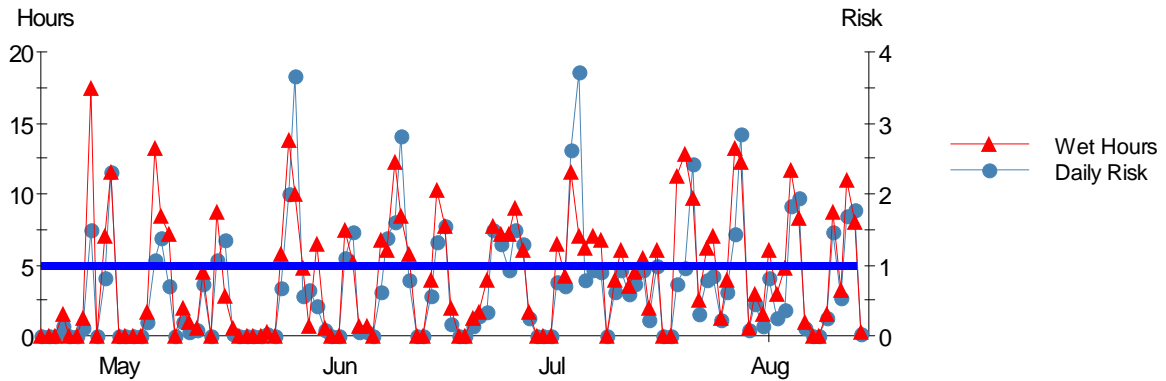
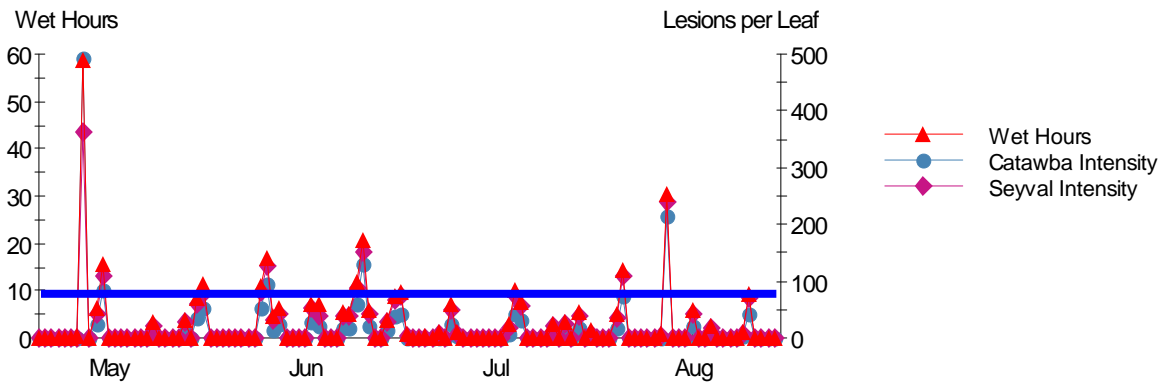


Waverly, MO 2009 - Black Rot - Grape

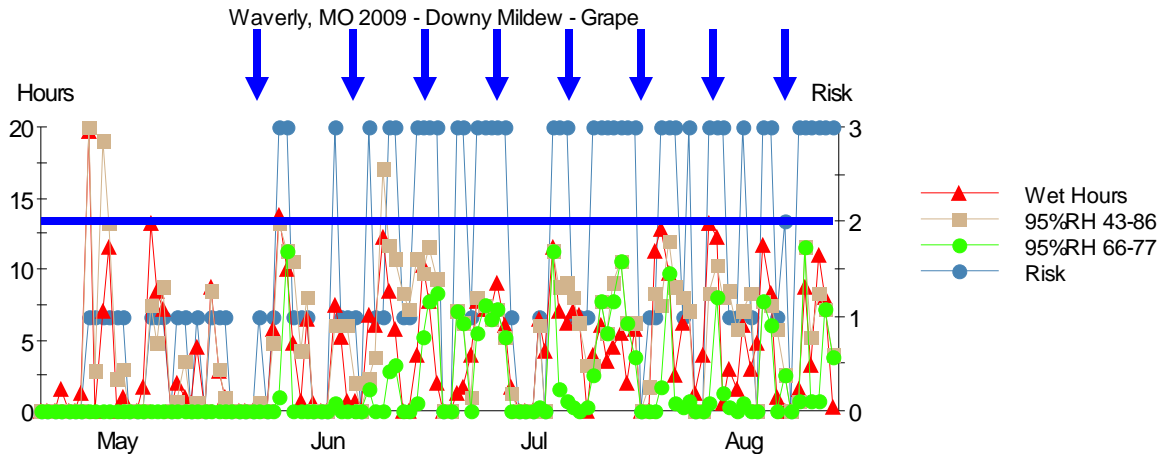


Risk for black rot fruit infection is just before bloom until about 6 weeks after bloom.
 Black rot infections occurred when **blue dot** was at or above Risk of 1 (**blue line**)

