	1.0	1.0	1.0	1.3	35	63.4	1.0	1.0	47.0
786 UC 786	6340 (24)	1.3	3.5	1.0	1.8	1.5	1.0	2.8	37	63.0	1.0	1.0	42.3
788 DA 984-034	6590 (16)	1.0	1.0	1.0	1.5	1.0	1.0	1.0	40	63.8	1.0	1.0	44.7
804 FMC BR 5144	6540 (17)	1.0	1.3	1.5	1.5	1.0	1.0	1.3	41	63.3	1.0	5.0	41.3
821 FMC BR 5236	5330 (41)	1.0	1.3	1.3	2.3	1.0	1.0	2.3	39	62.0	1.5	1.0	44.2
822 FMC BR 5450	6190 (28)	1.0	2.3	1.5	2.3	1.0	1.0	2.5	37	64.2	2.0	1.0	46.6
823 FMC BR 5678	6160 (30)	1.0	1.3	1.3	1.5	1.0	1.0	1.5	34	62.8	2.0	1.0	46.2
824 FMC BR 5784	6380 (23)	1.3	1.3	1.5	1.5	1.0	1.0	1.3	36	60.7	2.0	1.0	42.7
825 DA 984-146	6310 (25)	1.0	1.0	1.0	1.8	1.0	1.0	2.5	37	61.9	2.0	1.0	38.3
826 DA 984-039	6530 (18)	1.0	1.0	1.5	1.3	1.0	1.0	1.0	39	63.8	1.0	1.5	44.2
827 PB BR 5702	6080 (34)	1.0	1.8	1.8	2.3	1.0	1.0	2.0	36	63.0	2.0	1.0	47.6
828 PB BR 5710	5280 (42)	1.0	1.8	1.3	1.5	1.0	1.0	2.5	36	63.2	1.0	1.0	45.2
829 PB BR 5738	7220 (4)	1.0	1.0	1.0	1.8	1.3	1.0	1.5	29	63.2	1.0	1.0	43.0
830 PB BR 5762	5630 (38)	1.8	2.0	2.5	1.3	1.5	1.0	1.3	38	62.0	1.0	1.0	46.3
834 QT 555	5010 (43)	1.0	1.0	1.3	2.3	1.0	1.3	1.3	45	62.6	1.0	1.0	42.3
835 QT 562	4170 (47)	2.5	2.5	2.3	1.5	1.0	2.3	1.0	47	63.0	1.0	2.0	42.4
836 QT 574	3910 (48)	2.3	2.5	3.0	1.0	1.0	1.0	1.0	45	62.6	1.0	2.5	40.0
837 QT 578	6520 (19)	1.0	1.0	1.3	1.0	1.0	1.0	1.0	41	63.0	1.0	1.5	40.0
838 QT 588	6870 (10)	1.0	1.0	1.5	1.3	1.0	1.8	1.0	41	63.5	1.0	3.5	45.3
839 UC 839	6130 (31)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	30	63.1	1.0	2.0	38.8
840 UC 840	6400 (22)	1.0	1.0	1.0	1.5	1.5	1.0	4.3	29	62.4	2.0	1.0	43.8
841 UC 841	6630 (15)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	30	61.4	1.0	1.0	38.9
842 UC 842	6830 (11)	1.0	1.0	1.0	1.3	1.0	1.0	1.0	28	62.1	1.0	1.0	41.2
843 UC 843	6690 (14)	1.0	1.0	1.0	1.3	1.0	1.0	1.3	30	61.6	1.0	1.0	40.5
MEAN	6140	1.1	1.3	1.5	1.4	1.1	1.1	1.5	38	63.1	1.3	1.4	42.5
CV	9.8	23.2	41.6	36.5	43.6	25.5	21.3	38.1	3.7	0.6	17.8	28.3	2.7
LSD (.05)	840	0.4	0.8	0.8	0.9	0.4	0.3	0.8	3	0.8	0.5	0.8	2.3

Rating scale for diseases (area of flag-1 leaf affected), lodging, shatter, and yellowberry: 1 = 0-3%; 2 = 4-14%; 3 = 15-29%; 4 = 30-49%; 5 = 50-69%; 6 = 70-84%; 7 = 85-95%; 8 = 96-100%.
Diseases assessed but occurring in trace or less amounts: Septoria leaf blotch.
Numbers in parentheses indicate relative rank in column.
BYDV ratings (see scale above) were based on percentage of plants showing foliar symptoms.

TABLE 16. 1989 MERCED COMMON WHEAT TEST.

ENTRY		YIELD (lbs/acre)	SHATTER	BYDV	STRIPE RUST	PLANT HEIGHT (inches)	TEST WEIGHT (lbs/bu)	YELLOW-BERRY	THOUSAND KERNEL WEIGHT (grams)
20	ANZA	6210 (8)	1.0	1.0	1.0	37	63.1	5.0	36.7
112	YECORA ROJO	5310 (25)	1.0	1.0	1.0	33	64.5	3.0	48.2
221	PHOENIX	5190 (33)	1.0	1.0	1.0	34	62.0	5.5	38.7
243	PROBRED	4810 (39)	1.5	1.0	1.0	33	64.2	2.0	51.5
353	YOLO	6370 (3)	1.0	1.0	1.0	39	63.3	4.5	38.5
415	KLASIC	6670 (1)	1.0	1.0	1.0	34	64.5	3.0	46.7
538	PROBRAND 775	4740 (41)	1.0	1.0	1.0	32	61.2	4.0	37.5
544	TADINIA	5200 (31)	1.0	1.0	1.3	38	61.9	4.5	38.7
638	SERRA	5830 (11)	1.0	1.0	1.0	39	63.1	5.5	46.2
671	S8330501	6310 (4)	1.0	1.3	1.0	39	62.9	1.0	39.5
716	BAKER	6270 (5)	1.0	1.0	1.0	34	63.1	1.5	45.0
776	ESCA 2	4210 (46)	1.0	1.5	1.0	41	62.9	6.0	44.6
778	ESCA 4	4730 (42)	1.0	1.3	1.0	38	64.2	2.5	43.0
779	ESCA 5	5080 (34)	1.3	1.5	1.0	40	63.4	2.0	40.7
784	UC 784	6420 (2)	1.0	1.0	1.0	36	63.9	2.0	46.1
785	UC 785	5820 (12)	1.0	1.0	1.0	35	62.9	1.0	42.8
786	UC 786	6270 (6)	1.0	1.0	1.0	36	62.5	3.5	41.3
788	DA 984-034	5490 (22)	1.0	1.5	1.0	38	63.6	2.0	42.6
804	FMC BR 5144	5620 (18)	1.0	1.0	1.0	37	62.8	5.5	40.3
821	FMC BR 5236	5190 (32)	1.3	1.0	1.0	33	63.3	2.5	45.1
822	FMC BR 5450	6220 (7)	1.0	1.0	1.0	34	62.9	1.5	41.1
823	FMC BR 5678	5730 (14)	1.0	1.0	1.0	34	64.3	3.0	48.7
824	FMC BR 5784	5280 (26)	1.0	1.0	1.0	33	60.6	2.0	43.0
825	DA 984-146	5070 (35)	1.0	1.0	1.0	33	60.1	2.5	35.2
826	DA 984-039	5700 (15)	1.0	1.0	1.0	37	63.9	1.5	43.1
827	PB BR 5702	5920 (9)	1.0	1.0	1.0	35	63.4	1.5	48.0
828	PB BR 5710	5660 (16)	1.0	1.0	1.0	32	64.0	2.0	45.3
829	PB BR 5738	5250 (28)	1.0	1.0	1.0	28	62.4	1.0	39.5
830	PB BR 5762	4920 (37)	1.0	1.0	1.0	34	63.2	2.0	47.5
834	QT 555	4200 (47)	1.0	1.0	1.0	42	61.2	5.5	38.0
835	QT 562	4240 (45)	1.0	1.0	1.0	43	59.2	3.5	31.4
836	QT 574	3960 (48)	1.5	1.0	1.0	43	60.2	3.0	34.5
837	QT 578	4330 (44)	1.0	1.0	1.0	33	61.9	6.0	39.3
838	QT 588	5210 (30)	1.0	1.0	1.0	38	61.3	5.0	38.8
839	UC 839	4810 (40)	1.0	1.0	1.0	27	59.5	2.5	31.8
840	UC 840	5770 (13)	1.0	1.0	1.0	28	62.6	2.5	44.3
841	UC 841	5020 (36)	1.0	1.0	1.0	28	61.5	4.0	37.7
842	UC 842	5640 (17)	1.0	1.0	1.0	31	61.9	2.0	37.2
843	UC 843	5240 (29)	1.0	1.0	1.0	29	62.3	3.0	40.0
844	UC 844	5580 (19)	1.0	1.0	1.0	31	60.5	3.5	34.7
845	UC 845	5360 (24)	1.3	1.0	1.0	41	64.6	1.5	40.2
846	UC 846	5520 (21)	1.0	1.0	1.0	38	64.3	3.0	39.5
847	UC 847	4880 (38)	2.8	1.0	1.0	43	64.4	2.0	45.6
848	YECORA ROJO 87W	5580 (20)	1.0	1.0	1.0	33	64.4	3.0	45.0
849	UC 849	5860 (10)	1.0	1.0	1.0	36	63.4	1.5	33.7
850	UC 850	5270 (27)	1.5	1.3	1.0	39	63.1	7.0	37.1
851	UC 851	3640 (49)	3.0	1.3	1.0	44	63.8	1.5	43.8
852	UC 852	5360 (23)	1.3	1.0	1.0	39	62.7	7.0	37.7
853	ESCA 32	4420 (43)	1.0	1.0	1.0	31	60.6	1.5	35.7
MEAN		5330	1.1	1.1	1.1	36	62.7	3.1	41.0
CV		14.8	24.0	18.5	35.3	6.8	1.9	43.5	7.1
LSD (.05)		1110	0.4	0.3	0.5	5	2.4	2.7	5.9

Rating scale for diseases (area of flag-1 leaf affected), shatter, and yellowberry: 1 = 0-3%; 2 = 4-14%; 3 = 15-29%; 4 = 30-49%; 5 = 50-69%; 6 = 70-84%; 7 = 85-95%; 8 = 96-100%.
Diseases assessed but occurring in trace or less amounts: leaf rust, Septoria leaf blotch, powdery mildew, and black point.
Numbers in parentheses indicate relative rank in column.
BYDV ratings (see scale above) were based on percentage of plants showing foliar symptoms.

TABLE 17. 1989 KINGS COMMON WHEAT TEST.

ENTRY		YIELD	LODGING ON 5/18	LODGING AT HARVEST	BYDV	PLANT HEIGHT	TEST WEIGHT	YELLOW-BERRY	THOUSAND KERNEL WEIGHT
		(lbs/acre)				(inches)	(lbs/bu)		(grams)
20	ANZA	5080 (20)	1.0	1.0	1.3	32	62.5	2.0	33.2
112	YECORA ROJO	5400 (10)	1.8	1.3	1.0	30	62.8	1.0	39.7
221	PHOENIX	4860 (29)	1.0	1.0	1.0	31	60.3	2.5	31.4
243	PRO8RED	4880 (27)	1.3	1.0	1.0	28	60.6	1.0	38.0
353	YOLO	4040 (42)	1.0	1.0	1.8	34	61.8	1.0	29.0
415	KLASIC	5890 (2)	1.3	1.5	1.0	30	64.0	1.0	39.0
538	PROBRAND 775	4840 (30)	1.0	1.0	1.0	29	57.2	1.0	29.6
544	TADINIA	4870 (28)	1.0	1.0	1.0	35	61.0	3.0	32.0
638	SERRA	5520 (5)	2.8	2.0	1.0	37	61.6	1.0	34.9
671	S8330501	5910 (1)	1.0	1.0	1.0	33	62.6	1.0	34.0
716	BAKER	5310 (15)	1.8	1.5	1.3	28	61.3	1.0	36.7
776	ESCA 2	3500 (47)	1.0	1.0	1.8	35	56.4	1.0	28.8
778	ESCA 4	4910 (24)	1.0	1.0	2.0	36	61.9	1.0	34.6
779	ESCA 5	5490 (6)	1.0	1.0	1.8	35	62.3	1.0	34.5
784	UC 784	4570 (38)	1.0	1.0	1.0	29	58.8	1.0	34.0
785	UC 785	4440 (40)	1.0	1.0	1.0	29	59.2	1.0	33.3
786	UC 786	4980 (21)	1.3	1.0	1.0	32	60.8	1.0	33.9
788	DA 984-034	5290 (16)	1.0	1.0	1.5	33	60.8	1.0	33.0
804	FMC BR 5144	4680 (37)	1.0	1.0	1.0	35	61.7	1.5	29.3
821	FMC 8R 5236	5220 (17)	2.0	1.8	1.0	34	58.7	1.0	33.0
822	FMC 8R 5450	5420 (8)	1.3	1.3	1.0	30	63.1	1.0	40.3
823	FMC 8R 5678	5370 (13)	1.0	1.0	1.0	30	61.5	1.0	37.7
824	FMC 8R 5784	4690 (36)	2.0	1.5	1.0	30	56.0	1.0	30.4
825	DA 984-146	3790 (45)	1.0	1.0	1.3	29	59.3	1.0	30.5
826	DA 984-039	5480 (7)	1.0	1.0	1.5	36	62.4	1.0	34.3
827	PB 8R 5702	5610 (4)	2.0	1.8	1.0	31	61.6	1.0	39.1
828	PB 8R 5710	5660 (3)	1.3	1.3	1.0	29	62.0	1.0	37.0
829	PB BR 5738	4920 (23)	1.0	1.0	1.0	25	60.6	1.0	33.0
830	P8 8R 5762	4750 (34)	5.0	5.3	1.0	32	57.6	1.0	31.7
834	QT 555	3150 (49)	1.0	1.0	1.5	34	59.7	1.0	28.6
835	QT 562	3730 (46)	1.0	1.0	1.0	39	60.6	1.0	26.4
836	QT 574	3190 (48)	1.0	1.0	1.0	36	58.6	1.0	26.6
837	QT 578	4560 (39)	1.0	1.0	1.0	34	61.2	1.5	31.4
838	QT 588	4740 (35)	1.0	1.0	1.0	34	61.1	3.0	32.7
839	UC 839	3920 (44)	1.0	1.0	1.0	24	58.9	1.5	28.1
840	UC 840	4880 (26)	1.0	1.0	1.0	25	58.4	1.5	33.5
841	UC 841	4300 (41)	1.0	1.0	1.0	25	58.8	1.0	29.9
842	UC 842	4980 (22)	1.0	1.0	1.0	25	60.0	1.0	32.9
843	UC 843	5090 (19)	1.0	1.0	1.0	26	59.9	1.0	32.8
844	UC 844	4800 (33)	1.0	1.0	1.0	27	59.7	1.0	29.1
845	UC 845	5160 (18)	1.0	1.0	1.0	36	64.0	1.0	37.4
846	UC 846	4810 (32)	1.0	1.0	1.0	39	62.7	1.0	33.0
847	UC 847	5410 (9)	2.5	2.3	1.5	39	62.9	1.0	38.5
848	YECORA ROJO 87W	5320 (14)	1.0	1.0	1.0	27	61.7	1.0	34.0
849	UC 849	4890 (25)	1.0	1.0	1.0	34	61.3	1.0	27.8
850	UC 850	5370 (11)	2.0	2.3	1.0	35	62.5	6.0	32.5
851	UC 851	4820 (31)	1.0	1.0	1.0	39	61.1	1.0	33.2
852	UC 852	5370 (12)	1.3	1.5	1.5	36	62.2	5.5	32.8
853	ESCA 32	3950 (43)	1.0	1.0	1.5	27	56.4	1.0	26.7
MEAN		4850	1.3	1.2	1.1	32	60.7	1.4	32.9
CV		10.7	42.0	33.4	33.4	3.2	2.8	27.6	7.4
LSD (.05)		730	0.8	0.6	0.5	2	3.4	0.8	4.9

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 leaf blotch, powdery mildew, and black point.
Numbers in parentheses indicate relative rank in column.
BYDV ratings (see scale above) were based on percentage of plants showing foliar systems.

TABLE 18. 1989 KERN COMMON WHEAT TEST.

