Warmer temperatures are rapidly promoting crop growth and development. Some heavy rains have fallen across different parts of the state creating challenges in planting crops in heavy textured soils and have led to some wet feet. Most of the crops have recovered from the frost damage with little evidence of injury other than some scars (damage to leaves) and possibly a little stunted growth. I have not heard of large scale losses in crops due to the frost.

**Potatoes:** Potato planting has not progressed much in Northern Wisconsin or on the muck soils due to rains and wet soils. Crop planting should be finished up once weather conditions improve.

There are some stand issues with the emerged crop in Central Wisconsin. Seed piece decay is more visible now that the crop has emerged. In addition, there are signs that Rhizoctonia might be affecting the crop. This seems to be much more severe on the crop that had not emerged prior to the frost and heavy rains this week. The wet and cool soils have likely contributed to this effect.

Plants that emerged prior to the end of last week have grown vigorously. Many of these plants now have stolons and are beginning to develop. I would anticipate the tuber initiation will likely begin by the end of next week if warm weather continues.

Potato rooting has progressed quite aggressively even though we have had soil moisture content. In the photo to the left you can see the roots that are growing all the way to the edge of the hill and are
beginning to penetrate into the soils in the furrow. A fun exercise is to carefully excavate the inter-row space and evaluate root penetration. We typically assume roots extend at least 20% beyond the edge of the canopy, but the reality is that root grow extends much further that just beyond the canopy.

Vegetable Disease Update – Amanda J. Gevens, Assistant Professor & Extension Vegetable Plant Pathologist, UW-Madison, Dept. of Plant Pathology, 608-890-3072 (office), Email: gevens@wisc.edu. Vegetable Path Webpage: http://www.plantpath.wisc.edu/wivegdis/

Bravo Zn, Bravo Ultrex, and Bravo Weather Stik (Syngenta) chlorothalonil products just received 24(c) Special Local Needs registration from the Wisconsin Department of Agriculture, Trade, and Consumer Protection for increased allowance of total active ingredient per acre/season for use in long season potatoes. The 24c allows for 16 lb active ingredient per acre in long season potato crops in Wisconsin. This is a modification from the standard federal label for these Bravo products which allows for 11.25 lb active ingredient per acre per season. 24c labels will soon be posted at the DATCP and CDMS websites. Recall that the Echo (Sipcam Advan) chlorothalonil products also have this 24c extension (renewal received in 2010).

High tunnel tomato update and survey: In high tunnels I have visited so far this spring, I have seen little disease - but for incidental Botrytis resulting from broken and/or dead tissues. Remember to keep on top of your fertility and irrigation programs to maintain productive growth that lends to disease control. And, maintain clean tunnel floors and alley spaces outside of and between houses. Yellow rocket weeds, for example, can serve as a beacon for insect pests, according Dr. Russ Groves, UW-Vegetable Entomology.

As advertised at the WI Fresh Market Veg Growers Association Spring Field Day on high tunnel tomatoes, we are writing to ask for your participation in a grower survey to best identify current standard practices and grower information needs in high tunnel vegetable production. This information will be used to further tailor our research and extension efforts. Below there are 2 survey links. Please select survey 1 if you are currently raising tomatoes in high tunnels. Select survey 2 if you have a high tunnel but are not currently raising tomatoes within the tunnel. No survey necessary for growers without high tunnels. Data generated from the survey will be pooled with no identifying information from a particular operation offered in any summary report. Results will come back to you at grower education meetings this winter. Thank you for helping us help you.

Survey 1: for growers currently raising tomatoes in high tunnel season extension structures https://buswisc.qualtrics.com/SE/?SID=SV_1HWzFr5NeQNNyHr

Survey 2: for growers with high tunnels that are not currently raising tomatoes https://buswisc.qualtrics.com/SE/?SID=SV_brsHP1VNDg5b3s9

Feel free to contact me if you have questions regarding this survey and forward along as appropriate. Thank you, Amanda Gevens & Ken Cleveland, Graduate Research Assistant working in high tunnel tomato
**DSVs and Late Blight**: From NOAA weather station and forecasted weather data: Disease Severity Values (DSVs) for a May 22, 2013 potato crop emergence date in Wisconsin at current time (generated on Friday May 31) ranged from 4 to 20 across the state. Regionally, greatest DSV accumulations are occurring at regions surrounding Manitowoc (20) and LaCrosse (14), with most of the rest of the state at roughly 10-13 DSVs. Based on forecasted environmental conditions for the next 24-72 hours, there will be slow accumulation of additional DSVs over the next 3 days.

