

Fresh Market Tomato Cultivar Performance Trial Grown in Southern Ohio 2012



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OBJECTIVES:

To screen new fresh market tomato variety releases (2011-2012) for their production performance, under Southern Ohio growing conditions, and to evaluate yield and marketing potential for the southern Ohio area.

MATERIALS and METHODS:

This trial evaluated 8 fresh market tomato 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 comparisons. The observation trial was located in southern Ohio, at the Ohio State University South Centers field research trials in Piketon, Ohio. Seeds were hand planted May 8th into 98 cell Pro Trays filled with soilless mix in the greenhouse. Plants were transplanted onto 10 inch tall raised beds covered with black plastic spaced 12 inches apart in row on June 21st using a waterwheel transplanter. Trickle irrigation was installed under the plastic mulch. Bed spacing was 6 foot apart on center. 90 pounds of N, P2O5 and K2O per acre were applied before forming beds and laying plastic mulch. A standard commercial fungicide and insecticide program was implemented, following recommendations from the Ohio Vegetable Production Guide, OSU Bulletin #672. Weeds were controlled with cultivation and hand hoeing.

RESULTS and DISCUSSION:

This trial was planted later than usual, June 21st to evaluate for late season disease and fruit physiological disorders. Despite the less than optimal growing conditions experienced this season, overall plant and fruit quality was good. Fruit was harvested six times September 4, September 12, September 21, September 28, October 5 and October 12. Table 1 lists yield data and varieties in descending order of marketable yield.

In this observation trial, total marketable pounds per plant ranged from 11.66 lbs. (HM 2826) to 3.65 lbs. (BHN 961). The Cultivar HM 88496CR had the most fruit per plant and the second highest pounds per plant. The average fruit size ranged from a low of .43 lbs. to a high of .61 lbs. We wish to thank the Ohio Vegetable and Small Fruit Research and Development Program (OVSFRDP) and contributing seed companies for their in kind funding and contributions to conduct this field research.

Table 1: Total fruit yields and average fruit weight responses for fresh market tomato cultivars grown in southern Ohio (Piketon), 2012.

<i>Cultivar</i>	<i>Marketable lbs/Plant</i>	<i>Fruit per Plant</i>	<i>Average Fruit Weight</i>	<i>Seed Source</i>
HM 88496CR	10.76	19.66	.54	SW
Mountain Glory	6.40	12.50	.51	RU
Red Bounty	5.91	9.66	.61	SW
Charger	5.19	9	.57	RU
BHN 961	3.65	8.50	.43	RU
Red Deuce	7.49	13.33	.56	SW
HMX 2826	11.66	21.5	.54	SW
Bella Rosa	9.58	18.0	.53	RU