

Fresh Market Tomato Cultivar Performance Trial in Southern Ohio 2013

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OBJECTIVES:

To screen new fresh market tomato cultivar releases (2012-2013) 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 and screened six 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 (lat. 39.07° N, long. 83.01° W, elevation 578 ft.). Seeds were hand planted April 1st 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 18 inches apart in row on May 24th 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 Midwest Vegetable Production Guide for Commercial Growers (ID-56). Weeds were controlled with cultivation and hand hoeing.

RESULTS and DISCUSSION:

This trial was planted to the field on May 24, 2013. Overall plant and fruit quality was good despite the less than optimal growing conditions experienced this season. Fruit were harvested three times August 14, August 22 and August 29.

In this observation trial total marketable pounds per acre ranged from 9,666 (Tonopah) to 28,900 (Charger).

We wish to thank the Ohio Vegetable and Small Fruit Research and Development Program (OVSFRDP) and contributing seed companies listed in table 1. for their in kind funding and contributions to conduct this field research.

Table 1: Fruit yield responses for fresh market tomato cultivars grown in southern Ohio (Piketon), 2013.

Cultivar	Marketable lbs/Acre	Marketable fruit/Acre	Seed Company
Charger	28900	46666	SK/SAK
Volante	25900	43333	SK/SAK
Fletcher	14500	26666	BE
Sunkeeper	12866	20000	SY/RG/ROG
BHN 964	12533	20000	BHN
Tonopah	9666	16666	SW/SDW