





Virginia's Forgotten Indigenous Wine Grapes

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Introduction

- An indigenous viticulture of grapes suitable for wine making evolved in Virginia in the late 18th into the 19th centuries without intervention by government, academia or industry.
- Key historical figures included Col. Theodorick Bland, Daniel .N. Norton, and Jacob Cunningham.
- Key varieties included Red Bland, Norton's Virginia Seedling, and Cunningham Prince Edward.
- Historical information helps constrain the origin of these pre- Green-Revolution varieties so modern analogs can be bred.
- Virginia's flora provides enormous opportunity to build a truly indigenous, sustainable, modern viticulture following these historical clues.

Virginia Grapes: Vitis vinifera

• Vitis vinifera is the Latin name for European grapes, including all the common industrial wine grapes. It is NOT NATIVE to Virginia. • Vitis vinifera now makes up the vast majority of grapes grown in the state. • Vitis vinifera failed in the eastern USA prior to the Green Revolution after WWII because until the pesticide of that era were developed it could not be kept alive long enough to produce profitably. Today it is grown here as a fashion statement.

"Big 5" Wild Virginia Vitis (grapes)

• Vitis cordifolia – the winter grape

• Vitis æstivalis – the summer grape

• Vitis cinerea – the opossum grape

• Vitis labrusca – the fox grape

• Vitis rotundifolia – the muscadine grape

Vitis cordifolia (winter grape)





- Best at or after fall frost
- High sugar and acidity (very sour)
- Phylloxera (root louse) resistant
- Airy open cluster reduces rot and grape berry moth infestation
- Downy mildew major endemic disease problem
- Strange, strong, herbaceous flavor decreases in hybrids

Vitis æstivalis (summer grape)



- Ripens late September
- High sugar and moderate acidity (sour)
- Phylloxera (root louse) resistant
- Dry, pulpy fruit is not attractive to bugs
- Mostly resistant to diseases, tolerates drought and low soil pH
- Most neutral flavor of the local grapes best for wine



Vitis cinerea (opossum grape)





- Ripens after frost
- Very high sugar and high acidity (sour)
- Phylloxera (root louse) resistant
- Tiny berried fruit is not attractive to bugs
- Mostly resistant to diseases
- Second most neutral flavor of the local grapes – good for wine
- Often misidentified as *Vitis riparia*



Vitis labrusca (fox grape)





- Ripens early September
- Low sugar and low-moderate acidity
- Phylloxera (root louse) susceptible
- Small clusters of few large berries that drop
- Mostly disease resistant
- Very strong, musky, petroliferous flavor and aroma is a dominant trait



Vitis rotundifolia (muscadines)





- Ripe at fall frost
- Moderate sugar and low acidity (sweet)
- Phylloxera (root louse) resistant
- Small clusters ripen unevenly
- No serious disease problems
- Strong, musky, petroliferous flavor can be ameliorated by hybridization



History of Indigenous Wine Grapes in Virginia









Col. Theodorick Bland (March 21, 1741 – June 1, 1790)

• Found a good grape on the Virginia Eastern Shore in the late 1700's.





The 'Red Bland' grape is extinct, but was popular and moved quickly up the James and Appomattox Rivers.

Dr. Daniel Norborne Norton (1794-1842)

 Used the Red Bland grape to breed his 'Virginia Seedling' grape at his Magnolia Farm in Richmond ca. 1820.

James River

Eastern Shore

Bland's Plantations Appomattox River

Lunenbur

Norton's Magnolia Farm

Cumberland-



 'Norton's Virginia Seedling' grape, now known as 'Norton' was popular up to Prohibition and is now enjoying a return to popularity. It is Virginia's most disease resistant wine grape.