ENTRY		YIELD	LODGING AT HARVEST	SHATTER	BYDV	LEAF RUST	PLANT HEIGHT	TEST WEIGHT	BLACK POINT	YELLOW BERRY	THOUSAND KERNEL WEIGHT
		(lbs/acre)					(inches)	(lbs/bu)			(grams)
20	ANZA	5870 (21)	1.0	1.0	1.8	1.0	37	62.1	1.5	1.5	36
112	YECORA ROJO	5740 (31)	1.0	1.0	1.0	1.0	30	62.6	2.0	1.0	46
221	PHOENIX	5850 (22)	1.0	1.0	2.3	1.0	36	61.9	1.0	1.5	36
243	PROBRED	5480 (36)	1.0	1.0	1.0	1.0	32	61.4	2.0	1.0	45
353	YOLO	6490 (6)	1.0	1.0	1.8	1.0	35	62.6	1.0	1.0	35
415	KLASIC	6560 (4)	1.0	1.0	1.0	1.0	33	63.4	2.0	1.0	44
538	PROBRAND 775	6510 (5)	1.0	1.0	1.8	1.0	31	60.2	3.5	1.0	36
544	TADINIA	5650 (35)	1.0	1.0	2.3	1.3	38	59.5	1.0	1.0	32
638	SERRA	6600 (3)	1.5	1.3	1.3	1.0	38	62.8	1.0	1.5	40
671	S8330501	6690 (2)	1.0	1.0	1.0	1.0	35	61.1	1.0	1.0	37
716	BAKER	5720 (32)	1.0	1.0	1.0	1.0	31	62.6	2.0	1.0	45
776	ESCA 2	4910 (47)	1.0	1.0	3.3	1.0	37	60.0	1.0	1.0	39
778	ESCA 4	5820 (26)	1.0	1.3	1.8	1.0	35	62.4	1.0	1.0	41
779	ESCA 5	6050 (17)	1.0	1.0	1.8	1.0	37	62.0	1.0	1.0	40
784	UC 784	6220 (10)	1.0	1.3	1.3	1.0	32	62.0	2.0	1.0	45
785	UC 785	5650 (34)	1.0	1.0	1.8	1.0	30	61.4	2.5	1.0	40
786	UC 786	6450 (7)	1.0	1.0	1.0	1.0	33	61.8	1.0	1.0	40
788	DA 984-034	6200 (12)	1.0	1.0	1.0	1.0	36	63.1	1.0	1.0	40
804	FMC BR 5144	6860 (1)	1.0	1.0	1.3	1.5	37	62.3	1.0	2.0	35
821	FMC BR 5236	5840 (23)	1.0	1.0	1.3	1.0	33	61.2	1.0	1.0	40
822	FMC BR 5450	5820 (27)	1.0	1.0	1.0	1.0	33	62.5	2.0	1.0	44
823	FMC BR 5678	5320 (40)	1.0	1.0	1.0	1.0	31	61.4	2.0	1.0	45
824	FMC BR 5784	5840 (24)	1.0	1.3	1.0	1.0	33	58.9	1.5	1.0	38
825	DA 984-146	5340 (39)	1.0	1.0	1.3	1.0	32	59.7	1.0	1.0	34
826	DA 984-039	5930 (19)	1.0	1.0	1.0	1.0	39	62.7	1.0	1.0	39
827	PB BR 5702	5770 (30)	1.0	1.0	1.0	1.0	33	61.7	1.5	1.0	43
828	PB BR 5710	5940 (18)	1.0	1.3	1.0	1.0	32	62.1	1.5	1.0	43
829	PB BR 5738	5310 (41)	1.0	1.0	1.0	1.0	27	60.1	1.0	1.0	37
830	PB BR 5762	6190 (13)	1.0	1.0	1.3	1.0	34	60.3	1.5	1.0	41
834	QT 555	4430 (49)	1.0	1.5	4.3	1.0	37	61.0	1.0	1.0	38
835	QT 562	5180 (44)	2.3	1.3	2.3	1.0	38	61.2	1.0	2.0	35
836	QT 574	5000 (46)	1.0	1.0	3.0	1.0	38	60.9	1.0	2.0	36
837	QT 578	5250 (43)	1.0	1.0	2.3	1.0	35	60.6	1.5	1.0	35
838	QT 588	6260 (9)	1.0	1.0	1.5	1.0	34	60.7	1.5	2.0	38
839	UC 839	5000 (45)	1.0	1.0	1.8	1.3	27	59.5	2.0	1.0	33
840	UC 840	5390 (38)	1.0	1.0	1.3	1.0	26	60.8	2.5	1.0	41
841	UC 841	4810 (48)	1.0	1.3	1.0	1.3	26	57.3	2.0	1.0	33
842	UC 842	5800 (28)	1.0	1.0	1.0	1.0	26	59.2	1.5	1.0	37
843	UC 843	6210 (11)	1.0	1.0	1.0	1.0	26	60.2	1.0	1.0	39
844	UC 844	5280 (42)	1.0	1.0	1.3	1.0	32	59.2	2.0	1.5	35
845	UC 845	6410 (8)	1.0	1.5	1.0	1.0	37	63.9	1.0	1.0	40
846	UC 846	5800 (29)	1.0	1.8	1.0	1.0	37	63.3	1.0	1.0	39
847	UC 847	5720 (33)	1.0	1.5	2.5	1.0	41	63.0	1.0	1.0	41
848	YECORA ROJO 87W	5830 (25)	1.0	1.0	1.0	1.3	29	61.9	1.5	1.0	39
849	UC 849	6070 (16)	1.0	1.0	1.0	1.0	36	62.9	1.5	1.0	35
850	UC 850	6170 (14)	1.5	1.0	2.0	1.0	37	62.9	1.0	5.0	38
851	UC 851	6130 (15)	1.0	1.5	2.3	1.0	40	62.0	1.0	1.0	39
852	UC 852	5900 (20)	1.0	1.0	1.3	1.0	37	62.3	1.5	4.5	36
853	ESCA 32	5400 (37)	1.0	1.0	1.5	1.0	31	60.2	2.0	1.0	36
MEAN		5810	1.0	1.1	1.5	1.0	34	61.4	1.4	1.3	39
CV		4.8	17.2	23.4	40.7	16.1	5.3	0.8	26.0	33.0	4.6
LSD (.05)		390	0.3	0.4	0.9	0.2	4	1.0	0.8	0.8	4

Rating scale for diseases (area of flag-1 leaf affected), lodging, shatter, and yellowberry: 1 = 0-3%, 2 = 4-14%; 3 = 15-29%; 4 = 30-49%; 5 = 50-69%; 6 = 70-84%; 7 = 85-95%; 8 = 96-100%.
Diseases assessed but occurring in trace or less amounts: stripe rust, Septoria leaf blotch, and powdery mildew.
Numbers in parentheses indicate relative rank in column.
BYDV ratings (see scale above) were based on percentage of plants showing foliar symptoms.

TABLE 19. 1989 SANTA BARBARA COMMON WHEAT TEST.

ENTRY		YIELD	LODGING AT HARVEST	SHATTER	BYDV	PLANT HEIGHT	TEST WEIGHT	BLACK POINT	THOUSAND KERNEL WEIGHT
		(lbs/acre)				(inches)	(lbs/bu)		(grams)
20	ANZA	4300 (14)	1.0	1.0	1.3	31	62.6	4.0	40.4
112	YECORA ROJO	3950 (30)	1.0	1.0	1.0	26	60.0	1.0	33.1
221	PHOENIX	4660 (6)	1.0	1.0	1.8	33	61.0	3.5	39.6
243	PROBRED	3650 (38)	1.5	1.0	1.0	29	59.7	1.5	42.3
353	YOLO	4690 (4)	1.0	1.3	1.0	33	61.0	1.5	32.5
415	KLASIC	4560 (9)	2.0	1.0	1.0	27	62.6	1.5	44.2
538	PROBRAND 775	3530 (41)	1.0	1.0	1.0	26	56.4	1.5	28.8
544	TADINIA	4370 (13)	1.0	1.0	1.5	33	59.8	1.5	34.2
638	SERRA	5270 (1)	1.0	1.0	1.3	34	61.0	1.5	41.7
671	S8330501	3990 (26)	1.0	1.0	1.0	34	60.3	1.5	36.0
716	BAKER	3530 (40)	1.5	1.3	1.0	27	60.7	1.5	37.3
776	ESCA 2	4110 (24)	1.0	1.0	2.0	35	61.3	2.5	38.7
778	ESCA 4	4290 (15)	1.3	1.3	1.0	35	60.8	1.0	39.2
779	ESCA 5	5110 (2)	1.0	1.0	1.3	36	60.1	1.0	38.2
784	UC 784	3960 (27)	1.3	1.0	1.5	26	59.3	1.5	37.4
785	UC 785	4110 (23)	1.3	1.0	1.0	30	61.1	2.5	43.7
786	UC 786	4280 (17)	1.5	1.3	1.0	28	61.3	1.5	42.7
788	DA 984-034	4690 (5)	1.0	1.5	1.3	34	59.7	1.0	35.6
804	FMC BR 5144	4580 (8)	1.0	1.0	1.0	33	61.3	1.5	35.8
821	FMC BR 5236	3490 (44)	1.0	1.3	1.0	30	59.8	1.0	39.1
822	FMC BR 5450	4160 (22)	1.3	1.0	1.0	30	61.2	2.0	40.3
823	FMC BR 5678	3490 (43)	1.0	1.3	1.0	27	59.6	1.0	36.8
824	FMC BR 5784	3760 (34)	1.3	1.3	1.0	26	59.0	1.0	42.2
825	DA 984-146	3950 (28)	1.0	1.0	1.3	27	60.7	2.5	43.5
826	DA 984-039	4590 (7)	1.0	1.3	1.3	33	59.6	1.0	36.4
827	PB BR 5702	5100 (3)	1.0	1.0	1.0	29	60.3	3.0	47.6
828	PB BR 5710	4240 (19)	1.3	1.3	1.0	26	60.0	1.0	38.1
829	PB BR 5738	3950 (29)	1.0	1.0	1.0	22	57.5	1.0	31.9
830	PB BR 5762	4440 (12)	1.8	1.0	1.0	28	58.5	1.0	37.5
834	QT 555	2910 (47)	1.5	3.5	1.3	36	61.4	1.0	39.3
835	QT 562	3700 (36)	2.8	1.3	1.3	37	60.5	1.5	33.8
836	QT 574	3720 (35)	1.5	1.0	1.5	36	61.4	2.5	39.4
837	QT 578	3560 (39)	1.8	1.3	1.0	35	61.5	2.5	39.8
838	QT 588	3530 (42)	1.0	1.0	1.0	30	61.8	4.0	43.8
839	UC 839	4530 (10)	1.0	1.0	1.3	25	59.0	1.0	31.7
840	UC 840	4160 (21)	1.0	1.0	1.8	24	61.1	1.5	44.5
842	UC 842	3860 (32)	1.0	1.0	1.0	25	59.4	1.0	34.3
843	UC 843	4070 (25)	1.0	1.0	1.0	27	59.9	1.0	37.2
844	UC 844	3890 (31)	1.0	1.0	1.5	24	59.3	1.5	35.3
845	UC 845	4260 (18)	1.5	1.3	1.0	35	63.3	1.5	43.2
846	UC 846	4290 (16)	1.3	1.0	1.0	36	64.3	1.5	42.9
848	YECORA ROJO 87W	3360 (46)	1.0	1.0	1.0	30	59.1	1.5	37.7
849	UC 849	4170 (20)	1.5	1.0	1.0	30	61.7	1.0	33.2
850	UC 850	3820 (33)	3.0	3.3	1.0	33	62.2	3.5	37.3
851	UC 851	3650 (37)	1.0	2.3	2.0	36	61.1	1.0	40.8
852	UC 852	3480 (45)	1.3	2.8	1.0	30	62.1	3.5	38.1
853	ESCA 32	4440 (11)	1.0	1.0	1.3	27	59.1	2.0	37.6
MEAN		4090	1.3	1.2	1.2	30	60.5	1.7	38.4
CV		17.6	47.5	30.0	35.4	7.3	1.6	37.2	7.9
LSD (.05)		1010	0.8	0.5	0.6	4	1.9	1.3	6.1

Rating scale for diseases (area of flag-1 leaf affected), lodging, and shatter: 1 = 0-3%, 2 = 4-14%; 3 = 15-29%; 4 = 30-49%; 5 = 50-69%; 6 = 70-84%; 7 = 85-95%; 8 = 96-100%.
Diseases assessed but occurring in trace or less amounts: leaf rust, stripe rust, Septoria leaf blotch and powdery mildew.
Numbers in parentheses indicate relative rank in column.
BYDV ratings (see scale above) were based on percentage of plants showing foliar symptoms.

TABLE 20. 1989 IMPERIAL COMMON WHEAT TEST.

ENTRY		YIELD	TEST WEIGHT	DAYS TO HEADING FROM 1/1	DAYS TO MATURITY FROM 1/1	PLANT HEIGHT	LODGING	SHATTER	THOUSAND KERNEL WEIGHT	% HARD VITREOUS
		(lbs/acre)	(lbs/bu)			(inches)			(grams)	
20	ANZA	6790 (32)	63.8	84	124	34	1.3	3.3	44.1	53.4
112	YECORA ROJO	7080 (26)	62.5	77	119	29	1.0	1.3	46.3	98.0
221	PHOENIX	8280 (1)	63.8	86	128	34	2.3	1.5	42.4	60.0
243	PROBRED	7090 (24)	62.3	81	121	29	2.3	1.8	48.9	98.0
353	YOLO	6960 (28)	63.0	84	124	36	3.5	4.5	40.4	85.6
415	KLASIC	8200 (2)	63.8	76	118	25	1.0	1.0	46.3	99.8
538	PROBRAND 775	7570 (12)	60.3	78	118	27	1.0	1.0	42.1	92.8
544	TADINIA	7170 (22)	61.5	82	123	36	1.5	1.8	41.4	59.3
638	SERRA	6370 (38)	62.8	80	122	36	2.8	3.3	47.1	89.3
671	S8330501	7480 (15)	62.5	81	121	35	3.0	2.0	44.8	97.1
716	BAKER	7690 (9)	63.0	76	117	30	1.0	1.5	45.5	98.9
776	ESCA 2	3550 (45)	62.3	84	122	38	1.0	6.5	46.8	98.0
778	ESCA 4	5850 (44)	63.0	81	120	35	1.3	3.5	47.9	98.0
779	ESCA 5	6130 (42)	63.5	81	120	34	1.0	3.0	46.4	98.5
784	UC 784	8090 (4)	62.5	78	119	27	1.3	1.0	43.8	98.6
785	UC 785	7600 (11)	62.8	80	122	28	1.3	1.5	47.5	96.6
786	UC 786	7640 (10)	63.0	83	121	30	1.8	1.8	44.8	93.3
788	DA 984-034	6370 (37)	63.3	80	120	35	1.3	3.8	47.1	98.1
804	FMC BR 5144	6240 (40)	62.8	82	121	33	2.3	4.3	42.6	67.8
821	FMC BR 5236	5930 (43)	61.3	83	120	32	1.3	3.5	43.3	94.1
822	FMC BR 5450	7720 (6)	63.8	75	116	31	1.3	1.0	49.3	97.0
823	FMC BR 5678	7200 (20)	62.0	79	119	27	1.3	1.3	45.6	97.9
824	FMC BR 5784	7420 (16)	60.3	82	122	29	1.5	1.8	44.8	87.3
825	DA 984-146	7400 (17)	61.3	85	127	30	1.0	1.3	41.3	95.3
826	DA 984-039	6240 (41)	63.3	80	120	34	1.0	3.5	45.3	99.0
827	PB BR 5702	7810 (5)	62.3	78	118	30	1.0	1.8	49.5	98.1
828	PB BR 5710	7250 (19)	62.0	80	119	29	1.8	1.3	40.3	99.9
829	PB BR 5738	7090 (25)	61.5	78	115	24	1.0	1.0	41.9	98.1
830	PB BR 5762	6660 (33)	60.5	78	120	31	2.0	2.0	45.3	96.3
834	QT 555	6870 (30)	61.8	97	133	35	2.3	1.8	37.3	64.0
835	QT 562	7700 (7)	60.8	100	135	37	3.8	1.0	37.1	56.1
836	QT 574	6460 (35)	61.0	97	135	38	3.5	1.0	40.9	65.0
837	QT 578	7280 (18)	61.5	97	135	32	2.8	1.3	38.1	76.0
838	QT 588	8170 (3)	62.3	94	133	32	2.8	1.3	42.1	48.0
839	UC 839	7050 (27)	61.3	84	126	24	1.0	1.0	40.5	58.0
840	UC 840	7690 (8)	62.5	80	123	23	1.0	1.0	49.0	85.8
842	UC 842	7160 (23)	61.0	80	121	24	1.0	1.0	42.6	97.1
843	UC 843	7540 (14)	60.5	80	117	24	1.0	1.0	43.9	95.1
844	UC 844	6820 (31)	60.0	81	122	27	1.0	1.0	39.8	89.9
845	UC 845	6880 (29)	64.0	79	116	35	1.8	2.0	46.6	97.5
848	YECORA ROJO 87W	7550 (13)	63.3	82	121	27	1.0	1.0	45.4	96.9
849	UC 849	6380 (36)	63.0	78	117	33	2.0	2.5	40.0	97.3
850	UC 850	6280 (39)	62.8	80	120	34	2.5	3.3	42.9	55.0
851	UC 851	1580 (46)	63.3	83	122	40	1.0	7.8	46.0	95.1
852	UC 852	6630 (34)	62.8	80	119	33	2.3	3.0	43.4	55.4
853	ESCA 32	7200 (21)	62.0	82	122	30	1.0	1.3	43.4	97.4
MEAN		6920	62.3	82	122	31	1.7	2.1	43.9	86.4
CV		8.3	0.8	1.5	1.9	4.9	38.7	37.6	4.8	7.3
LSD (.05)		800	0.7	2	3	2	0.9	1.1	2.9	8.8

Rating scale for lodging and shatter: 1 = 0-3%, 2 = 4-14%; 3 = 15-29%; 4 = 30-49%; 5 = 50-69%; 6 = 70-84%; 7 = 85-95%; 8 = 96-100%.
Numbers in parentheses indicate relative rank in column.

