Jalapeno Variety Evaluation

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Table 1. Summary of cultural practices used for Jalapeno variety trial during spring 2010.

Field History	
Location	Clewiston, FL.
Experimental Design	CRBD (4 reps)
Irrigation	Seepage
Plot size/Harvest	8.3 ft
Planting Date	17-February-10
Fumigation	K-Pam
Mulch	Black
Linear ft per acre	7,260
Bed Spacing	6 ft
Bed Height	9 in
Bed Width	36 in
No of Rows per Bed	2
Distance between rows	17 in
Row run	North–South
Distance between Plants	10 in
Plant Population	17,494
Harvest date	
First harvest	10-May-10
Second harvest	19-May-10
Third harvest	28-May-10
Planting to 3rd pick	14 week

Table 2. Sources of seeds

Variety	Seed Company
Capsico	Sakata
Centella	Enza Zaden
Compadre	Rogers
Magno	Sakata
RPP-22422	Rogers
RPP-22423	Rogers
Taos	Rogers
Tlaloc	Rogers
Tormenta	Grower Standard

Table 3. Summary of temperature and total rainfall during the spring 2010, Clewiston, FL.

Period	Temperature (⁰F)			Total rainfall (inch)
	Average	Min	Max	
Feb-10	57.4	45.2	72.2	0.4
Mar-10	61.7	48.9	75.3	8.6
Apr-10	71.3	60.8	83.1	7.2
May-10	79.0	68.8	91.3	3.1
Average/Total	67.4	55.9	80.5	19.3

Table 4. Marketable and unmarketable yield categories of first harvest for selected Jalapeno varieties grown in Spring 2010, Clewiston, FL.

Variety	Marketable Yield			Unmarketable
	Number 1	Number 2	Total	
	-------------------------------- (25-bu/acre) --------------------------------			
Capsico	256	49ab^Z	305	29
Centella	227	36bc	264	31
Compadre	321	2c	323	29
Magno	166	30bc	196	46
RPP-22422	242	78a	320	23
RPP-22423	261	86a	348	25
Taos	344	35bc	379	14
Tlaloc	284	79a	363	24
Tormenta	192	31bc	224	24
P value	0.24	0.0008	0.31	0.26
Sig	ns	**	Ns	Ns

^{Z} 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.
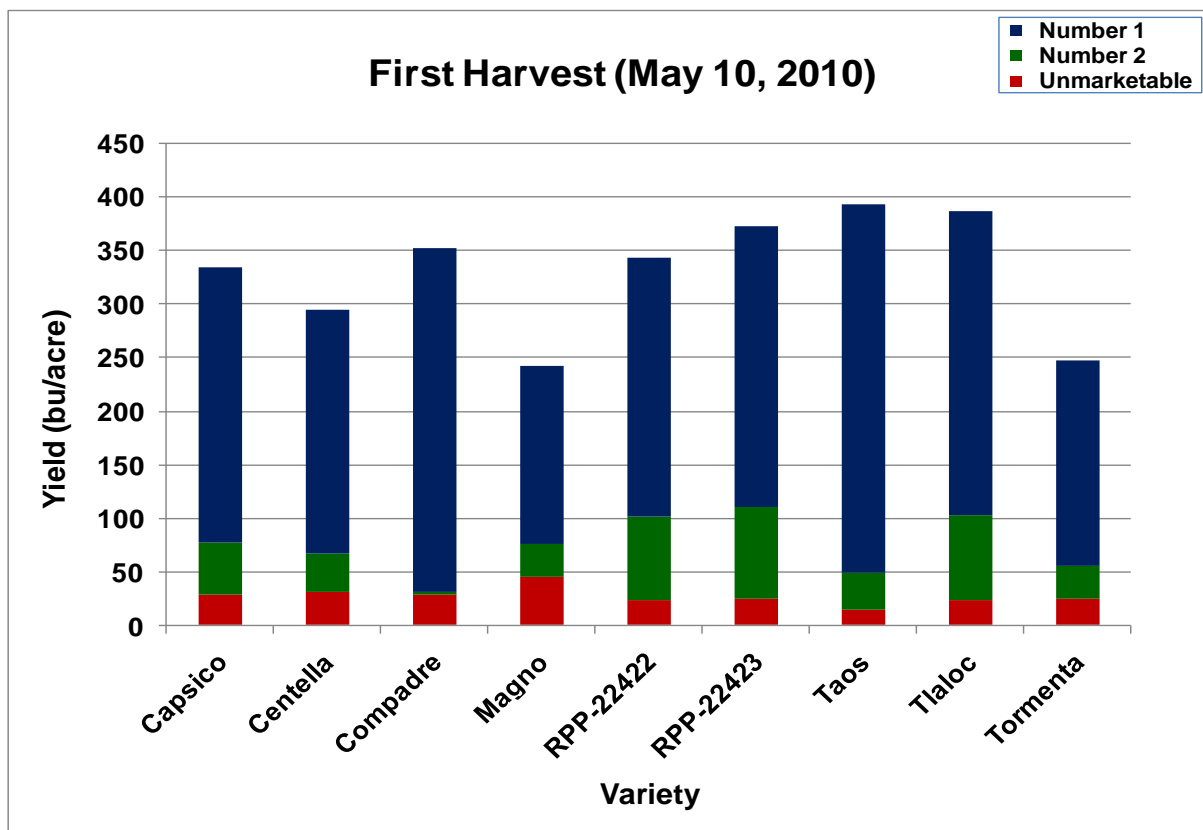
Table 5. Marketable and unmarketable yield categories of second harvest for selected Jalapeno varieties grown in Spring 2010, Clewiston, FL.

