

**Pepper Variety Trial Evaluation under  
Commercial Conditions  
Immokalee, FL.  
Spring, 2011**



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**Table 1. Summary of cultural practices used for variety trial of pepper grown with seepage irrigation in Immokalee, FL. during spring 2011.**

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<b>Location</b>	Immokalee, FL.
<b>Experimental Design</b>	RCBD (4 reps)
<b>Irrigation</b>	Seepage
<b>Plot size</b>	20 ft
<b>Harvest unit</b>	10 ft
<b>Planting Date</b>	14-Jan-11
<b>Fumigation</b>	MeBr/Chloropicrin (125 lb/acre)
<b>Plastic Mulch</b>	Black
<b>Linear ft per acre</b>	7,260
<b>Bed Spacing</b>	6 ft
<b>Bed Height</b>	8 in
<b>Bed Width</b>	36 in
<b>Plan Population</b>	14,520
<b>Distance between plants</b>	12 in
<b>No of rows</b>	2
<b>Distance between rows</b>	16 in
<b>Row run</b>	North - South
<b>Harvest Date</b>	11-Apr-11
<b>Planting to pick</b>	12 weeks

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**Table 2. Sources of seeds and bacterial spot disease resistance.**

Variety	Company	Bacterial Spot (Xcv) Resistance
ACR 2993	Abbott and Cobb	1-5
ACR 75311	Abbott and Cobb	1-6
Allegiance	Harris Moran	1-5
FPP 7039	Sakata	1-5
Hunter	Syngenta/Rogers	1-5 and 7-9
Myakka	Enza Zaden	1-4
PRC 9-714	Pepper Research	1-5
PRC 7-12	Pepper Research	1-5
RPP 24226	Syngenta/Rogers	1-5 and 7-9, TSW
RPP 24272	Syngenta/Rogers	1-5 and 7-9, TSW
Tomcat	Syngenta/Rogers	1-5 and 7-9
Vanguard	Harris Moran	1-5, Pc
XPP 6001	Sakata	1-5
2815	Seminis	1-10
4288	Seminis	1-6
7141	Seminis	1-5
8302	Seminis	1-5
9325	Seminis	1-10
<b>Brigadier (Control)</b>	Syngenta/Rogers	1-3

Xcv 1,2,3,4,5,6,7,8,9,10 - Bacterial spot (*Xanthomonas campestris* pv. *Vesicatoria*)

Pc - Phytophthora root rot (*Phytophthora capsici*); TSW - Tomato spotted wilt.

**Table 3. Summary of temperature and total rainfall in Immokalee, FL. during spring 2011.**

Period	Temperature (°F)			Total rainfall (inch)
	Average	Min	Max	
Jan-11	60.2	46.6	75.3	1.4
Feb-11	65.7	52.4	81.4	0.4
Mar-11	67.8	53.7	84.2	2.4
Apr-11	74.2	59.5	90.3	0.6
<b>Average/Total</b>	67.0	53.0	82.8	4.8

