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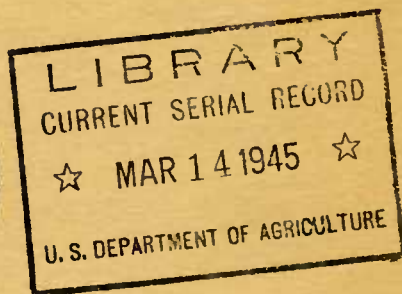
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**UNITED STATES
DEPARTMENT OF AGRICULTURE
WASHINGTON, D. C.**

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IMPORTANCE OF VARIETIES IN BARLEY IMPROVEMENT

Research on barley has brought to American farmers many new varieties that are constantly increasing the efficiency of their production of this important cereal, and continuing investigations look toward a still greater efficiency. More than 5,000 varieties of barley have been tested by the United States Department of Agriculture and by State and Canadian agricultural experiment stations. Only a few of these varieties are at present under cultivation on farms, because there is a decided advantage in growing a limited number of varieties. Yet it is at the same time highly important to sow only those that have been shown by testing to be high yielding and suited to a locality. What

¹ Submitted for publication June 1944.

varieties to seed, when, and in what quantity per acre is the subject of a Farmers' Bulletin recently revised.² The selection of still better varieties both for stock feed and for industrial uses is a constant concern of barley breeders.

Continuing the periodic reports of the Department of Agriculture on the yields of barley varieties in the United States and Canada, which were begun in 1925, this bulletin makes available to barley breeders of both countries essential data obtained on the testing fields during the years 1937-41. The first of this series included a comprehensive summary to 1921 of the early history of barley production and of the development of varieties.³ Subsequent reports cover the 5-year periods 1922-26,⁴ 1927-31,⁵ and 1932-36.⁶

The agricultural experiment stations from which the yield data were obtained—114 in the United States and 24 in Canada (fig. 1)—cover all



FIGURE 1.—Location of stations in the United States and Canada from which barley yields are reported in this bulletin.

the important barley-producing areas of these two countries. The results are therefore of value to growers on both sides of the border, as

² HARIAN, H. V., and WIEBE, G. A. GROWING BARLEY FOR MALT AND FEED. U. S. Dept. Agr. Farmers' Bul. 1732, 19 pp., illus. 1943. (Revised.)

³ MARTINI, M. L., and POPE, M. N. TESTS OF BARLEY VARIETIES IN AMERICA. U. S. Dept. Agr. Dept. Bul. 1334, 219 pp., illus. 1925.

⁴ NEWMAN, L. H., and MARTINI, M. L. YIELDS OF BARLEY IN THE UNITED STATES AND CANADA, 1922-1926. U. S. Dept. Agr. Tech. Bul. 96, 84 pp. 1929.

⁵ COWAN, P. R., and REINBACH, L. YIELDS OF BARLEY IN THE UNITED STATES AND CANADA, 1927-31. U. S. Dept. Agr. Tech. Bul. 446, 80 pp. 1935.

⁶ WIEBE, G. A., COWAN, P. R., and REINBACH-WELCH, L. YIELDS OF BARLEY IN THE UNITED STATES AND CANADA, 1932-36. U. S. Dept. Agr. Tech. Bul. 735, 78 pp. 1940.

farmers at some distance from their own testing stations are better served by nearby stations of the neighboring country to the north or to the south.

To facilitate the use of the data, percentage comparisons have been made, computed on the total yield of the varieties tested in terms of some standard variety grown at each station for a comparable period. The data for the United States are given in tables 1 to 38; for Canada, in tables 39 to 47.

A summary of superior varieties is given in table 48 (p. 57), showing the highest and second highest in yield for each station for the 5-year period. If a variety was tested for less than 5 years with good results this fact also is indicated. The choice of a variety in this last category was often arbitrary, as another could have been chosen with equal grounds.

In the United States there is considerable variation in the type of plot used in testing. Since the accuracy of the results is influenced by the size and shape of the plot and by the number of replications used, a compilation of these factors was made and is presented in table 49 (p. 63). In this table plots of 300 square feet or less are considered as nursery plots and those of greater area as field plots. This is an arbitrary division, but it seems to segregate the tests reported fairly well. In Canada there is much less variation in the type and size of plot used, the greater part of the tests being conducted in nursery plots.

The varieties tested at most stations are not those tested 20 years ago. Since many new ones have entered the tests, it seems desirable to give a brief description and the origin of each, especially for those of hybrid origin. The older varieties were described in the first report above-mentioned.⁷ A description of the varieties reported in the present bulletin, their origin or source, and an index to the tables in which each is mentioned are given in table 50 (p. 70). These were grown at Madison, Wis., in the summer of 1942, in order to study their botanical characters. For most of the descriptive notes the present writers are greatly indebted to Ewert Aberg, collaborator of the Division of Cereal Crops and Diseases and research assistant of the University of Wisconsin, while on leave of absence from the Agricultural College, Uppsala, Sweden.

The bulk of the data from Canada consists of results obtained by the Dominion Experimental Farms. This is an extensive testing agency, and responsibility for the presentation of the results has been accepted by P. R. Cowan as an author of this bulletin. This, naturally, should not be taken to mean that the material from the independent Provincial agencies is not on an absolutely equal footing in authorship, but only that, because of the number of stations, the task of preparing the material from the Dominion Experimental Farms has been more onerous.

As in previous reports, the data were contributed by many agencies, and the Division of Cereal Crops and Diseases has functioned only as an agency for compiling the results and for calculating the averages and percentages. It is freely acknowledged that the real authors of this bulletin are the agronomists at the various agricultural experiment stations, whose names are listed preceding the tabulation for each State and Province. It is through their unselfish cooperation that this report is made possible.

⁷ See footnote 3, p. 2.

RESULTS OF TESTS BY STATIONS (TABLES 1-47)

ALABAMA

Alabama Polytechnic Institute, Auburn.....D. G. Sturkie.
 Tennessee Valley Substation, Belle Mina.....Fred Stewart.
 Sand Mountain Substation, Crossville.....R. C. Christopher.
 Black Belt Substation, Marion Junction.....K. G. Baker.

TABLE 1.—*Acre yields of varieties of barley grown at agricultural experiment stations in Alabama in 1 or more of the years 1937-41*

[Data obtained through the courtesy of the Alabama Polytechnic Institute in cooperation with the Division of Cotton and Other Fiber Crops and Diseases, United States Department of Agriculture]

Station and variety	C. I. ¹ No.	Number of plots and acre yield										Average yield, 1937-41	Relative yield com- pared with stand- ard
		1937		1938		1939		1940		1941			
		Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield		
			Bu.		Bu.		Bu.		Bu.		Bu.	Bu.	Per- cent
Auburn:													
Tennessee Beardless 5 2	3384									2	35.0		100.0
Marnobarb.....	6120			2	5.6					2	37.0		105.7
Belle Mina:													
Tennessee Beardless 5 2	3384	2	16.2					2	50.0	2	36.1		100.0
Marnobarb.....	6120							2	44.0	2	40.5		98.1
Crossville:													
Tennessee Beardless 5 2	3384	2	26.3	2	20.1	2	10.9	2	27.9	2	27.3	22.5	100.0
Marnobarb.....	6120							2	24.2	2	37.5		111.8
Marion Junction:													
Tennessee Beardless 5 2	3384					2	17.0	2	19.0	2	51.0		100.0
Marnobarb.....	6120					2	46.6	2	25.0	2	49.2		138.9

¹ C. I. in this and subsequent tables refers to accession number of the Division of Cereal Crops and Diseases.

² Standard with which other varieties are compared for comparable years.

ARIZONA

Salt River Valley Experiment Farm, Mesa

.....D. C. Aepli; also A. T. Bartel, Tucson.

United States Field Station, Sacaton.....C. J. King.

TABLE 2.—*Acre yields of varieties of barley grown at agricultural experiment stations in Arizona in 1 or more of the years 1937-41*

[Data for Mesa obtained in cooperation with the Arizona Agricultural Experiment Station and for Sacaton through the courtesy of the Division of Cotton and Other Fiber Crops and Diseases]

Station and variety	C. I. No.	Station No.	Number of plots and acre yield										Average yield, 1937-41	Relative yield compared with stand- ard
			1937		1938		1939		1940		1941			
			Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield		
Mesa:				Bu.		Bu.		Bu.		Bu.		Bu.	Bu.	Per- cent
Vaughn ¹ -----	1367	19	3	57.2	3	78.8	3	99.2	3	81.5	2	94.2	82.2	100.0
Arivat-----	6573	269	3	72.9	3	93.8	3	96.3	3	87.8	2	95.6	89.3	108.6
California Mariout-----	1455	341							3	86.4	2	97.0		104.4
Atlas X Vaughn-----	7064	Moscow 6	3	64.5	3	90.0	3	96.3						106.6
Scarab-----	995	22	3	64.9	3	83.3	3	89.7						101.1
Union Beardless-----	5976	246	3	60.7	3	67.5	3	84.6						90.5
Common Six-Row-----	4625	39	3	58.0	3	61.5	3	86.8						87.7
Sacramento-----	4108	2	3	68.3	3	81.0								109.8
Trebi-----	936	3	3	57.5	3	66.8								91.4
Sacaton: ²														
Common Six-Row ¹	4625	-----	1	39.7	2	61.3	-----		3	60.9	3	52.8	-----	100.0
Trebi-----	936	-----	1	44.1	2	55.0	-----		3	52.9	3	44.8	-----	91.7
Vaughn-----	1367	-----	1	53.6	-----				3	59.3	3	63.4	-----	114.9
Arivat-----	6573	-----							3	63.3	3	64.0	-----	112.0
Sacramento-----	4108	-----	1	14.5	2	90.6	-----						-----	104.1
Scarab-----	995	-----	1	81.4	2	83.8	-----						-----	163.6
Union Beardless-----	5976	-----	1	51.1	2	63.5	-----						-----	114.6
Atlas X Vaughn-----	7064	Moscow 6	2	68.9	-----								-----	173.6

¹ Standard with which other varieties are compared for comparable years.

² No test conducted at Sacaton in 1939.

ARKANSAS

Arkansas Agricultural Experiment Station, Fayetteville...C. K. McClelland.

Rice Branch Experiment Station, Stuttgart.....C. Roy Adair.

TABLE 3.—*Acre yields of varieties of barley grown at agricultural experiment stations in Arkansas in 1 or more of the years 1937-41*

[Data for Fayetteville obtained through the courtesy of the Arkansas Agricultural Experiment Station and for Stuttgart in cooperation with the Arkansas Agricultural Experiment Station]

Station and variety	C. I. No.	Station No.	Number of plots and acre yield										Average yield, 1937-41	Relative yield compared with standard
			1937		1938		1939		1940		1941			
			Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield		
Fayetteville:														
<i>Fall-sown</i>														
Kentucky 6 1	4678		1	30.4	1	30.1	1	38.3	2	40.7	1	20.9	32.1	100.0
Alaska	4106		1	31.5	1	25.4	1	41.4	2	40.5	1	23.7	32.5	101.3
Tennessee Beardless 6	2746		1	24.1	1	12.7	1	19.7	2	25.4	1	23.2	21.0	65.5
Tennessee Winter 57	3544		1	28.6	1	29.6	1	32.4	2	38.1	1	23.7	30.5	95.0
Tennessee Winter 52	3543		1	34.4	1	24.3	1	37.2	2	43.2	1	24.9	32.8	102.2
Orel	351		1	35.5	1	31.7	1	41.3	2	30.9	1	31.6	34.2	106.6
Tenkow	646		1	30.9	1	25.4	1	45.7	2	42.3	1	25.6	34.0	105.9
Kentucky 36	4677		1	32.1	1	23.3	1	38.3	2	34.7	1	17.2	29.1	90.8
Union Winter	583		1	23.5	1	15.3	1	36.7	2	39.1	1	17.2	26.4	82.2
Tennessee Winter	6034								2	33.3	1	21.4		88.8
Missouri Early Beardless	6051								2	25.1	1	21.4		75.5
Flynn 1	5911								2	15.9	1	11.2		44.0
Vaughn	1367								2	15.1	1	11.2		42.7
Stavropol	5913								2	23.9	1	25.1		79.5
Tennessee Winter 61	3545		1	26.4	1	33.8	1	35.1	2	36.8				94.7
Kentucky Winter	4641		1	35.5	1	31.2	1	43.0	2	40.5				107.7
<i>Spring-sown</i>														
Stavropol 1	5913				1	22.7	3	26.8	2	25.2	2	9.4		100.0
Flynn	1311				1	13.7	3	19.7	2	24.1	2	6.3		75.9
Vaughn	1367				1	16.9	3	20.4	2	23.6	2	3.1		76.1
Stuttgart:														
<i>Fall-sown</i>														
Tennessee Winter 52 1	3543										3	45.7		100.0
Jackson	6569	Tenn. B5-9 (S)									3	57.5		125.8
Davidson	6373	N. C. 15									3	55.9		122.3
Composite Cross selection	6564	N. C. 11									3	53.9		117.9
Kentucky 11	6021										3	53.1		116.2
Smooth Awn 86	6268										3	46.6		102.0
Marnobarb	6120										3	43.3		94.7
Tennessee Smooth Awn	6570	Tenn. B5-14									3	39.4		86.2
Missouri Early Beardless	6051										3	38.5		84.2
Wisconsin Winter	2159										3	37.7		82.5
Nakano Wase 59	6567										3	37.2		81.4
Tennessee Beardless 5	3384										3	36.8		80.5
Tennessee Winter 66	3546										3	35.8		78.3
Tennessee Winter X Smooth Awn	6565										3	35.5		77.7
Randolph	6372	N. C. 1-68									3	31.6		69.1
Wintex	6127										3	30.6		67.0
Purdue 28156A3-2-2-2	6562										3	28.3		61.9
Union Winter	583										3	27.2		59.5
Tennessee Winter	6034										6	25.8		56.5
Purdue 1101	4582										3	25.4		55.6
Reno	6561										3	22.9		50.1
Esaw	4690										3	22.6		49.5
Kentucky 1	6050										3	20.8		45.5

¹ Standard with which other varieties are compared for comparable years.

CALIFORNIA

University Farm, Davis.....C. A. Suneson.

TABLE 4.—*Acre yields of varieties of barley grown at University Farm, Davis, in 1 or more of the years 1937-41*

[Data obtained in cooperation with the California Agricultural Experiment Station]

Variety	C. I. No.	Number of plots and acre yield										Average yield, 1937-41	Relative yield com- pared with stand- ard
		1937		1938		1939		1940		1941			
		Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield		
			Bu.		Bu.		Bu.		Bu.		Bu.	Bu.	Per- cent
Vaughn ¹	1367	5	66.9	5	69.4	5	40.2	5	56.6	7	69.3	60.5	100.0
Atlas.....	4118	5	69.8	5	66.2	5	36.6	5	55.6	7	52.7	56.2	92.9
California Coast.....	6115	5	56.5	5	58.5	5	33.1	5	50.6	7	62.9	52.3	86.5
Coast.....	4633	5	52.4	5	63.5	5	38.5	5	59.9	7	71.2	57.1	94.4
Club Mariout.....	261	5	66.2	5	54.3	5	38.7	5	46.1	7	57.9	52.6	87.0
Hero.....	4602	5	66.4	5	61.0	5	39.7	5	53.5	7	59.2	56.0	92.5
Hannchen.....	531									7	55.8		80.5
California Mariout.....	1455									7	44.4		64.1
Rojo (Sta. No. 1017).....	5401									7	66.9		96.5
Blanco.....	5045	5	55.9	5	49.2	5	32.0						77.7
Stewart.....	6112	5	67.6	5	51.4								87.3
C-422.....	6113	5	62.8										93.9
C-308.....	6114	5	64.3										96.1

¹ Standard with which other varieties are compared for comparable years.

COLORADO

Colorado Agricultural Experiment Station, Fort Collins....D. W. Robertson.

United States Dry Land Field Station, Akron.....J. F. Brandon.

Fort Lewis Substation, Hesperus.....Dwight Koonce.

TABLE 5.—*Acre yields of varieties of barley grown at agricultural experiment stations in Colorado in 1 or more of the years 1937-41*

[Data for Fort Collins and Hesperus obtained through the courtesy of the Colorado Agricultural Experiment Station and for Akron in cooperation with the Colorado Agricultural Experiment Station and the Division of Dry Land Agriculture]

Station and variety	C. I. No.	Station No.	Number of plots and acre yield										Average yield, 1937-41	Relative yield compared with standard
			1937		1938		1939		1940		1941			
			Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield		
Fort Collins: ¹				Bu.		Bu.		Bu.		Bu.		Bu.	Bu.	Per-cent
Trebi ² -----	936		10	58.4	10	58.4			7	59.9	7	85.3		100.0
Lico-----	6279	³ F. C. 1110	10	75.8	10	63.1			7	51.4	7	72.6		100.3
Ezond-----	5064		10	64.5	10	55.6			7	67.2	7	82.1		102.8
Wisconsin Barbless	5105		10	64.4	10	51.6			7	48.9	7	73.5		91.0
Coast X Lion-----	6368	F. C. 1109	10	63.4	10	55.9			7	55.6	7	78.8		96.8
Velvon-----	6109		10	63.4	10	57.7			7	63.3	7	87.7		103.9
Trebi X Colsess-----	6369	F. C. 1124	10	59.1	10	56.8			7	62.4	7	96.6		104.9
Do-----	6370	F. C. 1125	10	56.4	10	64.5			7	54.7	7	88.8		100.9
Coast 23-----	2791		10	52.2	10	42.3			7	36.6	7	65.1		74.9
Colsess-----	2792		10	51.5	10	46.1			7	45.0	7	65.4		79.4
Velvet-----	4252		10	41.9	10	49.5			7	43.8	7	74.3		80.0
Nepal-----	595		10	37.2	10	31.1			7	34.7	7	55.9		60.6
Hannchen-----	531		10	26.2	10	64.9			7	51.0	7	80.2		84.8
Composite Cross-----	5461		10	42.1	10	51.5			7	51.0	7	73.8		83.4
Regal-----	5030				10	43.1			7	45.7	7	78.1		82.0
Beecher-----	6566								7	45.3	7	70.0		79.4
Arivat-----	6573								7	53.7	7	77.5		90.4
Warrior-----	6991										7	72.6		85.1
Colsess X Trebi-----	6986	F. C. 1139	10	62.2	10	53.8			7	54.6				96.5

See footnotes at end of table.

TABLE 5.—*Acre yields of varieties of barley grown at agricultural experiment stations in Colorado in 1 or more of the years 1937-41—Continued*

Station and variety	C. I. No.	Station No.	Number of plots and acre yield										Average yield, 1937-41	Relative yield compared with standard
			1937		1938		1939		1940		1941			
			Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield		
Fort Collins—Con. Union Beardless— (Canadian Thorpe X Coast) X (Black Six-Row X Coast)	5976		10	Bu. 57.8	10	Bu. 36.0		Bu.	7	Bu. 33.0		Bu.	Bu.	Percent 71.8
Peatland	6985	F. C. 1140	10	62.8	10	55.8			7	53.0				97.1
Akron: 4	5267		10	21.8	10	48.5								60.2
Club Mariout 2	261		4	18.2	4	25.9	4	5.4	4	1.0	4	28.9	15.9	100.0
Trebi	936		4	14.2	4	16.8	4	.9	4	1.2	4	37.5	14.1	88.9
Coast	690		4	17.0	4	26.1	4	4.1	4	1.4	4	34.7	16.7	104.9
Himalaya	620		4	11.2	4	14.6	4	2.5	4	1.0	4	23.9	10.6	67.0
Spartan	5027		4	17.5	4	24.0	4	5.6	4	1.2	4	35.3	16.7	105.3
Vance	4585		4	16.4	4	31.7	4	3.8	4	1.9	4	37.8	18.3	115.4
Blackhull 1180	6009		4	18.7	4	33.7	4	4.0	4	1.2	4	36.9	18.9	119.0
Flynn	1311		4	12.8	4	23.9	4	4.4	4	1.0	4	32.1	14.8	93.5
Vaughn	1367		4	18.6	4	28.6	4	5.1	4	1.1	4	28.2	16.3	102.8
Blackhull	878		4	13.8	4	27.4	4	3.4	4	1.2	4	25.1	14.2	89.3
Beecher	6566	Moscow 9			4	34.3	4	6.7	4	1.2	4	29.9		117.8
North Platte 1	5266						4	5.0	4	1.4	4	34.1		114.7
Atlas X Vaughn	6973	Moscow 13									4	28.4		98.3
Lico	6279		4	14.8	4	21.3	4	3.8	4	1.2				81.4
Atlas X Vaughn	6970	Moscow 1			4	29.2	4	5.0	4	.7				108.0
Composite Cross selection	5414		4	18.1	4	25.3	4	6.3						100.4
Blackhull 1178	5679		4	18.0										98.9
Pryor	2359		4	15.6										85.7
Hesperus:														
Trebi 2	936		10	74.7	10	90.5	10	57.1	10	31.0	10	58.0	62.3	100.0
Lico	6279	F. C. 1110	10	73.6	10	79.4	10	52.6	10	54.0	10	62.4	64.4	103.4
Trebi X Colless	6369	F. C. 1124	10	78.0	10	80.9	10	50.8	10	46.1	10	63.4	63.8	102.5
(Canadian Thorpe X Coast) X (Black Six-Row X Coast)	6985	F. C. 1140	10	78.1	10	80.2	10	51.8	10	48.3	10	58.0	63.3	101.6
Coast X Lion	6368	F. C. 1109	10	66.6	10	85.5	10	54.8	10	47.8	10	59.5	62.8	100.9
Velvon	6109	F. C. 1138	10	67.8	10	69.3	10	57.5	10	55.7	10	55.0	61.1	98.1
Colless X Trebi	6986	F. C. 1139	10	68.0	10	70.5	10	51.3	10	42.1	10	55.6	57.5	92.4
Trebi X Colless	6370	F. C. 1125	10	66.2	10	77.5	10	43.3	10	39.8	10	59.4	57.2	91.9
Wisconsin Barbless	5105		10	63.4	10	79.0	10	49.0	10	38.1	10	54.6	56.8	91.3
Coast 23	2791		10	54.9	10	75.0	10	52.9	10	39.8	10	51.2	54.8	88.0
Ezond	5064		10	69.1	10	65.3	10	48.1	10	39.2	10	51.6	54.7	87.8
Hannchen	531		10	58.0	10	70.1	10	48.0	10	42.8	10	52.0	54.2	87.0
Velvet	4252		10	56.4	10	68.1	10	35.1	10	38.0	10	48.2	49.2	79.0
Colless	2792		10	42.4	10	58.7	10	43.4	10	35.0	10	47.2	45.3	72.8
Regal	5030				10	63.5	10	31.1	10	43.9	10	53.0		80.9
Flynn 134	6987						10	65.1	10	47.6	10	47.8		109.9
Arivat	6573							10	68.5	10	53.2			136.7
Beecher	6566							10	66.6	10	52.5			133.8
Lico 393	6988									10	68.0			117.2
Lico 351	6989									10	66.9			115.3
Lico 448	6990									10	64.7			111.6
Warrior	6991									10	61.4			105.9
Union Beardless	5976		10	57.5	10	72.5	10	46.1	10	52.0				90.1
Coast X Lion		F. C. 1119	10	72.0	10	79.4								91.6
Do		F. C. 1123	10	66.0	10	76.0								86.0
Peatland	5267		10	53.7	10	51.4								63.6

1 No test conducted at Fort Collins in 1939.

2 Standard with which other varieties are compared for comparable years.

3 F. C. = Fort Collins.

4 Yields at Akron greatly reduced by drought in 1939 and by hail and drought in 1940.

DELAWARE

Delaware Agricultural Experiment Station, Newark.....G. L. Schuster.
 Milford Plats, Milford.....In care of G. L. Schuster, Newark.

TABLE 6.—*Acre yields of varieties of barley grown at agricultural experiment stations in Delaware in 1 or more of the years 1937-41*

[Data obtained through the courtesy of the Delaware Agricultural Experiment Station]

Station and variety	C. I. No.	Number of plots and acre yield										Average yield, 1937-41	Relative yield compared with standard
		1937		1938		1939		1940		1941			
		Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield		
			Bu.		Bu.		Bu.		Bu.		Bu.	Bu.	Percent
Newark:													
Tennessee Winter 1	257	5	20.9	5	40.1	5	32.4	5	20.9	5	43.0	31.5	100.0
Tennessee Winter 52	3543	5	20.4	5	38.4	5	31.2	5	20.1	5	33.9	28.8	91.5
Tennessee Winter 76	6992	5	20.9	5	33.9	5	32.7	5	18.0	5	42.7	29.6	94.2
Kentucky 1	6050	5	23.0	5	42.9	5	31.8	5	20.0	5	45.2	32.6	103.6
Kentucky 2	6993	5	20.2	5	39.7	5	34.0	5	21.6	5	43.6	31.8	101.1
Kentucky 20	6994	5	25.5	5	44.4	5	37.2	5	13.4	5	47.3	33.6	106.7
Purdue 21	4581	5	19.4	5	35.6	5	28.2	5	17.0	5	38.1	27.7	87.9
Purdue 1101	4582	5	21.2	5	43.1	5	33.8	5	16.6	5	49.0	32.7	104.1
Michigan Winter	2036	5	19.3	5	37.7	5	36.2	5	18.4	5	39.7	30.3	96.2
Manchuria	2947	5	22.7	5	45.9	5	35.2	5	20.5	5	42.1	33.3	105.8
Smooth Awn 86	6268	---	---	---	---	---	---	---	17.2	---	49.8	---	106.3
Smooth Awn 102	6995	---	---	---	---	---	---	---	17.2	---	48.1	---	102.2
Sunrise	6272	---	---	---	---	---	---	---	16.4	---	40.8	---	89.5
Wisconsin Winter	2159	---	---	---	---	---	---	5	18.6	---	36.6	---	86.4
Marnobarb	6120	---	---	---	---	---	---	---	---	5	40.8	---	94.9
Milford:													
Tennessee Winter 1	257	5	33.7	5	24.5	5	25.4	5	46.8	5	28.2	31.7	100.0
Tennessee Winter 52	3543	5	38.1	5	18.4	5	19.1	5	41.0	5	24.8	28.3	89.2
Tennessee Winter 76	6992	5	38.7	5	17.8	5	23.8	5	49.2	5	29.7	31.8	100.4
Kentucky 1	6050	5	39.3	5	22.2	5	22.2	5	50.3	5	24.6	31.7	100.0
Kentucky 2	6993	5	34.4	5	24.3	5	19.3	5	39.2	5	22.4	27.9	88.0
Kentucky 20	6994	5	45.8	5	27.3	5	27.0	5	47.2	5	30.9	35.6	112.4
Purdue 21	4581	5	33.3	5	20.1	5	20.8	5	39.4	5	25.2	27.8	87.5
Purdue 1101	4582	5	34.6	5	20.8	5	22.4	5	48.6	5	24.9	30.3	95.4
Michigan Winter	2036	5	38.4	5	24.4	5	29.3	5	47.0	5	29.7	33.8	106.4
Manchuria	2947	5	37.6	5	24.1	5	26.4	5	46.4	5	23.7	31.6	99.7
Smooth Awn 86	6268	---	---	---	---	---	---	---	63.1	---	37.9	---	134.7
Smooth Awn 102	6995	---	---	---	---	---	---	---	44.6	---	32.0	---	102.1
Sunrise	6272	---	---	---	---	---	---	---	50.6	---	29.9	---	107.3
Wisconsin Winter	2159	---	---	---	---	---	---	5	41.8	---	20.8	---	83.5
Marnobarb	6120	---	---	---	---	---	---	---	---	5	32.5	---	115.2

1 Standard with which other varieties are compared for comparable years.

GEORGIA

Georgia Agricultural Experiment Station, Experiment.....R. P. Bledsoe.
College of Agriculture of the University of Georgia, Athens...W. C. Collins.

TABLE 7.—Acre yields of varieties of barley grown at agricultural experiment stations in Georgia in 1 or more of the years 1937-41

[Data obtained through the courtesy of the Georgia Agricultural Experiment Station and the College of Agriculture of the University of Georgia]

Station and variety	C. I. No.	Station No.	Number of plots and acre yield										Average yield, 1937-41	Relative yield compared with standard
			1937		1938		1939		1940		1941			
			Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield		
Experiment: ¹				Bu.		Bu.		Bu.		Bu.		Bu.	Bu.	Per-cent
Tennessee Beardless 5 ²	3384	184	6	0	6	17.6	6	57.6	6	34.4	10	26.6	27.2	100.0
Greece	221	168	6	0	6	18.9	6	57.8	6	32.9	10	37.1	29.3	107.7
Tennessee Winter	257	169	6	0	6	18.4	6	58.5	6	38.2	10	37.0	30.4	111.7
Texas Winter	554	171	6	0	6	19.7	6	57.5	6	38.6	10	36.8	30.5	112.0
Wisconsin Winter	519	172	6	0	6	18.4	6	59.7	6	37.5	10	36.2	30.4	111.5
Greece X Tennessee Beardless 5	6996	H398-1-2-2-5	6	0	6	17.5	6	58.4	6	37.3	10	33.8	29.4	107.9
Do	6997	H398-1-2-2-6	6	0	6	16.6	6	56.5	6	35.4	10	34.2	28.5	104.8
Do	6998	H398-1-2-11-4	6	0	6	23.5	6	65.2	6	39.4	10	36.0	32.8	120.5
Tennessee Beardless 5 selection	7001	P 900	6	0	6	14.6	6	43.9	6	31.1	10	33.6	24.6	90.5
Esaw	4690	970	6	0	6	20.7	6	57.8	6	37.6	10	27.9	28.8	105.7
Greece X Tennessee Beardless 5	6999	H398-1-2-2-5-4	6	0	6	17.3	6	57.5			10	36.3		109.1
North Carolina Hooded	5951	975	6	0	6	15.0	6	51.3			10	23.6		88.3
Nakano Wase 33	6269	965							6	36.1	10	26.4		102.5
Sunrise	6272	966							6	39.8	10	32.5		118.5
Marnobarb	6120	1135							6	23.5	10	13.2		60.2
Tennessee Beardless 5 selection	7002	P 901									10	39.0		146.6
Do	7003	P 906									10	37.3		140.2
Smooth Awn 203	6267	968									10	35.0		131.6
Smooth Awn 205	7004	969									10	34.4		129.3
Blackhull 1178	5679	979									10	34.7		130.5
Athens:														
Nakano Wase ²	2164		4	56.0	4	50.1	4	33.3	4	32.3	4	24.7	39.3	100.0
Tennessee Beardless 5	3384		4	41.5	4	32.8	4	16.6	4	38.8	4	34.1	32.8	83.4
Tennessee Winter 66	3546		4	37.1	4	56.9	4	23.0	4	42.7	4	33.0	38.5	98.1
Tennessee Winter	257		4	32.6	4	52.5	4	22.8	4	34.4	4	36.7	35.8	91.1
Awnless	5922		4	31.5	4	50.0	4	43.8	4	39.6	4	40.1	41.0	104.4
Argentine	4594		4	19.2	4	59.2	4	33.3	4	55.8	4	55.4	44.6	113.5
Greece	4593		4	19.6	4	60.8	4	31.2	4	54.2	4	63.6	45.9	116.8
Mammoth	4683		4	17.1	4	63.5	4	22.8	4	44.3	4	60.5	41.6	106.0
Orel	4592		4	13.5	4	30.2	4	22.8	4	40.1	4	38.7	29.1	74.0

¹ No yields were taken in 1937 because of injury to nursery by aphids; yields in 1938 are of doubtful value because of hail injury.

² Standard with which other varieties are compared for comparable years.

IDAHO

Idaho Agricultural Experiment Station, Moscow

K. H. Klages and H. K. Schultz.

Aberdeen Substation, Aberdeen.....Harland Stevens and J. L. Toevs.

Sandpoint Substation, Sandpoint.....R. E. Knight.

TABLE 8.—*Acre yields of varieties of barley grown at agricultural experiment stations in Idaho in 1 or more of the years 1937-41*

[Data for Moscow and Sandpoint obtained through the courtesy of the Idaho Agricultural Experiment Station and for Aberdeen in cooperation with that station]

Station and variety	C. I. No.	Station No.	Number of plots and acre yield										Average yield, 1937-41	Relative yield compared with standard		
			1937		1938		1939		1940		1941					
			Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield				
				Bu.		Bu.		Bu.		Bu.		Bu.		Bu.		Per- cent
Moscow:																
Trebi 1	936	2073	3	78.4	3	66.6	3	51.0	3	52.3	5	73.5	64.4	100.0		
Winter Club	488	2001	3	75.7	3	70.7	3	55.3	3	64.9	5	61.3	65.6	101.9		
White Smyrna	910	2074	3	52.8	3	56.5	3	51.7	3	61.9	5	42.9	53.2	82.6		
Colless	2792	2088	3	55.7	3	68.6	3	45.8	3	31.6	5	46.7	49.7	77.2		
Spartan	5027	2106	3	68.3	3	43.2	3	35.2	3	47.6	5	52.5	49.4	76.7		
Ezond	5064	2112	3	63.4	3	73.1	3	62.0	3	47.6	5	62.8	61.8	96.0		
Hannchen	4841	2113	3	73.9	3	76.2	3	49.8	3	45.4	5	65.5	62.2	96.6		
Victory	5077	2116	3	79.0	3	74.4	3	57.6	3	65.7	5	69.9	69.3	107.7		
Faust	4579	2117	3	37.7	3	35.3	3	33.4	3	32.4	5	37.0	35.2	54.6		
Vaughn	1367	2119	3	63.2	3	71.0	3	54.9	3	49.1	5	54.4	58.5	90.9		
Atlas	4118	2120	3	87.7	3	64.9	3	43.2	3	48.9	5	49.3	58.8	91.4		
Archer	1031	2121	3	44.5	3	66.8	3	56.7	3	47.9	5	63.8	55.9	86.9		
Meloy	1176	2122	3	64.6	3	48.4	3	45.7	3	38.1	5	50.9	49.5	77.0		
Black		2123	3	65.9	3	70.6	3	46.9	3	58.6	5	55.3	59.5	92.4		
Atlas X Vaughn		12	3	78.1	3	72.8	3	42.3	3	71.9	5	62.1	65.4	101.7		
Do		14	3	79.8	3	86.4	3	46.2	3	47.4	5	57.3	63.4	98.5		
Do		15	3	75.9	3	82.8	3	45.0	3	58.4	5	57.0	63.8	99.2		
Do		16	3	76.3	3	91.7	3	45.7	3	47.2	5	70.7	66.3	103.0		
Do		17	3	84.3	3	94.5	3	42.1	3	48.0	5	69.3	67.6	105.1		
Do		18	3	76.4	3	91.7	3	52.6	3	58.4	5	62.1	68.2	106.0		
Arivat	6573	19	3	81.9	3	80.0	3	49.9	3	46.1	5	77.7	67.1	104.3		
Atlas X Vaughn		21	3	91.5	3	85.1	3	48.0	3	48.3	5	81.9	71.0	110.3		
Do		22	3	75.0	3	87.6	3	38.2	3	65.9	5	73.5	68.0	105.7		
Do		23	3	91.3	3	88.5	3	46.3	3	41.9	5	79.8	69.6	108.1		
Do		24	3	91.8	3	93.5	3	46.2	3	45.6	5	75.4	70.5	109.5		
Do		25	3	83.6	3	88.9	3	48.8	3	47.3	5	76.0	68.9	107.1		
Do		26	3	92.1	3	89.4	3	50.6	3	50.3	5	79.0	72.3	112.3		
Do		27	3	106.5	3	81.4	3	50.4	3	42.8	5	71.5	70.5	109.6		
Do		28	3	65.9	3	91.5	3	47.8	3	57.7	5	91.6	70.9	110.2		
Do		29	3	79.7	3	86.2	3	38.9	3	45.1	5	63.8	62.7	97.5		
Do	6974	30	3	74.6	3	96.3	3	61.6	3	58.9	5	72.4	72.8	113.1		
Do	6975	31	3	74.6	3	96.3	3	61.6	3	58.9	5	72.4	72.8	113.1		
Glacier	6976	33	3	94.5	3	95.3	3	63.8	3	44.6	5	62.2	72.1	112.0		
Atlas X Vaughn		34	3	69.9	3	88.4	3	75.7	3	40.2	5	62.9	67.4	104.8		
Do		35	3	84.1	3	102.3	3	90.1	3	52.5	5	86.4	83.1	129.1		
Do		36	3	79.8	3	88.3	3	53.5	3	55.5	5	64.6	68.3	106.2		
Do		37	3	94.0	3	93.5	3	34.3	3	56.6	5	68.8	69.4	107.9		
Do		38	3	89.8	3	88.7	3	50.8	3	59.4	5	79.5	73.6	114.4		
Do		39	3	70.7	3	70.5	3	44.4	3	58.8	5	80.6	65.0	101.0		
Do		41	3	85.3	3	72.7	3	40.1	3	57.7	5	71.4	65.4	101.7		
Do		42	3	86.9	3	93.8	3	39.8	3	56.5	5	79.6	71.3	110.8		
Do		43	3	82.9	3	88.3	3	32.1	3	68.5	5	78.0	70.0	108.7		
Do	6978	45	3	87.9	3	78.5	3	35.5	3	54.4	5	67.4	64.7	100.6		
Do		46	3	65.8	3	88.7	3	40.1	3	62.2	5	67.4	64.8	100.7		
Do		47	3	73.3	3	85.1	3	37.8	3	51.6	5	56.7	60.9	94.6		
Do		48	3	84.0	3	102.7	3	36.6	3	57.1	5	73.6	70.8	110.0		
Do		49	3	78.9	3	88.3	3	36.2	3	68.6	5	75.9	69.6	108.1		
Aberdeen:																
Trebi 1	936		3	103.9	8	115.3	3	112.8	2	2106.7	2	3121.8	112.1	100.0		
Velvon	6109		3	107.5	3	113.1	2	103.2	2	103.8	3	124.2	110.4	98.4		
Ezond	6265		3	91.4	3	105.5	3	99.8	2	89.4	3	110.4	99.3	88.6		
Flynn	1311		3	91.1	3	113.3	3	107.2	2	98.5	3	114.2	104.9	93.5		
Hannchen	531		3	85.7	3	103.5	3	97.0	2	92.8	2	3107.0	97.2	86.7		
Composite Cross selection	5302		1	99.4	3	112.6	3	110.0	2	104.2	3	126.6	110.6	98.6		
Mechanical Mixture	4115		1	93.2	1	77.1	1	75.1	1	90.3	1	77.8	82.7	73.8		
Composite Cross	4116		1	89.6	1	95.0	1	75.9	1	76.4	1	110.4	89.5	79.8		
Do	5461		3	102.7	2	100.2	1	75.5	2	66.5	2	95.6	88.1	78.6		

See footnotes at end of table.

TABLE 8.—*Acre yields of varieties of barley grown at agricultural experiment stations in Idaho in 1 or more of the years 1937-41—Continued*

Station and variety	C. I. No.	Station No.	Number of plots and acre yield										Average yield, 1937-41	Relative yield compared with standard
			1937		1938		1939		1940		1941			
			Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield		
Aberdeen—Con.				Bu.		Bu.		Bu.		Bu.		Bu.	Bu.	Percent
Lico	6279						3	90.3	2	93.2	3	117.1		88.1
Hannchen X														
Minia	7005	36Ab.5117					1	109.7	2	111.0	2	119.1		99.6
Murasaki Mochi	5899						1	52.3	1	67.9	2	71.0		56.0
Meloy	1176		2	74.8	1	95.8					3	90.4		76.5
Spartan	5027								2	73.4	3	87.8		70.5
Composite Cross selection	7007	36Ab.1794									1	115.5		94.8
Do	7008	36Ab.6127									1	117.6		96.6
Minia X Horn	7006	36Ab.4631									1	112.1		92.0
Composite Cross selection	5280		3	96.0	3	98.5	3	91.7	2	89.0				85.5
Afghan 1	4166		3	103.0	3	114.2	3	107.2						97.7
Composite Cross selection	5365		3	101.2	3	112.1	3	101.0						94.7
High Altitude Composite Cross	6006		1	82.4	1	58.7	1	79.3						66.4
Sandrel X Trebi		36Ab.4331					1	102.1	2	108.4				95.9
Minia	3556						1	93.7	1	75.1				76.9
Composite Cross selection		36Ab.3452					1	83.5						74.0
Do	5323		1	94.1	3	111.5								93.8
Sandpoint:														
Trebi 1	936	2073	2	33.9	2	19.7	2	58.8	2	36.2	2	57.4	41.2	100.0
Beldi Giant	2777		2	32.8	2	22.8	2	54.2	2	35.2	2	61.8	41.4	100.4
Charlottetown 80	2732	2118	2	32.7	2	20.7	2	51.2	2	30.3	2	38.7	34.7	84.3
Hannchen	531		2	39.5	2	26.2	2	55.7	2	34.5	2	52.5	41.7	101.2
Union Beardless	5976	2108	2	37.5	2	22.8	2	49.0	2	34.6	2	55.5	39.9	96.8
O. A. C. 21	1470		2	28.7	2	21.2	2	57.3	2	33.0				94.3

1 Standard with which other varieties are compared for comparable years.

2 First replication of all varieties not harvested, because of error caused by threshing on this land in 1939.

3 Third replication not harvested because of severe lodging.

ILLINOIS

Illinois Agricultural Experiment Station, Urbana.....G. H. Dungan.
 Crop Experiment Field, Alhambra.....In care of G. H. Dungan, Urbana.
 Crop Experiment Field, De Kalb.....In care of G. H. Dungan, Urbana.
 Crop Experiment Field, Mount Morris.....In care of G. H. Dungan, Urbana.

