



## Grape IPM Survey January 2011

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A request to participate in this survey was sent out to the members of the Cold Climate Grape Listserve in January 2011. There were 23 survey respondents. Below is a summary of the input which was received.

### Description of Your Vineyard

#### 1. Location (State, Province) of vineyard:

|    |        |
|----|--------|
| CT | 4.35%  |
| NY | 13.04% |
| WI | 4.35%  |
| VT | 78.26% |

#### 2. Number of acres:

Total for all responses: 74.68 acres

Total for Vermont responses only: 62.18 acres

#### 3. Do you practice IPM in your vineyard (including organic IPM which would use organically-acceptable tools and practices)?

|     | % of answers |
|-----|--------------|
| Yes | 91.30%       |
| No  | 8.70%        |

**4. Have you found the IPM information provided by the UVM Cold Climate Grape Program (i.e. either in IPM updates, articles, presentations, website, and/or one-on-one education):**

|               | <b>% of answers</b> |
|---------------|---------------------|
| Highly Useful | 56.52%              |
| Useful        | 43.48%              |
| Rarely Useful | 0.00%               |
| Never Useful  | 0.00%               |

**5. Have you used the IPM information provided in decision-making?**

|     | <b>% of answers</b> |
|-----|---------------------|
| Yes | 95.65%              |
| No  | 4.35%               |

**6. Has the information obtained through the UVM Cold Climate Grape Program allowed you to:**

Increase your knowledge or understanding of Grape IPM

|        | <b>% of answers</b> |
|--------|---------------------|
| Yes    | 100.00%             |
| No     | 0.00%               |
| Unsure | 0.00%               |

Adopt at least one new IPM practice

|        | <b>% of answers</b> |
|--------|---------------------|
| Yes    | 95.00%              |
| No     | 0.00%               |
| Unsure | 5.00%               |

Reduce or minimize pesticide use

|        | <b>% of answers</b> |
|--------|---------------------|
| Yes    | 71.43%              |
| No     | 19.05%              |
| Unsure | 9.52%               |

Determine if pesticides are needed in your vineyard

|        | <b>% of answers</b> |
|--------|---------------------|
| Yes    | 80.95%              |
| No     | 14.29%              |
| Unsure | 4.76%               |

Effectively time pesticides if they were needed.

|        | <b>% of answers</b> |
|--------|---------------------|
| Yes    | 66.67%              |
| No     | 19.05%              |
| Unsure | 14.29%              |

Reduce the risks associated with pesticide use

|        | <b>% of answers</b> |
|--------|---------------------|
| Yes    | 71.43%              |
| No     | 9.52%               |
| Unsure | 19.05%              |

Adopt a reduced-risk alternative to manage a pest (e.g., insect, disease, weed, vole, deer, etc.)

|        | <b>% of answers</b> |
|--------|---------------------|
| Yes    | 80.95%              |
| No     | 4.76%               |
| Unsure | 14.29%              |

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**7. Where on the EPA "IPM Gradient" would you *currently* put you and your vineyard?**

|         | <b>% of answers</b> |
|---------|---------------------|
| Level 0 | 0.00%               |
| Level 1 | 4.35%               |
| Level 2 | 8.70%               |
| Level 3 | 73.91%              |
| Level 4 | 13.04%              |
| Level 5 | 0.00%               |

**8. Where on the EPA "IPM Gradient" would you have categorized you and your vineyard in 2008? (In other words, has there been a change over the last two growing seasons?)**

|         | <b>% of answers</b> |
|---------|---------------------|
| Level 0 | 13.64%              |
| Level 1 | 22.73%              |
| Level 2 | 27.27%              |
| Level 3 | 31.82%              |
| Level 4 | 4.55%               |
| Level 5 | 0.00%               |

*Level 0 - Your pest management almost entirely relies on prophylactic pesticide applications with little effort to monitor pest populations through scouting or forecasting.*

*Level 1 - You are interested in learning about IPM and reduced-risk pest management practices (such as using sanitation, canopy management, pest thresholds, weather/insect/disease models and reduced-risk pesticide options, etc.) but have not implemented practices yet.*

*Level 2 - You have started to use reduced-risk pest management practices on a trial basis; you are in the early stages of IPM implementation.*

*Level 3 - You utilize key management practices such as scouting, pest identification, knowledge of pest life cycles and monitoring of weather conditions to determine when and what tools to utilize in managing pests; you are aware of the environmental and human health risks and benefits of the various pesticide options.*

*Level 4 - You have fully implemented IPM and reduced-risk pest management practices with primary reliance on bio-controls to manage pest populations when present at economically damaging levels. Cultural practices to manage pest populations are fully utilized. You are actively mentoring others and moving toward a whole systems approach.*

*Level 5 - You have successfully adopted a whole systems approach which successfully integrates pest, soil, water, and crop management practices. Your IPM program incorporates conservation planning and focuses on sustainable agriculture with long term outcomes.*

**9. Compared to how you managed your vineyard in 2008, have you increased your use of or do you more effectively use the following IPM practices to reduce risk in your current pest management program?**

