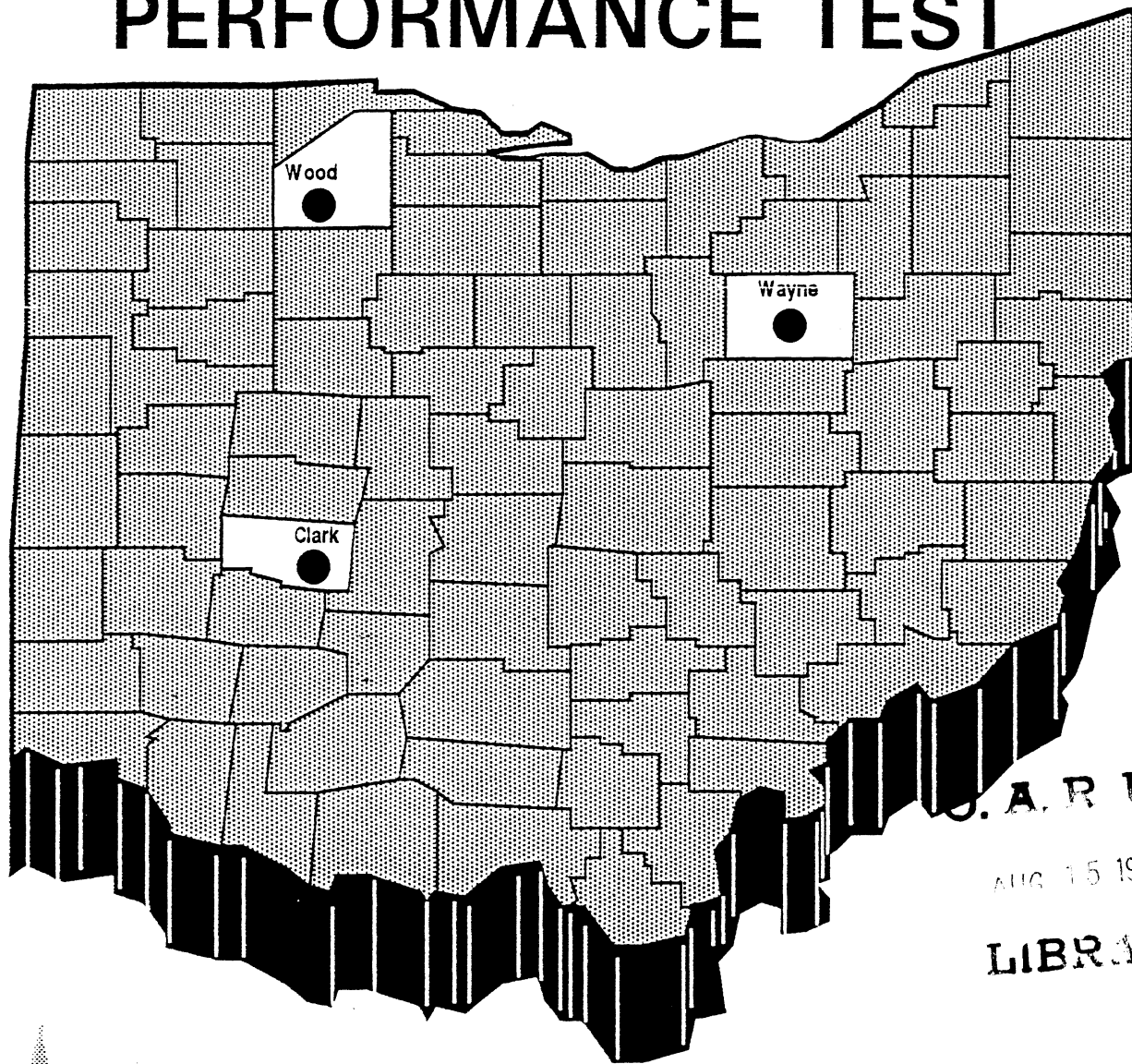


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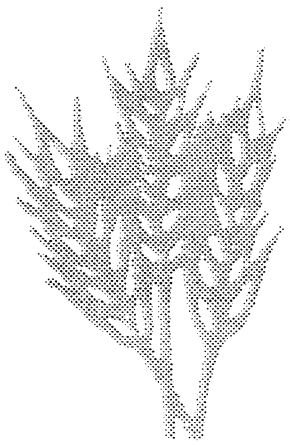
1995 OHIO WHEAT PERFORMANCE TEST