TABLE 9.—*Acre yields of varieties of barley grown at agricultural experiment stations in Illinois in 1 or more of the years 1937-41*

[Data obtained through the courtesy of the Illinois Agricultural Experiment Station]

Station and variety	C. I. No.	Station No.	Number of plots and acre yield										Average yield, 1937-41	Relative yield compared with standard
			1937		1938		1939		1940		1941			
			Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield		
Urbana:														
<i>Spring-sown</i>				<i>Bu.</i>		<i>Bu.</i>		<i>Bu.</i>		<i>Bu.</i>		<i>Bu.</i>	<i>Bu.</i>	<i>Per-cent</i>
Wisconsin Bar- less ¹	5105		2	52.1	2	27.4	2	26.5	6	50.1	6	47.3	40.7	100.0
Trebi	936		2	54.3	2	33.0	2	33.2	6	46.8	6	41.7	41.8	102.8
Ioglos	6239		2	47.7	2	31.9	2	28.4	6	37.2	6	45.5	38.1	93.8
Velvet	4252		2	45.6	2	27.0	2	31.2	6	36.0	6	42.6	36.5	89.7
Orderbrucker	4666		2	43.7	2	33.7	2	31.4	6	41.5	6	39.9	38.0	93.5
Manchuria	2947	N. Dak. 2121	2	41.6	2	25.0	2	28.0			6	36.0		85.2

See footnotes at end of table.

TABLE 9.—*Acre yields of varieties of barley grown at agricultural experiment stations in Illinois in 1 or more of the years 1937-41—Continued*

Station and variety	C. I. No.	Station No.	Number of plots and acre yield										Average yield, 1937-41	Relative yield compared with standard
			1937		1938		1939		1940		1941			
			Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield		
				Bu.		Bu.		Bu.		Bu.		Bu.	Bu.	Per-cent
Urbana—Continued.														
Spartan	5027		2	48.2	2	32.7	2	33.6						108.0
Glabron	4577		2	38.4	2	26.0	2	32.3						90.9
Regal	5030								6	44.0				87.8
New Era	5108		2	35.2										67.6
Fall-sown														
Purdue 21 ¹	4581		2	28.9	2	44.2	4	61.4	6	34.3	6	33.2	40.4	100.0
Purdue 1101	4582		2	37.2	2	51.6	4	63.7	6	38.5	6	30.1	44.2	109.5
Kentucky 1	6050		2	28.0	2	45.1	4	63.8	6	41.9	6	21.8	40.1	99.3
Tennessee Winter	6034		2	11.0	2	20.4	4	45.5	6	41.1	6	8.9	25.4	62.8
Missouri Early														
Beardless	6051		2	20.4	2	22.9	4	38.1	6	21.7	6	4.5	21.5	53.3
Smooth Awn 203	6267		2	30.0	2	12.1	4	56.2	6	25.2	6	.1	24.7	61.2
Orel	351						4	53.6	6	19.7	6	.3		57.1
Purdue 28156A3														
2-2-2	6562								6	38.0	6	30.3		101.2
Reno	6561								6	43.6	6	14.1		85.5
Santiam	6367								6	40.4	6	3.0		64.3
Marnobarb	6120								6	27.1	6	.8		41.3
Tennessee Winter														
52	3543								6	30.9	6	4.0		51.7
Wisconsin Winter	2159								6	25.0	6	3.8		42.7
Jackson	6569	Tenn. B5-9 (S)							6	26.8	6	.7		40.7
Esaw	4690		2	3.0	2	13.1	4	57.8	6	23.5				57.7
Alhambra:														
Spring-sown														
Wisconsin Bar-														
less 1	5105							2	11.4		6	8.7		100.0
Spartan	5027								6	31.2	6	19.6		225.3
Fall-sown														
Purdue 21 ¹	4581		5	61.6	5	24.6	5	44.0	5	52.7	2	27.1	42.0	100.0
Missouri Early														
Beardless	6051		5	38.9	5	9.2	5	34.5	5	46.8	2	20.6	30.0	71.4
Kentucky 1	6050		5	65.0	5	29.9	5	62.5	5	58.0	2	23.3	47.7	113.7
Purdue 1101	4582		5	42.3	5	60.6	5	37.6			2	32.1		109.7
Tennessee Winter	6034		5	42.4	5	25.2	5	18.2			2	20.4		67.5
Smooth Awn 203	6267		5	44.1	5	.1	5	30.9			2	20.4		60.7
Marnobarb	6120								5	51.0	2	23.3		93.1
Orel	351						5	15.6			2	18.2		47.5
Reno	6561										2	31.4		115.9
Tennessee Winter														
52	3543										2	30.3		111.8
Wisconsin Winter	2159										2	26.0		95.9
Tennessee Smooth														
Awn	6570	Tenn. B5-14									2	25.8		95.2
Santiam	6367										2	21.9		80.8
Tennessee Smooth														
Awn	6569	Tenn. B3-56									2	20.4		75.3
Jackson	6569	Tenn. B5-9 (S)									2	18.5		68.3
Esaw	4690		5	39.1			5	13.6						49.9
De Kalb: 2														
Spring-sown														
Wisconsin Bar-														
less 1	5105		2	23.4	2	34.8	2	35.2	6	55.2	6	41.6	38.0	100.0
Trebi	936		2	32.1	2	40.4	2	42.5	6	59.9	6	33.5	41.7	109.6
Velvet	4252		2	17.0	2	31.3	2	33.1	6	52.0	6	34.3	33.5	88.2
Ioglos	6239		2	17.6	2	31.4	2	34.1	6	56.7	6	32.7	34.5	90.7
Oderbrucker	4666		2	16.3	2	30.5	2	36.3	6	48.3	6	31.9	32.7	85.9
Manchuria	2947	N. Dak. 2121	2	16.3	2	29.9	2	34.9			6	29.5		81.9
Spartan	5027		2	31.7	2	27.1	2	25.0						95.9
Glabron	4577		2	14.5	2	29.2	2	36.4						85.8
Regal	5030								6	58.0				105.1
New Era	5108		2	17.9										76.5

¹ Standard with which other varieties are compared for comparable years.² Tests were conducted at Mount Morris instead of De Kalb in 1941.

INDIANA

Purdue University Agricultural Experiment Station, La Fayette

-----R. R. Mulvey.

Jennings County Experiment Field, North Vernon

-----In care of R. R. Mulvey, La Fayette.

Moses Fell Annex Farm, Bedford

-----H. G. Hall.

Knox County Experiment Field, Bicknell

-----In care of R. R. Mulvey, La Fayette.

TABLE 10.—*Acre yields of varieties of barley grown at agricultural experiment stations in Indiana in 1 or more of the years 1937-41*

[Data obtained through the courtesy of the Purdue University Agricultural Experiment Station]

Station and variety	C. I. No.	Number of plots and acre yield										Average yield, 1937-41	Relative yield compared with standard
		1937		1938		1939		1940		1941			
		Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield		
La Fayette:													
Fall-sown			Bu.		Bu.		Bu.		Bu.		Bu.		Per-cent
Purdue 1101 ¹ -----	4582	8	45.8	8	37.4	8	36.3	8	40.3	8	45.7	41.1	100.0
Purdue 21-----	4581	2	48.9	2	35.7	2	34.8	2	42.5	2	41.6	40.7	99.0
Kentucky 1-----	6050	2	48.8	2	44.1	2	42.5	2	45.3	2	49.5	46.0	112.0
Beardless Winter-----		2	25.4	2	21.3	2	33.5	2	29.1	2	39.0	29.7	72.2
Missouri Early Beardless-----	6051	2	33.0	2	20.6	2	29.6	2	30.2	2	40.2	30.7	74.7
Purdue 28156A3-2-2-2-----	6562			2	27.0	2	34.3	2	36.9	2	36.2		84.2
Purdue 28154A3-1-1-6-----	7067					2	31.5	2	41.9	2	42.9		95.1
Purdue 28156A3-2-1-3-----						2	31.7	2	34.9	2	34.3		82.5
Purdue 28156A3-2-1-2-----						2	31.5	2	39.7	2	36.1		87.7
Purdue 28156A4-1-1-6-----						2	29.0	2	40.0	2	41.3		90.2
Marnobarb-----	6120	2	38.4	2	11.1								59.5
Spring-sown													
Alpha ¹ -----	959	8	35.2	8	5.7	4	29.9	4	31.7	4	41.5	28.8	100.0
Spartan-----	5027	2	34.7	2	7.0	2	24.5	2	26.3	2	37.0	25.9	89.9
Manchuria-----	2330	2	32.6	2	6.0								94.4
Glabron-----	4577	2	23.8	2	3.3								66.3
Velvet-----	4252	2	37.6	2	7.8								111.0
Wisconsin Barbless-----	5105	2	27.5	2	2.8								74.1
Oderbrucker X Lion (Sta. No. Wis. Ped. 37)-----	5028	2	34.1	2	6.0								98.0
North Vernon:													
Fall-sown													
Purdue 21 ¹ -----	4581	2	14.5	2	6.5	2	25.5	2	20.5	2	27.5	18.9	100.0
Missouri Early Beardless-----	6051	1	14.9	1	9.3	1	16.5	1	14.5	1	30.3	17.1	90.5
Kentucky 1-----	6050			1	12.8	1	30.5	1	24.3	1	33.8		126.8
Marnobarb-----	6120	1	15.6	1	10.5								124.3
Bedford:													
Fall-sown													
Purdue 21 ¹ -----	4581	2	45.0	2	33.8	2	42.8	2	44.5	2	28.5	38.9	100.0
Missouri Early Beardless-----	6051	1	41.0	1	24.3	1	40.3	1	50.3	1	31.7	37.5	96.4
Kentucky 1-----	6050			1	42.4	1	43.8	1	56.9	1	36.1		119.7
Marnobarb-----	6120	1	41.0	1	34.4								95.7
Bicknell:													
Fall-sown													
Purdue 21 ¹ -----	4581	2	17.7	2	26.0	2	28.7	2 ¹	44.2	2	32.2	29.8	100.0
Missouri Early Beardless-----	6051	1	24.0	1	20.0	1	27.0	1	30.9	1	24.4	25.3	84.9
Kentucky 1-----	6050			1	39.0	1	41.1	1	41.6	1	40.6		88.8
Marnobarb-----	6120	1	13.9	1	24.5								87.9

¹ Standard with which other varieties are compared for comparable years.

IOWA

Iowa Agricultural Experiment Station, Ames.....L. C. Burnett.
 Experimental Field, Kanawha.....In care of L. C. Burnett, Ames.

TABLE 11.—*Acre yields of varieties of barley grown at agricultural experiment stations in Iowa in 1 or more of the years 1937-41*

[Data obtained through the courtesy of the Iowa Agricultural Experiment Station]

Station and variety	C. I. No.	Number of plots and acre yield										Average yield, 1937-41	Relative yield compared with standard
		1937		1938		1939		1940		1941			
		Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield		
Ames: 1			Bu.		Bu.		Bu.		Bu.		Bu.	Bu.	Per-cent
Ioglos 2	6239	2	43.3	2	20.5	2	24.8	2	36.7	2	0	25.1	100.0
Velvet	4252	2	42.0	2	16.3	2	27.6	2	39.0	2	0	25.0	99.7
Glabron	4577	2	40.3	2	19.4	2	23.8	2	38.0	2	0	24.3	97.0
Wisconsin Barbless	5105	2	47.8	2	24.8	2	38.6	2	42.9	2	0	30.8	123.0
Spartan	5027	2	45.7	2	25.5	2	21.2	2	36.9	2	0	25.9	103.2
Manchuria	2947	2	43.5	2	16.5	2	16.3	2	37.2	2	0	22.7	90.6
Oderbrucker	4666	2	35.7	2	12.4	2	17.3	2	28.5	2	0	18.8	74.9
Peatland	5267	2	46.5	2	14.7	2	20.3	2	37.7	2	0	23.8	93.1
Trebi	936	2	43.5	2	24.2	2	19.3	2	40.2	2	0	25.4	101.5
Minsturdi	1556	2	39.5	2	21.8	2	15.3	2	36.8	2	0	22.7	90.5
Kanawha:													
Ioglos 2	6239	10	22.2	10	30.6	10	47.8	10	51.9	4	16.4	33.8	100.0
Velvet	4252	10	20.3	10	34.6	10	47.3	10	52.6	4	16.9	34.3	101.7
Glabron	4577	10	22.6	10	30.7	10	45.1	10	52.3	4	19.9	34.1	101.0
Wisconsin Barbless	5105	10	31.6	10	33.5	10	55.7	10	56.0	4	22.0	39.8	117.7
Spartan	5027	10	25.1	10	44.8	10	35.0	10	38.2	4	10.0	30.6	90.6
Manchuria	2947	10	25.7	10	23.3	10	33.7	10	38.4	4	14.5	27.1	80.3
Oderbrucker	4666	10	17.0	10	21.7	10	32.8	10	27.8	4	11.3	22.1	65.5
Peatland	5267	10	38.2	10	22.1	10	35.2	10	32.1	4	18.2	29.2	86.3
Trebi	936	10	28.1	10	21.2	10	40.2	10	53.2	4	13.2	31.2	92.3
Minsturdi	1556	10	15.5	10	20.7	10	16.9	10	31.5	4	16.2	20.2	59.7

¹ Crop destroyed by hail at Ames in 1941

² Standard with which other varieties are compared for comparable years.

KANSAS

Kansas Agricultural Experiment Station, Manhattan.....H. H. Laude.
 Northeast Experiment Field, McLouth.....In care of Erwin Abmeyer, Wathena.
 Southeast Experiment Field, Columbus.....In care of F. E. Davidson, Parsons.
 Southeast Experiment Field, Thayer.....In care of F. E. Davidson, Parsons.
 South Central Experiment Field, Wichita.....In care of C. R. Porter, Kingman.
 South Central Experiment Field, Kingman.....In care of C. R. Porter.
 South Central Experiment Field, Hutchinson.....In care of C. R. Porter, Kingman.
 Southwest Experiment Field, Dodge City.....In care of A. B. Erhart, Meade.
 Southwest Experiment Field, Meade.....A. B. Erhart.
 Branch Experiment Station, Hays.....A. F. Swanson.
 Branch Experiment Station, Colby.....E. H. Coles.
 Branch Experiment Station, Tribune.....T. B. Stinson.
 Branch Experiment Station, Garden City.....A. E. Lowe.

TABLE 12.—*Acre yields of varieties of barley grown at agricultural experiment stations in Kansas in 1 or more of the years 1937-41*

[Data for Manhattan, for the branch stations at Garden City and Tribune, and for the experiment fields obtained through the courtesy of the Kansas Agricultural Experiment Station; for Hays, in cooperation with the station; and for Colby through the courtesy of the station and the Division of Dry Land Agriculture]

Station and variety	C. I. No.	Station No.	Number of plots and acre yield										Average yield, 1937-41	Relative yield compared with standard
			1937		1938		1939		1940		1941			
			Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield		
Manhattan:				Bu.		Bu.		Bu.		Bu.		Bu.	Bu.	Per cent
Spring-sown														
Stavropol	5913	7136	3	35.9	3	46.6								
Flynn	1311	7143					3	2.1	3	21.8	3	29.3		
Fall-sown ¹														
Missouri Early														
Beardless ²	6051	7182	1	15.4	1	0	1	2.3	1	20.1	1	19.4	11.4	100.0
Reno	6561	7178							1	29.3	1	24.3		135.7
Ward	6007	7179							1	26.4	1	33.3		151.1
Kansas Southeast strain	7070	7176	1	17.9	1	0	1	2.5	1	19.9				106.6
Kansas South-central strain	6376	7177	1	21.1	1	0	1	5.4	1	22.8				130.4
Kentucky 2	6148	8081	1	23.0	1	0								149.4
Kentucky 11	6021	8082	1	16.2										105.2
Tenkow	646	7180							1	31.0				154.2
Manchuria	245	7181							1	35.4				176.1
McLouth: ³														
Fall-sown														
Kansas Southeast strain ²	7070	7176	3	32.1	2	31.1	3	37.4	3	62.4	3	0	32.6	100.0
Missouri Early														
Beardless	6051	7182	3	0	3	0	2	29.2	3	42.5	3	0	14.3	71.8
Reno	6561	7178			3	0	3	38.6	3	55.1	3	0		93.9
Ward	6007	7179									3	0		
Columbus:														
Fall-sown														
Missouri Early														
Beardless ²	6051	7182	2	30.7	2	30.7	2	18.9	2	14.3	3	21.3	23.2	100.0
Reno	6561	7178			2	64.4	2	34.8	2	37.2	3	38.5		205.3
Ward	6007	7179							2	32.9	3	33.7		187.1
Kansas South-central strain	6376	7177	2	38.1	2	58.8	2	34.3	1	25.1				165.2
Kansas Southeast strain	7070	7176	2	43.7	2	61.4	2	31.7	1	32.0				178.4
Kentucky 2	6148	8081	2	39.8	2	57.5	2	28.1						156.2
Tenkow	646	7180							2	12.1				84.6
Manchuria	245	7181							2	6.1				42.7
Thayer:														
Fall-sown														
Reno ²	6561	7178					3	21.6	3	22.2	3	44.1		100.0
Missouri Early														
Beardless	6051	7182					3	20.7	3	14.1	3	27.0		70.3
Ward	6007	7179							2	10.4	3	41.4		78.1
Kansas South-central strain	6376	7177					3	24.1	3	14.1				87.2
Kansas Southeast strain	7070	7176					3	18.9	3	17.8				83.8
Tenkow	646	7180							2	13.0				58.6
Manchuria	245	7181							2	15.6				70.3
Kentucky 2	6148	8081					3	20.6						95.4
Wichita:														
Spring-sown														
Flynn ²	1311	7143	4	31.4	4	37.1	6	11.4	3	61.6	3	47.4	37.8	100.0
Stavropol	5913	7136	4	25.4	4	39.5	6	11.4	3	50.8	3	40.8	33.6	88.9
Malt ⁴		7183	4	31.0	4	31.0	6	8.3	3	53.9				87.8
Trebi	936	7137			4	32.7								88.1

See footnotes at end of table.

TABLE 12.—*Acre yields of varieties of barley grown at agricultural experiment stations in Kansas in 1 or more of the years 1937-41—Continued*

Station and variety	C. I. No.	Station No.	Number of plots and acre yield										Average yield, 1937-41	Relative yield compared with standard	
			1937		1938		1939		1940		1941				
			Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield			
Wichita—Continued.															
Fall-sown				Bu.		Bu.		Bu.		Bu.		Bu.		Bu.	Per cent
Kansas South-central strain ²	6376	7177	3	30.2	2	38.9			1	87.5	2	45.4			100.0
Missouri Early Beardless	6051	7182			2	37.4			1	73.3	2	33.8			84.1
Ward	6007	7179							1	84.6	2	46.8			98.9
Reno	6561	7178							1	80.9	2	41.7			92.2
Kansas Southeast strain	7070	7176	3	29.5	2	44.3			1	83.3					100.3
Bluebaugh ⁵					2	49.8									128.0
Kingman:															
Spring-sown															
Flynn ²	1311	7143	4	22.3	4	28.4	6	13.2	2	26.0	2	28.9	23.8		100.0
Stavropol	5913	7136	4	22.2	4	39.1	6	12.1	2	22.1	2	33.8	25.9		108.8
Malt ⁴		7183	4	23.6	4	40.8	6	9.8	2	27.7					113.3
Trebi	936	7137			4	32.3									113.7
Fall-sown ⁶															
Kansas South-central strain ²	6376	7177	2	19.1	2	41.6	2	0	1	27.3	2	42.4	26.1		100.0
Missouri Early Beardless	6051	7182	2	12.1	2	33.5	2	0	1	16.5	2	30.2	18.5		70.8
Ward	6007	7179							1	23.1	2	43.5			95.6
Reno	6561	7178							1	17.3	2	42.1			85.2
Kansas Southeast strain	7070	7176	2	18.2	2	45.5	2	0	1	23.9					99.5
Bluebaugh ⁵					2	40.5									97.4
Hutchinson:															
Spring-sown															
Flynn ²	1311	7143					4	14.7	2	57.8	2	30.5			100.0
Stavropol	5913	7136					4	13.4	2	40.0	2	22.5			73.7
Malt ⁴		7183					4	10.5	2	52.4					86.8
Fall-sown															
Kansas South-central strain ²	6376	7177							2	41.7					100.0
Kansas Southeast strain	7070	7176							2	41.2					98.8
Reno	6561	7178							2	41.3					99.0
Ward	6007	7179							2	31.4					75.3
Hays:															
Spring-sown															
Flynn 1 ²	5911		2	23.4	2	50.3	2	15.9	4	28.5	4	57.4	35.1		100.0
Vaughn	1367		2	20.3	2	49.5	2	15.1	4	24.7	4	51.3	32.2		91.7
Club Mariout	261		2	19.3	2	24.0	2	9.4	4	25.0	4	42.3	24.0		68.4
Stavropol	5913		2	18.7	2	35.9	2	7.3	4	29.8	4	48.5	28.0		79.9
Franklin Malt	5915		2	24.7	2	29.9	2	2.6	4	27.1	4	45.0	25.9		73.7
Spartan	5027		2	21.1	2	33.0	2	5.0	4	25.0	4	45.8	26.0		74.0
White Smyrna	195		2	30.2	2	32.6	2	11.2	4	23.2	4	44.3	28.3		80.6
Flynn	7009	H. C. 388			2	33.9	2	8.6	2	32.3	4	46.5			79.8
Beecher	6566				2	45.3	2	20.3	4	21.1	4	47.8			88.4
Glacier	6976	Moscow 33									4	57.8			100.7
Hannchen	531										4	38.8			67.6
Wisconsin Barbless	5105										1	55.2			96.2
Atlas X Vaughn		Moscow 22			2	39.6	2	11.2	4	24.0					79.0
Lico	6279						2	6.3	4	24.4					69.1
Colby:															
Spring-sown															
Flynn 1 ²	5911		3	10.5	3	13.2	3	18.4	3	26.5	3	51.5	24.0		100.0
Vaughn	1367		3	8.6	3	10.9	3	16.4	3	19.4	3	51.2	21.3		88.7
Stavropol	5913		3	8.5	3	18.0	3	11.5	3	13.0	3	50.7	20.3		84.7
Spartan	5027		3	6.9	3	8.0	3	15.4	3	13.7	3	50.3	18.9		78.5
Club Mariout	261		3	6.7	3	9.7	3	12.8	3	19.9	3	56.1	21.0		87.6
Franklin Malt	5915		3	7	3	11.8	3	7.9	3	7.3	3	42.9	14.1		58.8
Beecher	6566								3	23.6	3	66.6			115.6
Hannchen	531										3	25.7			49.9
Wisconsin Barbless	5105										3	27.6			53.6

See footnotes at end of table.

TABLE 12.—*Acre yields of varieties of barley grown at agricultural experiment stations in Kansas in 1 or more of the years 1937-41—Continued*

Station and variety	C. I. No.	Station No.	Number of plots and acre yield										Average yield, 1937-41	Relative yield com- pared with stand- ard
			1937		1938		1939		1940		1941			
			Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield		
Tribune: ⁷														
<i>Spring-sown</i>				<i>Bu.</i>		<i>Bu.</i>		<i>Bu.</i>		<i>Bu.</i>		<i>Bu.</i>	<i>Bu.</i>	<i>Per- cent</i>
Flynn ²	1311	7143	2	0	2	17.1	2	4.3	2	3.8	2	58.9	16.8	100.0
Vaughn	1367	8073	2	0	2	16.3	2	4.9	2	3.6	2	50.2	15.0	89.2
Stavropol	5913	7136	2	0	2	23.0	2	4.1	2	2.5	2	49.8	15.9	94.4
Beecher	6566	8086										67.1		113.9
Spartan	5027	8075									2	38.6		65.5
Malt ⁴		7183	2	0	2	18.6	2	2.2						97.2
Club Mariout	261	7131	2	0	2	12.6	2	5.4						84.1
Trebi	936	7137	2	0	2	18.2								106.4
Garden City:														
<i>Spring-sown</i>														
Flynn ^{1 2}	5911		1	13.5	3	5.5	3	1.7	3	41.3	3	49.4	22.3	100.0
Vaughn	1367		1	14.9	3	5.9	3	1.8	3	37.9	3	48.1	21.7	97.5
Stavropol	5913		1	14.2	3	1.0	3	1.2	3	38.0	3	57.5	22.4	100.4
Club Mariout	261		1	12.8	3	6.0	3	.9	3	29.9	3	37.8	17.5	78.5
Franklin Malt	5915		1	11.3	3	2.1	3	.8	3	26.3				65.3
Hannchen	531										3	34.0		68.8
Dodge City: ⁸														
<i>Spring-sown</i>														
Flynn ²	1311	7143			2	9.5	2	13.7	2	45.9	2	47.4		100.0
Stavropol	5913	7136			2	10.3	2	11.2	2	40.2	2	47.9		94.1
Vaughn	1367	8073			2	7.3	2	12.7	2	49.2	2	45.7		98.6
Meade: ⁸														
<i>Spring-sown</i>														
Flynn ²	1311	7143			2	18.8	2	7.9	2	24.8	2	56.4		100.0
Stavropol	5913	7136			2	16.7	2	4.6	2	22.1	2	43.0		80.1
Vaughn	1367	8073			2	17.6	2	7.6	2	26.5	2	58.7		102.3

¹ All varieties were winter-killed in 1938.² Standard with which other varieties are compared for comparable years.³ All zero yields are due to winter-killing ranging from 90 to 100 percent.⁴ Seed for this variety was obtained from several sources and, therefore, may not be exactly identical at all stations where it was grown.⁵ A local barley.⁶ All varieties were winter-killed in 1939.⁷ Crop failure in 1937 due to drought; crop was damaged by hail in 1938.⁸ Duplicate plots were sown, one on fallow land and the other on cropped land, each year.

MAINE

Aroostook Experiment Farm, Presque Isle...In care of J. A. Chucka, Orono.

TABLE 13.—*Acre yields of varieties of barley grown at the Aroostook Experiment Farm, Presque Isle, in 1 or more of the years 1937-41*

[Data obtained through the courtesy of the Maine Agricultural Experiment Station]

Variety	C. I. No.	Number of plots and acre yield										Average yield, 1937-41	Relative yield compared with standard
		1937		1938		1939		1940		1941			
		Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield		
			Bu.		Bu.		Bu.		Bu.		Bu.	Bu.	Per-
Alpha ¹ -----	959	4	46.7	5	29.5	5	41.2	6	68.6	10	47.5	46.7	100.0
Byng -----	6089	4	57.4	5	26.2	5	47.6	6	69.2	10	50.1	50.1	107.3
Velvet -----	4252	4	48.1	5	17.8	5	37.5	6	53.9	10	25.7	36.6	78.4
Wisconsin Barbless -----	5105	4	37.7	5	18.6	5	35.5	6	54.8	10	41.8	37.7	80.7
Hannchen -----	531	---	---	5	20.6	5	41.7	6	65.7	10	47.1	---	93.7
Oderbrucker -----	4666	---	---	5	20.2	5	35.2	6	51.2	10	25.9	---	70.9
Spartan -----	5027	4	39.7	5	15.9	---	---	---	---	---	---	---	73.0
Trebi -----	936	4	57.4	5	27.1	---	---	---	---	---	---	---	110.9
Manchuria -----	2947	4	33.7	---	---	---	---	---	---	---	---	---	72.2

¹ Standard with which other varieties are compared for comparable years.

MARYLAND

Maryland Agricultural Experiment Station, College Park....R. G. Rothgeb.

TABLE 14.—*Acre yields of varieties of barley grown at the Maryland Agricultural Experiment Station, College Park, in 1 or more of the years 1937-41*

[Data obtained through the courtesy of the Maryland Agricultural Experiment Station]

Variety	C. I. No.	Station No.	Number of plots and acre yield										Average yield, 1937-41	Relative yield com- pared with stand- ard
			1937		1938 ¹		1939 ¹		1940		1941			
			Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield		
				Bu.		Bu.		Bu.		Bu.		Bu.	Bu.	Per- cent
Tennessee Winter 2	257	-----	2	45.1	2	0	2	25.0	2	18.9	3	24.6	22.7	100.0
Marnobarb	6120	13-6	2	43.3	2	0	2	19.2	2	17.0	3	20.2	19.9	87.8
Smooth Awn selection	6495	15-8	2	47.9	2	0	2	18.8	2	16.5	3	23.4	21.3	93.8
Smooth Awn 86	6268	-----	2	47.0	2	0	2	16.8	2	16.1	3	30.2	22.0	96.9
Missouri Early Beardless	6051	-----	2	37.9	2	0	2	26.4	2	14.5	3	24.1	20.6	90.6
Tennessee Winter	6034	-----	2	47.9	2	0	2	23.8	2	20.4	3	27.3	-----	104.4
Kentucky 1	6050	-----	2	47.9	2	0	2	23.8	2	20.4	3	19.9	-----	80.9
Sunrise	6272	-----	2	51.3	2	0	2	24.4	2	16.7	-----	-----	-----	103.8
Smooth Awn selection	6494	19-8	2	44.6	2	0	2	18.1	-----	-----	-----	-----	-----	89.4
Smooth Awn 203	6267	-----	2	37.1	-----	-----	-----	-----	-----	-----	-----	-----	-----	82.3

¹ Plots not harvested in 1938 because of poor emergence due to late seeding on a wet seedbed; lower yields, beginning in 1939, are due to the fact that a new farm, with soil unsuitable for good barley production, was used for the plot tests.

² Standard with which other varieties are compared for comparable years.

MICHIGAN

Michigan Agricultural Experiment Station, East Lansing--J. W. Thayer, Jr.

TABLE 15.—*Acre yields of varieties of barley grown at the Michigan Agricultural Experiment Station, East Lansing, in 1 or more of the years 1937-41*

[Data obtained through the courtesy of the Michigan Agricultural Experiment Station]

Variety	C. I. No.	Station No	Number of plots and acre yield										Average yield, 1937-41	Relative yield compared with stand-ard
			1937		1938		1939		1940		1941			
			Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield		
				Bu.		Bu.		Bu.		Bu.		Bu.	Bu.	Per-cent
Spartan ¹ -----	5027	68	136	25.0	137	47.6	90	29.7	212	35.8	201	39.6	35.5	100.0
Michigan Two-Rowed-----	2782	124	5	25.0	6	47.6	6	33.6	6	42.2	6	44.8	38.6	108.7
Alpha-----	959	121	6	24.4	6	49.3	6	35.3	6	45.2	6	48.2	40.5	113.9
Wisconsin Barbless-----	5105	180	6	29.4	6	55.3	6	38.7	6	39.8	6	49.5	42.5	119.7
Manchuria-----	1275	101	6	23.6	6	36.4	6	43.0	6	32.7	6	33.9	33.9	95.4
Velvet-----	4252	95	6	30.1	6	48.0	6	37.3	6	38.9	5	43.2	39.5	111.1
Trebi-----	936	137	6	30.4	6	57.4	6	34.9	6	40.5	5	44.3	41.5	116.8
Ioglos-----	6239	204	6	26.6	6	49.3	6	36.6	6	35.1	6	42.6	38.0	107.0
Newal-----	6088	205	-----	-----	-----	50.6	6	34.3	6	23.7	6	33.8	-----	93.3
Nobarb-----	6335	227	-----	-----	-----	-----	-----	-----	4	44.6	-----	42.7	-----	115.8
Glabron-----	4577	99	6	27.5	6	48.6	6	36.1	-----	-----	-----	-----	-----	109.7
Minnesota 450-----	4646	100	6	34.8	6	54.2	6	40.1	-----	-----	-----	-----	-----	126.2

¹ Standard with which other varieties are compared for comparable years.

MINNESOTA

Minnesota Agricultural Experiment Station, St. Paul.....F. R. Immer.
Southeast Experiment Station, Waseca...In care of F. R. Immer, St. Paul.
West Central Experiment Station, Morris...In care of F. R. Immer, St. Paul.
Northwest Experiment Station, Crookston...In care of F. R. Immer, St. Paul.
North Central Experiment Station, Grand Rapids
.....In care of F. R. Immer, St. Paul.
Northeast Experiment Station, Duluth...In care of F. R. Immer, St. Paul.

TABLE 16.—*Acre yields of varieties of barley grown at agricultural experiment stations in Minnesota in 1 or more of the years 1937-41*

[Data obtained through the courtesy of the Minnesota Agricultural Experiment Station]

Station and variety	C. I. No.	Station No.	Number of plots and acre yield										Average yield, 1937-41	Relative yield compared with standard
			1937		1938		1939		1940		1941			
			Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield		
St. Paul:				Bu.		Bu.		Bu.		Bu.		Bu.	Bu.	Per cent
Manchuria 1	2330	184	3	27.9	3	41.4	3	33.5	3	55.5	3	46.5	41.0	100.0
Pearland	5267	452	3	33.0	3	50.6	3	51.6	3	73.3	3	54.9	52.7	128.6
Velvet	4252	447	3	34.2	3	42.2	3	44.4	3	73.3	3	54.7	49.8	121.1
Minsturdi	1556	439	3	42.0	3	58.3	3	42.0	3	68.9	3	61.0	54.4	132.9
Wisconsin Barbless	5105	529	3	30.5	3	54.8	3	49.6	3	77.8	3	64.7	55.5	135.4
O. A. C. 21	1470	587					3	56.7	3	71.8	3	65.5		143.2
Gartons	7016	588					3	52.0	3	71.2	3	42.4		122.2
Spartan	5027	536							3	77.0	3	58.4		132.7
Minnesota 462 X														
Peatland	7010	II-31-15									3	52.8		113.5
Do	7011	II-31-19									3	55.4		119.1
Do	7012	II-31-25									3	52.1		112.0
Do	7013	II-31-37									3	52.2		112.3
Do	7014	II-31-39									3	53.3		114.6
Mars	7015	II-31-45									3	62.4		134.2
Glabron	4577	445	3	37.9	3	45.9	3	45.7	3	69.7				125.8
Trebi	936	448	3	46.0	3	58.4	3	48.7	3	71.5				141.9
Ioglos	6239	586			3	56.8	3	37.2	3	65.7				122.5
Oderbrucker	4666	528	3	18.8	3	42.4								88.3
Odessa	182	564	3	34.6	3	42.4								111.1
Lion X Manchuria	6001	565	3	47.6	3	46.1								135.2
Waseca:														
Manchuria 1	2330	184	3	47.7	3	41.5	3	48.8	3	53.4	3	35.9	45.5	100.0
Peatland	5267	452	3	48.3	3	44.0	3	58.2	3	83.7	3	34.5	53.7	118.2
Velvet	4252	447	3	44.6	3	47.7	3	61.7	3	61.3	3	35.1	50.1	110.2
Minsturdi	1556	439	3	54.1	3	47.4	3	52.7	3	66.2	3	36.5	51.4	113.0
Wisconsin Barbless	5105	529	3	57.1	3	56.8			3	103.4	3	43.3		146.0
Spartan	5027	536							3	62.9	3	46.9		123.0
Minnesota 462 X														
Peatland	7010	II-31-15									3	41.5		115.6
Do	7011	II-31-19									3	42.4		118.1
Do	7012	II-31-25									3	32.5		90.5
Do	7013	II-31-37									3	37.9		105.6
Do	7014	II-31-39									3	28.9		80.5
Mars	7015	II-31-45									3	43.6		121.4
Glabron	4577	445	3	39.0	3	44.4	3	53.7	3	61.6				103.8
Trebi	936	448	3	67.3	3	50.3	3	64.8	3	84.2				139.3
Oderbrucker	4666	528	3	38.3	3	43.7	3	60.4	3	53.2				102.2
Ioglos	6239	586			3	45.1	3	59.5	3	66.9				119.3
Odessa	182	564	3	52.4										97.3
Lion X Manchuria	6001	565	3	46.4										
Morris:														
Manchuria 1	2330	184	3	31.5	3	49.0	3	31.1	3	51.2	3	39.3	40.4	100.0
Peatland	5267	452	3	31.8	3	48.8	3	41.7	3	59.6	3	47.0	45.8	113.3
Velvet	4252	447	3	34.3	3	50.9	3	48.6	3	52.7	3	44.4	45.6	112.8
Wisconsin Barbless	5105	529	3	43.4	3	64.6	3	55.1	3	72.4	3	53.3	57.8	142.9
Gartons	7016	588					3	44.0	3	61.2	3	43.6		122.4
Spartan	5027	536									3	54.1		137.7
Minnesota 462 X														
Peatland	7010	II-31-15									3	46.1		117.3
Do	7011	II-31-19									3	51.5		131.0
Do	7012	II-31-25									3	45.0		114.5
Do	7013	II-31-37									3	47.6		121.1
Do	7014	II-31-39									3	41.5		105.6

See footnote at end of table.