**Late blight status in the U.S.**  No reports of late blight in Wisconsin at this time. There have been no recent reports of late blight in tomato or potato crops in the U.S. in recent weeks. To date this production year, late blight has been reported in several counties in FL on tomato and potato (primarily of the US-23 clonal lineage). The website: [http://www.usablight.org/](http://www.usablight.org/) indicates location of positive reports of late blight in the U.S. and provides further information on disease characteristics and management.


A pdf of the document can be downloaded or is available at the following direct link: [http://learningstore.uwex.edu/Assets/pdfs/A3422.pdf](http://learningstore.uwex.edu/Assets/pdfs/A3422.pdf)
Disease Updates: Figure 1. A. Current DSVs. B. 24 hr-forecasted DSVs. C. 48 hr-forecasted DSVs. D. 72 hr-forecasted DSVs. DSVs generated from potato emergence date of May 22, 2013 with 90% relative humidity threshold utilized in calculations.
Late blight disease forecasting indicates risk for late blight in early-planted potato crops in Grand Marsh, Hancock, and Plover areas. At this time, a fungicide application is recommended for early-planted potatoes to prevent development of late blight. A second file listing registered fungicides for potato late blight in Wisconsin is included as a companion to this newsletter (& will be accessible at Veg Path website above).

No late blight has been detected in Wisconsin potato or tomato crops at this time. And, there have been no recent (within a week) reports of late blight in the U.S. This Disease Supplement serves to make growers aware that the Blitecast thresholds (DSV 18) have been met at several locations in Wisconsin and preventative fungicide application is recommended for producers of susceptible potato crops at specific crop stages. The website:  http://www.usablight.org/ indicates location of positive reports of late blight in the U.S. and provides further information on disease characteristics and management. Additional, specific fungicide recommendations will soon be provided through this newsletter for tomato and organics.

Current P-Day (Early Blight) and Severity Value (Late Blight) Accumulations

<table>
<thead>
<tr>
<th>Location</th>
<th>Planted</th>
<th>50% Emergence</th>
<th>P-Day Cumulative</th>
<th>DSV Cumulative</th>
<th>Calculation Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Antigo Area</td>
<td>Early 5/13</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td></td>
<td>Mid 5/22</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td></td>
<td>Late NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td></td>
<td>Mid 5/1</td>
<td>5/21</td>
<td>82</td>
<td>18</td>
<td>6/3/13</td>
</tr>
<tr>
<td></td>
<td>Late 5/15</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Hancock Area</td>
<td>Early 4/20</td>
<td>5/15</td>
<td>132</td>
<td>18</td>
<td>6/3/13</td>
</tr>
<tr>
<td></td>
<td>Mid 5/5</td>
<td>5/23</td>
<td>71</td>
<td>16</td>
<td>6/3/13</td>
</tr>
<tr>
<td></td>
<td>Late 5/15</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Plover Area</td>
<td>Early 4/22</td>
<td>5/17</td>
<td>111</td>
<td>28</td>
<td>6/3/13</td>
</tr>
<tr>
<td></td>
<td>Mid 5/7</td>
<td>5/30</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td></td>
<td>Late 5/24</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
</tbody>
</table>
Disease Forecasting: What are DSVs and P-days?: As we will now be routinely posting disease forecasting information in this newsletter, and have added new subscribers, it is necessary to provide some explanation of the 18 disease severity value and 300 P-Day concepts used in disease forecasting and IPM programming. Locations of in-field weather stations/disease forecasts will include: Antigo, Plover, Hancock, and Grand Marsh. (This year, I will also add summary of our state-wide, remotely sensed weather data/disease forecasting). Computation of 18 disease severity values (DSVs) relies on maximum and minimum temperatures each day, the duration of relative humidity periods above 90% and the maximum/minimum temperatures during the relative humidity periods above 90%. For a given day, up to 4 DSVs can accumulate. We start the severity value calculations at approximately 50% crop emergence. When we reach a total of 18 severity values, we issue a warning which indicates that environmental conditions have been met which favor late blight. At 18 DSVs, the recommendation for preventive applications of effective late blight fungicides is made. An additional alert is issued when the first symptoms of late blight appear anywhere in the state. The determination of late blight management recommendations is made by taking into consideration DSVs, projected weather forecast, and presence/risk of inoculum. This information is published in our newsletter and will be disseminated in various other outlets as the season progresses.