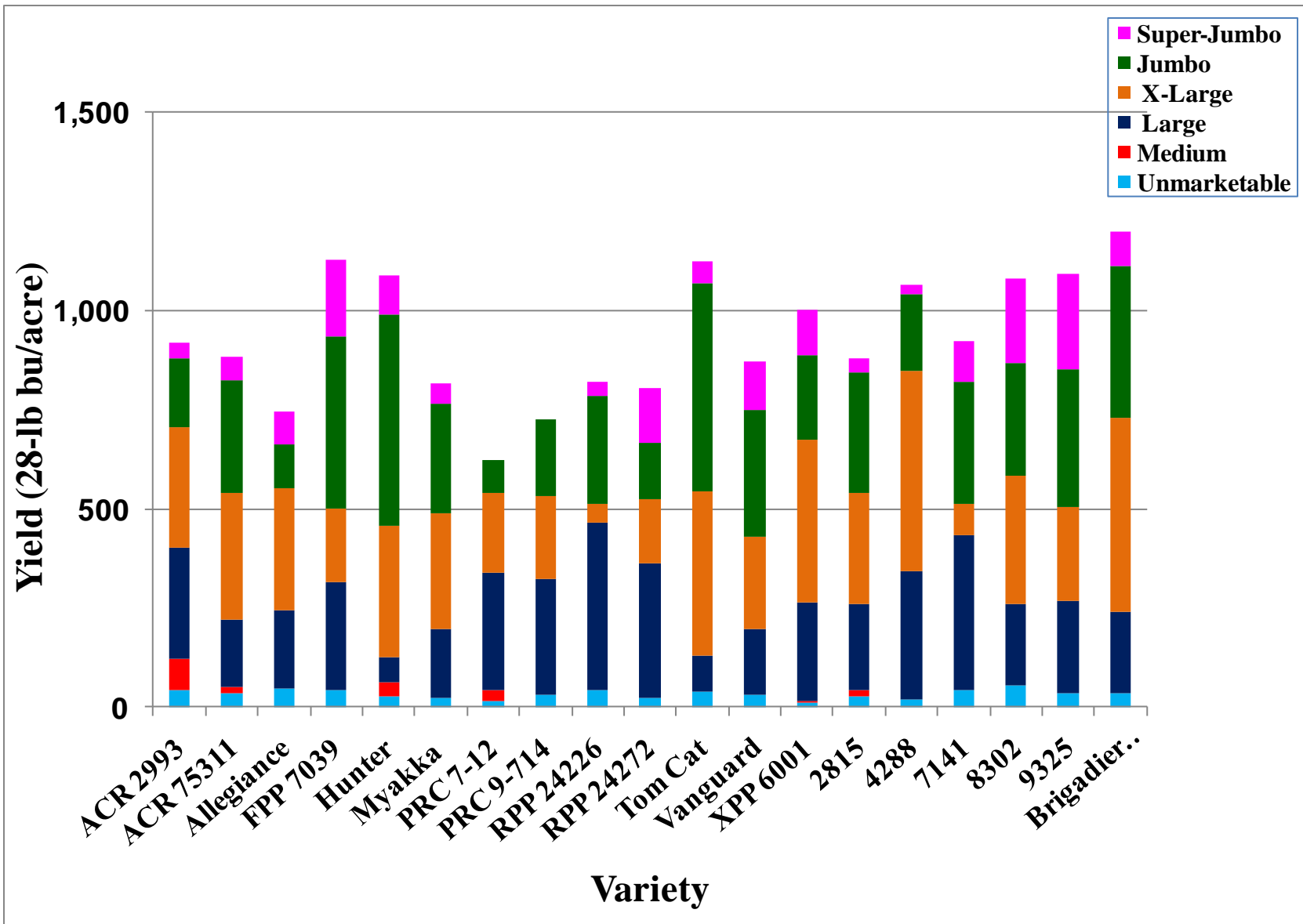
\*There was freeze event on January 23, 2011

**Table 5. Total harvest marketable and unmarketable (culls) yield categories for selected pepper varieties grown in Immokalee, FL. during spring 2011.**

Variety	Super-Jumbo	Jumbo	X-Large	Large	Medium	Culls	Total Marketable
----- Yield (28-lb bu/acre) -----							
<b>ACR 2993</b>	37d <sup>z</sup>	175cde	303abcd	282	79	41	877cde
<b>ACR 75311</b>	60bcd	284bcde	321abcd	170	15	36	849def
<b>Allegiance</b>	84bcd	109de	310abcd	196	0	47	698fg
<b>FPP 7039</b>	194abc	436ab	185bcd	271	0	44	1,086ab
<b>Hunter</b>	abcd	533a	332abc	63	34	26	1,065ab
<b>Myakka</b>	53cd	275bcde	293abcd	173	0	21	796ef
<b>PRC 7-12</b>	0d	86e	199bcd	295	29	15	609g
<b>PRC 9-714</b>	0d	193cde	207bcd	295	0	29	695fg
<b>RPP 24226</b>	37d	272bcde	47d	423	0	41	779ef
<b>RPP 24272</b>	138abcd	143cde	164bcd	339	0	23	783ef
<b>Tom Cat</b>	55cd	525a	413ab	92	0	37	1,086ab
<b>Vanguard</b>	122abcd	321abcde	232abcd	167	0	29	841def
<b>XPP 6001</b>	113abcd	214bcde	410ab	248	5	11	990bcd
<b>2815</b>	36d	305abcde	279abcd	220	16	24	856def
<b>4288</b>	26d	191cde	506a	326	0	17	1,048ab
<b>7141</b>	102abcd	310abcde	78cd	391	0	42	880cde
<b>8302</b>	212ab	285bcde	324abc	206	0	53	1,027abc
<b>9325</b>	241a	349abcd	237abcd	232	0	34	1,059ab
<b>Brigadier (Control)</b>	88bcd	381abc	491a	206	0	34	1,165a
<b>P. value</b>	0.01	0.0007	0.01	0.06	0.52	0.81	0.0001
<b>Sig.</b>	**	**	**	ns	ns	ns	**

<sup>z</sup> Within columns, means followed by different letters are significantly different according to Duncan's Multiple Range Test at 5%.