TABLE 16.—*Acre yields of varieties of barley grown at agricultural experiment stations in Minnesota in 1 or more of the years 1937-41—Continued*

Station and variety	C. I. No.	Station No.	Number of plots and acre yield										Average yield, 1937-41	Relative yield compared with standard
			1937		1938		1939		1940		1941			
			Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield		
Morris—Continued.				Bu.		Bu.		Bu.		Bu.		Bu.	Bu.	Per-cent
Mars.....	7015	II-31-45									3	56.0		142.5
Glabron.....	4577		3	30.5	3	55.3	3	46.8	3	58.9				117.6
Trebi.....	936		3	42.9	3	63.7	3	44.6	3	70.4				136.1
Ioglos.....	6239		3	58.6	3	54.7	3	46.7	3	65.1				126.8
Oderbrucker.....	4666		3	24.1	3	50.6								92.8
Odessa.....	182		3	34.8										110.5
Lion X Manchuria	6001		3	37.5										119.0
Crookston:														
Manchuria ¹	2330	184	3	25.2	3	29.7	3	35.0	3	42.2	3	23.7	31.2	100.0
Peatland.....	5267	452	3	43.1	3	44.3	3	43.1	3	42.8	3	37.9	42.2	135.6
Velvet.....	4252	447	3	38.6	3	33.7	3	41.2	3	40.0	3	43.8	39.5	126.6
Wisconsin Barbless	5105	529	3	40.2	3	45.7	3	42.9	3	58.5	3	41.5	45.8	146.9
O. A. C. 21.....	1470	587	3	34.1	3	48.3	3	47.2	3	35.7	3	36.2	40.3	129.3
Gartons.....	7016	588								52.0				126.1
Spartan.....	5027	536							3	46.2	3	38.8		129.0
Minnesota 462 X														
Peatland.....	7010	II-31-15									3	37.1		156.5
Do.....	7011	II-31-19									3	42.8		180.6
Do.....	7012	II-31-25									3	31.6		133.3
Do.....	7013	II-31-37									3	37.6		158.6
Do.....	7014	II-31-39									3	37.3		157.4
Mars.....	7015	II-31-45									3	41.9		176.8
Glabron.....	4577		3	33.4	3	39.8	3	41.4	3	42.2				118.7
Trebi.....	936		3	39.0	3	37.5	3	56.3	3	43.9				133.8
Ioglos.....	6239		3	58.6	3	34.1	3	43.8	3	45.9				115.8
Oderbrucker.....	4666		3	28.4	3	25.7								98.5
Odessa.....	182		3	35.5	3	35.1								128.6
Lion X Manchuria	6001		3	29.6										117.5
Grand Rapids:														
Manchuria ¹	2330	184	3	24.1	3	19.8	3	30.2	3	36.0	3	31.2	28.3	100.0
Peatland.....	5267	452	3	45.5	3	16.8	3	26.8	3	39.4	3	37.2	33.1	117.3
Velvet.....	4252	447	3	25.5	3	16.6	3	38.4	3	44.5	3	48.2	34.6	122.6
Wisconsin Barbless	5105	529	3	33.8			3	49.7	3	60.7	3	49.5		159.4
Spartan.....	5027	536									3	36.6		117.3
Minnesota 462 X														
Peatland.....	7010	II-31-15									3	42.0		134.6
Do.....	7011	II-31-19									3	26.1		83.7
Do.....	7012	II-31-25									3	37.7		120.8
Do.....	7013	II-31-37									3	33.6		107.7
Do.....	7014	II-31-39									3	26.3		84.3
Mars.....	7015	II-31-45									3	39.7		127.2
Glabron.....	4577		3	21.3	3	16.1	3	32.8	3	43.3				103.1
Trebi.....	936		3	32.7	3	19.0	3	42.7	3	58.7				139.1
Ioglos.....	6239		3	58.6	3	15.2	3	30.0	3	41.9				101.3
Oderbrucker.....	4666		3	22.4	3	17.6								91.1
Odessa.....	182		3	38.3										158.9
Lion X Manchuria	6001		3	27.1										112.4
Duluth:														
Manchuria ¹	2330	184	3	12.3	3	30.0	3	35.9	3	28.9	3	20.5	25.5	100.0
Peatland.....	5267	452	3	27.9	3	28.5	3	33.5	3	29.3	3	29.6	29.8	116.6
Velvet.....	4252	447	3	14.0	3	27.7	3	39.0	3	29.0	3	27.8	27.5	107.8
Wisconsin Barbless	5105	529	3	11.6	3	36.3	3	45.4	3	38.3	3	32.6	32.8	128.7
Spartan.....	5027	536							3	25.9		21.5		96.0
Minnesota 462 X														
Peatland.....	7010	II-31-15									3	30.6		149.3
Do.....	7011	II-31-19									3	32.9		160.5
Do.....	7012	II-31-25									3	32.4		158.0
Do.....	7013	II-31-37									3	35.5		173.2
Do.....	7014	II-31-39									3	30.6		149.3
Mars.....	7015	II-31-45									3	36.0		175.6
Glabron.....	4577		3	19.8	3	24.2	3	30.5	3	29.9				97.5
Trebi.....	936		3	20.5	3	27.6	3	49.4	3	39.8				128.2
Ioglos.....	6239		3	58.6	3	28.4	3	43.1	3	32.1				109.3
Oderbrucker.....	4666		3	7.4	3	26.5								80.1
Odessa.....	182		3	20.3										165.0
Lion X Manchuria	6001		3	12.4										100.8

¹ Standard with which other varieties are compared for comparable years.

MISSISSIPPI

Mississippi Agricultural Experiment Station, State College.....J. F. O'Kelly.

Delta Branch Experiment Station, Stoneville.....P. W. Gull.

TABLE 17.—*Acre yields of varieties of barley grown at agricultural experiment stations in Mississippi in 1 or more of the years 1937-41*

[Data for State College obtained through the courtesy of the Mississippi Agricultural Experiment Station and for Stoneville through the courtesy of the Delta Branch Station in cooperation with the Division of Cotton and Other Fiber Crops and Diseases]

Station and variety	C. I. No.	Number of plots and acre yield										Average yield, 1937-41	Relative yield com- pared with stand- ard
		1937		1938		1939		1940		1941			
		Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield		
State College:			Bu.		Bu.		Bu.		Bu.		Bu.	Bu.	Per-
Texas Winter 1	6498	---	---	6	43.8	6	44.2	6	33.8	6	26.0	---	100.0
Tennessee Winter 52	3543	---	---	6	49.5	6	50.0	6	27.0	6	19.9	---	99.1
Wintex	6127	---	---	---	---	---	---	6	32.3	6	26.8	---	98.8
Missouri Early Beardless	6051	---	---	---	---	---	---	6	26.4	6	18.0	---	74.2
Stoneville:													
Texas Winter 1	554	4	46.7	4	40.1	4	42.2	6	51.6	6	48.5	45.8	100.0
Texan	6499	---	---	---	---	4	44.7	6	57.5	6	60.9	---	114.6
Wintex	6127	---	---	---	---	4	48.8	6	58.1	6	54.9	---	113.7
Missouri Early Beardless	6051	---	---	---	---	4	23.4	6	47.5	6	33.9	---	73.6
Finley	5901	---	---	4	32.7	---	---	6	51.9	6	51.8	---	97.3
Reno	6561	---	---	---	---	---	---	6	55.9	6	50.3	---	106.1
Hooded 16	6574	---	---	---	---	---	---	6	---	6	43.5	---	89.7
Tennessee Winter 52	3543	---	---	---	---	---	---	---	---	---	---	---	99.6
Tennessee Winter 61	3545	---	---	4	32.5	4	34.2	---	51.4	---	---	---	81.0

1 Standard with which other varieties are compared for comparable years.

MISSOURI

Missouri Agricultural Experiment Station, Columbia.....J. M. Poehlman.

TABLE 18.—*Acre yields of varieties of barley grown at the Missouri Agricultural Experiment Station, Columbia, in 1 or more of the years 1937-41*

[Data obtained through the courtesy of the Missouri Agricultural Experiment Station]

Variety	C. I. No.	Station No.	Number of plots and acre yield										Average yield, 1937-41	Relative yield compared with standard
			1937		1938		1939		1940		1941			
			Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield		
Fall-sown nursery plots ¹				Bu.		Bu.		Bu.		Bu.		Bu.	Per-cent	
Michigan Winter ²	2036	B 270	10	46.4	10	39.3	10	34.6	10	52.7	10	0	34.6	100.0
Kentucky 1	6050	B 216	10	49.1	10	40.2	10	33.4	10	60.8	10	0	36.7	106.1
Kentucky 2	6148	B 285	10	50.5	10	39.8	10	34.8	10	57.7	10	0	36.6	105.7
Kentucky 4	7017	B 217	10	33.3	10	39.6	10	33.6	10	53.6	10	0	32.0	92.5
Kentucky 5	7018	B 269	10	59.1	10	38.0	10	37.5	10	52.7	10	0	37.5	108.3
Wisconsin Winter	2159	B 236	10	46.4	10	29.6	10	32.1	10	65.0	10	0	34.6	100.1
Alaska	4106	B 237	10	44.1	10	27.7	10	31.3	10	66.3	10	0	33.9	97.9
Do	534	B 247	10	43.7	10	41.4	10	34.8	10	59.8	10	0	35.9	103.9
Han River	2163	B 238	10	47.8	10	23.9	10	30.2	10	68.2	10	0	34.0	98.3
Cusado	895	B 252	10	40.3	10	32.9	10	30.5	10	45.4	10	0	29.8	86.2
Arabel	896	B 253	10	50.3	10	27.7	10	32.0	10	55.8	10	0	33.2	95.8
Pidor	901	B 254	10	47.2	10	29.6	10	36.4	10	76.9	10	0	38.0	109.9
Missouri Early Beardless	6051	B 288	10	33.1	10	39.0	10	32.9	10	47.4	10	0	30.5	88.1
Admire	6377	B 387	---	---	10	46.4	10	37.4	10	48.6	10	0	---	104.6
Poland	6280	B 388	---	---	10	31.0	10	32.5	10	53.9	10	0	---	92.7
Ward	6007	B 392	---	---	10	43.3	10	41.8	10	53.4	10	0	---	109.4
Randolph	6372	B 417	---	---	---	---	10	42.2	10	60.0	10	0	---	117.1
Reno	6561	B 420	---	---	---	---	---	---	10	48.4	10	0	---	91.8
Manchuria	245	B 418	---	---	---	---	---	---	10	56.2	10	0	---	106.6

See footnotes at end of table.

TABLE 18.—*Acre yields of varieties of barley grown at the Missouri Agricultural Experiment Station, Columbia, in 1 or more of the years 1937-41—Continued*

Variety	C. I. No.	Station No.	Number of plots and acre yield										Average yield, 1937-41	Relative yield com- pared with stand- ard
			1937		1938		1939		1940		1941			
			Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield		
<i>Fall-sown nursery plots—Continued.</i>				<i>Bu.</i>		<i>Bu.</i>		<i>Bu.</i>		<i>Bu.</i>		<i>Bu.</i>	<i>Bu.</i>	<i>Per- cent</i>
Tenkow-----	646	B 419	---	---	---	---	---	---	10	52.6	10	0	---	99.8
Purdue 21-----	4581	B 393	---	---	10	42.1	10	33.7	---	---	---	---	---	102.6
Tennessee Beardless 5-----	3384	B 219	10	26.5	---	---	---	---	---	---	---	---	---	57.1
Tennessee Beardless 6-----	2746	B 287	10	24.3	---	---	---	---	---	---	---	---	---	52.4
Hanse Hull-less-----	703	B 265	10	31.5	---	---	---	---	---	---	---	---	---	67.9
Clancy-----	1002	B 268	10	26.7	---	---	---	---	---	---	---	---	---	57.5
<i>Fall-sown field plots</i>														
Michigan Winter 2-----	2036	B 270	---	---	---	---	---	---	4	36.5	4	342.7	---	100.0
Missouri Early Beardless-----	6051	B 288	---	---	---	---	---	---	4	34.7	4	419.5	---	68.4
Reno-----	6561	B 420	---	---	---	---	---	---	4	38.5	4	549.8	---	111.5
Manchuria-----	245	B 418	---	---	---	---	---	---	4	44.0	4	60	---	55.6
Tenkow-----	646	B 419	---	---	---	---	---	---	4	41.3	4	70	---	52.1
Admire-----	6377	B 387	---	---	---	---	---	---	4	36.5	---	---	---	100.0

¹ All varieties grown in nursery plots winter-killed at Columbia in 1941.

² Standard with which other varieties are compared for comparable years.

³ Winter survival 60 percent.

⁴ Winter survival 38 percent.

⁵ Winter survival 65 percent.

⁶ No winter survival.

⁷ Winter survival 2 percent.

MONTANA

Montana Agricultural Experiment Station, Bozeman.....S. C. Litzenberger.

Judith Basin Branch Station, Moccasin

-----In care of S. C. Litzenberger and R. H. Bamberg, Bozeman.

North Montana Branch Station, Havre.....J. J. Sturm.

Huntley Field Station, Huntley.....A. E. Seamans.

TABLE 19.—*Acre yields of varieties of barley grown at agricultural experiment stations in Montana in 1 or more of the years 1937-41*

[Data for Bozeman obtained through the courtesy of the Montana Agricultural Experiment Station; for Moccasin, in cooperation with the station; for Havre, through the courtesy of the Division of Dry Land Agriculture, cooperating with the Montana Agricultural Experiment Station; and for Huntley, through the courtesy of the Division of Dry Land Agriculture]

Station and variety	C. I. No.	Station No.	Number of plots and acre yield										Average yield, 1937-41	Relative yield compared with standard
			1937		1938		1939		1940		1941			
			Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield		
			Bu.	Bu.	Bu.	Bu.	Bu.	Bu.	Bu.	Bu.	Percent			
Bozeman:														
Trebi 1	936	1500	3	91.4	3	100.8	3	102.4	3	80.5	3	95.7	94.2	100.0
Manchuria	2947	1617	3	69.6	3	66.1	3	60.2	3	71.9	3	77.0	69.0	73.2
Wisconsin Barless	5105	1614	3	70.4	3	70.0	3	90.6	3	87.9	3	84.0	80.6	85.6
Smooth Awn X Manchuria	5998	1618	3	87.9	3	87.5	3	79.7	3	99.9	3	98.8	90.8	96.4
Atlas X Vaughn	6973	Moscow 13	3	107.0	3	107.0	3	107.3	3	93.3	3	108.2		109.6
Velvon	6109	1623	3	96.5	3	96.7	3	104.2	3	102.3				105.4
Composite Cross selection	5436	1625					3	91.8	3	92.2	3	100.7		102.2
Compana	5438	1626					3	86.1	3	96.4	3	100.7		101.7
Glacier	6976	Moscow 33					3	77.7	3	99.6	3	116.7		121.9
Horn	926	1559	3	83.6	3	99.6	3	73.7	3	99.6				95.0
Velvet	4252	1580	3	76.2	3	73.2	3	68.8						74.1
Hannchen 1	5462	1613	3	84.0	3	89.1	3	77.6						85.1
Oderbrucker	1272	1620	3	55.6	3	58.8	3	61.0						59.5
Rhodesia	3339	1622	3	89.1	3	108.9	3	99.8						101.1

See footnote at end of table.

TABLE 19.—Acre yields of varieties of barley grown at agricultural experiment stations in Montana in 1 or more of the years 1937-41—Continued

Station and variety	C. I. No.	Station No.	Number of plots and acre yield										Average yield, 1937-41	Relative yield compared with standard
			1937		1938		1939		1940		1941			
			Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield		
Bozeman—Con.				Bu.		Bu.		Bu.		Bu.		Bu.	Bu.	Per-
Atlas	4118	1585	3	82.9	3	68.1								78.6
Trebi X Velvet 4	6353	1621	3	72.0	3	58.4								67.8
Spartan	5027	1581	3	75.1										82.2
Cebada 97A	6352	1601	3	91.8										100.4
Moccasin:														
Trebi 1	936	1500	2	4.7	4	54.8	4	27.8	4	16.2	4	34.5	27.6	100.0
Horn	926	1559	2	2.3	4	42.8	4	40.0	4	7.2	4	24.1	23.3	84.3
Compana	5438	1626	2	7.7	4	55.0	4	35.8	4	20.4	4	39.3	31.6	114.6
Atlas X Vaughn	6973	Moscow 13							4	24.9	4	39.3		126.6
Composite Cross selection	5297								4	24.4	4	43.4		133.7
Do	5436	1625							4	19.7	4	36.0		109.9
Glacier	6976	Moscow 33									4	44.8		129.9
Velvon	6109	1623									4	44.5		129.9
Atlas	4118	1585	2	5.3	4	49.4	4	29.9						96.9
Composite Cross selection	5414		2	5.7	4	51.3	4	35.5						106.0
Do	5429		2	5.3	4	53.4	4	35.3						107.7
Coast	690		2	5.1	4	45.7								85.4
Unnamed	4197		2	4.1	4	46.4								84.9
Composite Cross selection	5431		2	6.5	4	47.6								90.9
Mechanical Mix-	4115		2	5.4										114.9
ture	4116		2	5.3										112.8
Composite Cross	5461		2	5.3										112.8
Do														
Hayre:														
Trebi 1	936		3	7.6	3	41.7	3	30.2	3	15.8	3	32.3	25.5	100.0
Ezond	5064		3	9.4	3	44.8	3	38.9	3	16.3	3	32.3	28.3	111.1
Horn	926		3	7.8	3	36.6	3	27.4	3	9.7	3	21.5	20.6	80.7
Velvet 4	7020						3	20.5	3	13.2	3	13.9		60.8
Composite Cross selection	5407						3	27.8	3	21.9	3	27.8		99.0
Regal	5030						3	13.9	3	10.8	3	25.0		63.5
Morsett	4800						3	22.6	3	7.6	3	21.9		66.5
Composite Cross selection	5436						3	31.2	3	17.7	3	41.3		115.2
Wisconsin Barbless	5105						3	11.5	3	11.5	3	22.6		58.2
Compana	5438								3	18.8	3	37.5		117.0
Atlas X Vaughn	6973	Moscow 13							3	23.6	3	43.1		138.7
Composite Cross selection	5297										3	34.7		107.4
Glacier	6976	Moscow 33									3	49.7		153.9
Velvon	6109										3	35.8		110.8
Flynn	1311		3	11.5	3	37.5	3	29.9	3	8.3				91.5
Meloy	1176		3	11.8	3	33.7	3	31.9	3	4.2				85.6
Spartan	5027		3	10.1	3	38.2	3	26.4	3	17.4				96.6
White Smyrna	195		3	8.3	3	42.7	3	33.3	3	17.4				106.7
Faust	4579		3	6.9	3	26.7	3	22.2	3	5.2				64.0
Hannchen	531		3	4.5	3	27.6	3	10.1						53.1
Nawal	6088		3	4.2	3	40.6	3	18.7						79.9
Oderbrucker	4666		3	2.1	3	21.5	3	6.2						37.5
Beldi Giant	2777		3	9.0	3	45.8								111.2
Nepal	595		3	7.6	3	26.4								69.0
Velvet	4252		3	6.6	3	29.5								73.2
Composite Cross selection	5429						3	19.8						65.6
Huntley:														
Horn 1	926						2	49.1	2	39.6	2	37.2		100.0
Compana	5438						2	71.4	2	49.0	2	43.4		130.1
Composite Cross selection	5436								2	47.3	2	44.2		119.1
Atlas X Vaughn	6973	Moscow 13							2	50.1	2	52.3		133.3
Composite Cross selection	5414						2	57.3						116.7
Do	5429						2	61.6						125.5

1 Standard with which other varieties are compared for comparable years.

NEBRASKA

Nebraska Agricultural Experiment Station, Lincoln

K. S. Quisenberry and W. E. Lyness.

North Platte Substation, North Platte—O. J. Webster and K. S. Quisenberry.

Box Butte Experiment Farm, Alliance—R. E. Pahl and K. S. Quisenberry.

Valentine Substation, Valentine—E. M. Brouse and K. S. Quisenberry.

TABLE 20.—Acre yields of varieties of barley grown at agricultural experiment stations in Nebraska in 1 or more of the years 1937-41

[Data obtained in cooperation with the Nebraska Agricultural Experiment Station]

Station and variety	C. I. No.	Station No.	Number of plots and acre yield										Average yield, 1937-41	Relative yield compared with stand-ard
			1937		1938		1939		1940		1941			
			Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield		
				Bu.		Bu.		Bu.		Bu.		Bu.	Bu.	Per cent
Lincoln:														
Trebi 1	936	105	5	23.2	5	41.6	5	8.9	4	18.9	4	20.5	22.6	100.0
Flynn 1	5911	107	5	19.8	5	55.7	5	14.2	4	23.4	4	21.4	26.9	118.9
Spartan	5027	111	5	19.5	5	42.9	5	15.5	4	20.7	4	24.4	24.6	108.8
North Platte 1	5266	116	5	20.5	5	50.0	5	10.9	4	22.8	4	22.2	25.3	111.8
Manchuria	2330	102	5	14.1	5	33.7	5	5.5	4	12.2	4	12.5	15.6	69.0
Ezond	6265	115	5	22.8	5	44.6	5	12.4	4	17.6	4	29.2	25.3	111.9
Short Comfort	5907	104	5	24.1	5	44.3	5	10.0	4	19.1	4	25.3	24.6	108.6
Wisconsin Barbless	5105	119	5	23.1	5	38.8	5	8.4	4	11.9	4	16.9	19.8	87.6
Club Mariout	261	121	5	20.3	5	48.7	5	13.9	4	23.3	4	22.9	25.8	114.1
Manchuria	2947	123	5	13.2	5	24.0	5	3.7	4	11.3	4	14.4	13.3	58.9
Trebi X Velvet 4	3353	125	5	41.8	5	41.8	5	12.4	4	15.5	4	25.2	25.2	105.6
Velvon	6109	127	5	45.7	5	45.7	5	11.4	4	21.2	4	24.0	24.0	113.8
Lico	6279	128	5	16.2	5	16.2	5	9.2	4	20.6	4	24.1	24.1	126.1
Atlas X Vaughn	6970	130	5	9.2	5	9.2	5	2.5	4	23.5	4	15.4	15.4	99.6
Beecher	6566	130	5	12.4	5	12.4	5	2.2	4	22.9	4	16.8	16.8	107.9
Velvet	4252	120	5	17.7	5	24.8	5	6.2	4	9.7	4	10.4	10.4	63.1
Comfort	4578	108	5	18.0	5	31.7	5	7.6	4	10.4	4	10.4	10.4	73.1
Oderbrucker X Lion	5028	109	5	26.7	5	39.8	5	8.8	4	13.3	4	13.3	13.3	95.7
Glabron	4577	109	5	15.2	5	24.6	5	8.7	4	13.3	4	13.3	13.3	65.8
Oderbrucker	4666	122	5	10.3	5	21.5	5	4.2	4	6.9	4	6.9	6.9	48.8
Ioglos	6239	124	5	18.2	5	28.7	5	6.9	4	6.9	4	6.9	6.9	73.0
Odessa	182	103	5	18.9	5	42.0	5	42.0	4	42.0	4	42.0	42.0	94.0
Colness	2792	110	5	19.0	5	40.9	5	40.9	4	40.9	4	40.9	40.9	92.4
Peatland	5267	5	5	8.9	5	8.9	5	8.9	4	8.9	4	8.9	8.9	38.4
Smooth Awn X Manchuria	5998	126	5	30.7	5	30.7	5	6.2	4	13.3	4	13.3	13.3	72.3
Composite Cross III	6144	1	1	42.6	1	42.6	1	5.6	1	11.5	1	11.5	11.5	86.0
North Platte: 2														
Trebi 1	936	4	4	9.4	4	33.3	4	20.7	4	0	4	55.3	23.7	100.0
North Platte 1	5266	4	4	11.0	4	31.3	4	22.8	4	0	4	56.9	24.4	102.8
Sandrel	937	4	4	11.1	4	31.5	4	21.3	4	0	4	56.8	24.1	101.7
Common Six-Row	4640	4	4	9.7	4	26.3	4	20.0	4	0	4	57.4	22.7	95.5
McClymont	2126	4	4	8.5	4	25.0	4	18.4	4	0	4	54.0	21.2	89.2
Club Mariout	261	4	4	7.9	4	27.9	4	23.3	4	0	4	53.5	22.5	94.9
Spartan	5027	4	4	7.6	4	34.7	4	22.6	4	0	4	53.0	23.6	99.3
Short Comfort	5907	4	4	9.2	4	31.7	4	19.6	4	0	4	51.8	22.5	94.6
Comfort	4578	4	4	8.8	4	28.6	4	14.5	4	0	4	38.5	18.1	76.2
Blackhull 1180	6009	4	4	33.3	4	24.1	4	24.1	4	0	4	61.7	24.1	109.0
Velvon	6109	4	4	37.9	4	21.8	4	21.8	4	0	4	60.9	21.8	110.3
Ezond	6265	4	4	37.5	4	19.5	4	19.5	4	0	4	59.2	21.8	106.3
Atlas	4118	4	4	31.3	4	25.5	4	25.5	4	0	4	58.5	25.5	105.5
Lico	6279	4	4	34.9	4	24.0	4	24.0	4	0	4	56.9	24.0	105.9
Flynn 1	5911	4	4	32.4	4	23.0	4	23.0	4	0	4	53.4	23.0	99.5
Beecher	6566	4	4	26.1	4	26.1	4	26.1	4	0	4	53.4	26.1	104.6
North Platte 4	5488	4	4	11.3	4	25.7	4	20.4	4	0	4	53.4	20.4	90.5
Ezond	5064	4	4	10.2	4	37.5	4	20.5	4	0	4	53.4	20.5	107.6
Coast	690	4	4	9.1	4	30.0	4	19.6	4	0	4	53.4	19.6	92.6
Glabron	4577	4	4	8.6	4	27.5	4	14.4	4	0	4	53.4	14.4	79.7
Vaughn	1367	4	4	8.6	4	27.5	4	14.4	4	0	4	53.4	14.4	91.5
Alliance:														
Trebi 1	936	105	3	2.5	3	45.6	3	18.3	3	4.0	3	50.3	24.1	100.0
Spartan	5027	111	3	4.9	3	37.3	3	20.4	3	11.5	3	35.9	22.0	91.1
Flynn 1	5911	107	3	8.1	3	38.3	3	18.8	3	12.7	3	40.6	23.7	98.2
Ezond	6265	115	3	4.5	3	41.3	3	23.8	3	5.0	3	53.9	25.7	106.5

See footnotes at end of table.

TABLE 20.—*Acre yields of varieties of barley grown at agricultural experiment stations in Nebraska in 1 or more of the years 1937-41—Continued*

Station and variety	C. I. No.	Station No.	Number of plots and acre yield										Average yield, 1937-41	Relative yield com- pared with stand- ard
			1937		1938		1939		1940		1941			
			Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield		

Alliance—Continued.				Bu.		Bu.		Bu.		Bu.		Bu.	Bu.	Per- cent
North Platte 1.....	5266	116	3	2.8	3	35.1	3	22.3	3	5.0	3	45.8	22.2	92.0
Club Mariout.....	261	121	3	4.1	3	39.1	3	19.2	3	7.3	3	36.9	21.3	88.3
Velvon.....	6109	127	—	—	3	37.5	3	20.1	3	5.9	—	45.4	—	92.1
Oderbrucker X Lion.....	5028	—	—	—	3	28.3	3	15.5	3	3.2	—	47.8	—	80.2
Lico.....	6279	128	—	—	—	—	—	—	3	5.6	—	39.2	—	82.5
Beecher.....	6566	130	—	—	—	—	—	—	3	7.4	—	23.6	—	57.1
Atlas X Vaughn.....	6970	—	—	—	—	—	—	—	—	—	3	29.1	—	59.3
Glabron.....	4577	109	3	9	3	22.2	3	13.2	—	—	—	—	—	49.7
Wisconsin Barbless.....	5105	119	3	4.6	3	36.1	—	—	—	—	—	—	—	84.6
Comfort.....	4578	108	3	3.3	—	—	—	—	—	—	—	—	—	132.0
Vaughn.....	1367	114	3	7.8	—	—	—	—	—	—	—	—	—	312.0
Short Comfort.....	5907	104	—	—	3	32.4	3	17.4	3	5.3	—	—	—	81.1
Manchuria.....	2330	102	—	—	3	31.6	—	—	—	—	—	—	—	69.3
Colless.....	2792	110	—	—	3	33.1	—	—	—	—	—	—	—	72.6
Valentine:														
Spartan 1.....	5027	111	—	—	2	15.7	2	12.5	—	—	—	—	—	100.0
Short Comfort.....	5907	104	—	—	2	17.5	2	13.1	—	—	—	—	—	108.5
Glabron.....	4577	109	—	—	2	7.5	2	13.0	—	—	—	—	—	72.7
Flynn 1.....	5911	107	—	—	2	14.2	2	9.7	—	—	—	—	—	84.8
Club Mariout.....	261	121	—	—	2	12.2	2	6.6	—	—	—	—	—	66.7
North Platte 1.....	5266	116	—	—	2	10.7	2	5.4	—	—	—	—	—	57.1
Colless.....	2792	110	—	—	2	9.0	2	5.0	—	—	—	—	—	49.6
Trebi.....	936	105	—	—	2	14.3	—	—	—	—	—	—	—	114.4
Ezond.....	6265	115	—	—	2	9.8	—	—	—	—	—	—	—	78.4

1 Standard with which other varieties are compared for comparable years.

2 Crop destroyed by hail in 1940.

NEW JERSEY

New Jersey Agricultural Experiment Station, New Brunswick G. H. Ahlgren.

TABLE 21.—*Acre yields of varieties of barley grown at the New Jersey Agricultural Experiment Station, New Brunswick, in 1 or more of the years 1937-41*

[Data obtained through the courtesy of the New Jersey Agricultural Experiment Station]

Variety	C. I. No.	Station No.	Number of plots and acre yield										Average yield, 1937-41	Relative yield com- pared with stand- ard
			1937		1938		1939		1940		1941			
			Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield		
<i>Spring-sown</i>														
Wisconsin Barbless 1	5105	BS112	10	41.0	9	35.7	10	15.9	10	26.1	9	32.4	30.2	100.0
Velvon.	6109		10	39.3	10	35.0	10	19.8	10	35.2	10	43.7	34.6	114.5
Spartan.	5027		10	32.7	9	32.5	10	17.1	10	32.5	10	32.3	29.4	97.4
Alpha.	959		10	41.3	10	41.5	10	18.8	10	39.8	10	41.4	36.6	121.0
Velvet.	4252		9	39.1	10	29.4	10	12.7	10	27.9	10	35.2	28.9	95.5
Trebi.	936		10	44.2	10	36.7	10	19.1	10	37.2	10	46.1	36.7	121.3
Tall Comfort.	5903		10	44.2	9	34.4	10	14.4	10	29.9	10	28.3	30.2	100.1
Flynn 1.	5911						10	21.9	10	31.7	10	26.3		107.4
Queens.	7021										9	45.6		140.7
Comfort.	4578		10	43.2	9	33.6	10	15.6	10	34.8				107.2
Ioglos.	6239			10	28.7								80.4	
Bonami.	4664	8	28.4										69.3	

See footnote at end of table.

TABLE 21.—*Acre yields of varieties of barley grown at the New Jersey Agricultural Experiment Station, New Brunswick, in 1 or more of the years 1937-41—Continued*

Variety	C. I. No.	Station No.	Number of plots and acre yield										Average yield, 1937-41	Relative yield compared with standard
			1937		1938		1939		1940		1941			
			Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield		
<i>Fall-sown (variety plots)</i>				Bu.		Bu.		Bu.		Bu.		Bu.	Bu.	Per-cent
Marnobarb ¹	6120	-----	10	45.2	9	32.2	7	53.4	10	29.0	10	33.5	38.7	100.0
Missouri Early Beardless.....	6051	-----	8	33.9	9	33.8	10	42.6	10	29.0	10	26.9	33.2	86.0
Tennessee Winter 52.....	3543	-----	9	41.6	9	40.2	10	40.7	10	30.4	10	30.8	36.7	95.0
Michigan Winter.....	2036	-----	10	45.4	10	40.3	10	48.4	10	32.7	10	36.0	40.6	104.9
Wisconsin Winter.....	2159	-----	10	42.0	10	38.8	10	50.4	10	34.8	10	36.3	40.5	104.7
Kentucky 1.....	6050	-----	10	42.7	9	44.7	10	39.9	10	38.5	10	40.5	41.3	106.7
Woods Hooded.....	6235	-----	7	38.8	9	35.3	10	47.4	10	32.1	10	33.8	37.5	96.9
Hartungs.....	7023	-----	7	38.8	10	38.7	10	50.0	10	35.1	10	35.8	-----	107.8
Tennessee Winter.....	257	-----	10	42.3	9	44.2	10	44.7	10	30.3	10	38.3	-----	104.7
Poland.....	6280	-----	10	42.3	10	42.3	10	51.4	10	34.7	10	42.8	-----	111.2
Nassau.....	7022	WB6-68	-----	-----	-----	-----	-----	-----	-----	-----	10	45.2	-----	134.9
Burlington.....	7024	-----	9	47.5	10	32.0	10	49.8	10	33.9	-----	-----	-----	102.1
Woods Bearded.....	7024	-----	10	47.5	9	33.4	10	44.7	10	31.3	-----	-----	-----	98.2
Tennessee Beardless 5.....	3384	-----	7	34.9	10	29.5	-----	-----	-----	-----	-----	-----	-----	83.2
<i>Fall-sown (breeding plots)</i>														
Marnobarb ¹	6120	-----	3	61.7	6	37.0	6	30.2	9	31.0	-----	-----	-----	100.0
Kentucky 1.....	6050	-----	3	64.8	3	34.8	3	29.0	3	24.9	-----	-----	-----	96.0
Randolph.....	6372	-----	3	59.7	3	41.2	3	32.6	3	17.4	-----	-----	-----	94.4
Hooded selection.....	7026	N. C. I-26	3	47.0	3	32.0	3	26.6	-----	-----	-----	-----	-----	81.9

¹ Standard with which other varieties are compared for comparable years.

NEW MEXICO

New Mexico Agricultural Experiment Station, State College. J. C. Overpeck.
Conservancy District Substation, Albuquerque

-----In care of J. C. Overpeck, State College.

Capulin Field, Capulin.....In care of J. C. Overpeck, State College.

TABLE 22.—*Acre yields of varieties of barley grown at agricultural experiment stations in New Mexico in 1 or more of the years 1937-41*

[Data obtained through the courtesy of the New Mexico Agricultural Experiment Station]

Station and variety	C. I. No.	Station No.	Number of plots and acre yield										Average yield, 1937-41	Relative yield com- pared with stand- ard
			1937		1938		1939		1940		1941			
			Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield		
State College: <i>Fall-sown</i> <i>(irrigated)</i> ¹				<i>Bu.</i>		<i>Bu.</i>		<i>Bu.</i>		<i>Bu.</i>		<i>Bu.</i>	<i>Per-</i>	
Trebi ²	936		7	96.5			6	55.1	12	46.4	8	42.0	-----	100.0
New Mexico Winter 1	7065		7	92.1			6	43.7	12	67.9	8	48.7	-----	105.2
New Mexico Winter 2	7066		7	98.5			6	46.1	12	62.2	8	48.7	-----	106.5
Tennessee Winter	257		7	84.0			6	42.9	12	65.6	8	34.9	-----	94.8
O. A. C. 6	5954		7	99.9			6	43.3	12	58.6	8	47.7	-----	104.0
Finley	5901						6	48.7	12	52.5	8	50.6	-----	105.8

See footnotes at end of table.

TABLE 22.—Acre yields of varieties of barley grown at agricultural experiment stations in New Mexico in 1 or more of the years 1937-41—Continued

Station and variety	C. I. No.	Station No.	Number of plots and acre yield										Average yield, 1937-41	Relative yield compared with standard
			1937		1938		1939		1940		1941			
			Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield		
State College—Con. <i>Fall-sown (irrigated)</i> —Continued				Bu.		Bu.		Bu.		Bu.		Bu.	Bu.	Per cent
Texas Winter	6498						6	48.2	12	63.3	8	59.0		118.8
Tenkow	646										8	55.7		132.2
Kentucky 1	6050		7	69.7										72.2
Kentucky 2	6148		7	76.0										78.8
Club Mariout	261		7	83.7										86.7
Missouri Early Beardless	6051		7	30										0
<i>Spring-sown (irrigated)</i> ⁴														
Trebi 2	936		7	70.4			7	87.0	7	78.0	8	65.6		100.0
Club Mariout	261		7	65.8			7	70.7	7	71.7	8	54.6		87.3
Vaughn	1367		7	53.3			7	72.2	7	78.4	8	62.6		88.5
Conway	6095		7	77.0			7	86.6	7	65.2	8	52.9		93.6
Atlas	4118						7	62.6	7	69.2	8	51.9		79.7
Atlas X Vaughn	7064	Moscow 6					7	76.7	7	74.4	8	66.1		94.2
Flynn	1311						7	72.1	7	77.3	8	63.4		92.3
Lico	6279								7	69.5	8	41.8		77.5
Velvon	6109											60.1		91.6
Wisconsin Barbless	5105		7	62.9			7	58.9						77.4
Union Beardless	5976		7	68.2										96.9
Hannchen	531		7	46.0										65.3
Oderbrucker	4666		7	48.7										69.2
Albuquerque:														
<i>Spring-sown (irrigated)</i>														
Trebi 2	936				12	37.0	6	27.6	5	58.3	6	53.5		100.0
Club Mariout	261				12	38.3	6	23.9	5	59.5	6	51.8		98.4
Conway	6095				12	37.3	6	25.0	5	57.1	6	58.0		100.6
Atlas X Vaughn	7064	Moscow 6			12	34.4	6	24.6	5	68.4	6	60.5		106.5
Vaughn	1367				12	32.8	6	25.8	5	69.0	6	55.3		103.7
Atlas	4118				12	36.0	6	26.1	5	65.1	6	57.0		104.4
Flynn	1311				12	33.1	6	27.2	5	71.0	6	67.1		112.5
Velvon	6109										6	66.7		124.7
Union Beardless	5976				12	33.6	6	22.7	5	46.2				83.4
Hannchen	531				12	36.2	6	24.7						94.3
Colless	2792				12	26.8	6	20.5						73.2
Wisconsin Barbless	5105				12	30.2	6	20.6						78.6
Oderbrucker	4666						6	23.3						84.4
Capulin: ⁵														
<i>Spring-sown (dry-farmed)</i>														
White Smyrna 2	195		3	3.9	2	10.9	2	0			3	19.4		100.0
Stavropol	5913		3	3.4	2	12.8	2	0			3	21.6		110.5
Odessa	182		3	3.8	2	17.2	2	0			3	32.5		156.4
Club Mariout	261		3	3.3	2	10.1	2	0			3	20.2		98.2
Colless	2792		3	2.6	2	11.2	2	0			3	27.4		120.5
Wisconsin Barbless	5105		3	3.8	2	10.5	2	0			3	30.4		130.7
Conway	6095		3	4.6	2	13.4	2	0			3	22.9		119.6

¹ No yield data in 1938, due to poor uneven stands.² Standard with which other varieties are compared for comparable years.³ No yield, on account of frost at heading time.⁴ No tests conducted in 1938.⁵ Crop failure in 1939 due to drought; no tests conducted in 1940.

NEW YORK

New York Agricultural Experiment Station, Cornell University, Ithaca
-----H. H. Love.TABLE 23.—*Acre yields of varieties of barley grown at the New York Agricultural Experiment Station at Cornell University, Ithaca, in 1 or more of the years 1937-41*

[Data obtained in cooperation with the New York Agricultural Experiment Station]

Variety	C. I. No.	Station No.	Number of plots and acre yield										Average yield, 1937-41	Relative yield compared with standard
			1937		1938		1939		1940		1941			
			Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield		
				Bu.		Bu.		Bu.		Bu.		Bu.	Bu.	Percent
Alpha ¹	959		10	19.7	10	25.4	8	26.8	8	47.7	8	29.3	29.8	100.0
Swiss Spring 87	7025		10	29.7	10	38.1	8	30.7	8	47.0	8	31.9	35.5	119.1
Wisconsin Barless	5105		10	17.6	10	23.4	8	30.3	8	41.5	8	22.2	27.0	90.7
Ohio	5910		10	16.8	10	21.5	8	35.8	8	41.3	8	29.1	28.9	97.0
(Manchuria X Leiorrhynchum) X Alpha		220a1-29-50	10	21.4	10	35.0	8	34.8	8	43.3	8	26.2	32.1	107.9
Do		220a1-31-358	10	26.5	10	34.6	8	30.4	8	42.4	8	24.0	31.6	106.0
(Manchuria X Leiorrhynchum) X Russian 02		222a1-29-302	10	17.4	10	30.8	8	29.8	8	43.2	8	18.8	28.0	94.0
Do		225a1-29-410	10	22.8	10	34.1	8	33.5	8	47.6	8	25.2	32.6	109.6
Nanking 150 X Comfort		505a1-15-4	5	17.5	8	41.5	8	31.5	8	44.1	8	24.8	31.9	107.1
Do		505a1-17-6	5	19.1	8	40.5	8	29.1	8	49.4	8	25.3	32.7	109.7
Do		505a1-51-1	5	20.3	8	39.4	8	26.6	8	50.9	8	26.1	32.7	109.7
Do		505a1-51-3	5	21.5	8	38.8	8	27.5	8	51.5	8	28.5	33.6	112.7
Do		505a1-58-2	5	20.1	8	38.3	8	29.8	8	51.5	8	24.7	32.9	110.4
Do		505a1-58-6	5	19.0	8	41.3	8	27.7	8	48.2	8	25.4	32.3	108.5
Goldfoil	928		10	18.5	10	26.7	8	30.0	8	42.9	8	25.3	28.7	96.3
(Manchuria X Leiorrhynchum) X Alpha		204a1-27-243	10	24.5	10	29.5	8	29.6	8	42.6	8	27.9	30.8	103.5
Do		220a1-29-176	10	22.8	10	26.7	8	25.5	8	37.9	8	25.0	27.6	92.6
Do		220a1-29-181	10	25.7	10	25.1	8	27.8	8	40.2	8	28.5	29.5	98.9
Do		220a1-29-184	10	23.8	10	24.7	8	29.4	8	39.4	8	27.8	29.0	97.4
Do		220a1-30-461	10	21.1	10	27.7	8	29.5	8	40.2	8	26.9	29.1	97.6
(Manchuria X Leiorrhynchum) X (Arlington Awnless X Wild)		221a1-31-837	10	22.8	10	27.7	8	28.4	8	38.6	8	27.8	29.1	97.6
Alpha X Goldfoil		504a7-5-2	5	22.5	8	35.0	8	25.2	8	44.4	8	24.4	30.3	101.7
Do		504a11-5-1	5	25.2	8	35.2	8	25.5	8	45.4	8	27.0	31.7	106.3
Do		504a11-5-2	5	22.7	8	40.8	8	32.6	8	46.3	8	28.3	34.1	114.6
Do		504a11-5-3	5	28.6	8	35.4	8	29.3	8	42.8	8	28.3	32.9	110.4
Do		504a11-5-4	10	27.2	10	36.0	8	29.1	8	46.6	8	26.9	33.2	111.3
Do		504a11-5-7	5	26.9	8	37.8	8	29.4	8	42.6	8	23.3	32.0	107.5
Do		504a11-5-11	5	27.1	8	39.5	8	29.2	8	45.6	8	22.8	32.8	110.3
Do		504a11-5-12	10	28.1	10	31.2	8	26.2	8	45.0	8	29.3	32.0	107.3
Do		504a11-20-18-1	5	24.4	8	38.5	8	28.7	8	38.8	8	25.5	31.2	104.7
Do		504a11-20-18-3	5	24.1	8	40.9	8	29.8	8	43.1	8	25.2	32.6	109.5
Do		504a12-15-3	5	24.5	8	43.3	8	28.6	8	39.6	8	21.3	31.5	105.6
Do		504a12-19-18-5	5	25.1	8	37.4	8	26.1	8	45.0	8	26.7	32.1	107.7
Do		504a23-9-8	5	26.6	8	34.0	8	25.0	8	43.3	8	25.9	31.0	104.0
Do		504a25-4-4	5	20.3	8	34.8	8	26.4	8	46.1	8	25.3	30.6	102.7
Do		504a25-4-5	5	23.4	8	36.0	8	27.3	8	42.2	8	28.3	31.4	105.6
Do		504a25-14-7	5	25.4	8	36.8	8	30.7	8	42.0	8	28.4	32.7	109.7
Do		504a25-19-4	5	21.1	8	39.7	8	29.8	8	43.9	8	28.3	32.6	109.3
Do		504a26-6-3	5	22.2	8	41.9	8	31.2	8	39.8	8	25.1	32.0	107.6
Do		504a27-2-8	5	28.2	8	38.1	8	24.8	8	46.1	8	27.3	32.9	110.5
Do		504a28-1-2	5	23.9	8	37.6	8	30.9	8	47.3	8	26.5	33.2	111.6
Do		504a28-17-1	5	24.8	8	38.0	8	27.1	8	43.2	8	26.0	31.8	106.9
Do		504a28-17-3	5	27.8	8	41.7	8	25.2	8	43.9	8	28.7	33.5	112.4

¹ Standard with which other varieties are compared for comparable years.