TABLE 21. 1989 YOLO DRYLAND COMMON WHEAT TEST.

ENTRY		YIELD	SHATTER	PLANT HEIGHT	TEST WEIGHT	YELLOW-BERRY	THOUSAND KERNEL WEIGHT
		(lbs/acre)		(inches)	(lbs/bu)		(grams)
20	ANZA	1800 (37)	1.0	29	59.1	1.0	26
112	YECORA ROJO	2300 (16)	1.8	30	62.3	1.0	40
221	PHOENIX	1140 (48)	1.0	29	57.4	1.5	25
243	PROBRED	2390 (10)	2.0	29	61.4	1.0	40
353	YOLO	1650 (42)	1.0	31	60.0	2.5	25
415	KLASIC	2640 (4)	1.0	31	63.0	1.0	41
538	PROBRAND 775	2050 (26)	1.0	29	58.5	1.0	31
544	TADINIA	1630 (43)	1.0	35	59.2	2.5	30
638	SERRA	2450 (6)	1.0	35	61.7	4.5	38
671	S8330501	2360 (13)	1.0	34	60.9	2.0	34
716	BAKER	2370 (11)	1.8	30	63.3	1.0	43
776	ESCA 2	1900 (33)	1.5	32	59.9	2.0	34
778	ESCA 4	2220 (22)	1.5	35	62.4	1.5	38
779	ESCA 5	1660 (41)	1.8	32	59.4	1.0	32
784	UC 784	1940 (30)	1.0	30	58.3	1.0	31
785	UC 785	2870 (1)	1.0	31	62.3	1.5	39
786	UC 786	2230 (19)	1.0	27	60.8	2.5	34
788	DA 984-034	2440 (7)	2.5	34	59.6	1.5	34
804	FMC BR 5144	1170 (46)	1.0	31	58.8	2.0	28
821	FMC BR 5236	2230 (20)	1.8	29	58.6	1.0	34
822	FMC BR 5450	2290 (18)	1.0	31	61.0	1.5	36
823	FMC BR 5678	2390 (9)	1.0	30	59.8	1.0	37
824	FMC BR 5784	2750 (3)	1.5	29	59.5	1.5	37
825	DA 984-146	2430 (8)	1.3	28	60.7	4.0	35
826	DA 984-039	1950 (29)	2.0	33	61.8	1.5	35
827	PB BR 5702	2480 (5)	1.5	31	61.5	1.0	42
828	PB BR 5710	2300 (17)	1.3	28	61.6	1.0	37
829	PB BR 5738	2340 (14)	1.3	29	59.9	1.0	34
830	PB BR 5762	2220 (21)	1.8	32	58.9	1.0	35
834	QT 555	1080 (49)	2.3	25	56.3	1.0	26
835	QT 562	1150 (47)	1.0	32	59.3	4.0	28
836	QT 574	1700 (40)	1.0	34	60.0	3.0	31
837	QT 578	1390 (44)	1.0	23	58.9	2.0	29
838	QT 588	1300 (45)	1.0	28	60.9	3.5	34
839	UC 839	1790 (38)	1.0	25	58.5	2.0	29
840	UC 840	2130 (25)	1.0	26	58.5	1.0	35
841	UC 841	1910 (32)	1.0	25	58.7	1.5	29
842	UC 842	2180 (23)	1.0	27	59.7	1.0	33
843	UC 843	1760 (39)	1.0	27	59.3	1.0	33
844	UC 844	2310 (15)	1.0	28	60.3	2.0	32
845	UC 845	1820 (35)	1.0	34	62.6	1.0	35
846	UC 846	1990 (28)	1.0	36	62.8	1.5	35
847	UC 847	2840 (2)	2.8	39	63.0	1.0	45
848	YECORA ROJO 87W	1850 (34)	1.3	28	57.5	1.0	28
849	UC 849	2020 (27)	1.3	31	60.9	1.5	28
850	UC 850	2360 (12)	2.3	33	61.9	3.5	31
851	UC 851	1910 (31)	3.0	35	59.9	1.0	35
852	UC 852	2140 (24)	2.0	31	61.4	2.5	30
853	ESCA 32	1800 (36)	1.0	28	59.4	1.5	32
MEAN		2040	1.4	30	60.2	1.7	33
CV		18.7	33.4	5.6	2.4	43.8	9.4
LSD (.05)		530	0.6	3	2.9	1.5	6

Rating scale for shatter and yellowberry: 1 = 0-3%, 2 = 4-14%; 3 = 15-29%; 4 = 30-49%; 5 = 50-69%; 6 = 70-84%; 7 = 85-95%; 8 = 96-100%.
Diseases assessed but occurring in trace or less amounts: BYDV, leaf rust, stripe rust, Septoria leaf blotch, powdery mildew and black point.
Numbers in parentheses indicate relative rank in column.

TABLE 22. 1989 SAN LUIS OBISPO DRYLAND COMMON WHEAT TEST.

ENTRY		YIELD	PLANT HEIGHT	TEST WEIGHT	YELLOW-BERRY	THOUSAND KERNEL WEIGHT
		(lbs/acre)	(inches)	(lbs/bu)		(grams)
20	ANZA	1770 (13)	24 (27)	62.7	1.0	29
112	YECORA ROJO	1710 (14)	21 (13)	61.5	1.0	38
221	PHOENIX	1580 (27)	23 (22)	62.3	1.0	31
243	PROBRED	990 (48)	21 (15)	60.2	1.0	40
353	YOLO	1700 (16)	24 (24)	62.0	1.0	25
415	KLASIC	1780 (12)	23 (22)	63.0	1.0	40
538	PROBRAND 775	1250 (40)	19 (6)	61.7	1.0	37
544	TADINIA	1510 (29)	25 (29)	61.3	2.0	29
638	SERRA	1830 (8)	25 (28)	61.5	1.5	33
671	S8330501	1700 (15)	25 (31)	60.8	1.0	31
716	BAKER	1940 (4)	21 (13)	61.4	1.0	36
776	ESCA 2	1310 (37)	25 (29)	61.2	1.0	33
778	ESCA 4	1810 (9)	25 (30)	61.6	1.0	33
779	ESCA 5	1950 (3)	27 (35)	61.8	1.0	31
784	UC 784	2020 (1)	21 (16)	60.2	1.0	34
785	UC 785	1630 (23)	18 (4)	61.1	1.0	35
786	UC 786	1580 (26)	22 (18)	61.1	1.0	32
788	DA 984-034	1810 (10)	26 (32)	61.7	1.0	33
804	FMC BR 5144	1460 (33)	22 (21)	62.1	1.0	26
821	FMC BR 5236	1300 (38)	20 (10)	61.2	1.0	38
822	FMC BR 5450	2020 (2)	23 (23)	61.5	1.0	37
823	FMC BR 5678	1680 (18)	20 (10)	61.6	1.0	37
824	FMC BR 5784	1000 (47)	21 (14)	61.2	1.0	40
825	DA 984-146	1050 (45)	18 (3)	60.9	1.0	34
826	DA 984-039	1910 (6)	27 (34)	61.5	1.0	31
827	PB BR 5702	1650 (21)	22 (19)	61.4	1.0	40
828	PB BR 5710	1690 (17)	19 (7)	61.9	1.0	37
829	PB BR 5738	1640 (22)	18 (3)	60.1	1.0	33
830	P8 BR 5762	1920 (5)	22 (20)	60.5	1.0	33
834	QT 555	1130 (44)	22 (19)	59.6	1.0	28
835	QT 562	1370 (35)	21 (17)	60.3	1.0	28
836	QT 574	1160 (42)	24 (25)	60.0	1.0	29
837	QT 578	1160 (41)	20 (9)	60.5	1.0	29
838	QT 588	1320 (36)	19 (6)	61.0	1.0	30
839	UC 839	1130 (43)	17 (1)	61.4	1.0	30
840	UC 840	1510 (28)	18 (2)	61.4	1.0	37
841	UC 841	1440 (34)	19 (5)	60.8	1.0	33
842	UC 842	1490 (30)	20 (8)	60.2	1.0	30
843	UC 843	1660 (19)	19 (7)	59.7	1.0	31
844	UC 844	1480 (32)	20 (11)	59.2	1.0	28
845	UC 845	1600 (24)	26 (33)	62.9	1.0	38
846	UC 846	1010 (46)	27 (35)	61.4	1.0	36
848	YECORA ROJO 87W	1600 (25)	20 (12)	61.6	1.0	34
849	UC 849	1800 (11)	24 (26)	62.0	1.0	28
850	UC 850	1650 (20)	25 (28)	63.0	1.0	29
851	UC 851	1490 (31)	28 (36)	62.1	1.0	33
852	UC 852	1860 (7)	24 (25)	63.2	1.5	29
853	ESCA 32	1300 (39)	19 (7)	61.5	1.0	31
MEAN		1550	22	61.3	1.0	33
CV		10.7	4.8	0.8	23.6	2.9
LSD (.05)		230	2	1.0	NS	2

Diseases assessed but occurring in trace or less amounts: BYDV, leaf rust, stripe rust, Septoria leaf blotch, and powdery mildew.
Numbers in parentheses indicate relative rank in column.

TABLE 23. 1989 AND 1987-89 COMMON WHEAT YIELD SUMMARY (LB/ACRE).

ENTRY		SACRAMENTO VALLEY			SAN JOAQUIN VALLEY			ORYLAND		
		1989 4 LOC	1988-89 8 LOC/YR	1987-89 12 LOC/YR	1989 3 LOC	1988-89 6 LOC/YR	1987-89 9 LOC/YR	1989 2 LOC	1988-89 4 LOC/YR	1987-89 5 LOC/YR
20	ANZA	6340 (17)	6290 (12)	6630 (6)	5720 (10)	6290 (7)	6080 (5)	1790 (26)	2430 (8)	2210 (7)
112	YECORA ROJO	5960 (30)	6050 (15)	6450 (8)	5480 (22)	6070 (10)	5820 (8)	2000 (13)	2400 (11)	2250 (5)
221	PHOENIX	6510 (8)	6200 (13)	6600 (7)	5300 (32)	6030 (12)	5850 (7)	1360 (43)	2160 (16)	1960 (9)
243	PROBRED	6170 (20)	6170 (14)		5060 (39)	5790 (16)		1690 (33)	2250 (14)	
353	YOLO	6510 (9)	6680 (4)	6950 (2)	5630 (15)	6670 (3)	6420 (4)	1670 (35)	2230 (15)	2020 (8)
415	KLASIC	6190 (19)	6400 (7)	6800 (5)	6370 (1)	6840 (1)	6540 (1)	2210 (2)	2490 (6)	2320 (3)
538	PROBRAND 775	5960 (31)			5360 (28)			1650 (36)		
544	TADINIA	6600 (3)	6600 (5)	6810 (4)	5240 (35)	5960 (13)	5790 (9)	1570 (38)	2400 (10)	2210 (6)
638	SERRA	6060 (26)	6340 (11)	6850 (3)	5980 (3)	6660 (4)	6430 (3)	2140 (5)	2780 (1)	2520 (1)
671	S8330501	6850 (1)	6800 (1)	7030 (1)	6300 (2)	6590 (5)	6470 (2)	2030 (10)	2490 (5)	2290 (4)
716	BAKER	5630 (39)	5700 (17)	6140 (9)	5770 (7)	6180 (9)	5970 (6)	2150 (3)	2660 (3)	2460 (2)
776	ESCA 2	5350 (45)	5210 (18)		4210 (47)	5080 (18)		1610 (37)	1830 (18)	
778	ESCA 4	6020 (29)	5920 (16)		5150 (38)	5720 (17)		2010 (11)	2360 (12)	
779	ESCA 5	6590 (4)	6350 (10)		5540 (20)	5790 (15)		1810 (25)	2280 (13)	
784	UC 784	6800 (2)	6740 (2)		5740 (9)	6240 (8)		1980 (17)	2470 (7)	
785	UC 785	6390 (13)	6370 (8)		5310 (31)	5890 (14)		2250 (1)	2700 (2)	
786	UC 786	6400 (12)	6410 (6)		5900 (4)	6490 (6)		1910 (20)	2410 (9)	
788	DA 984-034	6550 (6)	6360 (9)		5660 (13)	6030 (11)		2120 (6)	2540 (4)	
804	FMC 8R 5144	6530 (7)	6710 (3)		5720 (11)	6700 (2)		1310 (45)	2070 (17)	
821	FMC BR 5236	5650 (38)			5420 (25)			1760 (27)		
822	FMC BR 5450	5840 (36)			5820 (5)			2150 (4)		
823	FMC BR 5678	6130 (22)			5470 (24)			2040 (9)		
824	FMC BR 5784	5900 (33)			5270 (34)			1880 (22)		
825	DA 984-146	6110 (23)			4730 (41)			1740 (28)		
826	DA 984-039	6420 (11)			5700 (12)			1930 (18)		
827	PB BR 5702	6060 (25)			5770 (6)			2070 (8)		
828	PB BR 5710	5550 (43)			5750 (8)			1990 (15)		
829	PB BR 5738	6360 (15)			5160 (37)			1990 (16)		
830	PB BR 5762	5580 (42)			5290 (33)			2070 (7)		
834	QT 555	5080 (46)			3920 (49)			1110 (48)		
835	QT 562	4900 (48)			4380 (46)			1260 (47)		
836	QT 574	4320 (49)			4050 (48)			1430 (42)		
837	QT 578	5890 (34)			4710 (43)			1270 (46)		
838	QT 588	6380 (14)			5410 (26)			1310 (44)		
839	UC 839	5920 (32)			4570 (45)			1460 (41)		
840	UC 840	6420 (10)			5350 (29)			1820 (24)		
841	UC 841	5840 (35)			4710 (42)			1670 (34)		
842	UC 842	6240 (18)			5470 (23)			1830 (23)		
843	UC 843	6150 (21)			5510 (21)			1710 (31)		
844	UC 844	6040 (27)			5220 (36)			1890 (21)		
845	UC 845	6070 (24)			5640 (14)			1710 (30)		
846	UC 846	6040 (28)			5380 (27)			1500 (40)		
847	UC 847	5760 (37)			5340 (30)			0 (0)		
848	YECORA ROJO 89W	6590 (5)			5570 (18)			1720 (29)		
849	UC 849	5620 (40)			5610 (16)			1910 (19)		
850	UC 850	5540 (44)			5600 (17)			2010 (12)		
851	UC 851	5000 (47)			4860 (40)			1700 (32)		
852	UC 852	5620 (41)			5540 (19)			2000 (14)		
853	ESCA 32	6340 (16)			4590 (44)			1550 (39)		
MEAN		6020	6290	6700	5330	6170	6150	1790	2390	2250
CV		7.8	7.4	6.3	10.7	8.4	9.7	16.5	15.2	15.5
LSD (.05)		320	230	170	460	300	280	290	250	220

Numbers in parentheses indicate relative rank in column.