Scout/monitor your vineyard for insect pests and disease levels during the growing season

|        | <b>% of answers</b> |
|--------|---------------------|
| Yes    | 90.48%              |
| No     | 9.52%               |
| Unsure | 0.00%               |

Use established pest thresholds to determine the need for pesticide intervention

|        | <b>% of answers</b> |
|--------|---------------------|
| Yes    | 65.00%              |
| No     | 20.00%              |
| Unsure | 15.00%              |

Monitor weather conditions that affect insect and disease development and use in decision-making

|        | <b>% of answers</b> |
|--------|---------------------|
| Yes    | 85.00%              |
| No     | 5.00%               |
| Unsure | 10.00%              |

Remove diseased plant parts (e.g., canes, leaves, fruit)

|        | <b>% of answers</b> |
|--------|---------------------|
| Yes    | 85.00%              |
| No     | 10.00%              |
| Unsure | 5.00%               |

Manage canopy to allow better air flow and sun penetration to suppress disease development

|        | <b>% of answers</b> |
|--------|---------------------|
| Yes    | 90.00%              |
| No     | 10.00%              |
| Unsure | 0.00%               |

Spot-treat sections of vineyard if a whole vineyard spray is not warranted

|        | <b>% of answers</b> |
|--------|---------------------|
| Yes    | 60.00%              |
| No     | 35.00%              |
| Unsure | 5.00%               |

Make optimal use of reduced-risk or bio-pesticides

|        | <b>% of answers</b> |
|--------|---------------------|
| Yes    | 60.00%              |
| No     | 25.00%              |
| Unsure | 15.00%              |

**10. Compared to how you managed your vineyard in 2008, have you increased your use of or do you more effectively use any of the PESTICIDES that EPA has categorized as 'reduce-risk' in your current pest management program?**

|        | <b>% of answers</b> |
|--------|---------------------|
| Yes    | 54.55%              |
| No     | 31.82%              |
| Unsure | 13.64%              |

*Note: Reduced-risk pesticides include:*

*Fungicides: Abound, Elevate, Endura, Flint, Quintec, Revus, Scala, Vanguard*

*Insecticides/Miticides: Acramite, Assail, Avaunt, Clutch, Confirm, Intrepid, Delegate, Movento,*

*Success, Venom, Zeal, Zeal Miticide 1*

**11. Do you consider the following when selecting a pesticide (e.g., insecticide, fungicide, herbicide)?**

Spectrum of activity

|           | <b>% of answers</b> |
|-----------|---------------------|
| Always    | 86.36%              |
| Sometimes | 13.64%              |
| Never     | 0.00%               |
| Unsure    | 0.00%               |

Non-target impact on beneficial organisms

|           | <b>% of answers</b> |
|-----------|---------------------|
| Always    | 72.73%              |
| Sometimes | 22.73%              |
| Never     | 4.55%               |
| Unsure    | 0.00%               |

Mode of action of pesticide

|           | <b>% of answers</b> |
|-----------|---------------------|
| Always    | 66.67%              |
| Sometimes | 27.78%              |
| Never     | 0.00%               |
| Unsure    | 5.56%               |

Chemical family of pesticide

|           | <b>% of answers</b> |
|-----------|---------------------|
| Always    | 47.62%              |
| Sometimes | 42.86%              |
| Never     | 0.00%               |
| Unsure    | 9.52%               |

Toxicity to pesticide applicator

|           | <b>% of answers</b> |
|-----------|---------------------|
| Always    | 81.82%              |
| Sometimes | 18.18%              |
| Never     | 0.00%               |
| Unsure    | 0.00%               |

### Signal word on label

|           | <b>% of answers</b> |
|-----------|---------------------|
| Always    | 72.73%              |
| Sometimes | 9.09%               |
| Never     | 4.55%               |
| Unsure    | 13.64%              |

### Cost of pesticide

|           | <b>% of answers</b> |
|-----------|---------------------|
| Always    | 36.36%              |
| Sometimes | 59.09%              |
| Never     | 4.55%               |
| Unsure    | 0.00%               |

### Resistance risk rating

|           | <b>% of answers</b> |
|-----------|---------------------|
| Always    | 54.55%              |
| Sometimes | 36.36%              |
| Never     | 4.55%               |
| Unsure    | 4.55%               |

### Whether it is a reduced-risk pesticide

|           | <b>% of answers</b> |
|-----------|---------------------|
| Always    | 63.64%              |
| Sometimes | 31.82%              |
| Never     | 0.00%               |
| Unsure    | 4.55%               |

### Whether it is a biopesticide

|           | <b>% of answers</b> |
|-----------|---------------------|
| Always    | 40.91%              |
| Sometimes | 36.36%              |
| Never     | 4.55%               |
| Unsure    | 18.18%              |

Whether it is an organically-approved pesticide

|           | <b>% of answers</b> |
|-----------|---------------------|
| Always    | 40.91%              |
| Sometimes | 40.91%              |
| Never     | 18.18%              |
| Unsure    | 0.00%               |

Potential movement in soil/water

|           | <b>% of answers</b> |
|-----------|---------------------|
| Always    | 63.64%              |
| Sometimes | 27.27%              |
| Never     | 4.55%               |
| Unsure    | 4.55%               |

