

2024 Jack O'Lantern Pumpkin Evaluations

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Trial Method

Twenty medium to large jack o'lantern varieties were evaluated at the University of Maine's Highmoor Farm in Monmouth, ME in 2024. The field evaluation was laid out in a replicated complete block design with four blocks (replications). Seedlings were started in a greenhouse and grown for three weeks (3-4 true leaf stage) prior to transplanting. Plants were spaced 45 inches apart with a water wheel transplanter into raised beds covered in black plastic mulch. Each plot contained ten plants. Qualitative attributes were measured on ten individual fruit per plot.

Data are shown in Table 1 below. Entries highlighted yellow denote the best performing varieties for that trait.

Fruit Weight

Zeus, Carrie, Carbonado Gold, and Garnet Gold were the smallest fruited varieties in this trial, weighing less than 15 lb on average with ranges from 5 to 26 lb.

Champion, Big Doris, Spartacus, Cronus, Hulk, and Griffin had the heaviest fruit, weighing greater than 20 lb on average and ranging from 11 to 34 lb.

Fruit Shape

Fruit shape varied between varieties, ranging from tall and upright, to round, to more squat and flattened. Bayhorse Gold, Jason, Justify, Igor, Champion, Big Doris, Hulk, and Griffin were most upright in shape; Zeus, Carrie, Carbonado Gold, Garnet Gold, Orange Sunrise, Apollo, Kratos, The Boss, Expert and Spartacus were round; Cronus and Sweet Baby Jane were slightly squat.

All varieties except Carrie averaged greater than 10 inches in height; only Hulk and Griffin averaged taller than 15 inches.

Color & Ribbing

Color was not highly variable in this trial; all varieties had acceptable color, ranging slightly in darkness. Carbonado Gold, Garnet Gold, Kratos, Spartacus, and Expert had the deepest orange color ranked on a 1-5 scale; Griffin, Big Doris, Orange Sunrise, Hulk and Sweet Baby Jane had the lightest color.

Fruit sutures, or ribbing, was also ranked on a 1-5 scale. There was not a lot of variation between varieties in this trial; Garnet Gold and Spartacus had the heaviest or deepest ribbing; Zeus, Carrie, and Griffin had the lightest ribbing.

Stem Characteristics

Fruit stems were evaluated for overall quality (appearance), how well they were attached to the fruit, and their length. While longer stems tend to enhance the overall appearance, they tend to be more susceptible to breakage and cause more wounding to fruit during packing, transport and storage. Most varieties had acceptable attachment qualities: Carrie, Carbonado Gold, Garnet Gold, Orange Sunrise, Sweet Baby Jane, Justify, Kratos, The Boss, Big Doris, Hulk, and Griffin had the most well attached stems. Champion and Spartacus had the weakest stems.

Jason, Sweet Baby Jane, Expert, Cronus, Hulk, and Griffin had the longest stems, averaging over 5 inches; Spartacus, and Zeus had the shortest stems averaging less than 4 inches.

Overall Quality and Recommendations

Overall quality for each variety was ranked according to overall appearance and attractiveness of the fruit, considering all of the factors above. All the varieties in this trial received acceptable overall quality rankings. Carbonado Gold, Garnet Gold, and Kratos received the highest ratings for quality. Champion, Big Doris and Carrie received the lowest quality rankings.

Based on this trial, varieties that performed very well and produced high quality fruit include:

Largest Size (25+lb): Hulk, Griffin

Medium-Large (15-20 lb): Kratos, The Boss

Small-Medium (10-15 lb): Carbonado Gold, Garnet Gold

Table 1. Yield and quality attributes of 20 jack o’lantern pumpkin cultivars evaluated at the University of Maine’s Highmoor Farm in Monmouth, ME in 2024.

Cultivar	Weight (lb)	Weight Range	Shape ^a	Color ^b	Ribs ^c	Height (in)	Circumference (in)	Stem Quality ^d	Stem Attach ^e	Length of Stem (in)	Overall Quality ^f
Zeus	12.0	8 - 16	2.0	4.0	2.7	10.0	34.6	3.6	3.7	3.7	3.5
Carrie	13.2	5 - 26	2.0	3.6	2.7	9.3	32.9	4.1	4.1	4.1	3.4
Carbonado Gold	13.4	8 - 18	2.0	4.5	3.6	10.2	32.0	4.2	4.3	4.9	4.2
Garnet Gold	13.8	6 - 18	2.0	4.5	4.3	10.2	32.3	4.0	4.2	4.4	4.3
Bayhorse Gold	15.7	5 - 21	1.5	3.6	3.0	11.0	32.0	3.7	3.8	4.2	3.8
Orange Sunrise	16.5	8 - 22	2.0	3.4	2.9	11.2	36.8	4.0	4.3	4.1	3.7
Jason	16.8	8 - 22	1.8	4.0	3.3	11.5	33.9	3.6	3.8	5.1	3.8
Apollo	17.3	9 - 23	2.0	4.0	2.9	11.8	36.0	3.8	3.9	4.4	3.8
Sweet Baby Jane	17.8	11 - 21	2.1	3.4	3.3	10.5	39.1	3.8	4.0	6.8	3.7
Justify	17.8	8 - 24	1.6	4.0	3.1	12.0	34.2	4.0	4.3	4.9	3.5
Kratos	18.5	11 - 23	2.0	4.3	3.1	11.9	38.0	4.1	4.3	4.5	4.0
The Boss	18.5	5 - 22	2.0	3.7	3.3	11.0	36.4	3.8	4.1	4.1	3.8
Igor	19.7	12 - 25	1.4	3.7	3.9	13.5	35.7	3.4	3.4	4.3	3.7
Expert	19.8	10 - 23	2.0	4.1	3.9	11.6	36.5	3.7	3.8	5.1	3.9
Champion	20.7	11 - 30	1.3	3.5	3.6	12.9	36.6	3.1	3.0	4.0	3.3
Big Doris	21.5	13 - 26	1.4	3.3	2.6	12.6	36.9	3.9	4.1	4.2	3.4
Spartacus	21.5	12 - 29	2.0	4.2	4.4	10.6	38.9	2.9	3.2	3.7	3.5
Cronus	23.4	15 - 32	2.3	3.4	3.3	11.4	41.8	3.5	3.7	7.6	3.8
Hulk	25.5	16 - 34	1.0	3.7	3.1	15.3	37.3	4.3	4.3	5.3	3.6
Griffin	27.3	17 - 33	1.0	3.1	2.7	16.2	36.0	3.8	4.1	7.4	3.8

^a Shape value of 1 = tall, 2 = round, 3 = flat

^b Color ranked on a 1-5 scale; 5 = darkest

^c Ribs ranked on a scale 1-5; 5 = heaviest ribbing

^d Stem quality ranked on a scale 1-5; 5 = highest quality

^e Stem attachment ranked on a scale 1-5; 5 = stem best attached

^f Overall quality ranked on a scale 1-5; 5 = highest quality.





















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