



THE STATE UNIVERSITY  
OF NEW JERSEY

# **Grape Cultivars and the NE1020 Trial in New Jersey**

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# What is the NE 1020?

- A Multi-State Research Project
  - 22 participating states
  - Evaluation of cultivars and clones
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- Lessons,
  - Accomplishments, and
  - The Future

RAREC planting (South)	Snyder Farm planting (North)
<b>Sentinels</b>	<b>Sentinels</b>
‘Chambourcin’	‘Cabernet Sauvignon #8’
‘Vidal’	‘Vidal’
‘Merlot #3’	<b>Others</b>
‘Cabernet Sauvignon #8’	‘La Cresse’
<b>Others</b>	‘Marquette’
‘Barbera’	MN 1235 (MN 1235)
‘Lemberger’	MN 1200 (MN 1200)
‘Touriga Nacional’	NY 76.0 (NY 76.0 34’)
‘Tempranillo’	NY 81 (NY 81 34’)
‘Albariño’	‘Levy’
‘Malbec’	‘Merlot’ (Italian clone)
‘Petit Verdot’	‘Frontenac’
‘Vermentino’	‘Petit Verdot’

# Lessons:

Variability of Nursery stock quality

Initial variability can confound with cultivar effect

Our young, nimble industry will forge ahead quickly

Cultivars to test need to be novel and even risky

Expect losses

Nature in many forms can destroy your plans









**Phytotoxicity Ratings from NE-1020 Cultivar and Clone trial following application of Captan in tank mix with Danitol<sup>2</sup>.**

CV	Leaf		Fruit		Stem	
NY 81	11.0	a	7.4	a	10.1	ab
Chambourcin	10.4	ab	6.9	ab	10.5	a
MN 1235	9.3	bc	5.1	abc	8.7	abc
Petit Verdot	9.0	bcd	6.0	abc	9.5	ab
MN 1200	8.9	bcd	5.4	abc	9.9	ab
Marquette	8.1	cd	3.3	bc	8.3	abc
Frontenac	8.0	cd	3.9	bc	8.6	abc
La Crescent	8.0	cd	4.2	abc	8.9	abc
Vidal blanc	8.0	cd	3.4	c	7.1	c
Lemberger	7.9	cd	7.1	ab	9.6	abc
NY 76	7.8	cd	3.1	c	7.9	bc
Carmenere	7.5	d	3.3	c	8.3	abc

<sup>2</sup> Each value is the mean of 6 plots in a randomized complete block design on each of two days with three raters on each day. Means with no letters in common are significantly different at  $\alpha=0.05$  according to Tukey's HSD.

**DO NOT** tank mix Captan with any oil or apply near time of application of any oil, including any oil emulsion formulations.



# Accomplishments:

Vineyard at RAREC indicates some strong winners

# Survival of grape vines in the NE1020 cultivar trial at Rutgers Agricultural Research and Extension Center, Bridgeton, NJ

Cultivar	Vine survival <sup>z</sup> (%)
Chambourcin <sup>y</sup>	100 A
Lemberger	94.6 A
Vidal <sup>y</sup>	94.6 A
Petit Verdot	76.2 AB
Touriga Nacional	61.8 B
Albariño	56.6 BC
Barbera	24.5 C
Merlot	24.5 C
Malbec	2.3 D
Cabernet Sauvignon	0 E
Tempranillo	0 E
Vermentino	0 E

<sup>z</sup> Means with no letters in common are significantly different at  $\alpha=0.05$ .  
<sup>y</sup> Indicates sentinel (i.e. grower standard) cultivar.

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Vineyard at RAREC indicates some strong winners

‘Lemberger’ and ‘Petit Verdot’ have survived tough winter conditions as well as our standards ‘Chambourcin’ and ‘Vidal’.



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Vineyard at RAREC indicates some strong winners

Rutgers Italian Clones - These clones were collected by Rutgers and NJ wine industry personnel in Trentino Alto-Adige over 25 years ago.

They have been cleaned of viruses and included into the National Clean Plant Network





‘Nebbiolo’

# Future Plans:

Remove original NE-1020 grape cultivar trial block and renovate for replanting.

Plant new trials with emphasis on screening cold hardy and disease resistant cultivars.

Initiate separate trials for:

1. Broader scale screening of interesting novel identities
2. Evaluation of promising cultivars in larger plantings to compare wines