Re-entry interval

|           | <b>% of answers</b> |
|-----------|---------------------|
| Always    | 66.67%              |
| Sometimes | 23.81%              |
| Never     | 4.76%               |
| Unsure    | 4.76%               |

Days to harvest interval (Preharvest interval)

|           | <b>% of answers</b> |
|-----------|---------------------|
| Always    | 76.19%              |
| Sometimes | 23.81%              |
| Never     | 0.00%               |
| Unsure    | 0.00%               |

**Other: (fill-in answers)**

|                               |
|-------------------------------|
| Organically approved (Always) |
| I don't use pesticides        |

**12a. Have the IPM practices that you have implemented had an overall economic impact in your vineyard operation?**

|        | <b>% of answers</b> |
|--------|---------------------|
| Yes    | 47.83%              |
| No     | 8.70%               |
| Unsure | 43.48%              |

**12b. -- If yes, has the economic impact produced a:**

|  | <b>% of answers</b> |
|--|---------------------|
| Net economic benefit (i.e., benefit from better yield (quality and/or quantity) and/or reduce-risks, etc.) | 100.00%             |
| Net economic loss (i.e., cost outweighed any benefits)   | 0.00%               |

**13. How would you rate your overall knowledge of the disease cycles of the major grape DISEASES, the optimal time(s) to manage each disease, and the pro's and con's of various management options?**

|           | <b>% of answers</b> |
|-----------|---------------------|
| Excellent | 4.35%               |
| Good      | 26.09%              |
| Average   | 47.83%              |
| Minimal   | 17.39%              |
| Very Poor | 4.35%               |

**14. How important is it to you to learn more about the major grape diseases, the optimal time(s) to manage them, and the various management options?**

|                      | <b>% of answers</b> |
|----------------------|---------------------|
| Highly Important     | 68.18%              |
| Moderately Important | 31.82%              |
| Slightly Important   | 0.00%               |
| Not at all Important | 0.00%               |
| Unsure               | 0.00%               |

**15. How would you rate your overall knowledge of the insect life cycles of the major grape INSECT pests, the optimal time(s) to manage each pest, and the pro's and con's of various management options?**

|           | <b>% of answers</b> |
|-----------|---------------------|
| Excellent | 0.00%               |
| Good      | 43.48%              |
| Average   | 39.13%              |
| Minimal   | 17.39%              |
| Very Poor | 0.00%               |

**16. How important is it to you to learn more about the major grape insect pests, the optimal time(s) to manage them, and the various management options?**

|                      | <b>% of answers</b> |
|----------------------|---------------------|
| Highly Important     | 69.57%              |
| Moderately Important | 30.43%              |
| Slightly Important   | 0.00%               |
| Not at all Important | 0.00%               |
| Unsure               | 0.00%               |

**17. How would you rate your overall knowledge of the WEEDS that impact grape production, the optimal time to manage the various weeds, and the pro's and con's of various management options?**

|           | <b>% of answers</b> |
|-----------|---------------------|
| Excellent | 4.35%               |
| Good      | 34.78%              |
| Average   | 34.78%              |
| Minimal   | 17.39%              |
| Very Poor | 8.70%               |

**18. How important is it to you to learn more about weeds , the optimal time(s) to manage them, and the various management options?**

|                      | <b>% of answers</b> |
|----------------------|---------------------|
| Highly Important     | 56.52%              |
| Moderately Important | 26.09%              |
| Slightly Important   | 17.39%              |
| Not at all Important | 0.00%               |
| Unsure               | 0.00%               |

**19. How would you rate your overall knowledge of BENEFICIAL ORGANISMS and the potential for BIOLOGICAL CONTROL in your vineyard?**

|           | <b>% of answers</b> |
|-----------|---------------------|
| Excellent | 0.00%               |
| Good      | 26.09%              |
| Average   | 26.09%              |
| Minimal   | 47.83%              |
| Very Poor | 0.00%               |

**20. How important is it to you to learn more about beneficial organisms and the potential for biological control?**

|                      | <b>% of answers</b> |
|----------------------|---------------------|
| Highly Important     | 69.57%              |
| Moderately Important | 26.09%              |
| Slightly Important   | 4.35%               |
| Not at all Important | 0.00%               |
| Unsure               | 0.00%               |

**21a. Are you producing grapes using organically-approved practices and materials?**

|        | <b>% of answers</b> |
|--------|---------------------|
| Yes    | 26.09%              |
| No     | 56.52%              |
| Unsure | 17.39%              |

**21b. -- If yes, are you**

|   | <b>% of answers</b> |
|---|---------------------|
| Certified organic                                   | 8.33%               |
| Transitioning to certified organic grape production | 25.00%              |
| Neither   | 66.67%              |

**22. How important is it to you to learn more about organically-approved practices and pesticides?**

|                      | <b>% of answers</b> |
|----------------------|---------------------|
| Highly Important     | 43.48%              |
| Moderately Important | 39.13%              |
| Slightly Important   | 13.04%              |
| Not at all Important | 4.35%               |
| Unsure               | 0.00%               |