NORTH CAROLINA

Piedmont Branch Station, Statesville--G. J. Middleton and R. W. McMillen.

TABLE 24.—Acre yields of varieties of barley grown at the Piedmont Branch Station, Statesville, N. C., in 1 or more of the years 1937-41

[Data obtained through the courtesy of the North Carolina Agricultural Experiment Station]

Variety	C. I. No.	Station No.	Number of plots and acre yield										Average yield, 1937-41	Relative yield compared with standard
			1937		1938		1939		1940		1941			
			Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield		
				Bu.		Bu.		Bu.		Bu.		Bu.	Bu.	Per-cent
Tennessee Beardless 6 1	2746		20	26.7	36	23.4	51	60.2	41	33.2	5	39.8	36.7	100.0
Iredell	6571	I-23	10	23.1	3	48.5	5	53.8	5	38.1	5	57.8	44.3	120.7
Hooded selection	7026	I-26	10	20.9	3	37.4	5	55.4	5	44.9	5	50.3	41.8	114.0
Tennessee Winter	257		10	20.7	3	41.0	5	53.5	5	39.7	5	48.1	40.6	110.7
Randolph	6372	I-68	10	24.5	3	44.9	5	57.7	5	43.6	5	56.1	45.4	123.7
Composite Cross selection	7027	II-3	5	30.0	3	44.4	5	62.0	5	50.8	5	58.6	49.2	134.1
Do	6564	II-11	10	21.6	3	51.3	5	54.8	5	46.6	5	54.9	45.8	125.0
Davidson	6373	II-15	10	22.3	3	52.8	5	55.7	5	47.5	5	59.8	47.6	129.9
Hooded 16	6574				3	36.3	5	58.5	5	36.3	5	42.9		111.1
Nakano Wase 33	6269				3	49.5	5	65.9	5	55.9	5	61.7		148.8
Sunrise	6272				3	43.1	5	83.8	5	51.3	5	68.5		157.5
Smooth Awn 203	6267				3	40.5	5	55.1	5	43.3	5	45.1		117.5
Smooth Awn 88	7028				3	44.0	5	54.5	5	48.7	5	62.6		134.0
Smooth Awn 90	7029				3	38.7	5	58.8	5	39.4	5	47.7		117.9
Wisconsin Winter	2159				3	41.7	5	51.6	5	42.5	5	46.4		116.3
Tennessee Winter	6034				3	40.1	5	57.5	5	44.1	5	51.6		123.4
Orel	351				3	43.6	5	50.9	5	39.7	5	46.4		115.3
Unnamed	3836		5	22.7	3	46.4	5	50.4	5	44.8				114.5
Do	4298		5	22.8	3	42.8	5	53.6	5	38.7				110.0
	-1													
Hooded 11	6575				3	36.3	5	53.9	5	41.3				112.6
Hooded 21					3	36.6	5	59.4	5	30.9				108.6
Nakano Wase 51	7057				3	38.8	5	74.3	5	48.4				138.3
Nakano Wase 45					3	41.7	5	66.6	5	48.3				134.1
Nakano Wase 59	6567				3	41.2	5	58.9	5	53.4				131.4
Smooth Awn 86	6268				3	34.5	5	50.1	5	40.1				106.8
Smooth Awn 85					3	37.8	5	54.2	5	42.7				115.3
Smooth Awn selection	6495	Md. 15-8			3	25.0	5	38.3	5	39.7				88.2
Composite Cross selection		II-52-1			3	39.3	5	38.2	5	33.3				94.9
Do		II-52-3			3	50.9	5	39.9	5	33.5				106.4
Do		II-52-4			3	42.2	5	36.1	5	34.4				96.5
Do		II-53-4			3	38.1	5	44.2	5	30.2				96.3
Do		II-53-7			3	39.8	5	40.9	5	28.5				93.5
Do		II-53-12			3	41.3	5	40.7	5	29.7				95.6
Bearded selection		I-70	5	21.9	3	40.2	5	45.6						97.6
Do		I-83	5	26.6	3	41.0	5	53.0						109.3
Composite Cross selection		II-8	5	29.8	3	49.0	5	63.0						128.6
Do		II-24	5	30.8	3	45.8	5	47.0						112.1
Do		II-30	5	32.4	3	37.2	5	62.0						119.3
Do		II-120			3	43.0	5	61.8						125.4
Do		II-127			3	50.4	5	55.1						126.2

¹ Standard with which other varieties are compared for comparable years.

NORTH DAKOTA

North Dakota Agricultural Experiment Station, Fargo.....T. E. Stoa.
 Dickinson Substation, Dickinson.....R. W. Smith.
 Northern Great Plains Field Station, Mandan.....J. C. Brinsmade, Jr.

TABLE 25.—*Acre yields of varieties of barley grown at agricultural experiment stations in North Dakota in 1 or more of the years 1937-41*

[Data for Fargo obtained through the courtesy of the North Dakota Agricultural Experiment Station; for Dickinson, in cooperation with the station; for Mandan, in cooperation with the Division of Dry Land Agriculture]

Station and variety	C. I. No.	Station No.	Number of plots and acre yield										Average yield, 1937-41	Relative yield compared with standard
			1937		1938		1939		1940		1941			
			Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield		
Fargo:				Bu.		Bu.		Bu.		Bu.		Bu.	Bu.	Per cent
Trebi ¹	936	30013	3	47.2	3	53.5	3	50.7	3	12.1	3	43.1	41.3	100.0
Spartan	5027	32005	3	49.8	3	44.0	3	46.0	3	16.2	3	39.8	39.2	94.8
Odessa	182	30014	3	45.8	3	51.1	3	45.2	3	14.2	3	45.3	40.3	97.6
Manchuria	2947	2121	3	34.9	3	46.4	3	40.9	3	9.5	3	31.5	32.6	79.0
Wisconsin Barbless	5105	30019	3	48.1	3	46.5	3	48.2	3	14.8	3	35.4	38.6	93.4
Peatland	5267	30033	3	43.7	3	41.6	3	37.9	3	9.3	3	32.5	33.0	79.9
Tregal	6359	30036	2	49.1	3	60.9	3	51.2	3	18.1	3	39.7	43.8	106.0
Ezond	6265	30034	3	52.8	3	61.3	3	52.6	3	14.9	3	26.8	41.7	100.9
Lico	6279	30039					3	50.7	3	16.6	3	32.4		94.1
Beecher	6566	30040					3	43.3	3	17.4	3	22.0		78.1
Velvon	6109	30038					3	55.1	3	15.8	3	32.8		97.9
Regal X Trebi	7031	30042					3	48.6	3	15.0	3	36.9		94.9
Grandin	6968	30041					1	20.2	3	29.4	3	20.2		47.0
Olli	6251	30044									3	38.0		88.2
Plush	6093	30043									3	32.7		75.9
Velvet	4252	30015	3	42.4	3	38.9	3	45.0	3	9.1				82.8
Steigum	907	32006	3	39.3	3	35.9	3	40.2						76.2
Oglos	6239	30037	3	42.5	3	48.7	3	48.4						92.2
Oderbrucker	1174	30021	3	28.3	3	30.3								58.2
Svansota	1907	32004	3	42.6	3	46.4								88.4
Hannchen	531	32003	3	37.6	3	37.6								74.7
Regal X Trebi	6358	30035	3	53.2	3	56.4								108.8
Mensury (Ott. 60)	4696	30045					1	42.3						83.4
Winter Club	592		1	25.0										53.0
Dickinson:														
Trebi ¹	936		4	4.7	4	15.1	4	48.2	4	18.3	4	4.2	18.1	100.0
Hannchen	531		4	5.0	4	2.9	4	41.6	4	18.4	4	4.6	14.5	80.1
Steigum	907		4	7.5	4	6.1	4	42.5	4	17.6	4	4.4	15.6	86.3
Horn	926		4	3.1	4	4.2	4	40.4	4	16.1	4	3.5	13.5	74.4
Manchuria	244		4	8.1	4	9.2	1	437.4	4	13.5	4	4.0	14.4	79.8
Odessa	182		4	5.8	4	6.8	1	438.6	4	11.5	3	2.3	13.0	71.8
Ezond	6265		4	6.6	4	20.6	4	40.6	4	17.0	4	5.0	18.0	99.2
Composite Cross	5461		2	52.3	2	510.0	2	432.6	2	57.9	2	4.2	11.4	63.0
Regal X Trebi	6358				4	11.6	4	46.4	4	21.5	4	3.5		96.7
Tregal	6359				4	10.4	4	47.4	4	14.3	4	3.7		88.3
Spartan	5027						4	43.6	4	18.6	4	3.7		93.2
Velvon	6109								4	15.9	4	5.9		96.9
Rex	6618								4	15.8	4	1.9		78.7
Lico	6279										3	5.8		138.1
Colless	2792		2	52.7	4	14.6	1	437.9	2	511.2				76.9
Wisconsin Barbless	5105		4	3.3	4	7.7	1	436.0	4	9.8				65.8
Velvet	4252		4	1.8	4	1.8	4	22.7						38.7
Glabor	4577		4	3.8	4	2.0	4	28.6						50.6
Lion	923		4	8.8	4	10.6								98.0
Svansota	1907		4	4.5										95.7
Mandan:														
Trebi ¹	936		3	14.3	3	10.1	3	23.5	3	15.0				100.0
Ezond	6265		3	19.8	3	10.1	3	25.6	3	15.0				112.1
Odessa	182		3	15.8	3	9.3	3	23.4	3	14.3				99.8
Steigum	907		3	13.6	3	7.7	3	22.7	3	18.4				99.2
Wisconsin Barbless	5105		3	9.2	3	11.0	3	20.3	3	713.3				85.5
Horn	926		3	7.0	3	8.5	3	23.1	3	13.2				82.4
Regal X Trebi	6358				3	11.7	3	19.5	3	14.2				93.4
Tregal	6359				3	10.7	3	24.9	3	13.4				100.8
Spartan	5027						3	16.3	3	15.0				81.3
Velvon	6109								3	17.8				118.7
Rex	6618								3	710.2				68.0
Glabor	4577		3	15.8	3	4.5	3	19.3						82.7
Velvet	4252		3	8.6	3	5.3	3	22.1						75.2
Featherston	1120		3	12.0										83.9
Hannchen	531		3	10.1										70.6

¹ Standard with which other varieties are compared for comparable years.² Average of three replications, using estimated yields for one replication.³ Two plots of each variety grown on cornland and 2 plots on fallow, yield averaged. Yields greatly reduced by hail in 1941.⁴ Yields from fallow land only and not entirely comparable.⁵ Yields from cornland only and not entirely comparable.⁶ No variety test at Mandan in 1941.⁷ Some rabbit damage.

OKLAHOMA

Oklahoma Agricultural Experiment Station, Stillwater..... C. B. Cross.
 United States Dry Land Field Station, Lawton..... W. M. Osborn.
 United States Southern Great Plains Field Station, Woodward. V. C. Hubbard.

TABLE 26.—*Acre yields of varieties of barley grown at agricultural experiment stations in Oklahoma in 1 or more of the years 1937-41*

[Data for Stillwater obtained through the courtesy of the Oklahoma Agricultural Experiment Station; for Lawton, through the courtesy of the Division of Dry Land Agriculture; and for Woodward, 1937-40, in cooperation with the Division of Dry Land Agriculture, and for 1941, through the courtesy of the Division of Dry Land Agriculture]

Station and variety	C. I. No.	Station No.	Number of plots and acre yield										Average yield, 1937-41	Relative yield compared with standard	
			1937		1938		1939		1940		1941				
			Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield			
Stillwater:															
Fall-sown															
Tenkow ¹	646		4	44.2	4	61.2	4	65.7	4	19.1	4	33.9	44.8	100.0	
Manchuria	245		4	48.1	4	59.5	4	63.9	4	25.0	4	18.3	43.0	95.9	
Cape			4	41.7	4	57.1	4	61.9	4	27.9	4	22.0	42.1	94.0	
Wisconsin Winter	519		4	48.6	4	52.7	4	49.8	4	29.8	4	24.3	41.0	91.6	
Michigan Winter			4	37.7	4	53.6	4	48.2	4	34.0	4	20.2	38.7	86.4	
Tennessee Winter			4	39.2	4	54.8	4	61.7	4	28.5	4	11.3	39.1	87.2	
Black Egyptian	1246		4	42.6	4	46.0	4	56.7	4	13.8	4	26.9	37.2	83.0	
Brown Winter			4	35.5	4	53.7	4	30.9	4	28.9	4	16.0	33.0	73.6	
Missouri Early Beardless	6051		4	31.7	4	38.4	4	33.5	4	23.2	4	16.7	28.7	64.0	
Tennessee Beardless 6	2746						4	33.6	4	19.4	4	11.3		54.2	
Finley	5901						4	49.2	4	19.8	4	26.5		80.5	
Reno	6561								4	33.4	4	21.5		103.6	
Ward	6007								4	35.0	4	30.8		124.2	
Spring-sown															
Tenkow ¹	646		4	29.4	4	25.7	4	14.6	4	30.6	4	5.6	21.2	100.0	
Limerick	1302		4	35.5	4	28.9	4	19.9	4	31.6	4	9.1	25.0	118.0	
Hero	1286		4	27.1	4	27.6	4	20.1	4	24.4	4	14.7	22.8	107.6	
Manchuria	245		4	24.8	4	22.6	4	18.5	4	32.5	4	2.8	20.2	95.6	
Heron	1299		4	23.3	4	26.1	4	18.0	4	26.9	4	15.6	22.0	103.8	
Phoebe	1305		4	31.1	4	32.0	4	18.6	4	22.8	4	7.3	22.4	105.6	
Cape			4	36.6	4	16.9	4	19.2	4	31.3	4	2.2	21.2	100.3	
Spartan	5027		4	24.6	4	35.5	4	15.8	4	26.1	4	13.0	23.0	108.6	
Italiani			4	19.2	4	28.2	4	17.9	4	31.8	4	9.5	21.3	100.7	
Stavropol	2103		4	19.6	4	26.5	4	22.7	4	20.5	4	10.0	19.9	93.8	
Black Algerian	708		4	34.1	4	27.4	4	12.4	4	27.6	4	13.1	22.9	108.2	
Club Mariout	261		4	25.7	4	26.5	4	13.8	4	30.7	4	19.7	23.2	109.9	
White Smyrna	910		4	25.7	4	11.4	4	19.4	4	36.0	4	11.8	20.9	98.5	
Calotte	1102		4	15.5	4	24.4	4	15.9	4	31.7	4	19.8	21.5	101.3	
Black Smyrna	191		4	37.3	4	12.3	4	12.5	4	25.8	4	10.5	19.7	92.9	
Vaughn	1367		4	21.4	4	23.8	4	11.4	4	29.5	4	13.8	20.0	94.3	
Black Egyptian	1246		4	27.8	4	11.1	4	9.5	4	22.1	4	12.7	16.6	78.6	
Glabron	4577		4	15.1	4	15.2	4	20.4	4	22.4	4	17.3	18.1	85.4	
Trebi	936		4	16.6	4	16.7	4	11.8	4	23.6	4	2.2	14.2	66.9	
Comfort	4578		4	13.0	4	14.5	4	17.0	4	18.0	4	7.7	14.0	66.3	
Velvet	4252		4	11.3	4	17.2	4	16.8	4	15.3	4	1.0	12.3	58.2	
Blackhull	878		4	20.5	4	25.3	4	17.2	4	26.9	4	18.8	21.7	102.6	
Flynn	1311		4	36.0	4	23.4	4	11.9			4	9.2		106.9	
Finley	5901						4	7.8	4	19.3	4	7.4		67.9	
Lawton: ²															
Fall-sown															
Tennessee Winter 66 ¹	3546		3	49.7	3	0	3	17.0	3	16.9	3	32.1	23.1	100.0	
Wisconsin Winter	519		3	54.6	3	0	3	13.8	3	16.7	3	43.7	25.8	111.3	
Han River	206		3	49.6	3	0	3	15.1	3	16.2	3	37.0	23.6	101.9	
Michigan	7032		3	51.1	3	0	3	15.0	3	20.8	3	34.3	24.2	104.8	
Missouri Early Beardless	6051		3	30.5	3	0	3	16.1	3	10.1	3	37.9	18.9	81.8	
Eaw	4690		3	56.3	3	0	3	18.3	3	16.6	3	34.7	25.2	108.8	
Wintex	6127								3	19.0	3	50.3		141.4	
Texan	6499								3	14.1	3	57.6		146.3	

See footnotes at end of table.

TABLE 26.—*Acre yields of varieties of barley grown at agricultural experiment stations in Oklahoma in 1 or more of the years 1937-41—Continued*

Station and variety	C. I. No.	Station No.	Number of plots and acre yield										Average yield, 1937-41	Relative yield compared with standard
			1937		1938		1939		1940		1941			
			Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield		
Lawton—Continued.														
<i>Fall-sown</i>														
—Continued.														
Composite Cross selection	6500	Tex. 1-33-179		Bu.		Bu.		Bu.	3	19.5	3	52.4		146.7
Tenkow	646										3	50.4		157.0
Reno	6561										3	46.0		143.3
Davidson	6373										3	50.4		157.0
Woodward: ³														
<i>Spring-sown</i>														
Atlas ¹	4118		3	13.9	3	59.4	3	35.4	27	15.8	6	42.7	33.4	100.0
Danne 113	6140		3	12.7	3	59.1	3	27.0	9	19.3	3	43.3	32.3	96.5
White Smyrna	910		3	18.3	3	44.9	3	26.2	27	18.3	3	41.6	29.9	89.3
Blackhull 1180	6009		2	24.8	3	55.2	3	33.9	9	19.2	3	46.3	35.9	107.3
Vaughn	1367		3	14.2	3	52.7	3	33.8	27	13.0	6	50.2	32.8	98.0
Flynn 1	5911		3	17.8	3	48.2	3	30.4	9	16.8	3	41.0	30.8	92.2
Vance	4585						3	33.3	9	18.4	3	41.4		99.1
Tenkow	646						3	23.3	9	13.0	3	43.7		85.2
Ward	6007						3	17.6	9	11.9	3	39.3		73.3
Michigan Winter	2036						3	17.7	9	12.0	3	39.3		73.5
Woodwin	7033	2159					3	23.5	9	15.8	3	43.5		88.2
Lico	6279						3	21.9	9	16.7	3	44.6		88.6
Beecher	6566						3	33.6	9	15.1	3	62.3		118.2
Perth	6025								2	12.7	3	52.5		111.5
Compana	5438								1	27.5	3	47.4		128.0
Manchuria	245								9	14.8	3	52.1		114.4
Ariav	6573										3	49.9		116.9
Wintex	6127										2	48.0		112.4
Ezond	6265										3	23.8		55.7
Blackhull 1178	5679		2	17.6	3	51.6	3	33.2	9	19.0				97.5
Deputy	6012		2	6.1	3	50.2	3	33.4	9	18.9				87.2
Trebi	936		3	10.6	3	40.9	3	24.0	9	15.3				72.9
Stavropol	5913		3	12.5	3	57.6	3	30.7	9	14.9				92.9
California Mariout	1455		3	13.9	3	42.3	3	25.6	9	14.4				77.3
Sandel	937		3	10.3	3	54.2	3	22.6	9	13.2				80.6
<i>Fall-sown</i>														
Ward ¹	6007		3	18.3	3	47.3	3	28.6	36	14.8		0	21.8	100.0
Michigan Winter	2036		3	13.7	3	62.5	3	24.1	9	14.0		0	22.9	104.9
Missouri Early	6051		3	19.0	3	28.4	3	21.8	9	16.0		0	17.0	78.2
Beardless	7033	2159	3	14.1	3	70.9	3	30.4	9	20.1		0	27.1	124.3
Kansas South-central strain	6376		3	15.4	3	82.3	3	34.9	9	11.8		0	28.9	132.5
Hooded 10	6563		1	13.2	1	36.0	1	38.2	9	11.7		0	19.8	90.9
Alaska	4106		1	22.9	3	87.2	3	36.1	9	10.3		0	31.3	143.6
Tennessee Winter	3546		3	15.6	3	76.7	3	38.8	9	9.8		0	28.2	129.3
66	6034		9	15.6	3	76.7	3	27.3	9	8.4		0	25.6	117.4
Tennessee Winter	7034	35h11-3	3	19.7	3	83.7	9	34.3	9	11.2		0	29.8	136.6
Ward selection														
Composite Cross selection														
Do		35h9-5	3	14.5	3	93.6	9	31.8	9	19.1		0	31.8	145.9
Do		35h10-3	3	16.0	3	93.4	9	30.9	9	18.0		0	31.7	145.2
Do		35h9-9	3	24.9	3	75.6	9	33.7	9	17.9		0	30.4	139.5
Do		35h10-17	3	20.9	3	78.2	9	31.4	9	17.8		0	29.7	136.1
Do		35h9-23	3	16.3	3	76.8	9	32.3	9	18.0		0	28.7	131.6
Do		35h10-12	3	20.1	3	74.9	9	29.2	9	18.4		0	28.5	130.8
Do		35h10-30	3	24.8	3	71.3	9	31.0	9	13.1		0	28.0	128.6
Do		35h10-23	3	17.8	3	72.6	9	33.2	9	16.7		0	28.1	128.7
Wintex	6127						3	81.8	3	33.5		0		140.1
Reno	6561						1	54.5	3	41.7		9	9.2	116.2
Randolph	6372						1	38.7	1	44.1		9	7.5	99.6
Composite Cross selection	6564	N.C.II-11			1	60.8	3	34.0	9	7.1		0		112.3
Wisconsin Winter	2159						3	33.0	9	19.2		0		120.3

¹ Standard with which other varieties are compared for comparable years.² Crop destroyed by hail in 1938.³ No yields from fall-sown tests at Woodward in 1941, due to winter-killing.

OREGON

Oregon Agricultural Experiment Station, Corvallis.....D. D. Hill.
 Sherman County Branch Experiment Station, Moro.....M. M. Oveson.
 Pendleton Field Station, Pendleton.....J. Foster Martin.
 Eastern Oregon Branch Livestock Experiment Station, Union.....D. E. Richards.
 Harney Branch Experiment Station, Burns.....Obil Shattuck.

TABLE 27.—Acre yields of varieties of barley grown at agricultural experiment stations in Oregon in 1 or more of the years 1937-41

[Data for Corvallis, Union, and Burns furnished through the courtesy of the Oregon Agricultural Experiment Station; for Moro and Pendleton, in cooperation with the station]

Station and variety	C. I. No.	Station No.	Number of plots and acre yield										Average yield, 1937-41	Relative yield compared with standard	
			1937		1938		1939		1940		1941				
			Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield			
Corvallis:															
<i>Fall-sown</i> ¹															
O. A. C. 1 ²	5953	1	12	0	12	36.9	12	69.4	12	53.1	12	59.4	43.8	100.0	
Santiam	6367	36	3	0	3	41.3	3	84.3	3	54.6	3	53.8	46.8	106.9	
Winter Club	592	15	3	0	3	42.9	3	80.9	3	58.4	3	36.7	43.8	100.0	
O. A. C. 6	5954		3	0	3	33.4	3	71.6	3	50.5	3	47.1	40.5	92.6	
Composite Cross selection		38	3	0	3	41.0	3	88.4	3	61.7	3	65.8	51.4	117.4	
Do		54					3	90.0	3	62.7	3	71.9		123.5	
Do		55					3	80.5	3	50.9	3	65.7		108.4	
Do		56					3	77.3	3	53.9	3	59.5		104.8	
Do		69							3	58.4	3	53.3		99.3	
Do		64							3	70.4	3	59.3		115.3	
Do		65							3	71.6	3	66.2		122.5	
Do		66							3	73.6	3	72.3		129.7	
Do		67							3	69.2	3	71.0		124.6	
Do		68							3	70.4	3	74.3		128.6	
Do		60							3	80.0	3	82.7		144.6	
Do		61							3	76.0	3	55.1		116.5	
Do		62							3	79.6	3	89.2		150.0	
Do		63							3	87.5	3	85.3		153.6	
<i>Spring-sown</i>															
Hannchen ²	531	17	10	43.1	10	9.5	10	30.5	7	22.3	7	33.8	27.8	100.0	
Trebi	936	19	3	38.6	3	10.3	3	23.3	3	21.3	3	29.8	24.7	88.6	
Union Beardless	5976	20	3	43.4	3	5.5	3	29.9	3	16.9	3	26.6	24.5	87.9	
Victory	5077	27	3	42.1	3	9.0	3	29.7	3	20.4	3	25.2	25.3	90.8	
Wisconsin Barbless	5105	37	3	42.7	3	5.1	3	24.8	3	16.8	3	25.6	23.0	82.6	
Composite Cross selection		45	3	48.7	3	7.5	3	27.8	3	20.7	3	29.6	26.9	96.5	
Do		47			3	5.4	3	30.3	3	19.8	3	39.1		98.4	
Do		49			3	7.2	3	30.9	3	21.3	3	28.4		91.4	
Do		50			3	10.4	3	27.4	3	20.7	3	29.3		91.4	
O. A. C. 7	2814	7	3	35.3	3	7.6	3	23.1	3	11.9				73.9	
Composite Cross selection		44	3	41.7	3	5.4	3	25.5	3	13.6				81.8	
Moro:															
Peruvian 19 ²	6568		1	64.2	3	46.0	4	41.2	4	26.5	3	64.0	48.4	100.0	
Flynn 37	5918		2	53.3	3	42.7	4	45.0	4	28.1	3	63.6	46.5	96.2	
Composite Cross selection	5449		1	47.0	3	41.7	4	33.5	4	22.6	3	43.4	37.6	77.8	
Meloy 3	4656		2	46.7	3	40.8	4	33.7	4	22.1	3	48.2	38.3	79.2	
Atlas	4118										3	60.0		93.8	
Afghanistan	4173		1	35.5										55.3	
Awnless	5631		1	35.5										55.3	
Pendleton:															
Trebi ²	936		4	48.8	4	48.0	4	46.2	4	38.2	4	68.8	50.0	100.0	
Flynn 1	5911		4	47.0	4	47.2	4	42.8	4	39.3	4	66.4	48.5	97.1	
Flynn 37	5918		4	47.0	4	46.2	4	42.8	4	44.8	4	71.2	50.4	100.8	
Meloy 3	4656		4	44.8	4	46.3	4	40.8	4	31.5	4	45.8	41.8	83.7	
Composite Cross selection	5449		4	43.3	4	45.0	4	37.2	4	26.8	4	51.2	40.7	81.4	
Atlas	4118								4	35.0	4	64.0		92.5	
Arivat	6573										4	69.7		101.3	

See footnotes at end of table.

TABLE 27.—*Acre yields of varieties of barley grown at agricultural experiment stations in Oregon in 1 or more of the years 1937-41—Continued*

Station and variety	C. I. No.	Station No.	Number of plots and acre yield										Average yield, 1937-41	Relative yield compared with standard
			1937		1938		1939		1940		1941			
			Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield		
				Bu.		Bu.		Bu.		Bu.		Bu.	Bu.	Percent
Union:														
Trebi 2	936		3	62.8	3	76.4	3	85.7	3	61.8	3	70.5	71.4	100.0
Odessa	182		3	60.8	3	80.2	3	80.5	3	56.6	3	69.1	69.4	97.2
Hannchen	531		3	58.3	3	66.6	3	71.2	3	48.6	3	61.1	61.2	85.6
Ezond	5064		3	54.9	3	83.3	3	77.7	3	56.2	3	67.0	67.8	94.9
Union Beardless	5976		3	63.2	3	77.1	3	49.6	3	47.6	3	65.3	60.6	84.8
Union Beardless 6	7035		3	63.5	3	77.8	3	51.0	3	41.7	3	67.7	60.3	84.5
Faust	4579		3	35.3	3	57.2	3	33.6	3	23.6	3	51.7	40.3	56.4
Velvon	6109		3		3	82.3	3	45.1	3	55.9	3	63.2		83.7
Composite Cross selection	7036	32855							3	61.5	3	65.3		95.8
Rex	6618								3	52.8	3	55.2		81.6
O. A. C. 7	2814		3	61.1	3	80.5	3	72.5						95.2
Vaughn	1367		3	48.3	3	72.9	3	64.9						82.7
Flynn	1311		3	51.8	3	79.2	3	65.6						87.4
Composite Cross selection	5449		3	55.6										88.5
Burns:														
Trebi 2	936				2	127.1	2	99.6	2	89.8	2	105.8		100.0
Union Beardless	5976				2	120.8	2	85.3	2	86.1	2	90.0		90.5
Hannchen	531				2	105.1	2	86.4	2	88.2	2	80.2		85.2

¹ No yields from fall-sown varieties, due to unprecedented dry weather in fall of 1936.

² Standard with which other varieties are compared for comparable years.

PENNSYLVANIA

Pennsylvania Agricultural Experiment Station, State College.-----C. F. Noll.

TABLE 28.—*Acre yields of varieties of barley grown at the Pennsylvania Agricultural Experiment Station, State College, in 1 or more of the years 1937-41*

[Data obtained through the courtesy of the Pennsylvania Agricultural Experiment Station]

Variety	C. I. No.	Station No.	Number of plots and acre yield										Average yield, 1937-41	Relative yield com- pared with stand- ard
			1937		1938		1939		1940		1941			
			Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield		
<i>Fall-sown</i> ¹				Bu.		Bu.		Bu.		Bu.		Bu.	Bu.	Per- cent
Kentucky 1 ²	6050		5	39.6	5	36.0			4	38.7	5	31.0	-----	100.0
Poland.....	6280		5	37.7	5	31.2			4	33.9		29.7	-----	91.2
Olympia.....	6107		5	35.6	5	34.1			4	33.1	5	34.4	-----	94.4
York Hooded.....	7038		5	39.4	5	19.1			4	28.9	5	25.0	-----	77.4
Old Maryland ³	7037		5	34.9	5	30.2			4	31.3		25.6	-----	84.0
Marnobarb.....	6120		5	30.3								6.1	-----	51.6
Tennessee Winter.....											5	23.2	-----	74.8
Smooth Awn 86.....	6268										5	13.4	-----	43.2
Hooded 16.....	6574										5	18.9	-----	61.0
Sunrise.....	6272										5	12.6	-----	40.6
Brugh 76.....	6477										5	21.4	-----	69.0
Purdue 28156A3-2.....														
2-2.....	6562										5	23.4	-----	75.5
West Virginia I-35.....														
274.....	7039										5	24.8	-----	80.0
Winter Club.....	592		5	39.0	5	30.7			4	28.3			-----	85.7
Santiam.....	6367		5	32.5	5	31.9			4	28.6			-----	81.4
Kentucky 2.....	6148		5	34.7									-----	87.6

See footnotes at end of table.

TABLE 28.—*Acre yields of varieties of barley grown at the Pennsylvania Agricultural Experiment Station, State College, in 1 or more of the years 1937-41—Continued*

Variety	C. I. No.	Station No.	Number of plots and acre yield										Average yield, 1937-41	Relative yield compared with standard
			1937		1938		1939		1940		1941			
			Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield		
<i>Spring-sown</i> ¹				Bu.		Bu.		Bu.		Bu.		Bu.		Per-
Wisconsin Barbless ²	5105	-----	5	10.5	-----	-----	5	24.6	5	16.0	5	22.7	-----	100.0
Oderbrucker	1272	-----	5	13.6	-----	-----	5	21.9	5	16.4	5	20.2	-----	97.7
Alpha	959	-----	5	14.0	-----	-----	5	26.5	5	19.0	5	22.2	-----	110.7
Comfort	4578	-----	5	12.9	-----	-----	5	22.6	5	15.1	5	20.9	-----	96.9
Wisconsin Barbless selection	7000	104A-35	5	13.5	-----	-----	5	27.3	5	17.8	5	22.4	-----	109.8
(Manchuria × Leiorhynchum) × Alpha		N. Y. 220a1-29-50	-----	-----	-----	-----	5	23.5	5	17.3	5	22.0	-----	99.2
Do		N. Y. 220a1-31-358	-----	-----	-----	-----	5	20.7	5	16.1	5	20.6	-----	90.7
Alpha × Goldfoil		N. Y. 504a11-5-4	-----	-----	-----	-----	5	23.0	5	23.4	5	23.4	-----	110.3
Ezond	6265	-----	-----	-----	-----	-----	5	27.1	5	21.2	5	21.4	-----	110.1
ZZ Second	6299	-----	-----	-----	-----	-----	5	36.2	5	25.5	5	26.3	-----	139.0
Peatland	5267	-----	-----	-----	-----	-----	5	20.6	5	12.6	5	22.1	-----	87.4
Hannchen	531	-----	-----	-----	-----	-----	5	24.4	5	19.2	5	15.2	-----	92.9
Chevron	1111	-----	-----	-----	-----	-----	5	20.8	5	14.7	5	24.8	-----	95.3
Trebi	936	-----	-----	-----	-----	-----	5	24.0	5	20.6	5	20.6	-----	103.0
Velvon	6109	-----	-----	-----	-----	-----	5	20.0	5	17.9	5	13.7	-----	81.5
Velvet	4252	-----	5	12.1	-----	-----	-----	-----	-----	-----	-----	-----	-----	115.2

¹ No yields secured in 1939, fall-sown, and 1938, spring-sown, tests due to poor stand resulting from injury to seed in treatment for smut control.

² Standard with which other varieties are compared for comparable years.

³ A strain of Tennessee Winter.

SOUTH CAROLINA

South Carolina Agricultural Experiment Station, Clemson..... W. R. Paden.

TABLE 29.—*Acre yields of varieties of barley grown at the South Carolina Agricultural Experiment Station, Clemson, in 1 or more of the years 1937-41*

[Data obtained through the courtesy of the South Carolina Agricultural Experiment Station]

Variety	C. I. No.	Station No.	Number of plots and acre yield										Average yield, 1937-41	Relative yield com- pared with stand- ard
			1937		1938		1939		1940		1941			
			Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield		
				Bu.		Bu.		Bu.		Bu.		Bu.	Bu.	Per- cent
Clemson Awnless 1	7040		11	51.0	11	32.5	10	53.0	10	64.8	10	43.2	48.9	100.0
Maretts Beardless	7041		11	50.0	11	29.5	10	67.3	10	57.4	10	53.8	51.6	105.5
Woods Hooded	6235		11	42.4	11	29.6	10	61.5	10	57.3	10	44.9	47.1	96.4
Woods Bearded	7024		11	33.1	11	44.1	10	61.1	10	46.3	10	45.2	46.0	94.0
Clemson Hooded	7042		11		11	42.4	10	64.4	10	68.2	10	57.4		120.1
Maretts Awnless	7043						10	65.4	10	65.4	10	44.6		107.1
Marnobarb	6120								10	53.3	10	41.7		88.0
Jackson	6569										10	34.9		80.8
Maretts Pedigree Awnless 58	7044										10	67.7		156.7
Tennessee Beardless 5	3384		11	52.6	11	28.8	10	44.2	10	41.9	10			83.2
Missouri Early Beardless	6051	38133					10	58.3						110.0
Tennessee Smooth Awn		Tenn. B3- 56					10	39.3						74.2
Hastings Bearded			11	30.3										59.4

¹ Standard with which other varieties are compared for comparable years.

SOUTH DAKOTA

South Dakota Agricultural Experiment Station, Brookings.....J. E. Grafius.
 Highmore Substation, Highmore.....In care of J. E. Grafius, Brookings.
 Eureka Substation, Eureka.....In care of J. E. Grafius, Brookings.
 United States Belle Fourche Field Station, Newell
 -----Beyer Aune ⁸ and A. Osenbrug.