WI had late blight during the 2009-2012 production seasons and there is risk in 2013. We had a cold and long winter – as evidenced by the cold soil temperatures at 2 & 4 inch depths reported previously in this newsletter. Using MI’s calculation for potato volunteer risk, we determined that risk for volunteer viability is likely low across the state, and thus, late blight potential in volunteers is low in 2013. Growers should be mindful to plant disease-free seed, to destroy cull potatoes prior to new crop emergence, and to control volunteers when they do appear. Other potential sources of late blight in WI come from overwintered infected tomato plants.

The Potato P-Day accumulator is used to generate early blight management recommendations. The physiological degree day (P-Day) program is used to predict the development of the potato plants and P-Day 300 accumulation has been correlated in Wisconsin with the first seasonal rise in the number of spores of the early blight fungus. Once we reach 300 P-Days (typically around time of potato row closure), calculated from emergence on, our spray recommendations take both the P-Day and severity value totals into account to generate 5 day, 7 day or 10 day spray interval recommendations. The interval is variable depending on prevailing weather conditions and the presence of disease in the area. In most years, the need to prevent early blight in potatoes occurs before the need to consider late blight control with fungicides, but this year has been a bit different and late blight risk is preceding early blight risk.

Further details on registered fungicides for WI vegetables can be found in the Wisconsin Commercial Vegetable Production Guide A3422, [http://learningstore.uwex.edu/assets/pdfs/A3422.PDF](http://learningstore.uwex.edu/assets/pdfs/A3422.PDF).
## Potato Late Blight Fungicides Registered for WI, 2013.

In-furrow and seed treatment registrations are omitted. This is not a comprehensive list. Most fungicides listed are for use in conventional production systems. List compiled 4 June 2013.

