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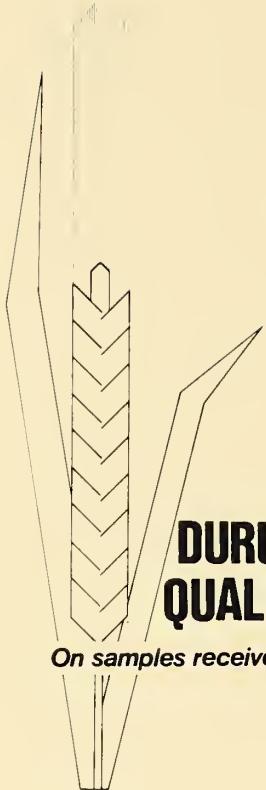
1983 CROP

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27 p. + unpage tables

# DURUM WHEAT QUALITY REPORT

*Physical, Chemical, Milling, and Spaghetti Characteristics*

United States Department of Agriculture  
Agricultural Research Service  
North Central Region



## DURUM WHEAT QUALITY REPORT

*On samples received from the 1983 crop*

Source:

Spring and Durum Wheat Quality Laboratory  
USDA, Agricultural Research Service  
Cereal Chemistry & Technology, N.D.S.U.  
Fargo, North Dakota 58105

UNITED STATES DEPARTMENT OF AGRICULTURE  
AGRICULTURAL RESEARCH SERVICE  
in cooperation with  
STATE AGRICULTURAL EXPERIMENT STATIONS

QUALITY EVALUATION OF DURUM WHEAT VARIETIES

1983 CROP1/

by

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1/ This is a progress report of cooperative investigations containing some results that have not been sufficiently confirmed to justify general release; interpretations may be modified with additional experimentation. Confirmed results will be published through established channels. The report is primarily a tool for use of cooperators and their official staffs and to those persons having direct and special interest in the development of agricultural research programs.

This report was compiled by the Agricultural Research Service, U. S. Department of Agriculture. Special acknowledgment is made to the North Dakota State University for their facilities and services provided in support of these studies. The report is not intended for publication and should not be referred to in literature citations or quoted in publicity or advertising. Use of the data may be granted for certain purposes upon written request to the agency or agencies involved. Cooperators submitting samples for analysis have been given analytical data on their samples prior to release of this report.

2/ Hard Red Spring & Durum Wheat Quality Lab., NDSU.

3/ Dept. of Cereal Chemistry & Technology, NDSU.

TABLE OF CONTENTS

<u>Contents</u>	<u>Page No.</u>
Introduction . . . . .	3
Source of the Samples . . . . .	4
Tables of Varieties and Crosses . . . . .	5 & 6
Methods . . . . .	7
Flow Diagram for Large Durum Wheat Samples . . . . .	9
Flow Diagram for Small Durum Wheat Samples . . . . .	10
Discussion . . . . .	15
Experimental Results - 1983 Crop . . . . .	18
Uniform Regional Nursery Samples . . . . .	18-23
Western Durum Nursery Samples . . . . .	24
Field Plot Nursery Samples . . . . .	25
Advanced Nursery Samples . . . . .	26
Preliminary Nursery Samples . . . . .	26-27
International Durum Yield Nursery Samples . . . . .	27
Elite Durum Yield Trial . . . . .	27
Explanation of Abbreviations . . . . .	28
1983 Crop Tables No. 1 through No. 24 . . . . .	
Reference Mixograms	

## INTRODUCTION

The twentieth Durum Wheat Quality Report contains data for the 1983 crop. Samples of standard varieties and new strains of durum wheat grown in cooperative experiments in the durum wheat regions of the United States<sup>4/</sup> were milled and evaluated by the Hard Red Spring and Durum Wheat Quality Laboratory in cooperation with the Department of Cereal Chemistry and Technology on the campus of North Dakota State University at Fargo, ND. Methods and techniques are described in detail in the text of the report.

All samples received that were large enough to mill on the Buhler experimental mill were processed into spaghetti using the macro spaghetti processing method as described on page 12. A five pound wheat sample is required for the above method. All other samples were milled using the micro procedure and were not processed into spaghetti. Those samples having acceptable kernel characteristics and dust color score, if possible, should be included for macro processing the following year.

The purpose of this report is to make available to cooperators the quality data on standard varieties and new selections of durum wheat from the 1983 crop.

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<sup>4/</sup> Busch, R.H. and Cantrell, R.G. Wheat varieties grown in cooperative plot and nursery experiments in the spring wheat region in 1983. Agricultural Research Service, U.S. Department of Agriculture.

SOURCE OF THE 1983 CROP SAMPLES

Seven hundred sixty-two durum samples were received from 20 stations and eight states (South Dakota, North Dakota, Minnesota, Montana, Washington, Arizona, California and Colorado), also from Bari, Italy for quality evaluation. However, data on 31 of these are not included in this report, because this information was of interest to plant breeders at specific experiment stations only.

UNIFORM REGIONAL NURSERY - 196

Selby and Day County	South Dakota
Williston and Carrington	North Dakota
Crookston and Morris	Minnesota
Sidney	Montana

WESTERN REGIONAL DURUM WHEAT TESTS - 94

Davis, Delta and Imperial Valley      California

FIELD PLOTS - 31

Pinal County, Yuma County and Mesa      Arizona

WASHINGTON DURUM NURSERY - 33

Royal Slope      Washington

ADVANCED NURSERY - 21

Davis      California

PRELIMINARY NURSERY - 331

Imperial Valley and Tulelake      California

INTERNATIONAL DURUM YIELD NURSERY - 16

Davis      California

ELITE DURUM YIELD TRIAL - 9

Davis      California

1983 UNIFORM REGIONAL DURUM NURSERY

LIST OF ENTRIES

Entry No.	Entry	Sel. or P.I. No.	Year Entered	Origin
1	Mindum	5296	1929	Minnesota
2	Rolette	D6517	1968	ND-USDA
3	Ward	D6674	1969	ND-USDA
4	Crosby	D6715	1970	ND-USDA
5	Rugby	D6722	1970	ND-USDA
6	Cando	D7057*	1972	ND-USDA
7	Coulter	DT411	1974	AC, Winnipeg
8	Vic	D74112	1976	ND-USDA
9	Lloyd	D771*	1978	ND-USDA
10	Medora	DT433	1980	AC, Winnipeg
11	72114/Ed	D7733	1981	North Dakota
12	71110/Ed	D7798	1981	North Dakota
13	7224/Crosby	D77200*	1981	North Dakota
14	7456/Vic	D793	1981	North Dakota
15	Wsc/Hc	DT371	1982	Univ. of Sask.
16	7224/Cd	D78127*	1982	North Dakota
17	74111/Cd	D78177*	1982	North Dakota
18	77204/7618	D804*	1982	North Dakota
19	7224/Vic	D79168*	1983	North Dakota
20	Ed/Wkm	D79120	1983	North Dakota
21	Ed/Wkm	D79122	1983	North Dakota
22	DT427/Vic	D79103	1983	North Dakota
23	74111/Cd	D79209*	1983	North Dakota
24	764/73121	D79104	1983	North Dakota
25	7463/74110	D7983	1983	North Dakota
26	7456/Vic	D7925	1983	North Dakota
27	7507/Vic	D7958	1983	North Dakota
28	SC6962/SC6965- 494-1	DT375	1983	AC, Swift Current

\* Semidwarf

WESTERN REGIONAL DURUM

LIST OF ENTRIES

Mexicali 75	D8204
Modoc	D8209
Njoro 231	D8257
Ward	TL73-16
Westbred 881	TL73-457
Yavaros	TL73-468
Yecora Rojo	TL73-471
D7911	TL73-506
D8018	TL74-30
D8019	TL75-409
D8027	UC-482
D8042	UC-512
D8055	UC-513
D8056	UC-514
D8057	UC-517
D8118	UC-518
D8126	UC-559
D8128	UC-560
D8129	WDE-8010

## METHODS

The methods used in the testing of the samples were essentially the same as given in the last report.

Briefly, the following methods and terminologies were applied:

Test Weight Per Bushel - The weight per Winchester bushel of dockage-free wheat.

Thousand Kernel Weight - The 1000 kernel weight was determined by counting the number of kernels in a 10 g sample of cleaned, picked wheat on a Seedburo seed counter<sup>5/</sup>.

Kernel Size - The percentage of the size of the kernels [large, medium, and small] was determined on a wheat sizer as described by Shuey<sup>6/</sup>.

The sieves of the sizer were clothed as follows:

Top Sieve - Tyler # 7 with 2.92 mm opening  
Middle Sieve - Tyler # 9 with 2.24 mm opening  
Bottom Sieve - Tyler #12 with 1.65 mm opening

Protein Content - The protein (14% m.b.) was calculated by multiplying the percent nitrogen, as determined by the standard Kjeldahl procedure, by the factor of 5.7.

Milling - The samples were cleaned by passing the wheat over an Emerson kicker and dockage tester and through a modified Forster scourer Model 6. The clean, dry wheat was tempered in three stages: first to 12.5% moisture at least 72 hours prior to the second stage which is to add an additional 2.0% for 18 hours to give a cumulative moisture of 14.5%, then a final temper of 3.0%, 45 minutes prior to milling.

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- 5/ Mention of a trademark name or proprietary product does not constitute a guarantee or warranty of the product by the U. S. Department of Agriculture, and does not imply its approval to the exclusion of other products that may also be suitable.
- 6/ Shuey, William C. A wheat sizing technique for predicting flour milling yield. Cereal Sci. Today 5: 71 (1960).

The field plot and large advanced and special yield nursery samples were milled on a Buhler experimental mill specially designed for milling durum wheat. The mill is equipped with corrugated rolls throughout and the semolina purified on a Miag laboratory purifier. All of the stock is handled pneumatically. The mill flow is shown on page 9. The purified semolina is used in testing the quality of semolina. The semolina extraction was calculated on a total products basis.

The small samples were milled according to the method of Vasiljevic et al 7/. The flow diagram of this system is shown on page 10. Extraction is determined on a clean, dry basis.

Semolina Extraction - For the macro procedure the percent semolina is calculated on a total products basis. For the micro procedure the extraction is calculated on cleaned wheat to mill.

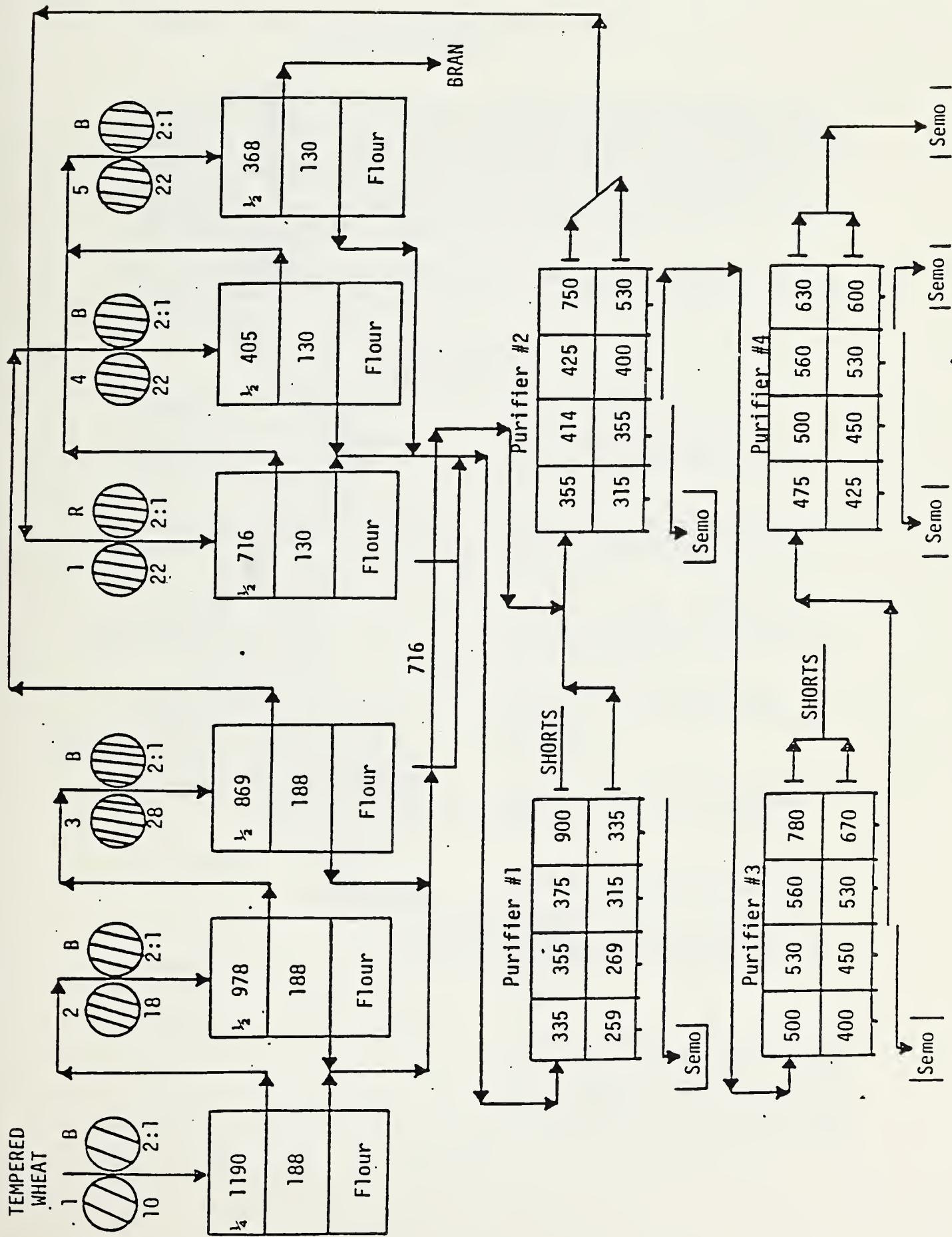
Speck Count - The number of specks in three different one-inch square areas of semolina enclosed by a special glass and frame were counted. Any materials other than pure endosperm chunks, such as bran particles, etc. were considered specks. The average of three readings was converted to the number of specks per 10 sq in (speck count). Speck count is done only on the macro milled samples.

Color Score - The color of the spaghetti or semolina has been generally accepted as the most important single grading factor. A deep amber or golden color is the most preferable. The amount of yellow pigmentation determines the color.

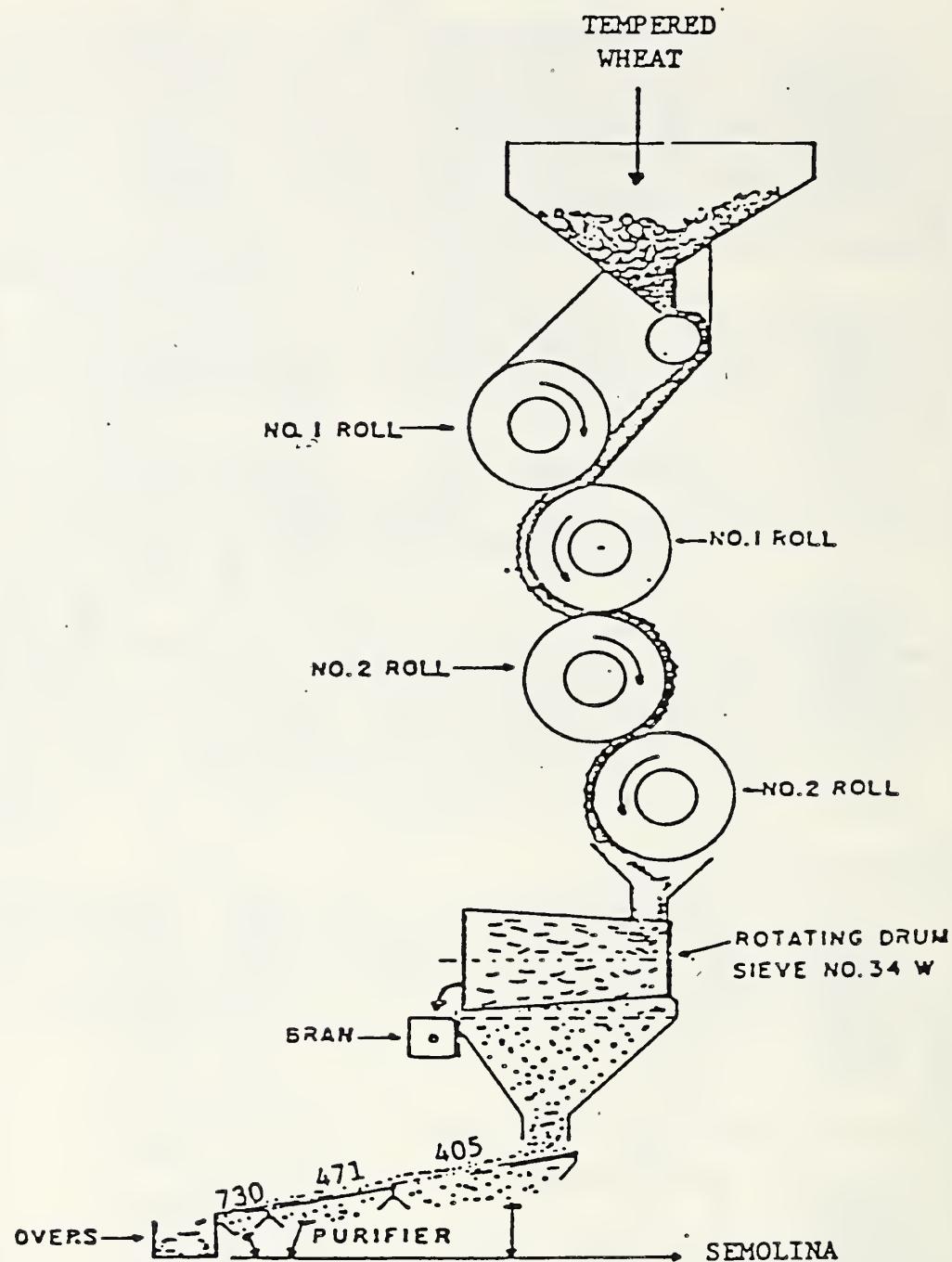
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7/ Vasiljevic, S., Banasik, O.J. and Shuey, W.C. A micro unit for producing durum semolina. Cereal Chem. 54: 397 (1977).

## MACRO PROCEDURE



FLOW DIAGRAM FOR SMALL DURUM WHEAT SAMPLES  
MICRO PROCEDURE



Samples which have a color rating 1.5 point below the standard spaghetti score or 15 points below the standard semolina color score are unsatisfactory. It is possible that the average color score for a crop year may be higher or lower than average; therefore, this would be taken into consideration when giving the overall rating of a variety over a number of years.

The grading system shown below has been adopted for scoring the semolina color and spaghetti relative to the standard color score.

COLOR SCORE

<u>Semolina</u>	<u>Spaghetti</u>	<u>Description</u>
15 above	1.5 above	Much deeper and intense yellow pigmentation than standard
10 above	1.0 above	Deeper and more intense yellow pigmentation than standard
5 above	0.5 above	Slightly deeper and more intense yellow pigmentation than standard
Equal to Standard	Equal to Standard	Standard quality, depth and intensity of yellow pigmentation
5 below	0.5 below	Slightly less depth and intensity, but sufficient quantity of pigmentation
10 below	1.0 below	Slightly less quantity as well as depth and intensity of pigmentation than the standard, but still sufficient to be rated satisfactory on the basis of color
15 below	1.5 below	Sufficiently less quantity of yellow pigmentation than the standard to give a pale yellow color and graded unsatisfactory for color score.

Semolina Color Score - The semolina color score was determined by using Model XL-10 Gardner digital color difference meter. The instrument was calibrated using a yellow standard tile ( $L = 82.5$ ,  $a = -3.6$  and  $b = +25.2$ ). A sample of semolina (3/4-inch deep) is placed in a sample cup for an Agtron reflectance color meter. After the first reading has been taken, the sample is turned 90 degrees and a second reading is taken and the two readings averaged. The "b" color value is converted to a color score ranging from 1 to 14, with 14 being a deep yellow and the most desirable color. In this report, the semolina color score, reported as "DU" in the tables, is multiplied by a factor of 10.

Spaghetti Color - The spaghetti color scores were determined on a Model D25 Hunter color difference meter equipped with a D25A optical unit. The specimen area (2 in diameter) was covered with straight spaghetti strands and readings were taken against a black background with 0% reflectance. Color difference values ( $L\%$ ,  $a\%$  and  $b\%$ ) were measured for all the spaghetti samples by the method of Walsh, Gilles and Shuey<sup>8/</sup>. A uniform chromaticity chart was used for determining spaghetti color scores.

MACRO Spaghetti Processing - Spaghetti was processed on a semi-commercial scale pasta extruder (DEMACO). The control as well as all samples was processed with the following extruding conditions.

Temperature . . . . . 49.5°C

Rate . . . . . 12 rpm

Absorption . . . . . 31.5%

Vacuum . . . . . 18 in Hg

These were the optimum conditions for processing spaghetti.

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8/ Walsh, D. E., Gilles, K. A. and Shuey, W. C. Color determination of spaghetti by the tristimulus method. Cereal Chem. 46: 7 (1969).

To process the spaghetti, a 1000 g batch was premixed by slowly adding the water and mixing at a slow speed for approximately 30 seconds and high speed for 10 seconds, then add the remainder of the water at slow speed in a Hobart C-100-T mixer equipped with a pastry knife agitator. After all of the water has been added, the semolina and water are blended at high speed for 30 seconds; the mixer was stopped to scrape down the sides of the bowl and the blending continued for 90 seconds more to complete the premix stage. The premixed pasta was then transferred to the vacuum mixer of the press and extruded through an 84-strand 0.043 in teflon spaghetti die. A jacketed extension tube (9 $\frac{1}{4}$ " long x 1-3/4" inside diameter) was attached to the semi-commercial pasta extruder to allow more time for hydration of the semolina and minimize the number of white specks (unhydrated semolina) in the spaghetti. Extrusion temperature was controlled by a circulating water bath.

Spaghetti Drying - Spaghetti was dried in an experimental pasta dryer for an 18 hour cycle as described by Gilles, Sibbitt and Shuey<sup>9/</sup>. During the drying period, the humidity of the dryer was decreased linearly from 95 to 60% R.H. and the temperature was held constant at 100°F.

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<sup>9/</sup> Gilles, K. A., Sibbitt, L. D. and Shuey, W. C.  
Automatic laboratory dryer for macaroni products.  
Cereal Sci. Today 11: 322 (1966).

### Cooking Characteristics of Spaghetti

#### A. Cooking Procedure

Spaghetti (10 g) which had been broken into lengths of approximately 5 cm, was placed into 300 ml of boiling water in a 500 ml beaker. After 12 minutes cooking, the samples were washed thoroughly with distilled water in a Buchner funnel, allowed to drain for 2 minutes and then weighed to determine cooked weight. This procedure is the same as last year, but differs from previous years, when a 1% salt solution was used and the spaghetti was cooked for 10 minutes.

#### B. Firmness Score

Two strands of cooked spaghetti were placed on a plexiglass plate and sheared at a 90° angle with a special plexiglass tooth. A continuous recording of distance versus force was made by the instrument during the operation. An automatic integrator was used to calculate the area under the curve (g cm) which was the amount of work required to shear the cooked spaghetti. To measure firmness, the average of three integrator scores was used, and the average work to shear was used as a measure of spaghetti firmness. The firmness score was read directly from the integrator value.

The higher the value, the firmer the spaghetti. A value of approximately 7.00 appears to be of preference.

Calculations were as follows:

$$E = 0.0216 \times A \text{ (g cm)}$$

A = Average integrator reading

E = Area of curve in g cm

#### C. Residue

This is the weight of the solids remaining after the combined cooking and washing water was evaporated.

## DISCUSSION

The following discussion represents some of the basic techniques and criteria used in the milling and cooking quality evaluation of durum wheat samples. Several testing factors are used to determine the overall quality characteristics or final evaluation of a particular sample including, in general, the kernel characteristics, milling performance and cooking performance.

Each evaluation factor can be important. A sample could be of sufficiently poor quality for a given factor to eliminate it from possible future testing. However, a sample submitted for the first time and found to show little promise should be tested again to establish if it has some good promise, or no promise. A sample which is consistently rated as little promise or no promise should be discarded.

Data presented in this report were processed by using the Statistical Analysis System (SAS Institute, Inc., SAS Circle, Box 8000, Cary, NC 27511). The program developed from this system allows flexibility within the quality grading factors. This should allow us to relate more directly to industry and consumer requirements.

In this evaluation system 11 dependent variables are used. These are test weight, 1000 kernel weight, percent small kernels, wheat protein, total extraction, semolina extraction, dust color, speck count, semolina protein, spaghetti visual color score and spaghetti firmness score. Five additional variables are measured and included in the tables for the reader's use and information but are not used in the computerized evaluation of the samples. These are percent large kernels, mixograph score, semolina mineral, falling number and cooking residue.

After computing an average of each of the 11 variables for the standards from a station or nursery, the computer subtracts established values from each of the standard averages to determine major (MJ) and minor (MI) faulting limits. There are two exceptions where precise values have been assigned, which are independent of the station standards. The first exception is wheat protein, where percentages below 11.5% will be classified as MJ faults, and percentages between 11.5% - 12.5% will be MI faults (14% m.b.). The second exception is semolina protein, where percentages below 11.0% are classified as MJ faults, and percentages between 11.0 and 11.5% are classified as MI faults (14% m.b.). Hence, the wheat and semolina protein faulting values remain the same for all stations and nurseries.

### SELECTION OF STANDARDS

Whenever possible, the standards selected were named varieties grown at each location or in each nursery. In the tables of data, the varieties used as standards are identified by an "s" in the second column. At the bottom of each table are cited "average of standards". Quality deviation from these values determine the major and minor faults (note preceding paragraph). In nurseries where breeders did not grow named varieties, standard quality data were obtained from the 1983 North Dakota standard, which was processed separately with each nursery. This standard was made up of durum wheats grown in North Dakota, not at the particular nursery location. Other deviations are footnoted in the tables.

### HOW SAMPLES ARE SCORED

Each sample is assigned an evaluation score of 4. Major and minor faults determined from the data by the computer will reduce this score, depending upon the quality factor being faulted. The effects of the different quality faults are shown in the table which follows:

### DURUM PROGRAM FAULTING AND SCORING VALUES

Variable	Range <sup>1/</sup>		Effect on Evaluation Score <sup>2/</sup>	
	Minor fault	Major fault	Minor fault	Major fault
Test Wt. (lb/bu)	-2.2	-3.1	-	-1
1000 KWT (g)	-2.1	-5.1	-	-1
Small Kernels (%)	+5	+10	-	-1
Wheat Prot. (%)	12.5	11.5	-1	-2
Tot. Ext. (%)	-2.5	-3.5	-1	-2
Semo. Ext. (%)	-3.0	-4.0	-1	-2
Dust color	-10	-15	-2	-3
Specks/10 sq. in.	+10	+15	-	-1
Semo. Prot. (%)	11.5	11.0	-1	-2
Visual Spag. color	-1.0	-1.5	-2	-3
Firmness (g cm)	-1.5	-2.25	-1	-2

1/ Wheat and semolina protein percents are fixed lower limits for faults. All other values represent the deviation from the average of the standards required to warrant a minor or major fault.