TABLE 24. 1988 BUTTE, UC DAVIS AND SACRAMENTO-SAN JOAQUIN DELTA COMMON WHEAT TESTS, QUALITY EVALUATION.*

Entry	Flour				Mixograph		Baking			
	YLD	ASH	MSCR	PRO	ABSR	TY	ABSR	MXT	LVOL	BCR
Butte Co.										
20 Anza	72.8	0.37	89.3	9.8	59.5	2M	59.7	2.2	824	9
112 Yecora Rojo	73.4	0.36	90.1	10.3	63.2	4M	64.4	2.8	863	3
221 Phoenix	73.2	0.36	90.0	9.6	62.1	3M	62.3	2.3	877	8
243 Probred	72.3	0.38	87.9	12.0	63.8	3H	65.5	3.6	793	4
353 Yolo	72.4	0.36	89.0	9.7	60.1	3M	60.3	2.3	811	8
415 Klasic	74.0	0.34	91.7	11.3	63.9	5H	65.6	5.2	831	3
544 Tadinia	73.7	0.35	91.3	10.0	62.0	3M	61.7	1.8	862	6
638 Serra	74.4	0.36	91.3	9.6	62.2	8M	63.9	4.3	1037	2
671 S8330501	70.3	0.38	85.9	11.3	60.4	3M	61.1	2.1	756	8
672 Baker	69.1	0.36	85.7	9.7	63.2	4M	65.9	3.3	926	8
683 UC 683	67.0	0.39	82.2	9.5	61.7	3M	62.4	2.3	808	8
702 UC 702	70.7	0.35	88.0	10.6	66.6	5H	68.3	4.0	940	3
703 UC 703	70.4	0.35	87.8	12.0	63.7	2H	65.4	2.2	838	4
716 PH983-69	71.8	0.37	88.0	12.6	61.9	5H	64.6	3.6	896	2
733 BH122	71.1	0.37	87.2	9.9	60.8	3M	62.5	2.3	908	5
736 NK85S412	71.9	0.36	88.9	9.9	60.5	4M	62.2	2.8	908	6
745 PH982-163R	69.9	0.36	86.8	9.8	61.7	4M	63.4	2.8	939	6
750 CM28339	67.8	0.36	84.5	10.0	62.2	3M	63.9	2.4	812	8
773 Cargill 42450	67.2	0.43	80.0	11.9	59.8	4M	61.5	2.8	934	3
775 ESCA 1	71.7	0.35	89.0	11.2	67.3	5H	68.0	3.5	888	4
776 ESCA 2	69.5	0.39	84.7	11.2	65.0	3H	66.7	3.0	963	3
777 ESCA 3	70.3	0.44	82.7	11.4	64.1	2H	65.8	2.2	885	5
778 ESCA 4	69.9	0.36	86.8	11.4	65.8	2H	67.5	2.3	920	5
779 ESCA 5	68.7	0.35	85.7	11.7	63.9	2H	65.6	2.2	877	5
784 UC 784	69.9	0.37	86.0	9.8	63.2	4M	64.9	2.5	879	6
785 UC 785	70.7	0.40	85.4	10.8	61.2	4M	62.9	2.9	832	5
786 UC 786	71.7	0.37	87.7	9.9	62.8	6M	64.5	3.3	923	3
787 DA984-155	69.3	0.35	86.4	9.7	63.7	4M	65.4	2.9	926	4
788 DA984-034	70.8	0.35	87.9	12.2	64.6	2H	66.3	2.2	931	5
789 Marshall	72.8	0.39	87.8	10.0	61.9	4M	63.6	2.5	937	2
790 Len	71.9	0.38	87.4	11.5	65.8	5H	67.5	3.7	894	2
791 NK84S8148	73.1	0.33	91.5	11.2	63.5	8M	65.2	4.3	863	2
792 NK85S318R	71.5	0.32	90.1	10.5	62.5	6M	64.2	3.1	956	3
793 NK85S318W	71.5	0.35	88.7	10.5	62.0	4M	63.7	3.0	981	5
794 NK85S8961	71.3	0.34	88.9	9.4	60.1	3M	61.8	2.6	854	6
803 FMC5086	71.5	0.38	87.1	9.7	60.2	3M	60.9	2.3	906	6
804 FMC5144	72.6	0.38	88.2	8.8	58.6	2M	59.3	1.5	836	9
805 FMC5742	70.7	0.33	88.9	10.6	59.6	4M	61.3	2.8	850	5
806 FMC5745	74.0	0.37	90.1	10.9	60.8	6M	62.5	3.5	956	3
807 FMC5758	72.8	0.40	87.7	10.8	63.7	8M	65.4	5.7	947	4
808 Pegasus	68.9	0.39	83.8	11.0	61.7	6M	63.4	3.2	895	2
UC Davis										
20 Anza	75.8	0.45	88.0	9.3	56.3	1M	56.0	1.4	645	9
112 Yecora Rojo	72.5	0.46	84.1	11.2	64.6	5H	64.3	3.3	838	4

Entry	Flour				Mixograph		Baking			
	YLD	ASH	MSCR	PRO	ABSR	TY	ABSR	MXT	LVOL	BCR
221 Phoenix	71.3	0.37	87.3	10.2	63.5	3M	64.2	2.1	860	7
243 Probred	70.7	0.35	88.0	10.4	64.3	6M	65.0	3.0	827	7
353 Yolo	72.7	0.34	90.7	9.3	60.5	2M	61.2	1.9	810	9
415 Klasic	73.3	0.33	91.8	10.6	62.9	5H	64.6	3.7	835	5
544 Tadinia	70.9	0.33	89.3	9.7	58.8	2M	59.5	1.7	741	9
638 Serra	72.4	0.34	90.4	10.5	62.0	7M	63.7	4.1	871	4
671 S8330501	69.7	0.35	86.8	10.5	58.5	2M	59.2	1.9	686	9
672 PH982-38	67.6	0.36	84.4	10.2	62.6	3H	64.3	2.6	895	6
683 UC 683	66.8	0.38	82.1	9.8	61.9	3M	63.6	1.9	819	8
702 UC 702	69.3	0.33	87.4	11.7	64.2	5H	65.9	4.1	812	6
703 UC 703	70.1	0.33	88.6	11.0	62.5	2H	64.2	2.1	795	7
716 Baker	71.2	0.41	85.4	11.5	64.0	5H	65.7	3.1	869	2
733 BH122	69.3	0.37	85.6	11.0	62.2	3M	63.9	2.1	850	8
736 NK85S412	70.1	0.34	87.8	10.4	62.6	4M	64.3	2.5	837	6
745 PH982-163R	67.1	0.31	86.1	10.4	62.0	6M	63.7	3.1	882	5
750 CM28339	65.4	0.34	83.1	9.2	62.7	3M	64.4	2.4	732	9
773 Cargill 42450	68.2	0.34	85.8	10.2	60.1	4M	61.8	2.5	895	5
775 ESCA 1	70.0	0.34	87.8	11.6	65.4	4H	68.1	3.1	888	2
776 ESCA 2	67.6	0.38	83.2	12.3	64.6	4H	67.3	2.8	894	2
777 ESCA 3	69.4	0.35	86.6	11.3	65.0	3H	67.7	2.5	886	4
778 ESCA 4	70.0	0.37	86.2	12.2	64.6	3H	66.3	2.2	851	4
779 ESCA 5	69.0	0.34	86.9	11.2	66.0	3H	67.7	2.3	963	4
784 UC 784	68.9	0.33	86.8	10.1	61.6	3M	63.3	2.4	801	8
785 UC 785	69.0	0.36	85.6	10.5	61.4	8M	64.1	3.9	826	6
786 UC 786	69.3	0.37	85.6	10.6	63.6	4H	66.3	3.3	835	4
787 DA984-155	65.5	0.34	83.1	10.6	62.8	6M	65.5	2.7	840	6
788 DA984-034	68.5	0.36	85.4	12.1	62.7	6M	64.9	1.8	847	6
789 Marshall	71.7	0.38	87.5	12.2	64.5	4H	65.2	4.3	816	2
790 Len	70.6	0.38	86.1	12.7	62.4	4H	64.6	4.2	895	2
791 NK84S8148	72.2	0.33	90.4	11.2	63.7	3H	65.4	2.9	863	2
792 NK85S318R	68.6	0.31	87.8	10.8	62.8	4M	64.5	3.3	827	3
793 NK85S318W	68.5	0.33	86.5	11.1	64.6	6M	66.8	4.0	859	3
794 NK85S8961	69.6	0.34	87.2	10.1	63.1	4M	64.8	3.2	856	2
803 FMC5086	67.2	0.36	83.7	10.2	63.0	4M	64.7	2.2	825	6
804 FMC5144	72.4	0.32	91.3	9.8	63.0	3M	64.7	2.3	894	6
805 FMC5742	68.4	0.34	86.3	10.6	64.4	6M	66.1	3.9	830	6
806 FMC5745	71.9	0.36	88.5	10.3	63.2	8M	68.4	3.9	853	5
807 FMC5758	71.0	0.36	87.6	10.8	65.1	5H	67.3	4.8	862	4
808 Pegasus	67.9	0.40	82.6	10.7	63.8	3M	65.5	2.8	854	4
Sacramento-San Joaquin Delta										
20 Anza	74.4	0.36	91.5	10.4	59.4	2M	59.1	1.3	727	9
112 Yecora Rojo	74.3	0.34	92.3	12.1	64.4	5H	66.1	4.0	887	2
221 Phoenix	73.6	0.34	91.3	11.2	63.5	2H	63.2	1.6	893	8
243 Probred	73.6	0.35	91.0	11.5	64.0	5H	64.7	3.4	949	3
353 Yolo	74.4	0.36	91.3	9.8	61.1	2H	60.8	1.7	889	9
415 Klasic	75.0	0.34	92.8	11.5	65.5	6H	67.2	5.3	969	3
544 Tadinia	71.6	0.35	89.1	9.4	65.3	3M	65.5	1.8	934	7
638 Serra	75.3	0.39	90.6	10.5	66.9	6H	67.6	7.3	1006	2

Entry	Flour				Mixograph		Baking			
	YLD	ASH	MSCR	PRO	ABSR	TY	ABSR	MXT	LVOL	BCR
671 S8330501	72.1	0.35	89.6	11.3	62.6	2H	62.8	2.0	816	6
672 PH982-38	69.5	0.36	86.2	10.5	67.3	5H	69.0	3.3	891	5
683 UC 683	69.2	0.36	85.8	9.9	63.6	3M	63.3	1.6	823	9
702 UC 702	73.2	0.31	92.4	12.5	67.2	5H	68.4	4.5	902	3
703 UC 703	73.0	0.33	91.2	11.9	64.5	2H	64.2	1.9	899	3
716 Baker	72.9	0.33	91.0	10.4	62.7	2M	61.9	1.3	847	8
733 BH122	72.9	0.34	90.6	12.1	66.9	5H	67.6	4.4	817	2
736 NK85S412	72.3	0.35	89.6	10.4	63.6	4M	65.3	3.2	862	4
745 PH982-163R	70.6	0.33	88.7	10.4	64.8	3H	66.5	3.7	922	4
750 CM28339	68.7	0.32	87.7	10.7	62.6	2H	63.3	2.0	749	9
773 Cargill 42450	70.8	0.34	88.5	10.7	61.7	3M	62.4	2.1	844	8
775 ESCA 1	73.5	0.33	92.0	12.7	68.8	5H	70.5	4.2	825	4
776 ESCA 2	71.8	0.38	87.6	12.2	66.2	3H	67.9	3.1	876	4
777 ESCA 3	73.1	0.36	89.8	13.5	67.2	3H	67.9	2.3	870	4
778 ESCA 4	73.0	0.34	91.1	13.5	66.9	2H	67.6	2.2	865	4
779 ESCA 5	72.9	0.33	91.1	13.4	67.3	3H	67.5	2.3	861	4
784 UC 784	71.4	0.36	88.4	11.1	64.7	4M	65.4	2.8	774	5
785 UC 785	71.4	0.35	88.5	11.0	62.9	4M	63.1	2.8	835	4
786 UC 786	72.6	0.38	88.4	10.6	64.6	6M	65.3	3.6	855	4
787 DA984-155	69.3	0.38	84.7	10.3	64.2	6M	64.9	3.2	843	5
788 DA984-034	73.1	0.33	91.6	13.3	64.7	2H	64.9	2.1	897	3
789 Marshall	73.4	0.38	89.4	11.5	62.0	4M	62.2	2.3	824	4
790 Len	71.9	0.34	89.9	13.1	68.1	5H	69.3	3.7	855	2
791 NK84S8148	73.4	0.31	92.7	11.3	64.7	3H	66.4	4.2	846	5
792 NK85S318R	71.7	0.32	90.8	12.1	64.8	3H	66.5	4.7	892	3
793 NK85S318W	71.6	0.34	89.4	11.4	62.9	3H	64.6	4.1	925	5
794 NK85S8961	71.7	0.34	89.4	9.8	63.7	8M	64.4	4.8	839	4
803 FMC5086	70.8	0.36	87.3	10.2	63.1	3M	63.3	2.3	850	7
804 FMC5144	73.6	0.35	90.9	9.5	64.2	3M	63.9	1.9	858	9
805 FMC5742	71.3	0.30	91.4	11.5	63.7	4H	64.9	3.1	834	4
806 FMC5745	75.4	0.37	92.0	10.1	63.6	8M	65.3	4.2	881	4
807 FMC5758	72.2	0.37	88.3	11.5	65.0	6H	66.7	6.2	899	3
808 Pegasus	70.1	0.39	85.0	10.7	63.1	3M	63.8	2.6	824	6

*Quality analyses were performed by the Western Wheat Quality Laboratory, USDA, Pullman, WA.

YLD = flour extraction percentage; ASH = flour ash percentage; MSCR = milling score; PRO = flour protein, 14% m.b.; ABSR = absorption at 14% m.b. corrected to 11% protein; TY = mixograph type; MXT = optimum mixing time in minutes; LVOL = loaf volume (cc) corrected to 11% protein; BCR = bread crumb rating (1 = excellent; 2 = satisfactory, 4 = questionable/satisfactory, 6 = questionable, 9 = unsatisfactory)

TABLE 25. 1988 KINGS COMMON WHEAT TEST, QUALITY EVALUATION.*

Entry	WHT PRO	Flour YLD	ABS	MXT	LVOL	Texture	Grain	Crumb Color
20 Anza	11.53	70.0	58.0	6	--	harsh	vr. open	vr. cr. dull
112 Yecora Rojo	12.89	72.0	61.0	8	2725	soft	vr. open	sl. cr. brt.
221 Phoenix	12.39	73.0	60.0	6	2475	harsh	open	sl-cr. brt.
243 Probred	13.69	73.0	62.0	10	2650	soft	open	wht. brt.
353 Yolo	13.50	73.0	60.0	5	2325	harsh	open	cr. brt.
415 Klasic	12.95	75.0	61.0	11	2675	soft	vr. open	sl. cr. brt.
544 Tadinia	11.80	73.0	59.0	5	2300	harsh	open	cr. brt.
638 Serra	12.74	73.0	60.0	12	2750	soft	vr. open	wht. brt.
671 S8330501	12.64	73.0	60.0	6	2325	harsh	open	sl. cr. brt.
672 PH982-38	12.56	71.0	60.0	9	2450	sl. harsh	vr. open	wht. brt.
683 UC 683	11.87	70.0	59.0	4	2125	--	vr. open	cr. dull
702 UC 702	13.78	67.0	62.0	10	2350	--	vr. open	sl. cr. brt.
703 UC 703	13.79	69.5	58.0	9	2150	--	sl-op	cr. dull
716 Baker	13.79	73.1	58.0	11	2500	--	sl-op	sl. cr. brt.
733 BH 122	12.75	76.0	58.0	9	2100	--	open	cr. dull
736 NK85S412	12.43	75.3	59.0	7	2525	--	open	cl. cr.
745 PH 982-163R	12.54	78.0	59.0	7	2350	sl. harsh	sl-op	cr. dull
750 CM28339	12.48	63.7	59.0	6	2375	sl. harsh	sl-op	cr. dull
773 Cargill 42450	13.95	69.3	60.0	5	2775	soft	open	cr. brt.
775 ESCA 1	12.90	71.8	60.0	10	2750	soft	vr. open	wht. brt.
776 ESCA 2	13.66	71.8	60.0	9	2675	soft	vr. open	cr. brt.
777 ESCA 3	13.25	69.3	60.0	10	2425	sl. harsh	very open	cr. brt.
778 ESCA 4	12.90	72.7	59.0	9	2600	soft	vr. open	cr. brt.
779 ESCA 5	11.55	69.0	58.0	7	2725	soft	v. open	cr. brt.
784 UC 784	13.25	70.0	60.0	8	2825	soft	vr. open	sl. cr. brt.
785 UC 785	13.45	72.0	62.0	5	2325	soft	open	wht. brt.
786 UC 786	12.35	70.0	60.0	9	2450	soft	open	wht. brt.
787 DA984-155	12.52	70.0	60.0	10	2175	harsh	vr. open	cr. brt.
788 DA984-034	13.60	71.0	62.0	10	2725	soft	very open	wht. brt.
789 Marshall	13.27	73.0	62.0	6	2600	--	open	sl. cr. brt.
790 Len	15.14	70.4	63.0	13	2575	--	vr. open	cr. brt.
791 NK84S8148	13.25	67.2	63.0	10	2350	soft	sl. op.	cr. brt.
792 NK858318R	13.10	70.1	61.0	11	2275	very harsh	very open	cr. brt.
793 NK85S318W	12.60	72.0	60.0	13	2200	very harsh	very open	cr. brt.
794 NK85S8961	12.57	72.0	60.0	12	2325	harsh	very open	cr. brt.
803 FMC5086	12.39	71.2	60.0	11	2075	harsh	vr. open	cr. brt.
804 FMC5144	11.63	74.0	58.0	5	2350	harsh	vr. open	cr. dull
805 FMC5742	13.08	71.0	60.0	11	2350	sl. harsh	vr. open	sl. cr. brt.
806 FMC5745	12.37	71.0	60.0	12	2600	soft	vr. open	wht. brt.
807 FMC5758	12.38	74.0	60.0	14	2625	soft	vr. open	sl. cr. brt.

Quality analyses were performed by ADM Milling Company, Olathe, KS.

WHT PRO = wheat protein, 12% m.b.; Flour YLD = % flour; ABS = bake absorption %; MXT = mixing time (minutes); LVOL = loaf volume (cc); Texture = loaf texture; Grain = loaf cell structure.

TABLE 26. 1989 COMMON WHEAT TESTS, PROTEIN* SCORES.

