

Evaluation of New Vegetable Cultivars Under Northwest Ohio Growing Conditions - 2006

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Objectives: To evaluate new vegetable crop cultivars, focusing on fruit characteristics and yield potential in Northwest Ohio. New cultivar releases of tomato, pepper, eggplant and pumpkin will be evaluated under Ohio's soil types and environmental conditions along with disease resistance.

Materials and Methods: Tomato ('BHN 685'), eggplant ('Beatrice') and peppers ('Wahoo', 'Carmen' and 'Zsa Zsa') were seeded on April 18 and transplanted to the field on June 6 into raised beds with rows spaced 5 feet apart. Plants were spaced 12" apart within the rows. Each crop was replicated 4 times. Pumpkins ('Bat Wings') were seeded into 50-cell plug trays on May 15 and transplanted to the field on June 5 on black plastic mulch with rows spaced 7 feet apart and plants spaced 3' apart within the rows, replicated 4 times.

Results: Above normal rainfall and temperatures for the growing season caused a large percentage of blossom end rot in tomatoes and 'Wahoo' peppers. 'Wahoo' also had a significant amount of sunscald throughout all replications. Some bacterial wilt was confirmed on pumpkins. 'Carmen' and 'Zsa Zsa' peppers had very little blossom end rot or sunscald.

'BHN 685' tomato: Plants were seeded into 288-cell plug trays on April 18 and transplanted to the field on June 6. Plants were hand harvested on September 12. A large percentage of fruit had blossom end rot with a small percentage of late blight. No other diseases were noted. Final marketable yield was 7.6 T/A with 6.3 T/A culled fruit. Average fruit size was 0.27 lbs.

'Beatrice' eggplant: round to oval shaped firm, bright purple fruit. Plants were seeded into 200-cell plug trays on April 18 and transplanted to the field on June 6 into raised beds 5 feet apart and 12 inches between plants. Fruit was harvested on August 14, 29, September 12, 20. No disease problems were noted. Purple skinned with bright white interior. Marketable yield was 6.3 T/A and 1.4 T/A culled fruit. Average fruit weight was 1 lb. Fruit does not have a bitter taste. Nice variety for the eggplant market.

'Carmen' pepper: This 2006 All America Selection winner produces an Italian "bulls horn" type pepper. Fruits mature from green to deep red with a very sweet taste. Tapered fruit is 6 inches in length. Plants were upright with good foliage coverage. Fruits were harvested on August 29 and September 12. All fruits were harvested mature red. Marketable yield was 6.1 T/A with 0.6 T/A culled fruit. No disease or sunscald was present. Excellent sweet flavor for fresh use or roasting. Nice variety for fresh market sales.

‘Wahoo’ pepper: Plants were seeded into 200-cell plug trays on April 18 and transplanted to the field into raised beds 5 feet apart on June 6. Plant spacing was 12 inches between plants. Fruit was harvested on August 14, 29, and September 12. First fruits were difficult to harvest as fruit sets deep in the center of the plant. These bell peppers are thick walled and mature to a deep red. Blossom end rot and sunscald was noted on fruit in all harvests. Marketable fruit yield was 4.4 T/A with 2.1 T/A culled fruit. Average fruit weight was 0.41 lbs.

‘Zsa Zsa’ pepper: This Hungarian stuffing pepper matures from yellow to orange to red. Plants were seeded into 200-cell plug trays on April 18 and transplanted to the field on June 6 into raised beds. Rows were spaced 5 feet apart with a 12 inch spacing between plants. Plants were harvested on August 8, 29, and September 20. Fruit color at harvest provided a mixture of yellow, orange and red fruits. Average fruit size was 0.20 lb. Some blossom end red was present on fruit. Fruit is approximately 5 inches in length and tapers to a blunt end. Marketable yield was 5.1 T/A with 0.4 T/A culled fruit mainly due to blossom end rot. Nice variety for the colored pepper market.

‘Bat Wings’ pumpkin: Plants were seeded into 50-cell plug trays on and transplanted to the field on black plastic mulch on June 5 in rows 7 feet apart and in-row plant spacing of 3 feet. Plants are semi-bush type. Average fruit weight was .67 lbs. Total marketable yield was 6.7 T/A with 1.5 T/A culled fruit. Fruit are orange with various designs of black on the underside of the fruit and around the stem. Unique Halloween novelty pumpkin. No disease problems were noted.

Table 1.

Cultivar	Seed Source	Days to Maturity	Marketable T/A	Cull T/A
‘BHN 685’	SW	76	7.6 (red) 10.2 (green)	6.3
‘Beatrice’	JS	62	6.3	1.4
‘Carmen’	JS	60(grn)/80 red	6.1	0.6
‘Wahoo’	SW	74	4.4	2.1
‘Zsa Zsa’	SW	65	5.1	0.4
‘Bat Wings’	SW	90	6.7	1.5

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