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Pumpkin Cultivar Performance in Northern Indiana, 2000

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Pumpkin cultivars were evaluated in plots at County Line Orchard in Hobart, Indiana. Results for sixteen jack-o-lantern types, seven pie types, three mini pumpkins, and six specialty pumpkins are presented in this paper.

Pumpkins were direct seeded by hand on June 17, 2000. Twelve seeds per cultivar were spaced 4 ft. apart in the row on beds centered 12 ft. apart, for a population of 907 plants/A. Between the beds fescue grass had been seeded earlier in the spring. Duplicate plots of most cultivars were planted. Weeds on top of the bed were controlled with Curbit, 2 qt./A, applied after planting, and periodic handweeding. Insects were controlled with applications of Sevin for cucumber beetles (1 lb./A, June 30) and Pounce for squash vine borer (4 oz./A, July 13 and 22). Diseases were managed with Bayleton (2 oz./A, Aug. 3) and Nova (4 oz./A, Aug. 9). The plot was laid out as two trials, each a randomized complete block design with two replications: one trial included jack-o-lantern and specialty pumpkins, and the other included pie and mini pumpkins.

Pumpkins were harvested on September 8, 2000. Many pumpkins had not turned completely orange, and so both mature green and orange pumpkins were counted and weighed to estimate potential yield. Average weight per pumpkin was calculated for orange pumpkins only. On September 9, notes were taken on fruit shape and color, peduncle thickness and length, and vine vigor. Analyses of variance were performed separately for jack-o-lantern pumpkins and pie pumpkins, with mean separation using Fisher's protected least significant difference with alpha= 0.10.

Results are presented in Table 1. Yields of jack-o-lantern types ranged from 5 to 16 T/A. Of the largest jack-o-lantern pumpkins, Howden Biggie and Trojan yielded better than Gold Rush and Trax Field. Trax Field and Gold Rush appeared to be later-maturing than Howden Biggie and Trojan; given a longer growing season they may have yielded more. Appalachian, Jumpin Jack, Pro Gold 200, and Ol Zeb's were the highest-yielding among pumpkins averaging 18 to 23 lbs. Of the smaller jack-o-lantern types, Magic Lantern, Howdy Doody, and Gold Fever yielded well. Magic Lantern and the slightly larger Merlin are advertised as powdery mildew tolerant. Observations made at the end of the growing season indicated they had some powdery mildew, but not as much as many other cultivars.

Yields of the pie-sized pumpkins ranged from 2.5 to nearly 7 T/A. Hybrid Pam was the highest yielding and produced a high quality pumpkin averaging almost 5.5 lbs. Mystic and HMX 6688 (Mystic Plus) were nearly identical, both producing good quality pumpkins about 6 lbs. HMX 6688 is advertised as powdery mildew tolerant. Snack Jack and Touch of Autumn both produced pumpkins less than 3 pounds. Snack Jack has hull-less seeds. Baby Bear produced yields similar to Mystic and produced attractive fruit that was wider than tall and smaller than most pie pumpkins, averaging 1.8 lbs.

Among the mini-pumpkins, Jack-B-Quik and Baby Boo produced similar flattened and ribbed fruit, averaging about 1/2 lb. each. Wee-B-Little has a more typical pumpkin shape: taller than wide and without heavy ribbing.

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The specialty pumpkins generally produced yields similar to the pie pumpkins, ranging from 0.2 to 4.4 T/A. The flattened and highly ridged shape of Fairytale, combined with its deep tan color at maturity resulted in an old-fashioned and fairytale look that should do well in the right markets. The other tan cultivar, Buckskin, was reminiscent of an acorn, being taller than wide and with a tapered blossom end. It does not stand up by itself, but would make a unique contribution to fall arrangements. The color of Jarradale - dull blue-green like the hubbard squash - combined with the flattened and ridged shape, makes this cultivar unmistakable and a valuable addition to a line of decorative pumpkins and/or squash. Rouge Vif d'Etampes is the standard when a 'cinderella' pumpkin is desired: flattened, ridged, and bright red-orange, it brings the children's fairytale to mind in an instant. Lumina, a creamy-colored flattened fruit, combines well with the other decorative squash in displays. Casper, a smallish white round pumpkin, did not produce a good stand in this trial and the poor stand led to low yield.

A brief description of the cultivar characteristics follows. Cultivars are arranged alphabetically.