2/ These values are subtracted from a beginning score of 4.

Because of the large number of samples received, and often because of the small sample size, we cannot perform all of the evaluation tests on each sample. The computer evaluation system allows any combination of quality factors to be evaluated.

The Final Evaluation (VAL) rating applies only to the data contained in the year of the report. The main defects and outstanding features are discussed. A selection which is promising as a new variety should be continued. A sample which shows little or no promise should be discontinued.

## EXPERIMENTAL RESULTS - 1983 CROP

The results are tabulated and presented in the following order: Tables 1-7, Uniform Regional Nursery; Tables 8-10, Western Durum Nursery; Tables 11-13, Field Plot Nursery; Table 14, Washington Durum Nursery; Table 15, Advanced Nursery; Tables 16-22, Preliminary Nursery; Table 23, International Durum Yield Nursery; Table 24, Elite Durum Yield Trial.

### UNIFORM REGIONAL NURSERY

Analyses were done on the individual samples from each station. Samples were milled using the micro procedure. Semolina produced from the micro milled samples were not processed into spaghetti. A sample that has a good semolina dust color score will usually produce spaghetti with an acceptable spaghetti visual color score. The varieties of Rugby, Vic and Ward represent the standards used for all stations in the Uniform Regional Nursery.

One hundred ninety-six samples were received from seven stations and four states. Twenty-eight samples were received from all 7 stations. Ten of these samples were named varieties. The rest were experimental lines. The discussion which follows is based on averaged data from the 7 stations.

Quality data for Rugby, Vic and Ward were averaged for each station, and these data were used as a standard to evaluate the other selections. Exceptions are wheat and semolina protein concentrations, which are fixed values. Hence, a variety or selection may be rated satisfactory at two different stations, but comparison of the data may show much poorer results for one station due to adverse environmental conditions. Thus, the sample with poor results could be rated as satisfactory at one or more stations. Each variety or selection is followed by the average general evaluation and a short narrative.

Cando (3.4 - 22/8) (3 years) - Some promise.

Faults (1983 crop only)

1000 KWT - Morris, Selby, Williston, Carrington  
Wheat protein - Morris  
Test weight - Selby, Carrington  
Small kernels - Carrington

Coulter (3.3 - 20/6) (3 years) - Some promise

Faults (1983 crop only)

1000 KWT - Morris, Selby, Carrington, Sidney  
Wheat protein - Morris  
Semolina extraction - Morris, Sidney  
Test weight - Carrington  
Small kernels - Carrington

Crosby (3.4 - 16/6) (3 years) - Some promise

Faults (1983 crop only)

Semolina extraction - Morris  
1000 KWT - Crookston, Carrington, Sidney  
Wheat protein - Crookston  
Dust color - Selby

Lloyd (3.5 - 15/6) (3 years) - Good promise

Faults (1983 crop only)

Wheat protein - Morris  
Test weight - Selby, Carrington  
1000 KWT - Williston, Carrington  
Small kernels - Carrington

Medora (3.8 - 9/2) (3 years) - Good promise

Faults (1983 crop only)

1000 KWT - Morris, Carrington, Sidney  
Semolina extraction - Day County

Mindum (1.2 - 39/23) (3 years) - No promise

Faults (1983 crop only)

1000 KWT - Morris, Crookston, Day County, Williston,  
Carrington, Sidney  
Wheat protein - Morris, Crookston  
Dust color - Morris, Crookston, Selby, Day County,  
Williston, Carrington, Sidney  
Small kernels - Day County  
Semolina extraction - Day County  
Test weight - Carrington

Rolette (3.4 - 9/2) (3 years) - Some promise

Faults (1983 crop only)

Dust color - Williston  
1000 KWT - Carrington

Rugby (3.8 - 6/1) (3 years) - Good promise

Faults (1983 crop only)

Wheat protein - Morris  
1000 KWT - Williston

Vic (3.9 - 3/1) (3 years) - Good promise

Faults (1983 crop only)

Wheat protein - Morris

Ward (3.8 - 4/1) (3 years) - Good promise

Faults (1983 crop only)

Wheat protein - Crookston  
Semolina extraction - Carrington

D793 (3.7 - 6/1) (2 years) - Good promise

Faults (1983 crop only)

Wheat protein - Morris  
Semolina extraction - Morris  
Test weight - Crookston, Selby, Carrington

D804 (3.9 - 4/0) (1 year) - Good promise

Faults

1000 KWT - Morris, Selby, Carrington  
Wheat protein - Morris

D7733 (3.5 - 7/4) (3 years) - Good promise

Faults (1983 crop only)

Wheat protein - Morris  
Semolina extraction - Morris, Williston

D7798 (3.7 - 8/3)(3 years) - Good promise

Faults (1983 crop only)

Wheat protein - Morris

D7925 (3.7 - 1/0)(1 year) - Good promise

Faults

Dust color - Williston

D7958 (3.7 - 1/1)(1 year) - Good promise

Faults

Semolina extraction - Williston

D7983 (3.4 - 6/3)(1 year) - Some promise

Faults

1000 KWT - Morris, Crookston, Selby, Day County,  
Carrington

Semolina extraction - Day County

D77200 (3.3 - 17/5)(3 years) - Some promise

Faults (1983 crop only)

Wheat protein - Morris, Crookston

1000 KWT - Selby, Day County, Carrington

Small kernels - Day County, Carrington

D78127 (3.7 - 5/3)(2 years) - Good promise

Faults (1983 crop only)

Wheat protein - Morris

Test weight - Carrington

1000 KWT - Carrington

Small kernels - Carrington

D78177 (3.8 - 14/4)(2 years) - Good promise

Faults (1983 crop only)

1000 KWT - Morris, Selby, Williston, Carrington

Small kernels - Day County, Carrington

Test weight - Carrington

D79103 (3.6 - 2/1)(1 year) - Good promise

Faults

Wheat protein - Morris  
Semolina extraction - Crookston

D79104 (3.9 - 6/1)(1 year) - Good promise

Faults

1000 KWT - Morris, Crookston, Selby, Day County,  
Williston, Carrington

D79120 (3.6 - 4/1)(1 year) - Good promise

Faults

Wheat protein - Morris, Crookston  
Test weight - Selby  
1000 KWT - Carrington

D79122 (3.6 - 7/0)(1 year) - Good promise

Faults

Test weight - Morris  
Wheat protein - Morris, Crookston  
1000 KWT - Selby, Carrington, Sidney  
Semolina extraction - Selby

D79168 (3.1 - 7/3)(1 year) - Some promise

Faults

Wheat protein - Morris, Crookston  
1000 KWT - Williston, Carrington  
Semolina extraction - Williston  
Test weight - Carrington  
Small kernels - Carrington

D79209 (3.7 - 5/1)(1 year) - Good promise

Faults

Wheat protein - Morris  
1000 KWT - Selby, Williston, Carrington  
Test weight - Carrington

DT371 (3.4 - 15/6)(2 years) - Some promise

Faults (1983 crop only)

1000 KWT - Morris, Carrington, Sidney

Semolina extraction - Morris, Williston

Wheat protein - Crookston

Test weight - Selby, Day County, Williston, Sidney

DT375 (3.9 - 3/0)(1 year) - Good promise

Faults

Semolina extraction - Morris

1000 KWT - Carrington, Sidney

WESTERN DURUM NURSERY

Analyses for the Western Durum Nursery samples were similar to those for the Field Plot Nursery. All samples were milled, and the semolina was processed into spaghetti using the macro method. Thirty-eight samples were received from Imperial Valley, California, and 27 samples were received from both Davis and Delta, California; all three stations using Mexicali 75 and Westbred 881 as standards.

Imperial Valley, California, Table 8

Of the 38 samples received, 8 showed good promise. D8204 had a minor fault for test weight; three samples showed some promise. All 3 had a major fault for 1000 KWT and one a minor fault for semolina specks. Ten samples showed little promise, and 17 samples showed no promise. The average evaluation score for this station was 2.1.

Davis, California, Table 9

All samples received from this station showed no promise. The evaluation score for this station is 1.0.

Delta Area, California, Table 10

Three of the 27 samples received showed good promise. All 3 have a minor fault for 1000 KWT. Two samples showed some promise with minor faults for semolina specks, semolina protein and firmness score. One sample showed little promise, and 21 showed no promise. The average evaluation score for this station ws 1.5.

#### FIELD PLOT NURSERY

Thirty-one samples were received from three stations. All samples were milled, and the semolina was processed into spaghetti using the macro method.

##### Mesa, Arizona, Table 11

Sixteen samples were received from this station using Aldura, Mexicali 75 and Westbred 881 as the standards. Westbred 881 shows good promise, WDE-80-10 shows some promise. Fourteen samples show no promise. The average evaluation score for this station was 1.3.

##### Pinal County, Arizona, Table 12

Eight samples were received from this station using Aldura NK, Mexicali and Westbred 881 as the standards. Westbred 881 shows good promise with a minor fault for semolina specks. The 7 other samples all show no promise. The average evaluation score for this station was 1.4.

##### Yuma County, Arizona, Table 13

Seven samples were received from this station using Aldura, Mexicali and Westbred 881 as the standards. Westbred 881 shows good promise. The 6 other samples all show no promise. The average evaluation score for this station was 1.4.

#### WASHINGTON DURUM NURSERY

##### Royal Slope, Table 14

Thirty-three samples were received from this station using Aldura, Cando and Lloyd as the standards. Of the 33 samples 4 show good promise. They are Attila, TL 073468, TL 073506 and TL 075393. Fourteen samples show some promise, 7 samples show little promise and 8 samples show no promise. The average evaluation score for this station is 2.4.

WESTERN DURUM NURSERY

Analyses for the Western Durum Nursery samples were similar to those for the Field Plot Nursery. All samples were milled, and the semolina was processed into spaghetti using the macro method. Thirty-eight samples were received from Imperial Valley, California, and 27 samples were received from both Davis and Delta, California; all three stations using Mexicali 75 and Westbred 881 as standards.

Imperial Valley, California, Table 8

Of the 38 samples received, 8 showed good promise. D8204 had a minor fault for test weight; three samples showed some promise. All 3 had a major fault for 1000 KWT and one a minor fault for semolina specks. Ten samples showed little promise, and 17 samples showed no promise. The average evaluation score for this station was 2.1.

Davis, California, Table 9

All samples received from this station showed no promise. The evaluation score for this station is 1.0.

Delta Area, California, Table 10

Three of the 27 samples received showed good promise. All 3 have a minor fault for 1000 KWT. Two samples showed some promise with minor faults for semolina specks, semolina protein and firmness score. One sample showed little promise, and 21 showed no promise. The average evaluation score for this station ws 1.5.

#### FIELD PLOT NURSERY

Thirty-one samples were received from three stations. All samples were milled, and the semolina was processed into spaghetti using the macro method.

##### Mesa, Arizona, Table 11

Sixteen samples were received from this station using Aldura, Mexicali 75 and Westbred 881 as the standards. Westbred 881 shows good promise, WDE-80-10 shows some promise. Fourteen samples show no promise. The average evaluation score for this station was 1.3.

##### Pinal County, Arizona, Table 12

Eight samples were received from this station using Aldura NK, Mexicali and Westbred 881 as the standards. Westbred 881 shows good promise with a minor fault for semolina specks. The 7 other samples all show no promise. The average evaluation score for this station was 1.4.

##### Yuma County, Arizona, Table 13

Seven samples were received from this station using Aldura, Mexicali and Westbred 881 as the standards. Westbred 881 shows good promise. The 6 other samples all show no promise. The average evaluation score for this station was 1.4.

#### WASHINGTON DURUM NURSERY

##### Royal Slope, Table 14

Thirty-three samples were received from this station using Aldura, Cando and Lloyd as the standards. Of the 33 samples 4 show good promise. They are Attila, TL 073468, TL 073506 and TL 075393. Fourteen samples show some promise, 7 samples show little promise and 8 samples show no promise. The average evaluation score for this station is 2.4.

ADVANCED NURSERY

Davis, California, Table 15

Twenty-one samples were received from this station using Aldura, Modoc and Yavaros as standards. All 21 samples show no promise having an evaluation score of 1.0.

PRELIMINARY NURSERY

A total of 331 samples were received from 2 stations. All samples were milled using the micro procedure.

Tulelake, California

Four sets of samples were received using 3 different levels of nitrogen, plus a set with 0 nitrogen. Modoc 83-S-5, Modoc 83-S-6 and Modoc 83-S-7 were used as standards for all four sets.

0 Pounds Nitrogen, Table 16

Of the 16 samples in this set; one showed some promise, 10 showed little promise and 5 showed no promise. The major faulting area for this set was wheat protein. The average evaluation score was 1.8.

100 Pounds Nitrogen, Table 17

Sixteen samples were received in this set; one showed some promise, 11 showed little promise and 4 showed no promise. The major faulting area for this set was wheat protein. The average evaluation score was 1.8.

200 Pounds Nitrogen, Table 18

Sixteen samples are in this set; of those, 3 samples show some promise, 10 show little promise and 3 show no promise. Again, the major faulting area was wheat protein. The average evaluation score was 2.0.

300 Pounds Nitrogen, Table 19

Sixteen samples are in this set; of those, 6 show good promise. TL 75-409 and TL 83-1184 have a minor fault for 1000 KWT. Three samples show some promise, 6 show little promise and 1 shows no promise. The major faulting area is wheat protein. The average evaluation score for this set is 2.9.

Tulelake, California, Table 20

Thirty samples were received in this set. Cando, Irridur, Modoc and Waid were used as the standards. Seven show some promise, 10 samples show little promise and 13 show no promise. Two major faulting areas are wheat protein and semolina extraction. The average evaluation score is 1.8.

Tulelake, California, Table 21

Forty-two samples were received in this set. Mexicali, Modoc and Produra were used as the standards. Eleven samples show some promise, 21 show little promise and 10 samples show no promise. The major faulting area is wheat

Imperial Valley, California, Experiment No. 322, Tables 22 & 22A

Two hundred four samples were received from this station. This experiment was run twice, once using Mexicali 75 as the standard and on the second run using our 1983 durum standard as the standard. Using Mexicali 75 as the standard, 134 samples showed good promise, 48 showed some promise, 13 showed little promise and 9 showed no promise. The major area of faulting was 1000 KWT. The average evaluation score is 3.5.

The second run using our 1983 durum standard as the standard, there were 37 samples that show good promise, 8 samples show some promise, 35 samples show little promise and 124 show no promise. The major faulting area for this set was dust color. The average evaluation score is 1.8.

INTERNATIONAL DURUM YIELD NURSERY

Davis, California, Table 23

There were 16 samples received from this station using Edmore and Mexicali 75 as the standards. One sample "Dural" shows good promise, 2 samples show some promise and 13 samples show no promise. The major faulting areas were wheat protein, dust color and semolina protein. The average evaluation score is 1.4.

ELITE DURUM YIELD TRIAL

Davis, California, Table 24

There were 9 samples received from this station using Produra as the standard. All samples from this set rated no promise. The major faulting areas are wheat and semolina protein. The evaluation score for all samples is 1.0.

EXPLANATION OF ABBREVIATIONS  
LISTED UNDER THE HEADINGS AND UNDER  
MINOR AND MAJOR DEFICIENCIES ON TABLES

MINOR AND MAJOR DEFICIENCIES ON COMPUTER PRINTOUT

S or STD = Standard  
TW = Test Weight

1000 KWT or KW = 1000 Kernel Weight  
LG = % Large Kernels  
SM = % Small Kernels

WHT PRO or WP = Wheat Protein  
TOT EXT or TX = Total Extraction (Semolina Plus  
Flour)  
SEMO EXT or SX = Semolina Extraction  
DUS or DU = Semolina Dust Color Score (High  
score is more desirable)

MX = Mixograph Score (The higher the number, the  
stronger the curve)  
SPK or SK = Semolina Speck Count  
SEMO MIN = Semolina Mineral

FALL NO = Semolina Falling Number Value (Values  
above 300 are desired)  
SEMO PRO or SP = Semolina Protein

VI = Spaghetti Visual Color Score (The higher  
the score, the more desirable)  
FIRM or FR = Cooked Spaghetti Firmness Score  
(Approx. 6.50 to 8.50 is the  
desirable range)

RES = Residue in Water of Cooked Spaghetti  
VALU = Sample Evaluation Number (Example 4 =  
Good Promise)

TABLE 1

QUALITY DATA OF DURUM SAMPLES 1983 CROP  
 STATE= SOUTH DAKOTA STATION=SELBY NURSERY=UNIFORM

VARIETY	STD	TW	1000 KWT	% LG	SEM0 TOT PRO	WHT EXT	TOT PRO	SEM0 MX SPK	SEM0 MIN	SEM0 FALL NO	SEM0 PRO	VI	FIRM	RES	VALU TX SX DU SK SP	DEFICIENCIES		
																FR	TW	RW
CANDO	59.8	37.6	28	3	13.1	•	56.5	75	3	•	•	•	•	•	•	3	MJ	MJ
CROSBY	60.0	41.0	39	2	14.1	•	45.0	70	7	•	•	•	•	•	•	4	MJ	MJ
LLOYD	62.2	43.3	46	2	14.2	•	45.0	65	4	•	•	•	•	•	•	2	MJ	MJ
MEDORA	59.0	44.6	43	2	13.6	•	48.5	85	5	•	•	•	•	•	•	4	MJ	MJ
MINDUM	60.0	42.6	56	2	14.7	•	51.5	65	4	•	•	•	•	•	•	2	MJ	MJ
ROLETTE	62.4	42.9	51	2	14.0	•	51.5	65	4	•	•	•	•	•	•	4	MJ	MJ
RUGBY	62.2	43.1	60	2	15.4	•	51.5	65	4	•	•	•	•	•	•	4	MJ	MJ
VIC	56.2	44.1	50	2	14.5	•	48.5	80	6	•	•	•	•	•	•	4	MJ	MJ
WARD	62.6	42.6	52	2	14.4	•	44.0	75	5	•	•	•	•	•	•	4	MJ	MJ
D 79.3	59.7	50.3	70	2	14.8	•	48.5	80	8	•	•	•	•	•	•	4	MJ	MJ
D 80.4	62.1	41.1	36	1	23.0	•	47.5	85	6	•	•	•	•	•	•	4	MJ	MJ
D 77.33	61.8	42.6	61	2	14.4	•	47.5	85	6	•	•	•	•	•	•	4	MJ	MJ
D 779.8	61.9	46.1	57	2	14.5	•	47.5	85	6	•	•	•	•	•	•	4	MJ	MJ
D 792.5	61.9	42.9	56	2	14.7	•	45.0	70	7	•	•	•	•	•	•	4	MJ	MJ
D 795.8	61.4	43.5	58	1	14.5	•	45.5	75	7	•	•	•	•	•	•	3	MJ	MJ
D 798.3	61.3	38.2	45	2	14.5	•	50.0	75	7	•	•	•	•	•	•	4	MJ	MJ
D 772.00	61.9	40.3	25	2	12.7	•	54.5	75	5	•	•	•	•	•	•	4	MJ	MJ
D 781.27	61.8	43.9	58	2	13.4	•	46.5	80	5	•	•	•	•	•	•	4	MJ	MJ
D 781.77	61.9	46.1	57	2	14.5	•	47.5	85	6	•	•	•	•	•	•	4	MJ	MJ
D 791.03	61.8	42.9	56	2	14.7	•	45.0	70	7	•	•	•	•	•	•	4	MJ	MJ
D 791.04	62.4	38.8	48	2	14.0	•	48.0	85	6	•	•	•	•	•	•	4	MJ	MJ
D 791.20	59.3	42.6	45	2	13.9	•	53.5	75	8	•	•	•	•	•	3	MJ	MJ	
D 791.22	60.6	40.5	32	2	13.9	•	43.0	75	8	•	•	•	•	•	4	MJ	MJ	
D 791.68	62.1	42.4	37	3	13.7	•	47.5	80	7	•	•	•	•	•	4	MJ	MJ	
D 792.09	62.1	40.8	40	2	13.3	•	47.0	70	6	•	•	•	•	•	3	MJ	MJ	
DT 37.1	58.9	42.7	43	2	14.8	•	46.0	75	8	•	•	•	•	•	4	MJ	MJ	
DT 37.5	61.3	43.9	28	2	14.7	•	45.5	70	7	•	•	•	•	•	4	MJ	MJ	

## DEFICIENCIES

AVG OF STANDARDS

MINOR FAULTS

MAJOR FAULTS

DEFICIENCIES

AVG OF STANDARDS

MINOR FAULTS

MAJOR FAULTS

EVALUATION 1=NO PROMISE, 2=LITTLE PROMISE, 3=SOME PROMISE, 4=GOOD PROMISE

TABLE 2

QUALITY DATA OF DURUM SAMPLES      1983 CROP  
 STATE=SOULI DAKOTA STATION=DAY CO. NURSERY=UNIFORM

VARIETY	STD	TW	1000 KG/T	LG_SGN	%	WHT PRO EXT	TOT	SEM EXT	SEM MX	SEM MIN	SEM NO	SEM PRO	VI	FIRM	RES	** VALU	TW-KW-SX-TW DU SK SP TX	DEFICIENCIES SX DU SK SP VI FR	
CANDO	57.9	33.7	4	8	14.7	•	45.5	80	6	•	•	•	•	•	•	•	•	4	4
COULTER	57.6	32.1	5	6	15.8	•	45.5	75	8	•	•	•	•	•	•	•	•	4	4
CROSAY	57.9	32.2	4	6	16.2	•	44.5	75	6	•	•	•	•	•	•	•	•	4	4
LLOYD	57.8	38.0	11	4	14.9	•	49.0	75	8	•	•	•	•	•	•	•	•	4	4
MEDORA	59.0	35.1	16	3	16.9	•	43.5	75	8	•	•	•	•	•	•	•	3	3	MI MJ
MINDUM	59.4	30.7	2	10	15.8	•	42.5	60	6	•	•	•	•	•	•	•	1	1	MI MI
ROULETTE	59.4	33.8	6	14	14.4	•	46.0	70	5	•	•	•	•	•	•	•	4	4	4
RUGBY	59.4	33.1	8	4	15.9	•	44.5	70	6	•	•	•	•	•	•	•	4	4	4
VIC	59.8	35.8	15	3	15.9	•	48.0	75	8	•	•	•	•	•	•	•	4	4	4
WARD	59.4	31.5	8	5	16.1	•	49.5	80	6	•	•	•	•	•	•	•	4	4	4
D 793	57.6	34.5	16	4	15.3	•	48.5	85	8	•	•	•	•	•	•	•	4	4	4
D 804	60.5	34.4	7	5	14.7	•	51.5	85	7	•	•	•	•	•	•	•	4	4	4
D 7733	59.8	36.2	18	3	15.8	•	48.5	80	7	•	•	•	•	•	•	•	4	4	4
D 7798	59.5	36.1	15	3	15.5	•	47.5	80	7	•	•	•	•	•	•	•	4	4	4
D 7925	58.1	35.7	13	3	16.5	•	47.5	80	8	•	•	•	•	•	•	•	4	4	4
D 7958	59.8	35.7	11	4	15.1	•	47.0	80	8	•	•	•	•	•	•	•	4	4	4
D 7983	58.6	30.6	7	7	16.6	•	41.5	70	8	•	•	•	•	•	•	•	2	2	MI MI
D 77200	58.6	30.1	2	12	14.4	•	47.5	70	8	•	•	•	•	•	•	•	4	4	4
D 7722	60.5	39.5	17	5	14.1	•	50.0	80	7	•	•	•	•	•	•	•	4	4	4
D 78127	59.0	32.2	3	9	15.0	•	47.5	85	8	•	•	•	•	•	•	•	4	4	4
D 78177	59.0	32.0	3	9	15.0	•	47.5	85	7	•	•	•	•	•	•	•	4	4	4
D 79103	59.2	36.6	31	2	15.6	•	52.0	85	7	•	•	•	•	•	•	•	4	4	4
D 79104	60.2	30.6	8	6	15.5	•	50.5	80	8	•	•	•	•	•	•	•	4	4	4
D 79120	59.2	36.5	12	2	16.0	•	49.0	80	8	•	•	•	•	•	•	•	4	4	4
D 79122	59.5	33.7	6	5	15.5	•	52.5	80	8	•	•	•	•	•	•	•	4	4	4
D 79168	60.3	36.4	12	3	14.3	•	57.5	90	7	•	•	•	•	•	•	•	4	4	4
D 79209	60.2	34.1	5	6	14.4	•	53.0	80	6	•	•	•	•	•	•	•	3	3	4
DT 371	56.2	31.5	6	6	16.0	•	55.0	85	8	•	•	•	•	•	•	•	4	4	4
DT 375	60.3	34.4	3	5	16.6	•	44.5	75	7	•	•	•	•	•	•	•	4	4	4

DEFICIENCIES  
 AVG OF STANDARDS  
 MINOR FAULTING VALUES  
 MAJOR FAULTING VALUES

TW KW SW WP TX SX DU SK SP VI FR  
 59.5 33.5 4 16.0 • 47.3 75 • 11.5 •  
 57.3 31.4 9 12.5 • 44.3 65 • 11.5 •  
 56.4 28.4 14 11.5 • 43.3 60 • 11.0 •

