Texas AgriLife Extension Service

Texas PD Notes

OCTOBER, 2010 VOLUME 6 ISSUE 3

'Victoria Red' Scheduled for 2011 Release– Jim Kamas

The University of Arkansas, Texas AgriLife and Tarkington Vineyards are proud to announce the pending release of a Pierce's disease tolerant grape variety to be named 'Victoria Red'. Evaluated as Arkansas 1475, 'Victoria Red' was bred in 1971 and is the result of a cross between Ark 1123 and 'Exotic'. Although its paternal parent ('Exotic') is purely *Vitis vinifera*, the female parent is a derivation of largely French-American Hybrids produced in France in the late 1800's. While neither of the parents exhibit resistance or tolerance to Pierce's disease, there are several ancestors within the complex lineage of Ark 1123 that have repeatedly been shown to exhibit sustained field tolerance to *Xylella fastidiosa*. Tolerant ancestors include 'Villard Blanc' (S.V. 12-375), 'Jacquez' ('Black Spanish', 'Lenoir'), 'Herbemont', as well as the native Texas species *Vitis berlandieri*.

Clusters of 'Victoria Red' are attractive, large, and often long. Average cluster weight at Tarkington Vineyards near Victoria exceeded one pound

The most significant characteristic of 'Victoria Red' is its sustained health, vigor and productivity in Coastal Texas, an area of the United States with extremely high Pierce's disease pressure. It is a seeded grape with bright red skin color and large, attractive clusters. The skin is tender and resists cracking at maturity due to rainfall. It has a primarily neutral flavor.

The original plant was selected in 1974 by James N. Moore from a seedling field at the University of Arkansas Fruit Research Station, Clarksville, AR. A single, three-vine plot was established at the University of Arkansas Fruit Research Station, Clarksville in the summer of

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Additional Articles Contributed by Members of the Texas Pierce's Disease Research and Education Program

Inside this issue:

For Pierce's disease diagnostic services, contact the Texas Plant Disease Diagnostic Lab at http://plantclinic.tamu.edu

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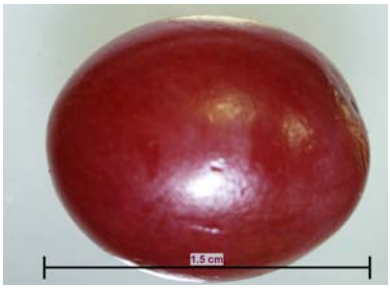
Victoria Red Scheduled for 2011 Release, cont.

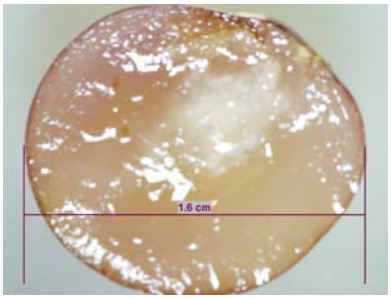
1975. In 1984, all vines were frozen to the ground, and an additional three-plant plot was established; however the young vines were never able to establish or fruit due to cane and bud damage. In 1994 the selection was discarded after being completely killed from winter injury.

Hardwood cuttings of Ark. 1475 were sent to Texas A&M University in 1981, and were then sent to a private vineyard owned by Friench and Martha Tarkington, Victoria TX . This location is approximately 64 km (40 miles) from the Gulf of Mexico and has very intense Pierce's disease pressure. Vines at this location were vigorous and productive for twenty years while all other susceptible varieties died rapidly from PD. Vines were established both as own-rooted vines and grafted on Champanel rootstock. Own-root vines did not survive however, and were thought to be killed by cotton root rot which is common in the Victoria area and had been previously diagnosed as killing grapevines at this site

Grafted vines were maintained at this site from 1983-2004.