Waverly, MO 2009 - Phomopsis Cane+Leaf Spot - Grape

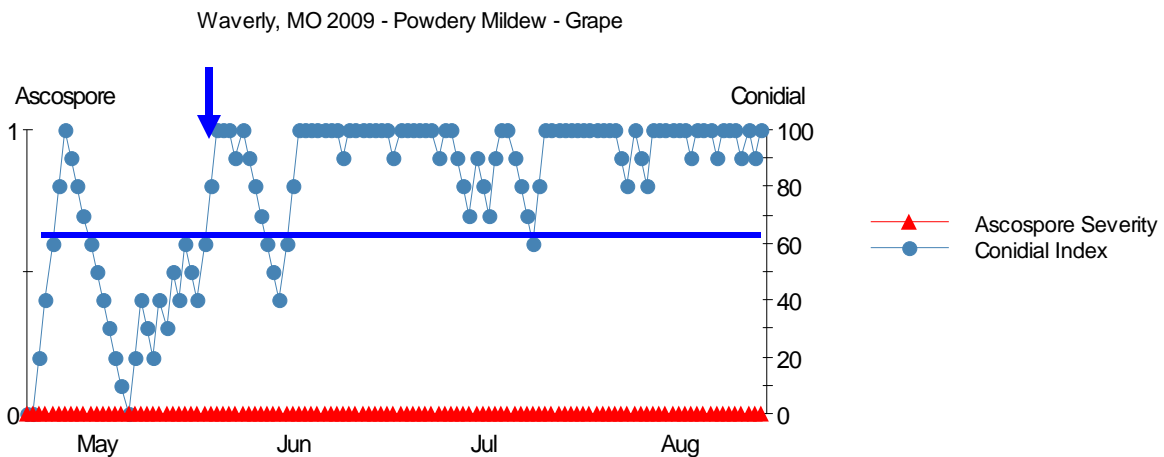


Potential for phomopsis infection starts by 1 or 2 inches of shoot growth in April.
 Phomopsis infections occurred on 27 & 30 April, 26 May, and 10 June when **blue (Catawba model)** and **purple (Seyval model)** dots were at or above 10 hr leaf wetness = 10 to 20% disease severity of more than 30 lesions/leaf (**blue line**)



Fruit most susceptible 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. Application of potential spray using a 10 day spray schedule is indicated with **blue arrows**. 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 sprays - a week or 2 before bloom to about 1 month after bloom.

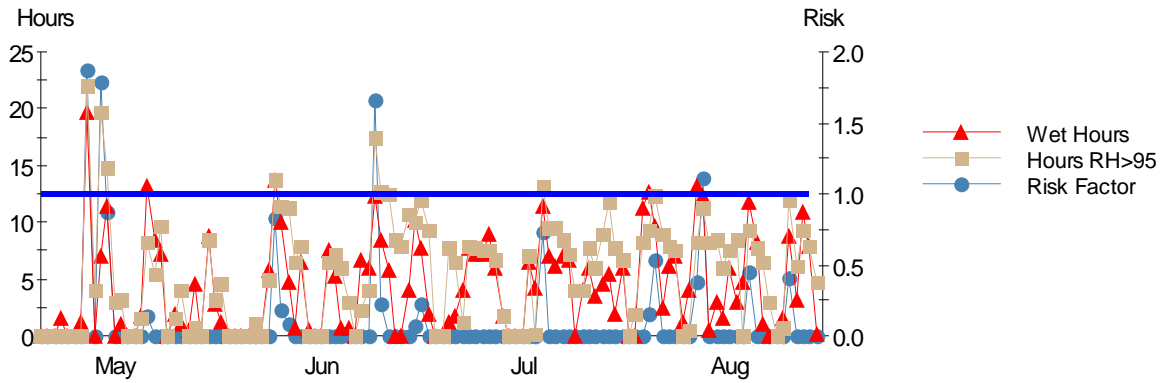
Severe Ascospore infection if **Ascospore Severity > 2**.

Infection by Conidia when **Conidia Index > 60**.

Powdery mildew conditions (**arrow** > 60 conidia Index) occurred by 19 May.

After each spray, model is to be re-run starting conidia index at zero and spray again when it reaches **60 Conidia Index (blue dot)**.

Waverly, 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.

There was potential for Botrytis infection on 27, 29 Apr, 9 June, and 28 July 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**)