### Amanda J. Gevens, Extension Plant Pathologist, UW-Madison

Office Phone: 608-890-3072; E-mail: gevens@wisc.edu

<table>
<thead>
<tr>
<th>Trade Name (rate/A)</th>
<th>Active Ingredient(s)</th>
<th>PHI</th>
<th>REI</th>
<th>FRAC #</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agri Tin, Super Tin 4L, Super Tin 80WP (4-6 fl oz)</td>
<td>triphenyltin hydroxide</td>
<td>7 days</td>
<td>48 hours</td>
<td>30</td>
<td>Restricted use pesticide. 3 fl oz rate can be used if material is tank-mixed with another fungicide.</td>
</tr>
<tr>
<td>Alude (1.25 qt in 90 gal water)</td>
<td>mono and dipotassium salts of phosphorous acid</td>
<td>0 days</td>
<td>4 hours</td>
<td>33</td>
<td>Foliar application</td>
</tr>
<tr>
<td>Fosphite, Rampart (1-4 qt in at least 20 gal water/A)</td>
<td>potassium phosphate</td>
<td>0 days</td>
<td>4 hours</td>
<td>33</td>
<td>Foliar post-emergence spray and post harvest spray for control in storage.</td>
</tr>
<tr>
<td>Fungi-Phite (Foliar: 2 qt/A Seed trt: 15% volume to volume-2 ton in 1 gal solution)</td>
<td>potassium phosphate</td>
<td>0 days</td>
<td>4 hours</td>
<td>33</td>
<td>Seed piece spray and foliar post-emergence spray. Tank-mix with another effective fungicide is recommended and use high label rate for late blight control.</td>
</tr>
<tr>
<td>Badge SC (1-3 pt at 7-10 day interval)</td>
<td>copper hydroxide, copper oxychloride</td>
<td>0 days</td>
<td>24 hours</td>
<td>M1</td>
<td>Protectant activity only.</td>
</tr>
<tr>
<td>Bravo Ultrex (.7 then .9 to 1.36 lb)</td>
<td>chlorothalonil</td>
<td>7 days</td>
<td>12 hours</td>
<td>M5</td>
<td>WI has a 24c Special Label for long season potatoes extending max a.i. from 11.25 lb to 16 lb a.i./acre (expires Dec 31, 2012).</td>
</tr>
<tr>
<td>Bravo WeatherStik (.75 then 1-1.5 pt)</td>
<td></td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>Bravo Zn (1 1/8 then 1 1/5 to 2 1/4 pt)</td>
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<td></td>
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</tr>
<tr>
<td>Cabrio Plus (2.9 lb)</td>
<td>pyraclostrobin+metalaxyl</td>
<td>3 days</td>
<td>24 hours</td>
<td>11+M3</td>
<td>17.4 lb/acre maximum per season. Do not apply more than 2 sequential applications.</td>
</tr>
<tr>
<td>Equus 720 SST, Initiate 720, Chlorothalonil 720 SC (.75 then 1-1.5 pt)</td>
<td>chlorothalonil</td>
<td>7 days</td>
<td>12 hours</td>
<td>M5</td>
<td>11.25 lb a.i./acre maximum.</td>
</tr>
<tr>
<td>Equus 500 Zn, Initiate Zn (1.125 then 1.5-2.25 pt)</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Equus DF (.7 then .9 to 1.36 lb)</td>
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<tr>
<td>Echo 90DF (5/8 then 7/8 to 1 1/2 lb)</td>
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</tr>
<tr>
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</tr>
<tr>
<td>Echo 720 (.75 then 1-1.5 pt)</td>
<td>chlorothalonil</td>
<td>7 days</td>
<td>12 hours</td>
<td>M5</td>
<td>WI has a 24c Special Label for long season potatoes extending max a.i. from 11.25 lb to 16 lb a.i./acre (expires Dec 31, 2014).</td>
</tr>
<tr>
<td>Echo Zn (1 pt to 2.125 pt)</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Champ WG (1 to 1.5 lb 3 to 4 lb in severe areas)</td>
<td>copper hydroxide</td>
<td>0 days</td>
<td>24 hours</td>
<td>M1</td>
<td>Use high label rates for foliar late blight protection.</td>
</tr>
<tr>
<td>Champ Formula 2 Flowable (2/3 to 2 2/3 pt)</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Champ DP Dry Prill (2/3 to 1 lb 2 to 2 3/3 lb when disease is severe)</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Kentan DF (1-2.5 lb 4 lb when severe)</td>
