

EVALUATION OF TOMATO CULTIVARS FOR SOUTHERN OHIO, 2006

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This cultivar trial evaluated 9 cultivars for their suitability in southern Ohio.

METHODS:

Seeds were planted April 13th in the greenhouse. Transplants were transplanted to the field on May 25th using a waterwheel transplanter. Raised beds covered with black plastic mulch with trickle irrigation. Plots rows were 6 foot apart. Experimental design was randomized complete block with 3 replications. 100 units of N, P and K were applied before forming beds and laying plastic mulch. A standard commercial fungicide and insecticide program was followed, following OSU Bulletin #672.

RESULTS:

The greatest difference in early season boxes/acre were for the small boxes/acre (Table 1) though there was a slight statistical difference in medium, large and total boxes per acre. There was also a statistically significant difference in season long boxes/acre (Table 2).

Table 1. Early Season Boxes/Acre

Variety	Boxes/Acre			
	Small	Medium	Large	Total
HMX 5826	C 137	D 1029	A 1664	D 2830
Mnt Fresh	C 189	D C B 1728	B A 1034	D C 2951
Linda	C 211	D C B 1671	B A 1286	D C B 3168
Florida 47	B A 574	A 2684	A 1485	A 4743
BHN 669	B A 607	C B A 2400	B 536	D C B A 3543
Suro 1721400	C 242	D 1442	A 1638	D C B 3322
Estela	A 716	A 3236	B 578	B A 4530
Faustina	C B 345	D C 1630	A 1715	D C B A 3691
Mt-Crest	A 818	B A 2562	B A 849	C B A 4228
Least Significant Difference*	318	926	871	1389

*Means with the same letter are not significantly different.

Table 2. Full Season Boxes/Acre

Variety	Boxes/Acre			
	Small	Medium	Large	Total
HMX 5826	D 621	C 3588	A 3005	A 7214
Mnt Fresh	D C 781	A 5787	C B 1719	A 8287
Linda	D C 855	C B A 4745	A 2137	A 7737
Florida 47	C B 1409	B A 5235	C B 1752	A 8395
BHN 669	B A 1925	B A 5283	C 747	A 7955
Suro 1721400	D 465	C B 3994	A 3106	A 7565
Estela	B A 1570	A 5633	C 730	A 7933
Faustina	D 563	C 3724	A 3058	A 7344
Mt-Crest	A 2138	B A 5193	C B 1108	A 8439
Least Significant Difference*	690	1450	1128	1921

*Means with the same letter are not significantly different.

There were also slight statistical differences in early season pounds/acre (Table 3) and full season pounds/acre (Table 4).

Table3. Early Season Pounds/acre

Variety	Pounds per acre			
	Smalls	Mediums	Larges	Total
HMX 5826	C 3414	D 25729	A 41595	D 70738
Mnt Fresh	C 4719	D C B 43200	B A 25857	D C 73776
Linda	C 5267	D C B 41771	B A 32152	D C B 79190
Florida 47	B A 14338	A 67095	A 37133	A 118567
BHN 669	B A 15171	C B A 59995	B 13405	D C B A 88571
Suro 1721400	C 6038	D 36052	A 40957	D C B 83048
Estela	A 17890	A 80905	B 14448	B A 113243
Faustina	C B 8629	D C 40757	A 42881	D C B A 92267
Mt-Crest	A 20438	B A 64057	B A 21214	C B A 105710
Least Significant Difference*	7955	23154	21763	34730

*Means with the same letter are not significantly different.

Table 4. Full Season Pounds/acre

Variety	Pounds per acre			
	Smalls	Mediums	Larges	Total
HMX 5826	D 15533	C 89690	A 75129	A 180352
Mnt Fresh	D C 19533	A 144681	C B 42962	A 207176
Linda	D C 21381	C B A 118619	B A 53433	A 193433
Florida 47	C B 35219	B A 130862	C B 43805	A 209886
BHN 669	B A 48124	B A 132076	C 18671	A 198871
Suro 1721400	D 11624	C B 99857	A 77643	A 189124
Estela	B A 39257	A 140829	C 18243	A 198329
Faustina	D 14067	C 93100	A 76438	A 183605
Mt-Crest	A 53457	B A 129814	C B 27705	A 210976
Least Significant Difference*	17260	36237	28189	48033

*Means with the same letter are not significantly different.

There were statistically significant differences in early average fruit weight Table 5 and full season average fruit weight Table 6.

Table 5: Early Season Average Fruit Weight (Least Significant Difference 0.11)

Means with the same letter are not significantly different.

t-Grouping	Mean	TRTMT
A	0.74	HMX 5826
B A	0.72	Faustina
B A C	0.67	Suro 1721400
B A C	0.65	Mnt Fresh
B C		
B D C	0.63	Linda
D C		
E D C	0.58	Florida 47
E D	0.53	BHN 669 and Mt-Crest
E	0.49	Estela

Table 6: Full Season Average Fruit Weight (Least Significant Difference 0.08). Means with the same letter are not significantly different.

t	Grouping	Mean	TRTMT
	A	0.69	Faustina
B	A	0.63	HMX 5826 and Suro 1721400
B	C	0.57	Linda and Mnt Fresh
D	C	0.53	Florida 47
D	E	0.48	Mt-Crest
D	E	0.47	BHN 669
	E	0.44	Estela