\*\*EVALUATION 1=NO PROMISE, 2=LITTLE PROMISE, 3=SOME PROMISE, 4=GOOD PROMISE

TABLE 3  
QUALITY DATA OF DURUM SAMPLES 1983 CROP  
STATE=MINNESOTA STATION=CROOKSTON NURSERY=UNIFORM

VARIETY	STD	TW	1000 KWT	X LG SM	WHT PRO	TOT EXT	SEMO EXT	DUS	MX SPK	SEMO NO	SEMO MIN	FALL PRO	VI	FIRM	RES	VALU	TJ-KW-SH-WP-TX SX DU SK-SP-VIT-FR	DEFICIENCIES
CANDO	59.0	2	37.7	23	2	13.3	*	66.5	80	4	*	*	*	*	*	*	4	4
COULTER	58.4	37.6	26	2	12.5	*	66.5	85	5	*	*	*	*	*	*	3	MI	
CROSSAY	60.0	5	36.1	20	1	12.5	*	66.5	80	3	*	*	*	*	*	4	MI	
LLOYD	57.3	39.2	23	5	13.5	*	65.5	80	5	*	*	*	*	*	*	4	MI	
MEDORA	59.5	39.0	40	3	14.4	*	65.5	80	6	*	*	*	*	*	*	1	MI	
MINDUM	62.6	35.6	18	3	12.1	*	66.5	65	3	*	*	*	*	*	*	4	MI	
ROLETTE	59.5	37.3	19	4	13.6	*	67.5	70	3	*	*	*	*	*	*	4	4	
RUGBY	S	58.9	36.9	27	5	13.1	*	66.5	75	3	*	*	*	*	*	4	4	
VIC	S	59.7	41.3	44	2	12.9	*	67.5	80	5	*	*	*	*	*	4	4	
WARD	S	58.7	36.8	32	3	12.5	*	66.0	75	3	*	*	*	*	*	3	MI	
D 793	S	56.3	41.6	36	4	13.2	*	66.0	75	5	*	*	*	*	*	4	4	
D 804	D	59.0	37.5	26	5	12.8	*	66.0	80	6	*	*	*	*	*	4	4	
D 7733	S	59.7	40.2	41	2	13.6	*	66.0	80	6	*	*	*	*	*	4	4	
D 7798	D	59.8	42.6	38	3	13.3	*	66.5	80	6	*	*	*	*	*	4	4	
D 7925	D	57.9	40.0	33	3	13.0	*	68.5	80	5	*	*	*	*	*	4	4	
D 7958	D	59.7	38.0	41	3	13.0	*	65.5	80	6	*	*	*	*	*	4	4	
D 7983	D	58.2	33.8	15	4	14.1	*	65.0	80	7	*	*	*	*	*	3	MI	
D 7720	D	60.3	37.9	12	4	12.3	*	66.5	80	5	*	*	*	*	*	4	4	
D 7812	D	58.9	40.3	45	4	12.8	*	66.0	80	5	*	*	*	*	*	4	4	
D 7817	D	58.6	37.5	17	4	13.1	*	67.0	75	5	*	*	*	*	*	4	4	
D 7910	D	59.0	40.7	55	2	12.8	*	61.5	80	6	*	*	*	*	*	2	4	
D 79104	D	58.9	34.7	24	3	13.6	*	65.5	90	7	*	*	*	*	*	3	MI	
D 79120	D	57.3	38.9	27	4	12.5	*	65.0	90	6	*	*	*	*	*	3	MI	
D 79122	D	58.4	38.3	30	2	12.5	*	67.5	80	6	*	*	*	*	*	3	MI	
D 79168	D	59.7	38.0	23	3	12.4	*	67.0	85	7	*	*	*	*	*	3	4	
D 79209	D	58.7	38.6	23	4	13.0	*	66.0	75	6	*	*	*	*	*	3	MI	
DT 371	57.8	37.5	24	3	12.5	*	66.0	75	6	*	*	*	*	*	4	4		
DT 375	60.6	38.0	19	2	13.0	*	66.0	80	5	*	*	*	*	*	4	4		

DEFICIENCIES  
AVG OF STANDARDS  
MINOR FAULTING VALUES  
MAJOR FAULTING VALUES

\*\*EVALUATION I=NO PROMISE. 2=LITTLE PROMISE. 3=SOME PROMISE. 4=GOOD PROMISE

TABLE 4

QUALITY DATA OF DURUM SAMPLES  
1983 CROP

STATE MINNESOTA STATION=MURRIS\_NURSERY=UNIFORM

VARIETY	STD	W	1000 KWT	LG_SSI	WHT		ICT		SEM		FALL		SEMO		PRU		VI	FIRK	RCS	VALU	TW	KA	SQ	WP	TX	SX	DU	SK	SP	VI	DEFICIENCIES
					PRO	EXT	DUS	MX	SPIK	MIN	NC	PRU	VI	FIRK	RCS	VALU	TW	KA	SQ	WP	TX	SX	DU	SK	SP	VI					
CANDO	59.5	34.2	13	4	12.1	•	65.0	80	3	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	MJ			
COULTER	59.7	33.3	15	4	12.0	•	61.5	75	4	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	MJ			
CROSBY	61.1	38.0	32	2	12.7	•	62.0	80	3	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	MJ			
LLOYD	60.0	38.5	30	3	12.2	•	65.5	85	5	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	MJ			
MEDORA	59.2	26.0	31	4	13.0	•	65.5	85	5	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	MJ			
MINDUM	62.5	35.8	18	2	12.0	•	67.0	70	3	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	MJ			
ROLETTE	62.7	38.9	40	2	13.3	•	63.5	80	3	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	MJ			
RUGBY	60.6	37.7	35	3	12.3	•	67.0	80	2	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	MJ			
VIC	60.0	40.7	45	2	12.0	•	67.0	80	4	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	MJ			
WARD	59.5	38.0	33	3	12.9	•	66.0	80	3	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	MJ			
D 793	59.4	41.0	45	2	12.1	•	61.5	85	4	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	MJ			
D 804	60.5	35.6	22	3	12.4	•	64.5	85	4	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	MJ				
D 7733	60.2	41.0	50	4	12.2	•	62.5	75	6	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	MJ				
D 7798	59.8	39.8	43	4	12.4	•	66.0	80	5	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	MJ				
D 7925	59.5	41.7	35	3	13.0	•	65.0	75	6	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	MJ				
D 7958	60.3	37.0	41	4	12.8	•	64.0	80	5	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	MJ				
D 7983	60.3	36.6	23	4	13.5	•	64.5	85	6	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	MJ				
D 77200	61.6	37.7	10	5	11.9	•	65.0	80	5	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	MJ				
D 78127	59.8	38.0	37	3	11.6	•	65.5	80	4	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	MJ				
D 78177	59.4	34.0	7	5	12.6	•	64.5	85	5	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	MJ				
D 79103	59.8	40.8	61	2	12.4	•	67.5	85	4	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	MJ				
D 79104	61.0	35.6	34	3	12.1	•	66.0	80	5	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	MJ				
D 79120	59.0	40.2	36	4	12.5	•	67.0	85	6	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	MJ				
D 79122	58.2	38.2	26	4	12.4	•	65.5	85	5	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	MJ				
D 79168	60.6	37.6	13	5	11.9	•	67.5	80	4	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	MJ				
D 79209	60.0	37.7	23	3	11.6	•	67.5	80	4	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	MJ				
DT 371	58.6	36.5	21	4	12.6	•	62.5	80	5	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	MJ				
DT 375	60.8	36.8	11	4	13.9	•	63.5	75	4	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	MJ				

## DEFICIENCIES

## AVG OF STANDARDS

## MINOR FAULTING VALUES

## MAJOR FAULTING VALUES

## EVALUATION 1=INC PROMISE.

## 2=LITTLE PROMISE.

## 3=SOME PROMISE.

## 4=GUD PROMISE

WHT EXT DUS MX SPIK MIN NC PRU VI FIRK RCS VALU TW KA SQ WP TX SX DU SK SP VI DEFICIENCIES

TW KA SQ WP TX SX DU SK SP VI

FIRK RCS VALU

DEFICIENCIES

TABLE 5

QUALITY DATA OF DURUM SAMPLES 1983 CROP  
 STATE=MONTANA STATION=SIDNEY NURSERY=UNIFORM

VARIETY	STD TW	1000 KWT	LG SM %	WHT PRO EXT	TOT EXT	SEM0 DUS MX SPK	SEM0 FALL MIN NO PRO	SEM0 PRO	VI	FIRM	RES	** VALU TW RW SW WP TX DU SK SP VI FR
CANDO	61.9	36.5	13	4	15.1	•	66.0	90	4	•	•	4
COULTER	60.2	34.5	19	4	15.7	•	64.5	80	6	•	3	MI
CROSBY	60.5	35.0	10	4	16.7	•	64.5	80	8	•	4	MI
LLOYD	60.5	38.5	12	4	14.7	•	65.0	90	8	•	4	MI
MEDORA	60.5	35.0	10	2	16.3	•	66.0	90	8	•	1	MI
MEDIUM	60.3	32.5	5	4	16.2	•	66.0	75	5	•	4	MI
ROLETTE	62.1	41.5	29	2	16.6	•	63.5	80	3	•	4	4
RUGBY	S 60.5	36.8	8	14	16.0	•	68.5	85	4	•	4	4
VIC	S 61.0	38.9	13	3	15.9	•	68.0	90	8	•	4	4
WARD	S 60.6	38.2	18	4	16.0	•	67.5	90	4	•	4	4
D 793	60.5	41.8	35	2	15.6	•	66.0	90	7	•	4	4
D 804	62.1	36.5	17	4	14.6	•	67.5	95	8	•	4	4
D 7733	61.3	39.1	17	2	16.1	•	66.5	90	8	•	4	4
D 7798	61.4	40.3	21	3	15.1	•	67.0	90	8	•	4	4
D 7925	60.5	33.7	7	19	2	14.9	•	67.0	85	7	•	4
D 7958	60.8	37.2	2	16	2	16.0	•	66.0	85	8	•	4
D 7983	61.3	37.2	2	15	3	15.9	•	65.5	90	8	•	4
D 77200	61.0	39.2	2	6	4	15.1	•	66.0	80	7	•	4
D 78127	62.4	38.3	3	15	2	14.3	•	67.5	90	7	•	4
D 78177	61.8	36.5	5	8	14.6	•	72.5	95	7	•	4	4
D 79103	61.4	40.2	35	2	15.3	•	70.0	85	6	•	4	4
D 79104	62.1	36.9	26	3	15.1	•	68.5	90	6	•	4	4
D 79120	59.3	36.1	14	4	14.6	•	70.0	90	7	•	4	4
D 79122	59.5	35.1	6	4	15.0	•	69.0	90	8	•	4	4
D 79168	62.1	37.0	8	3	15.2	•	71.0	95	6	•	4	4
D 79209	61.8	37.6	14	3	14.1	•	71.5	85	6	•	4	4
DT 371	57.6	33.4	6	6	15.7	•	68.0	90	7	•	3	MI
DT 375	59.0	33.4	3	8	17.1	•	67.0	85	7	•	4	MI

DEFICIENCIES  
 AVG OF STANDARDS  
 MINOR FAULTING VALUES  
 MAJOR FAULTING VALUES

1=NO PROMISE, 2=LITTLE PROMISE, 3=SOME PROMISE, 4=GOOD PROMISE

TABLE 6

QUALITY DATA OF DURUM SAMPLES 1983 CROP  
STATE=NORTH DAKOTA STATION=MILLISION\_NURSERY=UNIFORM

VARIETY	STD	TW	1000 KWT	% LG_SSN	WHT TOT			SEMO EXT	SEMO FALL	SEMO NO PRO	VI	FIRM	RES	VALU	TW-KW-SM-WP-TX SX DU SK-SP-VT-FR	
					PRO	EXT	DUS									
CANDO	63.4	35.0	7	3 15.6	•	60.0	85	6	•	•	•	•	•	•	4	MJ
COULTER	62.2	37.5	18	3 16.9	•	63.5	80	8	•	•	•	•	•	•	4	MJ
CROSBY	62.7	37.7	16	3 17.0	•	61.5	85	6	•	•	•	•	•	•	4	MJ
LLOYD	63.2	36.2	14	2 15.7	•	60.0	95	7	•	•	•	•	•	•	4	MJ
MEDORA	61.8	37.5	22	2 17.2	•	52.0	85	7	•	•	•	•	•	•	4	MJ
MINDUM	61.8	35.5	12	2 16.7	•	54.5	85	5	•	•	•	•	•	•	1	MJ
ROLETTE	63.2	42.7	41	1 18.2	•	58.5	75	5	•	•	•	•	•	•	2	MJ
RUGBY	S 63.7	36.4	14	3 16.6	•	56.0	80	5	•	•	•	•	•	•	4	MJ
VIC	S 61.8	40.3	29	1 16.7	•	55.0	90	6	•	•	•	•	•	•	4	MJ
WARD	S 62.7	38.9	23	2 17.7	•	53.5	85	5	•	•	•	•	•	•	4	MJ
D 793	62.1	44.4	54	1 17.0	•	53.5	80	7	•	•	•	•	•	•	4	MJ
D 804	62.2	38.0	13	2 15.7	•	55.0	85	6	•	•	•	•	•	•	4	MJ
D 7733	61.6	40.7	32	2 16.8	•	49.0	80	7	•	•	•	•	•	•	2	MJ
D 7798	61.8	39.8	24	1 16.9	•	52.5	85	8	•	•	•	•	•	•	4	MJ
D 7925	62.4	41.7	29	2 16.7	•	55.5	75	8	•	•	•	•	•	•	2	MJ
D 7958	62.7	38.2	20	1 16.8	•	49.0	90	8	•	•	•	•	•	•	2	MJ
D 7983	62.7	40.5	21	1 16.7	•	53.5	85	8	•	•	•	•	•	•	4	MJ
D 79200	62.4	40.7	10	2 15.3	•	56.0	80	8	•	•	•	•	•	•	4	MJ
D 78127	63.5	42.4	41	2 15.1	•	58.0	90	7	•	•	•	•	•	•	4	MJ
D 78177	62.9	35.5	7	2 15.8	•	53.5	90	7	•	•	•	•	•	•	4	MJ
D 79103	62.1	39.2	41	1 16.4	•	52.0	90	7	•	•	•	•	•	•	4	MJ
D 79104	62.6	35.3	19	2 16.3	•	58.5	90	8	•	•	•	•	•	•	4	MJ
D 79120	61.8	37.6	22	1 16.3	•	52.5	80	8	•	•	•	•	•	•	4	MJ
D 79122	61.3	36.9	13	2 16.1	•	51.0	95	7	•	•	•	•	•	•	3	MJ
D 79168	62.7	36.2	12	2 15.5	•	57.0	85	7	•	•	•	•	•	•	4	MJ
D 79209	62.1	36.4	12	2 15.4	•	51.5	80	8	•	•	•	•	•	•	3	MJ
DT 371	59.8	39.0	18	2 17.6	•	56.0	35	7	•	•	•	•	•	•	4	MJ
DT 375	61.6	33.8	11	1 16.9	•	•	•	•	•	•	•	•	•	•	•	•

DEFICIENCIES  
 AVG OF STANDARDS  
 MINOR FAULTING VALUES  
 MAJOR FAULTING VALUES

62.7	38.5	2 16.8	TX	54.8	85	DU SK SP VI FR
60.5	36.4	7 12.5	•	51.8	75	• 11.5 •
59.0	33.4	12 11.5	•	50.8	70	• 11.0 •

\*\*EVALUATION 1=NO PROMISE. 2=LITTLE PROMISE. 3=SOME PROMISE. 4=GOOD PROMISE

## QUALITY DATA OF DURUM SAMPLES 1983 CROP

TABLE 7 STATE=NORTH DAKOTA STATIONE CARRINGTON=IRRIGATED\_NURSERY=UNIFORM

VARIETY	STD	TW	1000 KWT		% LG SM		WHT TOT		SEMO		FALL		SEMO		NO PRO		VI	FIRM	RES	VAL*	TW	KWT	SM	WP	TX	SX	DU	SK	SP	VI	FR	DEFICIENCIES	
			LG	SM	PRO	EXT	DUS	MX	SPK	MIN	SEMO	NO	SEMO	MIN	SEMO	NO																	
CANDO	56.0	33.4	5	9	14.7	.	53.5	85	6	58.0	95	8	55.0	85	5	53.5	95	8	55.0	95	8	55.0	95	8	55.0	95	8	55.0	95	8	55.0	95	8
COULTER	56.0	30.7	6	9	15.1	.	58.0	95	8	55.0	85	5	53.5	95	8	58.0	95	7	55.5	70	4	57.5	85	4	57.5	85	4	57.5	85	4	57.5	85	4
CROSBY	58.4	28.0	11	6	14.9	.	58.0	95	8	53.5	95	8	58.0	95	7	55.5	70	4	57.5	85	4	57.5	85	4	57.5	85	4	57.5	85	4	57.5	85	4
LLOYD	51.2	28.8	3	12	16.6	.	52.0	95	8	53.5	95	8	58.0	95	7	55.5	70	4	57.5	85	4	57.5	85	4	57.5	85	4	57.5	85	4	57.5	85	4
MEDORA	58.4	35.2	24	4	15.3	.	58.0	95	7	58.0	95	7	58.0	95	7	55.5	70	4	57.5	85	4	57.5	85	4	57.5	85	4	57.5	85	4	57.5	85	4
MINDUM	56.8	30.6	9	6	15.0	.	55.5	70	4	55.5	70	4	55.5	70	4	57.5	85	4	57.5	85	4	57.5	85	4	57.5	85	4	57.5	85	4	57.5	85	4
ROLETTE	60.0	36.4	14	3	14.6	.	59.0	95	4	59.0	95	4	59.0	95	4	57.5	85	4	57.5	85	4	57.5	85	4	57.5	85	4	57.5	85	4	57.5	85	4
RUGBY	S 60.0	40.5	29	4	14.6	.	59.5	90	4	59.5	90	4	59.5	90	4	57.5	85	4	57.5	85	4	57.5	85	4	57.5	85	4	57.5	85	4	57.5	85	4
VIC	S 59.2	41.2	36	3	15.1	.	55.5	95	7	52.0	90	4	53.0	95	7	55.5	70	4	57.5	85	4	57.5	85	4	57.5	85	4	57.5	85	4	57.5	85	4
WARD	S 60.0	38.2	22	4	14.8	.	52.0	90	4	53.0	95	7	53.0	95	7	55.5	70	4	57.5	85	4	57.5	85	4	57.5	85	4	57.5	85	4	57.5	85	4
D 793	56.8	40.3	25	3	14.7	.	55.5	70	4	55.5	70	4	55.5	70	4	57.5	85	4	57.5	85	4	57.5	85	4	57.5	85	4	57.5	85	4	57.5	85	4
D 804	58.4	37.7	8	8	15.3	.	57.0	95	7	57.0	95	7	57.0	95	7	57.0	95	7	57.0	95	7	57.0	95	7	57.0	95	7	57.0	95	7	57.0	95	7
D 7733	58.4	40.7	35	4	15.2	.	57.0	90	7	57.0	90	7	57.0	90	7	57.0	90	7	57.0	90	7	57.0	90	7	57.0	90	7	57.0	90	7	57.0	90	7
D 7798	60.0	42.9	42	2	14.9	.	59.5	90	7	59.5	90	7	59.5	90	7	57.0	85	8	57.0	85	8	57.0	85	8	57.0	85	8	57.0	85	8	57.0	85	8
D 7925	57.6	39.1	11	4	15.1	.	57.0	85	8	58.0	90	8	58.0	90	8	58.0	90	8	58.0	90	8	58.0	90	8	58.0	90	8	58.0	90	8	58.0	90	8
D 7958	60.0	38.2	28	3	14.6	.	58.0	90	8	58.0	90	8	58.0	90	8	58.0	90	8	58.0	90	8	58.0	90	8	58.0	90	8	58.0	90	8	58.0	90	8
D 7983	57.6	34.2	4	8	15.8	.	57.6	90	8	57.6	90	8	57.6	90	8	57.6	90	8	57.6	90	8	57.6	90	8	57.6	90	8	57.6	90	8	57.6	90	8
D 77200	57.6	32.9	2	11	14.0	.	57.6	90	8	57.6	90	8	57.6	90	8	57.6	90	8	57.6	90	8	57.6	90	8	57.6	90	8	57.6	90	8	57.6	90	8
D 78127	55.2	31.0	4	12	15.5	.	54.0	95	7	54.0	95	7	54.0	95	7	54.0	95	7	54.0	95	7	54.0	95	7	54.0	95	7	54.0	95	7	54.0	95	7
D 78177	56.0	30.3	2	13	15.3	.	55.5	95	8	55.5	95	8	55.5	95	8	55.5	95	8	55.5	95	8	55.5	95	8	55.5	95	8	55.5	95	8	55.5	95	8
D 79103	60.0	41.7	57	2	14.9	.	59.0	95	7	59.0	95	7	59.0	95	7	59.0	95	7	59.0	95	7	59.0	95	7	59.0	95	7	59.0	95	7	59.0	95	7
D 79104	60.0	33.9	12	6	14.2	.	59.0	95	7	59.0	95	7	59.0	95	7	59.0	95	7	59.0	95	7	59.0	95	7	59.0	95	7	59.0	95	7	59.0	95	7
D 79120	57.6	34.8	14	4	14.9	.	57.6	90	8	57.6	90	8	57.6	90	8	57.6	90	8	57.6	90	8	57.6	90	8	57.6	90	8	57.6	90	8	57.6	90	8
D 79122	59.2	36.2	13	4	14.6	.	59.0	95	8	59.0	95	8	59.0	95	8	59.0	95	8	59.0	95	8	59.0	95	8	59.0	95	8	59.0	95	8	59.0	95	8
D 79168	55.2	32.2	2	15	16.3	.	54.0	95	8	54.0	95	8	54.0	95	8	54.0	95	8	54.0	95	8	54.0	95	8	54.0	95	8	54.0	95	8	54.0	95	8
D 79209	56.8	32.7	5	8	14.7	.	54.0	95	8	54.0	95	8	54.0	95	8	54.0	95	8	54.0	95	8	54.0	95	8	54.0	95	8	54.0	95	8	54.0	95	8
DT 371	57.6	36.6	19	4	15.6	.	55.0	90	7	55.0	90	7	55.0	90	7	55.0	90	7	55.0	90	7	55.0	90	7	55.0	90	7	55.0	90	7	55.0	90	7
DT 375	57.6	35.1	8	4	15.6	.	55.0	90	7	55.0	90	7	55.0	90	7	55.0	90	7	55.0	90	7	55.0	90	7	55.0	90	7	55.0	90	7	55.0	90	7

## DEFICIENCIES

AVG OF STANDARDS 59.7 40.0 4 14.8 TX 55.8 92

MINOR FAULTING VALUES 57.5 37.9 9 12.5 SP 52.8 82

MAJOR FAULTING VALUES 56.6 34.9 14 11.5 FR 51.8 77

TW

KWT

SM

WP

TX

SX

DU

SK

SP

VI

FR

TW

KWT

SM

WP

TX

SX

DU

SK

SP

VI

FR

\*\*EVALUATION 1=NO PROMISE, 2=LITTLE PROMISE, 3=SOME PROMISE, 4=GOOD PROMISE

QUALITY DATA OF DURUM SAMPLES 1983 CROP  
WESTERN REGIONAL DURUM WHEAT TEST  
IMPERIAL VALLEY, CALIFORNIA

TABLE 8

VARIETY	STD	TW	1000 KWT	LG_S24	WHT PRO	TOT EXT	SEM0 DUS	SEM0 MX	SEM0 SPK	SEM0 MIN	SEM0 NO	SEM0 PRO	V1	FIRM	RES	VALU	TW-KW-SX-WP	DEFICIENCIES	SK DU SX	FR
MEXICALI 75	S	61.8	59.5	84	1	14.2	80.5	62.3	80	8	70	0.77	400	12.7	8.0	7.30	6.2	4	MJ	MJ
MUDOC	S	65.0	53.5	73	1	14.3	77.6	56.9	85	5	83	0.69	400	12.7	8.0	8.14	6.6	1	M1	M1
NJDU 234	-	60.3	54.3	76	1	14.7	76.8	59.8	75	4	40	0.68	400	13.6	7.5	5.44	8.4	2	M1	M1
WARD	S	61.5	44.0	50	2	13.3	79.0	60.7	95	3	53	0.75	400	12.5	8.5	6.11	6.4	3	M1	M1
WESTBRED 881	S	63.9	57.8	85	1	14.1	79.3	61.6	90	2	63	0.71	400	12.5	8.0	5.94	6.6	4	M1	M1
YAVARUS	S	61.7	62.9	82	2	12.9	81.6	61.8	75	3	63	0.70	400	11.7	8.0	6.80	7.0	2	MJ	MJ
YECORA RUJO	D	63.7	47.8	63	1	13.2	67.2	48.4	40	8	99	0.49	400	12.0	6.5	7.13	5.9	1	MJ	MJ
D 7911	D	64.4	63.3	82	1	13.2	79.0	62.2	65	3	87	0.70	400	11.2	8.5	5.70	6.1	1	MJ	MJ
D 8018	D	62.9	63.7	86	1	13.0	80.6	61.7	85	9	30	0.71	400	11.6	8.5	6.35	7.7	4	M1	M1
D 8019	D	62.3	62.1	82	2	13.9	81.6	62.6	85	7	83	0.70	400	12.7	8.0	7.13	6.9	4	M1	M1
D 8027	D	63.7	59.5	86	1	13.7	79.7	61.9	65	3	83	0.70	400	12.4	8.0	7.19	6.4	1	MJ	MJ
D 8042	D	63.5	59.9	75	1	12.6	80.1	61.5	70	4	43	0.67	400	11.3	7.5	6.39	5.9	1	MJ	M1
D 8055	D	62.2	57.8	81	1	14.5	79.1	61.2	81	5	43	0.74	400	13.8	7.5	7.86	7.4	2	MJ	MJ
D 8056	D	62.8	61.3	75	1	14.5	78.8	60.3	75	4	37	0.72	400	13.3	7.5	8.10	6.7	2	M1	M1
D 8057	D	63.1	59.5	78	1	14.6	80.5	60.3	65	7	99	0.77	400	13.3	8.0	7.34	6.4	1	MJ	MJ
D 8118	D	62.0	62.1	88	1	14.9	79.1	60.8	65	5	93	0.78	400	13.8	8.0	7.00	5.5	1	M1	M1
D 8126	D	64.2	60.6	88	1	13.9	80.7	62.2	65	2	67	0.71	400	12.4	8.0	6.37	6.6	1	MJ	MJ
D 8128	D	61.6	55.9	72	3	14.8	79.6	59.6	65	3	87	0.72	400	13.3	8.0	6.96	6.5	1	M1	M1
D 8129	D	63.7	63.9	90	1	14.1	79.0	63.6	75	7	77	0.73	400	11.3	8.5	6.91	7.6	1	M1	M1
D 8204	D	60.5	60.6	84	1	14.4	79.4	61.0	85	6	63	0.74	400	12.6	8.5	7.41	7.3	4	M1	M1
D 8209	D	61.7	51.5	67	1	14.3	78.0	59.4	35	3	90	0.72	400	13.0	8.0	6.93	7.7	2	MJ	MJ
D 8257	D	64.7	62.9	93	1	14.0	79.5	60.3	85	3	90	0.72	400	12.7	8.0	7.34	6.8	4	M1	M1
D 8257	D	64.7	62.9	93	1	14.0	79.5	60.3	85	3	90	0.72	400	12.7	8.0	7.00	6.5	1	M1	M1
TL 73-16	S	63.3	49.8	71	1	13.0	76.1	56.4	10	2	99	0.69	400	12.4	8.0	6.37	6.6	1	MJ	MJ
TL 73-437	S	63.4	46.1	60	1	13.0	78.5	53.1	90	2	47	0.72	400	11.3	8.0	6.96	6.5	1	M1	M1
TL 73-468	S	61.3	41.1	56	1	13.4	78.0	56.6	95	2	83	0.73	400	12.3	8.0	6.91	7.6	1	MJ	MJ
TL 73-471	S	62.9	50.5	67	1	12.4	79.5	60.1	75	3	43	0.74	400	11.2	8.0	6.29	7.7	1	M1	M1
TL 73-506	S	62.9	48.3	59	1	13.0	80.6	59.4	90	2	57	0.67	400	11.8	8.0	5.81	6.7	3	MJ	MJ
TL 74-30	S	63.0	46.5	57	1	13.3	79.6	59.8	85	3	93	0.75	400	12.0	8.0	4.5	7.75	2	MJ	MJ
TL 75-409	S	60.9	45.5	48	2	13.4	82.3	61.4	95	3	99	0.76	400	12.4	8.0	6.52	6.4	1	MJ	MJ
UC 482	UC	62.2	51.8	75	1	14.0	81.1	60.0	85	3	80	0.74	400	11.4	9.0	5.90	6.8	2	MJ	MJ
UC 512	UC	65.2	46.1	57	1	12.1	80.2	59.9	90	2	57	0.70	400	12.3	8.0	4.00	7.20	3	MJ	MJ
UC 513	UC	62.4	56.5	60	2	13.3	78.2	58.4	80	2	91	0.69	400	10.8	9.0	6.42	6.7	1	M1	M1
UC 514	UC	62.6	62.9	89	1	15.3	78.3	59.6	90	8	73	0.71	400	13.4	9.0	5.27	7.1	2	M1	M1
UC 517	UC	62.5	51.3	65	2	13.4	79.7	53.5	90	3	33	0.73	400	12.2	8.5	3.49	6.3	4	M1	M1
UC 518	UC	62.4	52.1	64	1	13.3	79.7	59.5	90	3	87	0.73	400	12.1	8.5	5.21	6.3	1	M1	M1
UC 559	UC	64.0	55.2	81	1	13.3	79.4	60.0	75	2	99	0.69	400	11.3	8.0	6.00	7.0	2	M1	M1
UC 560	UC	61.9	53.5	79	1	14.2	83.6	62.1	93	3	87	0.75	400	12.8	8.5	5.34	6.0	2	M1	M1
WDE 8010	WDE	60.8	53.1	79	2	15.7	79.7	62.0	80	3	60	0.76	400	14.4	8.0	6.03	7.8	4	M1	M1