Norton's Time in Amherst

Dr. Norton's mother, Catherine Bush, remarried to John Ambler after John Hatley Norton's death. Amherst County history buffs will immediately recognize the Ambler name as a long standing one in the county. Dr. Norton's stepfather gifted Glenambler plantation along modern day Father Judge Road to Dr. Norton's half-brother John Jacquelin Ambler at JJ's coming of age, and also owned Saint Moor plantation. Dr. Norton managed Glenambler for John Jacquelin during his tour of Europe during 1823 to 1825.



P.S. I shall be able in my next to say something about your farm in Amherst.



Jacob Cunningham & Charles Woodson

 Found seedlings of the Red Bland in Prince Edward County ca. 1800 which were sent to NY by Norton.

Bland's Plantations • Norton's Magnolia Farm **Appomattox** River James River Cunningham's Farm Woodson's 🗳

Enargia conte



 'Cunningham' and 'Woodson' were grown by Samuel W. Venable of Hampden Sydney College fame. The 'Cunningham' survives today in Europe and Brazil.

Cunningham as a Clue

- Described by Hedrick & Munson as a "bourquiniana" type which are now believed to be Vitis æstivalis X Vitis vinifera.
- A description in the Farmer's Register from 1835 by CharlesWoodson states:
 - "The Cunningham grape is quite a new kind. The parent vine, though now large, is but young. It sprang up in a corner of Mr. Jacob Cunningham's garden, and is (to almost a moral certainty) a descendant of the Bland grape, which had been raised there for many years. In all its most striking qualities and appearance it resembles the Bland.

It is of large growth, the leaves and bark being nearly identical to the Bland."

 This description strongly suggests Cunningham is a self-pollinated seedling of Red Bland and is therefore direct, living, evidence of Norton's seed parent.



The Origin of Norton

- D.N. Norton reported in published letters of creating his seedling by using the hybridization methods of Mr. Knight on flowers of Bland and pollen from Pinot Meunier.
- If Cunningham is a self-pollinated seedling of Bland, and it is also a bourquiniana type of Munson (*æstivalis* X *vinifera*), then Bland was too, and the heavily *æstivalis*-dominated character of the Norton grape and vine require that the Bland flowers D.N. Norton emasculated were pollinated by wild male *æstivalis* and <u>not</u> Pinot Meunier as he reported.
- Knight's methods do not discuss protecting flowers using bags, so such a cross is possible, if not likely, because emasculated flowers only become pollen receptive a few days after emasculation.

• Norton = (æstivalis 1 X vinifera) X æstivalis 2

Other Virginia Native Hybrids

Beaverdam Ronk's Blue Grape
Grape Carter's Favorite • Henrico Bailie Grape Clarke's Grape • Owen's White • Willis' Large Black • Pale Red Virginian Early Black Summer Grape • Prolific Chicken Grape Monstrous Fox Grape Large Sloe

All of these varieties are extinct and were listed in Prince's 1830 Treatise on the Vine. Some were clearly æstivalis and labrusca hybrids, some were wild, and others were of uncertain affinity.

A Texan With a Plan: Thomas Volney Munson (1843-1913)



Foundations of American Grape Culture

T. V. Munson, D. &c.Published 103 years ago this year: Munson's "Foundations" - 1909

Munson's Advice

... Moreover, our native species excel in many points the Old World grapes. Some have rare delicious flavors unknown in the Vinifera varieties, others great size of cluster, others very large berries, others small and few seeds, nearly all great vigor and resistance to disease, adaptability to a most variable climate, and our experience clearly shows that all the species can be intermingled at will of the intelligent hybridizer. ..."

T.V. Munson, Foundations of American grape Culture, 1909, p. 140.

Today at Chateau Z Vineyard looking east "back in time" the intermingling continues...



