Subject: Grape Notes, Vol. 11, No. 4, May 20, 2016 From: Sonia Schloemann <sgs@umext.umass.edu> Date: 5/20/16, 9:01 AM To: umassfruit@umass.edu



Good morning,

Please find attached the excellent and much anticipated 2016 Grape Disease Management opus from Dr. Wayne Wilcox. Below I've excerpted the section UMass Extension

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on copper/sulfur sensitivity of Cold Climate cultivars.

~ Sonia

NEW FINDINGS: FUNGICIDE SENSITIVITIES OF NORTHERN GRAPE CULTIVARS Wayne Wilcox, Cornell Univ.

The development of a several new cold-hardy grape cultivars has expanded the geographical boundaries of commercial grape production and brought new questions to the associated viticultural community at large, where experience with these cultivars is generally limited at best. In terms of disease management, there have been a few surprises (who knew Marquette was so susceptible to anthracnose until there were widespread plantings?) and a few basic questions without clear answers. One of these is cultivar tolerance to several common fungicides that are used without problem on *V. vinifera* cultivars but which can cause varying levels of injury on certain natives and hybrids. Of particular interest are copper, sulfur, and the DMI difenoconazole (Revus Top, Quadris Top, Inspire Super), pertaining to some largely obvious issue that include resistance management, organic acceptability, efficacy, and cost.

Recently, my colleague Dr. Patty McManus at the University of Wisconsin published the results of a study that she initiated on this topic in 2012, in which she examined 10 of these cultivars in field trials where a few hybrids were included for comparison. The long version is a must-read for current and potential growers of these grapes and those who advise them, most of whom I hope are already aware of it from the February 2016 newsletter of the Northern Grapes Project: http://northerngrapesproject.org/wp-content/uploads/2016/02/NG-News-Vol5-I14-Feb2016.pdf

For those who may have missed it and are interested, a very brief synopsis of the take-home conclusions:

- Copper. Brianna was deemed sensitive enough that it should not be treated with fungicides containing copper. It was recommended that copper 16 use be restricted to one or two sprays per season on Frontenac, Frontenac gris, LaCrescent, Leon Millot, Maréchal Foch, Marquette, and St. Croix. There were no apparent problems on La Crosse, MN1220, Noiret, NY76, Petite Pearl, Valiant, or Vignoles.
- Sulfur. Patty and colleagues concluded that Brianna, Leon Millot and Maréchal Foch should not be treated with sulfur (the sensitivity of Maréchal Foch and its sibling Leon Millot was already known, so the injury that developed in these trials attests to the accuracy of the results in general). They also recommend that sulfur use be restricted to one or two sprays per season on LaCrescent and St. Croix. Frontenac, Frontenac gris, La Crosse, MN1220, Marquette, Noiret, NY76, Petite Pearl, Valiant, and Vignoles we OK.
- Difenoconazole. Only Noiret showed occasional injury, consistent with observations of minor injury on this cultivar in NY. All of the others were OK. (Note that in limited observations in NY after Revus Top was first released and this issue hadn't yet been recognized, damage also was observed on Brianna and minor damage was observed on St. Croix).

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-Attachments:-

2016 Grape Disease Control_M.O._Wilcox_reduced file size.pdf 1.2 MB