

# 2009 Great Lakes Vegetable Working Group Heirloom Tomato Project Summary — Indiana

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**Site:** Meigs Horticulture Research Farm, Lafayette IN

**Seeded in greenhouse:** April 13

**Transplanted:** May 22 into black plastic mulch

**Row spacing:** 7 feet

**Plant spacing:** 3 feet

**Plant support:** metal stakes and Florida weave

**Fertility:** Preplant 50 lbs/acre N, P<sub>2</sub>O<sub>5</sub>, and K<sub>2</sub>O incorporated

**Site Notes:** Generally cool with adequate rain for duration of season. The hottest period this summer was relatively early, in mid- to late June. August was wet and cool. September was very dry. The heaviest yields were in the last three weeks of September and October 1. Water was applied as needed through drip irrigation. Six applications of fungicides were applied (weekly) August 3 to September 14. Early season Septoria was present, followed by early blight infestations, and then *Xanthomonas* and *Psuedomonas* (spot and speck). Late blight was never present. No insecticides were applied. Mature fruits were at fully breaking stage to soft mature. Transplants were exposed to 2,4-D, dicamba drift. The varieties most affected were Amish Paste, Brandywine, Opalka, Oxheart, and Rutgers. This slowed overall plant development throughout June.

For additional information about this project, see “Evaluation of Ten Heirloom Tomato Varieties at Nine Sites Throughout the Great Lakes Region” in the 2009 *Midwest Vegetable Trial Report*.

	<b>Amish Paste</b>	<b>Brandywine</b>	<b>Burbank</b>	<b>Cherokee Purple</b>	<b>Jaune Flamme</b>	<b>Opalka</b>	<b>Oxheart</b>	<b>Peron</b>	<b>Rutgers</b>	<b>Tainan</b>
Plant habit	Slow, weak spindly growth, becoming more robust in late summer	Robust plants, classic potato-leaf.	Average growth Some individuals seem determinate, others indeterminate	Average growth	Average growth Precocious	Average growth Late.	Above average vigor compared to most others	Nice tidy architecture w thick stems, suckering at soil-stem base. Vigorous.	Average growth Early season leaf-rolling	“Untamed” extremely vigorous, sprawling and vining Precocious
Germination (%)	27	77	77	93	73	88	63	87	67	90
First ripe fruit	Aug. 15	Aug. 15	July 24	Aug. 15	July 16	July 31	Aug. 15th	Aug. 7	July 31	July 16
Total marketable fruit no./ plant	15	14	57	16	109	10	46	48	28	657
Total marketable fruit wt. / plant (lbs)	5.69	11.77	18.47	4.78	13.83	3.05	16.51	17.67	6.33	11.75
Avg. marketable fruit wt. (oz)	6.0	13.5	5.2	4.8	2.0	4.9	5.7	5.9	3.6	0.3
Total ripe fruit wt. (marketable plus unmarketable) /plant (lbs.)	6.25	15.68	21.4	7.25	18.02	4.17	18.31	19.49	8.58	12.26
Percent marketable of total weight	91	75	84	66	77	73	75	91	74	96
Total cull fruit no. / plant	2	4	7	4	33	3	5	5	10	29
Disease notes as of 9-11	Spot, Speck 5%	Spot, Speck 5%	Spot, Speck 15%	Spot, Speck 10%	Spot, Speck 20% Speck on fruits?	Spot, Speck 5%	Spot, Speck 5%	Spot, Speck 1%	Spot, Speck 5%	EB 5% Spot, Speck 10%

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Insect pressure notes	None	3 hornworms		1 hornworm		1 hornworm	1 Jap. beetle		4 hornworm	
Fruit notes	Prone to more radial cracks than concentric cracks. Blemishes and sunscald on shoulders. Not a pretty tomato though firm, meaty and thick skinned.	“Ugly tomatoes” but some of the best ones are absolutely beautiful. Deep radial cracks especially on larger fruits cause spoilage, rotting around pedicel scar. Thin-skinned and fragile.	Radial cracks a problem in early season. Some uneven ripening with green shoulders. High-yielding late with high-quality fruit.	Larger fruits that set were mostly unmarketable. Problems similar to those of Brandywine fruits, e.g. thin-skinned, big and misshaped.	Early fruiting. Fruits sometimes with small blemishes spots (sucking insect?) perhaps spec/spot later on? Most culls with single radial crack only.	Some BER on early-season fruits, improving in late summer. Some with green shoulders Beautiful fruits.	Thin skinned. Heavy fruiting late. Not an early variety. Great looking fruits.	Best of the round-fruited bunch, yielding lots of high-quality marketable fruits.	Firm fruits. Early problems w/ radial cracks, blotchy ripening. Fruits slightly irregular cross-section ribbed or zippered. Problems of uneven ripening.	Fruits not weight, size homogeneous; ranging from 6-15 grams, depending on branched cyme location picked. Few culls, mostly with single radial crack.

**Amish Paste**



**Brandywine**



**Burbank**



**Cherokee Purple**



**Jaune Flamme**



**Opalka**



**Oxheart**



**Peron**



**Rutgers**



**Tainan**

