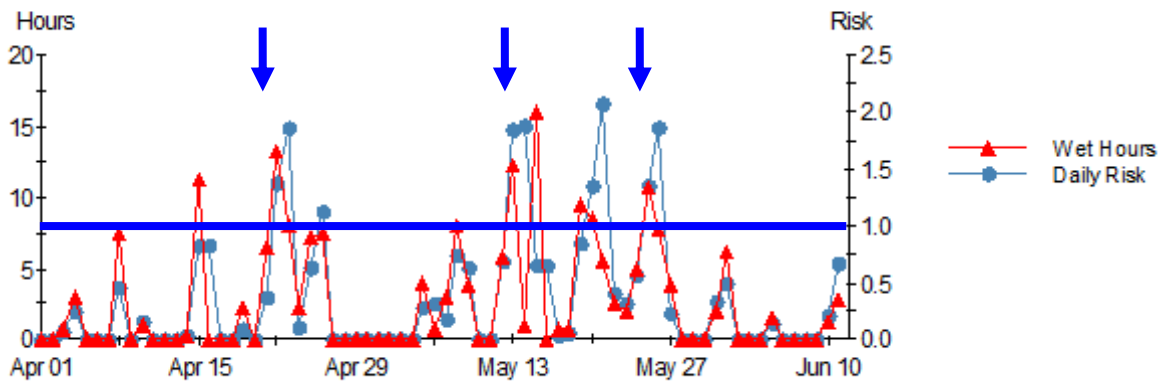


2011 Grape Disease Incidence (SpecWare 9 Pro disease models) in Rocheport, Missouri

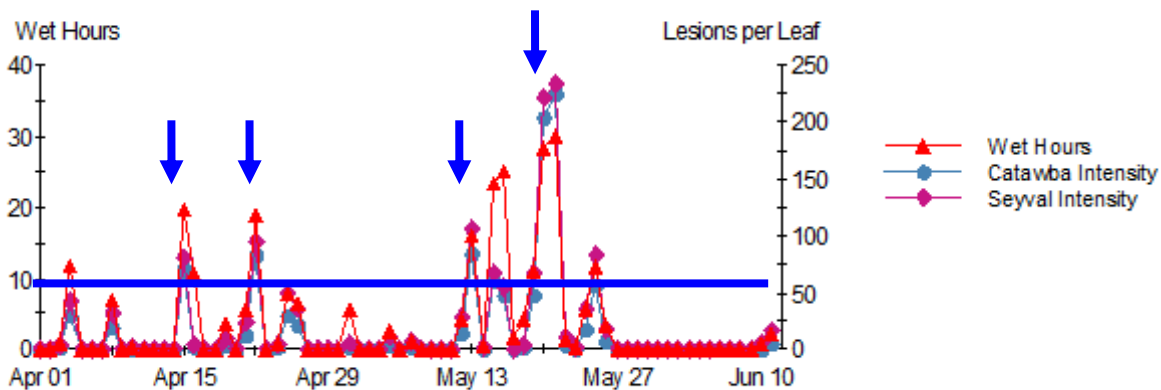
Rocheport 2011 modified 15 LW - Black Rot - Grape



Risk for fruit is just prior to bloom to about six weeks following bloom.

Black rot infection occurs at a daily risk > 1 (blue dots above blue line) and blue arrows note timing of sprays (10 days interval). Hours of leaf wetness and temperature determine potential infection periods. Risk of foliar or shoot infection begins shortly after budburst.

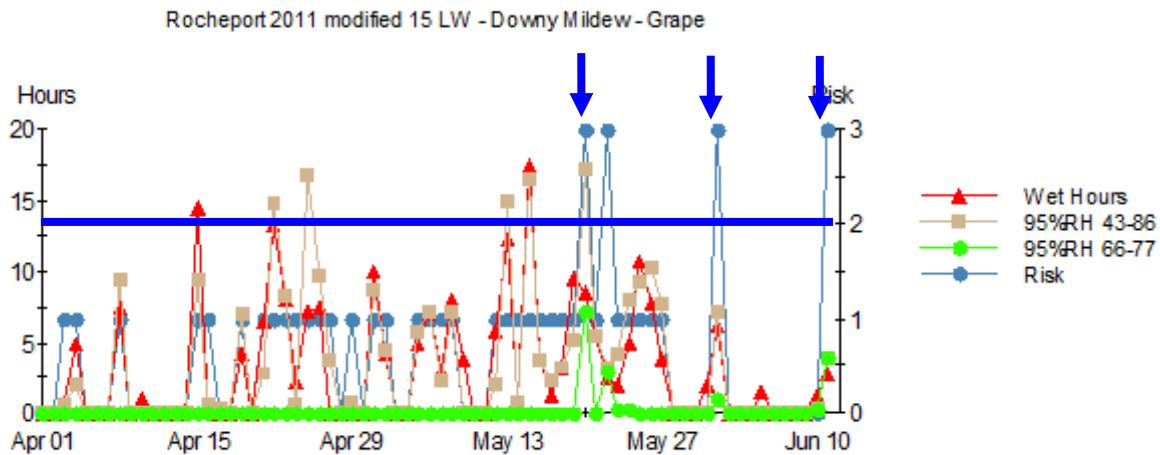
Rocheport 2011 modified 15 LW - Phomopsis Cane+Leaf Spot - Grape



Risk for Phomopsis infection start at 1-2 inch shoot length and lasts until around fruit set.

