

Clean nursery stock of grape hybrids with Pierce's disease tolerance.

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Several plant viruses can infect grapevines, reducing yield, maturity date, and fruit quality for the life of the vines. Symptoms may not be obvious, so propagation from infected vines can spread viruses for centuries. Therefore, viruses in grapevines cost growers lots of money. Viruses can also reduce grafting and rooting success in nurseries.

Even if few plants are infected at planting, several important viruses have insect or nematode vectors that spread viruses to adjacent healthy vines. Therefore, clean planting stock is a good investment. The reality is that clean-up often takes 4 to 5 years, and increase must begin with very few plants.

USDA funding to the National Clean Plant Network for Grapes permitted Foundation Plant Services at University of California-Davis to clean up 15 hybrid grape varieties submitted in 2010 and 2012 by Texas A&M AgriLife Extension Service. Because only a handful of clean plants is available initially, and the first five varieties were distributed to just two nurseries in 2014.

Clean starter plants of varieties Black Spanish (Lenoir), Blanc du Bois, Lomanto, Miss Blanc, and Orion were distributed by FPS in January 2014 to two California nurseries that do business with grape growers in Texas and the southeastern U.S. These nurseries can produce nursery stock under the phytosanitary guidelines of the California Department of Food and Agriculture, but there is no comparable phytosanitary capacity in southern states. One year after the initial release for nursery increase, any nursery may request clean plants of these five varieties from FPS to begin additional increases (Table 1).

Mist propagated plants (MPPs) are possible 6 months to 1 year from the order date. One-year old own-rooted field-grown vines or grafted vines must be ordered 2 or 3 years before growers are ready to plant. Another reality: for new grape variety inventories, nurseries often wait for grower orders before starting production. Plan ahead.

Nursery negotiations are underway for initial disbursement of two more varieties that are ready to increase in 2015. Clean-ups of the remaining eight varieties are expected to be completed in 2017.

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Other nurseries may produce clean nursery stock of grape hybrids if there is demand.

Table 1. Clean Pierce’s disease-tolerant grape nursery stock originating at FPS UC-Davis if ordered well in advance, as of December 4, 2014 (subject to nurseries decisions, production and additional testing).

Nursery	Grape hybrid							
	Blanc du Bois	Black Spanish (Lenoir)	Miss Blanc	Lomanto	Orion	Favorite	Breeding line C30-5-1	8 others ^b
Novavine, Santa Rosa, CA	MPPs ^a 2017?; grafted 2017	MPPs 2017?; grafted 2017	Waiting for grower requests	Waiting for grower requests	Waiting for grower requests	Negotiating initial placement		Initial placement in 2017?
Vintage Nurseries, Wasco, CA	MPPs 2015; grafted 2017	MPPs 2015; grafted 2017	Waiting for grower requests	Waiting for grower requests	Waiting for grower requests	Negotiating initial placement		Initial placement in 2017?
Foundation Plant Services, UC-Davis ^c	Dormant cuttings 2015	Dormant cuttings 2015	Dormant cuttings 2015	Dormant cuttings 2015	Dormant cuttings 2015	Dormant cuttings 2016		Dormant cuttings 2018
Florida A&M University							Variety name pending	

^aMPPs = mist propagated plants, small own-rooted green

^bA24-5-6 (variety name pending), Ben Hur, Mortensen Hardy, Phoenix, Victoria Red (tested as breeding line Arkansas 1475), Villard Blanc, Herbemont, breeding line Arkansas 1400. See <http://www.grapes.okstate.edu/PDFs/advanced-training/virus-problems-overview> pages 54-55 for other varieties in the pipeline for midwestern and eastern growers.

^cVery limited numbers are best used by nurseries to establish clean mother blocks for certified production.