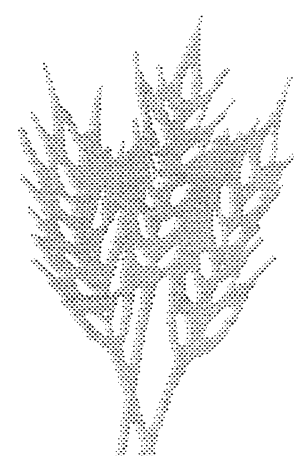
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TABLES

1. PERFORMANCE OF WHEAT CULTIVARS, 1995.
2. MULTIPLE YEAR SUMMARY, 1993, 1994 AND 1995.
3. SEED SOURCES.

DISEASE RATINGS PERFORMED BY
P. E. LIPPS
PROFESSOR, DEPARTMENT OF PLANT PATHOLOGY, OARDC

FLOUR AND SOFTNESS RATINGS PERFORMED BY
USDA, ARS SOFT WHEAT QUALITY LABORATORY
P. FINNEY, DIRECTOR

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OHIO WHEAT PERFORMANCE TEST
1995

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D. M. Jordan

Results of the Ohio Wheat Performance Test are published to provide a source of objective information from various locations in Ohio on the relative performance of wheat cultivars currently available to Ohio farmers. The information should benefit farmers in selecting varieties or blends for farm use. Cultivars differ in yield potential, winter hardiness, maturity, standability, disease and insect resistance, and other agronomic characteristics. Selection should be based on proven performance.

EVALUATION PROCEDURES

Producers of soft red winter wheat seed available to Ohio farmers for planting entered varieties or blends in the testing program. Each cultivar was entered at one site in each of three test regions. Each cultivar was replicated three or four times per site in a randomized complete block design. Plots consisted of 7 rows, 7 inches apart and approximately 50 feet long. Production practices are listed below Table 1. Producers selected a seeding rate for each of their cultivars.

MEASUREMENTS AND RECORDS

YIELD. Plots were harvested with a self propelled plot harvester. Yields were calculated to reflect bushels per acre at 13.5 percent moisture.

LODGING (LDG). The percent of broken or leaning stems in each plot was observed just prior to harvest. Stems leaning 45 degrees or more from a vertical position were considered lodged.

TEST WEIGHT (TW). Test weights were measured at the Northwest Branch using harvest grain moisture.

FLOUR (%). Flour is the percent flour yield of milled whole grain from samples collected at the Northwest Branch site.

SOFTNESS (%). Softness is the percent of fine granularity milled flour from samples collected at the Northwest Branch site. For the 1995 growing season, values higher than approximately 50 indicate kernel textures that are appropriate for soft wheat. Generally, high values are better for milling and baking qualities.

PLANT HEIGHT (HT). The plant height was determined by recording the average distance in inches from ground level to the top of the head.

HEADING DATE (HEAD). The heading date is the calendar day of the year in which 50 percent of the heads were completely emerged above the flag leaf.

POWDERY MILDEW (MLDW). Powdery mildew disease ratings were conducted at the Wooster site when most varieties were in bloom on June 1. Disease ratings were based on whole plot evaluations where "0" rating equals no disease to a trace on any leaf and "10" equals the flag leaf with more than 15 percent affected.

WHEAT YELLOW MOSAIC (WYM). This virus disease, previously known as Wheat Spindle Streak Mosaic (WSSM), was rated at the Wooster site when plants were in flag emergence growth stage on May 11. Ratings are based on a whole plot evaluation using a 0 to 9 scale where "0" equals no visible symptoms and "9" represents severe yellowing of all plants with typical spindle shaped lesions on flag leaves.

HEAD SCAB (SCAB). Head scab ratings represent the percentage of florets on heads killed by the scab fungus at the Wooster site when most varieties were in the soft dough growth stage on June 27.

