



Research Report: Greenhouse Cucumber Variety Trial, 2010

By Becky Sideman, Extension Professor and Specialist. *Written January, 2011.*

Cultural Details: Seeded: 5/17/10, Transplanted: 6/1/10. Grown in-ground in a 30'x60' high tunnel in Durham, NH. in a randomized complete block design, 4 replicates, 4 plants per plot. Plants were spaced 24" apart in rows 5' between centers and were trellised to a single leader. One application of carbaryl to control striped cucumber beetle. Harvest period: June 28- August 13.

Cultivar*	Type	No. fruits per plant	% Not marketable	Yield (lbs) per plant	Powdery mildew	Mites	Comments
Genuine (JSS)	Slicer	27.3	13.3	13.7	1	0	
Green Finger (HM)	Slicer	<u>9.3</u>	<u>31.3</u>	<u>8.2</u>	0	0	Poor fruit set. Not parthenocarpic.
Saber (HM)	Slicer	30.5	17.2	12.8	1.3	0	
Tasty Jade (JSS)	Slicer (long)	26.7	21.2	15.4	1.3	0	
Tasty Green (S)	Slicer (long)	<u>15.8</u>	<u>31.5</u>	<u>8.6</u>	0	0.7	Poor fruit set.
Carmen (S)	Oriental	18.2	19.3	9.5	0	3.0	No spines.
Orient Express (H)	Oriental	31.1	16.2	16.7	0.7	0.3	
Orient Express II (S)	Oriental	28.4	18.7	15.9	1.7	0	
Ballerina (SW)	Pickle	37.3	13.5	<u>9.2</u>	0	2.5	
Diamant (JSS)	Pickle	27.1	9.2	<u>8.2</u>	0.7	2.7	Extremely spiny.
Vertina (JSS)	Pickle	42.8	11.7	10.5	0	2.7	
Diva (H)	Beit alpha	22.1	22.7	9.5	0	0.3	
Katrina (JSS)	Beit alpha	32.8	21.4	11.2	0	5.0	
Socrates (JSS)	Beit alpha	33.3	20.0	13.7	0	3.7	

Powdery mildew was evaluated on a 0-5 scale on 7/26/10, where 0 = no symptoms, 5 = sporulation evidence on entire surface of every leaf.

Mite damage was evaluated on 7/26/10, where 0 = no stippling or webbing evident, 5 = yellowing, stippling, and webbing was observed on all leaves.

*Seeds provided by or purchased from Harris Seeds (H), High Mowing Seeds (HM), Johnny's Selected Seeds (JSS), Seedway Seeds (SW) and Stokes Seeds (S).

For more info, please contact Becky Sideman at becky.sideman@unh.edu.

NH Agricultural Experiment Station - COLLEGE OF LIFE SCIENCES & AGRICULTURE



The Asian types were very nice for slicing. Some customers were not sure what they were, because they were not familiar with the long type. Carmen was a smooth and resistant to PM, but had a lot of mite damage. Orient and Orient II were very similar. Both had PM, but little mite damage.



Genuine and Saber looked like field slicers. Both had some PM but were quite tolerant to mite damage. Green Finger was a slicer that had poor fruit set (not parthenocarpic) and a lot of unmarketable fruit (scarring).



Tasty Green and Tasty Jade were intermediate in type between Asian and typical slicers. Tasty Green had much lower fruit set (and fewer marketable fruit) than Tasty Jade.



In general, the picklers were very high yielding and had very few unmarketable fruit. All were pretty susceptible to mites. Diamant's abundant spines made it look different than a typical pickler.



Beit alpha types have tender smooth skins, which are susceptible to wounding and scarring. This type had the highest percentage unmarketable. Katrina and Socrates had higher yields than Diva, but also more mite damage.