DEFICIENCIES

Avg of Standards 62.8 58.6 1 14.1 79.9 61.9 85 67 12.5 8.0 6.62  
Minor Faulting Values 60.6 56.5 6 12.5 77.4 59.9 75 77 11.5 7.0 5.12  
Major Faulting Values 59.7 53.5 11 11.5 76.4 57.9 70 32 11.0 6.5 4.37

\* \* EVALUATION 1=NO PROMISE, 2=LITTLE PROMISE, 3=SOME PROMISE, 4=GODD PROMISE

QUALITY DATA OF DURUM SAMPLES      1933 CROP  
 WESTERN REGIONAL DURUM WHEAT TEST  
 DAVIS, CALIFORNIA

TABLE 9

VARIETY	STD	TW	1000 KWT	LG %	SM %	WHT PRO	TOT EXT	SEMOL			FALL NO	SEMOL PRU	VI	FIRM	RES	VALU	TW	KW	SM	WP	TX	SX	DU	SK	SP	VI	FR	DEFICIENCIES		
								DUS	MX	SPK MIN																				
MEXICALI 75	S	62.3	56.2	88	1	11.3	79.4	60.5	80	6	60	0.64	400	10.3	7.5	6.00	8.5	5.72	8.5	5.40	7.3	5.44	7.5	5.92	8.0	5.1	MJ	MJ	MJ	MJ
YAVAROS	S	65.5	57.8	93	1	11.5	79.3	61.8	70	3	53	0.57	400	9.9	7.5	5.72	8.5	5.40	7.3	5.44	7.5	5.44	7.5	5.92	8.0	5.1	MJ	MJ	MJ	MJ
NJORD 231	S	63.1	50.3	72	1	11.6	80.0	61.4	80	2	43	0.59	400	10.4	7.5	5.40	7.3	5.44	7.5	5.44	7.5	5.44	7.5	5.92	8.0	5.1	MJ	MJ	MJ	MJ
WESTBRED 881	S	63.4	53.8	88	1	11.7	79.3	60.1	95	7	40	0.64	400	10.4	7.5	5.40	7.3	5.44	7.5	5.44	7.5	5.44	7.5	5.92	8.0	5.1	MJ	MJ	MJ	MJ
D 7911	S	65.5	56.8	91	1	11.5	81.9	63.0	65	3	40	0.64	400	10.4	7.5	5.40	7.3	5.44	7.5	5.44	7.5	5.44	7.5	5.92	8.0	5.1	MJ	MJ	MJ	MJ
D 8018	D	62.9	57.3	92	1	10.6	77.6	59.7	80	7	40	0.66	400	9.9	8.5	6.42	7.5	6.42	7.5	6.42	7.5	6.42	7.5	6.42	7.5	6.42	7.5	6.42	7.5	6.42
D 8019	D	62.7	56.0	84	1	10.8	78.0	60.3	90	5	43	0.62	400	10.6	7.5	5.83	7.6	5.83	7.6	5.83	7.6	5.83	7.6	5.83	7.6	5.83	7.6	5.83	7.6	5.83
D 8027	D	65.1	56.5	89	1	11.7	83.4	60.3	60	4	30	0.62	400	10.6	7.5	5.53	8.8	5.53	8.8	5.53	8.8	5.53	8.8	5.53	8.8	5.53	8.8	5.53	8.8	5.53
D 8042	D	64.6	51.5	85	1	10.4	79.2	60.4	65	4	30	0.60	400	9.4	7.5	6.80	7.5	6.80	7.5	6.80	7.5	6.80	7.5	6.80	7.5	6.80	7.5	6.80	7.5	6.80
D 8118	D	63.6	55.9	89	1	11.3	78.0	60.3	75	4	40	0.66	400	9.9	6.5	6.09	7.3	6.09	7.3	6.09	7.3	6.09	7.3	6.09	7.3	6.09	7.3	6.09	7.3	6.09
D 8126	D	65.0	55.9	92	1	10.3	79.7	61.5	65	2	27	0.63	400	9.3	7.5	5.92	7.6	5.92	7.6	5.92	7.6	5.92	7.6	5.92	7.6	5.92	7.6	5.92	7.6	5.92
D 8128	D	64.8	51.5	83	1	12.2	79.0	61.1	65	3	33	0.62	400	10.7	7.5	6.91	7.1	6.91	7.1	6.91	7.1	6.91	7.1	6.91	7.1	6.91	7.1	6.91	7.1	6.91
D 8129	D	63.2	58.8	88	1	11.5	78.1	60.4	80	7	47	0.65	400	10.2	8.0	6.67	7.9	6.67	7.9	6.67	7.9	6.67	7.9	6.67	7.9	6.67	7.9	6.67	7.9	6.67
TL 73-16	D	65.5	50.3	79	1	12.2	76.4	57.1	95	3	60	0.59	400	10.9	9.0	6.20	6.3	6.20	6.3	6.20	6.3	6.20	6.3	6.20	6.3	6.20	6.3	6.20	6.3	6.20
TL 73-457	D	62.5	45.5	89	1	13.5	77.5	56.2	85	3	57	0.70	400	12.2	9.0	6.09	6.9	6.09	6.9	6.09	6.9	6.09	6.9	6.09	6.9	6.09	6.9	6.09	6.9	6.09
TL 73-463	D	63.3	44.8	88	1	12.5	78.0	56.2	90	2	53	0.67	400	11.6	9.0	6.87	6.3	6.87	6.3	6.87	6.3	6.87	6.3	6.87	6.3	6.87	6.3	6.87	6.3	6.87
TL 73-471	D	64.6	49.3	73	1	11.5	79.3	59.5	75	4	33	0.67	400	10.5	7.5	5.59	6.1	5.59	6.1	5.59	6.1	5.59	6.1	5.59	6.1	5.59	6.1	5.59	6.1	5.59
TL 73-506	D	64.6	46.3	76	1	12.1	81.1	54.9	75	2	37	0.61	400	10.8	8.0	6.83	6.7	6.83	6.7	6.83	6.7	6.83	6.7	6.83	6.7	6.83	6.7	6.83	6.7	6.83
TL 74-30	D	64.0	45.2	72	1	13.5	76.2	52.5	70	3	53	0.69	400	12.3	8.5	8.45	6.6	8.45	6.6	8.45	6.6	8.45	6.6	8.45	6.6	8.45	6.6	8.45	6.6	8.45
TL 75-409	D	64.1	46.7	61	1	11.3	78.9	55.6	65	3	43	0.61	400	10.3	8.5	6.22	6.7	6.22	6.7	6.22	6.7	6.22	6.7	6.22	6.7	6.22	6.7	6.22	6.7	6.22
UC 512	D	65.2	45.2	70	1	10.8	78.3	56.0	90	2	40	0.58	400	10.4	8.5	5.94	7.7	5.94	7.7	5.94	7.7	5.94	7.7	5.94	7.7	5.94	7.7	5.94	7.7	5.94
UC 513	D	63.9	45.7	73	1	11.0	75.8	52.4	75	2	53	0.60	400	10.2	7.5	5.98	8.0	5.98	8.0	5.98	8.0	5.98	8.0	5.98	8.0	5.98	8.0	5.98	8.0	5.98
UC 514	D	63.1	47.8	77	1	10.7	81.2	58.9	65	3	30	0.64	400	9.4	8.0	5.77	9.4	5.77	9.4	5.77	9.4	5.77	9.4	5.77	9.4	5.77	9.4	5.77	9.4	5.77
UC 517	D	63.3	46.5	76	1	13.4	76.3	53.8	75	3	50	0.66	400	12.4	8.0	5.08	7.2	5.08	7.2	5.08	7.2	5.08	7.2	5.08	7.2	5.08	7.2	5.08	7.2	5.08
UC 559	D	63.8	43.5	78	1	12.1	78.7	55.3	75	3	62	0.62	400	10.8	8.5	5.79	7.1	5.79	7.1	5.79	7.1	5.79	7.1	5.79	7.1	5.79	7.1	5.79	7.1	5.79
UC 560	D	63.4	50.0	76	1	10.3	80.0	53.0	65	2	40	0.61	400	9.8	7.5	6.22	8.7	6.22	8.7	6.22	8.7	6.22	8.7	6.22	8.7	6.22	8.7	6.22	8.7	6.22
WDE 8010	D	63.0	55.6	88	1	12.5	79.9	57.9	75	4	47	0.67	400	11.2	9.0	5.88	7.7	5.88	7.7	5.88	7.7	5.88	7.7	5.88	7.7	5.88	7.7	5.88	7.7	5.88

DEFICIENCIES  
 AVG OF STANDARDS  
 MINOR FAULTING VALUES  
 MAJOR FAULTING VALUES

1=NO PROMISE, 2=LITTLE PROMISE, 3=SOME PROMISE, 4=GOOD PROMISE  
 5.20.8 55.0 1 11.5 79.3 60.3 88 49 10.4 VI FR  
 60.6 52.0 6 12.5 76.8 57.3 73 59 11.5 7.0 0 4.72  
 59.7 59.7 11.5 75.8 56.3 73 64 11.0 6.5 3.97

\*\*EVALUATION 1=NO PROMISE, 2=LITTLE PROMISE, 3=SOME PROMISE, 4=GOOD PROMISE

QUALITY DATA OF DURUM SAMPLES 1983 CROP  
WESTERN REGIONAL DURUM WHEAT TEST

DELTA AREA, CALIFORNIA

TABLE 10

VARIETY	STD	TW	1000 KWT	LG_S2	WHT %	TOT PRO EXT	SEMO EXT	SEM0 DUS	SEM0 SPK	SEM0 MIN	SEM0 NO	SEM0 PRO	VI	FIRM	RES	VALU	TW KW	SM WP	SX DU	SX TX	DEFICIENCIES	TW VI FR
MEXICALI 75	S	61.6	58.5	92	1	12.7	75.9	56.4	75	6	93	0.72	398	11.3	7.0	6.67	7.6	3				
YAVARUS	S	65.1	62.1	95	1	10.9	78.0	58.4	65	3	53	0.63	400	10.2	7.0	6.54	8.3	1				
NJORD 231	S	62.0	48.5	61	1	12.0	78.3	56.3	75	3	27	0.59	400	11.0	5.5	5.85	7.4	1				
WESTBRED 831	S	62.1	49.3	92	1	14.6	77.9	54.7	85	7	70	0.75	400	13.5	6.5	7.38	7.5	4				
D 7911	S	64.9	59.5	95	1	11.3	78.7	53.2	55	3	40	0.65	400	10.1	7.0	5.62	7.3	1				
D 8018	S	62.3	58.1	93	1	12.3	79.0	57.3	75	6	99	0.67	386	11.0	7.5	6.46	9.3	1				
D 8019	S	62.6	55.2	93	1	11.7	80.3	59.5	80	5	73	0.67	400	10.7	7.5	5.44	8.0	1				
D 8027	S	65.1	57.3	94	1	12.2	75.7	56.3	60	3	57	0.60	400	10.3	7.0	6.16	7.9	1				
D 8042	S	63.9	55.2	94	1	11.5	78.3	57.2	65	3	23	0.61	400	10.1	7.0	6.43	7.7	1				
D 8118	S	62.7	51.3	93	1	11.5	78.3	60.5	70	4	53	0.72	346	10.5	7.0	5.27	10.1	1				
D 8126	S	64.6	53.3	96	1	12.4	79.0	61.2	70	2	60	0.66	400	9.8	7.0	5.54	8.8	1				
D 8128	S	62.4	51.3	97	1	11.8	78.3	59.9	47	3	60	0.64	400	10.4	6.0	4.69	8.3	1				
D 8129	S	62.4	53.1	93	1	11.5	75.3	58.0	80	5	70	0.67	400	10.2	6.0	5.03	9.3	1				
TL 73-16	S	65.4	52.9	93	1	11.5	75.0	56.7	95	2	67	0.61	400	10.9	8.5	5.46	7.4	1				
TL 73-457	S	64.0	50.5	77	1	11.6	78.3	58.1	90	3	30	0.66	400	10.8	8.5	5.59	8.0	1				
TL 73-463	S	63.7	45.5	77	1	11.8	78.8	58.3	75	2	30	0.63	400	10.8	9.0	5.25	8.2	1				
TL 73-471	S	63.5	47.4	80	1	11.0	82.4	63.9	75	4	43	0.67	400	10.3	7.5	5.81	6.7	1				
TL 73-506	S	64.3	53.8	90	1	11.0	79.9	59.0	85	2	30	0.61	400	10.3	8.0	5.90	7.7	1				
TL 74-30	S	64.5	47.4	75	1	10.9	77.6	58.8	80	4	27	0.62	400	10.0	8.5	5.51	6.3	1				
TL 75-409	S	63.1	48.3	73	1	11.0	79.7	60.9	90	3	47	0.60	400	10.4	9.5	6.39	6.1	1				
UC 512	S	66.0	47.6	79	1	10.7	79.3	60.9	90	2	60	0.61	400	9.9	9.0	5.94	7.9	1				
UC 513	S	63.3	52.8	81	1	10.7	77.4	57.6	85	2	47	0.60	400	9.7	8.5	5.42	6.0	1				
UC 514	S	63.3	52.9	99	1	13.4	79.3	61.0	90	3	93	0.69	400	13.1	9.0	5.70	6.6	3				
UC 517	S	64.4	44.1	70	1	11.6	78.6	59.5	90	2	57	0.62	400	11.4	9.0	5.40	6.9	1				
UC 559	S	63.7	50.0	88	1	12.8	81.6	60.6	85	2	30	0.62	389	12.2	8.0	6.22	7.9	4				
UC 560	S	63.1	59.3	88	1	13.1	78.5	60.5	70	3	80	0.67	376	11.6	7.5	6.52	7.2	2				
WDE 8010	S	62.2	50.3	90	1	13.7	78.8	60.1	75	4	50	0.72	381	12.8	8.0	6.80	7.1	4				

DEFICIENCIES  
AVG OF STANDARDS  
MINOR FAULTING VALUES  
MAJOR FAULTING VALUES

1=NO PROMISE, 2=LITTLE PROMISE, 3=SOME PROMISE, 4=GUD PROMISE

\*\*EVALUATION 1=NO PROMISE, 2=LITTLE PROMISE, 3=SOME PROMISE, 4=GUD PROMISE

3=SOME PROMISE, 4=GUD PROMISE

TABLE 11

QUALITY DATA OF DURUM SAMPLES 1983 CROP  
 STATE=ARIZONA STATION=MEESA\_NURSERY=FIELD\_PLOT

VARIETY	STD TW	1000 KWT	LG SM %	WHT PRO	TOT EXT	SEMO EXT	DUS MX SPK	SEMO NO SPK MIN	SEMO PRO	VI	FIRM	RES	VALU TW	TW RW	SM WP	TX DU	SK SP	FR VI	DEFICIENCIES
ALDURA	S	64.6	56.2	89	1	11.6	83.2	64.3	90	3	63	0.58	400	10.6	9.0	5.96	7.0	1	MJ
BOY "S"	S	63.8	62.5	90	1	10.4	79.5	62.4	75	7	80	0.59	400	9.7	7.5	6.37	7.2	1	MJ MJ MJ
ERP "S"	S	65.4	65.4	94	1	12.7	77.6	62.7	80	3	57	0.56	400	11.4	6.6	6.59	6.6	1	MJ
MEXICALI "S"-15	S	63.4	63.3	91	1	11.3	79.7	63.8	85	4	60	0.62	400	10.3	8.5	6.42	7.1	1	MJ MJ MJ
ROKEL "S"-15	S	64.3	64.1	90	1	10.6	76.6	60.9	80	4	40	0.54	400	9.7	8.0	5.62	7.3	1	MJ MJ MJ
WAHSA "S"	S	64.6	57.3	88	1	11.7	81.7	62.7	85	3	20	0.60	400	10.7	8.5	5.49	7.5	1	MJ MJ MJ
WESTBRED 881	S	63.7	61.7	94	1	12.6	80.3	62.4	95	8	60	0.61	400	11.7	8.5	6.85	7.2	4	MJ MJ MJ MJ
YAVAROS 79	S	64.5	59.2	93	1	10.8	76.9	58.6	90	3	53	0.57	400	9.9	8.5	6.70	7.8	1	MJ MJ MJ MJ
MEXI "S" X FG "S"	S	63.7	63.3	89	1	11.0	79.5	63.3	85	4	67	0.57	400	10.3	8.5	6.35	7.4	1	MJ MJ MJ MJ
M82-W2-D2	S	65.1	67.6	90	1	10.5	78.7	61.6	90	3	73	0.55	400	9.6	8.5	5.77	8.0	1	MJ MJ MJ MJ
M82-W52	S	64.2	57.3	84	1	11.7	81.0	63.4	100	3	70	0.56	400	9.9	8.5	5.36	7.0	1	MJ MJ MJ MJ
M82-W59	S	64.8	57.8	86	1	11.2	80.7	62.1	80	3	73	0.56	400	10.8	8.5	6.20	7.5	1	MJ MJ MJ MJ
Md2-W60	S	65.2	61.7	91	1	11.5	81.5	64.4	85	7	83	0.54	400	10.3	8.5	6.48	8.4	1	MJ MJ MJ MJ
M82-W66	S	65.3	61.0	86	1	10.7	80.6	64.4	95	3	53	0.56	400	9.7	8.0	6.22	7.5	1	MJ MJ MJ MJ
M82-W68	S	63.7	57.8	83	1	11.1	76.9	59.9	95	3	53	0.59	400	9.9	8.5	5.94	7.1	1	MJ MJ MJ MJ
WDE-80-10	S	62.9	60.9	89	1	12.9	82.7	65.2	85	5	63	0.63	400	11.4	8.5	6.61	6.9	3	MJ MJ MJ MJ

DEFICIENCIES  
 AVG OF STANDARDS 63.9 60.4 1 11.8 TX SX DU SK SP VI FR  
 MINOR FAULTING VALUES 61.7 58.3 6 12.5 78.6 60.5 80 71 11.5 7.7 6.41  
 MAJOR FAULTING VALUES 60.8 55.3 11 11.5 77.6 59.5 75 76 11.0 7.2 4.16

\*\*EVALUATION 1=NO PROMISE. 2=LITTLE PROMISE. 3=SOME PROMISE. 4=GOOD PROMISE

TABLE 12

QUALITY DATA OF DURUM SAMPLES 1983 CROP  
STATE=ARIZONA\_STATION=PINNACLE\_CROP=NURSERY FIELD\_ELDI

VARIETY	STD	TW	1000 KWT	LG SM %	WHT PRO	TOT EXT	SEMO EXT	DUS MX	SPK MIN	SEMO NO	SEMO PRO	VI	FIRM	RES	VALU	TW KW	SW WP	TX SX	DU SK	SP VI	FR	DEFICIENCIES	
ALDURA A		62.4	47.4	78	1	11.2	78.9	53.1	145	1	17	0.61	400	10.2	10.8	3.93	8.3	1	MJ	MJ	MJ	MJ	MJ
ALDURA B	S	62.3	50.8	85	1	12.4	79.0	53.5	145	2	13	0.59	400	11.1	10.3	3.82	8.6	1	MJ	MJ	MJ	MJ	MJ
ALDURA NK		61.7	57.8	89	1	12.2	78.2	51.8	140	2	10	0.60	400	10.7	10.5	3.97	7.8	1	MJ	MJ	MJ	MJ	MJ
GEM		61.4	58.8	92	1	13.3	78.4	49.9	105	2	13	0.54	400	11.4	8.4	4.30	9.4	1	MJ	MJ	MJ	MJ	MJ
MEXICALI	S	62.3	58.8	90	1	13.2	76.7	54.8	125	4	13	0.66	400	12.1	9.0	6.20	7.6	1	MJ	MJ	MJ	MJ	MJ
YAVAROS		60.6	49.8	84	2	12.2	77.7	52.1	110	2	17	0.56	400	10.8	8.5	4.41	9.2	1	MJ	MJ	MJ	MJ	MJ
1000 D		61.1	52.9	86	1	11.4	76.8	52.3	105	4	17	0.62	400	10.6	9.1	4.99	8.3	1	MJ	MJ	MJ	MJ	MJ
WESTBRED 881	S	61.1	52.9	86	1	14.5	76.1	52.8	140	6	30	0.64	400	13.2	11.9	7.17	7.3	4	MJ	MJ	MJ	MJ	MJ
DEFICIENCIES		TW	KW	SM	WP	TW	TW	SX	DU	SK	SP	V1											
Avg of STANDARDS		61.6	54.2	I	13.3	77.0	53.1	135	18	12.0	10.5												
MINOR FAULTING VALUES		59.4	52.1	6	12.5	74.5	50.1	125	28	11.5	9.5												
MAJOR FAULTING VALUES		58.5	49.1	11	11.5	73.5	49.1	120	33	11.0	9.0												

\*\* EVALUATION 1=NO PROMISE. 2=LITTLE PROMISE. 3=SOME PROMISE. 4=GOOD PROMISE

TABLE 13

QUALITY DATA OF DURUM SAMPLES 1983 CROP  
 STATE=ARIZONA\_STATION=YUMA\_CD\_NURSERY=FIELD\_PLOT

VARIETY	STD TW	1000 KWT	LG_SM	% PRO	WHT EXT	TOT EXT	SEMO EXT	DUS MX SPK	SEMO MIN	SEMO NO	SEMO PRO	VI	FIRM RES	VALU **	DEFICIENCIES				
															TW	KW	SX	DU	SP	VTP	FR
ALDURA	S	64.4	51.8	84	1	11.7	80.3	56.8	140	3	13	0.61	400	10.2	10.4	5.51	7.1	MJ	MJ
GEM	S	65.1	57.8	94	1	11.7	81.9	58.6	105	3	17	0.52	400	8.6	10.1	5.27	7.8	MJ	MJ
MEXICALI	S	63.9	61.3	94	1	11.6	77.7	57.1	120	7	30	0.61	400	10.1	9.5	5.81	7.6	MJ	MJ
YAVAROS	S	65.2	62.9	94	1	12.2	79.5	57.8	115	5	23	0.51	400	10.3	8.6	5.57	7.4	MJ	MJ
1000 D		61.7	51.8	86	1	12.6	79.7	57.4	110	6	13	0.72	400	11.3	8.9	6.07	7.2	MJ	MJ
WESTBRED 881	S	63.2	59.5	96	1	14.5	77.9	56.2	140	8	17	0.56	400	12.8	11.6	7.99	6.3	MJ	MJ
5003	S	63.3	59.5	92	1	10.8	79.3	59.2	135	6	13	0.57	400	9.5	10.5	7.80	6.2	MJ	MJ

DEFICIENCIES	TW	KW	SX	WP	TX	SX	DU	SK	SP	VI	FR
Avg of STANDARDS	63.8	57.5	1	12.6	78.6	56.7	133	20	11.0	10.5	6.44
MINOR FAULTING VALUES	61.6	55.4	6	12.5	76.1	53.7	123	30	11.5	9.5	4.94
MAJOR FAULTING VALUES	60.7	52.4	11	11.5	75.1	52.7	118	35	11.0	9.0	4.19

\* \* EVALUATION 1=NO PROMISE, 2=LITTLE PROMISE, 3=SOME PROMISE, 4=GOOD PROMISE

## QUALITY DATA OF CURUM SAMPLES 1983 CROP

WASHINGTON DOKUM NURSERY  
ROYAL SLCPE. WASHINGTON

TABLE 14

VARIETY	STD TW	1000 KWT	LG_SM	WHT PRO EXT	ICT PRO EXT	SEM0 EXT	SEM0 NC	FALL SK MIN	SEM0 PRO	VI	FIRM	RES VALU	TW KW SW WP TX SX DU SK SP VI FR	DEFICIENCIES	
														**	MJ
ALDURA	S 64°3	49°8	72	1 11°3	•	68°0	85	4	•	•	•	•	•	2	MJ
ATTILA	S 62°4	60°2	85	1 12°7	•	71°0	85	5	•	•	•	•	•	2	MJ
CANDO	S 63°8	49°3	67	2 11°3	•	70°5	70	3	•	•	•	•	•	3	MJ
EDMORE	S 63°5	53°7	75	2 12°5	•	71°0	85	5	•	•	•	•	•	3	MJ
GRANDEUR	S 63°5	61°7	90	1 12°4	•	71°5	70	4	•	•	•	•	•	3	MJ
IRRIDUR	S 64°3	49°8	77	1 12°4	•	69°0	75	4	•	•	•	•	•	3	MJ
LLOYD	S 63°7	44°4	54	2 11°4	•	68°0	75	5	•	•	•	•	•	2	MJ
MODUC	S 64°2	45°2	69	1 11°7	•	68°5	65	6	•	•	•	•	•	1	MJ
WAMPUM	S 64°0	45°0	82	1 11°7	•	72°0	40	6	•	•	•	•	•	1	MJ
WAVERLY	S 62°9	42°0	72	2 9°3	•	69°0	25	4	•	•	•	•	•	1	MJ
YAVAROS 75	S 65°8	55°9	83	1 11°5	•	69°5	65	3	•	•	•	•	•	1	MJ
CIO 17806	S 62°9	43°3	62	2 11°5	•	68°0	75	4	•	•	•	•	•	2	MJ
D 007200	S 65°0	55°2	83	1 11°3	•	73°0	70	5	•	•	•	•	•	3	MJ
UC 000512	S 65°8	46°9	68	2 12°0	•	70°0	75	3	•	•	•	•	•	3	MJ
UC 000514	S 64°0	48°5	77	1 12°0	•	68°5	75	3	•	•	•	•	•	3	MJ
UC 000516	S 65°1	53°2	78	2 11°8	•	70°0	55	7	•	•	•	•	•	1	MJ
UC 000518	S 64°1	53°5	78	2 12°0	•	70°0	55	7	•	•	•	•	•	3	MJ
TL 007315	S 64°2	49°3	73	2 12°3	•	69°5	80	4	•	•	•	•	•	3	MJ
TL 073457	S 64°6	50°3	74	1 11°9	•	69°5	75	3	•	•	•	•	•	3	MJ
TL 073468	S 63°7	54°3	83	2 12°7	•	70°0	80	3	•	•	•	•	•	4	MJ
TL 073471	S 64°5	52°4	78	1 11°8	•	71°0	65	5	•	•	•	•	•	1	MJ
TL 073506	S 65°0	54°3	81	1 12°6	•	70°5	70	4	•	•	•	•	•	4	MJ
TL 007430	S 64°0	47°6	70	2 12°5	•	68°0	75	5	•	•	•	•	•	3	MJ
TL 075393	S 65°0	51°0	80	2 13°0	•	68°5	75	3	•	•	•	•	•	4	MJ
TL 075409	S 63°5	47°1	73	1 12°5	•	68°5	80	5	•	•	•	•	•	3	MJ
WA 006518	S 62°4	42°9	52	3 11°7	•	66°0	75	3	•	•	•	•	•	2	MJ
WA 006521	S 63°0	43°9	55	2 11°5	•	67°0	70	4	•	•	•	•	•	3	MJ
WA 006525	S 63°4	50°0	73	2 11°6	•	68°0	85	6	•	•	•	•	•	1	MJ
WA 006621	S 63°5	45°8	61	1 11°5	•	68°0	65	5	•	•	•	•	•	2	MJ
WA 006627	S 63°8	37°2	74	1 12°5	•	69°5	75	4	•	•	•	•	•	3	MJ
WA 006755	S 62°4	50°3	60	1 12°1	•	67°5	85	5	•	•	•	•	•	2	MJ
WA 006869	S 62°4	50°3	61	2 11°7	•	67°0	70	4	•	•	•	•	•	3	MJ
WPB 00803	S 62°7	26°6	73	2 11°0	•	69°0	75	6	•	•	•	•	•	1	MJ

## DEFICIENCIES

## AVG CF STANDARDS

## MINOR FAULTING VALUES

## MAJOR FAULTING VALUES

## TW KW SW WP TX SX DU SK SP VI FR

3= SOME PROMISE • 2=LITTLE PROMISE • 1=GOOD PROMISE

\*\* EVALUATION 1=NG PROMISE.