| Variety | Marketable Yield | | | Unmarketable |
	Number 1	Number 2	Total	
	------------------------------------ (25-bu/acre) ------------------------------			
Capsico	48c^Z	7	55c	44c
Centella	94bc	10	103bc	40c
Compadre	168ab	10	179ab	59abc
Magno	44c	14	58c	39c
RPP-22422	96bc	18	114bc	40c
RPP-22423	109bc	43	152abc	48bc
Taos	216a	21	238a	70ab
Tlaloc	161ab	50	211ab	50bc
Tormenta	138ab	19	157abc	79a
P value	0.001	0.08	0.01	0.006
Sig	**	ns	**	**

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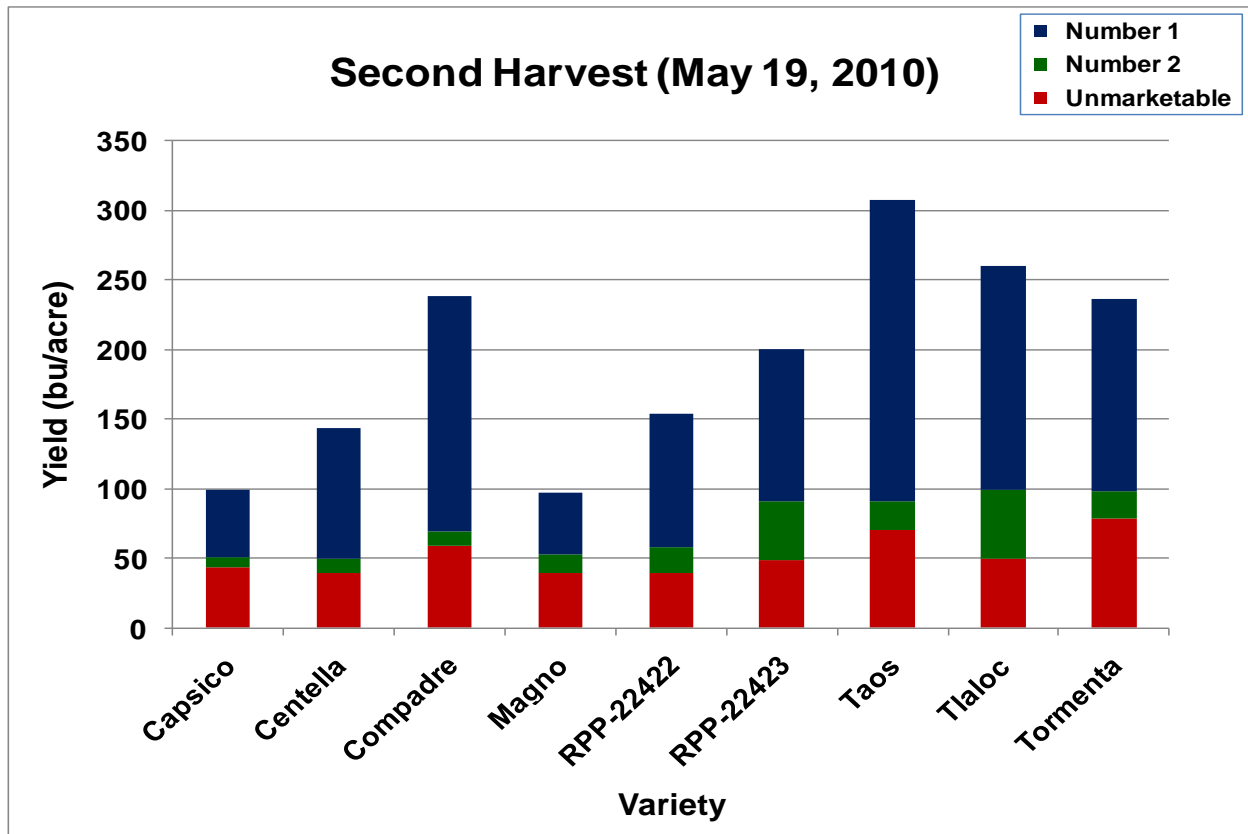