SEPTORIA TRITICI LEAF BLOTCH (SLB). Leaf blotch ratings represent the percentage of flag leaf area covered with leaf blotch lesions at the Wooster site on June 27.

LEAF RUST (RUST). Leaf rust ratings were based on the percentage of flag leaf area covered by rust pustules at the Western Branch site when most varieties were in the soft dough stage of development on June 21.

GROWING CONDITIONS

The wheat plots were timely planted in the fall of 1994. Fall growth was excellent. Ohio did not experience the extremely cold winter of the previous year. Tillering and early spring growth were excellent. Much of Ohio experienced excessive rainfall from late April to early June. Many diseases, especially head scab, were present at the Wooster and Western Branch sites. Due to the severity of the diseases, performance data at the Western Branch site will not be reported.

RESULTS AND DISCUSSION

To many farmers, the most important factor in seed wheat selection is comparing the grain yield of available varieties and blends. When comparing two entries, a yield difference greater than the Least Significant Difference (LSD) at $P=.05$ indicates that the odds are 19:1 that this is a real difference between the entries which is not due to chance variation (such as soil variation, etc.). Variable performance of a cultivar in different regions of Ohio is indicative of its reaction to different environments. Entries in Tables 1 and 2 are arranged in order of decreasing summary yield. The presentation of data does not imply endorsement of any variety or blend by The Ohio State University.

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Supervisor, Ohio Wheat Performance Test, Department of Agronomy, The Ohio State University, Ohio Agriculture Research and Development Center, Wooster, Ohio 44691.

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TABLE 1. PERFORMANCE OF WHEAT CULTIVARS, 1995.