TABLE 30.—*Acre yields of varieties of barley grown at agricultural experiment stations in South Dakota in 1 or more of the years 1937-41*

[Data for Brookings, Highmore, and Eureka obtained through the courtesy of the South Dakota Agricultural Experiment Station; for Newell, through the courtesy of the Divisions of Irrigation Agriculture and Dry Land Agriculture]

Station and variety	C. I. No.	Station No.	Number of plots and acre yield										Average yield, 1937-41	Relative yield compared with standard
			1937		1938		1939		1940		1941			
			Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield		
				Bu.		Bu.		Bu.		Bu.		Bu.	Bu.	Per cent
Brookings:														
Odessa ¹ -----	182	182	3	13.8	3	44.9	3	53.4	3	51.9	3	52.4	43.3	100.0
Spartan-----	5027	1352	3	24.5	3	51.8	3	46.3	3	60.6	3	45.9	45.8	105.9
Minsturdi-----	1556	1245	3	16.1	3	37.0	3	46.3	3	51.7	3	37.1	37.6	87.0
Lion X Manchuria-----	6001	1340	3	12.3	3	34.0	3	46.3	3	50.3	3	39.0	36.4	84.1
Glaboron-----	4577	1290	3	12.0	3	38.3	3	47.3	3	49.2	3	40.2	37.4	86.4
Velvet-----	4252	1286	3	10.4	3	34.9	3	46.3	3	47.9	3	35.5	35.0	80.9
Trebi-----	936	1298	3	17.0	3	41.2	3	63.6	3	55.3	3	47.8	45.0	103.9
Manchuria-----	2947	N. Dak. 2121	3	3.7	3	28.2	3	38.6	3	39.9	3	37.8	29.6	68.5
Oderbrucker-----	1529	1180	3	2.3	3	30.4	3	42.8	3	34.7	3	34.4	28.9	66.8
Wisconsin Barbles-----	5105	-----	3	11.2	3	49.5	3	59.2	3	56.5	3	41.3	43.5	100.6
Ezond-----	6265	-----	3	18.1	3	54.9	3	60.2	3	62.6	3	44.9	48.1	111.2
Ioglos-----	6239	-----	3	-----	3	47.4	3	43.7	3	45.3	3	44.9	-----	89.5
Composite Cross III-----	6144	-----	-----	-----	3	47.3	3	57.3	3	50.6	3	49.0	-----	100.8
Dryland-----	5673	-----	-----	-----	-----	-----	-----	-----	3	49.2	3	37.3	-----	82.9
Han River-----	-----	1348	-----	-----	-----	-----	-----	-----	2	77.0	3	56.2	-----	127.7
Atlas-----	4118	-----	-----	-----	-----	-----	-----	-----	-----	-----	3	42.2	-----	80.5
Compana-----	5438	-----	-----	-----	-----	-----	-----	-----	-----	-----	3	38.1	-----	72.7
Horn-----	926	1299	3	7.6	-----	-----	-----	-----	-----	-----	3	-----	-----	55.1
Highmore:														
Odessa ¹ -----	182	182	-----	-----	1	21.3	3	36.0	3	20.3	3	18.2	-----	100.0
Ace-----	1853	1173	-----	-----	1	35.8	3	43.4	3	16.1	3	18.0	-----	118.3
White Smyrna X Svanhals-----	6371	1344	-----	-----	1	23.4	3	36.0	3	18.0	3	13.7	-----	95.1
Spartan-----	5027	1352	-----	-----	1	28.9	3	46.2	3	19.9	3	15.6	-----	115.4
Coast X Lion-----	6002	1343	-----	-----	1	8.6	3	36.9	3	19.0	3	9.8	-----	77.6
Lion X Manchuria-----	6001	1340	-----	-----	1	5.8	3	37.1	3	12.9	3	11.9	-----	70.7
Glaboron-----	4577	1290	-----	-----	1	8.9	3	39.7	3	20.3	3	16.4	-----	89.0
Velvet-----	4252	1286	-----	-----	1	12.4	3	33.7	3	14.4	3	15.1	-----	78.9
Trebi-----	936	1298	-----	-----	1	38.2	3	46.6	3	16.7	3	22.2	-----	129.1
Horn-----	926	1299	-----	-----	1	15.8	3	33.2	3	18.0	3	15.8	-----	86.4
Ezond-----	6265	-----	-----	-----	-----	-----	3	48.8	3	21.4	3	22.7	-----	124.7
Dryland-----	5673	-----	-----	-----	-----	-----	-----	-----	3	17.5	3	12.2	-----	77.1
Han River-----	2163	1348	-----	-----	-----	-----	-----	-----	-----	-----	3	20.0	-----	109.9
Compana-----	5438	-----	-----	-----	-----	-----	-----	-----	-----	-----	3	19.0	-----	104.4
Atlas-----	4118	-----	-----	-----	-----	-----	-----	-----	-----	-----	3	16.6	-----	91.2
Minsturdi-----	1556	1245	-----	-----	1	19.3	-----	-----	-----	-----	-----	-----	-----	90.6
Eureka:														
Odessa ¹ -----	182	182	-----	-----	-----	-----	2	14.6	3	25.1	3	58.6	-----	100.0
White Smyrna X Svanhals-----	6371	1344	-----	-----	-----	-----	2	10.9	3	24.0	3	75.8	-----	112.6
Spartan-----	5027	1352	-----	-----	-----	-----	2	7.3	3	24.4	3	70.3	-----	103.8
Lion X Manchuria-----	6001	1340	-----	-----	-----	-----	2	9.9	3	24.9	3	64.7	-----	101.2
Trebi-----	936	1298	-----	-----	-----	-----	2	13.5	3	23.5	3	68.6	-----	107.4
Glaboron-----	4577	1290	-----	-----	-----	-----	2	7.8	3	22.3	3	53.2	-----	84.7
Dryland-----	5673	-----	-----	-----	-----	-----	-----	-----	3	25.1	3	65.4	-----	108.1
Ezond-----	6265	-----	-----	-----	-----	-----	-----	-----	3	28.6	3	81.5	-----	131.5
Velvet-----	4252	1286	-----	-----	-----	-----	-----	-----	3	20.5	3	54.1	-----	89.1
Han River-----	-----	1348	-----	-----	-----	-----	-----	-----	-----	-----	3	72.0	-----	122.9

See footnotes at end of table.

⁸ Deceased.

TABLE 30.—*Acre yields of varieties of barley grown at agricultural experiment stations in South Dakota in 1 or more of the years 1937-41—Continued*

Station and variety	C. I. No.	Station No.	Number of plots and acre yield										Average yield, 1937-41	Relative yield compared with standard
			1937		1938		1939		1940		1941			
			Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield		
Newell:														
<i>Irrigated</i> ²				Bu.		Bu.		Bu.		Bu.		Bu.	Bu.	Per-cent
Trebi 1	936		3	20.7	3	32.9	3	41.7	3	0	3	52.1	29.5	100.0
Comfort	4578		3	13.2	3	20.4	3	41.0	3	0	3	41.3	23.2	78.6
Glabron	4577		3	9.0	3	14.2	3	41.3	3	0	3	39.9	20.9	70.8
Odessa	182		3	23.6	3	37.4	3	36.4	3	0	3	39.6	27.4	92.9
Vaughn	1367		3	24.7	3	34.7	3	35.4	3	0	3	36.8	26.3	89.3
Horn	926		3	16.3	3	21.8	3	40.3	3	0	3	52.8	26.2	89.0
Chevalier II	200		3	6.6	3	25.7	3	25.4	3	0	3	23.3	16.2	55.0
White Smyrna	195		3	22.2	3	31.5	3	43.4	3	0	3	50.7	29.6	100.3
Hannchen	531		3	9.0	3	8.3	3	35.4						55.3
Spartan	5027										3	43.8		84.1
Compana	5438										3	52.4		100.6
Beecher	6566										3	51.7		99.2
<i>Dry-farmed</i>														
Beecher 1	6566										3	48.9		100.0
Spartan	5027										3	41.4		84.7
Compana	5438										3	38.1		77.9
White Smyrna	195										3	37.8		77.3

¹ Standard with which other varieties are compared for comparable years.² Crop destroyed by hail in 1940.

TENNESSEE

Tennessee Agricultural Experiment Station, Knoxville.....N. I. Hancock.

Middle Tennessee Experiment Station, Columbia.....L. R. Neel.

West Tennessee Experiment Station, Jackson.....B. P. Hazlewood.

TABLE 31.—*Acre yields of varieties of barley grown at agricultural experiment stations in Tennessee in 1 or more of the years 1937-41*

[Data obtained through the courtesy of the Tennessee Agricultural Experiment Station]

Station and variety	C. I. No.	Station No.	Number of plots and acre yield										Average yield, 1937-41	Relative yield compared with standard
			1937		1938		1939		1940		1941			
			Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield		
Knoxville:				Bu.		Bu.		Bu.		Bu.		Bu.		
Tennessee Winter 52 ¹ -----	3543	-----	3	42.2	6	39.9	6	45.3	5	57.3	7	64.5	49.8	100.0
Polders-----	3213	-----	1	42.4	6	43.2	6	37.2	5	59.3	7	52.2	46.9	94.0
Missouri Early Beardless-----	6051	-----	2	42.6	6	20.9	6	36.5	5	51.9	7	70.1	44.4	89.1
Jackson-----	6569	B5-9 (S)	-----	-----	-----	-----	-----	-----	5	61.7	7	59.5	-----	99.5
Kentucky 1-----	6050	-----	-----	-----	-----	-----	-----	-----	5	52.9	7	59.0	-----	91.9
Jackson 1-----	7045	7B2-42	-----	-----	-----	-----	-----	-----	-----	-----	7	67.9	-----	105.3
Tennessee Beardless 5-----	3384	-----	3	37.4	6	24.5	6	33.0	5	39.0	-----	-----	-----	72.5
Tennessee Smooth Awn-----	6570	B5-14	-----	-----	-----	-----	-----	-----	5	53.8	-----	-----	-----	93.9
Do-----	-----	B3-56	-----	-----	6	35.3	6	36.4	-----	-----	-----	-----	-----	84.2
Do-----	-----	B5-33	-----	-----	6	34.1	6	39.4	-----	-----	-----	-----	-----	86.3
Union Winter-----	583	-----	5	40.9	-----	-----	-----	-----	-----	-----	-----	-----	-----	96.9
Marnobarb-----	6120	-----	4	36.7	-----	-----	-----	-----	-----	-----	-----	-----	-----	87.0

See footnote at end of table.

TABLE 31.—*Acre yields of varieties of barley grown at agricultural experiment stations in Tennessee in 1 or more of the years 1937-41—Continued*

Station and variety	C. I. No.	Station No.	Number of plots and acre yield										Average yield, 1937-41	Relative yield compared with standard
			1937		1938		1939		1940		1941			
			Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield		
Columbia:				Bu.		Bu.		Bu.		Bu.		Bu.	Bu.	Per-
Tennessee Winter 52 1	3543						5	39.4	5	56.3	5	44.1		100.0
Polders	3213						5	43.8	5	64.0	5	48.0		111.4
Missouri E a r l y Beardless	6051						5	35.0	5	45.5	5	43.0		88.3
Tennessee Beardless 5	3384						5	31.1	5	45.5	5	39.7		83.2
Jackson	6569	B5-9 (S)							5	54.6	5	44.0		98.2
Kentucky 1	6050								5	63.2	5	47.7		110.5
Tennessee Smooth Awn	6570	B5-14							5	48.9	5	46.2		94.7
Jackson 1	7045	7B2-42									5	64.0		145.1
Tennessee Smooth Awn		B3-56					5	28.0						71.1
Do		B5-33					5	20.4						51.8
Union Winter	583						5	42.2						107.1
Jackson:														
Tennessee Winter 52 1	3543						5	68.5	5	64.2	5	64.5		100.0
Polders	3213						5	49.0	5	60.6	5	60.0		86.0
Missouri E a r l y Beardless	6051						5	40.8	5	40.8	5	55.8		69.7
Jackson	6569	B5-9 (S)							5	67.2	5	70.5		107.0
Kentucky 1	6050								5	64.0	5	56.4		93.6
Jackson 1	7045	7B2-42									5	79.8		123.7
Tennessee Smooth Awn	6570	B5-14							5	64.2				100.0
Tennessee Beardless 5	3384								5	37.2				57.9
Tennessee Smooth Awn		B3-56					5	37.5						54.7
Do		B5-33					5	44.0						64.2

¹ Standard with which other varieties are compared for comparable years.

TEXAS

Substation No. 6, Denton..... I. M. Atkins and P. B. Dunkle.
 Substation No. 5, Temple..... H. O. Hill.
 Substation No. 16, Iowa Park..... L. E. Brooks.
 Substation No. 12, Chillicothe..... J. R. Quinby.
 United States Cotton Field Station, Greenville..... D. R. Hooton.
 Conservation Experimental Station, Bushland..... D. A. Reid.
 Texas Technological College, Lubbock..... A. W. Young.

TABLE 32.—*Acre yields of varieties of barley grown at agricultural experiment stations in Texas in 1 or more of the years 1937-41*

[Data for Denton, Temple, Iowa Park, and Chillicothe obtained through the courtesy of the Texas Agricultural Experiment Station; for Greenville, through the courtesy of the Division of Cotton and Other Fiber Crops and Diseases; for Bushland, through the courtesy of the Texas Agricultural Experiment Station in cooperation with the Soil Conservation Service, United States Department of Agriculture; and for Lubbock, through the courtesy of the Texas Technological College]

Station and variety	C. I. No.	Station No.	Number of plots and acre yield										Average yield, 1937-41	Relative yield compared with standard
			1937		1938		1939		1940		1941			
			Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield		
				Bu.		Bu.		Bu.		Bu.		Bu.	Bu.	Per-cent
Denton:														
Wintex 1	6127	23258	4	63.6	4	58.5	4	48.0	4	44.3	4	12.1	45.3	100.0
Tennessee Winter	6125	15825	4	49.8	4	41.2	4	34.9	4	32.4	4	9.2	33.5	74.0
Do.	6128	23259	4	49.0	4	43.4	4	45.4	4	44.5	4	9.6	38.4	84.7
Finley	5901	12576	4	45.5	4	41.9	4	43.8	4	44.6	4	8.9	36.9	81.5
Bailey	5902	23241	4	55.1	4	46.8	4	40.7	4	44.7	4	10.7	39.6	87.4
Tennessee Winter														
61	3545	15826	4	44.7	4	40.8	4	32.4	4	33.9	4	10.2	32.4	71.5
Texas Winter	6498	24933			4	48.4	4	40.9	4	46.4	4	11.4		90.3
Texan	6499	28348			4	49.7	4	40.9	4	42.6	4	15.5		91.3
Composite Cross selection	6502	1-32-103			4	45.4	4	47.4	4	46.8	4	10.8		92.3
Do.	6500	1-33-179			4	43.1	4	42.8	4	43.0	4	10.6		85.6
Tenkow	646	20716							4	48.9	4	10.9		106.0
Composite Cross selection	6501	1-33-249			4	48.9	4	42.1						85.4
Tennessee Winter	6126	18561	4	44.0										69.2
Smith selection	6143	23257	4	54.8										86.2
Composite Cross selection	6351	1-31-79	4	47.7										75.0
Greenville:														
Wintex 1	6127	23258			4	24.7	4	36.7	4	33.6	4	34.8		100.0
Tennessee Winter	6125	15825			4	25.0	4	30.8	4	22.1	4	27.0		80.8
Finley	5901	12576					4	35.8	4	28.4	4	40.2		99.3
Composite Cross selection	6500	1-33-179					4	36.8	4	24.8	4	29.5		86.7
Texan	6499	28348					4	30.8	4	26.8	4	27.6		81.1
Missouri Early Beardless	6051	24941			4	23.7			4	20.0	4	24.5		73.3
Tennessee Winter														
61	3545	15826									4	26.9		77.3
Reno	6561										4	32.0		92.0
Texas Winter	6498	24933									4	30.8		88.5
Tenkow	646	20716									4	42.2		121.3
Composite Cross selection	6502	1-32-103									4	30.3		87.1
Do.	7046	1-35-4-16									4	31.6		90.8
Temple:														
Wintex 1	6127	23258			4	13.0	4	37.3	4	19.4	4	22.0		100.0
Texan	6499	28348			4	22.8	4	41.0	4	20.4	4	22.8		116.7
Tennessee Winter	6125	15825			4	22.2	4	20.0	4	20.6	4	18.9		89.1
Tennessee Winter														
61	3545	15826			4	24.0	4	28.6	4	23.2	4	18.5		102.8
Finley	5901	12576			4	7.2	4	32.0	4	19.2	4	22.1		87.8
Bailey	5902	23241			4	12.6	4	35.8	4	17.6	4	19.9		93.7
Smith selection	6143	23257			4	10.8	4	35.0	4	19.0	4	18.2		90.5
Missouri Early Beardless	6051	24941			4	15.9	4	18.3	4	15.0	4	14.6		69.6
Tennessee Beardless 5	3384	15831			4	11.4	4	19.2	4	15.0	4	14.5		65.5
Composite Cross selection	6500	1-33-179			4	29.0	4	32.6	4	18.4	4	17.0		105.8
Do.	6502	1-32-103			4	31.5	4	41.3	4	18.8	4	25.2		127.4
Iowa Park:														
Tennessee Winter														
61	3545	15826	4	27.8	4	12.8	4	44.1	4	24.7	4	20.0	25.9	100.0
Finley	5901	12576	4	29.4	4	15.1	4	43.2	4	29.0	4	25.9	28.5	110.2
Wintex	6127	23258			4	15.2	4	48.2	4	28.6	4	26.4		116.5
Texan	6499	28348					4	38.6	4	24.7	4	19.0		92.7
Composite Cross selection	6500	1-33-179					4	34.8	4	25.4	4	21.5		92.0

See footnote at end of table.

TABLE 32.—*Acre yields of varieties of barley grown at agricultural experiment stations in Texas in 1 or more of the years 1937-41—Continued*

Station and variety	C. I. No.	Station No.	Number of plots and acre yield										Average yield, 1937-41	Relative yield compared with standard
			1937		1938		1939		1940		1941			
			Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield		
				Bu.		Bu.		Bu.		Bu.		Bu.	Bu.	Per-cent
Iowa Park—Con.														
Tenkow.....	646	20716									4	20.6		103.0
Texas Winter.....	6498	24933									4	17.8		89.0
Tennessee Winter.....	6125	15825									4	16.9		84.5
Reno.....	6561										4	20.0		100.0
Missouri E a r l y														
Beardless.....	6051	24941									4	12.7		63.5
Composite C r o s s														
selection.....	6502	1-32-103									4	21.2		106.0
Do.....	7046	1-35-416									4	25.2		126.0
Tennessee Winter.....	6126	18561	4	25.3	4	13.7								96.1
Bailey.....	5902	23241	4	38.6	4	16.8								136.5
Chillicothe:														
Wintex 1.....	6127	23258			4	32.6	4	40.0	4	5.0	4	32.2		100.0
Finley.....	5901	12576			4	28.3	4	32.0	4	2.8	4	27.0		82.1
Tennessee Winter														
61.....	3545	15826			4	21.3	4	27.8	4	3.4	4	24.2		69.9
Ward.....	6007	24932			4	26.8	4	34.8	4	4.7	4	33.4		90.8
Missouri E a r l y														
Beardless.....	6051	24941			4	10.3	4	18.8	4	6.2	4	22.0		52.2
Texas.....	6499	28348			4	27.9	4	40.5	4	5.6	4	41.1		104.8
Composite C r o s s														
selection.....	6500	1-33-179			4	30.3	4	38.2	4	5.2	4	37.4		101.2
Tennessee Winter.....	6126	18581			4	15.8								48.5
Do.....	6125	15825			4	23.8								73.0
Tennessee Beard-														
less 5.....	3384	15831			4	11.4								35.0
Purdue 21.....	4581	23252			4	19.9								61.0
Tennessee Winter.....	6142	23255			4	28.1								86.2
Bushland:														
Spring-sown														
Wintex 1.....	6127	23258					6	10.5	6	7.4	6	54.9		100.0
Vaughn.....	1367	15830					6	12.4	6	17.5	6	44.0		101.5
Stavropol.....	2103	15828					6	9.4	6	13.2	6	49.6		99.2
Coast.....	690	15829					6	10.9	6	11.4	6	62.1		115.9
Finley.....	5901	12576					6	4.8	6	5.3	6	54.0		88.0
Bailey.....	5902	23241					6	7.5	6	3.7	6	48.7		82.3
Black.....	6129	23234					6	14.1	6	12.6	6	57.2		115.2
Amarillo.....	7047	S-31-68					6	22.0	6	11.4	6	67.8		139.0
Composite C r o s s														
selection.....	7048	1-31-45					6	22.9	6	12.2	6	57.1		126.6
Do.....	7049	1-31-83					6	14.1	6	5.2	6	54.0		100.7
Do.....	7050	1-33-332					6	15.1	6	7.2	6	54.2		105.1
Club Mariout.....	261								6	15.8	6	69.4		136.8
Atlas.....	4118								6	19.5	6	55.4		120.2
Composite C r o s s														
selection.....	6500	1-33-179							6	5.2	6	60.6		105.6
Do.....	7051	1-33-71							6	4.6	6	55.0		95.7
Do.....	7052	1-33-326							6	5.6	6	58.2		102.4
Do.....	7053	1-33-413							6	6.7	6	53.4		99.7
Flynn 1.....	5911								6	13.2	6	51.3		103.5
Atlas X Vaughn.....	6970	Moscow 1							6	17.4	6	57.7		120.5
Do.....	6971	Moscow 8							6	17.7	6	54.2		115.4
Beecher.....	6566	Moscow 9							6	18.0	6	63.6		131.0
Atlas X Vaughn.....	6972	Moscow 11							6	15.4	6	57.4		116.9
Do.....	6973	Moscow 13							6	17.0	6	57.0		118.8
Do.....	6974	Moscow 29							6	14.7	6	64.1		126.5
Do.....	6975	Moscow 31							6	14.1	6	55.8		112.2
Glacier.....	6976	Moscow 33							6	16.9	6	58.4		120.9
Atlas X Vaughn.....	6977	Moscow 39							6	10.0	6	58.4		109.8
Do.....	6978	Moscow 43							6	16.5	6	62.6		127.0
Do.....	6979	Moscow 44							6	13.6	6	69.0		132.6
Lion X Minia.....	6980	36Ab. 5269							6	12.7	6	66.6		127.3
Lico.....	6279								6	12.8	6	65.6		125.8

See footnote at end of table.

TABLE 32.—Acre yields of varieties of barley grown at agricultural experiment stations in Texas in 1 or more of the years 1937-41—Continued

Station and variety	C. I. No.	Station No.	Number of plots and acre yield										Average yield, 1937-41	Relative yield compared with standard
			1937		1938		1939		1940		1941			
			Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield		
Bushland—Con.														
Spring-sown—Con.				Bu.		Bu.		Bu.		Bu.		Bu.	Bu.	Per cent
Compana.....	5438							6	13.8	6	58.2			115.6
Spartan.....	5027							6	11.8	5	45.3			91.7
Blackhull 1180.....	6009							6	18.8	5	75.9			152.0
Trebi X Dryland.....	6981	S. Dak. 69						6	5.6	6	49.8			88.9
Odessa X Dryland.....	6982	S. Dak. 21						6	8.5	6	44.8			85.6
New Era X Odessa.....		C-1						6	6.8	6	47.4			87.0
Do.....		C-2						6	7.9	6	50.2			93.3
Do.....		C-16						6	11.0	6	52.4			101.8
Do.....		C-18						6	5.9	6	51.2			91.7
Ezond.....	5064							6	12.0	6	58.6			113.3
Arivat.....	6573							6	19.6	6	67.4			139.6
Texas.....	6499	28348								6	47.0			85.6
Colby 28445 X Flynn.....	6983	36 Hays 2034								6	54.7			99.6
Composite Cross selection.....	6984	36Ab. 2457								6	78.8			143.5
Chevron.....	1111							6	1.4					18.9
Fall-sown														
Wintex 1.....	6127	23258					8	37.5	8	24.0	8	73.7		100.0
Texas.....	6499	28348					8	13.2	8	20.8	8	67.3		74.9
Missouri Early Beardless.....	6051	24941					8	12.0	8	8.8	8	30.0		37.6
Tennessee Winter.....	6125	15825					8	22.3	8	13.4	8	47.6		61.6
Tennessee Winter 61.....	3545	15826					8	12.8	8	16.8	8	51.3		59.8
Composite Cross selection.....	6500	1-33-179					8	8.9	8	18.2	8	69.6		71.5
Ward.....	6007	24932					8	24.4	8	19.7	8	71.7		85.7
Tennessee Winter.....	6034	24930							8	18.4	8	73.3		93.9
Reno.....	6561								8	18.8	8	77.9		99.0
Woodwin.....	7033										8	61.0		82.8
Kansas South-central strain.....	6376										8	71.9		97.6
Michigan Winter.....	2036										8	64.7		87.8
Lubbock:														
Fall-sown (irrigated)														
Wintex 1.....	6127				3	34.2	3	27.8	36	82.4	46	97.3		100.0
Kentucky 1.....	6050	III-37-5			3	24.0	3	21.5	4	49.1	4	58.6		63.4
Kentucky 2.....	6148	III-37-8			3	27.5	3	15.9	4	56.8	4	56.1		64.7
Kentucky 11.....	6021	III-37-20			3	25.3	3	19.5	4	57.5	4	65.6		69.5
Velvon.....	6109	III-37-23			3	31.0	3	11.9	4	78.8	4	78.5		82.8
Orel.....	351	III-37-26			3	23.3	3	17.1	4	50.2	4	57.0		61.1
(Lion X Coast) X Trebi.....		Utah B2-5-2			3	18.7	3	9.3	4	65.8	4	81.2		72.4
Composite Cross selection.....	5329	III-37-35			3	30.5	3	10.9	4	64.6	4	74.4		74.6
Olympia.....	6107	III-37-38			3	32.0	3	21.5	4	54.6	4	71.7		74.4
Scottish Pearl.....	277	III-37-41			3	22.2	3	14.5	4	58.5	4	74.9		70.4
Poland.....	6280	III-37-44			3	27.0	3	16.5	4	57.7	4	64.1		68.4
Tenkow.....	646	III-37-50			3	16.7	3	10.7	4	65.3	4	58.8		62.7
Kentucky 6.....	4678	III-37-53			3	27.0	3	22.7	4	68.7	4	66.7		76.6
Tennessee Winter 57.....	3544	III-37-56			3	17.3	3	15.0	4	54.6	4	59.1		60.4
Tennessee Winter 61.....	3545	III-37-59			3	18.8	3	16.4	4	52.5	4	58.9		60.7
Tennessee Winter.....	257	III-37-89			3	26.2	3	14.8	4	51.0	4	68.9		66.6
Texas Winter.....	554	III-37-95			3	21.7	3	18.1	4	55.4	4	61.6		64.9

See footnote at end of table.

TABLE 32.—*Acre yields of varieties of barley grown at agricultural experiment stations in Texas in 1 or more of the years 1937-41—Continued*

Station and variety	C. I. No.	Station No.	Number of plots and acre yield										Average yield, 1937-41	Relative yield compared with standard
			1937		1938		1939		1940		1941			
			Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield		
Lubbock—Con.														
<i>Fall-sown (irrigated)</i> —Continued.				Bu.		Bu.		Bu.		Bu.		Bu.		Per-cent
Coast.....	4633	III-37-98	---	---	3	31.3	3	14.8	4	57.3	4	85.3	---	78.1
Walden Winter.....		III-37-101	---	---	3	38.0	3	20.7	4	49.4	4	62.5	---	70.6
Wisconsin Winter.....	1894	III-37-104	---	---	3	37.7	3	23.6	4	59.2	4	77.9	---	82.1
Union Winter.....	583	III-37-110	---	---	3	23.3	3	12.1	4	60.8	4	69.7	---	68.6
Winter Club.....	592	III-37-113	---	---	3	36.2	3	23.7	4	47.5	4	83.2	---	78.9
Composite Cross selection.....		Oreg. 38	---	---	3	34.8	3	31.1	4	56.5	4	83.3	---	85.1
Do.....		Oreg. 32	---	---	3	35.0	3	27.8	4	59.5	4	69.4	---	79.3
Do.....		539	---	---	---	---	---	---	---	---	---	---	---	---
Do.....		Oreg. 32	---	---	3	28.8	3	28.9	4	59.6	4	78.9	---	81.2
Do.....		549	---	---	---	---	---	---	---	---	---	---	---	---
Do.....		Oreg. 54	---	---	3	34.7	3	33.8	4	76.8	4	81.9	---	94.0
Santiam.....	6367	III-37-140	---	---	3	31.8	3	25.7	4	58.8	4	64.4	---	74.8
O. A. C. 1.....	5953	III-37-143	---	---	3	28.9	3	19.7	4	56.5	4	46.7	---	62.8
O. A. C. 6.....	5954	III-37-146	---	---	3	20.3	3	16.3	4	70.3	4	79.0	---	76.9
Bailey.....	5902	III-37-149	---	---	3	38.7	3	28.3	4	61.9	4	80.1	---	86.5
Tennessee Winter.....	6125	III-37-155	---	---	3	18.8	3	14.3	4	56.5	4	60.9	---	62.3
Purdue 1101.....	4582	III-37-158	---	---	3	26.7	3	21.4	4	44.4	4	65.7	---	65.5
Purdue 21.....	4581	III-37-161	---	---	3	25.7	3	19.9	4	35.7	4	71.6	---	63.3
Finley.....	5901	III-37-170	---	---	3	36.0	3	21.8	4	42.8	4	83.8	---	76.3
Smith selection.....	6143	III-37-173	---	---	3	32.6	3	28.8	4	56.0	4	69.4	---	77.3
New Mexico														
Winter 1.....	7065	III-37-179	---	---	3	25.7	3	15.0	4	49.9	4	77.7	---	69.6
Sunrise.....	6272	III-37-188	---	---	3	31.3	3	8.1	4	39.4	4	51.2	---	53.8
Tennessee Winter 52.....	3543	III-37-194	---	---	3	23.5	3	14.7	4	49.7	4	60.1	---	61.2
<i>Spring-sown (irrigated)</i>														
Flynn 1 ¹	5911	---	---	---	45	37.4	64	41.8	41	39.9	68	42.6	---	100.0
Club Mariout.....	261	III-37-2	---	---	3	33.9	4	46.8	4	35.0	4	47.6	---	101.0
Stavropol.....	5913	III-37-3	---	---	3	30.9	4	48.0	4	36.0	4	41.5	---	96.7
Minstardi.....	1556	III-37-4	---	---	3	21.0	4	33.4	4	19.4	4	39.5	---	70.1
Beldi Giant.....	2777	III-37-6	---	---	3	35.7	4	47.6	4	23.5	4	39.7	---	90.6
Trebi.....	936	III-37-7	---	---	3	40.5	4	39.2	3	23.0	4	44.9	---	91.2
North Platte 1.....	5266	III-37-9	---	---	3	37.0	4	48.1	3	41.1	4	49.0	---	108.3
Mensury.....	4696	III-37-10	---	---	3	22.4	4	43.2	3	22.9	4	37.2	---	77.7
Coast.....		III-37-13	---	---	3	40.3	4	37.1	3	44.8	4	36.7	---	98.3
Do.....	690	III-37-15	---	---	3	26.5	4	43.3	4	41.5	4	41.7	---	94.6
Atlas X Vaughn.....	6970	Moscow 1	---	---	3	33.3	4	35.7	4	28.7	4	50.3	---	91.5
Beecher.....	6566	Moscow 9	---	---	3	19.5	4	40.3	3	33.7	4	47.7	---	87.3
Vaughn.....	1367	III-37-18	---	---	3	31.8	4	38.6	4	39.1	4	35.4	---	89.6
Ezond.....	6265	III-37-19	---	---	3	44.0	4	44.4	4	35.5	4	33.8	---	97.5
Smooth Awn 203.....	6267	III-37-21	---	---	3	43.3	4	55.2	4	31.4	4	34.0	---	101.4
Hero.....	4602	III-37-22	---	---	3	36.1	4	48.3	4	35.4	4	52.1	---	106.3
Nobarb.....	6335	III-37-24	---	---	3	28.1	4	35.9	3	15.7	4	35.3	---	71.1
Comfort.....	4578	III-37-25	---	---	3	28.4	4	37.8	4	20.0	4	38.1	---	76.9
Lico.....	6279	III-37-28	---	---	3	30.1	4	47.1	4	37.0	4	37.8	---	94.0
Regal.....	5030	III-38-1	---	---	3	25.7	4	34.3	4	26.0	4	30.5	---	72.0
Glabron.....	4577	III-37-31	---	---	3	22.6	4	41.0	4	18.4	4	39.2	---	75.0
Velvet.....	4252	III-37-32	---	---	3	18.2	4	31.1	4	16.4	4	53.8	---	73.9
Oderbrucker X Lion.....	5028	Wis. Ped. 37	---	---	3	23.3	4	27.5	3	27.9	4	30.3	---	67.4
Wisconsin Barbless.....	5105	III-37-34	---	---	3	19.4	4	23.4	3	21.2	4	36.0	---	61.8
Oderbrucker.....	4666	III-37-37	---	---	3	8.9	4	24.9	4	7.0	4	27.6	---	42.3
Atlas.....	4118	III-37-39	---	---	3	30.5	4	38.9	3	38.4	4	49.1	---	97.0
O. A. C. 21.....	1470	III-37-42	---	---	3	16.8	4	33.8	3	8.7	4	28.5	---	54.3
Manchuria.....	2330	III-37-46	---	---	3	20.2	4	33.7	4	10.7	4	72.9	---	60.3
Odessa.....	182	III-37-47	---	---	3	21.2	4	35.9	4	18.2	4	11.8	---	72.4
Lion.....	923	III-37-49	---	---	3	35.3	4	37.7	4	51.2	4	40.5	---	101.9
Colsess.....	2792	III-37-66	---	---	3	26.9	4	37.7	3	15.0	4	31.7	---	68.8
Scarab.....	995	III-37-67	---	---	3	39.9	4	45.1	4	40.6	4	23.6	---	92.3
Velvon.....	6109	III-37-23	---	---	3	34.1	4	43.4	3	53.1	4	52.5	---	113.2
Composite Cross selection.....	5329	III-37-35	---	---	3	36.6	4	45.1	3	33.4	4	37.9	---	94.6

¹ Standard with which other varieties are compared for comparable years.

UTAH

Utah Agricultural Experiment Station, Logan.....R. W. Woodward.

TABLE 33.—*Acre yields of varieties of barley grown at the Utah Agricultural Experiment Station, Logan, in 1 or more of the years 1937-41*

[Data obtained in cooperation with the Utah Agricultural Experiment Station]

Variety	C. I. No.	Number of plots and acre yield										Average yield, 1937-41	Relative yield compared with standard
		1937		1938		1939		1940		1941			
		Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield		
			Bu.		Bu.		Bu.		Bu.		Bu.	Bu.	Percent
Trebi 1.....	936	3	69.1	3	94.9	3	94.8	3	66.7	3	80.6	81.2	100.0
Winter Club.....	592	3	85.4	3	117.2	3	99.2	3	66.5	3	97.7	93.2	114.8
Velvon.....	6109	3	78.2	3	95.6	3	86.5	3	72.6	3	76.4	81.9	100.8
Atlas.....	4118	3	-----	3	101.0	3	91.8	3	56.4	3	82.1	-----	98.3
Velvon 5.....	7054	3	-----	3	-----	3	-----	3	-----	3	87.6	-----	108.7
Titan.....	7053	3	-----	3	-----	3	-----	3	-----	3	67.7	-----	84.0
Union Beardless.....	5976	3	59.4	3	65.1	3	92.9	3	54.9	3	-----	-----	83.7
Algerian.....	1179	3	74.3	3	91.7	3	94.5	3	-----	3	-----	-----	100.7
Composite Cross selection.....	5289	3	53.2	3	104.1	3	110.0	3	-----	3	-----	-----	103.3

1 Standard with which other varieties are compared for comparable years.

VIRGINIA

United States Arlington Experiment Farm, Arlington.....J. W. Taylor.

Virginia Agricultural Experiment Station, Blacksburg.....T. B. Hutcheson.

Augusta County Station, Staunton.....P. T. Gish.

Washington County Station, Glade Spring.....C. W. Ryburn.

TABLE 34.—*Acre yields of varieties of barley grown at agricultural experiment stations in Virginia in 1 or more of the years 1937-41*

[Data for Blacksburg, Staunton, and Glade Spring obtained through the courtesy of the Virginia Agricultural Experiment Station]

Station and variety	C. I. No.	Number of plots and acre yield										Average yield, 1937-41	Relative yield com- pared with stand- ard
		1937		1938		1939		1940		1941			
		Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield		
			Bu.		Bu.		Bu.		Bu.		Bu.	Bu.	Per- cent
Arlington:													
Wisconsin Winter 1	2159	2	38.3	13	41.1	21	39.4	21	30.3	2	45.9	39.0	100.0
Tennessee Winter 12	3534	2	46.1	2	39.9	3	34.4	3	28.3	2	27.9	35.3	90.6
Esaw	4690	2	40.7	2	44.1	3	43.6	3	30.8	2	44.5	40.7	104.5
Composite Cross	5530	2	43.6	2	43.2	3	34.4	3	28.9	2	38.2	37.7	96.6
Smooth Awn 86	6268	2	37.8	2	56.4	3	48.3	3	29.2	1	62.5	46.8	120.1
Sunrise	6272	2	29.5	2	44.3	3	53.8	3	24.0	2	35.9	37.5	96.2
Kentucky 11	6021	2	28.0	2	29.1	3	38.1	3	20.0	2	59.0	34.8	89.3
Marnobarb	6120	2	19.8	2	23.4	3	40.5	3	19.0	2	56.7	31.9	81.7
Poland	6280	2	27.5	2	26.4	3	35.0	3	17.9	2	53.4	32.0	82.2
Hooded 16	6574	1	43.5	2	32.9	3	43.0	3	30.3	2	37.1	37.4	95.8
Nakano Wase 59	6567			1	43.8	1	39.3	3	28.2	2	39.1		96.0
West Virginia 1-35-153	7063							1	30.3	2	28.5		77.2
Tennessee Winter	257	2	47.1	2	41.2	3	37.4	3	22.4				99.3
Alaska	4106	2	50.4	2	41.5	3	34.2	3	22.8				99.9
Orel	351	2	49.0		38.3	3	33.4	1	20.5				94.7
Mechanical Mixture	4115	2	52.5		44.1	3	33.0	3	27.4				105.3
Composite Cross	4116	2	46.7		42.1	3	32.6	3	31.2				102.3
Tennessee Winter 66	3546	2	42.9		44.8	3	34.9	3	30.3				102.5
Tennessee Beardless 6	2746	2	35.7		38.6	3	40.1	3	27.8				95.4
Han River	2163	2	44.2		40.2	3	36.9	3	32.3				103.0
Tennessee Winter	6034	2	34.8	2	49.9	3	40.6	3	30.3				104.4

See footnote at end of table.

TABLE 34.—*Acre yields of varieties of barley grown at agricultural experiment stations in Virginia in 1 or more of the years 1937-41—Continued*

Station and variety	C. I. No.	Number of plots and acre yield										Average yield, 1937-41	Relative yield compared with standard
		1937		1938		1939		1940		1941			
		Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield		
Arlington—Continued.			Bu.		Bu.		Bu.		Bu.		Bu.	Bu.	Per-
Smooth Awn 203	6267	2	36.8	2	40.1	3	26.6	3	25.1				cent
Woods Hooded	6235	2	31.9	2	31.4	3	49.6	3	26.3				86.3
Hooded 11	6575	1	38.8	2	31.0	3	29.2	1	18.0				93.4
Nakano Wase 45				1	49.2	3	53.1	3	26.5				78.5
Nakano Wase 51	7057			1	40.5	1	41.7	1	35.8				116.2
Tennessee Winter X													106.5
Smooth Awn	6565			2	34.3	3	34.4	3	32.5				91.3
Virginia Hooded				1	36.0	1	35.8	1	15.5				78.8
Brugh 23	6491			1	38.0	1	31.3	1	18.0				78.8
Brugh 76	6477			1	38.0	1	35.2	1	22.8				86.6
Nakano Wase 58	7056			1	42.0	1	40.0	1	28.3				99.5
Nakano Wase 33	6269	2	30.2	2	42.5	1	37.5						92.8
Composite Cross III	6144					1	25.2	1	22.5				68.4
Gaddis	6003	2	31.7	2	34.1								82.9
Hooded 6	6270	2	36.7	2	33.6								88.5
Missouri Early Beardless	6051							1	30.8				101.7
Blacksburg:													
Sunrise 1	6272	10	51.8	10	29.1	3	13.7	3	26.4	3	19.6	28.1	100.0
Tennessee Winter	6034	10	51.7	10	37.7	3	16.5	3	33.4	3	23.2	32.5	115.6
Nakano Wase 33	6269	10	51.0	10	22.5	3	14.3	3	30.6	3	19.3	27.5	97.9
Nakano Wase 58	7056	10	47.6	10	23.6	3	14.5	3	28.3	3	27.1	28.2	100.4
Smooth Awn 85		10	43.9	10	31.4	3	17.2	3	40.1	3	29.2	32.4	115.1
Orel	351	10	69.7	10	27.4	3	16.9	3	35.1	3	22.1	34.2	121.8
Smooth Awn 90	7029	10	55.3	10	31.7	3	16.2	3	28.5	3	24.7	31.3	111.2
Hooded 11	6575	10	42.0	10	24.8	3	8.6	3	15.9	3	28.4	23.9	85.1
Kentucky 11	6021	10	53.9	10	23.8	3	14.8	3	33.8	3	27.8	30.8	109.6
Tennessee Beardless 6	2746	10	41.4	10	26.3	3	11.2	3	31.7	3	20.8	26.3	93.5
Smooth Awn 86	6268	10	44.3	10	33.2	3	10.8	3	38.0	3	31.5	31.6	112.2
Tennessee Winter 66	3546	10	59.4	10	40.6	3	19.2	3	40.5	3	20.9	36.1	128.4
Esaw	4690	10	49.2	10	30.1	3	16.2	3	21.1	3	25.2	28.4	100.9
Nakano Wase 45		10	60.7	10	34.7	3	18.1	3	27.4	3	19.8	32.1	114.3
Rowan	5672	10	35.4	10	23.3	3	11.3	3	26.5	3	25.2	24.3	86.6
Hooded 32		10	35.9	10	23.2	3	14.3	3	13.8	3	26.6	22.8	80.9
Smooth Awn 203	6267	10	53.9	10	29.5	3	11.0	3	30.4	3	23.1	29.6	105.2
Nakano Wase 59	6567	10	64.8	10	26.5	3	12.3	3	34.3	3	20.0	31.6	112.3
Hooded 16	6574	10	37.7	10	26.3	3	13.0	3	26.6	3	21.8	25.1	89.2
Tennessee Winter 2		10	37.2	10	33.0	3	17.8	3	35.4	3	18.9	28.5	101.2
Tennessee Winter 9		10	40.1	10	30.6	3	15.5	3	44.4	3	23.2	30.8	109.4
Tennessee Winter 11		10	42.1	10	35.0	3	12.9	3	41.5	3	21.2	30.5	108.6
Tennessee Winter 17		10	41.2	10	36.5	3	14.6	3	28.9	3	23.8	29.0	103.1
Tennessee Winter 18		10	37.7	10	32.0	3	9.7	3	36.1	3	27.2	28.5	101.5
Tennessee Winter 19		10	41.7	10	39.5	3	14.2	3	39.1	3	23.2	31.5	112.2
Tennessee Winter 20		10	46.1	10	33.6	3	9.6	3	40.3	3	27.5	31.4	111.7
Mechanical Mixture	4115			10	32.2	3	16.3	3	15.3	3	20.9		95.4
Poland 18				10	33.9	3	18.6	3	41.8	3	28.4		138.2
Composite Cross	5461			10	38.3	3	18.4	3	42.7	3	24.1		139.1
Do	4116			10	36.2	3	17.8	3	42.8	3	23.8		135.8
Alaska	534			10	36.7	3	14.1	3	34.2	3	22.9		121.5
Tennessee Winter X													
Smooth Awn	6565			10	26.5	3	12.5	3	34.5	3	28.1		114.4
Tennessee Winter	257			10	34.4	3	14.3	3	33.0	3	17.5		111.7
Wisconsin Winter	2159			10	35.7	3	7.9	3	24.8	3	21.6		101.4
Tennessee Winter X													
Abyssinian (37)	6236			10	21.3	3	4.0	3	15.2	3	18.6		66.6
Hooded 6	6270			10	30.7	3	10.0	3	16.6	3	15.7		82.2
Smooth Awn 88	7028	10	36.1			3	6.7	3	31.0	3	18.9		83.1
Smooth Awn Selection (Sta. No. Md. 15-8)	6495	10	54.1			3	5.9	3	19.9	3	16.3		86.3
Nakano Wase 51	7057	10	59.8			3	11.8	3	18.4	3	18.6		97.4
Nakano Wase	754-5	10	29.6			3	6.5	3	23.8	3	19.5		71.2
Nakano Wase 63		10	63.6			3	7.5	3	19.5	3	23.5		102.3
Hooded 15		10	44.7			3	9.0	3	27.7	3	20.0		90.9
Hooded 21		10	40.7			3	12.0	3	15.6	3	14.0		73.8
Woods Hooded	6235	10	45.9			3	9.3	3	21.1	3	25.8		91.6
Hooded 10	6563	10	43.7			3	7.9	3	17.5	3	28.4		87.4
Omugi	5144					3	7.3	3	33.0	3	26.9		112.6
Borun	5249					3	6.7	3	34.2	3	22.3		105.9
Shonan	5255					3	8.5	3	30.7	3	22.9		104.0

See footnote at end of table.