\*\*Significance at  $P \leq 0.01$ . \*Significance at  $P \leq 0.05$ . ns Non-significance.



**Table 6. Quality categories for selected peppers varieties grown in Immokalee, FL. during spring 2011.**

<b>Variety</b>	<b>Lobules (Number)</b>	<b>Length ----- (in) -----</b>	<b>Width -----</b>	<b>Ratio</b>	<b>Thickness (in)</b>	<b>Color (Rating 1-7)<sup>y</sup></b>
<b>ACR 2993</b>	3.7	4.25abcd	3.28f	1.30ab	0.26	3.0b
<b>ACR 75311</b>	3.7	4.64a	3.34ef	1.40a	0.25	3.0b
<b>Allegiance</b>	3.7	3.71f	3.65abcd	1.02ef	0.27	4.0a
<b>FPP 7039</b>	3.3	4.25abcd	3.46def	1.14cdef	0.24	3.0b
<b>Hunter</b>	3.8	3.83def	3.68abcd	1.05ef	0.26	4.0a
<b>Myakka</b>	3.7	3.80ef	3.77a	1.02ef	1.42	4.0a
<b>PRC 7-12</b>	3.8	4.01bcdef	3.47cdef	1.16bcdef	0.25	4.0a
<b>PRC 9-714</b>	3.9	3.85def	3.58abcde	1.08ef	0.24	3.0b
<b>RPP 24226</b>	4.0	4.08bcdef	3.49bcdef	1.18bcde	0.25	4.0a
<b>RPP 24272</b>	3.7	4.15bcde	3.65abcd	1.14cdef	0.27	3.0b
<b>Tom Cat</b>	3.8	4.02bcdef	3.72abc	1.08def	0.27	4.0a
<b>Vanguard</b>	4.0	3.93cdef	3.75ab	1.05ef	0.26	2.0d
<b>XPP 6001</b>	3.7	4.34abc	3.38def	1.31ab	0.26	2.0d
<b>2815</b>	4.0	4.42ab	3.56abcde	1.24abcd	0.26	2.9b
<b>4288</b>	3.7	3.96cdef	3.57abcd	1.10def	0.26	3.0b
<b>7141</b>	4.0	4.01bcdef	3.62abcd	1.12cdef	0.25	3.0b
<b>8302</b>	3.9	3.69f	3.68abcd	1.00f	0.27	4.0a
<b>9325</b>	3.7	4.09bcdef	3.67abcd	1.12cdef	0.25	4.0a
<b>Brigadier (Control)</b>	3.4	4.45ab	3.49bcdef	1.27abc	0.24	2.2c
P value	0.08	0.0001	0.0001	0.0001	0.07	0.0001
Sig.	ns	**	**	**	ns	**

<sup>z</sup> Within columns, means followed by different letters are significantly different according to Duncan's Multiple Range Test at 5%.

\*\*Significance at  $P \leq 0.01$ . \*Significance at  $P \leq 0.05$ . ns Non-significance.

<sup>y</sup> 1 = light green and 7 = dark green.

**Table 7. Evaluation of biomass for selected peppers varieties grown in Immokalee, FL. during spring 2011.**

Variety	Pepper Biomass (g/plant)
ACR 2993	88.0
ACR 75311	99.3
Allegiance	102.3
FPP 7039	93.0
Hunter	70.3
Myakka	88.7
PRC 7-12	72.0
PRC 9-714	94.0
RPP 24226	113.7
RPP 24272	92.7
Tom Cat	78.5
Vanguard	99.7
XPP 6001	81.7
2815	92.7
4288	82.7
7141	97.0
8302	108.3
9325	100.0
Brigadier (Control)	92.3
P value	0.07
Sig.	ns

<sup>z</sup> Within columns, means followed by different letters are significantly different according to Duncan's Multiple Range Test at 5%.

\*\*Significance at  $P \leq 0.01$ . \*Significance at  $P \leq 0.05$ . ns Non-significance.

