

Grape Disease Risk, Deerfield, MA July 30 – August 15, 2010

Black Rot

	High	Low	Wet	Daily	
Date	Temp	Temp	Hours	Risk	Warning
07/30	80.3	54.1	5.3	0.43	
07/31	79.7	51.2	2.3	0.08	
08/01	83.9	55.5	8.3	0.71	
08/02	83.8	62.2	10.3	1.68	Infection Risk
08/03	89.1	62.9	12.0	2.82	Infection Risk
08/04	95.2	68.9	13.8	2.41	Infection Risk
08/05	88.3	66.5	21.3	3.80	Infection Risk
08/06	84.1	57.9	8.5	5.15	Infection Risk
08/07	78.7	54.3	7.5	0.47	
08/08	89.9	50.4	8.8	0.51	
08/09	93.3	68.8	12.8	1.93	Infection Risk
08/10	91.0	66.5	14.3	2.17	Infection Risk
08/11	88.0	64.3	8.8	1.96	Infection Risk
08/12	84.5	60.7	11.8	0.97	
08/13	84.1	62.2	9.5	1.95	Infection Risk
08/14	84.2	54.2	7.8	0.97	
08/15	79.1	58.2	13.3	0.91	

Botrytis

High Low Wet RH>95 Daily

Date	Temp	Temp	Hours	Hours	Risk	Warning
07/30	80.3	54.1	5.3	0.00		
07/31	79.7	51.2	2.3	0.00		
08/01	83.9	55.5	8.3	0.5	0.00	
08/02	83.8	62.2	10.3	0.00		
08/03	89.1	62.9	12.0	0.23	Low Infection Risk	
08/04	95.2	68.9	14.0	0.49	Low Infection Risk	
08/05	88.3	66.5	21.3	13.0	2.25	High Infection Risk
08/06	84.1	57.9	8.5	6.5	0.00	
08/07	78.7	54.3	7.5	0.00		
08/08	89.9	50.4	8.8	1.0	0.00	
08/09	93.3	68.8	12.8	3.8	0.38	Low Infection Risk
08/10	91.0	66.5	14.3	7.3	0.76	Moderate Infection Risk
08/11	88.0	64.3	8.8	2.0	0.00	
08/12	84.5	60.7	11.8	0.18	Low Infection Risk	
08/13	84.1	62.2	9.5	0.00		
08/14	84.2	54.2	7.8	3.5	0.00	
08/15	79.1	58.2	13.3	2.3	0.42	Low Infection Risk

Downy Mildew

High Deg Rain Wet Hours>95%RH

Date	Temp	Hrs43	Fall Hours	43-86	66-77	Risk	Warning
07/30	80.3	0.0	5.3	0.0	0.0	0	Primary Infection
07/31	79.7	>min	2.3	0.0	0.0	0	
08/01	83.9	>min	8.3	0.0	0.0	0	
08/02	83.8	>min	10.3	0.0	0.0	0	
08/03	89.1	>min	12.0	0.0	0.0	0	
08/04	95.2	>min	13.3	0.0	0.0	0	
08/05	88.3	>min	0.53	21.0	4.5	4.5	3 High Risk of Infection
08/06	84.1	>min	0.01	8.5	6.0	2.8	3 High Risk of Infection
08/07	78.7	>min	7.5	0.0	0.0	0	
08/08	89.9	>min	8.8	0.0	0.0	0	
08/09	93.3	>min	0.02	12.8	3.3	3.3	3 High Risk of Infection
08/10	91.0	>min	0.02	14.3	6.5	6.5	3 High Risk of Infection
08/11	88.0	>min	8.8	1.5	1.5	3	High Risk of Infection
08/12	84.5	>min	11.8	0.0	0.0	0	
08/13	84.1	>min	9.5	0.0	0.0	0	
08/14	84.2	>min	7.8	2.0	0.0	1	Possible Infection
08/15	79.1	>min	0.16	13.3	2.0	0.0	1 Possible Infection

Powdery Mildew

Date	Temperature High	Temperature Mean	Hours 70-85	Hours >95	Wet Hours	Ascospore Infection	Conidial Index
07/30	80.3	68.6	10.5	0.0	5.3		
07/31	79.7	66.4	9.0	0.0	2.0		
08/01	83.9	68.7	10.5	0.0	7.5	60	Heavy
08/02	83.8	71.3	12.8	0.0	5.8	80	Heavy
08/03	89.1	75.1	11.0	0.0	11.5	100	Heavy
08/04	95.2	80.4	5.0	0.3	10.8	90	Heavy
08/05	88.3	75.4	24.0	0.0	18.5	Heavy	100 Heavy
08/06	84.1	71.8	12.5	0.0	8.3	Heavy	100 Heavy
08/07	78.7	65.9	10.0	0.0	7.3	100	Heavy
08/08	89.9	69.5	10.5	0.0	8.3	100	Heavy
08/09	93.3	79.0	5.3	0.0	10.0	90	Heavy
08/10	91.0	77.5	12.5	0.0	11.8	100	Heavy
08/11	88.0	75.9	7.8	0.0	7.5	100	Heavy
08/12	84.5	70.9	11.3	0.0	11.5	100	Heavy
08/13	84.1	71.2	12.0	0.0	9.0	100	Heavy
08/14	84.2	69.2	10.8	0.0	7.8	100	Heavy
08/15	79.1	67.2	9.8	0.0	13.0	100	Heavy

Phomopsis Cane and Leaf Spot

	Temp	Wet	Rain-	Wet+	Wet	Disease Intensity	
Date	Mean	Hours	Fall	Rain	Temp	Catawba	Seyval
07/30	68.6	9.0	0.00	0.0	0.0	0	0
07/31	66.4	3.8	0.00	0.0	0.0	0	0
08/01	68.7	12.5	0.00	0.0	0.0	0	0
08/02	71.3	22.5	0.00	0.0	0.0	0	0
08/03	75.1	22.8	0.00	0.0	0.0	0	0
08/04	80.4	22.0	0.00	0.0	0.0	0	0
08/05	75.4	24.0	0.53	10.5	73.1	39 Moderate	73 Moderate
08/06	71.8	14.3	0.01	24.0	72.7	129 High	175 High
08/07	65.9	10.8	0.00	0.0	0.0	0	0
08/08	69.5	19.8	0.00	0.0	0.0	0	0
08/09	79.0	21.0	0.02	1.8	72.3	3 Light	12 Light
08/10	77.5	21.8	0.02	19.5	77.4	69 Moderate	119 High
08/11	75.9	17.0	0.00	0.0	0.0	0	0
08/12	70.9	18.3	0.00	0.0	0.0	0	0
08/13	71.2	19.5	0.00	0.0	0.0	0	0
08/14	69.2	12.5	0.00	0.0	0.0	0	0
08/15	67.2	19.5	0.16	3.5	64.4	10 Light	25 Light