Second Harvest (May 19, 2010)

Table 6. Marketable and non-marketable yield categories of first and second harvest for selected Jalapeno varieties grown in spring 2010, Clewiston, FL.

Variety	Marketable Yield			Unmarketable
	Number 1	Number 2	Total	
	------------------------------------ (25-bu/acre) -------------------------------			
Capsico	304bc[Z]	56bc	360bc	73
Centella	321bc	46bc	367bc	70
Compadre	489ab	12c	502abc	88
Magno	209c	44bc	254c	85
RPP-22422	338bc	96ab	434abc	63
RPP-22423	370abc	129a	500abc	73
Taos	560a	56bc	617a	84
Tlaloc	445ab	129a	574ab	74
Tormenta	330bc	50bc	381abc	103
P value	0.02	0.0002	0.04	0.36
Sig	*	**	*	ns

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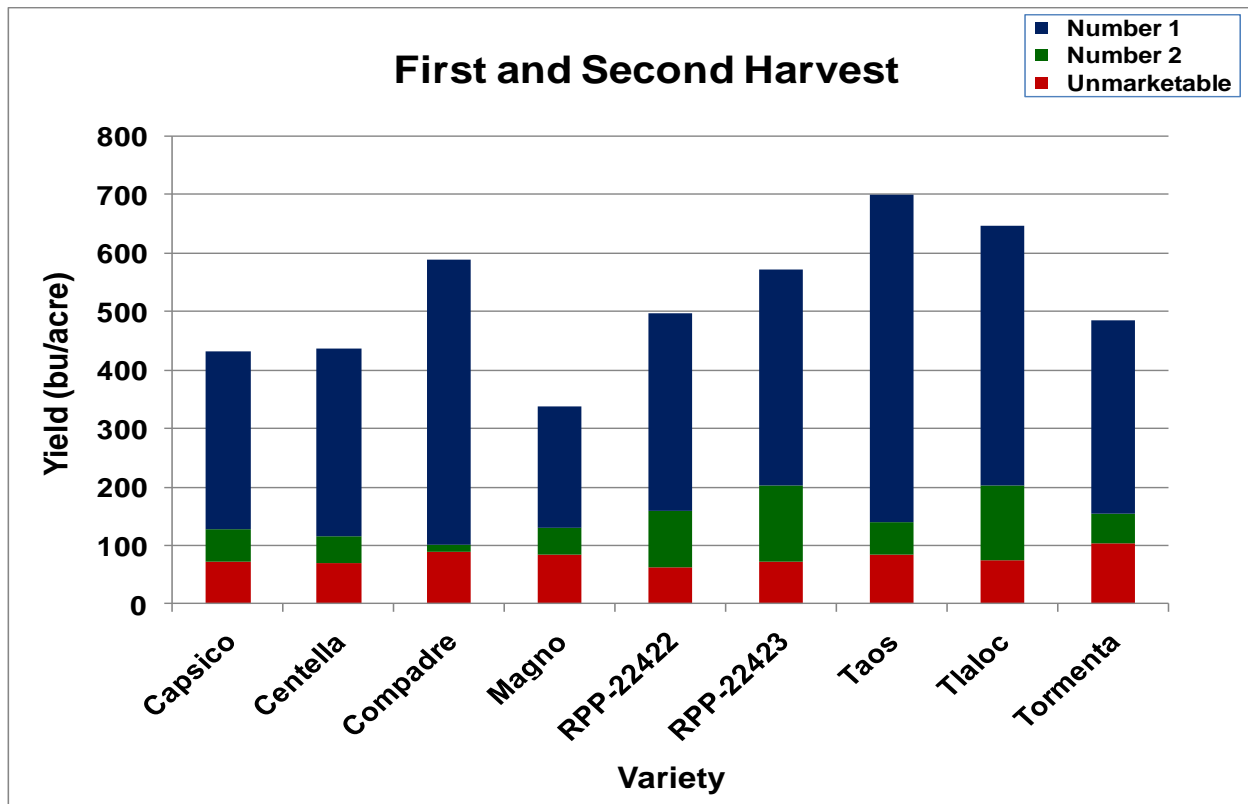
Table 7. Marketable and unmarketable yield categories of third harvest for selected Jalapeno varieties grown in Spring 2010, Clewiston, FL.

Variety	Marketable Yield			Unmarketable
	Number 1	Number 2	Total	
	------------------------------------ (25-bu/acre) ------------------------------			
Capsico	29	11b^{Z}	40	40
Centella	70	5b	75	40
Compadre	60	0b	60	39
Magno	44	15ab	60	36
RPP-22422	44	12b	55	37
RPP-22423	65	15ab	80	34
Taos	100	10b	109	61
Tlaloc	77	31a	107	57
Tormenta	82	13b	96	56
P value	0.10	0.04	0.14	0.11
Sig	ns	*	ns	ns