BRAND	CULTIVAR	NORTHWEST		WOOSTER		SUMMARY		CHARACTERISTICS				DISEASES						
		SEED RATE LB/A	YIELD BU/A	LDG BU/A	YIELD BU/A	LDG BU/A	YIELD BU/A	LDG BU/A	TW LB/BU	FLOUR %	SOFT-NESS	HD IN	HEAD DATE	PM -RATE-	WYM	SCAB %	SLB	RUST
PIONEER	2545	110	83.2	0	65.9	0	74.5	0	58.2	68.9	60.4	38	149	0	1	37	18	30
CERTIFIED	HOPEWELL	120	81.8	0	66.4	0	74.1	0	59.5	69.9	62.2	38	148	2	0	43	23	28
CERTIFIED	FREEDOM	125	80.5	0	66.7	12	73.6	6	57.7	70.6	58.9	40	150	5	3	18	23	0
PIONEER	2571	110	86.9	0	60.1	2	73.5	1	58.5	70.8	62.2	38	146	1	9	25	8	0
GREENLAND	GL9400	125	82.3	0	63.0	13	72.6	7	59.0	71.3	62.4	37	146	2	4	43	15	0
COUNTRYMARK CO-OP	558	125	78.0	0	67.0	7	72.5	3	61.1	70.9	54.0	40	149	1	6	23	30	9
PIONEER	2548	100	83.9	0	61.0	0	72.4	0	58.5	70.3	63.1	36	148	1	8	25	23	4
CERTIFIED	MADISON	125	78.6	0	66.2	0	72.4	0	58.4	72.9	57.1	39	148	0	0	35	14	6
PIONEER	2552	150	79.1	0	65.6	3	72.3	2	59.4	72.6	59.4	38	148	0	0	23	3	18
CERTIFIED	GLORY	125	79.4	0	64.3	23	71.8	12	59.2	69.6	57.1	37	149	1	1	31	6	23
AGRA	GR962	120	78.1	0	65.2	7	71.6	3	58.4	69.5	61.3	37	146	1	0	70	35	37
CERTIFIED	CLARK	125	76.1	0	67.1	0	71.6	0	58.9	70.3	59.7	38	145	5	2	*	27	35
STEYER	KILEN	140	83.0	0	60.1	0	71.6	0	56.2	71.2	66.7	41	150	0	1	42	10	2
BECK	105	105	81.7	0	61.3	0	71.5	0	57.8	70.7	55.9	40	147	1	4	35	23	20
CERTIFIED	WAKEFIELD	125	74.6	0	68.2	5	71.4	3	59.0	72.1	60.6	39	149	3	4	35	13	16
WELLMAN	W9420	150	78.4	0	64.1	0	71.2	0	58.1	70.5	61.0	40	147	4	2	36	10	33
COUNTRYMARK CO-OP	544	150	81.5	0	60.9	0	71.2	0	58.9	69.3	59.4	39	149	1	5	35	10	3
RUPP	RS927	140	78.9	0	62.3	5	70.6	3	60.4	72.7	54.9	40	148	5	6	28	30	20
AGRIPRO	SAWYER	120	82.2	0	58.8	0	70.5	0	56.6	70.6	59.2	37	146	4	7	35	21	13
PIONEER	2510	120	80.3	0	60.6	3	70.5	2	60.2	73.9	59.0	38	151	6	1	20	3	2
COUNTRYMARK CO-OP	568	125	77.1	0	63.6	2	70.4	1	60.2	72.0	57.7	41	150	2	3	35	14	25
CERTIFIED	CARDINAL	125	77.4	0	63.1	18	70.2	9	59.1	72.5	58.7	41	151	6	4	17	23	18
WELLMAN	W9540	150	79.0	0	61.3	2	70.2	1	58.4	70.9	57.6	41	150	2	1	32	25	18
THOMPSON	TS5020	150	80.5	0	59.4	8	70.0	4	58.5	71.7	55.2	38	147	1	6	33	22	12
BECK	109	105	76.3	0	63.6	0	70.0	0	61.6	73.5	52.2	40	148	1	6	28	17	18
