

Tomato Varieties Grown by Missouri Produce Auction Growers in 2014

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Abstract

For most Missouri produce auction growers, tomatoes are their top cash crop. An important question relating to tomatoes is the variety to grow in different cultural situations (greenhouse, high tunnel, or field). Growers discuss this amongst themselves, review new releases, tender their customers' opinions, and review recommendations from reputable sources. To aide these growers, who are primarily Amish and Mennonite and market through wholesale distribution facilities, a comprehensive survey was mailed in December 2013. Growers sent the survey are those who receive a free quarterly newsletter (Extension's IPM Bulletin) which has been published since 2010; 370 growers were on the mailing list in 2013. The survey contained sixteen questions; the response rate was 36%. Ninety-nine respondents grew tomatoes with 75 in the field, 54 in greenhouses, and 37 in high tunnels. Scarlet Red, Florida 91 and Rocky Top were the top three field varieties. Big Dena, Rocky Top and Goliath were the top three greenhouse varieties. Growers were asked to pick between three factors for their variety decision- marketability, productivity or hardiness. Marketability was most selected for both field and greenhouses. The top three heirlooms were Hillbilly, Brandywine and Cherokee Purple. Growers were also asked which new varieties they were most excited about; they were Red Bounty, Beorange, and Red Deuce. A sixteen page report was developed and inserted into their February quarterly newsletter. A one question evaluation with five response options was included, on a postage pre-paid postcard.

Produce Auctions in Missouri

The first was started in Missouri in 1994, with 8 currently in operation and one on the border in Iowa. Four wholesale distribution facilities operate in Rich Hill. Growers selling at all these outlets responded.

Table 1. Preferred Greenhouse Varieties

Tomato Variety	Count
Big Dena	26
Rocky Top	10
Goliath	8
Big Beef	7
Scarlet Red	7
Red Deuce	7
Geronimo	4
Mountain Fresh	4
Mountain Spring	3
Primo Red	3
Torero	2
Trust	2
Other	10

Figure 1. Number of Respondents Selling at Produce Auctions

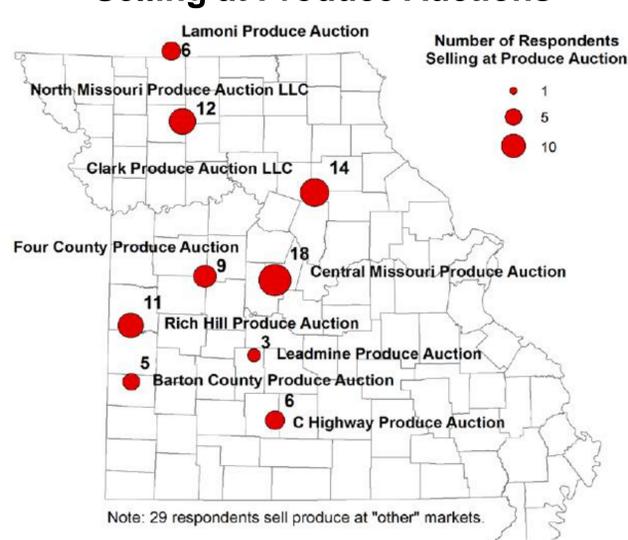
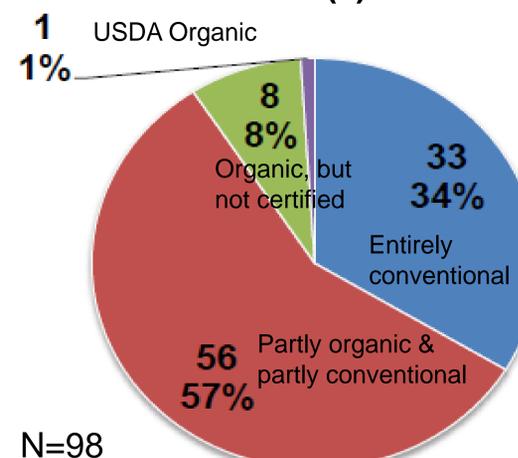


Figure 2. Organic Farming Practice(s)



Key Survey Results

Response rate was good (99 usable)

- Return was 36%, with 27% growing tomatoes.

Production practices in use

- Field, greenhouse, and high tunnels were used by 75, 54, and 37 growers, respectively.

Factor affecting variety choice

- Marketability was most important in field and greenhouse; varied by variety-Table. 2.

New or emerging varieties

- Red Bounty, Beorange, Charger, BHN selections (964, 1021, 602 & 871 yellow), Mr. Merit, Chiesta, Monticello, Mt. Glory, Phoenix, Rebelski, and Red Boundary.

Organic production practices

- Were more widespread than thought (Fig. 2).

Table 2. Main Factor for Growing Field Tomato Varieties

Tomato Variety	Marketability	Productivity	Hardiness
Amelia	0	0	0
Big Beef	3	0	0
BHN 589	5	1	1
Biltmore	1	1	0
Carolina Gold	7	5	2
Christa	0	0	1
Fabulous	1	0	0
Florida 91	4	5	10
Florida 47	0	0	1
Jet Star	4	0	0
Mountain Spring	3	2	0
Mountain Fresh	1	2	4
Mountain Fresh Plus	3	5	3
Rocky Top	11	3	2
Scarlet Red	16	6	1
Other	16	8	5
Total	75	38	30

Was the Tomato Survey Useful to Growers?

In February a one question evaluation postcard was included with the survey results. Growers (for the most part) were already confident on what they grow, but appreciated the results. But for 48% of the growers the results are giving them some direction or ideas on tomatoes to try. A surprising number of comments were received, and they were entirely positive or appreciative. Three examples are:

"It was very interesting, seems we're already growing the right types."

"It gives me more confidence in trying what I was going to this year."

"Although being unsure what varieties to plant, I neglected my survey; I'm glad not everybody did."