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FRESH MARKET CABBAGE CULTIVAR TRIAL - 1996

Richard L. Hassell and Cindy Wallace



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Fresh Market Cabbage Cultivar Trial, 1996

Richard L. Hassell and Cindy Wallace
Horticulture and Crop Science, OARDC/OSU

The cabbage cultivar trials were conducted at the OARDC Vegetable Crops Branch near Fremont, Ohio, and Boose Farm, Inc. near Norwalk, Ohio. Thirty cultivars or promising breeding lines were evaluated in a replicated trial at the Vegetable Branch and 10 cultivars on the grower farm.

Cultural Information

Transplants were grown in a poly-greenhouse with temperatures set at 70°F days and 60°F nights for 6 weeks. Plants were raised in Blackmore 228 deep trays using Premier pro-mix as a growing media. Once the first true leaf appeared, plants were fertilized on a continuous basis at the rate of 50 ppm of a Peters 20-10-20 solution using an Anderson injector system.

The field planting soil was classed as a sand soil in both locations. At the Fremont location, a broadcast application of 600 lb/A of 15-15-15 was applied and incorporated prior to planting. Transplanting was done using a tractor-driven finger transplanter placing the plants 10 inches apart within rows, 36 inches between rows. All other cultural practices during the growing season were according to standard recommendations. Weed control was excellent and no serious insect or disease problems developed during the season. Thrip pressure increased towards the end of the season, but was still controllable.

Growing conditions in 1996 were considered excellent for cabbage production, warm days and nights with below humidity. However, on the grower trial rain was scarce which caused slow growth and small head size.

Weather: Environmental factors at each of the research facilities and grower operations

Willard	Rain long term		Air Temperature(avg)			Long term (avg)			Humidity (avg)			Boose	Rain long term (in)
	in	avg	min.	max.	avg	min	max	avg	min	max	avg		
April	3.34	3.78	40.6	62.9	51.2	37.5	60.5	0	62.2	95.1	79.5	April	7
May	3.59	3.81	48	65.9	57.1	47	70.9	0	64.5	95.7	77.6	May	4.65
June	4.27	3.86	61.6	79.1	69.7	56.1	80	0	63.9	95	80.9	June	6.5
July	3.48	3.84	57.7	79.9	69.3	58.8	83.2	0	56.3	95.2	76.1	July	3.95
August	0.07	3.59	58	81.6	69.7	81.7	81.7	0	60	98.5	81.2	August	0.55
Sept	4.82	3.2	41.2	73.6	57.4	51.9	75.8	0	69.8	99.5	87.7	Sept	9.7
Oct	0.38	0	39.8	57.2	61.9	0	0	0	70.3	99.3	86.5	Oct	3.45

Table 1. Cabbage cultivar evaluation trials, 1996.

Cultivar	Source	Days to Harvest from Transplant	Total wt. /head (lbs)	Wt/crate/ 16 heads (lbs)	Wt/crate/ 18 heads (lbs)	Head ht. (in)	Head dia. (in)	Core length (in)	Comments
Blue Bayou	Asgrow	86	3.27	52.36	58.91	5.75	7.15	3.25	Light blue, surface thrips, flat, few wrappers, solid, light green.
XPH 5910 RED	Asgrow	93	2.26	36.15	40.67	6.92	6.25	3.25	Round to pointed, red solid interior, excellent wrapper leaves
XPH 5911 RED*	Asgrow	93	3.71	59.28	66.69	8.08	7.58	2.08	Round to pointed, green, excellent wrapper leaves, small core, loose, but solid white, thrip injury
XPH 15509*	Asgrow	93	3.21	51.36	57.78	7.83	7.67	3.25	Round to oblong, blue green, excellent wrapper leaves, thrip injury in outer leaves, solid interior, white with light green.
XPH 15513	Asgrow	93	3.43	54.91	61.77	6.83	7.67	2.75	Light blue green, round to flat, excellent wrapper leaves, thrip injury, solid, white
Blue Gem F1	Harris-Moran	86	3.17	50.69	57.03	6.50	7.50	4.33	Flat blue green, few wrapper leaves, some surface thrips, solid interior.
Bravo	Harris-Moran	86	3.27	52.29	58.83	6.67	8.17	3.25	Firm, internal browning, few wrapper leaves, blue green, some surface thrips.
Cardinal F	Harris-Moran	86	2.92	46.68	52.52	7.92	7.42	4.50	Red, round to flat, excellent size, long core, excellent wrapper leaves.
Blue Thunder*	Rispens Seeds	93	3.42	54.73	61.57	7.67	5.92	4.17	Flat, no thrip injury, light blue, excellent wrapper leaves, solid white interior.
Ramada	Bejo	93	3.26	52.08	58.59	6.58	7.33	2.92	Dark green, flat, no thrip injury, solid excellent wrapper leaves, pure white.
Alladin F1	Bejo	86	3.42	54.51	61.32	7.17	7.50	2.58	Light green, round to flat, excellent wrapper leaves, some heads splitting, pure white, solid.
Bronco F1	Bejo	93	3.38	54.03	60.78	7.42	7.25	2.75	Blue green, round, excellent wrapper leaves, no thrip injury, solid white, green on edges.

