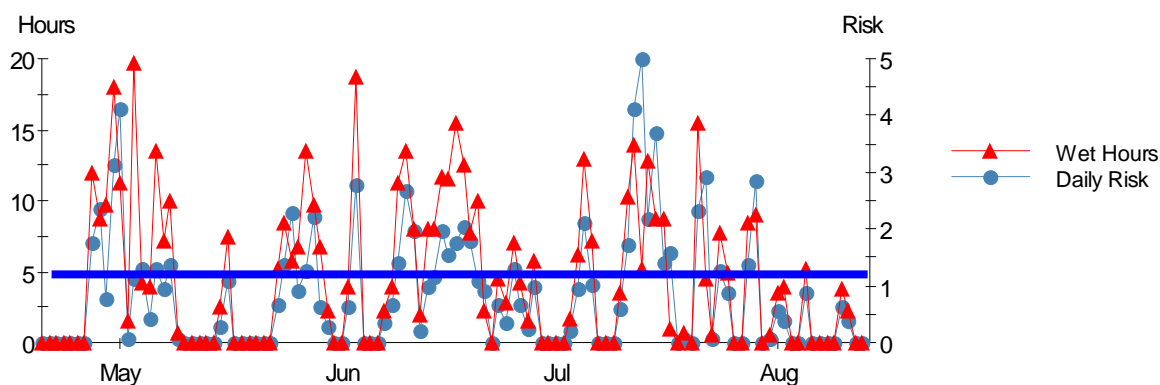
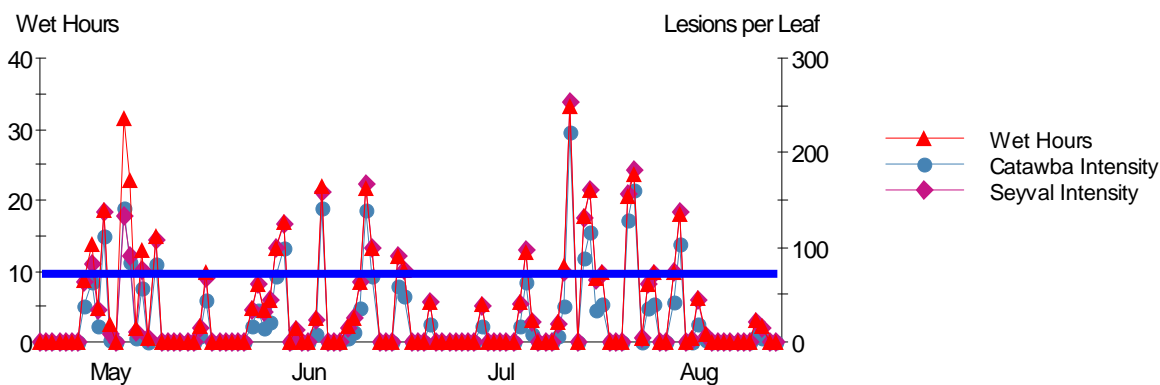


St James, MO 2009 - Black Rot - Grape

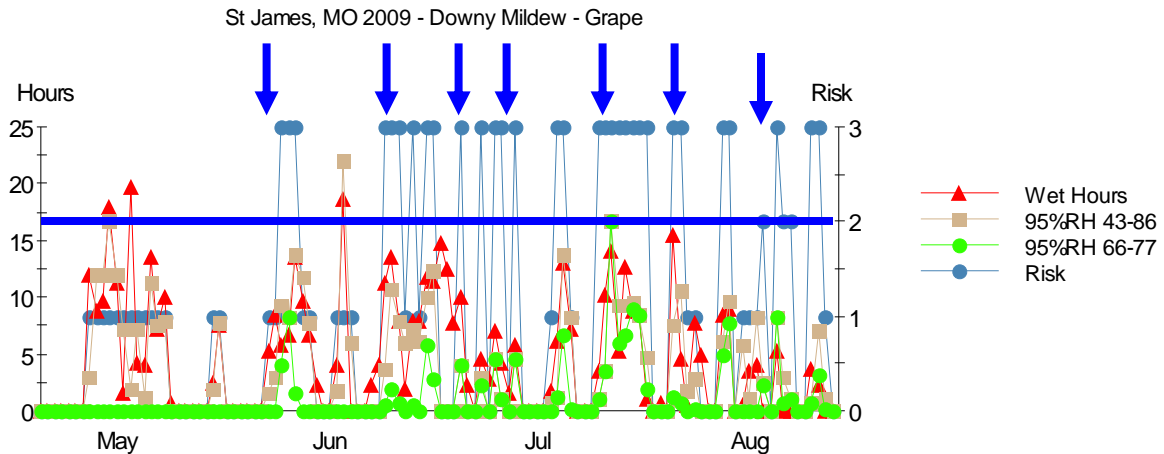


**Risk for black rot fruit infection is just before bloom until about 6 weeks after bloom.**  
 Black rot infections occurred when **blue dot** was at or above Risk of 1 (**blue line**)