TABLE 15

QUALITY DATA OF DURUM SAMPLES 1983 CROP  
STATE=CALIFORNIA-STATION=DAYIS\_NURSERY=ADVANCED

VARIETY	STD	TW	1000 KWT	LG_SSN	WHT PRO	TOT EXT	SEMO NO	SEMO FALL PRO	VI FIRM RES	VALU TW	KWT SH	WP TX SX DU SK SP	DEFICIENCIES	TW VI FR
ALDURA	S	66.4	54.6	89	1	11.3	74.9	59.1	70	37	0.59	400	10.2	8.0
MODOC	S	64.5	50.5	81	1	11.9	77.1	59.4	95	2	0.60	400	0.1	7.0
YAVAPROS	S	65.6	46.3	74	1	11.8	74.0	55.0	85	3	0.53	400	10.4	5.62
331/5	S	65.6	54.1	86	1	11.9	75.5	57.6	85	1	0.64	400	0.0	5.62
331/7	S	63.0	46.7	66	1	12.0	76.4	59.7	70	2	0.64	400	0.0	4.36
331/8	S	63.1	43.9	60	1	11.8	77.3	61.0	75	5	0.64	400	0.0	4.37
331/9	S	63.8	49.8	83	1	11.6	76.3	58.8	65	4	0.63	400	10.3	5.98
331/10	S	62.9	51.3	87	1	13.0	75.7	56.3	70	3	0.63	400	10.3	7.8
331/13	S	65.3	55.9	89	1	11.9	76.7	57.9	50	4	0.62	400	11.6	6.51
331/15	S	65.0	52.1	80	2	11.5	73.2	56.1	85	3	0.58	400	10.8	6.34
331/21	S	65.1	49.8	81	1	12.0	75.0	57.9	75	3	0.62	400	10.8	7.2
331/23	S	63.5	47.0	87	1	11.4	75.8	59.4	60	4	0.59	400	10.3	5.83
331/24	S	63.8	56.8	89	1	11.5	75.8	59.5	90	1	0.63	400	10.4	5.57
331/28	S	64.6	54.3	80	1	11.8	75.1	59.3	75	5	0.63	400	10.4	7.4
331/30	S	64.6	46.1	78	1	11.2	77.5	59.9	80	6	0.62	400	10.5	4.64
331/31	S	64.8	60.2	91	1	12.2	74.4	59.0	70	4	0.59	400	10.7	8.4
331/34	S	64.2	64.5	94	1	12.1	74.4	59.1	75	2	0.57	400	10.8	7.9
331/35	S	65.1	59.2	92	1	12.2	76.3	60.8	75	7	0.60	400	10.8	6.24
331/36	S	64.2	46.5	67	2	12.2	75.9	59.1	60	5	0.63	400	11.0	8.3
331/37	S	63.5	56.2	84	1	12.4	75.5	59.0	65	3	0.67	400	10.9	5.44
331/46	S	63.7	56.2	86	1	12.3	76.5	60.9	60	6	0.64	400	11.0	8.4
									70	0.64				7.9

DEFICIENCIES  
AVG OF STANDARDS  
MINOR FAULTING VALUES  
MAJOR FAULTING VALUES

TW KW SM WP TX SX DU SK SP VI FR  
65.3 50.5 1 11.7 75.3 57.8 83.4 10.2 7.5 5.87  
63.1 48.4 6 12.5 72.8 54.8 73.5 11.5 6.5 4.37  
62.2 45.4 11 11.5 71.8 53.8 68.56 11.0 6.0 3.62

\* EVALUATION 1=NO PROMISE, 2=LITTLE PROMISE, 3=SOME PROMISE, 4=GOOD PROMISE

TABLE 16

QUALITY DATA OF DURUM SAMPLES 1933 CROP  
 STATE=CALIFORNIA STATION=TULELAKE NURSERY=PRELIMINARY  
 0 POUNDS NITROGEN

VARIETY	STD	TW	1000 KWT	LG %	SM %	HT PRO	HT EXT	TUT PRO	TUT EXT	SEMO DUS	MX SPK	SEMO WIN	SEM0 NO	SEM0 PRO	VI	FIRM	RES	VALU	TW KW	SM WP	TX KW	SX DU	SK SEM	FR	DEFICIENCIES
MODOC 83-S-5	S	65.1	48.1	75	2	11.4	*	68.5	75	6	*	*	*	*	*	*	*	*	*	*	*	*	*	*	MJ
MODOC 83-S-6	S	65.3	48.3	75	2	11.5	*	67.5	80	6	*	*	*	*	*	*	*	*	*	*	*	*	*	*	MJ
MODOC 83-S-7	S	64.5	49.8	74	3	12.8	*	49.5	75	5	*	*	*	*	*	*	*	*	*	*	*	*	*	*	MJ
TL 73-19	S	63.8	44.2	66	1	8.3	*	68.5	70	1	*	*	*	*	*	*	*	*	*	*	*	*	*	*	MJ
TL 73-45	S	61.6	47.6	61	2	8.9	*	67.5	70	1	*	*	*	*	*	*	*	*	*	*	*	*	*	*	MJ
TL 73-46	S	63.2	42.6	58	1	10.9	*	65.5	75	3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	MJ
TL 73-47	S	63.1	51.0	82	1	9.9	*	66.0	55	4	*	*	*	*	*	*	*	*	*	*	*	*	*	*	MJ
TL 73-471	S	63.5	49.8	84	1	9.3	*	68.5	75	2	*	*	*	*	*	*	*	*	*	*	*	*	*	*	MJ
TL 73-506	S	63.2	45.5	71	1	10.0	*	67.5	75	2	*	*	*	*	*	*	*	*	*	*	*	*	*	*	MJ
TL 74-30	S	63.8	50.8	85	2	9.5	*	68.5	90	3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	MJ
TL 75-16	S	63.2	50.8	81	1	10.5	*	68.0	85	3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	MJ
TL 75-393	S	63.2	47.4	54	3	9.6	*	68.0	80	2	*	*	*	*	*	*	*	*	*	*	*	*	*	*	MJ
TL 75-409	S	61.6	46.5	77	1	8.2	*	68.5	65	2	*	*	*	*	*	*	*	*	*	*	*	*	*	*	MJ
TL 80-1102	S	63.1	48.3	80	1	8.9	*	68.5	60	4	*	*	*	*	*	*	*	*	*	*	*	*	*	*	MJ
TL 80-1104	S	62.6	54.6	87	2	8.7	*	73.5	70	2	*	*	*	*	*	*	*	*	*	*	*	*	*	*	MJ
TL 80-1248	S	64.0	45.3	66	2	11.3	*	65.0	30	4	*	*	*	*	*	*	*	*	*	*	*	*	*	*	MJ
TL 83-1133	S	64.0	45.3	66	2	11.3	*	65.0	30	4	*	*	*	*	*	*	*	*	*	*	*	*	*	*	MJ

DEFICIENCIES  
 AVG. OF STANDARDS  
 MINOR FAULTING VALUES  
 MAJOR FAULTING VALUES

TW 48.7  
 SM 46.7  
 WP 46.6  
 TX 43.6  
 DU 43.6  
 SK 43.6  
 FR

\*\*EVALUATION 1=NO PROMISE, 2=LITTLE PROMISE, 3=SOME PROMISE, 4=GOOD PROMISE

## QUALITY DATA OF DURUM SAMPLES 1983 CRUP

STATE=CALIFORNIA STATION=TULELAKE NURSERY=PRELIMINARY  
100 POUNDS NITROGEN

TABLE 17

VARIETY	STD TW	1000 KWT	% LG_S4	WHT PKU EXT	TOT PKU	SEM0 EXT	SEM0 DUS	MN SPK	SEM0 MIN	FALL PRO	SEM0 NO	SEM0 DU	SEM0 SK	SEM0 TX	SEM0 SX	SEM0 WP	SEM0 SM	DEFICIENCIES
																		FR
MUDOC 83-S-5	S 65.1	43.1	75	2	11.4	.	68.5	75	6	.	.	.	.	.	.	.	2	MJ
MUDOC 83-S-6	S 65.3	48.3	74	2	11.5	.	67.5	80	6	.	.	.	.	.	.	.	2	MJ
MUDOC 83-S-7	S 64.5	49.8	74	3	12.8	.	49.5	75	5	.	.	.	.	.	.	.	2	MJ
TL73-19	S 65.1	46.7	71	1	9.8	.	81.5	70	2	.	.	.	.	.	.	.	2	MJ
TL73-457	63.2	50.0	68	2	10.0	.	68.0	75	3	.	.	.	.	.	.	.	2	MJ
TL73-468	64.8	45.9	72	2	10.4	.	71.0	60	4	.	.	.	.	.	.	.	1	MJ
TL73-471	63.7	50.3	86	1	10.4	.	68.5	55	3	.	.	.	.	.	.	.	1	MJ
TL73-506	64.5	53.2	34	1	10.5	.	63.5	75	3	.	.	.	.	.	.	.	2	MJ
TL74-30	64.6	47.4	74	1	11.3	.	70.0	75	3	.	.	.	.	.	.	.	2	MJ
TL75-16	64.6	52.1	89	10	11.4	.	67.5	40	2	.	.	.	.	.	.	.	2	MJ
TL75-393	64.0	52.1	90	1	11.2	.	69.0	80	1	.	.	.	.	.	.	.	2	MJ
TL75-409	63.1	46.3	68	1	10.6	.	68.1	30	3	.	.	.	.	.	.	.	2	MJ
TL80-1102	63.1	46.5	78	1	9.4	.	66.5	65	2	.	.	.	.	.	.	.	1	MJ
TL80-1104	63.5	50.0	84	1	9.8	.	71.0	55	4	.	.	.	.	.	.	.	1	MJ
TL80-1248	63.5	53.2	86	1	9.3	.	70.5	80	2	.	.	.	.	.	.	.	2	MJ
TL83-1158	65.3	47.6	79	1	12.3	.	68.5	75	3	.	.	.	.	.	.	.	3	MJ

## DEFICIENCIES

AVG OF STANDARDS TW KW SM WP TX SX DU SK SP VI FR

MINOR FAULTING VALUES 65.0 48.7 2 11.9 61.8 77 0 0 0

MAJOR FAULTING VALUES 62.3 46.6 7 12.5 58.3 67 0 11.5 0

61.9 43.6 12 11.5 57.8 62 0 11.0 0

\*\*EVALUATION 1=NO PROMISE, 2=LITTLE PROMISE, 3=SOME PROMISE, 4=GOOD PROMISE

TABLE 18

QUALITY DATA OF DURUM SAMPLES 1983 CROP  
 STATE=CALIFORNIA STATION=TULELAKE NURSERY=PRELIMINARY  
 200 POUNDS NITROGEN

VARIETY	STD	TW	1000 KWT	LG_SSM	% WHT PRO	TOT EXT	SEM EXT	DUS	MX	SPK	SEM MIN	FALL NO	SEM PRO	VI	FIRM	RES	VALU	DEFICIENCIES											
																		TW	KW	SM	WP	TX	SX	DU	SK	SP	VIT	FR	
MODOC 83-S-5	\$ 65.4	48.1	75	2	11.4	*	68.5	75	6	*	*	*	*	*	*	*	*	2	2	•	•	•	•	•	•	•	MJ	MJ	MJ
MODUC 83-S-6	\$ 65.3	48.3	78	2	11.5	*	67.5	80	6	*	*	*	*	*	*	*	*	2	2	•	•	•	•	•	•	•	MJ	MJ	MJ
MODUC 83-S-7	\$ 64.5	49.3	74	3	12.5	*	49.5	75	5	*	*	*	*	*	*	*	*	3	3	MI	MI	MI	MI	MI	MI	MI	MJ	MJ	MJ
TL 73-19	64.6	44.1	66	1	11.6	*	70.0	90	2	*	*	*	*	*	*	*	*	3	3	MI	MI	MI	MI	MI	MI	MI	MJ	MJ	MJ
TL 73-457	62.6	47.8	59	1	12.0	*	69.5	70	3	*	*	*	*	*	*	*	*	2	2	MI	MI	MI	MI	MI	MI	MI	MJ	MJ	MJ
TL 73-469	64.0	44.8	69	1	11.4	*	69.0	75	3	*	*	*	*	*	*	*	*	2	2	MI	MI	MI	MI	MI	MI	MI	MJ	MJ	MJ
TL 73-477	64.0	44.0	69	1	11.4	*	67.5	75	3	*	*	*	*	*	*	*	*	2	2	MI	MI	MI	MI	MI	MI	MI	MJ	MJ	MJ
TL 73-499	64.0	44.8	69	1	11.4	*	67.5	75	3	*	*	*	*	*	*	*	*	2	2	MI	MI	MI	MI	MI	MI	MI	MJ	MJ	MJ
TL 73-506	64.0	50.3	33	1	11.4	*	67.5	60	5	*	*	*	*	*	*	*	*	2	2	MI	MI	MI	MI	MI	MI	MI	MJ	MJ	MJ
TL 74-301	64.0	52.1	86	1	11.2	*	69.0	70	3	*	*	*	*	*	*	*	*	2	2	MI	MI	MI	MI	MI	MI	MI	MJ	MJ	MJ
TL 74-305	64.0	47.1	79	1	12.5	*	69.5	75	4	*	*	*	*	*	*	*	*	3	3	MI	MI	MI	MI	MI	MI	MI	MJ	MJ	MJ
TL 75-1	64.0	51.5	90	1	11.7	*	56.5	85	2	*	*	*	*	*	*	*	*	1	1	MI	MI	MI	MI	MI	MI	MI	MJ	MJ	MJ
TL 75-393	64.8	54.3	90	1	11.1	*	69.5	75	2	*	*	*	*	*	*	*	*	2	2	MI	MI	MI	MI	MI	MI	MI	MJ	MJ	MJ
TL 75-403	63.7	46.3	66	1	10.4	*	67.5	75	3	*	*	*	*	*	*	*	*	2	2	MI	MI	MI	MI	MI	MI	MI	MJ	MJ	MJ
TL 80-1102	63.5	47.4	74	1	10.2	*	66.5	70	3	*	*	*	*	*	*	*	*	2	2	MI	MI	MI	MI	MI	MI	MI	MJ	MJ	MJ
TL 80-1104	63.8	49.3	76	2	12.2	*	69.0	60	4	*	*	*	*	*	*	*	*	1	1	MI	MI	MI	MI	MI	MI	MI	MJ	MJ	MJ
TL 80-1243	65.6	55.6	86	1	11.4	*	70.0	80	3	*	*	*	*	*	*	*	*	2	2	MI	MI	MI	MI	MI	MI	MI	MJ	MJ	MJ
TL 83-1159	65.8	47.6	78	1	12.9	*	57.5	80	5	*	*	*	*	*	*	*	*	2	2	MI	MI	MI	MI	MI	MI	MI	MJ	MJ	MJ

DEFICIENCIES  
 AVG OF STANDARDS  
 MINOR FAULTING VALUES  
 MAJOR FAULTING VALUES

65.0 43.7 2 11.9 61.8 77 • 61.8 77 • 11.5 •  
 62.8 46.6 7 12.5 58.8 67 • 11.5 •  
 61.9 43.6 12 11.5 57.8 62 • 11.0 •  
 • • • •

\* \* EVALUATION 1=NO PROMISE, 2=LITTLE PROMISE, 3=SOME PROMISE, 4=GOOD PROMISE

QUALITY DATA OF DURUM SAMPLES 1983 CROP  
 STATE=CALIFORNIA STATION=TULELAKE NURSERY=PRFLIMINARY  
 300 POUNDS NITROGEN

TABLE 19

VARIETY	STD	TW	1000 KWT	% LG_S%	WHT PRO	TOT EXT	SEMO EXT	SEMO MX	SEMO MIN	FALL NO	SEMO PRO	VI	FIRM	RES	* <sup>a</sup> VALU	** TW	** KW	** SM	** WP	** TX	** DU	** SK	** SP	** VI	** FR	DEFICIENCIES
MODUC 33-S-5	S	65.1	43.1	75	2	11.4	•	68.5	75	6	•	•	•	•	•	•	•	•	•	•	•	•	•	•	MJ	
MODUC 83-S-6	S	65.3	48.3	78	2	11.5	•	67.5	80	6	•	•	•	•	•	•	•	•	•	•	•	•	•	•	MJ	
MODUC 33-S-7	S	64.5	49.8	74	3	12.8	•	49.5	75	5	•	•	•	•	•	•	•	•	•	•	•	•	•	•	MJ	
TL73-19	S	66.7	44.6	64	1	11.9	•	70.5	75	3	•	•	•	•	•	•	•	•	•	•	•	•	•	•	MJ	
TL73-457	S	63.8	47.8	60	2	12.8	•	70.0	70	3	•	•	•	•	•	•	•	•	•	•	•	•	•	•	MI	
TL73-468	S	64.8	45.5	70	1	13.0	•	71.0	65	3	•	•	•	•	•	•	•	•	•	•	•	•	•	•	MI	
TL73-471	S	64.6	52.4	83	1	12.2	•	70.0	65	6	•	•	•	•	•	•	•	•	•	•	•	•	•	•	MI	
TL73-506	S	65.9	52.1	84	1	11.9	•	69.5	75	4	•	•	•	•	•	•	•	•	•	•	•	•	•	•	MI	
TL74-30	S	67.8	48.8	77	1	13.0	•	68.5	70	4	•	•	•	•	•	•	•	•	•	•	•	•	•	•	MI	
TL75-1b	S	65.3	53.5	87	1	12.6	•	69.5	80	2	•	•	•	•	•	•	•	•	•	•	•	•	•	•	MI	
TL75-393	S	66.2	52.4	86	1	13.5	•	68.5	85	3	•	•	•	•	•	•	•	•	•	•	•	•	•	•	MI	
TL75-409	S	65.1	46.3	58	1	13.2	•	67.5	85	5	•	•	•	•	•	•	•	•	•	•	•	•	•	•	MI	
TL80-1102	S	64.6	47.6	66	1	11.2	•	66.5	70	4	•	•	•	•	•	•	•	•	•	•	•	•	•	•	MI	
TL80-1104	S	64.8	48.1	74	1	12.4	•	70.0	70	3	•	•	•	•	•	•	•	•	•	•	•	•	•	•	MI	
TL80-1248	S	65.9	56.5	81	1	11.3	•	71.0	85	2	•	•	•	•	•	•	•	•	•	•	•	•	•	•	MI	
TL83-1184	S	64.5	45.3	70	1	13.9	•	67.0	80	4	•	•	•	•	•	•	•	•	•	•	•	•	•	•	MI	

DEFICIENCIES  
 AVG OF STANDARDS TW KW SM WP TX SX DU SK SP VI FR  
 MINOR FAULTING VALUES 65.0 48.7 2 11.9 • 61.8 77 • 11.5 •  
 MAJOR FAULTING VALUES 62.8 46.6 7 12.5 • 58.8 67 • 11.5 •  
 61.9 43.6 12 11.5 • 57.8 62 • 11.0 •

\*\*EVALUATION 1=NO PROMISE, 2=LITTLE PROMISE, 3=SOME PROMISE, 4=GOOD PROMISE

TABLE 20

QUALITY DATA OF DURUM SAMPLES 1983 CROP  
STATE=CALIFORNIA STATION=VILLELAKE NURSEY=PRELIMINARY

VARIETY	STU TW	1000 KJT	LG_SSM	% WHT	TOT PRO	TOT EXT	SEM0 EXT	DUS	MX SPK	SEM0 MIN	FALL PRO	SEM0 NO	VI	FIRM	RES	VALU	TW KW SM WP TX DU SK DU SK WP TX DEFICIENCIES
CANDU	S 64.0	45.7	26	1 10.6	•	64.5	30	3	•	•	•	•	•	•	•	2	2 3
IRRIDUR	S 64.0	48.1	28	1 10.8	•	62.5	30	4	•	•	•	•	•	•	•	•	MJ MJ
MODOC	S 65.6	50.0	84	1 12.4	•	62.5	80	5	•	•	•	•	•	•	•	3	MJ MJ
PHODURA	S 64.0	51.0	31	1 11.9	•	65.0	75	4	•	•	•	•	•	•	•	2	MJ MJ
WESTBRED 803	S 63.2	55.6	84	2 10.6	•	64.0	85	7	•	•	•	•	•	•	•	3	MJ MJ
WESTBRED 881	S 63.2	55.6	90	1 12.4	•	65.5	90	8	•	•	•	•	•	•	•	3	MJ MJ
WAID	S 64.0	48.5	74	1 11.6	•	62.5	85	4	•	•	•	•	•	•	•	2	MJ MJ
TL83-789	S 64.8	47.6	62	1 11.4	•	63.0	90	4	•	•	•	•	•	•	•	2	MJ MJ
TL83-790	S 64.8	51.3	65	1 11.0	•	64.0	85	5	•	•	•	•	•	•	•	2	MJ MJ
TL83-791	S 64.8	58.1	85	1 10.8	•	65.5	80	5	•	•	•	•	•	•	•	2	MJ MJ
TL83-792	S 65.6	49.8	71	1 11.2	•	64.0	80	3	•	•	•	•	•	•	•	2	MJ MJ
TL83-793	S 64.0	51.0	74	1 11.4	•	63.0	85	3	•	•	•	•	•	•	•	2	MJ MJ
TL83-794	S 64.8	49.3	72	1 11.3	•	57.5	70	6	•	•	•	•	•	•	•	1	MJ MJ
TL83-795	S 64.0	54.1	84	1 12.8	•	56.5	80	3	•	•	•	•	•	•	•	2	MJ MJ
TL83-796	S 64.0	51.3	76	1 11.2	•	57.5	90	3	•	•	•	•	•	•	•	1	MJ MJ
TL83-797	S 65.6	50.0	80	1 11.3	•	57.5	85	3	•	•	•	•	•	•	•	1	MJ MJ
TL83-798	S 63.2	55.6	90	1 11.0	•	57.0	85	4	•	•	•	•	•	•	•	1	MJ MJ
TL83-799	S 63.2	49.5	79	1 11.6	•	56.5	70	5	•	•	•	•	•	•	•	1	MJ MJ
TL83-800	S 64.8	53.8	85	1 11.3	•	53.5	85	4	•	•	•	•	•	•	•	1	MJ MJ
TL83-801	S 64.0	49.5	75	1 12.3	•	58.0	75	5	•	•	•	•	•	•	•	1	MJ MJ
TL83-802	S 64.0	46.3	68	1 12.4	•	57.5	70	5	•	•	•	•	•	•	•	1	MJ MJ
TL83-803	S 63.2	49.0	71	1 11.4	•	58.5	80	3	•	•	•	•	•	•	•	1	MJ MJ
TL83-804	S 63.2	55.2	87	1 12.0	•	57.5	90	3	•	•	•	•	•	•	•	1	MJ MJ
TL83-805	S 64.8	48.1	84	1 12.2	•	60.0	85	2	•	•	•	•	•	•	•	3	MJ MJ
TL83-806	S 63.2	53.8	76	1 11.3	•	59.0	85	7	•	•	•	•	•	•	•	2	MJ MJ
TL83-807	S 63.2	52.4	83	1 11.3	•	57.5	80	5	•	•	•	•	•	•	•	3	MJ MJ
TL83-808	S 64.0	57.1	86	1 11.6	•	60.0	80	6	•	•	•	•	•	•	•	1	MJ MJ
TL83-809	S 62.4	50.5	73	1 11.4	•	58.5	85	5	•	•	•	•	•	•	•	1	MJ MJ
TL83-810	S 61.6	54.3	82	1 11.7	•	58.5	75	5	•	•	•	•	•	•	•	1	MJ MJ
TL83-815	S 61.6	57.3	79	1 11.6	•	60.5	80	4	•	•	•	•	•	•	•	3	MJ MJ