Both cluster size and berry size were outstanding in Victoria with clusters averaging 477 grams and berries averaging 8 grams. At the Victoria evaluation site, 'Victoria Red' averaged 9.1kg per vine on 8' spacing in the row (20 lbs per vine or roughly 6 tons per acre). Average budbreak date was March 13th (about one day behind 'Champanel'), average bloom date was April 20th, and typical harvest (using table grape parameters at 18ºBrix) was early





Typical Skin and Flesh Color of 'Victoria Red'

July. After 20 years of vigorous growth and production, vines at the Victoria site died in 2004 from torrential rainfall from Hurricane Claudette. Vines were re-propagated in 2006 and are once again productive in Victoria.

Yield and fruit size were also evaluated in Stephenville by Dr. Larry Stein in the early 90's where it was vigorous and productive. Other susceptible cultivars died from PD in that evaluation. Yields and fruit size of 'Victoria Red' were also impressive in Stephenville, but were not as large as at the Victoria planting.

'Victoria Red' is typically a two seeded berry with an occasional third seed trace. In addition to yield and quality potential, 'Victoria Red' has a loose cluster architecture which appears to make it resistant to bunch rot organisms common on more tightly clustered varieties. A major limitation of this variety is its lack of cold hardiness as it routinely suffered cane and trunk injury in West-Central Arkansas. It is recommended for trial planting across the deep and mid-southern United States in zone 7b or warmer.

Victoria Red' is recommended primarily as a fresh-fruit cultivar for on-farm and local-market sales in USDA hardiness zones 7b or warmer. It has however ripened in excess of 24ºBrix, making it a potentially valuable neutral blending wine grape for high PD risk areas.

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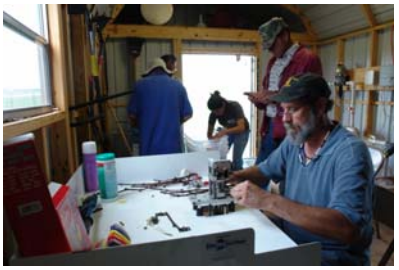
Availability of 'Victoria Red'

As was noted earlier in this newsletter, all vines of Victoria Red were lost at Tarnington Vineyard in 2004 due to Hurricane Claudette. While propagated and more widely distributed in the mid 80's, most other plantings were lost to causes other than Pierce's disease. Without a doubt, the continued propagation and support of this grape by Friench and Martha Tarkington are wholly responsible for this new variety not being lost for posterity. Because of its limited, but free distribution in the 1980's, 'Victoria Red' will not be patented, no royalties will be collected, and it is being released to the public domain.

While this new variety has recently been propagated and established in larger experimental plantings, propagation material for 'Victoria Red' is quite limited. Rather than further delay the release, it was jointly decided by all sponsors that we proceed as best we can. This coming year, rather than distribute cuttings, we plan on bench grafting vines on either 1103P or 5BB rootstock. This way each dormant bud may be used to produce a viable new vine. While we are proceeding with formal release and propagation, it has not yet been decided on the method by which nurseries or individuals can obtain plant material of this new variety. The Texas Pierce's Disease Research & Education Program's Grower Advisory will help determine priorities and policies.

<u>Complete information on plant availability will be published in the December Edition of Texas PD Notes.</u>



'Victoria Red' vines will be propagated on 1103P and 5BB rootstocks

Pre-Proposals Submitted for 2011-2012 APHIS Funding Cycle

In preparation for the 2011-2012 funding cycle, the Texas PD Research & Education Program issued a call for pre-proposals for new and continuing projects. The announcement was made in September with an October 18 due date. Pre-proposals will now be evaluated independently by the Texas A&M AgriLife PD Research and Education Program Administrative Team; PPQ plus the Texas Department of Agriculture; and, the Texas PD Grower Advisory Board. It is anticipated that invitations to submit full proposals will be announced by the week of Nov. 15th with a tentative due date for full proposals being mid-December. The on-going financial support of APHIS has been instrumental in helping mitigate the negative impact of PD on Texas vineyards while seeking more sustainable PD control mechanisms for the future. The on-going financial support of APHIS has been instrumental in helping mitigate the negative impact of PD on Texas vineyards while seeking more sustainable PD control mechanisms for the future.