ENTRY		KINGS	KERN	BUTTE	SUTTER	UCD	DELTA	AVERAGE
20	ANZA	12.57	12.87	10.84	9.50	12.40	10.91	11.52
112	YECORA ROJO	12.77	13.93	12.48	10.47	14.56	13.20	12.90
221	PHOENIX	12.90	13.40	12.50	9.80	13.30	12.80	12.45
243	PROBRED	12.60	14.67	10.40	10.47	13.92	14.01	12.68
353	YOLO	12.60	12.76	9.96	9.18	11.88	11.58	11.33
415	KLASIC	13.50	14.20	11.70	10.40	13.79	13.95	12.92
538	PROBRAND 775	12.35	13.43	12.41	10.30	14.52	12.50	12.58
544	TADINIA	12.02	13.18	11.25	9.90	12.08	11.92	11.72
638	SERRA	12.51	13.04	11.19	9.57	13.03	12.37	11.95
671	S8330501	13.01	13.09	11.98	9.40	12.67	13.62	12.30
716	BAKER	13.59	14.48	12.32	10.20	14.27	14.74	13.27
776	ESCA 2	15.16	15.37	11.07	10.34	14.73	14.96	13.60
778	ESCA 4	13.69	14.54	12.20	10.42	13.92	14.55	13.22
779	ESCA 5	14.11	13.93	11.48	10.09	14.62	14.44	13.11
784	UC 784	14.15	13.97	12.19	9.58	13.95	12.77	12.77
785	UC 785	13.83	14.13	11.40	10.25	14.79	13.44	12.97
786	UC 786	12.91	12.93	10.61	9.99	14.20	12.51	12.19
788	DA 984-034	14.10	14.31	12.80	10.03	14.14	14.49	13.31
804	FMC BR 5144	12.73	12.57	10.32	8.62	11.35	11.25	11.14
821	FMC BR 5236	12.96	13.56	11.59	9.57	14.25	12.61	12.43
822	FMC BR 5450	13.87	14.42	11.09	10.61	13.98	14.39	13.06
823	FMC BR 5678	13.35	14.53	12.01	10.04	14.12	13.94	13.00
824	FMC BR 5784	13.22	13.44	9.99	9.37	14.20	13.00	12.20
825	DA 984-146	14.23	14.25	11.47	10.01	13.58	14.01	12.92
826	DA 984-039	13.69	13.99	12.30	10.43	14.37	14.36	13.19
827	PB BR 5702	14.05	14.36	12.69	9.74	14.08	13.91	13.14
828	PB BR 5710	14.29	14.79	12.67	10.31	14.61	14.88	13.59
829	PB BR 5738	14.16	14.06	13.13	11.28	14.00	14.68	13.55
830	PB BR 5762	12.67	13.19	12.11	10.13	14.10	13.43	12.60
834	QT 555	12.26	12.27	11.35	8.83	13.53	13.30	11.92
835	QT 562	12.20	12.89	10.57	8.49	13.00	12.26	11.57
836	QT 574	12.69	13.72	11.46	9.69	14.15	13.49	12.53
837	QT 578	13.05	13.67	10.71	9.17	13.02	13.29	12.15
838	QT 588	12.80	13.21	10.01	8.41	11.60	12.65	11.45
839	UC 839	13.59	13.08	11.64	10.39	12.79	12.57	12.34
840	UC 840	12.83	13.22	10.42	10.03	13.27	12.60	12.06
841	UC 841	13.65	13.61	11.97	10.72	12.90	13.83	12.78
842	UC 842	14.37	14.23	11.98	11.18	13.98	14.28	13.34
843	UC 843	13.76	13.87	12.47	10.92	13.58	13.93	13.09
844	UC 844	13.77	14.04	11.52	10.56	13.89	13.29	12.84
845	UC 845	13.18	13.72	12.64	10.82	13.54	14.25	13.02
846	UC 846	13.00	13.69	11.91	10.98	13.28	14.02	12.81
847	UC 847	13.18	13.71	13.04	10.47	13.45	13.61	12.91
848	YECORA ROJO 87W	13.97	14.46	11.64	10.32	14.07	13.91	13.06
849	UC 849	14.10	14.50	11.37	11.50	14.80	15.10	13.56
850	UC 850	10.61	11.40	8.84	8.10	12.40	10.70	10.34
851	UC 851	13.32	13.60	13.07	9.80	14.00	13.70	12.92
852	UC 852	10.56	11.10	8.13	8.59	11.54	11.15	10.18
853	ESCA 32	13.00	13.89	12.03	10.32	12.36	13.39	12.50
AVERAGE		13.21	13.66	11.53	9.99	13.56	13.36	12.55

*12% moisture basis.

TABLE 27. 1989 UC DAVIS DURUM WHEAT TEST.

ENTRY	YIELD	LODGING ON 5/12	LODGING AT HARVEST	SHATTER	STRIPE RUST	DAYS TO HEADING AFTER 3/1	DAYS TO MATURITY AFTER 3/1	PLANT HEIGHT	TEST WEIGHT	BLACK POINT	THOUSAND KERNEL WEIGHT
	(lbs/acre)							(inches)	(lbs/bu)		(grams)
112 YECORA ROJO (HRS)	5390 (15)	5.5	6.0	1.8	1.0	40	83	30	61.5	1.0	44.3
169 MEXICALI 75	4870 (22)	6.8	7.8	1.5	1.0	41	85	30	59.5	1.0	44.1
410 ALDURA	6080 (4)	1.5	2.5	1.0	1.0	47	93	32	62.5	1.5	44.5
496 YAVAROS 79	5950 (8)	4.5	7.5	1.5	1.0	47	86	36	64.3	1.0	47.9
522 WESTBRED 881	5010 (19)	4.8	6.0	1.5	1.8	41	89	35	62.3	1.0	52.5
674 WESTBRED TURBO	5990 (7)	5.0	7.8	2.3	1.0	47	93	32	62.1	1.0	47.0
676 IMPERIAL	5700 (11)	2.3	4.5	2.3	1.0	50	90	39	60.3	1.0	53.2
712 UC 712	5410 (14)	5.3	7.3	1.3	1.5	45	88	35	61.9	1.0	47.5
714 ALTAR 84	5130 (18)	6.0	6.5	1.5	1.0	46	87	35	62.8	1.0	41.8
742 UC 742	5300 (16)	4.3	7.0	1.5	1.5	43	86	34	61.9	1.0	42.3
743 UC 743	5250 (17)	5.5	7.5	1.3	1.3	46	87	33	63.5	1.0	42.5
747 PH 884-11	4960 (20)	5.0	7.0	1.5	1.0	46	87	35	60.1	1.0	40.0
780 UC 780	4930 (21)	5.8	7.8	2.0	1.3	40	84	27	61.2	1.0	41.8
781 UC 781	6240 (3)	3.3	6.5	2.0	2.0	45	87	32	61.2	1.0	41.0
782 UC 782	5430 (13)	5.3	6.5	2.0	1.8	42	86	34	63.0	1.5	42.7
783 CARCOMUN "S"	6000 (6)	2.3	6.3	1.5	1.5	47	87	33	61.1	1.0	41.0
795 NUDURA	4730 (23)	2.3	4.3	1.0	1.0	46	85	31	62.9	1.5	51.5
798 FMC D5317	5440 (12)	5.5	7.5	1.8	1.0	42	85	33	61.0	1.5	40.1
809 DUREX	4140 (25)	2.8	4.3	1.5	2.0	41	93	36	61.7	2.0	52.7
814 FMC D5730	6780 (1)	2.3	5.5	1.3	1.0	41	87	34	62.5	1.5	48.3
819 FMC D5171	4630 (24)	6.0	7.5	1.0	1.0	41	90	36	62.3	2.0	48.5
820 FMC D5681	6540 (2)	5.3	6.8	2.3	1.0	36	85	33	60.8	1.5	41.3
831 PH 884-2	6030 (5)	7.3	8.0	1.3	1.0	40	86	34	60.6	1.0	41.1
832 PH 884-28	5840 (10)	2.8	5.3	1.5	1.3	41	87	34	63.1	1.5	51.0
833 PH 885-60	5880 (9)	1.0	3.8	1.8	2.0	46	86	32	60.8	1.0	36.8
MEAN	5500	4.3	6.3	1.6	1.3	43	87	33	61.8	1.2	45.0
CV	9.1	29.7	21.1	35.4	38.8	1.6	3.1	5.6	1.6	26.6	6.1
LSD (.05)	700	1.8	1.9	0.8	0.7	1	6	4	2.0	0.7	5.7

Rating scale for diseases (area of flag-1 leaf affected), lodging, and shatter: 1 = 0-3%, 2 = 4-14%; 3 = 15-29%; 4 = 30-49%; 5 = 50-69%; 6 = 70-84%; 7 = 85-95%; 8 = 96-100%.
Diseases assessed but occurring in trace or less amounts: BYDV, leaf rust, Septoria leaf blotch, and powdery mildew.
Numbers in parentheses indicate relative rank in column.

TABLE 28. 1989 SACRAMENTO-SAN JOAQUIN DELTA DURUM WHEAT TEST.

ENTRY	YIELD	LODGING AT HARVEST	SHATTER	BYDV	POWDERY MILDEW	PLANT HEIGHT	TEST WEIGHT	BLACK POINT	THOUSAND KERNEL WEIGHT
	(lbs/acre)					(inches)	(lbs/bu)		(grams)
112 YECORA ROJO (HRS)	5310 (25)	1.3	2.3	3.3	2.3	34	63.8	1.0	47.5
169 MEXICALI 75	7880 (16)	2.0	2.3	2.0	1.0	42	62.7	1.5	56.3
410 ALDURA	8000 (12)	1.0	1.0	1.0	2.0	37	63.6	2.0	51.0
496 YAVAROS 79	8120 (8)	3.3	1.5	1.0	1.0	40	65.5	2.0	57.4
522 WESTBRED 881	7210 (24)	1.3	1.3	3.0	1.0	40	62.4	2.5	56.3
674 WESTBRED TURBO	8660 (3)	6.5	2.5	1.0	1.8	42	63.9	2.0	55.3
676 IMPERIAL	7590 (20)	1.5	1.8	1.3	1.0	43	61.4	2.0	62.6
712 UC 712	7890 (15)	2.0	2.0	1.8	3.3	42	63.2	1.5	52.8
714 ALTAR 84	8090 (9)	6.5	1.3	1.0	1.0	39	64.8	1.5	44.5
742 UC 742	8350 (6)	1.5	1.3	1.3	1.0	43	63.7	1.5	52.7
743 UC 743	7580 (21)	1.5	2.3	1.3	4.3	41	64.9	1.5	50.8
747 PH 884-11	7890 (14)	3.3	2.0	1.3	1.0	43	63.1	1.5	53.8
780 UC 780	7950 (13)	4.5	2.5	1.3	1.0	43	64.1	2.0	50.6
781 UC 781	9020 (1)	2.3	2.3	1.5	1.0	37	63.1	2.0	47.1
782 UC 782	8020 (11)	1.0	2.3	2.5	5.0	39	64.9	1.5	49.7
783 CARCOMUN "S"	8760 (2)	5.5	1.5	1.3	1.0	40	63.2	2.0	48.5
795 NUDURA	7600 (19)	1.5	1.0	1.0	1.0	38	64.2	2.0	56.9
798 FMC D5317	7730 (18)	3.0	1.8	1.3	1.0	40	62.7	2.0	50.3
809 DUREX	7270 (23)	1.0	2.0	2.3	1.0	42	61.7	2.0	54.9
814 FMC D5730	8550 (4)	1.0	1.0	1.3	1.8	40	63.5	2.5	55.0
819 FMC D5171	7850 (17)	1.0	1.5	1.8	1.3	39	63.8	2.0	57.5
820 FMC D5681	8370 (5)	1.3	2.3	1.5	1.0	39	62.3	2.0	46.8
831 PH 884-2	8210 (7)	1.0	1.0	1.3	2.8	42	63.2	1.5	50.4
832 PH 884-28	8050 (10)	1.0	1.3	1.3	1.0	40	63.5	2.0	53.5
833 PH 885-60	7410 (22)	1.3	1.0	4.3	2.3	38	62.2	1.5	43.5
MEAN	7890	2.3	1.7	1.6	1.7	40	63.4	1.8	52.2
CV	5.9	45.8	34.6	39.6	29.5	3.0	0.5	27.2	2.2
LSD (.05)	660	1.5	0.8	0.9	0.7	3	0.7	NS	2.4

Rating scale for diseases (area of flag-1 leaf affected), lodging, and shatter: 1 = 0-3%; 2 = 4-14%; 3 = 15-29%; 4 = 30-49%; 5 = 50-69%; 6 = 70-84%; 7 = 85-95%; 8 = 96-100%.
Diseases assessed but occurring in trace or less amounts: leaf rust, stripe rust, and Septoria leaf blotch.
Numbers in parentheses indicate relative rank in column.
BYDV ratings (see scale above) were based on percentage of plants showing foliar symptoms.

TABLE 29. 1989 KINGS DURUM WHEAT TEST.

ENTRY	YIELD	LODGING ON 5/18	LODGING AT HARVEST	BYDV	PLANT HEIGHT	TEST WEIGHT	THOUSAND KERNEL WEIGHT
	(lbs/acre)				(inches)	(lbs/bu)	(grams)
112 YECORA ROJO (HRS)	4190 (6)	1.0	1.5	1.0	29	55.9	27.6
169 MEXICALI 75	2900 (23)	3.8	5.5	1.5	35	51.7	27.8
410 ALDURA	3500 (17)	1.0	2.0	1.0	30	54.3	29.2
496 YAVAROS 79	3550 (15)	2.5	5.0	2.3	35	54.0	27.0
522 WESTBRED 881	4250 (5)	3.3	4.0	1.0	34	58.8	33.0
674 WESTBRED TURBO	3850 (10)	4.5	5.3	1.3	40	55.0	30.8
676 IMPERIAL	3330 (20)	1.5	3.3	1.3	35	54.7	35.8
712 UC 712	3530 (16)	2.3	3.3	1.5	35	54.9	31.8
714 ALTAR 84	3250 (21)	5.0	6.3	2.0	34	55.7	26.3
742 UC 742	3570 (14)	2.5	4.3	3.0	36	52.1	25.6
743 UC 743	3840 (11)	3.3	4.8	1.5	36	56.8	31.0
747 PH 884-11	4030 (8)	2.0	3.0	1.5	34	55.0	29.3
780 UC 780	3150 (22)	5.5	5.8	2.0	36	49.6	23.4
781 UC 781	4520 (2)	2.0	3.3	1.0	33	56.8	32.2
782 UC 782	3710 (13)	3.8	5.0	1.8	33	53.7	26.3
783 CARCOMUN "S"	4500 (3)	4.3	5.5	1.0	32	60.1	36.6
795 NUDURA	4430 (4)	1.5	4.5	1.0	33	60.2	37.5
798 FMC D5317	2480 (25)	3.8	6.3	2.3	32	49.5	24.4
809 DUREX	2610 (24)	2.3	4.5	1.5	35	51.6	26.1
814 FMC D5730	3830 (12)	2.8	5.3	1.3	33	54.6	29.8
819 FMC D5171	3400 (19)	4.3	6.8	1.8	33	56.2	29.6
820 FMC D5681	3950 (9)	4.8	6.3	1.5	33	53.8	29.6
831 PH 884-2	4990 (1)	2.5	3.0	1.3	34	58.4	33.0
832 PH 884-28	4170 (7)	1.5	2.8	1.0	35	56.3	31.0
833 PH 885-60	3440 (18)	1.5	3.8	2.5	32	54.1	22.6
MEAN	3720	2.9	4.4	1.5	34	54.9	29.5
CV	21.3	32.3	29.9	46.5	5.3	6.2	15.1
LSD (.05)	1120	1.3	1.9	1.0	4	NS	NS

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 leaf blotch, and powdery mildew.
Numbers in parentheses indicate relative rank in column.
BYDV ratings (see scale above) were based on percentage of plants showing foliar symptoms.

TABLE 30. 1989 IMPERIAL DURUM WHEAT TEST.

