

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

Black Rot

Date	High Temp	Low Temp	Wet Hours	Daily Risk	Warning
07/30	78.9	56.3	5.0	0.49	
07/31	79.8	54.5	2.5	0.24	
08/01	81.7	57.0	9.5	1.16	Infection Risk
08/02	83.2	59.9	8.5	1.01	Infection Risk
08/03	84.9	64.6	9.3	1.35	Infection Risk
08/04	90.6	69.6	15.0	2.75	Infection Risk
08/05	84.8	71.0	20.0	5.91	Infection Risk
08/06	83.8	60.4	9.0	7.45	Infection Risk
08/07	80.1	55.5	1.8	0.12	
08/08	86.0	59.7	9.8	0.87	
08/09	92.9	71.1	13.0	2.69	Infection Risk
08/10	89.1	68.1	12.8	4.83	Infection Risk
08/11	86.9	65.8	8.5	6.28	Infection Risk
08/12	81.9	63.8	9.8	1.01	Infection Risk
08/13	81.9	61.6	10.0	1.67	Infection Risk
08/14	81.7	54.5	9.5	1.02	Infection Risk
08/15	75.9	59.4	14.3	2.03	Infection Risk

Botrytis

High Low Wet RH>95 Daily

Date	Temp	Temp	Hours	Hours	Risk	Warning
07/30	78.9	56.3	5.0	0.8	0.00	
07/31	79.8	54.5	2.5		0.00	
08/01	81.7	57.0	9.5	6.5	0.00	
08/02	83.2	59.9	8.5		0.00	
08/03	84.9	64.6	9.3		0.00	
08/04	90.6	69.6	15.0	2.5	0.86	Moderate Infection Risk
08/05	84.8	71.0	20.0	11.8	1.93	High Infection Risk
08/06	83.8	60.4	9.0	6.8	0.00	
08/07	80.1	55.5	1.8		0.00	
08/08	86.0	59.7	9.8		0.00	
08/09	92.9	71.1	13.3	5.0	0.49	Low Infection Risk
08/10	89.1	68.1	12.8	9.3	0.43	Low Infection Risk
08/11	86.9	65.8	8.5	3.8	0.00	
08/12	81.9	63.8	9.8		0.00	
08/13	81.9	61.6	10.0		0.00	
08/14	81.7	54.5	9.5	4.8	0.00	
08/15	75.9	59.4	14.3	1.5	0.69	Moderate Infection Risk

Downy Mildew

High Deg Rain Wet Hours>95%RH

Date	Temp	Hrs43	Fall Hours	43-86	66-77	Risk	Warning
07/30	78.9	0.0	5.0	0.3	0.0	0	Primary Infection
07/31	79.8	>min	2.5	0.0	0.0	0	
08/01	81.7	>min	9.5	6.0	0.0	1	Possible Infection
08/02	83.2	>min	8.5	0.0	0.0	0	
08/03	84.9	>min	9.3	0.0	0.0	0	
08/04	90.6	>min	14.8	0.0	0.0	0	
08/05	84.8	>min	0.27	20.0	10.8	10.8	3 High Risk of Infection
08/06	83.8	>min	9.0	5.8	5.8	3	High Risk of Infection
08/07	80.1	>min	1.8	0.0	0.0	0	
08/08	86.0	>min	9.8	0.0	0.0	0	
08/09	92.9	>min	0.06	13.0	4.0	4.0	3 High Risk of Infection
08/10	89.1	>min	0.15	12.5	9.3	9.3	3 High Risk of Infection
08/11	86.9	>min	8.5	3.3	3.0	3	High Risk of Infection
08/12	81.9	>min	9.8	0.0	0.0	0	
08/13	81.9	>min	10.0	0.0	0.0	0	
08/14	81.7	>min	9.5	3.0	0.0	1	Possible Infection
08/15	75.9	>min	0.08	14.3	1.0	0.5	3 High Risk of Infection

Powdery Mildew

Date	Temperature High	Temperature Mean	Hours 70-85	Hours >95	Wet Hours	Ascospore Infection	Conidial Index
07/30	78.9	68.7	10.5	0.0	5.0		
07/31	79.8	66.7	8.0	0.0	2.3		
08/01	81.7	67.9	9.8	0.0	9.3	60 Heavy	
08/02	83.2	70.3	10.3	0.0	7.3	80 Heavy	
08/03	84.9	73.5	16.0	0.0	7.8	100 Heavy	
08/04	90.6	77.9	5.8	0.0	13.3	90 Heavy	
08/05	84.8	76.0	24.0	0.0	17.0	Heavy	100 Heavy
08/06	83.8	72.7	14.5	0.0	8.5	Heavy	100 Heavy
08/07	80.1	67.0	9.5	0.0	1.5	100 Heavy	
08/08	86.0	71.5	13.8	0.0	8.0	100 Heavy	
08/09	92.9	79.4	11.0	0.0	12.0	100 Heavy	
08/10	89.1	76.8	8.0	0.0	10.8	100 Heavy	
08/11	86.9	75.6	14.3	0.0	8.0	100 Heavy	
08/12	81.9	71.6	12.5	0.0	9.0	100 Heavy	
08/13	81.9	69.3	10.3	0.0	9.3	100 Heavy	
08/14	81.7	68.1	10.0	0.0	9.3	100 Heavy	
08/15	75.9	67.3	9.5	0.0	13.3	Heavy	100 Heavy

Phomopsis Cane and Leaf Spot

	Temp	Wet	Rain-	Wet+	Wet	Disease Intensity	
Date	Mean	Hours	Fall	Rain	Temp	Catawba	Seyval
07/30	68.7	7.3	0.00	0.0	0.0	0	0
07/31	66.7	4.8	0.00	0.0	0.0	0	0
08/01	67.9	14.5	0.00	0.0	0.0	0	0
08/02	70.3	19.3	0.00	0.0	0.0	0	0
08/03	73.5	20.5	0.00	0.0	0.0	0	0
08/04	77.9	23.5	0.00	0.0	0.0	0	0
08/05	76.0	24.0	0.27	16.5	76.9	56 Moderate	103 High
08/06	72.7	16.5	0.00	33.0	75.6	169 High	223 High
08/07	67.0	5.5	0.00	0.0	0.0	0	0
08/08	71.5	19.0	0.00	0.0	0.0	0	0
08/09	79.4	21.5	0.06	0.5	71.7	1 Light	3 Light
08/10	76.8	22.8	0.15	18.5	76.6	68 Moderate	117 High
08/11	75.6	17.8	0.00	0.0	0.0	0	0
08/12	71.6	15.5	0.00	0.0	0.0	0	0
08/13	69.3	16.5	0.00	0.0	0.0	0	0
08/14	68.1	14.5	0.00	0.0	0.0	0	0
08/15	67.3	18.3	0.08	1.8	65.8	4 Light	12 Light