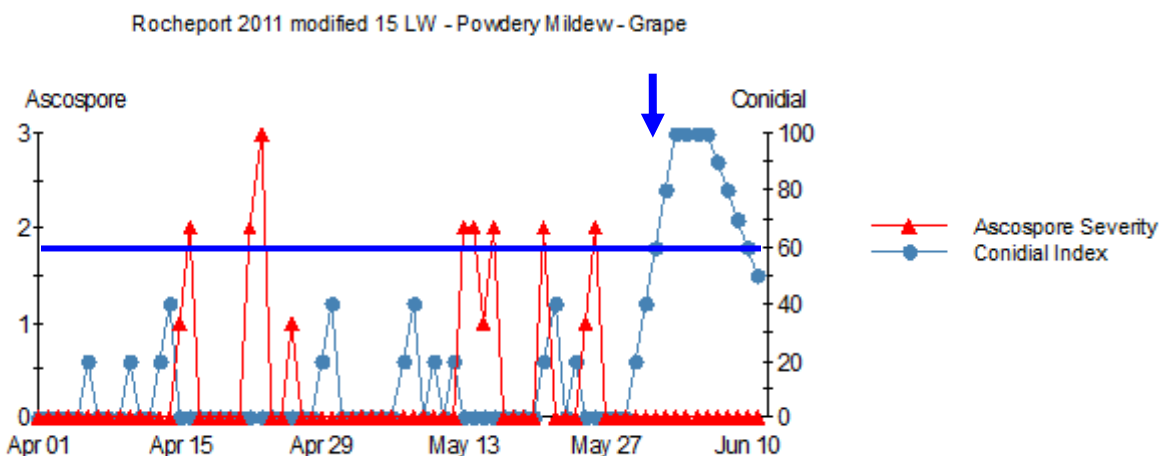
Lesions per leaf (1-30 = light, 31-90 = moderate, 90+ = high as indicated by blue (Catawba model) and purple (Seyval model). Dots at or above 10 hr leaf wetness = 10 to 20% disease severity of more than 30 lesions/leaf (blue line) where blue arrow notes timing of spray.

The greater the amount of leaf wetness the higher the chance for increased severity of infection.



Fruit most susceptible to Downy Mildew from 2 weeks prior to bloom to 4 weeks following.

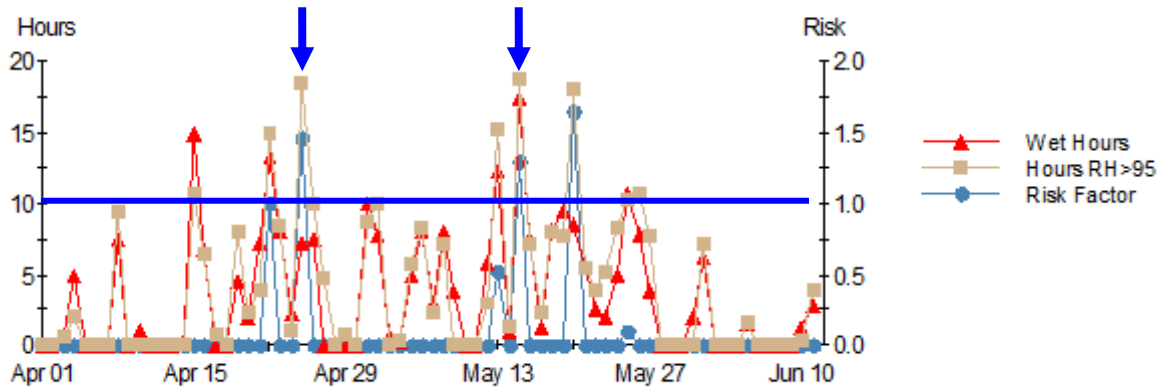
Risk level > 2 (**blue line**) indicated by **blue dots** signifies a potential Downy Mildew infection period (**blue arrow** notes timing of spray). Potential infection risk is determined by hours of leaf wetness, relative humidity, and temperature. Moderate temperatures combined with high humidity are favorable conditions for spread of infection.



Most important Powdery Mildew sprays - a week or 2 before bloom to about 1 month after.

Red symbols indicate Severe Ascospore severity if > 2. Ascospores cause the primary infection while the conidial spores resulting from the ascospores are a secondary infection. **Blue dots** for Conidial index > 60 (**blue line**) signifies a potential Powdery Mildew infection period and **blue arrow** notes timing of spray. Air temperature and leaf wetness are essential for spread while rainfall is damaging to powdery mildew. Powdery model is reset following a spray application to more accurately determine start of the next infection period when Conidial Index (**blue dots**) exceed 60 (**blue line**). Continue to reset the model every time following a spray application.

Rocheport 2011 modified 15 LW - Botrytis - Grape



Spray about bloom, closing, veraison and preharvest to protect fruit.

If conditions aren't favorable then you could probably safely omit the spray.

There was potential for Botrytis infection when it was cool enough (< 85°F) and > 95% RH humid for > 12 hrs as noted by the **blue dots** that exceed Risk > 1 (**blue line**) where **blue arrows** note timing of spray.