

# Cold Climate Grape Production



**"Snapshot"**

**Of**

**Integrated Pest Management (IPM)**

**Based on a 2009 Survey**

**Supported, in part, by a grant from the  
EPA Pesticide Environmental Stewardship  
Program**

# Cold Climate Grape Production



Presentation By

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At the

**Cold Climate Research and Extension Planning  
Workshop**

Burlington, VT

November 12, 2009

# **Cold Climate Grape Varieties:**

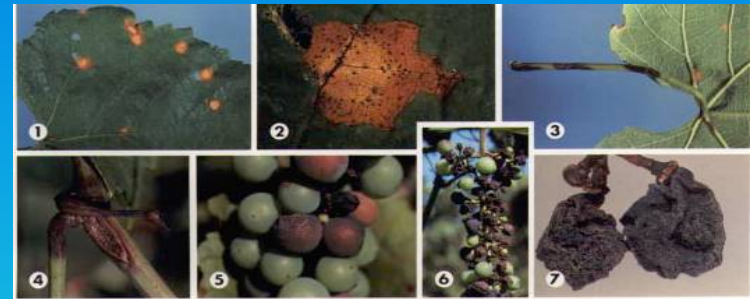
- Disease Resistance ?
- Insect attractiveness ?
- Sensitivity to pesticides ?

# Major Diseases – The BIG 4

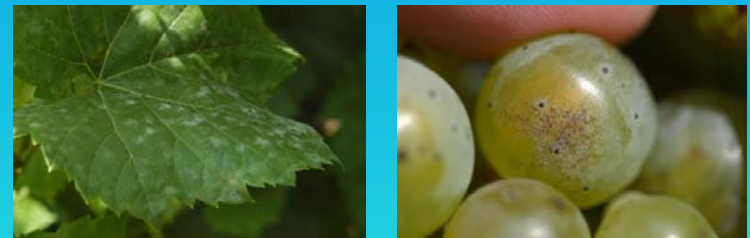
**Phomopsis cane  
and leaf spot**



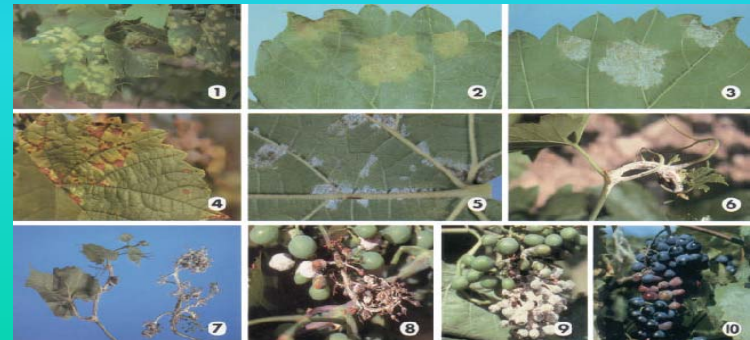
**Black Rot**



**Powdery Mildew**



**Downy Mildew**



# Cold Climate Grape IPM

## Other Important Diseases

- Anthracnose
- Botrytis bunch rot
- Angular leaf scorch

# 2009 Cold Climate Grape Survey



**Which of the following DISEASES  
have been a problem in your  
vineyard requiring the use of a  
pesticide to manage them?**

# Disease - "Yes"



- Downy Mildew – 73%
- Botrytis Bunch Rot – 41%
- Powdery Mildew – 70%
- Crown Gall – 29%
- Black Rot – 67%
- Anthracnose – 27%
- Phomopsis – 42%
- Angular Leaf Scorch – 19%

# 2009 Cold Climate Grape Survey



Which of the following  
**Insects/Mites**

have been a problem in your  
vineyard requiring the use of a  
pesticide to manage them?

# Insect – “Yes”



- Jap. Beetle – 89%
- Grape Flea Beetle – 61%
- Grape Phylloxera – 55%
- Grape Berry Moth – 53%
- Rose Chafer – 50%
- Grape Leafhoppers – 37%
- Grape Cane Girdlers – 31%

# 2009 Cold Climate Grape Survey



Which of the following

**Weed Types**

have been a problem in your vineyard requiring the use of a pesticide to manage them?

# Weed Types - "Yes"

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- Grasses – 69%
- Broadleaf weeds – 65%

# 2009 Cold Climate Grape Survey



Which of the following

**Vertebrates**

have been a problem in your  
vineyard?

# Vertebrates



- Deer – 81%
- “Other birds” – 62%
- Turkeys – 54%
- Starlings – 42%
- Voles/Mice – 42%
- Raccoons – 35%

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?

- **Excellent – 9%**
- **Good – 29%**
- **Average – 35%**
- **Minimal – 26%**
- **Very Poor – 0%**

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?

- **Highly Important – 82%**
- **Mod. Important – 15%**
- **Slightly Important – 3%**
- **Not at all Important – 0%**
- **Unsure – 0%**

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?

- **Excellent – 12%**
- **Good – 18%**
- **Average – 41%**
- **Minimal – 29%**
- **Very Poor – 0%**

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?

- **Highly Important – 82%**
- **Mod. Important – 12%**
- **Slightly Important – 6%**
- **Not at all Important – 0%**
- **Unsure – 0%**

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?

- **Excellent – 9%**
- **Good – 26%**
- **Average – 29%**
- **Minimal – 32%**
- **Very Poor – 3%**

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

- **Highly Important – 53%**
- **Mod. Important – 29%**
- **Slightly Important – 9%**
- **Not at all Important – 6%**
- **Unsure – 3%**

**High Quality  
Wine**

**starts with**

**High Quality  
Grapes**

**Effective, Ecologically-based  
IPM**

**is critical to achieving**

**High Quality Grapes**

# Thank you !

## Source of funding:

- EPA PESP grant
- UVM Extension
- UVM Agric. Exp. Station