TABLE 34.—*Acre yields of varieties of barley grown at agricultural experiment stations in Virginia in 1 or more of the years 1937-41—Continued*

Station and variety	C. I. No.	Number of plots and acre yield										Average yield, 1937-41	Relative yield com- pared with stand- ard
		1937		1938		1939		1940		1941			
		Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield		
			Bu.		Bu.		Bu.		Bu.		Bu.	Bu.	Per- cent
Blacksburg—Continued.													
Marnobarb.....	6120							3	33.8	3	25.2		128.3
Brugh 23.....	6491							3	23.9	3	23.2		102.4
Brugh 76.....	6477							3	22.4	3	28.8		111.3
Kentucky 1.....	6050							3	40.1	3	31.8		156.3
Staunton:													
Marnobarb 1.....	6120					1	53.4	1	53.1	1	39.7		100.0
Hooded 16.....	6574					1	38.2	1	35.4	1	38.0		76.3
Smooth Awn 203.....	6267					1	68.0	1	41.7	1	33.1		97.7
Smooth Awn 86.....	6268					1	25.4	1	40.6	1	26.3		63.1
Poland.....	6280					1	52.0	1	58.3	1	37.2		100.9
Sunrise.....	6272					1	24.0	1	50.0	1	28.6		70.2
Tennessee Winter.....	6034					1	41.0	1	47.9	1	37.4		86.4
Wisconsin Winter.....	2159									1	40.7		102.5
Glade Spring:													
Nakano Wase 58 1.....	7056					2	47.3	2	54.5	2	30.0		100.0
Nakano Wase 51.....	7057							2	52.0	2	19.6		84.7
Nakano Wase.....	754-5							2	69.6	2	21.7		108.0
Nakano Wase 59.....	6567							2	60.2	2	22.9		98.3
Marnobarb.....	6120							2	51.4	2	28.0		94.0
Virginia Hooded.....		2	21.9	2	30.3		41.1						86.9
Tennessee Winter.....		2	44.8	2	44.4	2	65.4						138.3
Smooth.....		2	43.1	2	34.8								
Slightly Awmed.....		2	43.8	2	32.0								
Smooth Awmed.....		2	35.6										

¹ Standard with which other varieties are compared for comparable years.

WASHINGTON

Washington Agricultural Experiment Station, Pullman.....O. E. Barbee. ⁹
 Adams Branch Experiment Station, Lind.....H. D. Jaquot.
 Irrigation Branch Experiment Station, Prosser.....H. P. Singleton.

TABLE 35.—*Acre yields of varieties of barley grown at agricultural experiment stations in the State of Washington in 1 or more of the years 1937-41*

[Data obtained through the courtesy of the Washington Agricultural Experiment Station]

Station and variety	C. I. No.	Station No.	Number of plots and acre yield										Average yield, 1937-41	Relative yield compared with standard
			1937		1938		1939		1940		1941			
			Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield		
Pullman:														
<i>Spring-sown</i>				<i>Bu.</i>		<i>Bu.</i>		<i>Bu.</i>		<i>Bu.</i>		<i>Bu.</i>	<i>Bu.</i>	<i>Per-cent</i>
Rufflyn 1.....	6374	2356	4	77.8	4	53.6	4	54.7	4	45.0	4	52.0	56.6	100.0
Beldi Giant.....	2777	967	4	67.1	4	49.8	4	58.0	4	43.4	4	47.9	53.2	94.0
Blue.....	1247	973	4	74.6	4	50.6	4	62.4	4	43.6	4	54.1	57.1	100.8
Horsford.....	1775	873	4	65.7	4	40.4	4	46.5	4	38.1	4	38.0	45.7	80.8
Trebi.....	936	1176	4	67.0	4	48.0	4	55.2	4	44.4	4	43.4	52.8	93.2
Hannchen.....	4841	2911	4	67.7	4	52.6	4	55.6	4	42.2	4	33.2	50.3	88.8
Composite Cross.....	4116	3212	4	69.3	4	57.0	4	49.8	4	33.4	4	44.2	50.7	89.6
Flynn 37.....	5918	3230	4	85.6	4	64.5	4	60.4	4	43.5	4	50.4	60.9	107.5
Winter Club.....	592	957	4	64.6	4	53.7	4	49.7	4	42.1	4	50.2	52.1	91.9
Atlas.....	4118	2687	4		4	58.1	4	54.8	4	41.0	4	43.5		96.2
Belford.....	7060	3399							2	33.0	4	36.6		71

See footnotes at end of table.

⁹ Deceased.

TABLE 35.—*Acre yields of varieties of barley grown at agricultural experiment stations in the State of Washington in 1 or more of the years 1937-41—Continued*

Station and variety	C. I. No.	Station No.	Number of plots and acre yield										Average yield, 1937-41	Relative yield com- pared with stand- ard
			1937		1938		1939		1940		1941			
			Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield		
Pullman—Con. <i>Spring-sown</i> —Continued.				<i>Bu.</i>		<i>Bu.</i>		<i>Bu.</i>		<i>Bu.</i>		<i>Bu.</i>		<i>Per- cent</i>
Wisconsin Barbless	5105	2875	4	47.9	4	36.7	4	44.8	—	—	—	—	—	69.5
O. A. C. 21.....	1470	3137	4	57.6	4	49.2	4	43.0	—	—	—	—	—	80.5
Mechanical Mix- ture.....	4115	2486	4	60.7	4	55.3	4	43.5	—	—	—	—	—	85.7
Olli.....	6251	—	4	—	4	24.5	4	23.3	—	—	—	—	—	44.1
Velvet.....	4252	2134	4	41.3	4	31.9	—	—	—	—	—	—	—	55.7
<i>Fall-sown</i>														
Winter Club 1.....	592	957	4	71.5	4	82.0	4	69.9	4	54.8	4	64.2	68.5	100.0
Wisconsin Winter.....	1894	971	4	53.3	4	63.8	4	51.9	4	50.7	4	47.4	53.4	78.0
Olympia.....	6107	2799	4	57.5	4	62.3	4	51.1	4	45.6	4	35.6	50.4	73.6
Lind:														
Meloy 1.....	1176	1343	3	13.8	3	21.4	3	11.3	6	6.8	3	25.3	15.7	100.0
Hannchen.....	531	1174	3	18.9	3	20.0	3	10.4	6	11.2	3	22.0	16.5	105.0
Rufflyn.....	6374	2356	—	—	—	—	—	—	—	—	3	20.7	—	81.8
Flynn 37.....	5918	3230	—	—	—	—	—	—	—	—	3	25.7	—	101.6
Composite Cross selection.....	7058	3400	—	—	—	—	—	—	—	—	3	26.0	—	102.8
Do.....	7059	3401	—	—	—	—	—	—	—	—	3	26.5	—	104.7
California Mariout.....	1455	3213	—	—	—	—	—	—	—	—	3	12.7	—	50.2
Belford.....	7060	3399	—	—	—	—	—	—	—	—	3	30.7	—	121.3
Prosser: 2														
Blue 1.....	1247	973	3	61.2	2	49.5	3	32.9	3	49.2	—	—	—	100.0
Rufflyn.....	6374	2356	—	—	—	—	—	—	3	45.9	—	—	—	93.3

1 Standard with which other varieties are compared for comparable years.

2 No data in 1941, due to error in harvesting.

WEST VIRGINIA

West Virginia Agricultural Experiment Station, Morgantown...R. O. Weibel.
University Experiment Farms, Kearneysville

.....In care of R. O. Weibel, Morgantown.
Lakin Experiment Farm, Lakin.....In care of R. O. Weibel, Morgantown.
Cooperative Trials, Arthurdale.....In care of R. O. Weibel, Morgantown.
Cooperative Trials, Marlinton.....In care of R. O. Weibel, Morgantown.
Cooperative Trials, Lewisburg.....In care of R. O. Weibel, Morgantown.

TABLE 36.—*Acre yields of varieties of barley grown at agricultural experiment stations in West Virginia in 1 or more of the years 1937-41*

[Data obtained through the courtesy of the West Virginia Agricultural Experiment Station]

Station and variety	C. I. No.	Station No.	Number of plots and acre yield										Average yield, 1937-41	Relative yield compared with standard
			1937		1938		1939		1940		1941			
			Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield		
Morgantown:				Bu.		Bu.		Bu.		Bu.		Bu.	Bu.	Per-
Union Winter 1	583	2	4	27.7	4	49.8	4	36.0	5	70.2	4	25.9	41.9	cent
Tennessee Winter 52	3543	21	4	27.6	4	45.0	4	33.3	5	71.6	4	20.4	39.6	94.4
Tennessee Winter	257	22	4	30.4	4	43.8	4	31.4	5	58.9	4	26.2	38.1	91.0
Kentucky 1	6050	16	4	47.8	4	61.8	4	29.0	5	64.2	4	24.3	45.4	108.3

See footnotes at end of table.

TABLE 36.—*Acre yields of varieties of barley grown at agricultural experiment stations in West Virginia in 1 or more of the years 1937-41—Continued*

Station and variety	C. I. No.	Station No.	Number of plots and acre yield										Average yield, 1937-41	Relative yield compared with standard
			1937		1938		1939		1940		1941			
			Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield		
				Bu.		Bu.		Bu.		Bu.		Bu.		Per-cent
Morgantown—Con.														
Kentucky 2	6148	17	4	36.2	4	49.4	4	32.3	5	73.2	4	25.7	43.4	103.4
Han River	2163	18	4	30.1	4	45.2	4	35.9	5	65.4	4	23.6	40.0	95.5
Wisconsin Winter	2159	26	4	32.7	4	50.0	4	33.4	5	72.1	4	21.0	41.8	99.8
Pidor	901	27	4	31.4	4	45.4	4	33.3	5	72.0	4	32.6	42.9	102.4
Scottish Pearl	277	28	4	40.4	4	46.1	4	39.1	5	67.2	4	25.6	43.7	104.2
Tuckwiller	7061	31	4	32.2	4	52.6	4	35.0	5	68.8	4	30.8	43.9	104.7
Folk	7062	32	4	38.2	4	49.2	4	29.8	5	69.9	4	27.9	43.0	102.6
Poland	6280	36	4	49.9	4	50.9	4	35.0	5	66.4	4	29.6	46.4	110.6
Orel	351	23	4	28.1	4	45.2	4	26.1	5	50.1	4	12.3	32.4	77.2
Kentucky 11	6021	15	4	31.9	4	48.7	4	29.8	5	65.0	4	28.3	40.7	97.2
Tennessee Beardless 6	2746	25	4	26.9	4	30.3	4	27.2	5	53.8	4	24.0	32.4	77.4
North Carolina Hooded	5951	20	4	25.8	4	34.4	4	41.5	5	59.2	4	32.1	38.6	92.1
West Virginia I-35-274	7039	43	4	65.7	4	40.2	4	45.4	5	60.8	4	32.1	48.8	116.5
Tennessee Beardless 5	3384	13	4	32.5	4	26.3	4	25.7	5	---	4	26.3	---	79.5
Alaska	4106	19	4	28.7	4	45.1	4	28.4	5	---	4	21.5	---	88.7
Esaw	4690	24	4	29.6	4	49.5	4	30.5	5	---	4	25.7	---	97.1
Marnobarb	6120	38	---	---	---	---	4	25.1	5	63.2	4	21.1	---	82.8
Missouri Early Beardless	6051	37	---	---	---	---	4	45.6	5	50.4	4	36.9	---	100.6
Smooth Awn 86	6268	41	---	---	---	---	---	---	---	---	4	30.1	---	116.2
Sunrise	6272	42	---	---	---	---	---	---	---	---	4	15.2	---	58.7
Hooded 16	6574	---	---	---	---	---	---	---	---	---	4	10.8	---	41.7
Kearneysville: Union Winter 1	583	2	4	32.4	4	23.1	4	20.2	5	11.5	4	24.7	22.4	100.0
Tennessee Winter 52	3543	21	4	38.2	4	25.8	4	20.2	5	15.3	4	22.8	24.5	109.3
Kentucky 1	6050	16	4	29.8	4	33.0	4	17.8	5	11.0	4	26.3	23.6	105.4
Kentucky 2	6148	17	4	41.7	4	27.4	4	18.8	5	10.1	4	25.1	24.6	110.0
Pidor	901	27	4	29.7	4	26.5	4	31.2	5	12.7	4	21.6	24.3	108.8
Scottish Pearl	277	28	4	33.3	4	26.2	4	25.1	5	12.8	4	25.8	24.6	110.1
Tuckwiller	7061	31	4	31.0	4	23.7	4	19.4	5	13.3	4	24.0	22.3	99.6
Tennessee Beardless 6	2746	25	4	23.1	4	22.2	4	18.8	5	10.6	4	19.7	18.9	84.4
North Carolina Hooded	5951	20	4	27.1	4	25.8	4	25.2	5	12.4	4	22.6	22.6	101.1
Poland	6280	36	---	---	4	32.6	4	29.0	5	17.6	4	33.7	---	142.0
Missouri Early Beardless	6051	37	---	---	---	---	---	---	5	9.3	4	21.7	---	85.6
West Virginia I-35-274	7039	43	---	---	---	---	---	---	5	12.6	4	21.9	---	95.3
Kentucky 11	6021	15	4	30.5	4	29.4	4	19.9	5	10.0	---	---	---	103.0
Lakin: 2 Union Winter 1	583	2	5	0	5	53.2	5	37.5	5	59.5	5	46.8	39.4	100.0
Tennessee Winter 52	3543	21	5	0	5	59.6	5	31.1	5	54.3	5	44.3	37.9	96.1
Kentucky 1	6050	16	5	0	5	46.3	5	31.9	5	55.9	5	54.5	37.7	95.7
Kentucky 2	6148	17	5	0	5	53.1	5	34.9	5	58.5	5	50.0	39.3	99.7
Pidor	901	27	5	0	5	56.7	5	36.2	5	54.9	5	56.6	40.9	103.8
Scottish Pearl	277	28	5	0	5	49.9	5	37.3	5	61.4	5	49.1	39.5	100.4
Tuckwiller	7061	31	5	0	5	49.9	5	31.5	5	55.0	5	45.7	36.4	92.4
Poland	6280	36	5	0	5	44.4	5	34.1	5	53.6	5	47.3	35.9	91.1
Tennessee Beardless 6	2746	25	5	0	5	28.1	5	32.9	5	49.8	5	43.4	30.8	78.3
North Carolina Hooded	5951	20	5	0	5	50.4	5	40.1	5	50.8	5	52.2	38.7	98.2
Missouri Early Beardless	6051	37	---	---	---	---	---	---	5	51.7	5	55.7	---	101.0
West Virginia I-35-274	7039	43	---	---	---	---	---	---	5	63.3	5	49.3	---	105.9
Han River	2163	18	5	0	5	50.7	5	34.9	5	51.9	---	---	---	91.5
Folk	7062	32	5	0	5	47.6	5	32.6	5	50.4	---	---	---	87.0
Kentucky 11	6021	15	5	0	5	41.2	5	36.4	5	47.7	---	---	---	83.4

See footnotes at end of table.

TABLE 36.—*Acre yields of varieties of barley grown at agricultural experiment stations in West Virginia in 1 or more of the years 1937-41—Continued*

Station and variety	C. I. No.	Station No.	Number of plots and acre yield										Average yield, 1937-41.	Relative yield compared with standard
			1937		1938		1939		1940		1941			
			Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield		
				Bu.		Bu.		Bu.		Bu.		Bu.	Bu.	Per cent
Arthurdale: ³														
Union Winter ¹ ---	583	2	4	21.6	4	6.3	4	0	5	31.2	4	0	11.8	100.0
Kentucky 1-----	6050	16	4	10.1	4	16.8	4	0	5	36.4	4	0	12.7	107.1
Kentucky 2-----	6148	17	4	13.5	4	9.0	4	0	5	31.3	4	0	10.8	91.0
Han River-----	2163	18	4	22.0	4	6.1	4	0	5	30.8	4	0	11.8	99.7
Pidor-----	901	27	4	26.8	4	6.7	4	0	5	37.2	4	0	14.1	119.6
Scottish Pearl---	277	28	4	30.3	4	7.4	4	0	5	28.0	4	0	13.1	111.2
Tuckwiller-----	7061	31	4	12.8	4	7.8	4	0	5	34.4	4	0	11.0	93.1
Folk-----	7062	32	4	14.2	4	8.4	4	0	5	22.2	4	0	9.0	75.8
Kentucky 11-----	6021	15	4	5.1	4	12.4	4	0	5	19.8	4	0	7.5	63.1
Tennessee Beardless 6---	2746	25	4	20.3	4	6.5	4	0	5	26.5	4	0	10.7	90.2
North Carolina Hooded---	5951	20	4	20.2	4	5.9	4	0	5	34.6	4	0	12.1	102.7
Poland-----	6280	36			4	9.5	4	0	5	27.2	4	0	---	97.9
Missouri Early Beardless---	6051	37							5	29.4	4	0	---	94.2
West Virginia I-35-274---	7039	43							5	39.0	4	0	---	125.0
Marlington:														
Union Winter ¹ ---	583	2			4	28.3	4	66.2						100.0
Kentucky 1-----	6050	16			4	25.0	4	49.4						92.1
Kentucky 2-----	6148	17			4	28.1	4	58.9						90.8
Tennessee Winter 52---	3543	21			4	39.6	4	52.9						90.2
Pidor-----	901	27			4	39.8	4	60.5						98.9
Scottish Pearl---	277	28			4	37.4	4	52.3						90.5
Tuckwiller-----	7061	31			4	27.9	4	68.4						89.8
Poland-----	6280	36			4	31.0	4	57.8						90.6
North Carolina Hooded---	5951	20			4	39.6	4	36.0						92.0
Tennessee Beardless 6---	2746	25			4	33.9	4	39.5						92.2
Lewisburg:														
Union Winter ¹ ---	583	2									4	27.0		100.0
Kentucky 1-----	6050	16									4	31.0		114.8
Kentucky 2-----	6148	17									4	35.1		130.0
Tennessee Winter 52---	3543	21									4	30.6		113.3
Pidor-----	901	27									4	29.1		107.8
Scottish Pearl---	277	28									4	33.0		122.2
Tuckwiller-----	7061	31									4	30.4		112.6
Poland-----	6280	36									4	30.0		111.1
North Carolina Hooded---	5951	20									4	25.1		93.0
Tennessee Beardless 6---	2746	25									4	25.4		94.1
Missouri Early Beardless---	6051	37									4	26.2		97.0
West Virginia I-35-274---	7039	43									4	26.7		98.9

¹ Standard with which other varieties are compared for comparable years.² Tests destroyed by flood at Lakin in 1937.³ Tests winter-killed at Arthurdale in 1939 and were killed by May freeze in 1941.

WISCONSIN

Wisconsin Agricultural Experiment Station, Madison..... B. D. Leith.
 Marshfield Branch Station, Marshfield. In care of E. J. Delwiche, Green Bay.
 Ashland Branch Station, Ashland..... In care of E. J. Delwiche, Green Bay.
 Sturgeon Bay Branch Station, Sturgeon Bay
 -----In care of E. J. Delwiche, Green Bay.

TABLE 37.—*Acre yields of varieties of barley grown at agricultural experiment stations in Wisconsin in 1 or more of the years 1937-41*

[Data obtained through the courtesy of the Wisconsin Agricultural Experiment Station. Superscripts (in italics) indicate number of times recurrent variety was used as a parent]

Station and variety	C. I. No.	Station No.	Number of plots and acre yield										Average yield, 1937-41	Relative yield compared with standard
			1937		1938		1939		1940		1941			
			Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield		
Madison:				Bu.		Bu.		Bu.		Bu.		Bu.	Bu.	Per cent
Wisconsin Bar b- less ¹	5105	Ped.38	4	26.6	4	32.9	4	23.6	4	49.0	4	49.0	36.2	100.0
Oderbrucker	4666	Ped.5-1	4	17.5	4	17.7	4	25.0	4	39.6	4	34.9	26.9	74.4
Peatland	5267		4	37.2	4	31.6	4	25.8	4	48.5	4	41.6	36.9	102.0
Wisconsin Bar b- less X Newal	7069	X191-2- 1-2									4	47.1		96.1
Ioglos	6239	131	4	20.8	4	27.1	4	23.6	4	39.4				84.0
Chevron	1111		4	33.4	4	27.4	4	23.2	4	42.1				95.5
Manchurian	6492	122-3	4	21.3	4	24.1								76.3
Manchuria	2947		4	14.8	4	19.0								56.8
Velvet	4252		4	19.5	4	23.8								72.8
Newal	6088		4	21.7	4	28.9								85.0
Trebi	936		4	26.7	4	27.9								91.8
Regal	5030	132	4	22.0	4	28.5								84.9
Lion X Oderbruck- er ²		X128-5- 5-3	4	20.8	4	24.3								75.8
Lion X Oderbruck- er ³		X163-1-8	4	21.7	4	25.5								79.3
Lion X Oderbruck- er ⁴		X120-5- 26-12-1-1	4	20.1	4	25.2								76.1
(Lion X Oderbruck- er ⁴) X July		X156-8- 4-4-1	4	15.7										59.0
Marshfield:														
Wisconsin Bar b- less ¹	5105	Ped.38	3	15.0	3	43.0	3	25.4	4	54.2	4	29.9	33.5	100.0
Oderbrucker	4666	Ped.5-1	3	14.0	3	41.2	3	29.8	4	52.6	4	33.0	34.1	101.9
Velvet	4252		3	15.6	3	39.9	3	26.9	4	46.5	4	32.0	32.2	96.1
Newal	6088		3	14.3	3	44.9	3	22.0	4	38.8	4	30.4	30.1	89.8
Peatland	5267						3	24.5	4	56.7	4	34.0		105.2
Ashland:														
Wisconsin Bar b- less ¹	5105	Ped.38	4	7.0	3	19.4	3	21.9	3	45.5	2	20.9	22.9	100.0
Oderbrucker	4666	Ped.5-1	4	3.9	3	13.5	3	16.7	3	36.1	2	18.8	17.8	77.6
Peatland	5267		4	11.7	3	17.0	3	21.0	3	46.7	2	29.0	25.1	109.3
Newal	6088		4	10.6	3	14.3	3	13.2	3	41.2	2	18.5	19.6	85.3
Velvet	4252						3	18.7	3	34.1	2	17.5		79.6
Sturgeon Bay:														
Wisconsin Bar b- less ¹	5105	Ped.38	3	26.3	4	19.9	3	47.0	4	41.4	4	36.9	34.3	100.0
Oderbrucker	4666	Ped.5-1	3	23.1	4	11.9	3	38.0	4	30.9	4	32.2	27.2	79.4
Velvet	4252		3	27.8	4	14.7	3	37.3	4	36.5	4	35.0	30.3	88.2
Newal	6088		3	34.2	4	20.6	3	39.2	4	38.2	4	35.8	33.6	98.0
Peatland	5267						3	36.5	4	42.1	4	31.3		87.7
Trebi	936								4	44.7	4	38.5		106.3

¹ Standard with which other varieties are compared for comparable years.

WYOMING

Wyoming Agricultural Experiment Station, Laramie.....R. F. Eslick.
 United States Dry Land Field Station, Sheridan.....R. S. Towle.

TABLE 38.—*Acre yields of varieties of barley grown at agricultural experiment stations in Wyoming in 1 or more of the years 1937-41*

[Data for Laramie obtained through the courtesy of the Wyoming Agricultural Experiment Station; for Sheridan, through the courtesy of the Division of Dry Land Agriculture in cooperation with the station]

Station and variety	C. I. No.	Station No.	Number of plots and acre yield										Average yield, 1937-41	Relative yield compared with standard
			1937		1938		1939		1940		1941			
			Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield		
				Bu.		Bu.		Bu.		Bu.		Bu.	Bu.	Per-cent
Laramie:														
Trebi ¹	936	I-1	5	86.1	5	70.5	9	17.1	4	51.9	4	97.7	64.7	100.0
Odessa	182	I-7	1	108.4	1	76.2	1	54.7	4	73.8	4	100.1	82.6	127.8
Glabron	4577	I-5	1	63.6	1	61.7	1	20.7	4	57.9	4	85.8	57.9	89.6
Horn	926	I-2	1	73.3	1	87.7	2	22.5				89.5		100.6
Wisconsin Barbless	5105	I-3							4	62.5	4	91.3		102.8
Beecher	6566	I-6							4	60.2	4	79.2		93.2
Lico	6279	I-4							4	66.3	4	101.5		112.2
Charlottetown 80	2732	I-12	1	97.9	1	86.3	1	24.3	4	65.2				121.3
Spartan	5027	I-11	1	73.0	1	58.2	1	28.7	4	58.1				96.6
Vaughn	1367	I-16	1	70.2	1	58.7	1	25.6	4	42.3				87.2
Comfort	4578	I-15	1	63.5	1	56.0	1	17.1	4	61.9				88.0
O. A. C. 21	1470	I-10	1	91.4	1	64.0	1	22.4						102.4
Coast	690	I-9	1	95.7	1	84.6	1	27.2						119.5
Beldi Giant	2777	I-8	1	104.6	1	79.0	1	42.0						129.9
White Smyrna	658	I-14	1	97.2	1	84.7	1	35.4						125.1
Hannchen	531	I-13	1	92.6	1	71.3	1	31.5						112.5
Nepal	595	I-17			1	67.0	1	10.7						88.7
Sheridan:														
Trebi ¹	936		3	37.1	3	63.4	3	62.6	3	41.6	3	54.6	51.9	100.0
Vaughn	1367		3	35.2	3	68.0	3	37.0	3	33.6	3	56.6	46.1	88.9
Velvon	6109		3	40.9	3	67.6	3	63.4	3	35.9	3	61.5	53.9	103.9
Spartan	5027		3	41.6	3	60.0	3	40.5	3	36.3	3	52.7	46.2	89.1
Horn	926		3	226.0	3	53.5	3	57.7	3	33.6	3	58.1	45.8	88.3
Coast	690		3	37.1	3	60.0	3	34.8	3	35.2	3	58.8	45.2	87.1
Meloy	1176		3	35.9	3	56.5	3	43.6	3	32.1	3	50.1	43.6	84.1
Ezond	6265		3	42.8	3	60.0	3	50.4	3	39.7	3	62.3	51.0	98.4
Wisconsin Barbless	5105				3	61.9	3	42.0	3	35.9	3	53.5		87.0
Atlas	4118						3	55.4	3	38.9	3	64.2		99.8
Beecher	6566	Moscow 9					3	38.2	3	37.5	3	63.4		87.6
Compana	5438										3	59.6		109.2
Nepal	595		3	34.4	3	42.0	3	29.8	3	28.3				65.7
Glabron	4577		3	238.2	3	56.9	3	41.6						83.8
Velvet	4252		3	235.5	3	52.7	3	36.7						76.6

¹ Standard with which other varieties are compared for comparable years.

² Damaged by Mormon crickets.

ALBERTA

Experimental Station, Lacombe.....F. H. Reed, superintendent.
 Experimental Station, Lethbridge.....W. H. Fairfield, superintendent.
 University of Alberta, Edmonton.....A. G. McCalla, professor of field crops.
 Experimental Station, Beaverlodge.....W. D. Albright, superintendent.
 Experimental Station, Fort Vermilion.....A. Lawrence, officer in charge.

TABLE 39.—*Acre yields of varieties of barley grown at agricultural experimental stations in Alberta in 1 or more of the years 1937-41*

[Data for Lacombe, Lethbridge, Beaverlodge, and Fort Vermilion were obtained through the courtesy of the Dominion Experimental Farms; and for Edmonton, through the courtesy of the University of Alberta]

Station and variety	C. I. No.	C. A. ¹ No.	Number of plots and acre yield										Average yield, 1937-41	Relative yield compared with stand-ard
			1937		1938		1939		1940		1941			
			Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield		
Lacombe:				Bu.		Bu.		Bu.		Bu.		Bu.	Bu.	Per cent
O. A. C. 21 ²	1470	1086	4	65.5	4	72.3	4	57.6	4	64.4	4	70.3	66.0	100.0
Newal.....	6088	1089	4	71.2	4	82.5	4	71.5	4	86.4	4	80.4	78.4	118.8
Olli.....	6251	739	4	55.9	4	69.9	4	42.6	4	62.0	4	58.9	57.9	87.6
Plush.....	6093	1106	4	65.0	4	78.8	4	57.4	4	75.1	4	86.1	72.5	109.8
Rex.....	6618	1113	4	58.1	4	71.9	4	50.4	4	52.9	4	68.7	60.4	91.5
Sanalta.....	6087	1088	4	83.5	4	84.5	4	66.0	4	63.0	4	77.0	74.8	113.3
Trebi.....	936	1115	4	68.2	4	78.6	4	62.2	4	39.4	4	85.1	66.7	101.0
Titan.....	7055	1118	4	29.5	4	63.3	4	56.0	4	76.1	4	91.4	63.3	95.8
Regal.....	5030	742	4	62.0	4	81.2	4	58.1	4	66.7	4	---	---	103.2
Lethbridge:														
<i>Irrigated</i>														
O. A. C. 21 ²	1470	1086	4	63.1	4	70.5	4	87.6	4	95.7	4	65.0	76.4	100.0
Byng.....	6089	1096	4	103.4	4	62.3	4	101.2	4	109.0	4	69.3	89.0	116.6
Newal.....	6088	1089	4	95.2	4	82.3	4	110.2	4	96.9	4	80.1	92.9	121.7
Olli.....	6251	739	4	67.2	4	75.6	4	88.7	4	109.5	4	74.8	83.2	108.9
Plush.....	6093	1106	4	76.2	4	80.5	4	97.3	4	97.9	4	73.5	85.1	111.4
Rex.....	6618	1113	4	77.2	4	63.0	4	79.6	4	77.6	4	55.5	70.6	92.4
Sanalta.....	6087	1088	4	71.8	4	75.3	4	98.3	4	113.3	4	76.2	87.0	113.9
Trebi.....	936	1115	4	103.8	4	86.0	4	121.2	4	102.2	4	69.8	96.6	126.5
Titan.....	7055	1118	4	80.3	4	66.8	4	71.3	4	111.0	4	60.8	78.0	102.2
Regal.....	5030	742	4	78.4	4	67.9	4	---	4	115.9	4	71.9	---	113.5
<i>Dry land</i>														
O. A. C. 21 ²	1470	1086	---	---	4	61.8	4	39.0	4	33.6	4	49.9	---	100.0
Newal.....	6088	1089	---	---	4	76.1	4	46.3	4	38.1	4	54.5	---	116.7
Olli.....	6251	739	---	---	4	56.0	4	38.3	4	33.6	4	34.2	---	88.0
Sanalta.....	6087	1088	---	---	4	59.7	4	46.6	4	39.3	4	53.3	---	107.9
Trebi.....	936	1115	---	---	4	68.0	4	66.5	4	39.3	4	64.2	---	129.1
Byng.....	6089	1096	---	---	4	---	4	55.5	4	39.8	4	43.6	---	113.4
Plush.....	6093	1106	---	---	4	---	4	48.5	4	44.3	4	50.0	---	116.6
Rex.....	6618	1113	---	---	4	---	4	50.7	4	33.6	4	50.4	---	110.0
Titan.....	7055	1118	---	---	4	---	4	54.5	4	36.5	4	41.2	---	107.9
Regal.....	5030	742	---	---	4	57.5	---	---	4	33.6	4	46.8	---	94.9
Edmonton: ³														
O. A. C. 21 ²	1470	1086	4	0	4	28.2	4	0	4	64.6	4	35.1	25.6	100.0
Newal.....	6088	1089	4	0	4	29.7	4	0	4	64.7	4	48.3	28.5	111.6
Olli.....	6251	739	4	0	4	32.5	4	0	4	58.9	4	37.3	25.7	100.6
Plush.....	6093	1106	4	0	4	43.3	4	0	4	74.3	4	35.9	30.7	120.0
Regal.....	5030	742	4	0	4	33.2	4	0	4	56.4	4	42.2	26.4	103.0
Rex.....	6618	1113	4	0	4	31.9	4	0	4	62.4	4	51.1	29.1	113.7
Sanalta.....	6087	1088	4	0	4	41.5	4	0	4	61.3	4	42.7	29.1	113.8
Trebi.....	936	1115	4	0	4	30.6	4	0	4	70.8	4	35.7	27.4	107.2
Titan.....	7055	1118	4	0	4	23.7	4	0	4	55.8	4	53.7	26.6	104.1
Beaverlodge:														
O. A. C. 21 ²	1470	1086	4	46.6	4	14.0	4	25.0	4	41.5	4	54.0	36.2	100.0
Byng.....	6089	1096	4	50.5	4	19.2	4	31.5	4	48.7	4	61.5	42.3	116.7
Newal.....	6088	1089	4	50.3	4	22.7	4	31.3	4	47.1	4	55.5	41.4	114.2
Olli.....	6251	739	4	42.6	4	15.2	4	29.5	4	49.7	4	54.2	38.2	105.6
Plush.....	6093	1106	4	59.9	4	20.7	4	32.3	4	62.8	4	62.9	47.7	131.8
Regal.....	5030	742	4	42.8	4	23.8	4	31.2	4	39.7	4	59.3	39.4	108.7
Rex.....	6618	1113	4	40.3	4	18.7	4	31.8	4	51.3	4	55.0	39.4	108.8
Titan.....	7055	1118	4	41.4	4	20.1	4	30.7	4	44.7	4	44.7	36.3	100.3
Fort Vermilion:														
O. A. C. 21 ²	1470	1086	4	34.8	4	28.2	4	24.5	4	16.7	4	62.8	33.4	100.0
Olli.....	6251	739	4	32.4	4	26.4	4	31.7	4	21.7	4	61.4	34.7	104.0
Regal.....	5030	742	4	28.4	4	27.8	4	29.1	4	21.5	4	70.3	35.4	106.0
Newal.....	6088	1089	---	---	4	22.1	4	34.5	4	19.0	4	68.5	---	109.0

¹ C. A. = Canadian Accession number, used in this and subsequent tables.

² Standard with which other varieties are compared for comparable years.

³ Crop failure in 1937 due to drought and in 1939 due to hail.

BRITISH COLUMBIA

Experimental Farm, Agassiz.....W. H. Hicks, superintendent.

TABLE 40.—*Acre yields of varieties of barley grown at the experimental farm at Agassiz, British Columbia, for 1 or more of the years 1937-41*

[Data obtained through the courtesy of the Dominion Experimental Farms]

Variety	C. I. No.	C. A. No.	Number of plots and acre yield										Relative yield com- pared with stand- ard
			1937		1938		1939		1940		1941		
			Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield	
				Bu.		Bu.		Bu.		Bu.		Bu.	
Trebi 1	939	1115			4	44.7	4	52.3	4	50.7	4	45.7	100.0
Olli	6251	739			4	48.1	4	38.6	4	50.3	4	49.5	96.4
Byng	6089	1096					4	61.5	4	55.4	4	46.4	103.1
Nobarb	5336	1022					4	50.6	5	51.7	4	50.3	102.6
Plush	6093	1106					4	47.1	4	52.0	4	55.1	103.7
Wisconsin Barbless	5105	1101					4	56.5	4	53.2	4	37.7	99.1
Regal	5030	742			4	37.9			4	55.3	4	44.2	97.4
Titan	7055	1118							4	49.1	4	48.0	100.7

¹ Standard with which other varieties are compared for comparable years.

MANITOBA

Experimental Farm, Brandon.....M. J. Tinline, superintendent.

Experimental Station, Morden.....W. R. Leslie, superintendent.

University of Manitoba, Winnipeg.....P. J. Olson, professor of plant science.