THOMPSON	TS4020	150	79.0	0	60.7	0	69.8	0	61.3	73.4	52.3	39	148	1	5	32	23	3
SHUR GROW	SG1540	120	80.6	0	59.0	0	69.8	0	58.4	70.9	55.2	40	149	1	1	38	27	7
STINE	501	120	82.2	0	57.1	2	69.6	1	57.3	71.3	66.3	40	150	0	2	40	20	2
TERRA	SR204	90	76.0	0	63.3	5	69.6	3	60.8	73.1	52.9	39	148	1	5	32	28	5
VORIS	V8040	150	80.4	0	58.5	0	69.5	0	58.3	71.3	55.4	39	148	7	1	43	30	*
CERTIFIED	DYNASTY	125	79.0	0	59.8	7	69.4	3	60.2	71.1	61.6	41	150	3	1	28	15	33
RUPP	RS987	140	81.4	0	57.2	2	69.3	1	57.1	71.2	66.2	40	150	2	2	38	17	7
AGRA	GR942	130	78.3	0	60.2	2	69.2	1	57.3	69.8	63.5	34	149	1	9	47	37	23
SHUR GROW	SG1550	120	80.6	0	57.8	18	69.2	9	61.4	72.7	54.5	39	148	6	6	25	18	9
NOSCO	CLASSIC RW151	120	79.5	0	58.8	43	69.1	22	60.5	73.2	52.3	39	148	4	6	35	27	4
WELLMAN	W9350	150	76.6	0	61.6	0	69.1	0	60.5	72.6	57.3	38	148	3	5	25	20	2
HYTEST	SUCCESSION	120	78.6	0	59.6	0	69.1	0	61.5	73.3	51.9	39	148	1	5	32	17	5
AGRIPRO	ELKHART	120	80.4	0	57.8	33	69.1	17	59.4	72.3	56.6	40	147	2	6	40	9	6
AGRIPRO	PONTIAC	120	78.0	0	59.5	2	68.8	1	59.9	69.8	58.5	37	145	6	6	30	17	9
STEYER	PODACH	140	76.8	0	60.3	40	68.5	20	61.0	73.4	53.1	39	148	3	6	32	17	7
STEYER	HOPPES	140	78.5	0	58.5	0	68.5	0	57.5	71.2	56.5	39	149	6	2	37	28	12
AGRA	GR933	135	77.8	0	59.2	2	68.5	1	57.7	71.1	55.7	40	148	6	2	37	28	7
TERRA	SR205	90	78.4	0	58.1	8	68.2	4	58.7	71.1	55.1	39	148	6	1	35	30	11
AGRIPRO	CLEMENS	120	79.9	0	55.1	2	67.5	1	59.9	72.1	62.9	41	150	7	8	23	10	0
CERTIFIED	JACKSON	125	72.1	0	61.9	0	67.0	0	59.3	70.4	61.4	37	149	0	6	33	11	12
CERTIFIED	EXCEL	125	75.3	0	52.3	3	63.8	2	57.8	71.0	63.6	40	150	5	2	45	16	15
STEYER	MCLANE	140	75.5	0	50.1	0	62.8	0	58.8	69.4	58.5	36	150	1	7	28	8	7
AGRA	GR876	125	70.1	0	54.8	2	62.4	1	59.6	72.0	57.2	39	152	5	4	6	15	1
STEYER	ROWLAND	140	73.2	0	50.0	45	61.6	23	60.7	71.7	55.1	41	148	1	1	35	22	0
CERTIFIED	GRANT	125	71.9	0	51.1	40	61.5	20	59.8	71.9	63.4	35	150	7	3	62	23	3
CERTIFIED	CALDWELL	125	75.5	0	47.1	35	61.3	18	59.7	72.9	64.6	38	148	6	6	50	27	12
HIGH AVERAGE			86.9	0	68.2	45	74.5	23	61.6	73.9	66.7	41	152	7	9	70	37	37
LOW			78.7	0	60.3	8	69.5	4	59.1	71.5	58.5	39	148	3	4	33	19	11
LSD P=.05			70.1	0	47.1	0	61.3	0	56.2	68.9	51.9	34	145	0	0	6	3	0
			4.0	0	4.5	13			1.2			2	1	2	2	12	12	7

