Powdery Mildew Rating

Scale: 1 = none visible, to 5 = very severe
Downy Mildew was seen on some cultivars & was rated.

Top side

Under side
Downy Mildew Rating

Scale: 1 = none visible, to 5 = very severe
Plans for 2005

- Allow the vines to Crop
- Evaluate fruit quality
- Look more closely at disease management

‘Frontenac’
2003 Wine Grape Cultivar Trial
Planting Sites

Supported by an IDALS Specialty Crop Grant.
## Grape Cultivars

<table>
<thead>
<tr>
<th>New York:</th>
<th>Minn. / Wis.:</th>
<th>Cultivars not in 2002 planting:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rubiana (GR-7)</td>
<td>La Crescent</td>
<td>Cayuga White</td>
</tr>
<tr>
<td>NY73.136.17</td>
<td>Prairie Star v</td>
<td>Chancellor</td>
</tr>
<tr>
<td>NY76.0844.24*</td>
<td>Frontenac Gris*</td>
<td>De Chaunac v</td>
</tr>
<tr>
<td>NY84.0101.04</td>
<td>Swensen White**</td>
<td>Esprit</td>
</tr>
<tr>
<td>NY70.0809.10</td>
<td>Brianna*</td>
<td>Landot 4511</td>
</tr>
<tr>
<td>v  Trained to VSP</td>
<td>MN-1211*</td>
<td>Leon Millot</td>
</tr>
<tr>
<td></td>
<td>MN-1198*</td>
<td>St. Vincent v</td>
</tr>
<tr>
<td></td>
<td>* Planted in 2004</td>
<td>Vidal Blanc</td>
</tr>
<tr>
<td></td>
<td>** To be planted in 2005</td>
<td></td>
</tr>
</tbody>
</table>

The Northeast and Southeast R&D Farm plots also include the 15 cultivars from the 2002 planting.
The Armstrong Farm was the driest site in 2003.
Vines were pruned to ¼ inch diameter wood or “green” tissue.
With early freezes occurring at three of the sites, much cane die-back was observed. As a result, pruning weights were a poor indicator of vine vigor.
Pruning Weights of cultivars from the Leopold Trial

- Ounces per Vine
- Southeast
- Northeast

- Foch
- Frontenac
- Cynthiana
- St. Croix
- Chambourcin
- Seyval
- La Crosse
- Vignole
- Traminette
- Edelweiss
- Marquis
- Vanessa
- Reliance
- Mars
- Jupiter
With the October 2 freeze, many cultivars at the Southeast and Northeast Farms were killed back almost to the ground.
Among all cultivars, Frontenac & St. Croix exhibited the least die-back at both sites.
The greatest vine mortality occurred at the Northeast Farm.
Vine Mortality
of cultivars from the Leopold Trial

- Foch
- Frontenac
- Cynthiana
- St. Croix
- Chambourcin
- Seyval
- La Crosse
- Vignole
- Traminette
- Edelweiss
- Marquis
- Vanessa
- Reliance
- Mars
- Jupiter
2,4-D injury was only observed at the Armstrong Farm.
Vines were rated for the incidence of anthracnose, powdery mildew, and downy mildew in September.
Although sprayed with a dormant application of liquid lime sulfur, some exhibited anthracnose symptoms.
Anthracnose Rating
of cultivars from the Leopold Trial

Scale: 1 = none visible, to 5 = very severe
Differences in fungicide (captan) applications influenced the incidence of powdery mildew. Hort Farm - weekly beginning in July; Armstrong - 2 applications in Aug.; Northeast - 2 applications in Sept.; Southeast - no fungicides.
Powdery Mildew Rating of cultivars from the Leopold Trial

Scale: 1 = none visible, to 5 = very severe