TABLE 41.—*Acre yields of varieties of barley grown at agricultural experimental stations in Manitoba in 1 or more of the years 1937-41*

[Data for Brandon and Morden were obtained through the courtesy of the Dominion Experimental Farms; for Winnipeg, through the courtesy of the University of Manitoba]

Station and variety	C. I. No.	C. A. No.	Number of plots and acre yield										Average yield, 1937-41	Relative yield com- pared with stand- ard
			1937		1938		1939		1940		1941			
			Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield		
				Bu.		Bu.		Bu.		Bu.		Bu.		
Brandon:														
O. A. C. 21 ¹ ----	1470	1086	4	54.1	4	50.5	4	51.9	4	57.6	4	68.1	56.4	100.0
Newal	6088	1089	4	58.2	4	69.6	4	43.9	4	62.3	4	71.8	61.2	108.4
Peatland	5267	1112	4	53.6	4	57.6	4	30.0	4	49.7	4	58.4	49.9	88.3
Plush	6093	1106	4	68.2	4	69.4	4	60.7	4	66.7	4	75.6	68.1	120.7
Trebi	936	1115	4	63.4	4	69.9	4	45.4	4	66.1	4	53.3	59.6	105.6
Wisconsin Barbless	5105	1101	4	62.2	4	60.2	4	46.7	4	52.1	4	74.3	59.1	104.7
Gartons	7016	1134	4	---	4	---	4	31.9	4	52.4	4	46.4	73.6	---
Morden:														
O. A. C. 21 ¹ ----	1470	1086	4	68.9	4	61.2	4	40.1	4	67.4	4	54.5	58.4	100.0
Newal	6088	1089	4	76.5	4	72.3	4	49.1	4	78.6	4	47.7	64.8	111.0
Peatland	5267	1112	4	57.2	4	63.2	4	26.1	4	52.3	4	39.5	47.7	81.6
Plush	6093	1106	4	79.5	4	69.8	4	58.1	4	73.8	4	56.0	67.4	115.4
Trebi	936	1115	4	47.4	4	46.2	4	44.5	4	60.8	4	32.4	46.3	79.2
Wisconsin Barbless	5105	1101	4	63.4	4	64.9	4	39.3	4	65.6	4	43.3	55.3	94.7
Gartons	7016	1134	4	---	4	---	4	29.5	4	56.8	4	27.6	70.3	---
Winnipeg:														
O. A. C. 21 ¹ ----	1470	1086	4	50.8	4	45.9	4	59.6	4	49.9	4	39.4	49.1	100.0
Newal	6088	1089	4	45.1	4	54.4	4	62.3	4	58.4	4	49.9	54.0	110.0
Peatland	5267	1112	4	52.2	4	51.6	4	53.8	4	73.5	4	45.3	55.3	112.5
Plush	6093	1106	4	69.3	4	50.5	4	71.4	4	66.1	4	56.8	62.8	127.9
Trebi	936	1115	4	60.1	4	52.3	4	67.2	4	62.4	4	55.0	59.4	120.9
Wisconsin Barbless	5105	1101	4	60.0	4	49.4	4	65.2	4	75.1	4	55.4	61.0	124.2
Gartons	7016	1134	4	---	4	---	4	52.1	4	40.3	4	28.7	81.3	---

¹ Standard with which other varieties are compared for comparable years.

NEW BRUNSWICK

Experimental Station, Fredericton-----C. F. Bailey, superintendent.

TABLE 42.—*Acre yields of varieties of barley grown at the experimental station at Fredericton, New Brunswick, in 1 or more of the years 1937-41*

[Data obtained through the courtesy of the Dominion Experimental Farms]

Variety	C. I. No.	C. A. No.	Number of plots and acre yield										Average yield, 1937-41	Relative yield com- pared with stand- ard
			1937		1938		1939		1940		1941			
			Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield		
				Bu.		Bu.		Bu.		Bu.		Bu.		
O. A. C. 21 ¹ -----	1470	1086	4	40.9	4	35.4	4	41.9	4	55.7	4	43.3	43.4	100.0
Byng-----	6089	1096	4	44.2	4	41.5	4	42.7	4	72.8	4	52.5	50.7	116.8
Charlottetown 80-----	2732	817	4	45.0	4	36.5	4	42.3	4	61.2	4	42.7	45.5	104.8
Nobarb-----	6335	1022	4	43.7	4	36.8	4	40.9	4	55.1	4	46.7	44.6	102.8
Olli-----	6251	739	4	43.9	4	36.3	4	51.4	4	67.2	4	45.5	48.9	112.5
Velvet-----	4252	755	4	37.5	4	34.9	4	36.0	4	61.7	4	43.1	42.6	98.2

¹ Standard with which other varieties are compared for comparable years.

NOVA SCOTIA

Experimental Farm, Nappan-----W. W. Baird, superintendent.

TABLE 43.—*Acre yields of varieties of barley grown at the experimental farm at Nappan, Nova Scotia, in 1 or more of the years 1937-41*

[Data obtained through the courtesy of the Dominion Experimental Farms]

Variety	C. I. No.	C. A. No.	Number of plots and acre yield										Average yield, 1937-41	Relative yield com- pared with stand- ard
			1937		1938		1939		1940		1941			
			Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield		
				Bu.		Bu.		Bu.		Bu.		Bu.		
O. A. C. 21 ¹ -----	1470	1086	4	48.2	4	47.1	4	47.3	4	46.3	4	38.1	45.4	100.0
Byng-----	6089	1096	4	56.1	4	52.0	4	59.1	4	53.7	4	39.9	52.2	114.9
Charlottetown 80-----	2732	817	4	47.0	4	42.3	4	50.3	4	57.1	4	35.5	46.4	102.3
Nobarb-----	6335	1022	4	51.1	4	43.0	4	48.2	4	54.0	4	35.7	46.4	102.2
Olli-----	6251	739	4	51.3	4	52.6	4	58.7	4	63.5	4	38.9	53.4	117.6
Velvet-----	4252	755	4	41.7	4	45.9	4	46.2	4	37.3	4	33.1	40.8	90.0

¹ Standard with which other varieties are compared for comparable years.

ONTARIO

Central Experimental Farm, Ottawa. P. R. Cowan, senior assistant cerealist.
 Experimental Station, Kapuskasing. J. P. S. Ballantyne, superintendent.
 Ontario Agricultural College, Guelph
 G. P. McRostie, professor of agronomy.

TABLE 44.—*Acre yields of varieties of barley grown at agricultural experimental stations in Ontario in 1 or more of the years 1937-41*

[Data for Ottawa and Kapuskasing obtained through the courtesy of the Dominion Experimental Farms; for Guelph, through the courtesy of the Ontario Agricultural College]

Station and variety	C. I. No.	C. A. No.	Number of plots and acre yield										Average yield, 1937-41	Relative yield com- pared with stand- ard
			1937		1938		1939		1940		1941			
			Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield		
Ottawa: ¹				Bu.		Bu.		Bu.		Bu.		Bu.	Bu.	Per- cent
O. A. C. 21 2-----	1470	1086	4	44.0	4	36.6	4	35.9	4	57.0	4	0	34.7	100.0
Byng-----	6089	1096	4	52.3	4	43.8	4	54.4	4	58.7	4	0	41.8	120.6
Nobarb-----	6335	1022	4	36.5	4	48.0	4	45.2	4	52.2	4	0	36.4	104.8
Plush-----	6093	1106	4	36.9	4	38.4	4	45.6	4	62.0	4	0	36.6	105.4
Velvet-----	4252	755	4	52.4	4	35.9	4	42.4	4	53.1	4	0	36.8	105.9
Kapuskasing:														
O. A. C. 21 2-----	1470	1086	4	51.4	4	45.9	4	42.2	4	53.5	4	74.1	53.4	100.0
Byng-----	6089	1096	4	47.0	4	63.3	4	54.2	4	72.4	4	87.5	64.9	121.5
Nobarb-----	6335	1022	4	45.3	4	55.7	4	50.5	4	60.9	4	76.0	57.7	108.0
Velvet-----	4252	755	4	49.9	4	49.8	4	40.6	4	58.3	4	72.9	54.3	101.6
Olli-----	6251	739	4	48.9	4	47.3	4	49.4	4	53.1	4	73.2	54.4	101.8
Guelph:														
O. A. C. 21 2-----	1470	1086	4	24.3	4	28.7	4	23.0	4	31.2	4	34.2	28.3	100.0
Byng-----	6089	1096	4	32.9	4	42.7	4	47.0	4	46.1	4	42.8	42.3	149.6
Nobarb-----	6335	1022	4	45.8	4	46.2	4	42.3	4	55.6	4	41.1	46.2	163.4
Velvet-----	4252	755	4	38.7	4	45.9	4	38.9	4	45.7	4	37.5	41.3	146.2

¹ Crop failure in 1941 due to drought.

² Standard with which other varieties are compared for comparable years.

PRINCE EDWARD ISLAND

Experimental Station, Charlottetown. J. A. Clark, superintendent.

TABLE 45.—*Acre yields of varieties of barley grown at the experimental station, Charlottetown, Prince Edward Island, in 1 or more of the years 1937-41*

[Data obtained through the courtesy of the Dominion Experimental Farms]

Variety	C. I. No.	C. A. No.	Number of plots and acre yield										Relative yield com- pared with stand- ard
			1937		1938 ¹		1939		1940		1941		
			Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield	
													Per- cent
O. A. C. 21 2	1470	1086	4	21.3	---	---	2	45.0	4	45.8	4	23.9	100.0
Byng	6089	1096	4	32.7	---	---	2	47.1	4	53.0	4	34.8	123.2
Charlottetown 80	2732	817	4	41.9	---	---	2	52.3	4	50.1	4	33.5	130.7
Nobarb	6335	1022	4	31.0	---	---	2	49.9	4	57.1	4	26.9	121.3
Olli	6251	739	4	45.8	---	---	2	51.5	4	55.2	4	35.6	138.3
Velvet	4252	755	4	27.2	---	---	2	46.0	4	55.3	4	26.1	113.7

¹ Crop failure in 1938 due to poor location of plots and to weeds.

² Standard with which other varieties are compared for comparable years.

QUEBEC

Experimental Station, Ste. Anne de la Pocatiere

-----J. R. Pelletier, superintendent.

Experimental Station, Lennoxville-----J. A. Ste. Marie, superintendent.

Macdonald College, Ste. Anne de Bellevue

-----Emile A. Lods, assistant professor of agronomy.

Experimental Station, Normandin-----A. Belzile, superintendent.

TABLE 46.—*Acre yields of varieties of barley grown at agricultural experimental stations in Quebec in 1 or more of the years 1937-41*

[Data from Ste. Anne de la Pocatiere, Lennoxville, and Normandin obtained through the courtesy of the Dominion Experimental Farms and for Macdonald College, at Ste. Anne de Bellevue, through the courtesy of Macdonald College]

Station and variety	C. I. No.	C. A. No.	Number of plots and acre yield										Average yield, 1937-41	Relative yield com- pared with stand- ard
			1937		1938		1939		1940		1941			
			Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield*		
				Bu.		Bu.		Bu.		Bu.		Bu.	Bu.	Per- cent
Ste. Anne de la Pocatiere:														
O. A. C. 21 ¹ -----	1470	1086	4	69.8	4	57.4	4	70.5	4	28.5	4	67.7	59.8	100.0
Byng-----	6089	1096	4	67.5	4	51.4	4	78.2	4	32.2	4	67.8	59.4	101.1
Nobarb-----	6335	1022	4	67.9	4	51.6	4	68.2	4	37.5	4	64.7	58.0	98.6
Velvet-----	4252	755	4	66.8	4	47.5	4	63.4	4	27.4	4	57.8	52.6	89.5
Lennoxville:														
O. A. C. 21 ¹ -----	1470	1086	4	79.7	4	38.5	4	38.4	4	62.1	4	50.5	53.8	100.0
Byng-----	6089	1096	4	98.2	4	42.5	4	25.5	4	59.4	4	47.5	54.6	101.4
Nobarb-----	6335	1022	4	75.2	4	27.1	4	25.3	4	54.0	4	38.5	44.0	81.8
Velvet-----	4252	755	4	82.9	4	36.3	4	37.5	4	61.1	4	48.7	53.3	99.0
Ste. Anne de Bellevue:														
O. A. C. 21 ¹ -----	1470	1086	4	49.7	4	58.7	4	57.8	4	46.7	4	40.3	50.6	100.0
Byng-----	6089	1096	4	56.2	4	63.2	4	73.4	4	55.9	4	51.1	60.0	118.4
Velvet-----	4252	755	4	47.9	4	53.4	4	61.8	4	48.9	4	44.9	51.4	101.5
Nobarb-----	6335	1022	4	48.5	4	62.9	4	69.6	4	50.9	---	---	---	108.9
Plush-----	7030	1117	4	42.9	4	63.9	4	72.4	4	51.8	---	---	---	108.5
Olli-----	6251	739	4	49.9	4	58.9	4	59.9	4	59.7	---	---	---	107.3
Newal-----	6088	1089	4	41.9	4	52.3	4	62.8	---	---	---	---	---	94.5
Hannchen-----	4841	837	4	42.2	4	56.9	4	74.6	---	---	---	---	---	104.5
Pontiac-----	4849	741	4	42.7	4	57.2	4	65.9	---	---	---	---	---	99.8
Charlottetown 80-----	2732	817	4	45.3	4	53.6	4	63.2	---	---	---	---	---	97.5
Peatland-----	5267	722	4	39.2	4	49.6	4	62.0	---	---	---	---	---	90.7
Mensury Ott. 60-----	4696	730	4	42.8	4	54.6	4	58.9	---	---	---	---	---	94.0
Wisconsin Barbless-----	5105	1101	4	40.9	4	61.6	---	---	---	---	---	---	---	94.6
Regal-----	5030	742	4	50.9	4	56.1	---	---	---	---	---	---	---	98.7
Normandin:														
O. A. C. 21 ¹ -----	1470	1086	---	---	1	59.2	3	25.4	4	53.5	4	54.7	---	100.0
Byng-----	6089	1096	---	---	1	77.6	3	41.4	4	76.8	4	61.2	---	133.3
Nobarb-----	6335	1022	---	---	1	66.2	3	27.7	4	64.7	4	57.9	---	112.3
Velvet-----	4252	755	---	---	1	50.9	3	23.7	4	59.5	4	58.5	---	100.0

¹ Standard with which other varieties are compared for comparable years.

SASKATCHEWAN

Experimental Farm, Indian Head-----W. H. Gibson, superintendent.
 Experimental Station, Melfort-----M. J. McPhail, superintendent.
 University of Saskatchewan, Saskatoon
 -----J. B. Harrington, professor of agronomy.
 Experimental Station, Scott-----G. D. Matthews, superintendent.
 Experimental Station, Swift Current-----L. B. Thomson, superintendent.

TABLE 47.—*Acre yields of varieties of barley grown at agricultural experimental stations in Saskatchewan in 1 or more of the years 1937-41*

[Data for Indian Head, Melfort, Swift Current, and Scott obtained through the courtesy of the Dominion Experimental Farms; and for Saskatoon, through the courtesy of the University of Saskatchewan]

Station and variety	C. I. No.	C. A. No.	Number of plots and acre yield										Average yield, 1937-41	Relative yield com- pared with stand- ard
			1937		1938		1939		1940		1941			
			Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield	Plots	Yield		
				Bu.		Bu.		Bu.		Bu.		Bu.	Bu.	Per- cent
Indian Head:														
O. A. C. 21 ¹ -----	1470	1086	4	19.6	4	15.1	4	35.6	4	46.5	4	28.5	29.1	100.0
Hannchen -----	531	1109	4	33.0	4	20.0	4	43.2	4	68.9	4	49.1	42.8	147.4
Newal -----	6088	1089	4	32.8	4	15.9	4	46.0	4	52.0	4	46.8	38.7	133.2
Plush -----	6093	1106	4	35.2	4	35.7	4	50.8	4	62.5	4	58.5	48.5	167.0
Prospect -----	6339	1074	4	32.3	4	17.8	4	46.6	4	58.2	4	41.3	39.2	135.0
Regal -----	5030	742	4	32.8	4	10.8	4	44.0	4	52.5	4	44.2	36.9	126.8
Rex -----	6618	1113	4	30.4	4	22.9	4	50.7	4	59.6	4	49.2	42.6	146.5
Titan -----	7055	1118	---	---	---	---	---	---	4	71.5	4	51.0	---	163.3
Melfort:														
O. A. C. 21 ¹ -----	1470	1086	4	5.9	4	32.0	4	63.7	4	47.5	4	24.7	34.8	100.0
Newal -----	6088	1089	4	13.0	4	29.2	4	63.5	4	55.5	4	29.7	38.2	109.8
Plush -----	6093	1106	4	5.9	4	30.3	4	66.8	4	56.7	4	25.1	37.0	106.3
Wisconsin Barbless -----	5105	1101	4	4.5	4	38.4	4	46.0	4	57.6	4	33.8	36.1	103.7
Regal -----	5030	742	4	9.2	4	26.1	4	62.6	4	57.8	4	27.6	36.7	105.5
Peatland -----	5267	1112	4	2.5	4	41.2	4	54.3	---	---	4	25.1	---	97.5
Trebi -----	936	1115	4	17.8	4	25.7	4	69.3	---	---	4	24.2	---	108.5
Olli -----	6251	739	4	12.7	4	25.1	---	---	4	59.1	4	27.7	---	113.2
Gartons -----	7016	1134	---	---	---	---	4	63.9	4	51.9	4	29.2	---	106.7
Rex -----	6618	1113	---	---	4	27.5	---	---	4	---	4	29.5	---	100.5
Saskatoon:														
O. A. C. 21 ¹ -----	1470	1086	4	1.9	4	15.0	6	59.5	6	33.0	6	11.2	24.1	100.0
Hannchen -----	531	1109	4	8.9	4	24.5	6	58.7	6	45.5	6	16.4	30.8	127.7
Regal -----	5030	742	4	3.1	4	20.5	6	63.5	6	38.9	6	8.1	26.8	111.2
Rex -----	6618	1113	4	2.6	4	29.1	6	65.9	6	36.3	6	10.4	28.9	119.7
Trebi -----	936	1115	4	5.4	4	17.5	6	67.5	6	34.5	6	18.2	28.6	118.7
Newal -----	6088	1089	4	3.5	4	26.9	---	---	6	43.4	6	11.2	---	139.1
Plush -----	6093	1106	4	3.8	4	23.0	---	---	6	41.9	6	13.4	---	134.4
Prospect -----	6339	1074	4	4.1	4	19.5	---	---	6	32.6	6	16.2	---	118.5
Scott: ²														
O. A. C. 21 ¹ -----	1470	1086	4	0	4	18.1	4	15.9	4	21.5	4	9.8	13.1	100.0
Hannchen -----	531	1109	4	0	4	25.8	4	23.9	4	35.2	4	13.1	19.6	150.1
Newal -----	6088	1089	4	0	4	26.6	4	21.0	4	39.6	4	16.4	20.7	158.7
Plush -----	6093	1106	4	0	4	24.1	4	21.9	4	31.3	4	9.5	17.4	132.9
Prospect -----	6339	1074	4	0	4	23.1	4	33.7	4	32.4	4	13.8	20.6	157.7
Regal -----	5030	742	4	0	4	23.7	4	22.3	4	27.2	4	10.2	16.7	127.7
Rex -----	6618	1113	4	0	4	24.4	4	31.3	4	26.8	4	12.9	19.1	146.1
Titan -----	7055	1118	---	---	---	---	---	---	4	28.3	4	11.0	---	125.6
Swift Current: ²														
Regal ¹ -----	5030	742	4	0	4	32.8	4	48.3	4	48.2	4	4.8	26.8	100.0
Newal -----	6088	1089	4	0	4	29.0	4	35.1	4	51.8	4	5.2	24.2	90.3
Plush -----	6093	1106	4	0	4	28.4	4	30.9	4	41.6	4	5.6	21.3	79.4
Prospect -----	6339	1074	4	0	4	32.3	4	49.3	4	53.7	4	9.3	28.9	107.8
Rex -----	6618	1113	4	0	4	32.2	4	46.0	4	50.7	4	7.3	27.2	101.6
Titan -----	7055	1118	4	0	4	33.1	---	---	4	50.3	4	9.2	---	107.9

¹ Standard with which other varieties are compared for comparable years.

² Crop failure in 1937 due to drought.

HIGH-YIELDING VARIETIES (TABLE 48)

TABLE 48.—*High-yielding varieties grown at experiment stations in the United States and Canada in the years 1937-41*

Station	When sown	5-year period 1937-41				Showing promise in less than 5 years		
		Highest yielding variety	C. I. or State No.	Second highest yielding variety	C. I. or State No.	Number of years	Variety	C. I. or State No.
<i>United States</i>								
Alabama:								
Auburn.....	Fall.....					1	Marnobarb.....	6120
Belle Mina.....	do.....					2	Tennessee Beardless 5.....	3384
Crossville.....	do.....					2	Marnobarb.....	6120
Marion Junction.....	do.....					3	do.....	6120
Arizona:								
Mesa.....	do.....	Arivat.....	6573	Vaughn.....	1367	2	California Mariout.....	1455
Secaton 1.....	do.....	Common Six-Row.....	4625	Trebi.....	936	3	Vaughn.....	1367
Arkansas:								
Fayetteville.....	do.....	Orel.....	351	Tenkow.....	646			
Do, 1.....	Spring.....	Stavropol.....	5913	Vaughn.....	1367			
Stuttgart.....	Fall.....					1	Jackson.....	6569
California:								
Davis.....	do.....	Vaughn.....	1367	Coast.....	4633	1	Rojo.....	5401
Colorado:								
Fort Collins 1.....	Spring.....	Trebi X Colless.....	6369	Velvon.....	6109			
Akron.....	do.....	Blackhull 1180.....	6009	Vance.....	4385	4	Beecher.....	6566
Hesperus.....	do.....	Lico.....	6279	Trebi X Colless.....	6369	2	Arivat.....	6573
Delaware:								
Newark.....	Fall.....	Kentucky 20.....	6994	Manchuria.....	2947	2	Smooth Awn 86.....	6268
Milford.....	do.....	do.....	6994	Michigan Winter.....	2036	2	do.....	6268
Georgia:								
Experiment 1.....	do.....	Greece X Tenn. Beardless 5.....	6998	Texas Winter.....	554	2	Sunrise.....	6272
Athens.....	do.....	Greece.....	4593	Argentine.....	4594			
Idaho:								
Moscow.....	Spring.....	Atlas X Vaughn.....	Moscow 35	Atlas X Vaughn.....	Moscow 38			
Aberdeen.....	do.....	Trebi.....	936	Composite Cross selection.....	5302	3	Hanchen X Minia.....	7005
Sandpoint.....	do.....	Hanchen.....	531	Beldi Giant.....	2777			

See footnote at end of table.

TABLE 48.—*High-yielding varieties grown at experiment stations in the United States and Canada in the years 1937-41—Continued*

Station	When sown	5-year period 1937-41			Showing promise in less than 5 years			
		Highest yielding variety	C. I. or State No.	Second highest yielding variety	C. I. or State No.	Number of years	Variety	C. I. or State No.
United States—Continued.								
Illinois:								
Urbana.....	Spring.....	Trebi.....	936	Wisconsin Barbless.	5105	2	Purdue 28156A3-2-2-2	6562
Do.....	Fall.....	Purdue 1101.....	4582	Purdue 21.....	4581	2	Spartan	5027
Alhambra.....	Spring.....	Kentucky 1.....	6050	Purdue 21.....	4581	4	Purdue 1101	4582
Do.....	Fall.....	Trebi.....	936	Wisconsin Barbless.	5105			
De Kalb.....	Spring.....							
Indiana:								
La Fayette.....	Fall.....	Kentucky 1.....	6050	Purdue 1101.....	4582			
Do.....	Spring.....	Alpha.....	959	Spartan.....	5027			
North Vernon.....	Fall.....	Purdue 21.....	4581	Missouri Early Beardless.	6051	4	Kentucky 1	6050
Bedford.....	do.....	do.....	4581	do.....	6051	4	do.	6050
Bicknell.....	do.....	do.....	4581	do.....	6051	4	do.	6050
Iowa:								
Ames 1.....	Spring.....	Wisconsin Barbless.	5105	Spartan.....	5027			
Kanawha.....	do.....	do.....	5105	Velvet.....	4252			
Kansas:								
Manhattan.....	Fall.....	Kansas Southeast strain.....	7070	Missouri Early Beardless.	6051	2	Ward	6007
McLouth.....	do.....	Reno.....	6561	Kansas Southeast strain.....	7070	4	Reno	6561
Columbus 1.....	do.....	do.....				2	Ward	6007
Thayer.....	do.....	do.....				3	Reno	6561
Wichita.....	Spring.....	Flynn.....	1311	Stavropol.....	5913			
Do.....	Fall.....	do.....				4	Kansas South-central strain.	6376
Kingman.....	Spring.....	Stavropol.....	5913	Flynn.....	1311	2	Ward	6007
Do.....	Fall.....	Kansas South-central strain.....	6376	Missouri Early Beardless.	6051	3	Flynn.	1311
Hutchinson.....	Spring.....	do.....					Kansas South-central strain.	6376
Do.....	Fall.....	Flynn 1.....	5911	Vaughn.....	1367	1	Glacier	6976
Hays.....	Spring.....	do.....	5911	do.....	1367	1	Beecher	6566
Colby.....	do.....	do.....	5911	do.....	1367	1	do.	6566
Tribune.....	do.....	Flynn.....	1311	Stavropol.....	5913			
Garden City.....	do.....	Stavropol.....	5913	Flynn 1.....	5911			
Dodge City 1.....	do.....	Flynn.....	1311	Vaughn.....	1367			
Meade 1.....	do.....	Vaughn.....	1367	Flynn.....	1311			
Maine:								
Presque Isle.....	do.....	Byng.....	6089	Alpha.....	959			
Maryland:								
College Park.....	Fall.....	Tennessee Winter.....	257	Smooth Awn 86.....	6268	3	Tennessee Winter.	6034

YIELDS OF BARLEY, 1937-41

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Michigan: East Lansing	Spring	Wisconsin Barbless	5105	Trebi	936	2	Nobarb.	6335
Minnesota:								
St. Paul	do	do	5105	Minsturd.	1556	1	Mars	7015
Wasca	do	Peatland	5267	do	1556	4	Wisconsin Barbless	5105
Morris	do	Wisconsin Barbless	5105	Peatland	5267	1	Mars	7015
Crookston	do	do	5105	do	5267	4	Minnesota 462 X Peatland	7011
Grand Rapids	do	Velvet	4252	do	5267	1	Wisconsin Barbless	5105
Duluth	do	Wisconsin Barbless	5105	do	5267	1	Mars	7015
Mississippi:								
State College 1	Fall	Texas Winter	6498	Tennessee Winter 52	3543	2	Wintex	6127
Stoneville	do					3	Texas	6499
Missouri:								
Columbia (nursery plots)	do	Pidor	901	Kentucky 5	7018	3	Randolph	6372
Columbia (field plots)	do					2	Reno	6561
Montana:								
Bozeman	Spring	Trebi	936	Smooth Awn X Manchuria	5998	1	Glacier	6976
Moccasin	do	Compana	5438	Trebi	936	1	do	6976
Havre	do	Ezond	5064	do	936	1	do	6976
Huntley	do					2	Atlas X Vaughn	6973
Nebraska:								
Lincoln	do	Flynn 1	5911	Club Mariout	261	3	Lico	6279
North Platte 1	do	North Platte 1	3266	Sandrel	937	3	Velvon	6109
Alliance	do	Ezond	6265	Trebi	936	1	Trebi	936
Valentine	do							
New Jersey:								
New Brunswick	do	Trebi	936	Alpha	959	1	Queens	7021
Do	Fall	Kentucky 1	6050	Michigan Winter	2036	1	Nassau	7022
New Mexico:								
State College 1	do	New Mexico Winter 2	7066	New Mexico Winter 1	7065	3	Texas Winter	6498
Do 1	Spring	Trebi	936	Conway	6095	3	Atlas X Vaughn	7064
Albuquerque 1	do	Flynn	1311	Atlas X Vaughn	7064	1	Velvon	6109
Capulin 1	do	Odessa	182	Wisconsin Barbless	5105			
New York:								
Ithaca	do	Swiss Spring 87	7025	Alpha X Goldfoil	N. Y. 504a11-5-2			
North Carolina:								
Statesville	Fall	Composite Cross selection	7027	Davidson	6373	4	Sunrise	6272
North Dakota:								
Fargo	Spring	Tregal	6359	Ezond	6265	3	Velvon	6109
Dickinson	do	Trebi	936	do	6265	4	Regal X Trebi	6358
Mandan 1	do	Ezond	6265	Trebi	936	3	Tregal	6359

See footnote at end of table.

TABLE 48.—*High-yielding varieties grown at experiment stations in the United States and Canada in the years 1937-41—Continued*

Station	When sown	5-year period 1937-41			Showing promise in less than 5 years			
		Highest yielding variety	C. I. or State No.	Second highest yielding variety	C. I. or State No.	Number of years	Variety	C. I. or State No.
United States—Continued.								
Oklahoma:								
Stillwater.....	Fall	Tenkow.....	646	Manchuria.....	245	2	Ward.....	6007
Do.....	Spring	Limerick.....	1302	Club Marout.....	261	2	Texan.....	6499
Lawton 1.....	Fall	Wisconsin Winter.....	519	Eshaw.....	4690	3	Beecher.....	6566
Woodward.....	Spring	Blackhull 1180.....	6009	Atlas.....	4118	4	Wintex.....	6127
Do.....	Fall	Composite Cross selection.....	Okl. 35h9-5	Composite Cross selection.....	Okl. 35h10-3			
Oregon:								
Corvallis 1.....	do.	do.....	Oreg. 38	Santiam.....	6367	2	Composite Cross selection.....	Oreg. 63
Do.....	Spring	Hannchen.....	531	Composite Cross selection.....	Oreg. 45	4	do.....	Oreg. 47
Moro.....	do.	Peruvian 19.....	6568	Flynn 37.....	3918	1	Atlas.....	4118
Pendleton.....	do.	Flynn 37.....	5918	Trebi.....	322	1	Arivat.....	6373
Union.....	do.	Trebi.....	936	Odesa.....	182	2	Composite Cross selection.....	Oreg. 32855
Burns 1.....	do.	do.....	936	Union Beardless.....	5976			
Pennsylvania:								
State College 1.....	Fall	Kentucky 1.....	6050	Olympia.....	6107	3	ZZ Second.....	6299
Do. 1.....	Spring	Alpha.....	959	Wisconsin Barbless sel.....	7000			
South Carolina:								
Clemson.....	Fall	Maretts Beardless.....	7041	Clemson Awnless.....	7040	4	Clemson Hooded.....	7042
South Dakota:								
Brookings.....	Spring	Ezond.....	6265	Spartan.....	5027	2	Han River.....	S. Dak. 1348
Highmore 1.....	do.	Trebi.....	936	Ace.....	1853	3	Ezond.....	6265
Eureka.....	do.	White Smyrna.....	195	Trebi.....	936	2	do.....	6265
Newell (irrigated) 1.....	do.	do.....				1	Compans.....	5438
Newell (dry-farmed).....	do.	do.....				1	Beecher.....	6566
Tennessee:								
Knoxville.....	Fall	Tennessee Winter 52.....	3543	Polders.....	3213	1	Jackson 1.....	7045
Columbia.....	do.	do.....		do.....	do.	1	do.....	7045
Jackson.....	do.	do.....		do.....	do.	1	do.....	7045

Texas:	Fall	Wintex	6127	6127	5902	2	Tenkow	646
Denton	do.	do.	6127	Tennessee Winter	6125	1	do.	646
Greenville 1	do.	Composite Cross selection	6502	Texas	6499	4	Wintex	6127
Temple 1	do.	do.	5901	Tennessee Winter 61	3545	3	Amarillo	7047
Iowa Park	do.	Finley	6899	Composite Cross selection	6500	3	Wintex	6127
Chillicothe 1	Spring	do.						
Bushland	Fall	Wintex	6127	Composite Cross selection	Oreg. 54			
Do.	Fall	Velvon	6109	North Platte 1	5266			
Lubbock 1	Spring	do.						
Do. 1	do.	do.						
Utah: Logan	do.	Winter Club	592	Velvon	6109	1	Velvon 5	7054
Virginia:	Fall	Smooth Awn 86	6268	Eaw	4690	3	Nakano Wase 45	
Arlington	do.	Tennessee Winter 66	3346	Orel	351	2	Kentucky 1	6050
Blacksburg	do.	do.				3	Poland	6280
Staunton	do.	do.				3	Tennessee Winter	
Glade Spring	do.	do.						
Washington:	Spring	Flynn 37	5918	Blue	1247			
Pullman	Fall	Winter Club	592	Wisconsin Winter	1894	1	Belford	7060
Do.	Spring	Hannchen	531	Meloy	1176	4	Blue	1247
Lind	do.	do.						
Prosser	do.	do.						
West Virginia:	Fall	West Virginia 1-35-274	7039	Poland	6280	1	Smooth Awn 86	6268
Morgantown	do.	Scottish Pearl	277	Kentucky 2	6148	4	Poland	6280
Kearneysville	do.	Pidor	901	Scottish Pearl	277	2	West Virginia 1-35-274	7039
Lakin 1	do.	do.	901	do.		2	do.	7039
Arthur Dale	do.	do.				2	Union Winter	583
Marlinton	do.	do.				1	Kentucky 2	6148
Lewisburg	do.	do.						
Wisconsin:	Spring	Peatland	5267	Wisconsin Barbless	5105	3	Peatland	5267
Madison	do.	Oderbrucker	4666	do.	5105	2	Trebi	936
Marshfield	do.	Peatland	5267	Newal	6088			
Ashland	do.	Wisconsin Barbless	5105					
Sturgeon Bay	do.	do.						
Wyoming:	do.	Odessa	182	Trebi	936	2	Lico	6279
Laramie	do.	Velvon	6109	do.	936	3	Atlas	4118
Sheridan	do.	do.						

See footnote at end of table.

TABLE 48.—*High-yielding varieties grown at experiment stations in the United States and Canada in the years 1937-41—Continued*

Station	When sown	5-year period 1937-41				Showing promise in less than 5 years		
		Highest yielding variety	C. I. or State No.	Second highest yielding variety	C. I. or State No.	Number of years	Variety	C. I. or State No.
Canada								
Alberta:								
Lacombe	Spring	Newal	6088	Sanalta	6087			
Lethbridge (irrigated)	do.	Trebi	936	Newal	6088			
Lethbridge (dry land) ¹	do.	do.	936	do.	6088	3	Plush	6093
Edmonton ¹	do.	Plush	6093	Sanalta	6087			
Beaverlodge	do.	do.	6093	Byng	6089			
Fort Vermilion	do.	Regal	5030	Olli	6251	4	Newal	6088
British Columbia:								
Agassiz ¹	do.	Trebi	936	do.	6251	3	Plush	6093
Manitoba:								
Brandon	do.	Plush	6093	Newal	6088			
Morden	do.	do.	6093	do.	6088			
Winnipeg	do.	do.	6093	Wisconsin Barbless	5105			
New Brunswick:								
Frederickton	do.	Byng	6089	Olli	6251			
Nova Scotia:								
Nappan	do.	Olli	6251	Byng	6089			
Ontario:								
Ottawa	do.	Byng	6089	Velvet	4252			
Kapuskasing	do.	do.	6089	Nobarb	6335			
Guelph	do.	Nobarb	6335	Byng	6089			
Prince Edward Island:								
Charlottetown ¹	do.	Olli	6251	Charlottetown 80	2732			
Quebec:								
Ste. Anne de la Pocatiere	do.	Byng	6089	O. A. C. 21	1470			
Lennoxville	do.	do.	6089	do.	1470			
Ste. Anne de Bellevue	do.	do.	6089	Velvet	4252	4	Nobarb	6335
Normandin ¹	do.	do.	6089	Nobarb	6335			
Saskatchewan:								
Indian Head	do.	Plush	6093	Hanchen	531	2	Titan	7055
Melfort	do.	Newal	6088	Plush	6093	4	Olli	6251
Saskatoon	do.	Hanchen	531	Rex	6618	4	Newal	6088
Scott	do.	Newal	6088	Prospect	6339			
Swift Current	do.	Prospect	6339	Rex	6618	4	Titan	7055

¹ Yields for 4 years only.

SEASON SOWN, REPLICATIONS, AND SIZE OF PLOTS USED (TABLE 49)

TABLE 49.—Season when sown, number of replications, and type and size of plot used for yield tests at experiment stations in the United States and Canada in the years 1937-41

Station	When sown	Number of replications, 1 type and size of plot											
		1937			1938			1939			1940		
		Rep- lica- tions	Type of plot		Rep- lica- tions	Type of plot		Rep- lica- tions	Type of plot		Rep- lica- tions	Type of plot	
		Num- ber	Field	Nursery	Num- ber	Field	Nursery	Num- ber	Field	Nursery	Num- ber	Field	Nursery
			Acres	Square feet		Acres	Square feet		Acres	Square feet		Acres	Square feet
United States	Alabama:												
	Auburn.....	2	1/60	-----	2	1/60	-----	2	1/60	-----	2	1/60	-----
	Belle Mina.....	2	1/60	-----	2	1/60	-----	2	1/60	-----	2	1/60	-----
	Crossville.....	2	1/60	-----	2	1/60	-----	2	1/60	-----	2	1/60	-----
	Marion Junction.....	2	1/60	-----	2	1/60	-----	2	1/60	-----	2	1/60	-----
	Arizona:												
	Mesa.....	3	1/35	-----	3	1/35	-----	3	1/35	-----	3	1/35	-----
	Sacaton.....	1	1/33	-----	2	1/75	-----	3	1/35	-----	3	1/35	-----
	Arkansas:												
	Fayetteville.....	1	1/47	-----	1	1/47	-----	3	1/47	-----	2	1/47	-----
California: Davis.	Stuttgart.....	1	1/47	-----	1	1/47	-----	1	1/47	-----	2	1/47	-----
	do.....	5	1/50	-----	5	1/50	-----	5	1/50	-----	5	1/60	-----
	Colorado:												
	Akron.....	4	1/45	-----	4	1/45	-----	4	1/45	-----	4	1/45	-----
	Fort Collins.....	10	16	-----	10	16	-----	7	16	-----	7	16	-----
	Hesperus.....	10	16	-----	10	16	-----	10	16	-----	10	16	-----
	Delaware:												
	Milford.....	5	20	-----	5	20	-----	5	20	-----	5	60	-----
	Newark.....	5	20	-----	5	20	-----	5	20	-----	5	60	-----
	Georgia:												
	Athens.....	4	1/60	-----	4	1/60	-----	4	1/60	-----	4	1/60	-----
	Experiment.....	6	66	-----	6	66	-----	6	66	-----	10	66	-----

See footnotes at end of table.

TABLE 49.—Season when sown, number of replications, and type and size of plot used for yield tests at experiment stations in the United States and Canada in the years 1937-41—Continued

Station	When sown	Number of replications, 1 type and size of plot									
		1937		1938		1939		1940		1941	
		Rep- lica- tions	Type of plot	Rep- lica- tions	Type of plot	Rep- lica- tions	Type of plot	Rep- lica- tions	Type of plot	Rep- lica- tions	Type of plot
		Nu- m- ber	Field	Nu- m- ber	Field	Nu- m- ber	Field	Nu- m- ber	Field	Nu- m- ber	Field
			Acres	Square feet		Acres	Square feet		Acres	Square feet	
<i>United States—Continued.</i>											
Idaho:											
Aberdeen	Spring	3	1/40			3	1/40	2	1/40	3	1/40
Moscow	do	3		16		3		3		5	
Sandpoint	do	2	1/40			2	1/40	2	1/40	2	1/40
Illinois:											
Alhambra	do										
Do	Fall	5		16		2	1/10	5	1/35	6	1/25
De Kalb	Spring	2	1/10			2	1/10	5	1/35	2	1/40
Urbana	do	2	1/10			2	1/10	6	1/35	2	1/35
Do	Fall	2	1/35			4		6	1/35	6	1/35
Indiana:											
La Fayette	do	2	1/48			2	1/48	2	1/48	2	1/48
Do	Spring	2	1/48			2	1/48	2	1/48	2	1/48
North Vernon	Fall	1	1/48			1	1/48	1	1/48	1	1/48
Bedford	do	1	1/48			1	1/48	1	1/48	1	1/48
Bicknell	do	1	1/48			1	1/48	1	1/48	1	1/48
Iowa:											
Ames	Spring	2	1/20			2	1/20	2	1/20	2	1/20
Kanawha	do	10		20		10		10		4	
Kansas:											
Manhattan	do	3	1/40			3	1/40	3	1/40	3	1/40
Do	Fall	1	1/40			1	1/40	1	1/40	1	1/40
McLouth	do	3		296		3		3		3	
Columbus	do	2	1/83			2	1/83	2	1/83	2	1/83
Thayer	do										
Wichita	do										
Do	Spring	4		3110		4		3		3	
Do	Fall	3		3110		3		3		3	
Kingman	Spring	4		3110		4		2		2	
Do	Fall	2		3110		2		1		1	

[illegible]

See footnotes at end of table.