Named Chateau Z Vineyard Varieties as of September 2013

Ambers 03-1-1 'CordiCab' Ambers 03-2-1 'Chambourcin de l'hiver' Ambers 03-2-3 'Farinée Chambourcin de l'hiver' Ambers 04-3-2 'AuroriCord' Ambers 04-4-15 'Sevval Noir de l'hiver' Ambers 04-4-39 'SeyvalCord Producción' Ambers 04-4-44 'SeyvalCord d'élevage' Ambers 04-6-3 'Teddy's 1/4-20' Ambers 04-7-28 'FritzCord 28' Ambers 04-7-43 'FritzCord 43' Ambers 04-7-58 'FritzCord 58' Ambers 04-7-64 'FritzCord 64' Ambers 04-7-67 'FritzCord 67' Ambers 05-12-1 'Chambourcin de l'hiver de piste de chariot' Ambers 05-18-1 'De Lakemont de l'hiver' Ambers 05-19-1 'Michelle Yoder' Ambers 05-27-1 'Five Forks' Ambers 05-43-1 'MinnTot Blanc' Ambers 05-43-3 'MinnTot Noir' Ambers 05-43-5 'MinnTot 5' Ambers 05-46-1 'Chambourcin de l'hiver de l'ouest du champ' Ambers 05-54 'WiggiViv 1-10' Ambers 05-8-3 'CordiMourv' Ambers 06-8-5 'LongiFront #5' Ambers 06-8-8 'LongiFront #8' Ambers 06-14-3 'Anthony Paul Ambers' Ambers 06-33-2 'AestiWurz' Ambers 06-35-2 'Ika Gottlieb' Ambers 06-41-1 'Jingle Bells' Ambers 06-42-4 'Steve Broady' Ambers 06-46-3 'The Z Bomb' Ambers 06-47-1 'Amherst femme 1' Ambers 06-47-2 'Amherst femme 2' Ambers 06-47-4 'Amherst androgyne'

Ambers 06-49-3 'ArmloJeff aestival' Ambers 06-55-4 'Ellison's Excitement' Ambers 06-59-6 'LindDatt Rouge' Ambers 06-59-9 'LindDatt Blanc' Ambers 06-62-3 'Miakota' Ambers 06-65-3 'LindlBic' Ambers 06-66-2 'Debbie Van Schyndel' Ambers 06-66-11 'Rayon d'Colorado' Ambers 06-67-1 'Big Red' = 'Grande Rouges' Ambers 06-67-4 'Red Seyval' = 'Seyval Rouges' Ambers 06-67-8 'Light Fruit' = 'Fruit Lumière' Ambers 06-67-10 'Nice Leaf' = 'Feuille de Nice' Ambers 06-68-1 'Z Blanc' Ambers 06-70 the 'Tres Hermanas': Ambers 06-70-1 = 'Red Tip' = 'Rouge Pointe', Ambers 06-70-6 = 'Luna Plena', Ambers 06-70-15 = 'Green Pomegranate' = 'Vert Pomme Grenade' Ambers 06-72-4 'Munscato' Ambers 06-74-1 'Appomattox' Ambers 06-78-8 'Susie Schrock' Ambers 06-79-10 'Aestiwaba' Ambers 06-82-1 'R.W. Martin' Ambers 06-89-1 'Lorena Yoder' Ambers 06-92-1 'estivale Suffolk rouges' Ambers 06-92-2 'New Bland' Ambers 06-104-1 'Daniel Kasper' Ambers 06-104-2 'Thomas Kasper' Ambers 06-110-2 'WiggRod' Ambers 06-120-4 'Carol Mae Ambers' Ambers 07-50-2 'GaertVillNo Blanc' Ambers 07-50-5 'GaertVillNo Noir' Ambers 07-62-12SL 'Z Aestiseedless' Ambers 07-100-3 'UnConcord'

Ambers 07-101-5 'Purple Jumbo' Ambers 07-110-2 'Floral Blanc' Ambers 08-13-1 'Indiglo' Ambers 08-173-2 '1095Sprit' Ambers 08-195-1 'Haxall' Ambers 08-231-1 'SunZehn' Ambers 09-4-2 'Eliza Call' Ambers 09-7-3 'LindRayDel'

The End