<td>copper hydroxide</td>
<td>0 days</td>
<td>24 hours</td>
<td>M1</td>
<td>Use high label rates for foliar late blight protection.</td>
</tr>
<tr>
<td>Kocide 2000, Kocide 3000 (.73-3 lb .5-1.75 lb)</td>
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</tr>
<tr>
<td>Nu-Cop 3L (2/3 to 2 pt 2 to 4 pt if severe)</td>
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</tr>
<tr>
<td>Nu-Cop 50DF (1-1.5 lb 3-4 lb if severe)</td>
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<td></td>
</tr>
<tr>
<td>C-O-C-S WDG (1.5-4 lb)</td>
<td>copper oxychloride, basic copper sulfate</td>
<td>0 days</td>
<td>24 hours</td>
<td>M1</td>
<td>Use high label rates for foliar late blight protection.</td>
</tr>
<tr>
<td>Curzate 60DF (3.2 oz foliar)</td>
<td>cymoxanil</td>
<td>14 days</td>
<td>12 hours</td>
<td>27</td>
<td>Locally-systemic fungicide. Must be tank-mixed with a protectant fungicide. Rainfast within 2 hours.</td>
</tr>
<tr>
<td>Dithane F45 Rainshield (.4 to 1.6 qt)</td>
<td>mancozeb</td>
<td>24 hours</td>
<td>3 days</td>
<td>M3</td>
<td>Max rate per acre/season is 11.2 lb a.i. Plant as soon as possible after seed treatment.</td>
</tr>
<tr>
<td>Dithane M45 (.5 to 2 lb)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dithane DF (1 -2 lb)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trade Name (rate/A)</td>
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</tr>
<tr>
<td>Evito 480SC, Aftershock (3.8 fl oz)</td>
<td>fluoxastrobin</td>
<td>7 days</td>
<td>12 hours</td>
<td>11</td>
<td>Follow label for resistance management.</td>
</tr>
<tr>
<td>Forum (Foliar and tuber control: 6 oz)</td>
<td>dimethomorph</td>
<td>4 days</td>
<td>12 hours</td>
<td>40</td>
<td>May be tank-mixed with another effective fungicide for enhanced management – but not required by label. Addition of an adjuvant may enhance management. Can be applied after vine kill.</td>
</tr>
<tr>
<td>Gavel 75DF (1.5 to 2 lb)</td>
<td>zoxamide+mancozeb</td>
<td>3 days</td>
<td>48 hours</td>
<td>22+M3</td>
<td>Do not make &gt;6 applications/crop. Contact fungicide.</td>
</tr>
<tr>
<td>Gem 500SC (3.8 fl oz)</td>
<td>trifloxystrobin</td>
<td>7 days</td>
<td>12 hours</td>
<td>11</td>
<td>Follow label for resistance management.</td>
</tr>
<tr>
<td>Headline (6 to 12 fl oz)</td>
<td>pyraclostrobin</td>
<td>3 days</td>
<td>12 hours</td>
<td>11</td>
<td>Follow label for resistance management.</td>
</tr>
<tr>
<td>ManKocide (1.5 to 2 then 4-5 lb)</td>
<td>mancozeb+copper hydroxide</td>
<td>3 days</td>
<td>24 hours</td>
<td>M3+M1</td>
<td>Not labeled as a seed trt for potatoes.</td>
</tr>
<tr>
<td>Omega 500F (5.5 fl oz)</td>
<td>fluazinam</td>
<td>14 days</td>
<td>48 hours</td>
<td>29</td>
<td>REI is 4 days for high exposure activities. New special local need label 24c in April 2011.</td>
</tr>
<tr>
<td>Omega Top MP (5.5 fl oz) – individual label for Omega sold in co-pack with Top MP (difenoconazole)</td>
<td>fluazinam</td>
<td>14 days</td>
<td>48 hours</td>
<td>29</td>
<td>Can be applied aerially. REI is 4 days for high exposure activities.</td>
</tr>
<tr>
<td>Oxidate (40 to 120 fl oz to 100 gal water, 30-100 gal solution per acre)</td>
<td>hydrogen dioxide</td>
<td>0 days</td>
<td>1 hour</td>
<td>NC</td>
<td>Foliar spray for late blight. Frequent applications (5-day intervals) can limit sporulation.</td>
</tr>
<tr>
<td>Penncozeb 80WP, Penncozeb 75DF (.5 to 2 lb)</td>
<td>mancozeb</td>
<td>3 days</td>
<td>24 hours</td>
<td>M3</td>
<td>Do not exceed 11.2 lb a.i./acre/year.</td>
</tr>
<tr>