DEFICIENCIES  
AVG OF STANDARDS 64.4  
MINOR FAULTING VALUES 62.2  
MAJOR FAULTING VALUES 51.3

TW KW SM WP TX DU SK SP VI FR

\*\*EVALUATION 1=NO PROMISE, 2=LITTLE PROMISE, 3=SOME PROMISE, 4=GOOD PROMISE

TABLE 21  
QUALITY DATA OF DURUM SAMPLES  
STATE=CALIFORNIA STATION=IULIAKE NURSERY=PRELIMINARY  
1983 CROP

VARIETY	STD TW	1000 KWT	LG_SUN	% SE	WHT TOT	SEMO EXT	SEMO PRO	SEM0 NO	SEM0 MIN	SEM0 SPK	SEM0 DU	SEM0 SX	SEM0 WP	DEFICIENCIES
MEXICALI	\$ 63.2	57.8	97	1	10.8	•	•	61.5	80	6	•	•	•	MJ
PRODURA	\$ 64.0	52.4	83	1	12.4	•	•	59.0	35	4	•	•	•	MJ
TL83-1	64.0	48.3	67	1	12.1	•	•	59.0	75	4	•	•	•	MJ
TL83-2	63.2	49.0	60	2	11.2	•	•	60.5	80	3	•	•	•	MJ
TL83-3	64.0	53.2	70	2	10.8	•	•	59.0	80	5	•	•	•	MJ
TL83-4	63.2	58.8	89	1	12.3	•	•	59.0	80	4	•	•	•	MJ
TL83-5	63.2	51.2	67	2	11.7	•	•	60.0	80	4	•	•	•	MJ
TL83-6	64.8	59.9	93	1	11.0	•	•	59.5	75	3	•	•	•	MJ
TL83-7	63.2	61.3	90	1	11.3	•	•	60.5	80	2	•	•	•	MJ
TL83-8	62.4	61.3	89	1	10.3	•	•	60.5	75	3	•	•	•	MJ
TL83-9	60.8	51.0	75	1	10.0	•	•	58.5	75	3	•	•	•	MJ
TL83-10	62.4	51.8	76	1	10.2	•	•	57.5	70	3	•	•	•	MJ
TL83-11	61.6	51.5	64	1	10.9	•	•	59.0	85	3	•	•	•	MJ
TL83-12	60.8	48.1	64	1	11.1	•	•	59.5	75	3	•	•	•	MJ
TL83-13	63.2	52.4	76	1	10.4	•	•	61.0	75	4	•	•	•	MJ
TL83-14	62.4	51.8	77	1	10.2	•	•	59.0	70	6	•	•	•	MJ
TL83-15	63.2	54.9	90	1	11.0	•	•	62.0	80	0	•	•	•	MJ
TL83-16	63.2	59.5	37	1	11.4	•	•	62.5	80	4	•	•	•	MJ
TL83-17	62.4	51.8	80	1	10.2	•	•	61.5	85	3	•	•	•	MJ
TL83-18	64.8	52.1	69	1	11.6	•	•	62.5	75	3	•	•	•	MJ
TL83-19	63.2	55.9	36	1	10.4	•	•	62.5	60	3	•	•	•	MJ
TL83-20	63.2	55.6	81	1	10.9	•	•	61.0	60	3	•	•	•	MJ
TL83-21	64.0	58.8	91	1	12.1	•	•	62.0	75	3	•	•	•	MJ
TL83-22	63.2	51.5	80	1	11.7	•	•	61.5	85	6	•	•	•	MJ
TL83-23	63.2	53.5	83	1	11.2	•	•	62.0	80	3	•	•	•	MJ
TL83-24	62.4	47.8	62	1	10.6	•	•	59.0	65	4	•	•	•	MJ
TL83-25	63.2	55.2	36	1	10.6	•	•	62.0	65	3	•	•	•	MJ
TL83-26	64.0	45.5	75	1	12.1	•	•	62.0	80	3	•	•	•	MJ
TL83-27	62.4	54.1	89	1	10.5	•	•	63.0	60	3	•	•	•	MJ
TL83-28	63.2	53.2	31	1	11.5	•	•	60.0	80	3	•	•	•	MJ
TL83-29	64.0	50.0	71	1	11.2	•	•	59.0	75	5	•	•	•	MJ
TL83-30	64.8	50.8	83	1	11.6	•	•	58.0	75	5	•	•	•	MJ
TL83-31	64.8	56.8	91	1	11.2	•	•	60.0	85	2	•	•	•	MJ
TL83-32	63.2	42.8	67	1	11.1	•	•	60.0	75	4	•	•	•	MJ
TL83-33	64.8	49.3	31	1	11.6	•	•	61.5	75	4	•	•	•	MJ
TL83-34	63.2	50.3	62	2	11.5	•	•	61.5	80	3	•	•	•	MJ
TL83-35	64.8	52.1	86	1	11.2	•	•	60.0	65	6	•	•	•	MJ
TL83-36	64.8	55.9	85	1	10.8	•	•	63.0	80	6	•	•	•	MJ
TL83-37	64.8	56.5	89	1	11.3	•	•	62.5	90	3	•	•	•	MJ
TL83-38	63.2	53.2	77	1	12.1	•	•	62.0	90	3	•	•	•	MJ
TL83-39	64.0	52.4	70	1	12.0	•	•	62.5	85	3	•	•	•	MJ

Avg DEFICIENCIES OF STANDARDS  
MINOR FAULTING VALUES  
MAJOR FAULTING VALUES

TABLE 22

QUALITY DATA OF CURUM SAMPLES 1983 CROP  
 STATE CALIFORNIA-SAN JACINTO IMPERIAL VALLEY NURSERY PRELIMINARY

VARIETY	STD	TW	KWT	LG_SM	%	WHT	ICI	SEM	SEM	FALL	SEM	NO	PRC	VI	FIRM	RES	VALU	TW	KW	SM	WP	TX	DU	SK	SX	DU	SK	SX	DEFICIENCIES	
MEX175 (322/41)	S	63.0	8	50.0	3	79	1	15.2	*	65	4																			
322/2		62.8	47.8	75	1	13.5	*	57.5	70	7	*																			
322/3		64.0	54.6	87	2	13.9	*	58.5	75	4	*																			
322/4		64.2	47.1	71	1	15.0	*	52.5	65	8	*																			
322/5		61.1	48.5	78	1	14.9	*	58.5	65	2	*																			
322/6		62.7	52.4	78	1	14.3	*	55.5	60	7	*																			
322/7		63.5	46.9	73	2	14.5	*	57.0	65	4	*																			
322/8		61.9	53.5	85	1	15.2	*	59.0	65	4	*																			
322/9		62.7	47.1	74	1	13.6	*	59.0	60	5	*																			
322/10		64.2	51.8	79	2	12.9	*	60.5	75	6	*																			
322/13		63.4	50.8	77	1	14.4	*	48.5	75	4	*																			
322/15		57.8	36.1	50	3	14.9	*	49.1	70	7	*																			
322/17		63.5	46.7	73	1	12.4	*	53.5	70	6	*																			
322/18		61.5	44.6	77	2	14.5	*	54.5	75	6	*																			
322/19		61.1	55.2	83	1	13.8	*	56.5	70	8	*																			
322/20		63.7	46.5	72	2	14.1	*	58.5	65	6	*																			
322/23		64.5	58.8	89	1	13.3	*	58.5	65	4	*																			
322/26		62.9	50.3	75	2	13.7	*	56.5	65	4	*																			
322/27		62.2	47.8	81	1	15.9	*	54.0	75	6	*																			
322/29		63.5	53.5	82	4	13.7	*	57.5	65	8	*																			
322/30		63.2	53.2	84	1	13.5	*	56.5	85	6	*																			
322/32		62.1	51.8	80	1	15.5	*	49.0	70	2	*																			
322/33		59.8	52.6	75	1	14.4	*	50.5	80	7	*																			
322/34		63.8	58.8	87	1	14.3	*	58.5	75	7	*																			
322/35		61.9	55.2	82	1	14.0	*	57.0	70	6	*																			
322/37		63.0	44.1	69	2	13.7	*	58.5	80	5	*																			
322/38		63.7	47.1	79	2	14.2	*	59.5	90	5	*																			
322/39		61.8	49.8	78	3	15.2	*	55.0	75	4	*																			
322/40		62.7	47.4	72	1	13.4	*	52.0	85	4	*																			
322/42		63.5	40.3	67	1	13.2	*	57.0	75	7	*																			
322/49		63.0	51.0	90	1	13.7	*	54.5	85	7	*																			
322/53		62.9	46.9	78	2	14.7	*	57.5	75	3	*																			
322/58		63.0	42.5	67	2	14.5	*	57.5	80	4	*																			
322/59		64.3	40.8	63	1	13.5	*	58.0	90	4	*																			
322/60		63.0	44.4	75	1	13.4	*	55.5	65	6	*																			
322/65		62.2	44.4	63	2	13.8	*	54.0	85	6	*																			
322/66		62.7	43.9	68	1	14.2	*	54.0	95	6	*																			
322/67		64.2	46.5	78	1	15.2	*	60.0	65	5	*																			

DEFICIENCIES  
 AVG CF STANDARDS 63.0 8  
 MINOR FAULTING VALUES 61.6 48.2 6  
 MAJOR FAULTING VALUES 60.7 45.2 11

DEFICIENCIES  
 DU SK SP VI FR  
 54.5 65 \* 11.5 \*  
 51.5 55 \* 11.0 \*  
 50.5 50 \* 11.0 \*

\*\* EVALUATION 1=NO PROMISE, 2=LITTLE PROMISE, 3=SOME PROMISE, 4=GOOD PROMISE

TABLE 22 (Cont.)

QUALITY DATA OF DURUM SAMPLES 1963 CROP

## STATE CALIFORNIA STATION IMPERIAL VALLEY DURUM PRELIMINARY

VARIETY	STD	TW	KWT	LG-SM	WHT		PRO	EXT	SEND	SEM	FALL	SEM	NC	PRC	VI	FIRM	RES	VALU	TW	KW	SM	WP	TX	SX	DU	SK	SP	VI	FR	DEFICIENCIES
					%	WT																								
MEXIT5 (322/41)	S	63.8	50.3	79	1	13.2	.	54.5	65	4	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	4
322/72		62.1	52.6	77	1	13.8	.	60.5	75	8	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	4	
322/75		61.3	51.8	83	1	14.7	.	57.0	85	8	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	4		
322/76		61.8	55.9	86	1	14.2	.	55.5	80	8	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	4			
322/77		61.3	46.3	73	1	14.5	.	53.0	85	8	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	4				
322/79		61.3	42.7	70	1	14.5	.	55.3	75	8	.	.	.	.	.	.	.	.	.	.	.	.	.	.	3					
322/80		62.6	51.3	75	2	13.3	.	58.0	75	4	.	.	.	.	.	.	.	.	.	.	.	.	.	.	3					
322/82		61.1	41.5	62	2	15.0	.	54.0	65	7	.	.	.	.	.	.	.	.	.	.	.	.	.	.	3					
322/90		62.4	44.8	65	3	12.5	.	55.0	70	4	.	.	.	.	.	.	.	.	.	.	.	.	.	2						
322/93		60.0	57.3	82	2	15.4	.	59.0	70	3	.	.	.	.	.	.	.	.	.	.	.	.	.	3						
322/95		62.4	48.8	81	1	14.4	.	58.0	85	5	.	.	.	.	.	.	.	.	.	.	.	.	.	4						
322/96		60.2	46.3	71	2	14.1	.	56.0	85	5	.	.	.	.	.	.	.	.	.	.	.	.	.	3						
322/100		62.9	53.5	81	2	13.4	.	60.0	75	8	.	.	.	.	.	.	.	.	.	.	.	.	.	4						
322/101		61.8	52.1	76	2	14.8	.	52.0	75	8	.	.	.	.	.	.	.	.	.	.	.	.	.	4						
322/102		61.3	39.7	49	2	14.2	.	56.5	75	8	.	.	.	.	.	.	.	.	.	.	.	.	.	4						
322/104		61.9	47.1	72	1	14.1	.	58.0	80	6	.	.	.	.	.	.	.	.	.	.	.	.	.	4						
322/105		61.9	51.8	79	1	15.1	.	56.0	75	8	.	.	.	.	.	.	.	.	.	.	.	.	.	4						
322/107		61.6	44.7	71	1	13.4	.	54.0	90	8	.	.	.	.	.	.	.	.	.	.	.	.	3							
322/108		63.5	44.8	68	2	13.9	.	57.5	70	3	.	.	.	.	.	.	.	.	.	.	.	.	3							
322/109		63.0	51.3	77	1	14.9	.	59.4	80	6	.	.	.	.	.	.	.	.	.	.	.	.	4							
322/110		64.0	44.2	70	1	14.3	.	57.5	85	5	.	.	.	.	.	.	.	.	.	.	.	.	3							
322/111		61.3	50.8	72	1	15.5	.	36.5	85	8	.	.	.	.	.	.	.	.	.	.	.	.	3							
322/112		60.8	42.4	57	3	13.9	.	54.0	90	7	.	.	.	.	.	.	.	.	.	.	.	.	3							
322/114		62.1	45.0	71	2	14.0	.	58.0	80	7	.	.	.	.	.	.	.	.	.	.	.	.	4							
322/119		62.9	48.8	79	1	14.1	.	59.0	80	7	.	.	.	.	.	.	.	.	.	.	.	.	4							
322/120		63.8	39.7	59	3	12.3	.	60.5	50	6	.	.	.	.	.	.	.	.	.	.	.	.	4							
322/121		65.0	38.3	55	1	12.6	.	50.0	75	5	.	.	.	.	.	.	.	.	.	.	.	.	3							
322/124		62.2	40.2	53	1	13.9	.	55.0	75	5	.	.	.	.	.	.	.	.	.	.	.	.	3							
322/125		64.5	51.5	80	1	13.8	.	52.0	80	7	.	.	.	.	.	.	.	.	.	.	.	.	4							
322/126		64.2	50.8	83	1	13.8	.	58.5	80	7	.	.	.	.	.	.	.	.	.	.	.	.	4							
322/130		64.5	50.8	82	1	13.4	.	56.0	90	7	.	.	.	.	.	.	.	.	.	.	.	.	4							
322/131		63.8	48.1	77	1	13.7	.	57.5	80	3	.	.	.	.	.	.	.	.	.	.	.	.	4							
322/132		58.6	52.1	78	1	14.2	.	58.0	70	3	.	.	.	.	.	.	.	.	.	.	.	.	3							
322/133		60.5	49.0	73	1	13.4	.	55.0	70	6	.	.	.	.	.	.	.	.	.	.	.	.	3							
322/136		61.6	48.1	79	1	15.7	.	55.0	70	8	.	.	.	.	.	.	.	.	.	.	.	.	3							
322/137		60.2	50.0	80	1	14.7	.	54.5	85	3	.	.	.	.	.	.	.	.	.	.	.	.	3							

DEFICIENCIES  
AVG OF STANDARDS  
MINOR FAULTING VALUES  
MAJOR FAULTING VALUES

1=NO PRCMSE.  
2=LITTLE PROMISE.  
3=SOME PROMISE.  
4=GOOD FROMISE

DEFICIENCIES  
TW KW SM WP TX SX DU SK SP VI FR

\*\*EVALUATION 1=NO PRCMSE. 2=LITTLE PROMISE. 3=SOME PROMISE. 4=GOOD FROMISE

TABLE 22 (Cont.)

QUALITY DATA OF DURUM SAMPLES 1983 CROP

## STATE CALIFORNIA STATION IMPERIAL VALLEY SURVEY PRELIMINARY

VARIETY	STD	TW	KWT	LG	SM	WHT	TUT	EXT	SEM	DUS	MX	SPK	MIN	SEM	FALL	SEM	NO	PRO	VI	FIRM	RES	VALU	TW	KWT	SM	WP	TX	DU	SK	SP	VI	FR	DEFICIENCIES				
																																	DEFICIENCIES				
MEX 175 (322/41)	S	63.8	50.3	79	1	13.2	0	54.5	65	4																									4	MJ MJ	
322/138	S	59.8	42.4	63	2	14.3	0	58.0	85	7																									2	MJ MJ	
322/140	S	64.3	50.5	83	1	13.2	0	56.0	75	5																									3	MJ MJ	
322/146	S	61.1	41.7	64	1	15.7	0	54.0	80	5																									3	MJ MJ	
322/148	S	61.4	42.7	57	2	13.5	0	58.5	40	8																									1	MJ MJ	
322/150	S	62.4	43.9	58	2	13.5	0	59.0	80	7																								4	MJ MJ		
322/151	S	63.0	46.9	74	1	14.4	0	57.5	75	5																								4	MJ MJ		
322/154	S	62.1	46.1	75	1	14.7	0	56.0	70	5																								4	MJ MJ		
322/155	S	62.6	51.0	79	1	14.2	0	56.0	70	5																							3	MJ MJ			
322/160	S	63.5	38.9	55	3	14.1	0	53.5	85	5																							3	MJ MJ			
322/161	S	63.5	45.0	69	2	14.0	0	55.0	75	7																							4	MJ MJ			
322/163	S	64.2	52.1	84	1	14.9	0	60.0	85	5																							4	MJ MJ			
322/164	S	64.2	50.8	82	1	14.3	0	58.0	85	5																							4	MJ MJ			
322/166	S	63.7	55.2	85	1	15.3	0	56.5	85	5																							4	MJ MJ			
322/167	S	62.7	52.4	79	1	14.1	0	56.5	80	3																							3	MJ MJ			
322/168	S	62.4	44.6	77	1	15.2	0	57.5	90	3																							4	MJ MJ			
322/172	S	62.7	46.3	77	1	14.0	0	60.0	95	5																						3	MJ MJ				
322/173	S	62.2	43.1	71	1	16.9	0	53.0	75	4																						4	MJ MJ				
322/174	S	61.8	45.8	73	1	16.0	0	54.0	75	4																						4	MJ MJ				
322/175	S	63.5	47.8	71	1	15.9	0	55.5	75	5																						3	MJ MJ				
322/176	S	62.9	44.4	77	1	15.2	0	55.0	85	7																						4	MJ MJ				
322/177	S	62.4	46.7	80	1	15.0	0	65.0	70	7																						4	MJ MJ				
322/180	S	62.1	46.7	64	1	12.7	0	52.5	85	4																						4	MJ MJ				
322/182	S	62.4	44.4	69	1	14.8	0	54.5	90	4																						3	MJ MJ				
322/184	S	62.7	45.2	69	1	14.8	0	55.0	80	4																						4	MJ MJ				
322/185	S	62.6	44.4	78	1	14.0	0	53.3	75	4																						3	MJ MJ				
322/186	S	62.6	44.6	74	1	14.9	0	54.0	80	4																						4	MJ MJ				
322/187	S	62.1	46.7	69	1	14.7	0	51.0	75	4																						3	MJ MJ				
322/189	S	63.4	43.9	68	1	14.0	0	54.5	95	4																						3	MJ MJ				
322/190	S	62.9	42.7	70	1	16.1	0	52.5	80	2																						4	MJ MJ				
322/191	S	64.6	50.3	80	1	14.2	0	55.5	80	3																						4	MJ MJ				
322/192	S	64.5	48.5	78	1	13.8	0	54.0	80	3																						4	MJ MJ				
322/193	S	63.4	51.3	86	1	14.8	0	56.0	75	4																						4	MJ MJ				
322/194	S	63.9	51.3	88	1	15.2	0	57.0	70	6																						4	MJ MJ				
322/195	S	63.5	47.6	75	1	13.9	0	52.0	80	3																						3	MJ MJ				
322/197	S	62.1	42.6	63	2	14.4	0	52.0	85	2																						2	MJ MJ				
322/200	S	62.9	46.5	73	1	15.0	0	50.5	75	2																						2	MJ MJ				
322/201	S	62.2	47.1	68	1	15.1	0	52.5	85	1																						1	MJ MJ				

## DEFICIENCIES

TW KW SM WP TX DU SK SP VI FR

## AVG OF STANDARDS

63.8 50.3 1 13.2 0 54.5 65 0 0 0

## MINOR FAULTING VALUES

61.6 48.2 6 12.5 0 51.5 55 0 0 0

## MAJOR FAULTING VALUES

60.7 45.2 11 11.5 0 50.5 50 0 0 0

\*\* EVALUATION 1=NC PROMISE, 2=LITTLE PROMISE, 3=SOME PROMISE, 4=GOOD PROMISE

## QUALITY DATA OF CORUM SAMPLES 1983 CROP

TABLE 22 (Cont.)

STATE CALIFORNIA STANISLAUS IMPERIAL VALLEY SURVEY PRELIMINARY

VARIETY	STN	T <sub>w</sub>	1000 KWT			% LG SM			WHIT PRO EXF			TCT SEMC			SEMU FALL NC			SEMO PRO VI			FIRM RES VI			DEFICIENCIES		
			LG	SM	LG	SM	LG	SM	LG	SM	LG	SM	LG	SM	LG	SM	LG	SM	LG	SM	LG	SM	LG	SM	LG	SM
MEXI75 (322/41)	S	63.8	50.3	79	1	13.2	•	54.5	65	4	•	•	•	•	•	•	•	•	•	•	•	•	4	MI	MI	MI
322/202		63.8	47.4	75	1	14.4	•	54.5	90	2	•	•	•	•	•	•	•	•	•	•	•	•	4	MI	MI	MI
322/203		62.6	46.3	70	1	15.2	•	55.5	95	5	•	•	•	•	•	•	•	•	•	•	•	•	4	MI	MI	MI
322/204		63.4	46.3	78	1	15.3	•	54.5	80	4	•	•	•	•	•	•	•	•	•	•	•	•	2	NJ	MI	MI
322/205		60.3	50.8	81	1	16.0	•	51.5	80	8	•	•	•	•	•	•	•	•	•	•	•	•	4	MI	MI	MI
322/206		61.8	51.5	92	1	15.3	•	53.5	95	6	•	•	•	•	•	•	•	•	•	•	•	•	4	MI	MI	MI
322/208		62.1	54.6	75	2	13.5	•	57.5	75	8	•	•	•	•	•	•	•	•	•	•	•	•	4	MI	MI	MI
322/209		62.9	46.7	71	2	14.7	•	64.0	70	8	•	•	•	•	•	•	•	•	•	•	•	•	4	MI	MI	MI
322/210		61.4	45.7	63	2	14.1	•	52.5	70	6	•	•	•	•	•	•	•	•	•	•	•	•	4	MI	MI	MI
322/211		62.6	51.0	75	1	14.1	•	52.5	70	4	•	•	•	•	•	•	•	•	•	•	•	•	4	MI	MI	MI
322/212		61.6	48.8	71	1	15.3	•	52.0	70	5	•	•	•	•	•	•	•	•	•	•	•	•	4	MI	MI	MI
322/213		62.2	49.0	75	1	14.4	•	54.0	80	6	•	•	•	•	•	•	•	•	•	•	•	•	4	MI	MI	MI
322/216		60.0	51.8	79	1	15.1	•	50.5	55	7	•	•	•	•	•	•	•	•	•	•	•	•	1	MI	MI	MI
322/218		62.1	50.8	73	1	15.8	•	52.5	6	•	•	•	•	•	•	•	•	•	•	•	•	•	4	MI	MI	MI
322/222		63.0	56.2	83	1	15.7	•	53.0	85	4	•	•	•	•	•	•	•	•	•	•	•	•	4	MI	MI	MI
322/223		62.7	52.6	76	1	16.1	•	54.5	75	5	•	•	•	•	•	•	•	•	•	•	•	•	4	MI	MI	MI
322/225		61.7	53.8	83	1	13.9	•	54.5	70	7	•	•	•	•	•	•	•	•	•	•	•	•	4	MI	MI	MI
322/226		60.8	54.6	83	1	14.7	•	56.0	80	5	•	•	•	•	•	•	•	•	•	•	•	•	2	NJ	MI	MI
322/227		55.7	49.0	71	1	15.1	•	51.0	85	8	•	•	•	•	•	•	•	•	•	•	•	•	4	MI	MI	MI
322/228		61.1	54.1	87	1	13.9	•	55.0	90	7	•	•	•	•	•	•	•	•	•	•	•	•	3	MI	MI	MI
322/234		63.0	55.9	85	1	12.0	•	54.5	80	6	•	•	•	•	•	•	•	•	•	•	•	•	3	MI	MI	MI
322/238		63.5	40.5	62	2	12.6	•	54.0	90	6	•	•	•	•	•	•	•	•	•	•	•	•	3	MI	MI	MI
322/239		63.8	48.5	71	3	12.9	•	57.5	75	6	•	•	•	•	•	•	•	•	•	•	•	•	4	MI	MI	MI
322/240		64.8	52.1	79	1	12.6	•	58.5	70	8	•	•	•	•	•	•	•	•	•	•	•	•	4	MI	MI	MI
322/241		64.0	49.8	74	1	13.0	•	56.5	80	8	•	•	•	•	•	•	•	•	•	•	•	•	4	MI	MI	MI
322/242		64.0	47.4	69	1	13.1	•	55.5	80	7	•	•	•	•	•	•	•	•	•	•	•	•	4	MI	MI	MI
322/244		64.6	55.6	84	1	12.6	•	54.5	75	7	•	•	•	•	•	•	•	•	•	•	•	•	4	MI	MI	MI
322/245		64.6	52.1	79	1	13.3	•	55.5	75	7	•	•	•	•	•	•	•	•	•	•	•	•	4	MI	MI	MI
322/246		64.6	50.3	75	1	11.7	•	56.5	65	4	•	•	•	•	•	•	•	•	•	•	•	•	4	MI	MI	MI
322/247		64.8	49.3	82	1	12.6	•	54.0	80	8	•	•	•	•	•	•	•	•	•	•	•	•	4	MI	MI	MI
322/248		65.6	50.5	79	1	12.3	•	57.5	85	5	•	•	•	•	•	•	•	•	•	•	•	•	3	MI	MI	MI
322/249		62.6	51.3	79	1	13.1	•	54.5	80	4	•	•	•	•	•	•	•	•	•	•	•	•	4	MI	MI	MI
322/250		63.0	55.5	81	1	13.7	•	57.5	75	5	•	•	•	•	•	•	•	•	•	•	•	•	4	MI	MI	MI
322/251		62.7	52.6	82	1	13.9	•	56.5	70	5	•	•	•	•	•	•	•	•	•	•	•	•	4	MI	MI	MI
322/252		60.6	44.1	70	1	16.2	•	52.0	90	3	•	•	•	•	•	•	•	•	•	•	•	•	2	MI	MI	MI
322/253		64.0	53.2	80	1	13.0	•	57.5	75	4	•	•	•	•	•	•	•	•	•	•	•	•	4	MI	MI	MI
322/254		63.0	49.5	81	1	14.7	•	57.0	70	4	•	•	•	•	•	•	•	•	•	•	•	•	4	MI	MI	MI
322/256		64.0	45.8	68	2	15.2	•	56.5	70	7	•	•	•	•	•	•	•	•	•	•	•	•	4	MI	MI	MI

DEFICIENCIES  
AVG OF STANDARDS  
MINOR FAULTING VALUES  
MAJOR FAULTING VALUES

63.8 50.3 1 13.2  
61.6 48.2 6 12.5  
60.7 45.2 11 11.5

T<sub>w</sub> KW SM WP TX SX DU SK SF VI FR  
54.5 65 • 51.5 55 • 50.5 50 • 11.5 11.0

\*\*EVALUATION 1=NO PROMISE, 2=LITTLE PROMISE, 3=SOME PROMISE, 4=GCCD PROMISE

TABLE 22 (Cont.)