ENTRY	YIELD	TEST WEIGHT	DAYS TO HEADING FROM 1/1	DAYS TO MATURITY FROM 1/1	PLANT HEIGHT	LODGING AT HARVEST	SHATTER	THOUSAND KERNEL WEIGHT	% BLACK POINT	% HARD VITREOUS
	(lbs/acre)	(lbs/bu)			(inches)			(grams)		
112 YECORA ROJO (HRS)	7010 (27)	63.0	76	117	30	1.0	1.0	46.5	9.8	96.5
169 MEXICALI 75	8410 (12)	63.0	76	120	37	3.8	2.3	55.3	13.3	94.8
410 ALDURA	8220 (19)	62.3	82	123	31	3.0	1.0	46.6	18.8	98.3
496 YAVAROS 79	9170 (2)	65.0	79	123	36	3.3	1.3	56.9	19.1	91.9
522 WESTBRED 881	7610 (24)	61.8	77	119	34	2.8	1.3	52.6	6.5	99.6
674 WESTBRED TURB	10060 (1)	63.5	82	125	38	3.5	1.3	57.0	9.3	94.0
676 IMPERIAL	8430 (11)	61.8	83	123	37	3.5	1.8	62.5	9.6	99.0
712 UC 712	8730 (4)	63.3	78	120	36	4.3	1.0	52.9	6.0	98.8
714 ALTAR 84	8500 (9)	64.0	80	124	36	4.0	1.0	46.5	11.3	95.1
742 UC 742	8700 (6)	63.8	77	119	35	2.8	1.0	51.6	5.8	86.3
743 UC 743	8490 (10)	64.5	79	120	37	2.5	2.0	53.3	6.1	96.3
747 PH 884-11	8290 (16)	61.8	79	121	35	3.5	1.5	50.0	9.8	97.4
780 UC 780	8270 (17)	63.3	76	120	37	4.0	2.0	48.8	8.0	95.4
781 UC 781	8250 (18)	62.0	78	120	33	4.0	1.5	46.9	9.6	98.4
782 UC 782	8690 (7)	64.8	77	118	35	2.3	1.5	49.4	3.0	95.1
783 CARCOMUN "S"	8870 (3)	63.8	81	122	33	3.5	1.0	50.1	18.4	81.3
795 NUDURA	7830 (23)	64.3	78	121	33	2.8	1.0	52.9	9.6	97.3
798 FMC D5317	7870 (22)	62.8	78	120	34	2.3	2.0	49.6	7.6	99.0
809 DUREX	7550 (26)	62.0	76	121	36	3.5	1.3	52.6	13.0	98.4
814 FMC D5730	8700 (5)	63.0	78	121	33	3.8	1.3	54.5	21.8	97.8
819 FMC D5171	8310 (14)	63.8	76	118	35	2.3	1.0	53.3	6.5	98.0
820 FMC D5681	8510 (8)	61.0	74	117	35	2.3	1.5	48.4	11.4	92.8
831 PH 884-2	8300 (15)	62.0	76	120	35	2.0	1.0	48.9	7.6	98.3
832 PH 884-28	8060 (21)	63.3	76	120	34	1.3	1.0	54.6	6.8	98.1
833 PH 885-60	8310 (13)	62.0	80	120	34	3.8	1.3	47.4	5.3	97.9
854 SEPTRE	7560 (25)	61.8	88	128	47	6.0	1.8	42.8	3.4	90.9
855 TITAN	8170 (20)	65.0	83	127	32	2.0	1.5	50.8	12.8	96.0
MEAN	8330	63.0	78	121	35	3.1	1.4	51.2	10.0	95.6
CV	4.2	0.9	1.3	1.3	2.8	20.0	32.0	3.0	27.7	4.2
LSD (.05)	500	0.8	1	2	1	0.9	0.6	2.1	3.9	5.7

Rating scale for lodging and shatter: 1 = 0-3%, 2 = 4-14%; 3 = 15-29%; 4 = 30-49%; 5 = 50-69%; 6 = 70-84%; 7 = 85-95%; 8 = 96-100%.
Numbers in parentheses indicate relative rank in column.

TABLE 31. 1989 AND 1987-89 DURUM WHEAT YIELD SUMMARY (LBS/ACRE).

ENTRY		1989 4 LOC		1988-89 8 LOC/YR		1987-89 12 LOC/YR	
112	YECORA ROJO (HRS)	5480	(24)	6320	(18)	6550	(12)
169	MEXICALI 75	6020	(22)	6870	(12)	7170	(9)
410	ALDURA	6450	(11)	7290	(5)	7510	(4)
496	YAVAROS 79	6700	(7)	7470	(4)	7670	(1)
522	WESTBRED 881	6020	(21)	6740	(17)	6630	(11)
674	WESTBRED TURBO	7140	(1)	7810	(1)	7610	(2)
676	IMPERIAL	6260	(15)	6820	(14)	7010	(10)
712	UC 712	6390	(12)	7160	(7)	7450	(5)
714	ALTAR 84	6240	(17)	7220	(6)	7590	(3)
742	UC 742	6480	(9)	6960	(9)	7350	(6)
743	UC 743	6290	(14)	6850	(13)	7300	(7)
747	PH 884-11	6290	(13)	6900	(11)	7260	(8)
780	UC 780	6070	(19)	6960	(10)		
781	UC 781	7010	(3)	7670	(3)		
782	UC 782	6460	(10)	7090	(8)		
783	CARCOMUN "S"	7030	(2)	7730	(2)		
795	NUDURA	6150	(18)	6810	(15)		
798	FMC D5317	5880	(23)	6740	(16)		
809	DUREX	5390	(25)				
814	FMC D5730	6970	(4)				
819	FMC D5171	6050	(20)				
820	FMC D5681	6840	(6)				
831	PH 884-2	6880	(5)				
832	PH 884-28	6530	(8)				
833	PH 885-60	6260	(16)				
MEAN		6370		7080		7260	
CV		8.7		7.4		7.4	
LSD (.05)		380		260		220	

Numbers in parentheses indicate relative rank in column.

TABLE 32. 1988 UC DAVIS, SACRAMENTO-SAN JOAQUIN DELTA, KINGS, AND IMPERIAL DURUM WHEAT TESTS, QUALITY EVALUATION.*

	WHT PRO	HARD-NESS	FALL NO.	TOT EXT	SEMO EXT	SPK	DUS	MX	SEMO PRO	VI	FIRM	RES	SCORE
UC Davis													
169 Mexicali	12.2	116	400	78.1	63.3	37	85	5	10.9	8.0	6.11	7.1	1
410 Aldura	12.5	125	400	79.0	62.7	67	95	2	11.3	9.5	4.86	7.1	1
496 Yavaros	11.9	108	400	79.2	62.7	53	75	3	10.7	7.5	5.25	7.5	1
522 Westbred 881	12.9	113	400	77.3	61.8	80	95	5	11.7	9.0	6.16	7.1	3
647 Stifftail 4	13.3	122	400	78.1	62.2	27	80	5	12.4	8.0	5.56	7.6	4
674 Westbred Turbo	12.2	122	400	77.8	62.0	50	85	4	10.4	8.0	4.51	7.8	1
675 PH 883-2	13.6	110	400	76.9	60.2	63	95	7	12.8	9.5	6.13	6.8	4
676 Imperial	14.1	119	400	77.2	61.2	57	85	8	13.3	9.5	6.24	6.7	4
686 CD 25126	12.4	121	400	78.8	61.8	83	90	5	10.7	8.5	5.05	7.4	1
706 Waha 'S'	11.3	110	400	78.1	61.3	43	90	2	10.6	8.5	5.10	6.9	1
712 UC 712	12.4	114	400	78.0	61.5	23	95	5	11.2	9.5	4.75	7.4	2
714 Altar 84	11.9	121	400	79.3	64.0	50	85	4	10.4	9.0	4.88	7.2	1
721 PH 884-32	12.0	111	400	76.1	61.6	43	95	5	11.2	9.5	5.16	7.7	1
738 UC 738	13.4	117	400	77.4	60.0	50	80	1	12.4	8.0	4.75	7.0	3
739 UC 739	13.0	120	400	75.4	59.2	40	90	4	12.1	9.5	5.55	6.8	1
740 UC 740	13.5	120	400	75.9	58.1	27	100	2	12.3	9.5	5.40	7.1	1
741 UC 741	13.5	114	400	75.4	57.9	27	90	1	12.9	9.5	5.21	6.7	1
742 UC 742	12.7	113	400	77.7	61.8	30	85	3	12.3	9.0	5.75	6.8	3
743 UC 743	12.3	122	400	77.9	61.5	17	95	3	11.6	9.0	5.70	7.3	3
746 PH 884-57	11.6	115	400	77.3	61.6	40	90	4	10.8	8.0	4.84	7.4	1
747 PH 884-11	13.0	121	400	77.8	62.2	33	95	6	12.0	9.0	6.33	7.2	3
774 Nutriseed 28-1	11.4	102	400	77.0	59.8	10	80	2	10.6	8.0	5.55	6.8	1
780 UC 780	11.7	120	400	76.5	59.9	37	90	4	10.6	9.0	5.21	7.1	1
781 UC 781	11.9	112	400	76.7	64.1	37	90	3	10.4	9.0	5.18	7.1	1
782 UC 782	13.1	117	400	76.9	61.2	57	80	5	12.0	8.5	5.21	7.6	4
783 Carcomun 'S'	11.4	104	400	77.1	63.2	43	65	3	10.2	7.5	5.05	7.3	1
795 Nudura	13.0	119	400	77.4	60.3	57	95	6	12.2	9.0	6.54	7.2	4
796 NK 85D 9687	11.7	112	400	77.2	62.7	40	95	6	10.1	9.5	4.77	8.1	1
797 NK 85D 9699	12.8	113	400	78.4	61.3	24	100	6	11.4	9.0	5.68	7.4	3
798 FMC D5317	12.9	113	400	76.8	61.0	57	90	7	12.2	8.5	5.68	7.2	4
799 FMC D5081	12.2	114	400	77.8	63.2	73	100	7	11.2	9.5	5.64	7.4	1
800 FMC D5269	12.2	113	400	78.0	59.7	23	90	4	11.1	8.5	5.18	7.6	1
801 FMC D5172	13.6	118	400	78.0	62.0	63	90	4	12.9	9.5	5.10	7.3	4
802 FMC D5118	12.4	112	400	77.9	61.1	57	95	3	11.5	9.5	4.54	7.4	1
Sacramento-San Joaquin Delta													
169 Mexicali	13.2	124	400	77.9	63.4	83	85	7	11.9	9.0	5.64	6.8	4
410 Aldura	13.4	137	400	78.6	62.5	83	95	2	12.5	9.0	4.58	7.0	4
647 Stifftail 4	13.9	120	312	77.3	61.4	57	75	5	12.8	8.0	6.09	6.9	2
496 Yavaros	12.3	120	400	77.1	61.6	83	75	3	10.9	8.0	5.01	7.4	1
522 Westbred 881	14.4	131	400	76.2	61.0	83	95	8	13.6	9.5	6.72	6.4	4
674 Westbred Turbo	13.7	131	400	78.0	61.5	30	85	6	12.6	7.5	5.55	6.7	2
675 PH 883-2	14.7	126	400	77.1	61.1	23	95	8	14.1	9.5	6.50	6.4	4
676 Imperial	16.5	133	400	76.8	60.4	40	80	8	15.4	8.5	7.04	5.8	4
686 CD 25126	13.0	125	400	76.9	59.8	70	90	5	11.7	8.5	5.03	6.9	3

	WHT PRO	HARD-NESS	FALL NO.	TOT EXT	SEMO EXT	SPK	DUS	MX	SEMO PRO	VI	FIRM	RES	SCORE
706 Waha 'S'	13.8	127	400	77.5	62.0	83	90	4	13.0	9.0	4.99	7.1	4
712 UC 712	13.3	121	400	78.4	61.0	40	95	7	12.3	9.5	5.57	7.6	4
714 Altar 84	12.4	127	400	88.8	63.8	43	85	5	11.4	9.0	4.97	7.0	1
721 PH 884-32	12.7	118	400	77.5	60.7	17	95	7	11.6	9.5	5.44	6.7	4
738 UC 738	14.8	124	400	77.4	60.4	33	80	2	14.0	9.0	5.34	6.5	3
739 UC 739	14.0	122	328	75.9	58.8	50	90	4	13.0	9.5	5.27	6.8	2
740 UC 740	14.1	125	400	75.7	59.5	43	100	4	13.2	10.0	5.83	6.6	3
741 UC 741	14.5	122	400	74.1	57.7	43	90	1	13.5	9.5	5.01	6.8	1
742 UC 742	13.9	122	400	76.3	60.6	37	85	3	13.0	9.0	5.79	6.8	4
743 UC 743	13.9	128	400	77.3	60.7	53	90	5	12.9	9.0	6.24	6.5	4
746 PH 884-57	12.3	120	400	78.0	62.6	63	90	6	11.7	9.0	0.54	6.8	1
747 PH 884-11	13.5	126	400	77.1	61.5	30	95	7	12.8	9.0	6.13	7.0	4
774 Nutriseed 28-1	13.3	123	400	77.0	60.6	40	75	2	12.3	8.0	4.97	6.7	2
780 UC 780	12.8	121	400	77.2	60.2	53	90	6	12.0	9.0	5.68	6.2	4
781 UC 781	12.2	116	400	77.3	60.0	50	85	4	11.1	9.5	4.54	7.0	1
782 UC 782	13.6	119	400	77.1	59.0	30	80	7	12.6	8.5	5.94	7.0	2
783 Carcomun 'S'	12.4	128	400	79.2	61.7	63	65	3	11.4	7.5	4.95	7.5	1
795 Nudura	13.7	121	400	78.0	62.6	50	100	7	12.7	9.5	5.88	6.6	4
796 NK 85D 9687	12.2	127	400	78.6	63.5	53	105	6	10.7	9.5	5.31	7.2	1
797 NK 85D 9699	14.5	129	400	77.7	60.6	47	100	8	14.0	9.5	6.42	6.7	4
798 FMC D5317	14.1	116	400	77.2	61.3	43	90	8	13.5	9.0	6.35	6.3	4
799 FMC D5081	13.3	119	400	78.7	62.1	37	105	8	12.9	10.0	5.70	6.2	3
800 FMC D5269	13.2	125	400	77.1	63.2	47	90	5	12.4	9.0	5.64	6.3	4
801 FMC D5172	13.9	120	400	78.7	62.5	63	85	6	13.4	9.5	6.00	6.9	4
802 FMC D5118	14.9	133	400	76.7	59.1	73	95	3	13.9	9.5	5.40	6.5	2
Kings													
169 Mexicali	12.6	116	400	78.1	64.3	40	90	5	11.3	9.0	5.44	6.4	3
410 Aldura	12.2	130	400	78.6	63.6	43	95	1	11.1	9.5	4.64	7.3	2
496 Yavaros	12.1	127	400	78.2	63.2	33	80	3	10.9	8.0	5.40	7.6	1
522 Westbred 881	13.0	113	400	76.9	60.8	63	100	5	11.7	9.5	6.16	6.7	3
647 Stifftail 4	13.7	124	400	78.3	62.6	30	80	3	12.5	8.5	6.20	6.5	4
674 Westbred Turbo	12.9	123	400	76.5	60.0	67	90	3	11.4	9.0	5.29	7.0	1
675 PH 883-2	13.4	125	400	78.1	62.6	47	100	7	12.5	9.5	6.35	7.1	4
676 Imperial	14.5	114	400	77.1	61.5	67	90	6	14.2	9.5	6.39	6.2	3
686 CD 25126	12.9	117	400	77.9	61.1	30	95	3	11.3	9.0	5.55	6.9	2
706 Waha 'S'	12.8	122	400	78.3	62.4	27	95	2	11.5	9.5	5.46	6.5	3
712 UC 712	12.7	114	400	79.1	62.8	53	95	5	11.1	9.5	5.92	7.3	3
714 Altar 84	11.0	124	400	78.4	63.2	47	90	3	10.7	8.5	5.14	7.0	1
721 PH 884-32	12.1	118	400	78.3	62.6	37	95	4	10.8	9.5	5.64	6.9	1
738 UC 738	14.1	123	400	78.8	62.0	73	85	1	13.1	9.0	5.98	6.4	2
739 UC 739	12.4	117	400	77.1	61.1	37	100	3	11.6	10.0	6.13	6.8	2
740 UC 740	13.3	123	400	75.9	60.3	47	105	2	11.9	10.0	6.39	6.7	2
741 UC 741	13.3	118	400	76.2	61.7	63	95	1	12.3	9.5	6.03	6.6	3
742 UC 742	13.6	125	400	77.2	62.2	37	90	3	12.6	9.5	6.39	6.6	4
743 UC 743	13.2	121	400	77.3	62.1	20	100	3	12.1	9.5	6.83	6.4	3
746 PH 884-57	11.7	118	400	78.6	62.7	43	90	3	10.6	9.0	4.92	7.3	1
747 PH 884-11	13.2	117	400	77.3	62.3	50	95	7	12.2	9.5	6.29	6.9	3