TABLE 49.—Season when sown, number of replications, and type and size of plot used for yield tests at experiment stations in the United States and Canada in the years 1937-41—Continued

Station	When sown	Number of replications, 1 type and size of plot											
		1937			1938			1939			1940		
		Rep- lica- tions	Type of plot		Rep- lica- tions	Type of plot		Rep- lica- tions	Type of plot		Rep- lica- tions	Type of plot	
			Field	Nursery		Field	Nursery		Field	Nursery		Field	Nursery
		Num- ber	Acres	Square feet	Num- ber	Acres	Square feet	Num- ber	Acres	Square feet	Num- ber	Acres	Square feet
<i>United States—Continued.</i>													
New Jersey:													
New Brunswick—													
Breeding plots—	Fall—	3		12	3		12	3		12	10		36
Variety plots—	do—	10		36	10		36	10		36	10		36
New Brunswick—	Spring—	10		36	10		36	10		36	10		36
New Mexico:													
State College—	Fall—	7		23			23	6		23	12		23
Do—	Spring—	7		23			23	7		23	5		23
Albuquerque—	do—				12		16	6	1/45		1/48	1/48	
Capulin—	do—	3	1/12		2	1/12		2	1/12		3	1/12	
New York: Ithaca—	do—	5		15	8		15	8		15	8		15
North Carolina: Statesville	Fall—	10		16	3		16	5		16	5		16
North Dakota:													
Dickinson—	Spring—	4	1/58		4	1/58		4	1/58		4	1/58	
Fargo—	do—	3	1/44		3	1/44		3	1/44		3	1/44	
Mandan—	do—	3	1/66		3	1/66		3	1/66		3	1/66	
Oklahoma:													
Stillwater—	Fall—	4	1/96		4	1/96		4	1/96		4	1/96	
Do—	Spring—	4	1/96		4	1/96		4	1/96		4	1/96	
Lawton—	Fall—	3	1/50		3	1/50		3	1/50		3	1/50	
Woodward—	Spring—	3		20	3		20	3		20	3		20
Do—	Fall—	3		20	3		20	3		20	3		20
Oregon:													
Corvallis—	do—	3	1/40		3	1/40		3	1/40		3	1/40	
Do—	Spring—	3	1/40		3	1/40		3	1/40		3	1/40	
Moro—	do—	1	1/55		3	1/20		4	1/20		3	1/20	
Pendleton—	do—	4	1/53		4	1/53		4	1/53		4	1/53	
Union—	do—	3	1/50		3	1/50		3	1/50		3	1/50	
Burns—	do—				2	1/20		2	1/20		2	1/20	

YIELDS OF BARLEY, 1937-41

Pennsylvania:	Fall	5	16	5	16		4		16	5	16	5	16
State College	Spring	5	16				5			5	16	5	16
Do.....													
South Carolina:	Fall	11	20	11	20		10		20	10	20	10	20
Clemson.....													
South Dakota:	Spring	3	1/66	3	1/66		3	1/66	1/66	3	1/66	3	1/66
Brookings.....	do							1/66	1/66	3	1/66	3	1/66
Higmore.....	do			1	1/66		2	1/66	1/50	3	1/50	3	1/50
Eureka.....	do												
Newell.....	do	3	1/50	3	1/50		3	1/50	1/50	3	1/50	3	1/50
Irrigated.....	do												
Dry-farmed.....	do												
Tennessee:													
Columbia.....	Fall						• 5	1/120	1/120	5	1/120	5	1/120
Jackson.....	do						5	1/144	1/144	5	1/144	5	1/144
Knoxville.....	do	3	1/14	6	1/112		6	1/72	1/65	7	1/110	7	1/110
Texas:													
Bushland.....	Fall						8			8	10	8	10
Do.....	Spring						6			6	10	6	10
Delaware.....	Fall	4	1/44	4	1/44		4	1/44	1/44	4	1/44	4	1/44
Chillicothe.....	do						4	1/44	1/44	4	1/44	4	1/44
Lova Park.....	do	4	4/100	4	4/100		4	4/100	4/100	4	4/100	4	4/100
Greenville.....	do						4	4/100	4/100	4	4/100	4	4/100
Temple.....	do						4	20	20	4	20	4	20
Libbock.....	do						3	10	10	4	10	4	10
Do.....	Spring			3			4		10	4	10	4	10
Utah: Logan.....	do	3	1/59	3	1/75		3	1/40		3	1/60	3	1/60
Virginia:													
Arlington.....	Fall	2	1/80	2	1/80		3	1/80	1/80	2	1/80	2	1/80
Staunton.....	do						1	1/50	1/50	1	1/50	1	1/50
Blacksburg.....	do	10	16	10	16		3	16	16	3	16	3	16
Glade Spring.....	do	2	1/40	2	1/40		2	1/40	1/40	2	1/40	2	1/40
Washington:													
Lind.....	Spring	3	1/40	3	1/40		3	1/40		3	76	3	76
Prosser.....	do	3	1/40	2	1/40		3	1/40	1/40	3	1/40	3	1/40
Pullman.....	do	4	1/40	4	1/40		4	1/40	1/40	4	1/40	4	1/40
Do.....	Fall	4	1/40	4	1/40		4	1/40	1/40	4	1/40	4	1/40
West Virginia:													
Arturdale.....	do	4	16	4	16		4	16	16	4	16	4	16
Kearneyville.....	do	4	16	4	16		4	16	16	4	16	4	16
Latin.....	do	5	16	5	16		5	16	16	5	16	5	16

See footnotes at end of table.

TABLE 49.—Season when sown, number of replications, and type and size of plot used for yield tests at experiment stations in the United States and Canada in the years 1937-41—Continued

Station	When sown	Number of replications, ¹ type and size of plot											
		1937			1938			1939			1940		
		Rep-lica-tions	Type of plot		Rep-lica-tions	Type of plot		Rep-lica-tions	Type of plot		Rep-lica-tions	Type of plot	
			Field	Nursery		Field	Nursery		Field	Nursery		Field	Nursery
		Num-ber	Acres	Square feet	Num-ber	Acres	Square feet	Num-ber	Acres	Square feet	Num-ber	Acres	Square feet
<i>United States—Continued.</i>													
West Virginia—Continued.													
Marlinton.....	Fall.....	4	—	16	4	—	16	5	—	16	4	—	16
Morgantown.....	do.....	4	—	16	4	—	16	4	—	16	4	—	16
Lewisburg.....	do.....												
Wisconsin:													
Ashland.....	Spring.....	4	1/80	—	3	1/38	—	3	1/42	—	3	1/34	—
Madison.....	do.....	4	1/80	—	4	1/80	—	4	1/60	—	4	1/60	—
Marshfield.....	do.....	3	1/41	—	3	1/70	—	3	1/33	—	4	1/45	—
Sturgeon Bay.....	do.....	3	1/57-1/68	—	4	1/112	—	3	1/32-1/40	—	4	1/44	—
Wyoming:													
Laramie.....	do.....	1	1/20	—	1	1/40	—	1	1/40	—	4	1/80	—
Sheridan.....	do.....	3	1/55	—	3	1/55	—	3	1/55	—	3	1/55	—
<i>Canada</i>													
Alberta:													
Beaverlodge.....	do.....	4	—	16	4	—	16	4	—	16	4	—	16
Edmonton.....	do.....	4	—	16	4	—	16	4	—	16	4	—	16
Fort Vermilion.....	do.....	4	—	16	4	—	16	4	—	16	4	—	16
Lacombe.....	do.....	4	—	16	4	—	16	4	—	16	4	—	16
Lethbridge.....	do.....	4	—	16	4	—	16	4	—	16	4	—	16
Irrigated.....	do.....	4	—	16	4	—	16	4	—	16	4	—	16
Dry land.....	do.....	—	—	—	—	—	—	—	—	—	—	—	—
British Columbia: Agassiz.....	do.....	—	—	—	4	—	16	4	—	16	4	—	16
Manitoba:													
Brandon.....	do.....	4	—	16	4	—	16	4	—	16	4	—	16
Morden.....	do.....	4	—	16	4	—	16	4	—	16	4	—	16
Winnipeg.....	do.....	4	—	16	4	—	16	4	—	16	4	—	16

New Brunswick: Fredericton	Spring	4	16	4	16	4	16	4	16	4	16
Nova Scotia: Nappan	do.	4	16	4	16	4	16	4	16	4	16
Ontario:											
Guelph	do.	4	16	4	16	4	16	4	16	4	16
Kapuskasing	do.	4	16	4	16	4	16	4	16	4	16
Ottawa	do.	4	16	4	16	4	16	4	16	4	16
Prince Edward Island: Charlottetown	do.	4	16	2	16	4	16	4	16	4	16
Quebec:											
Lennoxville	do.	4	16	4	16	4	16	4	16	4	16
Normandin	do.	4	16	3	16	4	16	4	16	4	16
Ste. Anne de Bellevue	do.	4	44	4	44	4	44	4	44	4	44
Ste. Anne de la Pocatiere	do.	4	16	4	16	4	16	4	16	4	16
Saskatchewan:											
Indian Head	do.	4	16	4	16	4	16	4	16	4	16
Melfort	do.	4	48	4	48	4	48	4	48	4	48
Saskatoon	do.	4	16.5	4	16.5	6	16.5	6	16.5	6	16.5
Scott	do.	4	16	4	16	4	16	4	16	4	16
Swift Current	do.	4	16	4	16	4	16	4	16	4	16

1 At some stations the number of replications was not the same for all varieties, and in these cases the modal number of replications is shown.

3 Ten samples each 1 rod in length and 7 inches in width taken from each field plot.

2 Ten samples each 1 rod in length and 8 inches in width taken from each field plot.

4 Five samples of 20 square feet each taken from each field plot.

DESCRIPTION AND ORIGIN OF VARIETIES AND INDEX TO TABLES IN WHICH MENTIONED (TABLE 50)

TABLE 50.—Description and origin of barley varieties tested, arranged alphabetically, with index to tables in which mentioned

[Explanation of descriptive terms: Rows: 6 = 6-rowed, 2 = 2-rowed, D = Deficiens. Kernel cover, H = Hulled, N = Naked. Lemma appendage: R = Rough-awned, S = Smooth-awned. SS = Semi-smooth-awned, H = Hooded, A = Awless, RS = Mixed, rough, and smooth-awned. Kernel color: B = Blue, W = White, Blk = Black, P = Purple, BW or WB = Mixed, predominating color stated first. Rachilla hairs: L = Long, S = Short, LS or SL = Mixed, predominating type stated first. Growth habit: S = Spring type, W = Winter type, SW = Semi-winter type. Superscripts (in italics) indicate number of times recurrent variety was used as a parent]

Variety	C. I. No.	Station No.	Description						Origin or source	Index to tables in which variety appears
			Rows	Kernel cover	Lemma appendage	Kernel color	Rachilla hairs	Growth habit	Head density	
Ace.....	1853	-----	2	H	R	W	L	S	Mm	30, 48
Admiral.....	6377	-----	6	H	R	B	L	W	3.5	18
Afghan 1.....	4166	-----	6	H	R	W	L	S	3.9	8
Afghanistan.....	4173	-----	6	H	R	W	L	S	2.2	27
Algerian.....	534	-----	6	H	R	W	L	W	3.3	18, 34
Do.....	4106	-----	6	H	R	W	L	W	do	3, 18, 26, 34, 36
Algerian.....	1179	-----	6	H	R	B	S	S	3.7	33
Alpha.....	959	-----	2	H	R	W	L	S	3.5	10, 13, 15, 21, 23, 28, 48
Alpha X Goldfoil.....	-----	-----	2	H	R	W	L	S	3.6	23
Do.....	-----	N. Y. 504a7-5-2	2	H	R	W	L	S	3.8	23
Do.....	-----	N. Y. 504a11-5-1	2	H	R	W	L	S	3.7	23, 48
Do.....	-----	N. Y. 504a11-5-2	2	H	R	W	L	S	3.7	23
Do.....	-----	N. Y. 504a11-5-3	2	H	R	W	L	S	3.7	23
Do.....	-----	N. Y. 504a11-5-4	2	H	R	W	L	S	3.8	23
Do.....	-----	N. Y. 504a11-5-7	2	H	R	W	L	S	3.9	23, 28
Do.....	-----	N. Y. 504a11-5-11	2	H	R	W	L	S	3.8	23
Do.....	-----	N. Y. 504a11-5-12	2	H	R	W	L	S	3.8	23
Do.....	-----	N. Y. 504a11-20-18	2	H	R	W	L	S	3.8	23
Do.....	-----	N. Y. 504a11-20-18	2	H	S	W	L	S	3.7	23
Do.....	-----	N. Y. 504a12-15-3	2	H	S	W	L	S	3.8	23
Do.....	-----	N. Y. 504a12-19-18	2	H	S	W	L	S	3.9	23
Do.....	-----	N. Y. 504a23-9-8	2	H	S	W	L	S	3.7	23
Do.....	-----	N. Y. 504a23-4-4	2	H	S	W	L	S	3.3	23
Do.....	-----	N. Y. 504a23-4-5	2	H	S	W	L	S	3.3	23
Do.....	-----	N. Y. 504a23-14-7	2	H	S	W	L	S	3.8	23
Do.....	-----	N. Y. 504a23-19-4	2	H	S	W	L	S	4.0	23
Do.....	-----	N. Y. 504a26-6-3	2	H	S	W	L	S	3.9	23
Do.....	-----	N. Y. 504a27-2-8	2	H	S	W	L	S	3.9	23
Do.....	-----	N. Y. 504a28-1-2	2	H	S	W	L	S	3.8	23

[illegible]

See footnotes at end of table.

TABLE 50.—Description and origin or source of barley varieties tested, arranged alphabetically, with index to tables in which mentioned—Continued

* Variety	C. I. No.	Station No.	Description					Origin or source	Index to tables in which variety appears
			Rows	Kernel cover	Lemma appendage	Kernel color	Rachilla hairs	Growth habit	Head density
Beecher.....	6566	Moscow 9.....	6	H	SS	W	L	S	Mm. 3.5
Beldi Giant.....	2777	Wash. 3399.....	6	H	RH	B	S	S	3.5
Belford.....	7060	Do.....	6	H	RH	Bk	S	S	3.9
Black.....	6129	Do.....	6	H	RH	Bk	S	S	4.0
Do.....		Do.....	6	H	RH	Bk	L	S	3.8
Black Algerian.....	708	Do.....	6	H	RH	Bk	L	S	4.1
Black Egyptian.....	1246	Do.....	2	H	RR	Bk	L	S	3.4
Black Smyrna.....	191	Do.....	2	H	RR	Bk	L	S	3.6
Blackhall.....	878	Do.....	D	H	RR	Bk	L	S	3.9
Blackhall 1178.....	5679	Do.....	2	H	RR	Bk	L	S	3.5
Blackhall 1180.....	6009	Do.....	2	H	RR	W	L	S	3.8
Blanco.....	5045	Do.....	2	H	RR	W	L	S	3.5
Blue.....	1247	Do.....	6	H	RR	W	L	S	3.5
Bluebaugh.....	4664	Do.....	6	H	RR	W	L	S	3.6
Bonani.....	5249	Do.....	6	H	RR	B	L	S	3.6
Bonani.....		Do.....	6	H	RR	B	L	S	3.6
Brown Winter.....	6491	Do.....	6	H	RR	B	L	S	3.6
Brough 23.....	6477	Do.....	6	H	RR	B	L	S	3.6
Brough 76.....		Do.....	6	H	RR	W	S	W	3.8
Burlington.....		Do.....	6	H	RR	W	S	W	3.8
Byng.....	6089	C. A. 1096.....	6	H	RR	W	L	S	4.4
California Coast.....	6115	Do.....	6	H	RR	BW	L	S	3.9
California Mariout.....	1455	Do.....	6	H	RR	B	L	S	3.5
Calotte.....	1102	Do.....	6	H	RR	W	S	S	3.6
(Canadian Thorpe X Coast) X (Black Six-Row X Coast).....	6985	F. C. 1140.....	2	H	RR	W	S	S	3.5
Cape.....		Do.....	6	H	RR	B	S	S	3.9
Cebada 97A.....	6152	Mont. 1601.....	6	H	RR	B	S	S	3.7
Charlottetown.....	2732	C. A. 817.....	2	H	RR	W	S	S	3.5
Chevalier II.....	200	Do.....	2	H	RR	W	S	S	3.5
Chevron.....	1111	Do.....	2	H	RR	W	S	S	3.9
Clancy.....	1002	Do.....	6	H	RR	W	L	SW	3.2
Clemson Awless.....	7040	Do.....	6	H	RR	W	L	SW	3.7
Clemson Hooded.....	7042	Do.....	6	H	RR	BW	S	SW	3.7
Club Mariout.....	261	Do.....	6	H	RR	W	S	S	2.7
Atlas X Vaughn.....		Do.....							
Uncertain; see 1936 Yearbook, p. 331.....		Do.....							
Beldi Giant X Horsford.....		Do.....							
Introduced from Russia.....		Do.....							
Probably Lion, which see.....		Do.....							
Introduced from Caucasus, Russia.....		Do.....							
Introduced from Egypt.....		Do.....							
Introduced from Asia Minor.....		Do.....							
Introduced from Abyssinia.....		Do.....							
Selection from Blackhull, C. I. 878.....		Do.....							
do.....		Do.....							
Coast (C. I. 4633) X Hero.....		Do.....							
Introduced from North Africa.....		Do.....							
Local variety in Kansas.....		Do.....							
Lion X Manchuria.....		Do.....							
Introduced from Chosen.....		Do.....							
Oklahoma Agricultural Experiment Station.....		Do.....							
Selection from farmer's field in Virginia.....		Do.....							
do.....		Do.....							
Local variety in New Jersey.....		Do.....							
(Michigan 31604 X Com. Six-Rowed 4307 M. C.) X Mensury 32 M. C.....		Do.....							
Introduced from North Africa.....		Do.....							
Introduced from Egypt.....		Do.....							
Introduced from Russia.....		Do.....							
(Canadian Thorpe X Coast) X (Black Six-Row X Coast).....		Do.....							
Oklahoma Agricultural Experiment Station.....		Do.....							
Introduced from Argentina.....		Do.....							
Selection from Old Island Two-Rowed.....		Do.....							
Introduced from Sweden.....		Do.....							
Introduced from Switzerland.....		Do.....							
Introduced from Russia.....		Do.....							
Clemson Agricultural College.....		Do.....							
do.....		Do.....							
Introduced from Egypt.....		Do.....							

[illegible]

See footnotes at end of table.

TABLE 50.—Description and origin or source of barley varieties tested, arranged alphabetically, with index to tables in which mentioned—Continued

Variety	C. I. No.	Station No.	Description						Origin or source	Index to tables in which variety appears
			Rows	Kernel cover	Lemna appendage	Kernel color	Rachilla hairs	Growth habit	Head density	
Composite Cross selection.	6564	N. C. II-11	9	H	R	B	S	W	Mm.	3, 24, 26
Do.	6984	36Ab. 2457	6	H	R	W	S	S	3.1	32
Do.	7007	36Ab. 1794	6	H	R	W	S	S	3.2	32
Do.	7008	36Ab. 6127	6	H	R	W	S	S	3.8	8
Do.	7027	N. C. II-3	6	H	R	W	S	SW	3.2	24, 48
Do.	7036	Oreg. 32, 855	6	H	R	W	S	SW	4.9	27, 48
Do.	7046	Tex. 1-35-416	6	H	R	W	S	S	4.0	32
Do.	7048	Tex. 1-31-45	6	H	R	W	S	S	3.8	32
Do.	7049	Tex. 1-31-83	6	H	R	W	S	S	3.4	32
Do.	7050	Tex. 1-33-332	6	H	R	W	S	S	3.4	32
Do.	7051	Tex. 1-33-71	6	H	R	W	S	S	3.9	32
Do.	7052	Tex. 1-33-326	6	H	R	W	S	S	3.8	32
Do.	7053	Tex. 1-33-413	6	H	R	W	S	S	3.7	32
Do.	7058	Wash. 3400	6	H	RS	B	SL	S	3.6	32
Do.	7059	Wash. 3401	6	H	RS	B	SL	S	3.9	35
Do.		36Ab. 3452	6	H	R	W	S	S	4.3	35
Do.		N. C. II-8	6	H	R	W	S	SW	4.3	8
Do.		N. C. II-24	6	H	R	W	S	SW		24
Do.		N. C. II-30	6	H	R	W	S	SW		24
Do.		N. C. II-52-1	6	H	S	Bk	L	SW	3.9	24
Do.		N. C. II-52-3	6	H	S	W	S	S		24
Do.		N. C. II-52-4	6	H	S	W	S	S		24
Do.		N. C. II-53-4	6	H	S	W	S	S		24
Do.		N. C. II-53-7	6	H	S	W	S	S		24
Do.		N. C. II-53-12	6	H	S	Bk	S	S		24
Do.		N. C. II-120	6	H	S	W	S	S		24
Do.		N. C. II-127	6	H	R	W	S	W		24
Do.		N. C. II-127	6	H	R	W	S	W		24
Do.		Okla. 35h9-5	6	H	R	W	S	W	3.7	24, 48
Do.		Okla. 35h9-9	6	H	R	W	S	S	3.8	26
Do.		Okla. 35h9-23	6	H	R	W	S	W		26
Do.		Okla. 35h10-3	6	H	R	W	S	W		26
Do.		Okla. 35h10-12	6	H	R	W	S	W		26, 48
Do.		Okla. 35h10-17	6	H	R	BW	S	SW	3.8	26
Do.		Okla. 35h10-23	6	H	R	B	S	SW	3.9	26
Do.		Okla. 35h10-30	6	H	R	B	S	SW		26
Do.		Okla. 35h10-30	6	H	R	W	S	SW	3.8	26
Do.		Oreg. 38	6	H	R	W	S	SW	3.7	27, 32, 48
Do.		Oreg. 44	6	H	R	W	S	S		27
Do.		Oreg. 45	6	H	R	W	S	S	3.8	27, 48
Do.		Oreg. 47	6	H	R	W	S	S	3.7	27, 48

Composite Cross selection--										Selection from Composite Cross, C. I. 5530.									
Oreg. 49	6	H	R	W	S	SW	3.6	---	---	do	---	---	---	---	---	---	---	---	27
Oreg. 50	6	H	R	W	S	SW	3.6	---	---	do	---	---	---	---	---	---	---	---	27
Oreg. 54	6	H	R	W	S	SW	3.4	---	---	do	---	---	---	---	---	---	---	---	27
Oreg. 55	6	H	R	W	S	SW	3.7	---	---	do	---	---	---	---	---	---	---	---	27
Oreg. 56	6	H	R	W	L	SW	3.9	---	---	do	---	---	---	---	---	---	---	---	27
Oreg. 60	6	H	R	W	S	SW	3.6	---	---	do	---	---	---	---	---	---	---	---	27
Oreg. 61	6	H	R	W	S	SW	3.7	---	---	do	---	---	---	---	---	---	---	---	27
Oreg. 62	6	H	R	W	S	SW	3.8	---	---	do	---	---	---	---	---	---	---	---	27
Oreg. 63	6	H	R	W	S	SW	3.7	---	---	do	---	---	---	---	---	---	---	---	27
Oreg. 64	6	H	R	B	S	SW	3.7	---	---	do	---	---	---	---	---	---	---	---	27
Oreg. 65	6	H	R	B	S	SW	3.6	---	---	do	---	---	---	---	---	---	---	---	27
Oreg. 66	6	H	R	BW	S	SW	3.7	---	---	do	---	---	---	---	---	---	---	---	27
Oreg. 67	6	H	R	BW	S	SW	3.7	---	---	do	---	---	---	---	---	---	---	---	27
Oreg. 68	6	H	R	W	S	SW	3.6	---	---	do	---	---	---	---	---	---	---	---	27
Oreg. 69	6	H	R	W	S	SW	3.9	---	---	do	---	---	---	---	---	---	---	---	27
Oreg. 32, 539	6	H	R	W	S	SW	3.9	---	---	do	---	---	---	---	---	---	---	---	27
Oreg. 32, 549	6	H	R	W	S	SW	3.3	---	---	do	---	---	---	---	---	---	---	---	32
Conway	6095	H	S	W	L	SW	3.3	---	---	Selection from Club Mariout,	---	---	---	---	---	---	---	---	32
Cusado	895	H	R	B	S	SW	3.4	---	---	Tennessee Winter X Black Arabian.	---	---	---	---	---	---	---	---	22
C-308	6114	H	R	B	S	SW	4.1	---	---	Selection from California Coast.	---	---	---	---	---	---	---	---	48
C-422	6113	H	R	B	S	SW	3.4	---	---	do	---	---	---	---	---	---	---	---	18
Danne 113	6140	H	SS	B	L	SW	3.4	---	---	do	---	---	---	---	---	---	---	---	4
Davidson	6373	H	R	B	L	SW	4.1	---	---	Selection from farmer's field in Oklahoma.	---	---	---	---	---	---	---	---	26
Deputy	6012	H	R	W	S	SW	3.5	---	---	Selection from Composite Cross, C. I. 5461.	---	---	---	---	---	---	---	---	3.24, 26, 48
Dryland	5673	H	R	W	L	SW	4.0	---	---	Introduced from Australia.	---	---	---	---	---	---	---	---	26
										(Odessa X Club Mariout) X (Lion X Manchuria).	---	---	---	---	---	---	---	---	30
Esaw	4690	H	R	W	S	SW	2.2	---	---	Selection from Nakano Wase	---	---	---	---	---	---	---	---	3.7, 9, 26, 34, 36, 48
Ezond	5064	H	R	B	S	SW	4.0	---	---	(Gay Brewing X Lion) X Trebit	---	---	---	---	---	---	---	---	5.8, 19, 20, 26, 27, 32, 48
Do	6265	H	R	B	S	SW	4.2	---	---	Selection from Ezond, C. I. 5064.	---	---	---	---	---	---	---	---	8, 25, 28, 30, 32, 38, 48
Faust	4579	H	R	B	S	SW	3.6	---	---	Selection from Himalaya	---	---	---	---	---	---	---	---	8, 19, 27
Featherston	1120	H	R	B	S	SW	3.6	---	---	Selection from farmer's field in Minnesota.	---	---	---	---	---	---	---	---	25
Finley	5901	H	R	B	S	SW	3.6	---	---	Selection from farmer's field in Texas.	---	---	---	---	---	---	---	---	17, 22, 26, 32, 48
Flynn	1311	H	R	W	S	SW	3.9	---	---	Club Mariout X Lion.	---	---	---	---	---	---	---	---	3.5, 8, 12, 19, 22, 26, 27, 48
Do	7009	H	R	W	S	SW	4.0	---	---	Selection from Flynn, C. I. 1311.	---	---	---	---	---	---	---	---	12
Flynn 1	5911	H	R	W	L	SW	3.7	---	---	do	---	---	---	---	---	---	---	---	3, 12, 20, 21, 26, 27, 32, 48
Flynn 37	5918	H	R	W	L	SW	3.7	---	---	do	---	---	---	---	---	---	---	---	27, 35, 48
Flynn 134	6987	H	R	W	L	SW	3.7	---	---	do	---	---	---	---	---	---	---	---	5
Folk	7062	H	R	B	S	SW	3.1	---	---	Local variety in West Virginia.	---	---	---	---	---	---	---	---	36
Franklin Malt	5915	H	R	BW	S	SW	3.9	---	---	Local variety in Kansas, Oderbrucker-Odesa type.	---	---	---	---	---	---	---	---	12
Gaddis	6003	H	R	WB	SL	SW	3.5	---	---	Selection from Arlington Awless.	---	---	---	---	---	---	---	---	34
Gartons	7016	H	R	WB	SL	SW	4.3	---	---	Introduced from England.	---	---	---	---	---	---	---	---	16, 41, 47
Glaron	4577	H	R	WB	SL	SW	4.3	---	---	Lion X Manchuria.	---	---	---	---	---	---	---	---	9, 10, 11, 15, 16, 20, 25, 26,
Glacier	6976	H	SS	W	L	SW	3.4	---	---	Atlas X Vaughn.	---	---	---	---	---	---	---	---	30, 32, 38
Goldfoil	928	H	SS	W	L	SW	3.8	---	---	Introduced from Bohemia.	---	---	---	---	---	---	---	---	8, 12, 19, 32, 48
Grandin	6968	H	SS	W	L	SW	3.6	---	---	Introduced from Norway.	---	---	---	---	---	---	---	---	23
Greece	221	H	R	B	S	SW	3.6	---	---	Introduced from Greece.	---	---	---	---	---	---	---	---	25
Do	4593	H	R	B	S	SW	3.2	---	---	Selection from Greece, C. I. 221.	---	---	---	---	---	---	---	---	7
											---	---	---	---	---	---	---	---	7, 48

See footnotes at end of table.

Logos	6239	6	H	S	B	L	S	4.3	Selection from Glabron	9, 11, 15, 16, 20, 21, 25, 30, 37
Iredell	6571	6	H	H	W	L	SW	3.7	Selection from farmer's field of Tennessee Beard- less 6 in North Carolina.	24
Italiani										
Jackson	6569	6	H	R	B	S	SW	3.6	Oklahoma Agricultural Experiment Station	26
Jackson 1	7045	6	H	S	W	S	SW	4.0	Tennessee Winter 52 X Lion.	3, 9, 29, 31, 48
Kansas South-central strain	6376	6	H	S	BW	SL	W	3.8	do	31, 48
Kansas Southeast strain	7070	6	H	R	BW	SL	W	3.8	Local farmer's strain in Kansas	12, 26, 32, 48
Kansas Winter	4641	6	H	R	R	W	SW	3.5	do	12, 48
Kentucky 1	6050	6	H	R	R	W	SW	3.5	Kentucky Agricultural Experiment Station	3, 6, 9, 10, 14, 18, 21, 22, 23, 28, 31, 32, 34, 36, 48
Kentucky 2	6148	6	H	R	R	B	W	3.7	Selection from a local barley in Kentucky	12, 18, 22, 28, 32, 36, 48
Do	6993	6	H	R	B	S	W	3.7	do	6
Kentucky 4	7017	6	H	R	B	SL	W	3.8	do	18, 48
Kentucky 5	7018	6	H	R	B	SL	W	3.8	do	3, 42
Kentucky 6	4678	6	H	R	B	SL	W	3.8	do	3, 42
Kentucky 11	6021	6	H	S	S	SL	W	3.9	Smooth-awned Spring X Local Winter	3, 12, 22, 34, 36
Kentucky 20	6994	6	H	S	W	SL	W	3.9	Kentucky Agricultural Experiment Station	6, 48
Kentucky 36	6677	6	H	R	B	W	SW	3.9	Selection from a local barley in Kentucky	5
Lico	6279	6	H	R	W	S	W	3.9	Coast X Lion	5, 8, 12, 20, 22, 25, 26, 32, 35, 38, 48
Lico 351	6989	6	H	S	W	S	S	3.9	Selection from Lico, C. I. 6279	5
Lico 393	6988	6	H	S	W	S	S	3.8	do	5
Lico 448	6990	6	H	S	W	S	S	3.8	do	5
Limerick	1302	6	H	S	W	S	S	4.0	Manchuria X Lion	26, 48
Lion	923	6	H	S	Bk	L	S	4.0	Introduced from Russia	25, 32
(Lion X Coast) X Trebi 1									(Lion X Coast) X Trebi	12, 30
Lion X Manchuria	6001	6	H	S	B	L	S	4.5	Lion X Manchuria	16, 30
Lion X Minia	6980	6	H	S	W	S	S	4.1	Lion X Minia	32
Lion X Oderbrucker f									Lion X Oderbrucker f	37
Do									do	37
(Lion X Oderbrucker f)									Lion X Oderbrucker f	37
(Lion X Oderbrucker f) X July									(Lion X Oderbrucker f) X July	37
Malt									Local farmer's strain in Kansas	72
Mammoth	4683	6	H	R	B	S	W	3.8	Selection from Mammoth, C. I. 220	25
Manchuria	244	6	H	R	BW	LS	S	4.0	Introduced from Russia	12, 18, 26, 48
Do	245	6	H	R	W	S	SW	3.7	Oklahoma Agricultural Experiment Station	15
Do	1275	6	H	R	W	S	SW	3.7	do	10, 16, 20, 32
Do	2330	6	H	R	BW	S	S	3.6	do	6, 9, 11, 13, 19, 20, 25, 30, 37, 48
Do	2947	6	H	R	B	S	S	3.6	do	23
(Manchuria X Leiorthynchum)									(Manchuria X Leiorthynchum) X Alpha	23
X Alpha									do	23, 28
Do									do	23
Do									do	23
Do									do	23
Do									do	23
Do									do	23
Do									do	23, 28

See footnotes at end of table.

TABLE 50.—Description and origin or source of barley varieties tested, arranged alphabetically, with index to tables in which mentioned—Continued

Variety	C. I. No.	Station No.	Description						Origin or source	Index to tables in which variety appears	
			Rows	Kernel cover	Lemna appendage	Kernel color	Rachilla hairs	Growth habit			Head density
(Manchuria X Leiorrhynchum) X (Arlington Awnless X Wild).	---	N. Y. 221A1-31-837.	2	H	S	W	L	S	M ^m . 3.9	(Manchuria X Leiorrhynchum) X (Arlington Awnless X Wild).	23
(Manchuria X Leiorrhynchum) X Russian 02.	---	N. Y. 222A1-29-302.	6	H	S	W	S	S	4.1	(Manchuria X Leiorrhynchum) X Russian 02.	23
Do.	---	N. Y. 225A1-29-410.	6	H	S	W	L	S	4.1	do.	23
Manchurian.	6492	Wis. 122-3	6	H	R	W	L	S	3.5	Introduced from Manchuria.	37
Maretts Awnless.	7043	---	6	H	A	B	L	SW	3.2	From Maretts Farm & Seed Co.	29
Maretts Beardless.	7041	---	6	H	H	W	L	SW	4.0	do.	29, 48
Maretts Pedigree Awnless 58.	7044	---	6	H	A	W	L	W	---	do.	1, 3, 6, 7, 9, 10, 14, 21, 28,
Marnobarb.	6120	---	6	H	S	W	SL	SW	3.4	Velvet X Tennessee Winter.	1, 20, 31, 34, 36, 48
Mars.	7015	Minn. II-31-45	6	H	S	W	L	S	3.8	(Lion X Manchuria ⁴) X Peatland.	16, 48
McClymont.	2126	---	6	H	R	W	S	S	3.7	Nebraska Agricultural Experiment Station.	20
Mechanical Mixture 2	4115	---	---	---	---	---	---	---	---	Mixture of Manchuria, Hanchen, Trebi, Syan-hals, Deficiens, Smooth Awn, Gatami, Lion, White Smyrna, Coast, Meloy.	8, 19, 34, 35
Meloy.	1176	---	6	H	H	B	S	S	3.5	Nepal X Unknown.	8, 19, 35, 38, 48
Meloy 3.	4656	---	6	H	H	B	S	S	4.2	Selection from Meloy, C. I. 1176.	27
Mensury.	4696	Ott. 60, C. A. 730.	6	H	R	B	S	S	3.8	Selection from barley of Manchuria type in Canada.	25, 32, 46
Michigan.	7032	---	6	H	R	R	B	S	3.9	Oklahoma Agricultural Experiment Station.	26
Michigan Winter.	2036	---	6	H	R	B	SL	W	---	Indiana Agricultural Experiment Station.	6, 18, 21, 26, 32, 48
Do.	---	---	6	H	R	B	W	W	---	do.	26
Michigan Two-Rowed.	2782	---	6	H	R	W	W	L	---	Oklahoma Agricultural Experiment Station.	15
3556	---	---	2	H	R	W	W	L	4.0	Introduced from Germany.	26
Minia	7006	36Ab. 4631.	6	H	R	W	W	S	3.2	Introduced from Egypt.	8
Minia X Horn.	7006	---	6	H	R	W	W	S	3.0	Minia X Horn.	8
Minnesota 450.	4646	---	6	H	S	W	S	S	3.7	(Lion X Manchuria ⁴) X Sandrel.	15
Minnesota 462 X Peatland.	7010	Minn. II-31-15	6	H	S	W	L	S	3.9	(Lion X Manchuria ⁴) X Peatland.	16
Do.	7011	Minn. II-31-19	6	H	S	W	L	L	3.9	do.	16
Do.	7012	Minn. II-31-25	6	H	S	W	W	L	3.9	do.	16
Do.	7013	Minn. II-31-37	6	H	S	W	W	L	3.9	do.	16
Do.	7014	Minn. II-31-39	6	H	S	W	W	L	3.8	do.	16
Do.	7014	Minn. II-31-39	6	H	S	W	W	L	3.8	do.	16
Minstardi.	1556	Minn. 439.	6	H	R	R	W	WB	2.9	South African X Manchuria.	11, 16, 30, 32, 48
Missouri Early Beardless.	6051	---	6	H	R	H	W	WB	3.7	Mass selection from a farmer's field in Missouri.	3, 9, 10, 12, 14, 17, 18, 21, 22, 26, 29, 31, 32, 34, 36, 48

Vaughn.....	1367	6	H	SS	W	L	S	3.7	Club Mariout X Lion.....	2, 3, 4, 5, 8, 12, 20, 22, 26, 27, 30, 32, 38, 48
Velvet.....	4252	6	H	S	W	L	S	4.1	(Manchuria X Lion) X Luth.....	5, 9, 10, 11, 13, 15, 16, 19, 20, 21, 25, 26, 28, 30, 32, 35, 37, 38, 42, 43, 44, 45, 46, 48
Velvet 4.....	7020	6	H	S	W	L	S	4.5	Selection from Velvet, C. I. 4252.....	19
Velvon.....	6109	6	H	S	W	S	S	3.6	(Lion X Coast) X Trebi.....	5, 8, 19, 20, 21, 22, 25, 27, 28, 32, 33, 38, 48
Velvon 5.....	7054	6	H	S	W	L	S	3.7	Mass selection from Velvon, C. I. 6109.....	33, 48
Victory.....	5077	2	H	R	W	L	S	3.2	Gold X Hannchen.....	8, 27
Virginia Hooded.....	6007	6	H	R	W	SW	3.7	Local barley in Virginia.....	34	
Walden Winter.....	7034	6	H	R	B	W	W	3.9	Local farmer's strain in Kansas.....	12, 18, 26, 32, 48
Ward selection.....	6991	6	H	R	B	S	W	3.3	Local farmer's strain in Oklahoma.....	26
Warrior.....	7063	6	H	H	W	S	W	3.5	Trebi X Colseas.....	34
West Virginia 1-35-153.....	7039	6	H	H	W	S	W	3.5	Selection from farmer's field in West Virginia.....	28, 36, 48
West Virginia 1-35-274.....	195	2	H	R	W	L	S	3.9	do.....	12, 19, 22, 30, 48
White Smyrna.....	658	2	H	R	W	L	S	3.8	do.....	38
Do.....	910	2	H	SS	W	L	S	3.9	do.....	8, 26
White Smyrna X Svanhals.....	6371	2	H	R	W	L	S	3.9	White Smyrna X Svanhals.....	30
Winter Club.....	488	2	H	R	W	L	SW	1.8	Introduced from Europe.....	8
Do.....	592	6	H	R	W	L	SW	1.8	do.....	25, 27, 28, 32, 33, 35, 48
Wintex.....	6127	6	H	R	W	L	SW	3.8	Selection from farmer's field in Texas.....	3, 17, 26, 32, 48
Wisconsin Barbless.....	5105	6	H	R	W	L	S	4.8	Oderbrucker X Lion.....	5, 9, 10, 11, 12, 13, 15, 16, 19, 20, 21, 22, 25, 28, 27, 28, 30, 32, 35, 37, 38, 40, 41, 46, 47, 48
Wisconsin Barbless selection.....	7000	6	H	S	W	L	S	4.9	Selection from Wisconsin Barbless, C. I. 5105.....	28, 48
Wisconsin Barbless X Newal.....	7069	6	H	R	W	L	S	4.4	Wisconsin Barbless X Newal.....	37
Wisconsin Winter.....	519	6	H	R	B	W	W	3.9	Local variety in Wisconsin.....	7, 26, 48
Do.....	1894	6	H	R	B	W	W	3.7	Washington Agricultural Experiment Station.....	32, 35, 48
Do.....	2159	6	H	R	B	W	W	3.8	Selection from Wisconsin Winter, C. I. 519.....	3, 6, 9, 18, 21, 24, 26, 34, 36
Woods Bearded.....	7024	6	H	R	W	S	S	3.9	New Jersey Agricultural Experiment Station.....	21, 29
Woods Hooded.....	6235	6	H	R	W	SW	4.0	T. W. Wood & Sons, Richmond, Va.....	21, 29, 34	
Woodwin.....	7033	6	H	H	R	W	S	3.9	United States Southern Great Plains Field Sta- tion.....	26, 32
York Hooded.....	7038	6	H	H	WB	B	SW	3.8	Local farmer's barley in Pennsylvania.....	28
ZZ Second.....	6299	6	H	S	B	S	S	5.4	Selection from Composite Cross, C. I. 5461.....	28, 48

1 No data available on description.
2 Grown in bulk and made up of many types.

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