<td>Penncozeb 4FL, Manzate flowable (.4 to 1.6 qt)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manzate Pro-Stick (1 to 2 lb, seed trt: 1.25 lb/50 gal water)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phostrol (2.5 to 10 pt) (Post harvest trt: 1 gal/ton in .5 gal water)</td>
<td>mono- and di-basic sodium, potassium, and ammonium phosphites</td>
<td>0 days</td>
<td>4 hours</td>
<td>33</td>
<td>Can be applied as a foliar for late blight, pink rot, and Pythium leak. Can be applied post-harvest for storage disease control.</td>
</tr>
<tr>
<td>Trade Name (rate/A)</td>
<td>Active Ingredient(s)</td>
<td>PHI</td>
<td>REI</td>
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</tr>
<tr>
<td>Polyram 80DF (1.5 to 2 lb in 15 gal water/acre minimum)</td>
<td>metiram</td>
<td>3 days</td>
<td>24 hours</td>
<td>M3</td>
<td>Metiram is an EBDC, like mancozeb (M3). Total amount of a.i. per year/acre must include all EBDCs.</td>
</tr>
<tr>
<td>Previcur Flex (.7 to 1.2 pt)</td>
<td>propamocarb hydrochloride</td>
<td>14 days</td>
<td>12 hours</td>
<td>F</td>
<td>Apply in a tank-mix with effective protectant. Can be applied as a broadcast or banded application over the row, post-emergence.</td>
</tr>
<tr>
<td>Priaxor (4-8 fl oz)</td>
<td>fluxapyroxad+pyraclostrobin</td>
<td>7 days</td>
<td>12 hours</td>
<td>7+11</td>
<td>Cannot apply more than 3 applications/season. Follow label for resistance management. Xemium and Headline pre-mix.</td>
</tr>
<tr>
<td>Quadris (6 to 15.5 fl oz)</td>
<td>azoxystrobin</td>
<td>14 days</td>
<td>4 hours</td>
<td>11</td>
<td>Alternate away from Group 11 fungicides to manage resistance.</td>
</tr>
<tr>
<td>Quadris Opti (1.6 pt)</td>
<td>azoxystrobin+chlorothalonil</td>
<td>14 days</td>
<td>12 hours</td>
<td>11+M5</td>
<td>Alternate away from Group 11 fungicides to manage resistance.</td>
</tr>
<tr>
<td>Ranman (1.4 to 2.75 fl oz)</td>
<td>cyazofamid</td>
<td>7 days</td>
<td>12 hours</td>
<td>21</td>
<td>Follow label for resistance management.</td>
</tr>
<tr>
<td>Reason (5.5 to 8.2 fl oz)</td>
<td>fenamidone</td>
<td>14 days</td>
<td>12 hours</td>
<td>11</td>
<td>Follow label for resistance management.</td>
</tr>
<tr>
<td>Revus (5.5 to 8 fl oz)</td>
<td>mandipropamid</td>
<td>14 days</td>
<td>4 hours</td>
<td>40</td>
<td>Addition of an adjuvant is recommended.</td>
</tr>
<tr>
<td>Revus Top (5.5 to 7 fl oz)</td>
<td>mandipropamid+difenoconazole</td>
<td>14 days</td>
<td>12 hours</td>
<td>40+3</td>
<td>Addition of an adjuvant is recommended.</td>
</tr>
<tr>
<td>Tanos (8 to 10 oz)</td>
<td>cymoxanil + famoxadone</td>
<td>14 days</td>
<td>12 hours</td>
<td>27+11</td>
<td>Must be tank-mixed with an effective protectant fungicide.</td>
</tr>
<tr>
<td>Ridomil Gold SL (1 to 2 pt)</td>
<td>mefenoxam</td>
<td>14 days</td>
<td>48 hours</td>
<td>4</td>
<td>Do not apply beyond the at-planting stage.</td>
</tr>
<tr>
<td>Ridomil Gold Bravo SC (2.5 pt)</td>
<td>mefenoxam+chlorothalonil</td>
<td>14 days</td>
<td>48 hours</td>
<td>4+M5</td>
<td>Follow label for resistance management.</td>
</tr>
<tr>
<td>Ridomil Gold Copper (2 lb)</td>
<td>mefenoxam+cpp er hydroxide</td>
<td>14 days</td>
<td>48 hours</td>
<td>4+M1</td>
<td>Tank-mix with an effective protectant.</td>
</tr>
<tr>
<td>Ridomil Gold MZ WG (2.5 lb)</td>
<td>mefenoxam+mancozeb</td>
<td>3 days</td>
<td>48 hours</td>
<td>4+M3</td>
<td>Follow label for resistance management.</td>
</tr>
<tr>
<td>Zampro (11-14 fl oz)</td>
<td>ametoctrandin+dimethomorph</td>
<td>4 days</td>
<td>12 hours</td>
<td>45+40</td>
<td>Do not make more than 2 sequential applications. Follow label for resistance management. Ametoctrandin is new a.i.; dimethomorph is Forum (formerly Acrobat).</td>
</tr>
</tbody>
</table>