

Pumpkin Cultivar Performance Trial Grown in Southern Ohio 2011



Brad R. Bergefurd, Horticulture Specialist and Extension Educator Wayne Lewis, Thom Harker, Lynn Miller, Al Welch and Emily Weaks The Ohio State University South Centers 1864 Shyville Road, Piketon, Ohio 45661

OBJECTIVES:

To screen new pumpkin variety releases (2010-2011) for their production performance under Southern Ohio growing conditions and to determine the new releases showing yield potential for the southern Ohio area.

MATERIALS and METHODS:

This trial evaluated 26 pumpkin cultivars for their production suitability, performance and quality attributes under southern Ohio growing conditions. Cultivar selections were new releases along with industry standard varieties. Input was received from seed companies, growers, and industry personnel regarding variety selection and standard comparison. Seeds were direct seeded to the field on June 6th. Rows were spaced 10 foot apart with seeds planted 3 foot apart in the row. The observation trial was located in southern Ohio, at The Ohio State University South Centers field research trials in Piketon, Ohio. 100 pounds of N, P2O5 and K2O per acre were applied prior to planting. A standard commercial fungicide and insecticide program followed recommendations from the Ohio Vegetable Production Guide, OSU Bulletin #672. Weeds were controlled with cultivation and hand hoeing.

RESULTS and DISCUSSION:

Overall plant and fruit quality was good despite 2011 being a record setting wettest growing season on record. The season was wetter than usual early. These conditions resulted in a later than normal planting date. Drip irrigation was applied as needed throughout the growing season. Overall heat units were accelerated mid season with higher than normal temperatures resulting in blossom drop and inadequate pollination, this resulted in a reduction in fruit numbers. Overall fruit yield and quality was good for this trial. Fruit were harvested on September 13.

This year's pumpkin screening contained several types of pumpkins, including five specialty types: Black Knight, Peanut Pumpkin, Red Warty Thing, One Too Many and Galaxy of Stars (a decorative gourd type). Several types of jack o lantern and pie type pumpkins were evaluated.

Pumpkin cultivars in table 1 are ranked in descending order by marketable orange tons per acre. Marketable ton per acre ranged from a high of 32 to a low of 5 ton per acre. The top five jack o lantern types included Mustang, Gold Medal, Aladdin, Challenger and Cougar. Average fruit weight ranged from a high of 20.84 pounds (Gold Medal) to a low of .31 pound (Galaxy of Stars).

We wish to thank the seed companies for their in-kind contributions to conduct this field research.

Cultivor	Marketable Fruit per	Marketable Ibs. per	Marketable Tons per	Average Fruit Weight	Seed
Mustang	3428	64691	32	18.86	
Gold Medal	2857	59548	29	20.84	BU
	3428	54300	27	15.83	НМ
Challenger	2571	53240	26	20.70	SW
Courar	31/2	19118	20	15 73	н
Magic Lantern	4857	49734	24	13 44	HM
Anollo	3714	46522	23	12.52	HM
Solid Gold	2857	46320	23	16.21	BU
Camaro	2285	41511	20	18 16	HI
Magic Wand	2857	38417	19	13 44	HM
Corvette	2285	36460	18	15.95	HI
Hijinks	6571	35608	17	5 41	SW
Gladiator	2571	34531	17	13.42	HM
Warlock	3142	33911	16	10.79	HM
Diablo	2285	30754	15	13.45	SW
Black Knight	4285	29368	14	6.85	SW
Cannon Ball	8285	27791	13	3.35	HM
Magician	3428	23657	11	6.90	HM
Super Hero	1428	23702	11	16.59	HM
Peanut Pumpkin	1714	22722	11	13.25	SW
Red Warty Thing	2285	22400	11	9.80	RU
Half Pint	17142	20948	10	1.22	SI
Field Trip	5428	19680	9	3.62	HM
Kandy Korn Plus	21142	18991	9	.89	SW
Galaxy of Stars	37142	11671	5	.31	RU
One Too Many	1428	10000	5	7.0	RU

Table 1: Fruit yields and average fruit weight responses for pumpkin cultivars grown in southern Ohio (Piketon), 2011.