QUALITY DATA OF DURUN SAMPLES 1981 CROP

## STATE CALIFORNIA-SAN JUAN IMPERIAL VALLEY-NURSERY PRELIMINARY

VARIETY	STD TW	1000 KWT	X LG SM	WHIT PHU	TCT PRO	SEC EXT	DUS MX	SPK MIN	SEM NC PRO	FALL NC PRO	SEMO NC PRO	VI	FIRM	RTS VALU TX DU SK SP VI FR	DEFICIENCIES									
															TW KW SM		KW SM		TX		TX		TX		TX
MEX 175 (322/41)	S	63.8	50.3	79	1	13.2	1	14.4	0	64.5	65	4	0	0	0	0	0	0	0	0	0	0	0	0
322/258	S	64.0	54.6	89	1	14.4	0	13.5	0	68.0	70	7	0	0	0	0	0	0	0	0	0	0	0	0
322/259	S	64.1	49.3	77	1	15.9	0	15.9	0	67.5	80	7	0	0	0	0	0	0	0	0	0	0	0	0
322/260	S	63.2	52.9	37	1	13.5	0	13.5	0	65.0	70	8	0	0	0	0	0	0	0	0	0	0	0	0
322/261	S	65.4	54.4	86	1	13.5	0	13.5	0	68.0	70	6	0	0	0	0	0	0	0	0	0	0	0	0
322/262	S	64.5	45.2	65	2	13.4	0	13.4	0	55.0	70	8	0	0	0	0	0	0	0	0	0	0	0	0
322/263	S	61.4	55.2	78	2	14.1	0	14.1	0	56.0	75	8	0	0	0	0	0	0	0	0	0	0	0	0
322/264	S	62.2	49.3	77	1	13.4	0	13.4	0	68.0	65	8	0	0	0	0	0	0	0	0	0	0	0	0
322/265	S	64.0	53.2	81	1	15.3	0	15.3	0	67.0	75	8	0	0	0	0	0	0	0	0	0	0	0	0
322/266	S	63.5	48.3	75	1	15.1	0	15.1	0	66.5	75	8	0	0	0	0	0	0	0	0	0	0	0	0
322/267	S	64.0	48.1	73	1	14.2	0	14.2	0	67.0	70	8	0	0	0	0	0	0	0	0	0	0	0	0
322/268	S	63.2	61.7	91	1	14.2	0	14.2	0	68.5	80	2	0	0	0	0	0	0	0	0	0	0	0	0
322/269	S	62.7	59.5	88	1	14.3	0	14.3	0	69.0	75	8	0	0	0	0	0	0	0	0	0	0	0	0
322/270	S	62.4	32.8	35	8	11.6	0	11.6	0	67.0	40	6	0	0	0	0	0	0	0	0	0	0	0	0
322/271	S	61.4	52.4	79	2	14.1	0	14.1	0	61.4	65	6	0	0	0	0	0	0	0	0	0	0	0	0
322/272	S	62.6	55.6	85	1	14.0	0	14.0	0	68.0	75	5	0	0	0	0	0	0	0	0	0	0	0	0
322/273	S	63.8	59.2	87	1	13.0	0	13.0	0	61.5	75	4	0	0	0	0	0	0	0	0	0	0	0	0
322/274	S	61.8	55.6	85	1	13.0	0	13.0	0	59.5	75	4	0	0	0	0	0	0	0	0	0	0	0	0
322/275	S	63.0	56.2	84	2	13.0	0	13.0	0	61.0	85	5	0	0	0	0	0	0	0	0	0	0	0	0
322/276	S	59.5	44.1	63	3	15.2	0	15.2	0	62.5	75	7	0	0	0	0	0	0	0	0	0	0	0	0
322/277	S	61.0	48.3	74	1	16.1	0	16.1	0	52.5	75	7	0	0	0	0	0	0	0	0	0	0	0	0
322/278	S	62.6	50.3	85	2	13.6	0	13.6	0	67.5	75	7	0	0	0	0	0	0	0	0	0	0	0	0
322/279	S	61.8	47.8	67	2	15.1	0	15.1	0	64.5	75	4	0	0	0	0	0	0	0	0	0	0	0	0
322/280	S	59.8	50.3	80	1	15.1	0	15.1	0	55.5	70	8	0	0	0	0	0	0	0	0	0	0	0	0
322/281	S	61.1	52.2	89	1	14.8	0	14.8	0	64.5	70	6	0	0	0	0	0	0	0	0	0	0	0	0
322/282	S	62.6	51.3	76	1	13.9	0	13.9	0	55.5	75	7	0	0	0	0	0	0	0	0	0	0	0	0
322/283	S	62.7	49.8	81	1	15.6	0	15.6	0	55.0	80	8	0	0	0	0	0	0	0	0	0	0	0	0
322/286	S	64.0	54.9	83	1	14.6	0	14.6	0	55.5	80	6	0	0	0	0	0	0	0	0	0	0	0	0
322/288	S	64.3	57.3	89	1	13.5	0	13.5	0	55.0	80	6	0	0	0	0	0	0	0	0	0	0	0	0
322/289	S	63.8	60.6	89	1	14.4	0	14.4	0	54.5	70	6	0	0	0	0	0	0	0	0	0	0	0	0
322/290	S	63.8	57.3	89	1	14.5	0	14.5	0	54.5	65	6	0	0	0	0	0	0	0	0	0	0	0	0
322/293	S	61.1	48.8	80	1	14.7	0	14.7	0	53.0	60	6	0	0	0	0	0	0	0	0	0	0	0	0
322/296	S	61.8	46.7	77	1	14.7	0	14.7	0	50.5	60	6	0	0	0	0	0	0	0	0	0	0	0	0
322/298	S	62.7	45.7	75	1	14.0	0	14.0	0	53.5	60	6	0	0	0	0	0	0	0	0	0	0	0	0
322/299	S	64.2	43.5	73	1	12.1	0	12.1	0	54.0	80	7	0	0	0	0	0	0	0	0	0	0	0	0
322/300	S	62.6	42.9	55	3	14.1	0	14.1	0	52.5	35	8	0	0	0	0	0	0	0	0	0	0	0	0
322/301	S	64.0	42.7	71	1	14.6	0	14.6	0	54.5	75	7	0	0	0	0	0	0	0	0	0	0	0	0
322/305	S	62.2	40.7	54	2	12.7	0	12.7	0	57.5	90	4	0	0	0	0	0	0	0	0	0	0	0	0

DEFICIENCIES  
AVG CF STANDARDS  
MINOR FAULTING VALUES  
MAJOR FAULTING VALUES

1=NC PROMISE.

2=LITTLE PROMISE.

3=SOME PROMISE.

4=GOOD PROMISE

TW KW SM

TX

CU SK SP

v1

FR

64.5

51.5

11.5

50.5

50.5

11.0

0

0

0

QUALITY DATA OF DURUM SAMPLES 1983 CROP

TABLE 22 (Cont.)

STATE=CALIFORNIA\_STATION=IMPERIAL\_VALLEY\_NURSERY=Preliminary

VARIETY	STD	TW	1000 KWT	% LG-SM	WT PRO	WT EXT	ST MO EXT	ST MO DUS	FALL MX	FALL SPK	FALL MIN	SEM NC	SEM PRN	VI	FIRM	RES	VAL U	TW	KU	SP	TX	SX	DU	SK	FR	DEFICIENCIES
MEX175 (322/41)	S	63.8	50.3	79	1	13.2	•	54.5	65	4	•	•	•	•	•	•	•	•	•	•	•	•	•	4	4	
322/311	S	62.8	51.3	81	1	15.6	•	55.0	70	8	•	•	•	•	•	•	•	•	•	•	•	•	•	4	4	
322/320	S	61.9	51.0	88	1	13.4	•	55.0	80	7	•	•	•	•	•	•	•	•	•	•	•	•	•	4	4	
322/321	S	61.4	51.5	73	3	13.1	•	55.5	65	7	•	•	•	•	•	•	•	•	•	•	•	•	•	4	4	
322/324	S	63.4	46.5	69	1	15.1	•	54.5	70	7	•	•	•	•	•	•	•	•	•	•	•	•	•	4	4	
322/326	S	62.7	50.3	72	1	14.4	•	53.0	75	7	•	•	•	•	•	•	•	•	•	•	•	•	•	4	4	
322/327	S	62.7	47.8	67	2	13.3	•	54.0	60	5	•	•	•	•	•	•	•	•	•	•	•	•	•	4	4	
322/328	S	64.5	47.1	75	1	14.1	•	54.5	85	6	•	•	•	•	•	•	•	•	•	•	•	•	•	4	4	
322/329	S	64.2	52.1	77	1	13.8	•	56.0	85	7	•	•	•	•	•	•	•	•	•	•	•	•	•	4	4	
322/330	S	58.9	51.5	74	2	14.3	•	51.5	80	8	•	•	•	•	•	•	•	•	•	•	•	•	•	4	4	
322/332	S	63.7	46.3	76	1	15.0	•	51.0	80	8	•	•	•	•	•	•	•	•	•	•	•	•	•	3	3	
322/333	S	62.4	42.9	62	2	12.3	•	53.5	60	5	•	•	•	•	•	•	•	•	•	•	•	•	•	2	2	
322/335	S	64.3	48.5	65	2	13.0	•	56.0	75	7	•	•	•	•	•	•	•	•	•	•	•	•	•	4	4	
322/336	S	62.4	47.8	69	2	13.0	•	53.5	70	6	•	•	•	•	•	•	•	•	•	•	•	•	•	4	4	
322/337	S	61.3	48.3	78	2	14.4	•	55.5	75	4	•	•	•	•	•	•	•	•	•	•	•	•	•	4	4	
322/338	S	62.2	52.6	78	2	13.9	•	55.0	75	5	•	•	•	•	•	•	•	•	•	•	•	•	•	3	3	
322/339	S	60.6	47.8	74	2	15.7	•	52.5	75	6	•	•	•	•	•	•	•	•	•	•	•	•	•	4	4	
322/340	S	61.3	50.8	77	1	15.4	•	55.0	75	5	•	•	•	•	•	•	•	•	•	•	•	•	•	4	4	

DEFICIENCIES  
AVG OF STANDARDS 63.8 50.3 1 13.2 •  
MINOR FAULTING VALUES 61.6 48.2 6 12.5 • 51.5 55 • 11.5 •  
MAJOR FAULTING VALUES 60.7 45.2 11 11.5 • 50.5 50 • 11.0 •

\*\*EVALUATION 1=NO PROMISE, 2=LITTLE PROMISE, 3=SOME PROMISE, 4=GOOD PROMISE

TABLE 22A

## QUALITY DATA OF DURUM SAMPLES 1983 CROP

STATE=CALIFORNIA\_SIALIGNE IMPERIAL VALLEY\_NU=STORY=PRELIMINARY

VARIETY	STD TW	1000 KWT	LG %	LG SM	WHT PRO	TGT EXT	SEM0 DUS	SEM0 MX	SEM0 SPK	SEM0 MIN	NC PRU	VI FIRM	REF VALU	TW KW	SP SK	TW KW	SP SK	TW KW	SP SK	DEFICIENCIES		
1983 N.D.	S	61.6	46.3	51	2	14.0	0	56.5	90	7	0	0	0	0	0	0	0	0	0	0	0	0
322/2		62.8	47.8	75	1	13.5	0	57.5	70	7	0	0	0	0	0	0	0	0	0	0	0	MJ
322/3		64.4	54.6	87	2	13.9	0	58.5	75	4	0	0	0	0	0	0	0	0	0	0	0	MJ
322/4		64.2	47.1	71	1	15.0	0	56.5	65	8	0	0	0	0	0	0	0	0	0	0	0	MJ
322/5		61.1	48.5	78	1	14.9	0	52.5	65	8	0	0	0	0	0	0	0	0	0	0	0	MJ
322/6		62.7	52.4	78	1	14.3	0	58.5	60	8	0	0	0	0	0	0	0	0	0	0	0	MJ
322/7		63.5	46.9	73	2	14.5	0	65.5	60	7	0	0	0	0	0	0	0	0	0	0	0	MJ
322/8		61.9	53.5	85	1	15.2	0	57.0	65	4	0	0	0	0	0	0	0	0	0	0	0	MJ
322/9		62.7	47.1	74	1	13.6	0	59.0	80	5	0	0	0	0	0	0	0	0	0	0	0	MJ
322/10		64.2	51.8	79	2	12.9	0	60.5	75	6	0	0	0	0	0	0	0	0	0	0	0	MJ
322/13		63.4	50.8	77	1	14.4	0	58.5	75	4	0	0	0	0	0	0	0	0	0	0	0	MJ
322/15		57.8	36.1	50	3	14.9	0	49.5	70	7	0	0	0	0	0	0	0	0	0	0	0	MJ
322/17		63.5	46.4	73	1	12.4	0	53.5	70	6	0	0	0	0	0	0	0	0	0	0	0	MJ
322/18		61.9	44.6	77	2	14.5	0	54.5	55	6	0	0	0	0	0	0	0	0	0	0	0	MJ
322/19		61.1	55.2	83	1	13.8	0	56.5	55	5	0	0	0	0	0	0	0	0	0	0	0	MJ
322/20		63.7	46.5	72	2	14.1	0	58.5	65	6	0	0	0	0	0	0	0	0	0	0	0	MJ
322/23		64.5	58.8	99	1	13.3	0	58.5	65	4	0	0	0	0	0	0	0	0	0	0	0	MJ
322/26		62.9	50.3	75	2	13.7	0	56.5	65	4	0	0	0	0	0	0	0	0	0	0	0	MJ
322/27		62.2	47.8	81	1	15.9	0	54.0	75	6	0	0	0	0	0	0	0	0	0	0	0	MJ
322/29		63.5	53.5	82	1	15.7	0	57.5	65	8	0	0	0	0	0	0	0	0	0	0	0	MJ
322/30		63.2	53.2	84	1	13.5	0	56.5	65	4	0	0	0	0	0	0	0	0	0	0	0	MJ
322/32		62.1	51.8	80	1	15.5	0	49.0	70	8	0	0	0	0	0	0	0	0	0	0	0	MJ
322/33		59.8	52.6	75	1	14.4	0	50.5	80	7	0	0	0	0	0	0	0	0	0	0	0	MJ
322/34		63.8	58.8	87	1	14.3	0	52.5	75	7	0	0	0	0	0	0	0	0	0	0	0	MJ
322/35		61.9	55.2	82	1	14.0	0	57.0	70	6	0	0	0	0	0	0	0	0	0	0	0	MJ
322/37		63.0	44.1	69	2	13.7	0	58.5	80	5	0	0	0	0	0	0	0	0	0	0	0	MJ
322/38		63.7	47.1	79	3	14.2	0	55.5	90	5	0	0	0	0	0	0	0	0	0	0	0	MJ
322/39		61.9	49.8	78	3	15.2	0	55.0	75	4	0	0	0	0	0	0	0	0	0	0	0	MJ
322/40		62.7	47.4	72	1	15.4	0	56.0	85	4	0	0	0	0	0	0	0	0	0	0	0	MJ
322/41		63.8	50.3	79	1	13.2	0	54.5	65	4	0	0	0	0	0	0	0	0	0	0	0	MJ
322/42		63.5	45.0	67	1	15.2	0	57.0	75	7	0	0	0	0	0	0	0	0	0	0	0	MJ
322/49		63.0	51.0	80	1	13.7	0	54.5	75	7	0	0	0	0	0	0	0	0	0	0	0	MJ
322/53		62.9	46.9	78	1	14.7	0	57.5	75	3	0	0	0	0	0	0	0	0	0	0	0	MJ
322/58		63.0	42.9	67	2	14.5	0	57.5	80	4	0	0	0	0	0	0	0	0	0	0	0	MJ
322/59		64.3	40.8	63	1	13.5	0	52.0	90	4	0	0	0	0	0	0	0	0	0	0	0	MJ
322/60		63.0	44.4	75	1	13.4	0	55.5	65	6	0	0	0	0	0	0	0	0	0	0	0	MJ
322/65		62.2	44.4	63	2	13.8	0	54.0	65	6	0	0	0	0	0	0	0	0	0	0	0	MJ
322/66		62.7	43.9	68	1	14.2	0	54.0	95	8	0	0	0	0	0	0	0	0	0	0	0	MJ
322/67		64.2	46.5	78	1	15.2	0	50.0	65	5	0	0	0	0	0	0	0	0	0	0	0	MJ

DEFICIENCIES  
AVG OF STANDARDS  
MINOR FAULTING VALUES  
MAJOR FAULTING VALUES

61.6 46.3 2 14.0  
59.4 44.2 7 12.5  
58.5 41.2 12 11.5

DU SK SP VI FR  
50 50 0 0 0  
53.5 80 0 0 0  
52.5 75 0 0 0

\*\* EVALUATION 1=NO PROMISE. 2=LITTLE PROMISE. 3=SOME PROMISE. 4=GOOD PROMISE

TABLE 22A (Cont.)

QUALITY DATA OF DURUM SAMPLES 1983 CROP

## STATE CALIFORNIA-SAN JUAN IMPERIAL VALLEY-NURSE RIVER LIMINARY

VARIETY	STD TW	1000 KWT	LG SN	WHT TGT		SEM		SEM	SEMO	NC PRO	VI	FRN	HFS VALU	T <sub>W</sub> KW SM WP TX SX DU SK SP VI FR	DEFICIENCIES	
				TGT	EXT	DUS	MX SPK									
1983 N.D. SID.	S	61.6	46.3	51	2	14.0	.	36.5	90	7	.	.	.	.	3	MJ
322/72	62.1	51.3	51.8	83	1	13.8	.	60.5	75	6	.	.	.	.	1	MJ
322/75	61.3	51.8	55.9	86	1	14.7	.	57.0	85	6	.	.	.	.	4	MJ
322/76	61.8	55.9	46.3	73	1	14.2	.	55.5	80	8	.	.	.	.	2	MJ
322/77	61.3	46.3	42.7	70	1	14.5	.	53.0	85	8	.	.	.	.	3	MJ
322/79	61.3	42.7	51.3	75	2	13.3	.	55.3	75	8	.	.	.	.	1	MJ
322/80	62.6	51.3	51.5	62	2	15.0	.	58.0	75	4	.	.	.	.	1	MJ
322/87	61.1	41.5	44.8	65	3	12.5	.	54.5	85	7	.	.	.	.	4	MJ
322/90	62.4	44.8	46.9	70	2	15.0	.	55.0	70	4	.	.	.	.	1	MJ
322/93	60.0	57.3	48.8	81	1	15.4	.	55.0	70	3	.	.	.	.	1	MJ
322/95	62.4	48.8	46.3	71	2	14.4	.	58.5	85	5	.	.	.	.	4	MJ
322/96	60.2	46.3	60.2	71	2	14.1	.	56.0	85	5	.	.	.	.	4	MJ
322/100	62.9	53.5	53.5	81	2	13.4	.	60.0	75	5	.	.	.	.	1	MJ
322/104	61.8	52.1	51.7	76	2	14.8	.	52.5	75	8	.	.	.	.	1	MJ
322/102	61.3	53.9	7.49	2	14.2	.	56.5	75	5	.	.	.	.	1	MJ	
322/104	61.9	47.1	72	1	14.1	.	58.0	80	8	.	.	.	.	2	MJ	
322/105	61.9	51.8	79	1	15.5	.	56.5	75	8	.	.	.	.	1	MJ	
322/106	61.6	43.7	71	1	13.4	.	64.0	90	8	.	.	.	.	4	MJ	
322/107	64.2	44.8	68	2	13.9	.	57.5	70	3	.	.	.	.	1	MJ	
322/108	63.5	44.8	66	2	14.6	.	57.0	70	8	.	.	.	.	1	MJ	
322/109	63.0	51.3	77	1	14.9	.	59.4	80	6	.	.	.	.	2	MJ	
322/110	64.0	44.2	70	1	14.3	.	57.5	85	7	.	.	.	.	4	MJ	
322/111	61.3	50.8	42.4	57	3	15.5	.	54.5	85	8	.	.	.	2	MJ	
322/112	60.8	50.8	51.5	80	1	13.9	.	58.0	90	7	.	.	.	4	MJ	
322/114	62.1	45.0	71	2	14.0	.	58.0	80	7	.	.	.	.	1	MJ	
322/119	62.9	48.8	69	1	14.6	.	59.0	80	7	.	.	.	.	1	MJ	
322/120	63.8	39.8	75	3	12.3	.	60.5	70	7	.	.	.	.	2	MJ	
322/121	65.0	38.3	55	1	12.6	.	60.5	75	5	.	.	.	.	1	MJ	
322/124	62.2	40.2	53	2	13.9	.	55.5	75	5	.	.	.	.	2	MJ	
322/125	64.5	51.5	80	1	13.8	.	58.0	80	7	.	.	.	.	2	MJ	
322/126	64.2	50.8	83	1	13.3	.	53.5	90	7	.	.	.	.	2	MJ	
322/127	63.2	45.7	79	1	14.3	.	56.0	80	7	.	.	.	.	4	MJ	
322/130	64.5	50.8	82	1	13.1	.	56.5	75	3	.	.	.	.	2	MJ	
322/131	63.8	48.1	77	1	13.7	.	57.5	80	3	.	.	.	.	1	MJ	
322/132	58.6	52.1	76	1	14.2	.	58.0	70	3	.	.	.	.	1	MJ	
322/133	60.5	49.0	73	1	13.4	.	55.0	70	6	.	.	.	.	1	MJ	
322/136	61.6	40.1	78	1	15.7	.	55.0	70	6	.	.	.	.	4	MJ	
322/137	60.2	50.0	80	1	14.7	.	54.5	85	8	.	.	.	.	1	MJ	

DEFICIENCIES  
AVG CF STANDARDS  
MINOR FAULTING VALUES  
MAJOR FAULTING VALUES

T<sub>W</sub> KW SM WP TX SX DU SK SP VI FR  
Sx SK SF VI FR  
56.5 50 14.0 11.5  
53.5 80 12.5 11.5  
52.5 75 11.5 11.0

\*\* EVALUATION 1=NC PROMISE, 2=LITTLE PROMISE, 3=SOME PROMISE, 4=GODD PROMISE

TABLE 22A (Cont.)

QUALITY DATA OF DURUM SAMPLES 1963 CROP

## STATE CALIFORNIA STATION IMPERIAL VALLEY PRELIMINARY

VARIETY	STD.	STD. TW	1000 KWT	LG SSA	WHI TCI	SEMU EXT	SEMU DUS MX SPK MIN NC PRO	SEMU ALL NC PRO VI	FIRM	R.E.S. VAL U	TW-KN-SW-WP-TX-SX-DU-SK-SP-VI-FR	DEFICIENCIES
1983 N.D.	S	61.6	46.3	51	2 14.0	•	56.5	90	•	•	•	MI
322/138	S	59.8	42.4	63	2 14.3	•	58.0	85	7	•	•	MJ
322/140	S	64.3	50.5	83	1 13.2	•	56.0	75	5	•	•	MJ
322/146	S	61.1	41.7	64	1 15.7	•	54.0	60	5	•	•	MJ
322/148	S	61.4	42.7	57	2 13.7	•	55.0	85	6	•	•	MJ
322/150	S	62.4	43.9	58	2 13.5	•	53.5	40	8	•	•	MJ
322/151	S	63.0	46.9	74	1 14.4	•	59.0	80	7	•	•	MJ
322/154	S	62.1	46.1	75	1 14.7	•	57.5	75	5	•	•	MJ
322/155	S	62.0	51.0	76	1 14.2	•	58.0	70	6	•	•	MJ
322/160	S	63.0	38.9	55	3 14.1	•	53.5	85	7	•	•	MJ
322/161	S	63.5	45.0	65	2 14.3	•	55.0	75	7	•	•	MJ
322/163	S	64.2	52.1	84	1 14.9	•	60.0	85	5	•	•	MJ
322/164	S	64.2	50.2	82	1 14.3	•	58.0	85	5	•	•	MJ
322/166	S	63.7	55.0	85	1 15.3	•	56.5	85	5	•	•	MJ
322/167	S	63.2	52.4	79	1 14.1	•	57.5	80	3	•	•	MJ
322/168	S	62.4	44.6	77	1 15.2	•	57.5	90	3	•	•	MJ
322/172	S	62.7	46.3	77	1 14.3	•	60.0	85	5	•	•	MJ
322/173	S	62.2	43.1	71	1 16.8	•	53.5	75	4	•	•	MJ
322/174	S	61.8	45.6	73	1 16.0	•	64.0	75	4	•	•	MJ
322/175	S	63.5	47.8	74	1 15.9	•	55.5	75	5	•	•	MJ
322/176	S	62.9	44.4	77	1 15.2	•	55.0	85	7	•	•	MJ
322/177	S	62.4	46.7	80	1 15.0	•	55.0	70	7	•	•	MJ
322/180	S	61.3	46.7	64	1 12.7	•	52.5	85	4	•	•	MJ
322/182	S	62.4	44.4	69	1 14.8	•	54.5	90	4	•	•	MJ
322/184	S	62.7	45.2	69	1 14.8	•	55.0	90	4	•	•	MJ
322/185	S	62.6	44.4	78	1 15.0	•	53.5	75	4	•	•	MJ
322/186	S	62.6	44.6	74	1 14.9	•	54.0	80	4	•	•	MJ
322/187	S	62.1	46.7	69	1 14.7	•	55.0	70	7	•	•	MJ
322/189	S	63.4	43.9	63	1 14.0	•	54.0	95	4	•	•	MJ
322/190	S	62.9	42.7	70	1 16.1	•	52.5	80	2	•	•	MJ
322/191	S	64.6	50.3	80	1 14.2	•	55.5	80	1	•	•	MJ
322/192	S	64.5	48.5	78	1 13.8	•	55.5	90	3	•	•	MJ
322/193	S	63.4	51.3	86	1 14.9	•	56.0	75	5	•	•	MJ
322/194	S	63.9	51.3	88	1 15.2	•	57.0	70	6	•	•	MJ
322/195	S	63.5	47.6	75	1 13.9	•	52.5	90	3	•	•	MJ
322/197	S	62.1	42.6	63	2 14.4	•	52.0	85	2	•	•	MJ
322/200	S	62.9	46.5	73	1 15.0	•	50.5	75	2	•	•	MJ
322/201	S	62.2	47.1	68	1 15.1	•	52.5	85	1	•	•	MJ

DEFICIENCIES  
AVG CF STANDARDS  
MINOR FAULTING VALUES  
MAJOR FAULTING VALUES

TW KW SW WP TX SX DU SK SP VI FR  
61.6 46.3 2 14.0  
59.4 44.2 7 12.5  
58.5 41.2 12 11.5  
56.5 80  
53.5 75  
52.5 75

\*\*EVALUATION 1=NO PROMISE. 2=LITTLE PROMISE. 3=SOME PROMISE. 4=GOOD PROMISE

TABLE 22A (Cont.)