Table 1. Cabbage cultivar evaluation trials, 1996.

Cultivar	Source	Days to Harvest from Transplant	Total wt. /head (lbs)	Wt/crate/ 16 heads (lbs)	Wt/crate/ 18 heads (lbs)	Head ht. (in)	Head dia. (in)	Core length (in)	Comments
CB2	Rogers	86	2.71	43.41	48.84	7.42	6.83	3.17	Blue green, very nice, lots of wrappers, round to pointed, light thrip injury, surface solid, light green interior.
CB7	Rogers	86	3.33	53.25	59.91	7.42	7.42	3.08	Round, blue green, medium wrappers, some surface thrips, solid white.
Red Jewel	Siegers	86	2.43	38.88	43.74	6.33	7.17	3.08	Red, round to flat, excellent wrapper leaves.
Pruktor	Siegers	86	4.16	66.53	74.85	8.58	7.92	3.33	Blue green, round to pointed, excellent wrapper leaves, very large head, surface thrips, white, loose edges.
Atlantis*	Siegers	86	3.53	56.41	63.47	7.17	7.33	2.50	Light blue green, nice excellent wrapper leaves, some surface thrips, round to flat, solid white.
FMX 551	Ferry-Morse	86	3.60	57.59	64.79	8.00	7.17	2.83	Round, blue green, excellent wrapper leaves, surface thrips, solid white to light green.
FMX 552	Ferry-Morse	86	3.13	50.05	56.31	8.00	7.58	3.33	Dark green, round to pointed, few wrapper leaves, short core, surface thrips, some heads, bad solid, green to yellow interior
Blue Pak*	Ferry-Morse	86	2.58	41.32	46.49	6.67	7.25	2.75	Blue green, no surface thrips, round to pointed, excellent wrapper leaves, loose center, white, short core.
Fortress	Ferry-Morse	86	2.98	47.72	53.69	7.08	8.50	4.08	Light blue green, flat, no wrapper leaves, surface thrips, white to light green tint, loose edges.

Seeded: May 1, 1996

Transplanted: June 19, 1996

Harvested: Sept. 13, 1996 (Fremont)

Spacing: 3 feet between rows, 10 inches between plants; plots: one single row 30 feet long; 4 reps per row

*Considered best in trial.

Table 1a. Cabbage Cultivar Evaluation Grower Trials, 1996

Cultivar	Source	Days to Harvest from Transplant	Total wt. /head (lbs)	Wt/crate/ 16 heads (lbs)	Wt/crate/ 18 heads (lbs)	Head ht. (in)	Head dia. (in)	Core length (in)
Bravo	Harris-Moran	105	1.83	29.20	32.85	7.00	5.00	2.5
Blue Thunder*	Rispens Seeds	105	2.73	43.60	49.05	7.33	7.00	3.33
Ramada	Bejo	105	1.96	31.28	35.19	6.17	6.08	2.50
Bronco F1	Bejo	105	1.81	28.96	32.58	6.33	6.17	3.00
Gideon F1	Bejo	105	1.56	24.88	27.99	5.33	5.50	2.50
Fresco F1	Bejo	105	2.18	34.88	39.24	6.67	6.17	2.50
Green Cup*	Liberty	105	2.78	44.48	50.04	6.50	7.00	2.50
Cheers*	Liberty	105	2.43	38.80	43.65	7.25	6.17	3.17
Blue Pak*	Ferry-Morse	105	2.40	38.32	43.11	6.33	6.17	2.33
Pruktor	Siegers	105	2.09	33.44	37.62	6.58	6.25	3.00

Seeded: May 1, 1996

Transplanted: June 28, 1996

Spacing: 3 feet between rows; 10 inches between plants; plots: 2 rows 300 feet long

*Considered best in trial.

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