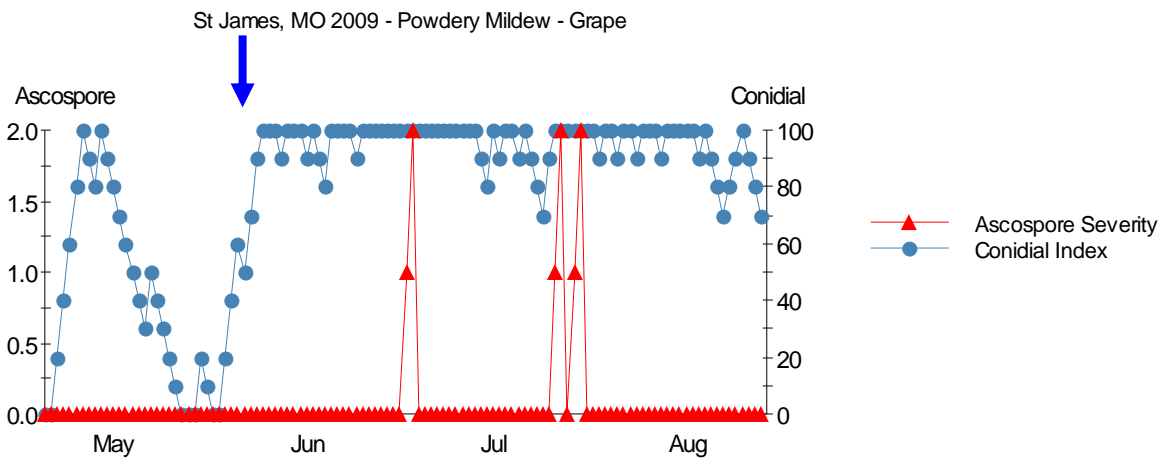
St James, MO 2009 - Phomopsis Cane+Leaf Spot - Grape



**Potential for phomopsis infection starts by 1 or 2 inches of shoot growth in April.**  
 Phomopsis infections occurred when **blue (Catawba model)** and **purple (Seyval model)** dots were at or above 10 hr leaf wetness = 10 to 20% disease severity of more than 30 lesions/leaf (**blue line**)

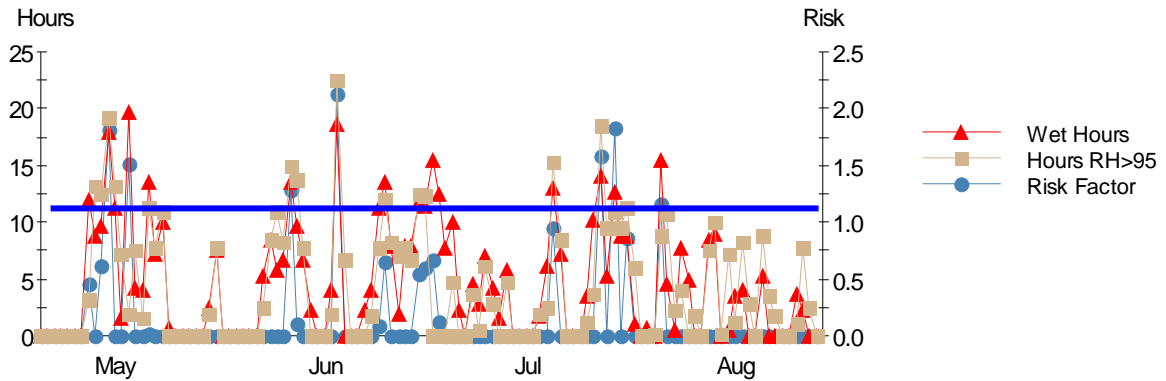


**Fruit are most susceptible from about 2 weeks before bloom until 4 weeks after bloom.**  
 There was high risk of infection when Risk > 2 (blue line) arrow indicates a time to sprays - every 10 days)



**Most important sprays - a week or 2 before bloom to about 1 month after bloom.**  
 Severe Ascospore infection if **Ascospore Severity > 2**.  
 Infection by Conidia when **Conidia Index > 60**.  
 Powdery mildew conditions (**blue dots > 60 conidia Index**) occurred by 19 May.  
 After each spray (**arrows**), model is to be re-run starting conidia index at zero and spray again when it reaches **60 Conidial Index (blue dot)**.

St James, MO 2009 - 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.

After late April when it was cool enough (< 85°F) and > 95% RH humid for > 12 hrs as noted by the **blue dot** exceeded Risk > 1 (**blue line**). Potential infections occurred on 3 June, 12, 14, 21 July.