	WHT PRO	HARD-NESS	FALL NO.	TOT EXT	SEMO EXT	SPK	DUS	MX	SEMO PRO	VI	FIRM	RES	SCORE
774 Nutriseed 28-1	13.4	116	400	76.6	60.7	23	80	2	11.8	9.0	5.57	6.7	4
780 UC 780	12.2	111	400	77.8	62.2	60	95	5	11.4	9.5	5.88	6.6	1
781 UC 781	12.4	119	400	77.2	61.5	33	90	3	10.9	9.0	5.90	6.6	1
782 UC 782	13.0	122	400	76.8	61.0	37	85	4	11.5	9.0	6.33	6.2	3
783 Carcomun 'S'	12.0	116	400	77.9	62.1	20	70	3	10.6	9.0	5.42	7.2	1
795 Nudura	13.0	122	400	77.9	62.4	53	100	4	11.4	9.5	6.07	6.5	3
796 NK 85D 9687	11.4	114	400	78.0	63.7	33	100	4	10.5	9.5	5.53	7.1	1
797 NK 85D 9699	13.1	116	400	85.1	61.3	33	100	5	11.7	9.5	5.90	7.2	4
798 FMC D5317	13.1	105	400	77.6	62.4	53	100	5	12.2	9.5	5.81	7.1	4
799 FMC D5081	13.0	115	400	78.4	62.1	30	100	4	11.9	9.0	6.03	6.4	3
800 FMC D5269	12.6	111	400	77.9	63.4	27	95	4	11.5	9.0	5.42	6.9	2
801 FMC D5172	12.8	116	400	78.1	64.4	47	90	4	12.4	9.0	5.40	7.1	4
802 FMC D5118	13.5	124	400	76.0	59.8	63	100	3	12.5	9.0	5.62	6.7	1
Imperial													
169 Mexicali	11.7	102	400	74.7	61.3	47	80	3	10.7	8.5	5.49	6.5	1
410 Aldura	12.2	100	400	75.3	59.5	73	90	2	11.2	9.5	4.51	7.3	1
496 Yavaros	12.4	87	400	74.6	59.5	43	80	2	10.5	8.0	4.77	7.4	1
522 Westbred 881	12.9	99	400	73.0	57.0	37	90	4	12.0	9.5	5.66	6.6	3
647 Stifftail 4	12.6	99	400	74.7	58.9	57	85	3	11.6	8.0	5.62	7.0	4
674 Westbred Turbo	11.9	93	400	74.1	59.2	40	80	3	10.8	8.5	5.01	7.0	1
675 PH 883-2	14.3	96	400	72.7	57.7	37	90	8	13.2	9.5	7.97	6.6	4
676 Imperial	13.7	103	400	74.0	57.8	53	80	4	13.1	9.0	5.72	7.1	4
686 CD 25126	11.8	94	400	73.3	58.2	47	85	4	11.0	9.0	5.46	7.6	1
706 Waha 'S'	13.0	85	400	74.6	58.5	40	85	3	12.0	9.0	5.16	6.7	3
712 UC 712	12.9	94	400	74.2	58.3	43	90	4	12.0	9.5	5.36	7.1	4
714 Altar 84	12.2	102	400	74.7	59.4	60	80	3	11.2	9.5	4.86	6.9	1
721 PH 884-32	12.0	91	400	73.5	58.0	43	90	6	11.1	9.5	4.54	7.3	1
738 UC 738	13.0	110	400	74.3	58.0	70	80	1	12.5	9.0	4.41	6.8	2
739 UC 739	11.9	96	400	74.2	56.2	43	90	2	11.2	9.5	5.18	7.4	1
740 UC 740	13.8	108	400	70.9	56.8	53	95	2	12.8	10.0	6.29	6.6	1
741 UC 741	13.2	108	400	73.0	57.5	73	90	1	12.3	9.5	5.25	6.9	3
742 UC 742	13.0	97	400	75.6	60.6	63	80	2	11.9	9.5	6.03	7.1	4
743 UC 743	12.9	106	400	75.1	60.0	43	90	3	11.6	9.5	5.68	6.8	3
746 PH 884-57	12.0	89	400	74.9	60.1	57	85	4	11.3	9.0	5.53	7.1	2
747 PH 884-11	12.2	96	400	73.2	58.0	50	85	7	11.5	9.5	7.11	7.1	2
774 Nutriseed 28-1	11.8	97	400	73.5	57.9	63	80	1	10.9	8.5	4.73	6.1	1
780 UC 780	12.1	94	400	77.8	59.3	83	85	3	11.3	9.5	5.49	6.8	1
781 UC 781	12.2	97	400	74.5	59.4	67	80	2	11.4	9.0	5.64	6.6	1
782 UC 782	12.8	97	400	72.6	56.8	60	80	3	11.9	9.0	5.51	7.4	3
783 Carcomun 'S'	11.5	96	400	80.2	57.6	47	70	2	10.7	7.5	5.38	6.8	1
795 NK 85D 9614	12.3	93	400	74.0	59.3	43	90	4	11.5	9.5	5.92	7.4	2
796 NK 85D 9687	13.2	92	400	74.3	59.6	33	90	4	10.5	9.5	5.25	8.0	2
797 NK 85D 9699	12.6	99	400	73.0	57.3	67	95	7	11.8	9.5	6.59	7.1	4
798 FMC D5317	12.2	87	400	73.3	58.1	87	90	4	11.4	9.5	5.01	7.7	1
799 FMC D5081	12.0	94	400	74.7	59.6	77	95	3	11.3	10.0	5.42	7.0	1
800 FMC D5269	12.7	91	400	74.7	60.7	37	85	3	11.1	9.0	3.93	7.3	3

	WHT PRO	HARD-NESS	FALL NO.	TOT EXT	SEMO EXT	SPK	DUS	MX	SEMO PRO	VI	FIRM	RES	SCORE
801 FMC D5172	12.7	93	400	74.3	59.7	47	80	4	12.2	9.0	5.46	7.0	4
802 FMC D5118	12.7	91	400	73.6	58.6	83	90	2	11.7	9.5	5.31	7.0	2
809 FMC D5238	11.9	102	400	74.4	58.1	60	90	2	10.7	9.5	4.86	7.9	1
810 FMC D5384	12.4	88	400	74.3	60.0	53	85	3	11.4	9.5	5.46	7.3	2
811 FMC D5573	11.3	89	400	74.4	58.4	58	80	4	10.3	9.0	4.99	7.7	1
812 FMC D5633	12.4	98	400	75.2	60.5	77	85	4	11.9	9.0	5.34	6.7	2
813 FMC D5691	12.6	100	400	82.0	61.2	93	80	4	11.6	9.0	5.66	7.1	2
814 FMC D5730	12.8	95	400	75.0	58.4	50	80	4	12.0	9.5	5.66	7.0	4

*Quality analyses were performed by the Hard Red Spring and Durum Wheat Quality Laboratory, USDA, North Dakota State University, Fargo, ND.

WHT PRO = wheat protein percentage, 14% m.b.; FALL No. = Semolina falling number value (seconds); TOT EXT = total extraction percentage; SPK = Semolina speck count; DUS = Semolina dust color score (high score desirable); MX = mixograph score (higher number = stronger curve); SEMO PRO = Semolina protein percentage; VI = spaghetti visual color score (higher score is more desirable); FIRM = cooked spaghetti firmness score (6.50-8.50 = desirable); RES = residue (g) in water of cooked spaghetti; SCORE = 1=no promise, 2=little promise, 3=some promise, 4=good promise.

TABLE 33. 1989 DURUM WHEAT TESTS, PROTEIN* AND SEDIMENTATION** SCORES.

ENTRY		SEDIMENTATION	PROTEIN		
		UC DAVIS	SAC-SJ DELTA	UC DAVIS	AVE
112	YECORA ROJO (HRS)	--	13.78	13.36	13.57
169	MEXICALI 75	48	14.12	14.15	14.14
410	ALDURA	25	14.26	14.00	14.13
496	YAVAROS 79	43	14.33	12.61	13.47
522	WESTBRED 881	83	15.23	15.60	15.42
674	WESTBRED TURBO	56	14.08	13.83	13.96
676	IMPERIAL	39	15.80	14.63	15.22
712	UC 712	48	14.28	15.44	14.86
714	ALTAR 84	45	12.71	13.39	13.05
742	UC 742	26	14.26	14.93	14.60
743	UC 743	27	14.44	15.52	14.98
747	PH 884-11	87	14.47	15.02	14.74
780	UC 780	57	13.82	14.25	14.04
781	UC 781	31	13.46	14.23	13.84
782	UC 782	65	13.97	14.93	14.45
783	CARCOMUN "S"	36	13.37	15.39	14.38
795	NUDURA	89	14.65	15.72	15.18
798	FMC D5317	89	14.42	14.44	14.43
809	DUREX	75	13.86	15.83	14.84
814	FMC D5730	26	13.50	14.05	13.78
819	FMC D5171	50	14.67	16.17	15.42
820	FMC D5681	58	14.28	13.60	13.94
831	PH 884-2	74	14.55	14.84	14.70
832	PH 884-28	59	15.14	14.78	14.96
833	PH 885-60	90	13.70	14.42	14.06
MEAN			14.21	14.61	14.41

*12% moisture basis.
**mm

TABLE 34. 1989 SUTTER TRITICALE TEST.

ENTRY		YIELD	LODGING ON 5/10	LODGING AT HARVEST	BYDV	PLANT HEIGHT	TEST WEIGHT	THOUSAND KERNEL WEIGHT
		(lbs/acre)				(inches)	(lbs/bu)	(grams)
1	SISKIYOU	3840 (14)	4.8	5.3	1.0	53	55.2	46.3
12	JUAN	5880 (2)	7.0	7.0	1.0	56	54.6	43.3
54	UC 54	5510 (6)	7.3	7.3	1.0	54	58.5	41.1
61	UC 61	5120 (10)	6.8	7.0	1.0	53	54.7	43.5
63	ERONGA 83	5230 (9)	7.3	7.5	1.3	56	54.0	43.5
64	PLATYPUSS "S"	5560 (5)	6.5	6.5	1.3	54	54.7	42.2
65	FARO "S"	5260 (7)	5.5	5.8	1.0	53	57.4	45.5
76	NUTRISEED 16A	5250 (8)	6.3	6.8	1.3	59	57.6	43.1
77	FF 81T211	4990 (11)	7.0	6.5	1.3	48	53.7	41.0
78	SUN KRH 603	4850 (12)	7.8	8.0	1.0	54	52.7	37.0
79	SUN 403	5800 (3)	5.0	4.5	1.0	52	54.3	41.8
80	SUN R-084	5650 (4)	3.8	4.0	1.0	55	54.4	39.0
81	SUN C-193-5	4680 (13)	5.5	5.5	1.0	43	52.0	34.6
353	YOLO (WHEAT)	5930 (1)	1.5	2.3	1.0	40	62.0	34.3
MEAN		5250	5.8	6.0	1.1	52	55.4	41.1
CV		15.3	25.2	25.3	24.0	2.8	1.7	8.2
LSD (.05)		1150	2.1	2.2	NS	3	2.0	7.3

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 leaf blotch, powdery mildew.
Numbers in parentheses indicate relative rank in column.
BYDV ratings (see scale above) were based on percentage of plants showing foliar symptoms.

TABLE 35. 1989 UC DAVIS TRITICALE TEST.

ENTRY		YIELD	LODGING ON 5/12	LODGING AT HARVEST	SHATTER	BYDV	STRIPE RUST	DAYS TO HEADING AFTER 3/1	DAYS TO MATURITY AFTER 3/1	PLANT HEIGHT	TEST WEIGHT	THOUSAND KERNEL WEIGHT
		(lbs/acre)								(inches)	(lbs/bu)	(grams)
1	SISKIYOU	3670 (14)	4.5	7.3	1.5	1.5	2.3	47	91	41	53.5	46.0
12	JUAN	6110 (5)	5.5	7.3	1.0	1.3	1.3	38	88	43	54.3	47.3
54	UC 54	6110 (4)	5.3	7.5	1.3	1.5	1.0	41	84	47	57.1	40.0
61	UC 61	6370 (3)	5.5	7.5	1.0	1.0	1.0	41	88	46	54.5	44.9
63	ERONGA 83	5990 (6)	5.3	7.0	1.0	1.3	1.0	36	83	46	54.8	49.3
64	PLATYPUSS "S"	5870 (7)	4.8	5.8	1.0	1.0	1.0	40	87	50	55.2	46.0
65	FARO "S"	6530 (2)	4.5	5.3	1.3	1.0	1.0	39	86	45	56.3	48.3
76	NUTRISEED 16A	5340 (11)	5.0	6.3	1.5	1.5	1.0	39	87	49	57.0	43.7
77	FF 81T211	5560 (10)	7.8	7.8	1.0	1.3	1.0	31	84	38	55.6	43.9
78	SUN KRH 603	5800 (9)	5.5	6.5	1.5	1.3	1.0	36	84	41	54.2	43.6
79	SUN 403	6680 (1)	4.0	4.8	1.3	1.0	1.3	36	85	40	54.3	44.7
80	SUN R-084	5800 (8)	4.3	5.3	1.3	1.3	1.0	46	91	47	54.5	40.3
81	SUN C-193-5	5140 (12)	6.0	7.0	1.3	1.0	1.0	31	82	36	52.8	32.6
353	YOLO (WHEAT)	3820 (13)	6.3	7.0	1.8	1.0	1.3	47	93	33	60.8	34.5
MEAN		5630	5.3	6.6	1.3	1.2	1.1	39	86	43	55.4	43.2
CV		15.0	24.4	20.4	34.2	37.5	30.0	1.3	1.9	7.3	2.0	5.9
LSD (.05)		1210	1.8	1.9	NS	NS	0.5	1	4	7	2.4	5.5

Rating scale for diseases (area of flag-1 leaf affected), lodging, and shatter: 1 = 0-3%, 2 = 4-14%; 3 = 15-29%; 4 = 30-49%; 5 = 50-69%; 6 = 70-84%; 7 = 85-95%; 8 = 96-100%.
Diseases assessed but occurring in trace or less amounts: leaf rust, Septoria leaf blotch, powdery mildew.
Numbers in parentheses indicate relative rank in column.
BYDV ratings (see scale above) were based on percentage of plants showing foliar symptoms.

TABLE 36. 1989 KINGS TRITICALE TEST.

ENTRY		YIELD	BYDV	PLANT HEIGHT	TEST WEIGHT	THOUSAND KERNEL WEIGHT
		(lbs/acre)		(inches)	(lbs/bu)	(grams)
1	SISKIYOU	2800 (14)	2.5	48	49.9	34.0
12	JUAN	4980 (2)	1.0	51	51.7	36.0
54	UC 54	4500 (6)	1.0	48	55.3	36.1
61	UC 61	4720 (3)	1.0	47	52.8	37.7
63	ERONGA 83	5080 (1)	1.0	50	49.2	35.7
64	PLATYPUSS "S"	4060 (8)	1.3	49	50.1	33.7
65	FARO "S"	3990 (9)	1.0	48	56.5	35.8
76	NUTRISEED 16A	4660 (4)	1.0	50	55.8	35.0
77	FF 81T211	4390 (7)	1.3	41	50.2	32.3
78	SUN KRH 603	4540 (5)	1.0	44	48.7	34.0
79	SUN 403	3840 (11)	1.0	45	46.6	29.8
80	SUN R-084	3810 (12)	1.0	45	50.8	29.3
81	SUN C-193-5	3860 (10)	1.0	36	49.6	26.6
353	YOLO (WHEAT)	3730 (13)	1.0	33	57.1	31.9
MEAN		4210	1.1	45	51.7	33.4
CV		17.2	20.2	3.4	5.4	12.3
LSD (.05)		1030	0.3	3	6.0	ns

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: leaf rust, stripe rust, Septoria leaf blotch, and powdery mildew.
Numbers in parentheses indicate relative rank in column.
BYDV ratings (see scale above) were based on percentage of plants showing foliar symptoms.

TABLE 37. 1989 SANTA BARBARA TRITICALE TEST.

ENTRY		YIELD	LODGING AT HARVEST	SHATTER	BYDV	PLANT HEIGHT	TEST WEIGHT	THOUSAND KERNEL WEIGHT
		(lbs/acre)				(inches)	(lbs/bu)	(grams)
1	SISKIYOU	3220 (12)	2.0	1.3	1.0	48	54.5	53.0
12	JUAN	3770 (11)	3.5	1.8	1.3	43	52.7	45.6
54	UC 54	3990 (10)	3.8	1.0	1.0	48	56.3	42.6
61	UC 61	4020 (8)	2.8	1.0	1.3	44	52.6	39.3
63	ERONGA 83	4440 (3)	3.5	1.8	1.0	47	53.0	46.3
64	PLATYPUSS "S"	4790 (1)	1.0	1.0	1.0	47	56.3	48.7
65	FARO "S"	4110 (6)	2.0	1.5	1.0	48	55.4	45.0
76	NUTRISEED 16A	4200 (4)	1.5	1.5	1.3	46	57.6	44.3
77	FF 81T211	4150 (5)	1.8	1.3	1.0	39	54.3	41.2
78	SUN KRH 603	2850 (14)	1.3	1.0	1.0	43	49.2	32.0
79	SUN 403	4020 (9)	1.5	1.3	1.0	43	53.0	43.2
80	SUN R-084	4680 (2)	1.3	1.3	1.0	43	54.1	47.6
81	SUN C-193-5	3180 (13)	2.5	1.3	1.0	35	51.8	28.8
353	YOLO (WHEAT)	4030 (7)	1.5	1.0	1.0	33	60.5	32.4
MEAN		3960	2.1	1.3	1.1	43	54.4	42.1
CV		20.1	64.1	38.0	20.2	7.3	1.7	5.0
LSD (.05)		1140.	1.9	NS	NS	7.	2.0	4.5

Rating scale for diseases (area of flag-1 leaf affected), lodging, and shatter: 1 = 0-3%, 2 = 4-14%; 3 = 15-29%; 4 = 30-49%; 5 = 50-69%; 6 = 70-84%; 7 = 85-95%; 8 = 96-100%.
Diseases assessed but occurring in trace or less amounts: leaf rust, stripe rust, Septoria leaf blotch, powdery mildew.
Numbers in parentheses indicate relative rank in column.
BYDV ratings (see scale above) were based on percentage of plants showing foliar symptoms.

TABLE 38. 1989 IMPERIAL TRITICALE TEST.