Appalachian - Jack-o-lantern, round, dark orange with average peduncle. Vigorous vines.
Baby Bear - Between a pie and a mini-pumpkin, flattened, medium orange.
Baby Boo - Mini, flattened and ridged, white.
Buckskin - Large pie size, taller than wide, tapered towards blossom end, tan, with short thin peduncle.
Casper - Pie size, round, white, with thin, short peduncle.
Fairytale - Medium to large, heavy for size, flattened, heavily ridged, deep tan at maturity. Vigorous vines had white markings on leaves and showed very little powdery mildew.
Gold Fever - Smallish jack-o-lantern, round, medium orange, uniform size and shape, with good peduncle. Early maturity.
Gold Rush - Large jack-o-lantern, round, medium orange, with very thick peduncle of average length. Long vines.
Gold Standard - Smallish jack-o-lantern, round, medium orange, uniform size and shape, with average peduncle.
HMX 6688 - Pie size, round, dark orange, with thick peduncle. Vigorous vines.
Howden - Standard jack-o-lantern, round, slightly taller than wide, dark orange, with average peduncle.
Howden Biggie - Large jack-o-lantern, taller than wide, dark orange, with average peduncle. Vigorous vines.
Howdy Doody - Smallish jack-o-lantern, round, medium orange, very uniform, with thick peduncle of average length.
Hybrid Pam - Pie size, slightly wider than tall, dark orange, thick long peduncle.
Jack-B-Quik - Mini, flattened, light orange, with small peduncle.
Jarradale - Medium size, flattened and ridged, dull blue-green.
Jumpin Jack - Standard jack-o-lantern, taller than wide, light orange, with average peduncle.
Lumina - Large pie size, flattened, creamy, with short thin peduncle. Medium vines showed low levels of powdery mildew.
Magic Lantern - Jack-o-lantern, round, slightly taller than wide, medium orange with average peduncle. Vigorous vines had medium to low levels of powdery mildew.
Merlin - Jack-o-lantern, round, dark orange, with average peduncle. Vines had medium levels of powdery mildew.

Mystic - Pie size, round, dark orange, with thick peduncle.
Ol Zeb's - Standard jack-o-lantern, round, medium orange, with thin peduncle. Large vines.
Pik-a-Pie - Pie size, round, medium orange, with somewhat thick peduncle. Short vines. Vines all dead at harvest.
Pro Gold 200 - Jack-o-lantern, slightly taller than wide, light orange, with average peduncle.
Pro Gold 510 - Standard jack-o-lantern, round, slightly taller than wide, with average peduncle.
Rex 38040 - Smallish jack-o-lantern, round, slightly flattened, dark orange, with thick peduncle of average length.
Rouge Vif d'Etampes (Cinderella) - Very flattened, ridged, bright reddish-orange, with thin peduncle.
Snack Jack - Pie size, slightly taller than wide, medium orange, slightly thin peduncle.
Touch of Autumn - Pie size, round, medium to light orange, with average peduncle. Short vines.
Trax Field - Standard jack-o-lantern, slightly taller than wide, medium orange, with slightly short peduncle. Fruit matured late.
Trojan - Large jack-o-lantern, round, taller than wide, medium orange, with nice-sized peduncle. Vigorous vines showed low levels of powdery mildew.
Wee-B-Little - Mini, round but slightly taller than wide, medium orange.

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Yield and fruit size of pumpkins at County Line Orchard, 2000.

Cultivar	Company	Orange and Green Pumpkins Tons/A	Orange and Green Pumpkins Number/A	Average Wt. Orange Lb. per Fruit	% Orange
Medium and Large Jack-o-Lanterns					
Howden Biggie	Harris Moran	16.3	1286	28.1	80
Gold Rush	Rupp	9.4	756	27.8	69
Trojan	Seedway	12.5	1134	25.3	79
Trax Field	Rupp	9.6	983	23.9	54
Appalachian	Seedway	13.2	1248	22.8	90
Jumpin Jack	Rupp	13.5	1210	22.7	82
Pro Gold 510	Abbott&Cobb	8.1	832	21.5	68
Howden	Rupp	6.8	681	21.3	92
Pro Gold 200	Abbott&Cobb	13.1	1399	19.2	76
Ol Zeb's	Rupp	13.0	1513	18.4	80
Merlin	Harris Moran	7.4	983	18.0	60
Magic Lantern	Harris Moran	15.8	1928	16.7	94
Rex 38040	Rupp	5.2	718	14.9	96
Howdy Doody	Rupp	12.9	1739	14.8	91
Gold Standard	Rupp	9.3	1437	13.4	90
Gold Fever	Rupp	12.5	2118	12.0	93
Grand Mean		11.2	1248	20.1	80.9
LSD, .10		3.5	490	5.1	–
Small Pumpkins					
HMX 6688	Harris Moran	4.4	1513	6.1	83
Mystic*	Harris Moran	4.4	1513	6.1	90
Hybrid Pam	Seedway	6.9	2609	5.4	93
Pik-A-Pie*	Rupp	3.5	1664	4.0	86
Snack Jack	Seedway	2.5	1928	2.7	90
Touch of Autumn	Seedway	3.8	2874	2.6	100
Baby Bear	Rupp	4.1	4727	1.8	89
Grand Mean		4.2	2404	4.1	90.3
LSD, .10		1.9	1802	0.4	–
Mini Pumpkins					
Wee-B-Little	Rupp	1.4	4311	0.6	100
Jack-B-Quik*	Rupp	1.0	4159	0.5	100
Baby Boo	Rupp	1.8	8924	0.4	100
Specialty Pumpkins					
Fairytale	Rupp	3.8	265	28.5	0
Jarradale*	Rupp	4.1	454	18.0	100
Rouge Vif d'Etampes	Rupp	4.4	605	14.4	100
Lumina	Rupp	0.9	151	11.4	100
Buckskin	Rupp	3.9	756	10.6	94
Casper*	Rupp	0.2	151	3.1	100

*1 replication only. Not included in analysis of variance.