

Montana Potato Weather Data and Disease Report

August 5, 2017

First, a note on PVY. Overall, we are seeing increased levels of PVY mosaic throughout the state. Everyone with elevated levels of PVY should strongly consider early vine kill to reduce late-season PVY transmission in those seed lots that have shown significant amounts of mosaic during roguing and field inspection, and in summer leaf tests. Previous year's results have shown that any seedlot with 0.1% PVY during the summer or higher has a much lower chance of making it through postharvest testing with 0.5% or less, and any seed lot with measureable PVY will often see tenfold increases or more from summer to postharvest.

Late Blight risk is still gradually increasing and the threshold for early blight has been met, or will soon be met for early and mid-season cultivars, and late season cultivars some areas. At this time, a preventative fungicide application of a product with activity against both late blight and early blight is recommended. Because our weather is still relatively hot and dry, and no major weather systems are forecast, cost-effective preventative products should be adequate. Keep the systemics in your arsenal for application when there is significant chance of a wide-ranging weather event that will bring in significant rain over a widespread area.

<u>Site</u> <u>Recommendation</u>	<u>Accrued Severity Values</u> ¹				<u>P – Days</u> ²	<u>Fungicide Spray</u>
	7/15	7/21	7/29	8/4		
<i>Churchill West – MSPUD1</i>	<i>X</i>	<i>8</i>	<i>21</i>	<i>22</i>	<i>400</i>	<i>³LB, EB – all cultivars</i>
<i>Churchill North – MSPUD2</i>	<i>8</i>	<i>15</i>	<i>25</i>	<i>35</i>	<i>373</i>	<i>LB, EB– early and mid cvs.</i>
<i>Churchill South – MSPUD3</i>	<i>6</i>	<i>10</i>	<i>10</i>	<i>10</i>	<i>391</i>	<i>EB – all cvs.</i>
<i>Toston – MSPUD4</i>	<i>x</i>	<i>13</i>	<i>16</i>	<i>18</i>	<i>394</i>	<i>LB, EB – all cvs.</i>
<i>Dillon – MSPUD5</i>	<i>0</i>	<i>0</i>	<i>6</i>	<i>7</i>	<i>332</i>	<i>EB, early cvs.</i>
<i>Twin Bridges – MSPUD6</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>334</i>	<i>EB– early and mid cvs.</i>
<i>Ronan – MSPUD7</i>	<i>2</i>	<i>3</i>	<i>8</i>	<i>12</i>	<i>337</i>	<i>EB– early and mid cvs.</i>
<i>Polson – MSPUD8</i>	<i>1</i>	<i>8</i>	<i>12</i>	<i>19</i>	<i>365</i>	<i>LB, EB– early and mid cvs.</i>
<i>Kalispell – MSPUD9 (offline)</i>	<i>4</i>	<i>6</i>	<i>6</i>	<i>xx</i>	<i>xx</i>	<i>EB– early and mid cvs.</i>
<i>Townsend – MSPUD10</i>	<i>6</i>	<i>9</i>	<i>18</i>	<i>24</i>	<i>400</i>	<i>Early blight – early cvs.</i>

¹ A threshold of 18 severity values is used for prediction of late blight disease development. Late blight is anticipated 7 to 14 days after 18 severity values have accrued from emergence when inoculum is present.

² A threshold of 300 P-Days is used to schedule preventative sprays for Early Blight for early varieties, 350 P-Days for medium season varieties, and 400 P-Days for late season varieties. P-days are calculated from emergence.

³LB = Late Blight
EB = Early Blight