Other Vine Characteristics

• Vine vigor
  - Planting distance
  - Training system
• Growth habit
  - Training system
• Need for cluster thinning
  - Additional labor expense
Growth Habit

Trailing / Drooping

Characteristic of American species

Upright

Characteristic of *V. vinifera* & some French-Amer. hybrids
Single Curtain Training Systems

Bi-lateral Cordon

High Cordon

Low Cordon w/ catch wires

For cultivars with a trailing / drooping growth habit.

For cultivars with an upright to semi-upright growth habit

From: Ohio State Univ. Bulletin 815, Agdex 231

From: Oregon St. Univ. Ext. Publ. EC 1305
# French - American Hybrid Cultivars

**Suited for a Low Cordon & Vertical Shoot Positioning**

<table>
<thead>
<tr>
<th>Semi-upright:</th>
<th>Upright:</th>
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<tbody>
<tr>
<td>Chambourcin</td>
<td>Chelois</td>
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<tr>
<td>Chardonel</td>
<td>St. Vincent</td>
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<tr>
<td>De Chaunac</td>
<td>Vignoles</td>
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<tr>
<td>La Crosse</td>
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<tr>
<td>Prairie Star</td>
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<tr>
<td>Seyval Blanc</td>
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<td>Traminette</td>
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Geneva Double Curtain System

where alternate vines are trained to opposite wires is suitable for high vigor vines. The minimum row width for this system should be 10 feet.
Cultivar Selection

• Vine Characteristics
  – Pest resistance or tolerance
    • Insect: phylloxera
    • Disease: black rot, downy & powdery mildew and Botrytis bunch rot; anthracnose on a few
  • Other
    – Herbicide drift: 2,4-D & dicamba (Banvel).
    – Pesticide sensitivity: Sulfur & Copper. (A critical consideration in developing an organic vineyard.)
Grape phylloxera

is the pest that nearly wiped out the French wine industry when it was accidentally introduced on some American grapes in the late 1800’s. This aphid-like pest attacks both the leaves and roots of grape vines. On the roots, it is detrimental to *V. vinefera* cultivars. However, the roots of American and French hybrid cultivars are tolerant to the pest. It will attack the leaves of all grape species, but the damage is not considered a problem on most American and French hybrid cultivars.
Grape Diseases

- See: “Common Grape Diseases” (2001 Grape Growing Workshop)
- **PM-1375** “Midwest Commercial Small Fruit & Grape Spray Guide”
- **B 861** “Midwest Small Fruit Pest Management Handbook”
- *Compendium of Grape Diseases*, APS Press