COUNTY WOOD WAYNE
 SOIL TYPE HOYTVILLE REVENNA * - Measurement not taken.
 PREVIOUS CROP SOYBEANS OATS
 PLANTING - HARVEST DATES 10/4 - 7/13 9/30 - 7/18
 FERTILIZER (N,P,K) 90-80-120 90-65-65
 HERBICIDE HARMONY HARMONY
 EXTRA,2,4-D EXTRA

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TABLE 2. MULTIPLE YEAR SUMMARY 1993,1994, AND 1995.

BRAND	CULTIVAR	NORTHWEST		WOOSTER		SUMMARY		CHARACTERISTICS		DISEASES			
		SEED RATE LB/A	YIELD BU/A	LDG	YIELD BU/A	LDG	YIELD BU/A	LDG	TW LB/BU	FLOUR %	HD IN	HEAD PM DATE	RATE

TWO YEAR AVERAGES (1994-1995)													
PIONEER	2545	113	77.7	0	67.6	0	72.7	0	56.9	68.7	37	148	1
PIONEER	2552	133	74.5	0	69.5	2	72.0	1	58.8	72.3	36	149	0
CERTIFIED	FREEDOM	125	75.3	0	68.2	6	71.8	3	57.0	70.3	38	150	4
TERRA	SR204	105	74.5	0	67.5	3	71.0	1	59.9	73.7	38	148	3
CERTIFIED	CLARK	125	74.6	0	66.4	3	70.5	1	58.2	69.6	38	145	5
NOSCO	CLASSIC RW151	135	76.0	0	64.7	22	70.3	11	59.8	73.4	38	148	4
WELLMAN	W9420	150	74.6	0	65.6	3	70.1	2	56.8	70.2	38	146	3
PIONEER	2548	108	77.0	0	63.1	1	70.0	0	57.2	69.7	35	148	1
PIONEER	2510	118	77.5	0	62.4	2	70.0	1	58.8	73.1	37	151	4
CERTIFIED	CARDINAL	125	75.5	0	63.3	14	69.4	7	58.0	72.6	39	150	6
SHUR GROW	SG1550	120	75.9	0	62.3	9	69.1	5	59.9	72.6	38	147	5
CERTIFIED	DYNASTY	125	76.1	0	61.5	4	68.8	2	58.8	71.7	39	149	5
RUPP	RS927	145	72.8	0	64.4	4	68.6	2	59.3	72.3	38	147	5
STEYER	PODACH	145	72.9	0	63.9	21	68.4	10	59.7	73.6	38	148	4
WELLMAN	W9350	150	73.3	0	63.1	1	68.2	0	56.9	72.6	37	148	4
AGRIPRO	PONTIAC	120	73.3	0	62.2	2	67.8	1	58.7	68.9	36	145	6
AGRIPRO	SAWYER	120	74.9	0	59.8	6	67.3	3	56.4	70.7	36	146	4
VORIS	V8040	150	72.3	0	61.8	1	67.0	0	57.8	70.9	37	147	7
PIONEER	2571	113	71.7	0	61.3	2	66.5	1	58.1	69.8	36	145	3
STEYER	HOPPES	145	70.8	0	61.6	1	66.2	0	56.8	70.5	37	148	6
AGRA	GR876	143	71.2	0	61.2	1	66.2	0	58.3	71.2	37	152	4
CERTIFIED	GLORY	123	65.1	0	66.9	13	66.0	7	58.7	69.1	37	149	1
CERTIFIED	GRANT	123	73.8	0	57.7	22	65.7	11	57.5	71.6	35	149	6
CERTIFIED	EXCEL	125	74.5	0	56.7	2	65.6	1	56.3	71.3	38	149	6
CERTIFIED	WAKEFIELD	125	61.6	0	69.6	6	65.6	3	58.7	71.4	37	149	2
CERTIFIED	JACKSON	123	66.3	0	64.5	8	65.4	4	58.2	70.0	37	148	0
TERRA	SR205	105	69.9	0	60.5	4	65.2	2	57.9	70.5	38	148	6
AGRA	GR942	125	72.4	0	57.6	1	65.0	0	55.7	70.2	34	149	2
AGRA	GR933	135	69.4	0	59.9	2	64.7	1	57.3	70.5	38	148	6
CERTIFIED	MADISON	125	62.6	0	64.5	3	63.5	1	57.9	71.4	38	148	0
CERTIFIED	CALDWELL	125	72.1	0	54.0	24	63.1	12	57.7	72.2	36	147	6
AVERAGE		127	72.8	0	63.2	6	68.0	3	58.0	71.1	37	148	4

THREE YEAR AVERAGES (1993-1995)													
PIONEER	2545	113	68.7	0	70.8	0	69.8	0	56.8		36	148	2
PIONEER	2548	110	67.2	0	68.2	1	67.7	0	57.2		35	148	2
CERTIFIED	FREEDOM	123	64.2	0	71.2	4	67.7	2	54.9		38	149	4
NOSCO	CLASSIC RW151	120	67.3	0	67.0	14	67.1	7	59.8		38	148	3
TERRA	SR204	100	65.5	0	67.9	2	66.7	1	59.6		39	147	3
CERTIFIED	CLARK	123	65.6	0	66.9	2	66.3	1	57.6		38	144	5
PIONEER	2510	117	68.1	0	63.7	1	65.9	1	57.4		36	150	5
RUPP	RS927	137	64.3	0	67.6	3	65.9	1	58.8		39	148	6
AGRIPRO	SAWYER	120	66.4	0	65.3	4	65.9	2	56.7		37	145	5
CERTIFIED	CARDINAL	123	64.9	0	66.6	9	65.8	5	57.3		40	149	7
SHUR GROW	SG1550	118	65.6	0	65.7	6	65.6	3	59.3		38	147	5
CERTIFIED	DYNASTY	123	66.0	0	65.1	3	65.6	1	58.8		40	149	5
PIONEER	2571	113	65.4	0	65.4	1	65.4	1	57.8		36	145	4
WELLMAN	W9350	150	63.6	0	66.8	1	65.2	0	56.1		37	148	4
VORIS	V8040	150	65.7	0	64.6	1	65.1	0	57.9		38	148	7
AGRIPRO	PONTIAC	120	64.1	0	65.7	1	64.9	1	58.7		36	145	6
STEYER	PODACH	140	63.9	0	65.5	14	64.7	7	59.1		38	148	3
STEYER	HOPPES	137	63.8	0	65.2	1	64.5	0	57.2		38	148	6
CERTIFIED	WAKEFIELD	123	57.2	0	71.8	4	64.5	2	57.5		38	149	1
TERRA	SR205	100	65.3	0	63.6	3	64.5	1	58.0		38	148	6
AGRA	GR876	133	61.7	0	62.1	1	61.9	0	56.8		37	152	4
CERTIFIED	CALDWELL	123	64.2	0	58.5	16	61.3	8	57.5		37	146	7
CERTIFIED	EXCEL	123	63.2	0	58.4	1	60.8	1	55.2		38	149	6
AVERAGE		124	64.9	0	65.8	4	65.3	2	57.7		38	148	5

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TABLE 3. SEED SOURCE.