ENTRY		YIELD	TEST WEIGHT	DAYS TO HEADING FROM 1/1	DAYS TO MATURITY FROM 1/1	PLANT HEIGHT	LODGING AT HARVEST	SHATTER
		(lbs/acre)	(lbs/bu)			(inches)		
1	SISKIYOU	6040 (13)	54.5	83	126	49	4.0	1.3
12	JUAN	7100 (3)	54.5	78	125	49	2.3	1.0
54	UC 54	7030 (6)	57.5	79	121	48	2.0	1.0
61	UC 61	6760 (8)	54.0	79	124	49	3.0	1.0
63	ERONGA 83	7120 (2)	53.5	78	124	49	3.5	1.3
64	PLATYPUSS "S"	7430 (1)	54.5	79	124	48	1.8	1.0
65	FARO "S"	6620 (10)	55.8	80	125	48	1.3	1.3
76	NUTRISEED 16A	7030 (5)	57.3	76	122	48	1.8	1.3
77	FF 81T211	6640 (9)	54.3	72	123	39	1.3	1.3
78	SUN KRH 603	7070 (4)	52.8	77	121	46	2.5	1.3
79	SUN 403	6270 (12)	51.3	77	123	42	1.8	1.0
80	SUN R-084	6830 (7)	52.3	85	128	43	1.0	1.5
81	SUN C-193-5	5540 (14)	50.0	75	123	36	1.0	1.0
353	YOLO (WHEAT)	6390 (11)	63.3	83	123	35	3.0	3.3
MEAN		6710	54.7	78	124	45	2.1	1.3
CV		6.1	1.3	1.6	1.3	2.7	34.5	34.9
LSD (.05)		580	1.0	2	2	2	1.1	0.6

Rating scale for lodging and shatter: 1 = 0-3%, 2 = 4-14%; 3 = 15-29%; 4 = 30-49%; 5 = 50-69%; 6 = 70-84%; 7 = 85-95%; 8 = 96-100%.
Numbers in parentheses indicate relative rank in column.

TABLE 39. 1989 AND 1987-89 TRITICALE YIELD SUMMARY (LB/ACRE).

ENTRY		1989 5 LOC		1988-89 9 LOC/YR		1987-89 13 LOC/YR	
1	SISKIYOU	3910	(14)	4060	(8)	4410	(8)
12	JUAN	5570	(2)	6280	(2)	6710	(2)
54	UC 54	5430	(4)	6170	(4)	6550	(4)
61	UC 61	5400	(5)	6120	(5)	6380	(6)
63	ERONGA 83	5570	(1)	6230	(3)	6560	(3)
64	PLATYPUSS "S"	5540	(3)	6070	(6)	6480	(5)
65	FARO "S	5300	(8)	6340	(1)	6710	(1)
76	NUTRISEED 16A	5300	(9)				
77	FF 81T211	5140	(10)				
78	SUN KRH 603	5020	(11)				
79	SUN 403	5320	(7)				
80	SUN R-084	5350	(6)				
81	SUN C-193-5	4480	(13)				
353	YOLO (WHEAT)	4780	(12)	5500	(7)	5860	(7)
MEAN		5150		5850		6210	
CV		14.2		12.0		10.6	
LSD (.05)		460		330		250	

Numbers in parentheses indicate relative rank in column.

TABLE 40. 1989 BUTTE OAT GRAIN TEST.

ENTRY	YIELD	LODGING ON 5/22	LODGING AT HARVEST	BYDV	STEM RUST	CROWN RUST	PLANT HEIGHT	TEST WEIGHT	THOUSAND KERNEL WEIGHT
	(lbs/acre)						(inches)	(lbs/bu)	(grams)
2 SIERRA	3200 (15)	3.8	4.5	2.0	1.8	1.0	52	34.0	37.8
3 MONTEZUMA	1600 (18)	2.0	4.8	3.3	2.0	1.0	45	35.6	36.1
4 CAL RED	2880 (17)	7.0	6.8	3.5	1.0	1.0	58	34.4	33.5
6 KANOTA	3330 (14)	5.8	6.8	3.3	1.8	1.0	54	36.4	32.5
10 SWAN	4030 (11)	4.0	3.8	2.3	2.3	1.5	53	38.0	43.3
22 CAYUSE	4420 (4)	2.3	2.5	1.8	1.0	1.0	62	36.4	32.0
89 MO 06072	4230 (7)	3.3	2.8	2.8	1.0	1.0	57	39.8	29.2
95 75Q-036-83-1D	7610 (1)	2.0	1.8	1.0	1.0	1.0	52	36.4	40.4
96 OGLE	3990 (12)	2.8	2.0	1.3	1.0	1.0	62	37.9	34.2
98 A82-0034	4050 (10)	2.3	2.3	2.0	1.0	1.0	55	38.0	34.9
102 A82-0039	4920 (2)	3.8	3.5	1.3	1.0	1.0	53	38.0	42.9
103 A82-0058	4380 (5)	2.8	2.3	1.3	1.0	1.0	53	38.6	39.8
104 A81-0006	4120 (9)	1.0	1.0	1.0	1.0	1.0	50	38.0	33.2
106 82SH163	4170 (8)	3.8	2.8	1.5	1.0	1.0	55	37.5	38.4
107 COKER 81C72	4290 (6)	2.5	2.0	2.5	1.0	1.0	45	37.3	35.7
108 83SH137	4500 (3)	1.3	1.3	2.5	1.0	1.0	45	38.6	36.9
109 84SH182	3870 (13)	3.8	3.0	1.3	1.0	1.0	52	35.9	37.3
111 OT 03669	2970 (16)	2.5	3.0	2.5	1.0	1.0	55	41.3	29.4
MEAN	4030	3.1	3.1	2.0	1.2	1.0	53	37.3	36.0
CV	16.0	39.0	35.8	34.1	30.9	13.2	4.5	2.1	4.9
LSD (.05)	910	1.7	1.6	1.0	0.5	0.2	5	1.6	3.8

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: powdery mildew.
Numbers in parentheses indicate relative rank in column.
BYDV ratings (see scale above) were based on percentage of plants showing foliar symptoms.

TABLE 41. 1989 UC DAVIS OAT GRAIN TEST.

ENTRY		YIELD	LODGING ON 5/19	LODGING AT HARVEST	SHATTER	BYDV	STEM RUST	POWDERY MILDEW	DAYS TO HEADING AFTER 3/1	DAYS TO MATURITY AFTER 3/1	PLANT HEIGHT	TEST WEIGHT	THOUSAND KERNEL WEIGHT
		(lbs/acre)									(inches)	(lbs/bu)	(grams)
2	SIERRA	2880 (3)	3.0	5.5	2.8	1.8	1.0	1.0	52	89	59	36.0	35.3
3	MONTEZUMA	2960 (2)	6.0	8.0	2.0	2.0	1.0	1.0	42	79	50	33.1	42.7
4	CAL RED	1190 (18)	6.5	7.3	3.3	3.8	1.0	1.0	65	91	59	36.6	28.0
6	KANOTA	2440 (7)	6.5	7.8	3.3	2.0	1.3	1.0	50	84	57	35.0	33.0
10	SWAN	2290 (9)	3.3	4.3	3.5	1.8	1.8	1.0	47	88	58	38.9	44.8
22	CAYUSE	1810 (13)	3.8	4.5	3.3	2.5	1.0	1.0	78	98	59	33.4	31.3
89	MO 06072	2170 (10)	5.8	7.0	2.5	1.5	1.0	1.0	63	93	57	34.6	25.0
95	75Q-036-83-1D	3030 (1)	1.8	1.5	1.8	1.3	1.0	1.8	65	99	49	38.2	37.5
96	OGLE	2740 (4)	1.0	1.0	1.3	1.0	1.0	1.0	62	92	62	37.1	32.8
98	A82-0034	2310 (8)	1.5	5.0	3.5	1.3	1.0	1.0	56	86	55	35.9	32.5
102	A82-0039	2450 (6)	5.5	5.5	1.8	1.8	1.0	1.0	63	94	53	36.5	36.4
103	A82-0058	2470 (5)	4.8	5.0	3.3	1.5	1.0	1.0	56	90	56	37.1	37.1
104	A81-0006	1390 (16)	1.0	1.0	1.8	1.5	1.0	1.5	70	96	50	36.3	30.5
106	82SH163	1770 (14)	4.0	4.0	2.8	1.3	1.0	1.0	65	94	57	36.2	36.1
107	COKER 81C72	1940 (11)	2.3	3.8	2.5	1.8	1.0	2.3	60	89	49	36.9	35.0
108	83SH137	1450 (15)	1.8	3.3	2.8	2.0	1.0	1.0	61	89	44	38.1	36.3
109	84SH182	1900 (12)	3.3	4.3	2.0	1.8	1.0	1.0	63	93	57	33.7	34.0
111	OT 03669	1210 (17)	3.0	3.5	4.8	2.0	1.0	1.0	49	82	60	41.3	27.5
MEAN		2130	3.6	4.6	2.7	1.8	1.1	1.1	59	90	55	36.4	34.2
CV		16.6	29.9	19.4	30.2	34.3	24.4	30.7	2.6	1.5	4.7	5.4	4.5
LSD (.05)		500	1.5	1.3	1.2	0.9	0.4	0.5	3	3	5	4.1	3.2

Rating scale for diseases (area of flag-1 leaf affected), lodging, and shatter: 1 = 0-3%, 2 = 4-14%; 3 = 15-29%; 4 = 30-49%; 5 = 50-69%; 6 = 70-84%; 7 = 85-95%; 8 = 96-100%.
Diseases assessed but occurring in trace or less amounts: crown rust.
Numbers in parentheses indicate relative rank in column.
BYDV ratings (see scale above) were based on percentage of plants showing foliar symptoms.

TABLE 42. 1989 YOLO DRYLAND OAT GRAIN TEST.

ENTRY		YIELD	LODGING ON 4/26	LODGING AT HARVEST	SHATTER	PLANT HEIGHT	THOUSAND KERNEL WEIGHT
		(lbs/acre)				(inches)	(grams)
2	SIERRA	1590 (2)	1.0	5.8	2.3	33	32.3
3	MONTEZUMA	2030 (1)	1.0	2.8	2.0	34	31.6
4	CAL RED	260 (17)	1.0	1.0	2.0	28	23.5
6	KANOTA	990 (8)	4.3	6.8	2.8	38	23.4
10	SWAN	1450 (3)	1.0	4.5	3.0	35	29.4
22	CAYUSE	420 (16)	1.0	1.0	1.8	26	22.5
89	MO 06072	470 (15)	1.0	1.0	2.5	29	22.4
95	75Q-036-83-1D	1140 (5)	1.0	1.0	1.0	23	28.3
96	OGLE	820 (10)	1.0	1.0	1.8	30	23.8
98	A82-0034	1130 (6)	1.0	1.0	2.3	30	28.0
102	A82-0039	500 (14)	1.0	1.0	2.5	25	28.0
103	A82-0058	1270 (4)	1.0	1.0	1.8	28	25.3
104	A81-0006	230 (18)	1.0	1.0	1.0	22	21.0
106	82SH163	600 (12)	1.0	1.0	1.8	26	27.9
107	COKER 81C72	1000 (7)	1.0	1.0	1.5	24	26.3
108	83SH137	770 (11)	1.0	1.0	1.3	19	22.5
109	84SH182	580 (13)	1.0	1.0	1.5	27	27.8
111	OT 03669	860 (9)	1.0	1.5	3.3	32	20.1
MEAN		900	1.2	1.9	2.0	28	25.8
CV		37.6	10.0	37.5	42.3	4.2	4.1
LSD (.05)		480	0.2	1.0	1.2	2	2.2

Rating scale for lodging and shatter: 1 = 0-3%, 2 = 4-14%; 3 = 15-29%; 4 = 30-49%; 5 = 50-69%; 6 = 70-84%; 7 = 85-95%; 8 = 96-100%.
Diseases assessed but occurring in trace or less amounts: BYDV, crown rust, stem rust, and powdery mildew.
Numbers in parentheses indicate relative rank in column.

TABLE 43. 1989 AND 1987-89 OAT GRAIN YIELD SUMMARY (LB/ACRE).

ENTRY		1989 3 LOC		1988-89 5 LOC/YR		1987-89 7 LOC/YR	
2	SIERRA	2560	(5)	3030	(4)	2760	(5)
3	MONTEZUMA	2200	(13)	2750	(9)	2640	(6)
4	CAL RED	1440	(18)	1570	(15)	1570	(13)
6	KANOTA	2250	(10)	2270	(14)	2010	(12)
10	SWAN	2590	(4)	3140	(2)	2810	(4)
22	CAYUSE	2220	(12)	2620	(10)	2250	(11)
89	MO 06072	2290	(9)				
95	75Q-036-83-1D	3930	(1)	4040	(1)	3690	(1)
96	OGLE	2520	(6)	3050	(3)	2860	(2)
98	A82-0034	2500	(7)	2930	(6)	2860	(3)
102	A82-0039	2630	(3)	2980	(5)		
103	A82-0058	2700	(2)	2830	(7)		
104	A81-0006	1910	(16)				
106	82SH163	2180	(14)	2540	(11)	2390	(9)
107	COKER 81C72	2410	(8)	2760	(8)	2620	(7)
108	83SH137	2240	(11)	2440	(13)	2350	(10)
109	84SH182	2120	(15)	2470	(12)	2400	(8)
111	OT 03669	1680	(17)				
MEAN		2350		2760		2550	
CV		19.8		17.0		19.3	
LSD (.05)		380		290		260	

Numbers in parentheses indicate relative rank in column.

TABLE 44. 1989 YOLO DRYLAND OAT HAY TEST.

ENTRY		YIELD DRY WEIGHT	PLANT HEIGHT	LODGING ON 4/26
		(lbs/acre)	(inches)	
2	SIERRA	7400 (8)	40	1.0
3	MONTEZUMA	7350 (9)	38	1.0
4	CAL RED	7280 (10)	35	1.0
6	KANOTA	7580 (5)	43	3.8
10	SWAN	7900 (3)	43	1.0
22	CAYUSE	7550 (6)	32	1.0
89	MO 06072	7960 (1)	39	1.0
95	75Q-036-83-1D	7410 (7)	30	1.0
96	OGLE	7930 (2)	37	1.0
98	A82-0034	7070 (13)	34	1.0
102	A82-0039	7260 (11)	36	1.0
103	A82-0058	7020 (14)	36	1.0
104	A82-0006	5780 (16)	28	1.0
106	82SH163	7620 (4)	34	1.0
107	COKER 81C72	7160 (12)	34	1.0
108	83SH137	5740 (17)	23	1.0
109	84SH182	5650 (18)	28	1.0
796	SIGRA (BARLEY)	5470 (19)	28	1.0
801	BFC 79-18 (BARLEY)	6580 (15)	39	1.0
MEAN		7040	35	1.1
CV		11.9	9.7	10.0
LSD (.05)		1180	5	0.2

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%.
Numbers in parentheses indicate relative rank in column.

TABLE 45. 1989 TULARE AND STANISLAUS OAT HAY TESTS.

ENTRY		YIELD (DRY WEIGHT)		TULARE				
		TULARE	STANISLAUS	STEM THICKNESS	LODGING	BYDV	PLANT HEIGHT	DAYS TO HEADING
		(lbs/acre)					(inches)	
2	SIERRA	16220 (8)	2860	4.0	4.0	1.3	52	120
3	MONTEZUMA	12580 (14)	3500	1.0	4.8	1.5	44	107
4	CAL RED	10190 (18)	2720	1.5	5.0	3.5	53	145
6	KANOTA	10430 (17)	1980	1.3	7.0	1.8	50	130
10	SWAN	16410 (7)	3280	2.3	5.3	1.0	47	130
22	CAYUSE	16190 (9)	2560	3.3	6.8	1.5	49	140
89	MO 06072	10650 (16)	2720	2.0	5.8	1.3	50	138
95	75Q-036-83-1D	24440 (1)	3060	3.3	7.3	1.3	47	132
96	OGLE	19890 (2)	2700	3.0	3.8	1.0	55	136
98	A82-0034	18010 (4)	3200	2.0	3.5	1.0	52	137
102	A82-0039	17530 (5)	4180	2.0	5.3	1.3	49	136
103	A82-0058	11970 (15)	2980	2.0	6.5	1.3	49	136
104	A82-0006	19740 (3)	1820	2.8	1.8	1.0	49	138
106	82SH163	15880 (10)	2330	2.5	5.5	1.3	50	132
107	COKER 81C72	13700 (12)	3080	2.8	6.0	1.0	47	137
108	83SH137	13130 (13)	2870	1.8	1.0	1.0	45	137
109	84SH182	13960 (11)	2600	3.8	5.8	1.0	50	137
796	SIGRA (BARLEY)	9500 (19)	2440	3.0	5.0	1.3	44	136
801	BFC 79-18 (BARLEY)	17100 (6)	5640	3.0	4.8	2.0	45	131
404	DIRKWIN (WHEAT)	--	3420					
MEAN		15130	3000	2.5	5.0	1.4	49	133
CV		27.0		26.0	28.7	38.1	6.0	8.7
LSD (.05)		5780	810	0.9	2.0	0.7	5	NS

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%.
Numbers in parentheses indicate relative rank in column.
BYDV ratings (see scale above) were based on percentage of plants showing foliar symptoms.
Stem thickness: 1 = very fine; 2 = fine; 3 = medium; 4 = thick; 5 = very thick.