^{Z} Within columns, means followed by different letters are significantly different according to Duncan's Multiple Range Test at 5%.
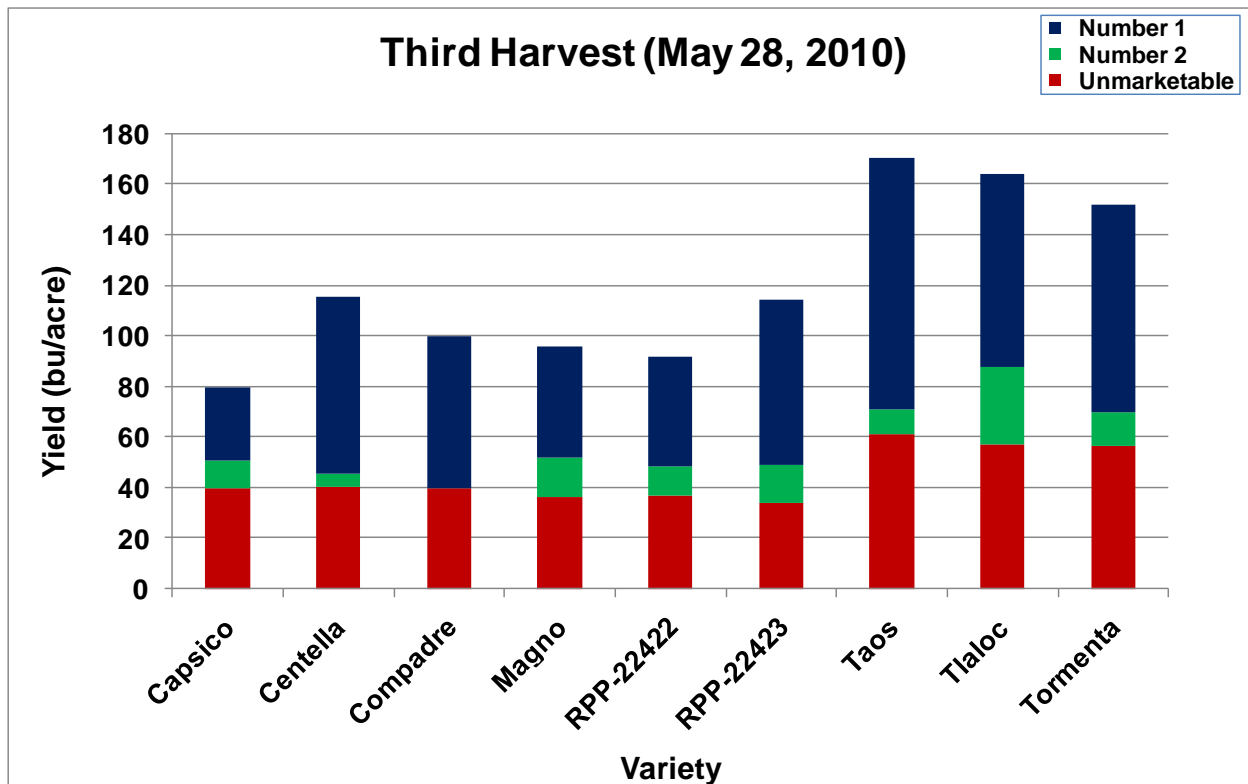**Significance at $P \le 0.01$. *Significance at $P \le 0.05$. ns Non-significance.

Third Harvest (May 28, 2010)

Legend: Number 1, Number 2, Unmarketable

Y-axis: Yield (bu/acre)
X-axis: Variety (Capsico, Centella, Compadre, Magno, RPP-22422, RPP-22423, Taos, Tlaloc, Tormenta)

Table 8. Marketable and unmarketable yield categories of total harvest for selected Jalapeno varieties grown in Spring 2010, Clewiston, FL.

Variety	Marketable Yield			Unmarketable
	Number 1	Number 2	Total	
	------------------------------- (25-bu/acre) -------------------------------			
Capsico	333bc^Z	67bc	400bc	112
Centella	391bc	51bc	442abc	111
Compadre	549ab	12c	562abc	128
Magno	254c	60bc	313c	121
RPP-22422	382bc	108ab	490abc	99
RPP-22423	435abc	145a	580abc	107
Taos	660a	66bc	726a	145
Tlaloc	522ab	159a	681ab	131
Tormenta	413bc	64bc	476abc	159
P value	0.02	0.0003	0.05	0.11
Sig	*	**	*	ns