BRAND	PRODUCER	CULTIVAR	TYPE
AGRA	AGRA, INC. P.O. BOX 6 CROTON, OH 43013	GR876	VARIETY
		GR933	VARIETY
		GR942	VARIETY
AGRIPRO	AGRIPRO BIOSCIENCE, INC. EAST 8TH ST, P.O. BOX 411 BROOKSTON, IN 47923	GR962	VARIETY
		CLEMENS	VARIETY
		ELKHART	VARIETY
BECK	BECK'S SUPERIOR HYBRIDS 6767 EAST 276TH STREET ATLANTA, IN 46031	PONTIAC	VARIETY
		SAWYER	VARIETY
		105	BLEND
CERTIFIED	OHIO SEED IMPROVEMENT ASSOC. 6150 AVERY RD., BOX 477 DUBLIN, OH 43017	109	VARIETY
		CALDWELL	VARIETY
		CARDINAL	VARIETY
		CLARK	VARIETY
		DYNASTY	VARIETY
		EXCEL	VARIETY
		FREEDOM	VARIETY
		GLORY	VARIETY
		GRANT	VARIETY
		HOPEWELL	VARIETY
COUNTRYMARK CO-OP	COUNTRYMARK CO-OP 950 N. MERIDIAN ST. INDIANAPOLIS, IN 46204	JACKSON	VARIETY
		MADISON	VARIETY
		WAKEFIELD	VARIETY
GREENLAND	MADISON SEED CO. 13455 ST. RT. 38SE LONDON, OH 43140	544	VARIETY
		558	VARIETY
		568	VARIETY
HYTEST	BEACHLEY HARDY SEEDS 457 RAILROAD AVE. SHIREMANSTOWN, PA 17019	GL9400	VARIETY
		SUCCESSION	VARIETY
NOSCO	THE ANDERSONS P.O. BOX 119 MAUMEE, OH 43537	CLASSIC RW151	VARIETY
PIONEER	PIONEER HY-BRED INT'L., INC. P.O. BOX 756 BRYAN, OH 43506	2510	VARIETY
		2545	VARIETY
		2548	VARIETY
		2552	VARIETY
		2571	VARIETY
RUPP	RUPP SEEDS, INC. 17919 CO. RD. B WAUSEON, OH 43567	RS917	VARIETY
		RS987	VARIETY
SHUR GROW	CHAMPAIGN LANDMARK, INC. 140 SOUTH MAIN ST. MECHANICSBURG, OH 43044	SG1540	VARIETY
		SG1550	VARIETY
STEYER	STEYER SEEDS 6154 N. CO. RD. 33 TIFFIN, OH 44883	HOPPES	VARIETY
		KILEN	VARIETY
		MCLANE	VARIETY
		PODACH	VARIETY
STINE	STINE SEED CO. P.O. BOX 231 SHERIDAN, IN 46069	ROWLAND	VARIETY
		501	VARIETY
TERRA	TERRA INTERNATIONAL, INC. 600 4th ST., P.O. BOX 6000 SIOUX CITY, IA 51101	SR204	VARIETY
		SR205	VARIETY
THOMPSON	THOMPSON SEED FARM, INC. 4929 DEFIANCE TR. DELPHOS, OH 45833	TS4020	VARIETY
		TS5020	VARIETY
VORIS	VORIS SEEDS, INC. P.O. BOX 457 WINDFALL, IN 46076	V8040	VARIETY
WELLMAN	WELLMAN SEEDS, INC. 23778 DELPHOS JENNIGNS RD. DELPHOS, OH 45833	W9350	VARIETY
		W9420	VARIETY
		W9440	VARIETY

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