

2005 University of Delaware Pickle Variety Trials

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Introduction

The 2005 Pickle Variety Trials included eleven varieties from three participating companies: Harris Moran, Seminis Vegetable Seeds, and Nunhems USA. The two trials were planted in grower fields. Varieties were planted in three-row plots with 30 inch between row spacing. Varieties were replicated four times in each trial. Irrigation, fertility, insects and disease were managed conventionally by the cooperating growers.

Plots were harvested mechanically and the weight of harvested pickles was measured using a weigh wagon. A half-bushel sample from each plot was graded for size and quality. At the harvest of Trial 1, ten size 3A pickles were sampled from each plot to determine the length : diameter ratio for each variety.

Varieties Entered in the 2005 Delaware Pickle Variety Trail

Variety Name	Company
Sassy	Harris Moran
Feisty	Harris Moran
Classy	Harris Moran
Pershing Classic	Nunhems USA
Nun 5512 Classic	Nunhems USA
Nun 5513 Supreme	Nunhems USA
Lafayette Classic	Nunhems USA
EX 04501043	Seminis
XP 04506117	Seminis
Vlaspik	Seminis
Expedition (XP 04506116)	Seminis

Results and Discussion

The results of the two trials are presented in the following tables. Vlaspik, EX 04501043, and Expedition produced the highest marketable yields in the first trial and Expedition, EX 04501043, and Nun 5512 Classic produced the highest marketable yields in the second trial. The percent of crooks and nubs, which differed significantly among the varieties in the second trial, may be an indicator of relative susceptibility/resistance to downy mildew – which was well established in Delaware by the time the second trial was planted.

We noticed some difficulty in harvesting XP 04506117 mechanically, due to excessive vining.

Acknowledgements

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2005 University of Delaware Pickle Variety Trial I

Location: Stevens Farm, Hurlock, MD

Planted: May 31, 2005

Harvested: July 12, 2005 (42 DAP)

Plot Size: 356 x 7.5 ft

Variety	Yields in Bu/A		L/D Ratio ²	Percent of Each Grade ³								
	Total Yield	Marketable Yield ¹		Oversize	4A	3B	3A	2B	2A	1B	1A	Crooks & Nubs
Vlaspik	234 a	217 a	2.95 b	2.1	7.7	27.3 bc	37.8 a	13.9 cd	5.0 b	0.9 c	0.1 bc	4.8
EX 04501043	228 ab	213 a	3.01 b	0.0	7.7	28.8 ab	32.8 abcd	17.6 bc	5.3 b	1.3 bc	0.3 ab	6.1
Expedition ⁴	214 abc	198 ab	3.00 b	0.0	2.1	19.6 bcd	35.7 ab	28.6 a	6.2 b	0.8 c	0.0c	7.1
XP 04506117	210 abc	195 ab	3.14 a	0.0	7.4	27.0 bc	34.2 abc	17.0 bc	5.8 b	1.5 bc	0.0c	7.2
Nun 5513 Supreme	200 bc	180 bc	3.00 b	3.0	5.5	24.4 bcd	34.8 abc	19.7 bc	4.6 b	0.8 c	0.0c	7.2
Nun 5512 Classic	183 cd	171 bc	2.94 b	1.5	8.1	28.5 ab	29.1 cd	18.1 bc	6.3 b	2.8 ab	0.2 abc	5.6
Lafayette Classic	165 de	156 cd	2.95 b	0.9	6.6	28.9 ab	31.3 bcd	18.6 bc	7.3 b	1.8 bc	0.0c	4.6
Pershing Classic	158 de	140 d	2.79 c	4.4	6.6	26.4 bc	30.6 bcd	19.7 bc	4.7 b	0.9 c	0.0c	6.8
Sassy	139 ef	134 d	3.04 ab	0.0	6.78	17.4 cd	28.9 cd	30.2 a	10.8 a	2.3 abc	0.0c	3.6
Classy	113 fg	103 e	2.72 c	6.4	11.4	38.3 a	27.2 d	7.39 d	5.4 b	1.2 c	0.0c	2.7
Feisty	93 g	84 e	3.01 b	1.8	3.5	15.8 d	34.8 abc	21.1 b	11.2 a	3.7 a	0.5 a	7.6
LSD_{0.05}	31.3	28.3	0.111	NS	NS	10.35	6.30	7.20	2.92	1.50	0.32	NS
<i>p</i> -value	<0.0001	<0.0001	<0.0001	0.0632	0.1098	0.0079	0.0379	<0.0001	0.0002	0.0051	0.0386	0.1113

Means followed by the same letter are not significantly different from one another.