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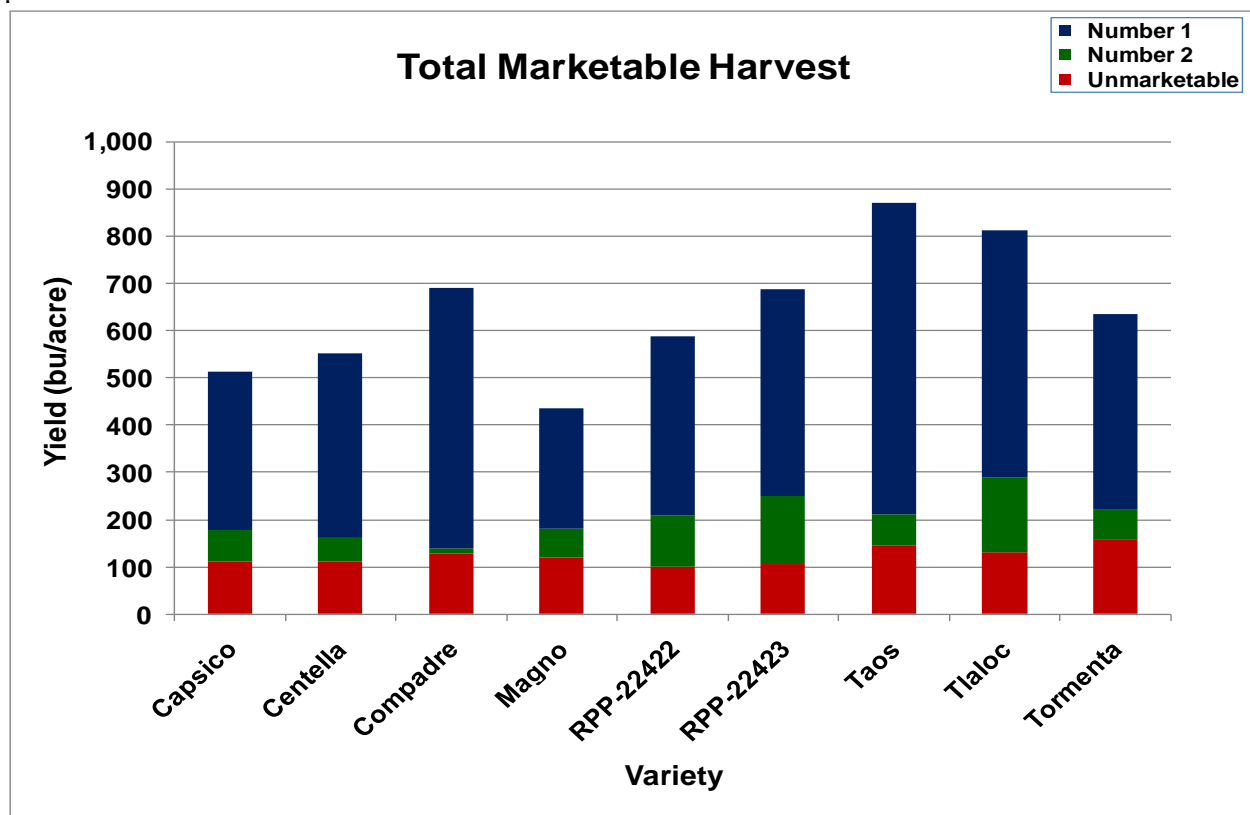**Significance at $P \leq 0.01$. *Significance at $P \leq 0.05$. ns Non-significance.

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Table 9. Bacterial spot evaluation for selected Jalapeno varieties grown in spring 2010, Clewiston, FL.

Variety	Bacterial Spot Rating[Y]		Severity of Bacterial Spot (%)		
	Apr 12	Apr 22	Apr 12	Apr 22	May 12
Capsico	0.6ab[Z]	3.8a	1b	42a	73a
Centella	1.1ab	1.8bcd	2ab	18bc	66ab
Compadre	0.9ab	1.1d	2ab	12bc	52cd
Magno	1.6a	4.3a	5a	44a	73a
RPP-22422	0.9ab[Z]	1.6bcd	2ab	10bc	65ab
RPP-22423	0.9ab	2.1bcd	3ab	15bc	60bc
Taos	0.5ab	2.4b	1b	18bc	39ef
Tlaloc	0.1b	1.3cd	0b	8c	46de
Tormenta	1.1ab	2.3bc	2ab	21b	32f

[Y]Bacterial spot ratings on a 0 to 5 scale, with 0 = no disease (immune), 1 = few bacterial spot lesions in lower canopy (very resistant), 2 = numerous spots in lower canopy, few in upper (moderately resistant), 3 = numerous bacterial spots in upper canopy, lower canopy heavily infected (moderately susceptible), 4 = heavy infection in both upper and lower canopy, lower leaves beginning to dehisce (susceptible), 5 = severe infection throughout canopy, most of lower canopy gone through leaf abscission (highly susceptible).

% Severity represents the percentage of the entire plant canopy affected by bacterial spot. This also takes into consideration the amount of leaf drop in the lower canopy incited by heavy bacterial spot infection.

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