2011 Green Pepper Cultivar Evaluation

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Summary of Results:

Eight varieties were transplanted on May 31, 2011 at a grower's location in Celeryville, OH. The experiment was conducted as a randomized complete block design with 4 replications. Plots were double rows, 25 feet long. Eight plants from the middle were harvested to determine yield and quality.

The harvest dates were: 11 Aug, 22 Aug, 31 Aug, 13 Sep, and 25 Sep 2011.

The top performing varieties (boxes per acre of extra large + large fruit) for total harvest, were Vangard, Archimedes, Karisma, and Aristotle, and were significantly better in yield than Tomcat and Hunter (see Table 1). Varieties producing in excess of 600 bushel/A of extra large + large fruit were Vangard and Archimedes. These two varieties were significantly higher in yield than Aristotle, Intruder, PX 0994-1819, Tomcat and Hunter (see table 1).

Table 2 shows the percentage of marketable fruit in the large size categories compared to all marketable fruit (% marketable large, represents the number of extra large and large fruit compared to all fruit harvested) for all harvests. Percent marketable represents every size category that can be sold from extra large down to the small category. Vangard. Archimedes, Karisma and PX 0994-1819 were the only varieties with 50% or more of its fruit in the larger size categories. For % marketable, Karisma produced significantly more marketable fruit than Vangard and Aristotle. Archimedes, Hunter and PX 0994-1819 had significantly more saleable fruit than Aristotle.

2011 Green Pepper Results

Table 1. Total Yield in all size categories in bushels or boxes/acre.

ID#	Variety	Xtra Large ¹	Large	XL+L & (Rank) ²	Medium	Small	Select	Total
1	Archimedes	293	335	628 (2) a	252	126	27	1033
4	Vangard	289	348	637 (1) a	244	106	55	1043
3	Karisma	230	302	531 (3) ab	246	97	21	895
2	PX0994-1819	158	275	433 (6) bc	198	90	50	771
8	Aristotle	154	308	463 (4) bc	241	73	61	837
5	Intruder	131	318	449 (5) bc	224	73	35	780
7	Hunter	111	245	355 (8) c	269	152	24	801
6	Tomcat	83	281	364 (7) c	295	102	29	790
	LSD 0.05%	126	111	161	85	69	35	189

- 1. The extra large category includes Jumbo and extra large fruit sizes.
- 2. Means followed by the same letter are not significantly different. (Rank) = highest yield to lowest of extra large plus large boxes per acre.

Table 2. Percent Marketable Large and Percent Marketable Yield (Extra Large + Large + Medium + Small + Select)

ID#	Variety	% Marketable Large ¹	ID#	Variety	% Marketable ²
4	Vangard	59 a ³	3	Karisma	96 a
1	Archimedes	53 a	1	Archimedes	95 ab
3	Karisma	52 a	7	Hunter	95 ab
2	PX09941819	50 ab	2	PX09941819	93 ab
5	Intruder	49 ab	6	Tomcat	92 abc
8	Aristotle	48 abc	5	Intruder	92 abc
6	Tomcat	39 bc	4	Vangard	91 bc
7	Hunter	36 c	8	Aristotle	88 c
	LSD 0.05%	13			4

- 1. % Marketable Large = the number of Extra Large + Large fruit divided by the number of Extra Large + Large + Medium + Small + Select + Cull fruit times 100.
- 2. % Marketable = the number of Extra Large + Large + Medium + Small fruit divided by the number of Extra Large + Large + Medium + Small + Select + Cull fruit times 100.
- 3. Means followed by the same letter are not significantly different.

Following the chart are the 8 green pepper varieties in the trial. Use the ruler for a size reference