¹Marketable Yield=Total yield – Crooks and Nubs – Oversize

²Length : Diameter Ratio for 3A pickles

³Graded according to the following:

Oversize >2.06 inches in diameter

4A 2.00 to 2.06 inches in diameter

3B 1.75 to 2.00 inches in diameter

3A 1.50 to 1.75 inches in diameter

2B 1.25 to 1.50 inches in diameter

2A 1.06 to 1.25 inches in diameter

1B 0.88 to 1.06 inches in diameter

1A 0.38 to 0.88 inches in diameter

⁴formerly XP 04506116

2005 University of Delaware Pickle Variety Trial II

Location: Pond Farm (R. Carlisle), Ellendale, DE

Planted: July 25, 2005

Harvested: September 7, 2005 (43 DAP)

Plot Size: 449 x 7.5 ft

Variety	Yields in Bu/A		Percent of Each Grade ²							
	Total Yield	Marketable Yield ¹	Oversize	3B	3A	2B	2A	1B	1A	Crooks & Nubs
Expedition ³	261 a	213 a	0.0 b	31.3 a	34.4 a	12.2 c	3.5 cd	0.7 b	0.0	17.8 c
EX 04501043	227 ab	160 b	2.0 b	35.1 a	21.1 de	11.0 c	2.7 d	1.0 b	0.0	27.0 ab
Nun 5512 Classic	214 abc	158 bc	0.9 b	29.2 ab	25.9 cd	12.8 c	4.7 bcd	1.4 b	0.0	25.3 abc
XP 04506117	188 bcd	149 bc	0.0 b	36.6 a	24.5 cde	11.6 c	6.8 b	1.7 b	0.0	18.8 c
Sassy	206 bc	139 bcd	0.6 b	15.0 cd	27.2 bcd	19.3 b	4.9 bcd	0.8 b	0.0	32.3 a
Lafayette Classic	164 cde	123 cde	0.5 b	30.6 a	26.8 bcd	12.6 c	6.0 bc	0.9 b	0.0	22.7 bc
Nun 5513 Supreme	142 def	105 def	1.5 b	28.8 ab	28.2 abc	10.4 c	5.0 bcd	1.3 b	0.0	24.7abc
Vlaspik	124 efg	99 efg	0.5 b	15.9 cd	28.4 abc	21.6 ab	10.6 a	4.4 a	0.1	18.5 c
Feisty	109 fg	83 fgh	0.5 b	7.6 d	26.1 cd	25.2 a	12.0 a	2.0 b	0.1	26.6 ab
Pershing Classic	89 g	65 gh	0.9 b	20.9 bc	32.9 ab	13.6 c	5.3 bcd	1.4 b	0.0	24.9 abc
Classy	84 g	62 h	4.1 a	36.6 a	19.1 e	9.0 c	2.9 d	1.2 b	0.0	27.4 ab
LSD_{0.05}	51.2	37.0	2.1	9.05	6.79	5.40	2.75	1.62	NS	7.59
<i>p</i> -value	<0.0001	<0.0001	0.0140	<0.0001	0.0031	<0.0001	<0.0001	0.0053	0.2065	0.0129

Means followed by the same letter are not significantly different from one another.

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Oversize >2.00 inches in diameter

3B 1.75 to 2.00 inches in diameter

3A 1.50 to 1.75 inches in diameter

2B 1.25 to 1.50 inches in diameter

2A 1.06 to 1.25 inches in diameter

1B 0.88 to 1.06 inches in diameter

1A 0.38 to 0.88 inches in diameter

³formerly XP 04506116