QUALITY DATA OF BURUM SAMPLES  
STATE: CALIFORNIA STATION: IMPERIAL VALLEY NUMBER: PRELIMINARY  
1983 CROP

VARIETY	STD TW	KWT	LG_SSM	PRO	EXT	WHT	ICL	SCMC	SEM	FALL	SEMO	NG	PKJ	VI	FIRM	DEFICIENCIES													
																SEM	FALL	SCMC	EXT	DUS	WY	SPK	MIN	TX	SX	DU	SK	SP	VI	FR
1983 N.D.	STD.	S	61.6	46.3	51	2	14.0	*	56.5	90	7	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
322/202			63.8	47.4	75	1	14.4	*	54.5	90	2	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	4	
322/203			62.6	46.3	70	1	15.2	*	55.5	95	5	4	*	*	*	*	*	*	*	*	*	*	*	*	*	*	2		
322/204			63.4	46.3	78	1	15.3	*	54.5	80	8	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1			
322/205			60.3	50.8	81	1	16.0	*	51.5	80	6	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1			
322/206			61.8	51.5	82	1	15.3	*	53.5	95	6	*	*	*	*	*	*	*	*	*	*	*	*	*	3				
322/208			62.1	54.6	75	2	14.5	*	57.5	75	8	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1			
322/209			62.9	46.7	71	2	13.8	*	54.5	70	5	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1			
322/210			61.4	45.7	63	2	14.1	*	52.5	70	6	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1			
322/211			62.6	51.0	75	1	14.1	*	52.5	70	4	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1			
322/212			61.6	48.8	71	1	15.3	*	52.0	70	5	*	*	*	*	*	*	*	*	*	*	*	*	*	*	2			
322/213			62.2	49.0	75	1	14.4	*	54.0	80	6	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1			
322/216			63.0	51.8	79	1	15.1	*	50.5	65	7	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1			
322/218			62.1	50.8	73	1	15.9	*	52.5	65	6	*	*	*	*	*	*	*	*	*	*	*	*	*	3				
322/222			63.0	56.2	83	1	15.7	*	54.3	65	4	*	*	*	*	*	*	*	*	*	*	*	*	*	1				
322/223			62.7	52.6	70	1	16.1	*	54.5	75	5	*	*	*	*	*	*	*	*	*	*	*	*	*	1				
322/225			61.1	53.8	63	1	13.9	*	54.5	70	7	*	*	*	*	*	*	*	*	*	*	*	*	*	2				
322/226			60.6	54.6	83	1	14.7	*	56.0	80	5	*	*	*	*	*	*	*	*	*	*	*	*	*	1				
322/227			55.7	49.0	71	1	15.1	*	51.0	85	8	*	*	*	*	*	*	*	*	*	*	*	*	1					
322/228			61.1	54.1	57	1	13.9	*	55.5	90	7	*	*	*	*	*	*	*	*	*	*	*	*	4					
322/234			63.0	55.9	85	1	12.0	*	54.5	60	5	*	*	*	*	*	*	*	*	*	*	*	*	1					
322/238			63.5	49.0	76	2	12.6	*	54.0	90	6	*	*	*	*	*	*	*	*	*	*	*	*	3					
322/239			63.8	48.5	71	3	12.9	*	57.5	65	6	*	*	*	*	*	*	*	*	*	*	*	*	4					
322/240			64.8	52.1	79	1	12.6	*	58.0	70	8	*	*	*	*	*	*	*	*	*	*	*	*	1					
322/241			64.0	49.8	74	1	13.0	*	56.5	80	2	*	*	*	*	*	*	*	*	*	*	*	*	2					
322/244			64.0	47.4	69	1	13.7	*	55.5	80	8	*	*	*	*	*	*	*	*	*	*	*	*	2					
322/245			64.8	55.6	84	1	12.6	*	54.5	65	7	*	*	*	*	*	*	*	*	*	*	*	*	1					
322/246			64.6	52.1	79	1	13.3	*	55.5	75	7	*	*	*	*	*	*	*	*	*	*	*	*	1					
322/247			64.8	49.3	82	1	12.6	*	54.0	80	8	*	*	*	*	*	*	*	*	*	*	*	*	2					
322/248			65.6	50.5	79	1	12.3	*	57.5	85	5	*	*	*	*	*	*	*	*	*	*	*	*	3					
322/249			62.6	51.3	79	1	13.1	*	54.5	80	4	*	*	*	*	*	*	*	*	*	*	*	*	2					
322/250			63.0	55.9	81	1	13.7	*	57.5	65	5	*	*	*	*	*	*	*	*	*	*	*	*	1					
322/251			62.7	52.6	82	1	13.9	*	56.5	70	5	*	*	*	*	*	*	*	*	*	*	*	*	1					
322/252			60.6	43.1	70	1	16.2	*	52.0	90	5	*	*	*	*	*	*	*	*	*	*	*	*	2					
322/253			64.0	53.1	80	1	13.0	*	57.5	75	4	*	*	*	*	*	*	*	*	*	*	*	*	1					
322/254			63.0	49.5	81	1	14.7	*	57.0	70	4	*	*	*	*	*	*	*	*	*	*	*	*	1					
322/256			64.0	45.8	68	2	13.2	*	56.5	70	7	*	*	*	*	*	*	*	*	*	*	*	*	1					

DEFICIENCIES  
AVG OF STANDARDS  
MINOR FAULTING VALUES  
MAJOR FAULTING VALUES

1=NO PROMISE. 2=LITTLE PROMISE. 3=SOME PROMISE. 4=GOOD PROMISE  
TW = THERMAL DEFICIENCY  
Kw = KINETIC DEFICIENCY  
SM = SMOOTH DEFICIENCY  
WP = WATERSHED DEFICIENCY  
TX = TERRAIN DEFICIENCY  
SX = SOIL DEFICIENCY  
DU = DUST DEFICIENCY  
SK = SKIN DEFICIENCY  
SP = SPERM DEFICIENCY  
VI = VITAMIN DEFICIENCY  
FR = FIBER DEFICIENCY

\*\*EVALUATION 1=NO PROMISE. 2=LITTLE PROMISE. 3=SOME PROMISE. 4=GOOD PROMISE

TABLE 22A (Cont.)

QUALITY DATA OF CURUM SAMPLES 1983 C&amp;CP

STATE CALIFORNIA STATION IMPERIAL VALLEY NURSEY PRELIMINARY

VARIETY	STD.	T <sub>W</sub>	1000 KWT	X <sub>LSN</sub>	WHI	TCI	SEMIC EXTR	SEMIC IN	SEMIC PRO	VI	FIRM	RES	VALU	TW	K <sub>W</sub>	SN	WP	TX	SK	SP	VI	FR	DEFICIENCIES	
																							DEFICIENCIES	
1983 N.O.	61.6	46.3	51	2	14.0	•	50.5	90	7	•	•	•	•	•	4	•	•	•	•	•	•	•	1	2
322/258	64.0	54.6	69	1	14.4	•	52.0	70	7	•	•	•	•	•	•	•	•	•	•	•	•	•	1	1
322/259	64.1	49.3	77	1	13.2	•	57.5	20	7	•	•	•	•	•	•	•	•	•	•	•	•	•	1	1
322/260	63.2	52.9	97	1	15.9	•	55.0	70	9	•	•	•	•	•	•	•	•	•	•	•	•	•	1	1
322/261	65.4	54.1	86	1	13.5	•	58.0	70	6	•	•	•	•	•	•	•	•	•	•	•	•	1	1	
322/262	64.5	45.2	65	2	13.4	•	55.5	70	8	•	•	•	•	•	•	•	•	•	•	•	•	1	1	
322/263	61.4	55.2	78	2	14.1	•	56.5	75	8	•	•	•	•	•	•	•	•	•	•	•	•	1	1	
322/264	62.2	49.3	77	1	13.4	•	56.0	65	8	•	•	•	•	•	•	•	•	•	•	•	•	1	1	
322/265	64.0	53.2	81	1	15.3	•	57.0	75	8	•	•	•	•	•	•	•	•	•	•	•	•	1	1	
322/266	63.5	48.3	75	1	15.1	•	56.5	75	8	•	•	•	•	•	•	•	•	•	•	•	•	1	1	
322/267	64.0	48.1	73	1	14.2	•	57.0	70	8	•	•	•	•	•	•	•	•	•	•	•	•	1	2	
322/268	63.2	61.7	91	1	14.2	•	53.5	90	8	•	•	•	•	•	•	•	•	•	•	•	•	1	1	
322/269	62.7	59.5	88	1	14.3	•	60.0	75	8	•	•	•	•	•	•	•	•	•	•	•	•	1	1	
322/270	62.4	32.8	35	3	14.6	•	57.0	40	6	•	•	•	•	•	•	•	•	•	•	•	•	1	1	
322/271	61.4	52.4	79	2	14.1	•	51.4	65	6	•	•	•	•	•	•	•	•	•	•	•	•	1	1	
322/272	62.6	56.5	85	1	14.0	•	58.4	75	5	•	•	•	•	•	•	•	•	•	•	•	•	1	1	
322/273	63.8	59.2	87	1	13.1	•	61.5	75	4	•	•	•	•	•	•	•	•	•	•	•	•	1	1	
322/274	63.8	55.6	85	1	13.0	•	52.5	75	4	•	•	•	•	•	•	•	•	•	•	•	•	1	2	
322/275	61.8	56.2	85	1	13.0	•	61.0	85	5	•	•	•	•	•	•	•	•	•	•	•	•	1	4	
322/276	63.0	56.2	31	2	17.7	•	58.5	75	7	•	•	•	•	•	•	•	•	•	•	•	•	1	1	
322/277	59.5	44.1	63	3	15.2	•	58.5	75	7	•	•	•	•	•	•	•	•	•	•	•	•	1	1	
322/278	61.0	48.3	74	1	14.1	•	52.5	75	7	•	•	•	•	•	•	•	•	•	•	•	•	1	1	
322/279	62.6	50.3	76	2	13.6	•	57.5	75	7	•	•	•	•	•	•	•	•	•	•	•	•	1	2	
322/280	61.8	47.8	67	2	15.1	•	54.5	80	6	•	•	•	•	•	•	•	•	•	•	•	•	1	2	
322/281	59.8	50.3	80	1	15.1	•	55.5	70	8	•	•	•	•	•	•	•	•	•	•	•	•	1	1	
322/282	61.1	55.2	89	1	14.8	•	55.5	75	5	•	•	•	•	•	•	•	•	•	•	•	•	1	1	
322/283	62.6	51.3	76	1	13.9	•	55.0	75	7	•	•	•	•	•	•	•	•	•	•	•	•	1	2	
322/286	62.7	49.8	81	1	15.6	•	60.5	80	3	•	•	•	•	•	•	•	•	•	•	•	•	1	2	
322/288	64.6	54.9	83	1	14.6	•	65.5	75	7	•	•	•	•	•	•	•	•	•	•	•	•	1	1	
322/289	64.0	57.3	89	1	13.5	•	55.0	70	7	•	•	•	•	•	•	•	•	•	•	•	•	1	1	
322/290	63.8	60.6	89	1	14.4	•	54.5	70	6	•	•	•	•	•	•	•	•	•	•	•	•	1	1	
322/293	63.8	57.3	89	1	14.5	•	54.5	75	6	•	•	•	•	•	•	•	•	•	•	•	•	1	1	
322/295	61.1	48.8	80	1	14.7	•	53.0	90	6	•	•	•	•	•	•	•	•	•	•	•	•	1	1	
322/296	61.8	46.7	77	1	14.7	•	50.5	80	8	•	•	•	•	•	•	•	•	•	•	•	•	1	1	
322/298	62.7	45.7	77	1	14.0	•	52.5	80	6	•	•	•	•	•	•	•	•	•	•	•	•	1	1	
322/299	64.2	43.5	73	1	12.0	•	54.0	80	7	•	•	•	•	•	•	•	•	•	•	•	•	1	1	
322/300	62.6	42.9	55	3	14.1	•	52.5	35	8	•	•	•	•	•	•	•	•	•	•	•	•	1	1	
322/301	64.0	42.7	71	1	14.6	•	54.5	75	7	•	•	•	•	•	•	•	•	•	•	•	•	1	1	
322/305	62.2	40.7	54	2	12.7	•	57.5	90	4	•	•	•	•	•	•	•	•	•	•	•	•	3	3	

DEFICIENCIES  
AVG OF STANDARDS  
MINOR FAULTING VALUES  
MAJOR FAULTING VALUEST<sub>W</sub> K<sub>W</sub> SN WP TX S<sub>X</sub> DU SK SP VI FR

61.6 46.3 2 14.0 56.5 50 • 53.5 90 • 52.5 12 11.5 75 • 11.5 75 •

\*\* EVALUATION 1=NO PROMISE. 2=LITTLE PROMISE. 3=SOME PROMISE. 4=GOOD PROMISE

TABLE 22A (Cont.)

QUALITY DATA OF DURUM SAMPLES 1983 CROP

STATE CALIFORNIA - SIALYNE IMPERIAL VALLEY - NURSEBY = PRELIMINARY

VARIETY	STD TW	1000 KAT	% LG_S24	% HT PRJ	TOT EXT	SEM EXT	DUS MX SPK	SENO MIN	FALL PRO	SEMO NO	SEMO PRO	VI	FIRM	RES	VALU **	TW	KW	SM	WP	TX	SK	SP	SX	DU	SK	SP	VII	FR	DEFICIENCIES
J22/30d	N.D.	STO.	5	61.0	48.0	51	2	14.0	0	56.5	90	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
J22/311				64.0	44.2	76	1	14.7	0	53.5	75	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	MJ	
J22/320				62.1	51.3	81	1	15.0	0	55.0	70	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	MJ	
J22/321				61.9	61.0	88	1	13.4	0	55.0	80	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
J22/322				61.4	51.5	73	3	13.1	0	55.5	95	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	
J22/324				63.4	46.5	69	1	15.1	0	54.5	70	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
J22/326				62.7	50.3	72	1	14.4	0	53.0	75	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	MJ	
J22/327				62.7	47.3	67	2	13.3	0	54.0	60	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
J22/328				64.5	47.1	75	1	14.1	0	54.5	85	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	MJ	
J22/329				64.2	52.1	77	1	13.8	0	56.0	85	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	
J22/330				58.9	51.5	74	2	14.3	0	51.5	80	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	MJ	
J22/332				63.7	46.3	76	1	15.0	0	51.0	80	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	MJ	
J22/333				62.4	42.9	62	2	12.3	0	53.5	60	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	MJ	
J22/335				64.3	43.5	69	2	13.0	0	56.0	75	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	MJ	
J22/336				62.4	47.8	69	2	13.0	0	53.0	75	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	MJ	
J22/337				61.4	48.3	78	2	14.4	0	55.5	75	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	MJ	
J22/338				62.2	52.6	73	2	13.9	0	55.0	75	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	MJ	
J22/339				60.6	47.8	74	2	15.7	0	52.5	75	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	MJ	
J22/340				61.3	50.3	77	1	15.4	0	55.0	75	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	MJ	

DEFICIENCIES  
AVG OF STANDARDS

MINOR FAULTING VALUES

MAJOR FAULTING VALUES

\*\* EVALUATION 1=NUG PROMISE, 2=LITTLE PROMISE, 3=SOME PROMISE, 4=GOOD PROMISE

TABLE 22A (Cont.)

QUALITY DATA OF DURUM SAMPLES 1983 CROP

STATE-LEVEL NURSERY PRELIMINARY

VARIETY	STD TW	1000 KAT	LG SEM	WHT PRO	TOT EXT	SEMO DUS	SEMO MX	SEMO MIN	SEMO PRO	VI	FIRM	RES VALU	** VALU	DEFICIENCIES								
														TW	RW	SW	WP	TX	SX	DU	SK	SP	VI
J22/303	N.D. STD.	5	61.6	46.0	51	2	14.0	•	56.5	90	7	•	•	•	•	•	•	•	•	•	•	4
J22/311		64.0	44.2	76	1	14.7	•	53.5	75	7	•	•	•	•	•	•	•	•	•	•	•	1
J22/320		62.1	51.3	81	1	15.6	•	55.0	70	8	•	•	•	•	•	•	•	•	•	•	•	1
J22/321		61.9	61.0	88	3	13.4	•	55.0	80	7	•	•	•	•	•	•	•	•	•	•	•	2
J22/324		61.4	51.5	73	3	13.1	•	55.5	95	7	•	•	•	•	•	•	•	•	•	•	•	4
J22/326		63.4	46.5	69	1	15.1	•	54.5	70	7	•	•	•	•	•	•	•	•	•	•	•	1
J22/327		62.7	50.3	72	1	14.4	•	53.0	75	7	•	•	•	•	•	•	•	•	•	•	•	1
J22/328		62.7	47.3	67	2	13.3	•	54.0	60	5	•	•	•	•	•	•	•	•	•	•	•	1
J22/329		64.5	47.1	75	1	14.1	•	54.5	85	6	•	•	•	•	•	•	•	•	•	•	•	4
J22/330		64.2	52.1	77	1	13.9	•	56.0	85	7	•	•	•	•	•	•	•	•	•	•	•	4
J22/332		58.9	51.5	74	2	14.3	•	51.5	80	8	•	•	•	•	•	•	•	•	•	•	•	1
J22/333		63.7	46.3	76	1	15.0	•	51.0	80	8	•	•	•	•	•	•	•	•	•	•	•	1
J22/334		62.4	42.9	62	2	12.3	•	53.5	60	5	•	•	•	•	•	•	•	•	•	•	•	1
J22/335		64.3	48.5	69	2	13.0	•	56.0	75	7	•	•	•	•	•	•	•	•	•	•	•	1
J22/336		62.4	47.8	69	2	13.0	•	53.5	70	6	•	•	•	•	•	•	•	•	•	•	•	1
J22/337		61.3	48.3	78	2	14.4	•	55.5	75	4	•	•	•	•	•	•	•	•	•	•	•	1
J22/338		62.2	52.6	78	2	13.9	•	55.0	75	5	•	•	•	•	•	•	•	•	•	•	•	1
J22/339		60.6	47.8	74	2	15.7	•	52.5	75	6	•	•	•	•	•	•	•	•	•	•	•	1
J22/340		61.3	50.8	77	1	15.4	•	55.0	75	5	•	•	•	•	•	•	•	•	•	•	•	1

AVG OF STANDARDS 61.6 46.3 2 14.0 TX SX DU SK SP V1 FR

MINOR FAULTING VALUES 59.4 44.2 7 12.5 • 53.5 90 • 11.5 •

MAJOR FAULTING VALUES 58.5 41.2 12 11.5 • 52.5 80 • 11.0 •

\*\* EVALUATION 1=NO PROMISE, 2=LITTLE PROMISE, 3=SOME PROMISE, 4=GOOD PROMISE

QUALITY DATA OF DURUM SAMPLES  
1983 CROP  
14TH INTERNATIONAL DURUM YIELD NURSERY  
DAVIS, CALIFORNIA

TABLE 23

VARIETY	STD	TW	1000 KWT	LG %	SM %	HT PRO	TOT EXT	SEMEXT	DUS MAX	SPK MIN	SEMNO PRO	VI	FIRM	RES VALU	** VALU	TW KW SP DU SX 1X SK FR	DEFICIENCIES
CIELESD	63.4	50.3	69	2	10.2	74.9	57.6	65	6	47	0.71	400	9.7	6.5	5.64	7.9	MJ
DURAL	63.3	50.3	74	1	12.7	75.7	57.1	30	7	53	0.77	400	11.3	6.5	6.74	6.9	4
EDMURE	S 63.3	50.3	63	2	12.1	72.2	54.0	95	5	83	0.65	400	11.7	7.5	5.33	7.4	MJ
HADJ MULINE	S 62.9	36.5	12	4	10.1	72.5	53.4	65	3	89	0.58	400	9.7	7.0	5.31	9.2	1
LA DULCE	64.0	54.9	B3	1	11.9	74.6	57.3	30	3	63	0.63	400	10.6	7.5	5.44	7.6	MJ
MES AURIA	62.7	53.5	75	2	11.5	73.3	57.6	70	2	90	0.62	400	10.5	6.5	4.30	8.0	MJ
MEXICALI 75	S 61.9	51.3	76	2	11.0	73.5	57.4	80	4	99	0.71	400	10.0	7.0	5.34	7.7	MJ
TASSILI 77	S 61.4	55.2	72	3	12.5	76.2	58.7	70	8	87	0.74	400	11.5	7.0	5.20	7.5	MJ
VAL NURA	64.6	54.1	78	1	12.0	74.1	57.1	65	9	30	0.65	400	10.6	7.0	5.85	7.9	MJ
YAVAROS 79	64.6	54.3	78	2	11.2	74.6	57.8	70	3	99	0.60	400	10.2	6.5	5.53	7.7	MJ
371/5	63.5	53.2	30	1	13.0	73.7	56.7	60	7	67	0.53	400	11.7	7.0	6.00	7.1	MJ
371/10	63.7	53.2	72	2	10.4	73.6	56.5	30	4	47	0.66	400	9.7	8.0	5.57	8.0	MJ
371/14	65.3	45.3	96	1	11.2	75.4	58.3	70	7	37	0.64	400	10.1	6.07	7.7	1	MJ
371/20	62.2	49.5	77	1	13.2	72.2	55.1	70	3	99	0.66	400	11.6	7.0	6.48	8.3	MJ
371/23	63.8	55.6	73	2	10.9	74.0	57.6	65	2	60	0.61	400	10.2	7.0	4.90	8.1	MJ
371/25	64.1	42.4	48	2	12.9	71.4	52.9	100	6	47	0.63	400	11.8	8.0	5.81	7.5	MJ

DEFICIENCIES  
AVG OF STANDARDS  
MINOR FAULTING VALUES  
MAJOR FAULTING VALUES

1=NO PROMISE, 2=LITTLE PROMISE, 3=SOME PROMISE, 4=GOOD PROMISE

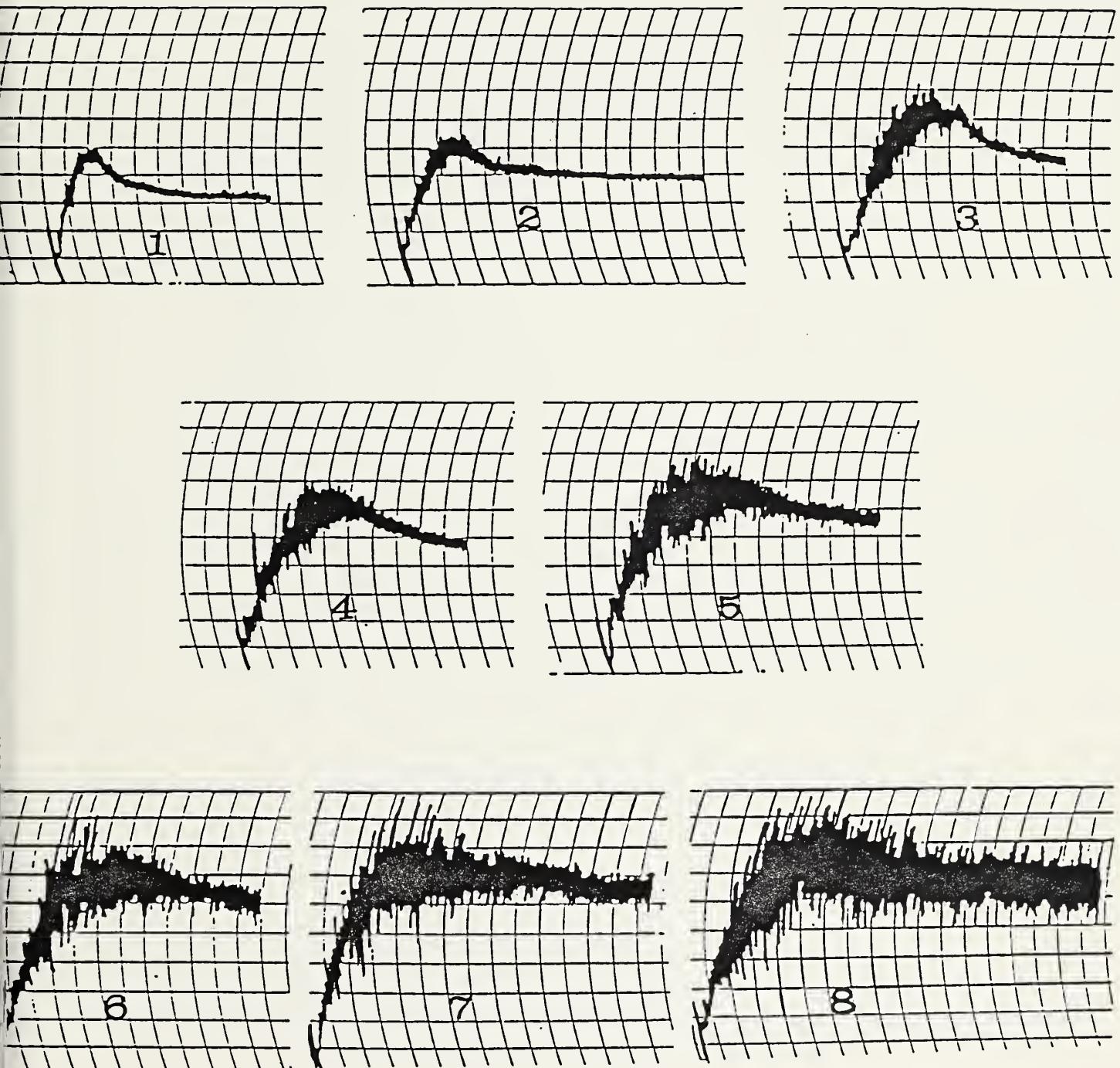
QUALITY DATA OF DURUM SAMPLES  
1963 CROP  
ELITE DURUM YIELD TRIAL  
DAVIS, CALIFORNIA

TABLE 24

VARIETY	STD TW	1000 KWT	LG SM %	WHT PRO EXT	TOT EXT	SEM0 DUS	SEM0 MX	SEM0 SPK	SEM0 F ALL	SEM0 NO PROJ	VI	FURN	RES	** VALU TW KW SPX DU SX DU SP TX SX WFP TX SX DEFICIENCIES					
PRODURA	S	64.1	46.7	73	2	10.7	73.3	55.5	60	3	4.3	0.94	400	10.2	6.5	5.44	7.2	1	MJ
SAHUL 77	S	63.8	46.3	56	3	10.4	75.8	56.7	60	4	4.7	0.60	400	9.8	6.5	5.81	8.2	1	MJ
372/78	S	63.4	48.8	70	2	10.1	69.1	53.1	60	3	4.3	0.60	400	9.7	6.5	5.79	7.7	1	MJ
372/1*	S	64.5	43.8	75	1	11.3	73.1	55.4	60	3	53	0.60	400	10.7	3.0	5.40	7.2	1	MJ
J72/10	S	62.4	51.8	83	1	11.3	71.3	53.1	90	7	37	0.65	400	10.4	7.5	7.13	7.8	1	MJ
J72/16	S	63.8	56.2	83	1	12.4	72.4	52.2	65	6	4.7	0.65	400	11.5	7.0	6.70	7.5	1	MJ
J72/18	S	65.4	44.4	71	1	10.3	71.8	54.4	90	5	37	0.61	400	9.6	7.5	6.70	7.5	1	MJ
J72/22	S	62.7	49.8	60	2	11.2	71.4	52.6	75	6	33	0.71	400	10.7	6.3	6.85	8.6	1	MJ
J72/24	S	61.4	49.3	74	2	9.9	69.9	54.3	75	2	37	0.67	400	9.5	8.0	5.27	7.4	1	MJ
																			MJ

DEFICIENCIES  
AVG OF STANDARDS  
MINOR FAULTING VALUES  
MAJOR FAULTING VALUES

\*\*EVALUATION 1=NO PROMISE, 2=LITTLE PROMISE, 3=SOME PROMISE, 4=GOD PROMISE



REFERENCE MIXOGRAMS  
DURUM WHEAT

