

## **Cherry Powdery Mildew Treatment Advisory: October 14, 2009**

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Everyone associated with the Washington cherry industry is painfully aware that 2009 has been the most severe powdery mildew year in recent memory. Although the damage done to fruit cannot be undone there are steps to be taken to help lower disease pressure in 2010. The fungus that causes powdery mildew produces cleistothecia on infected foliage and fruit. Cleistothecia are tiny spherical structures that contain ascospores. They are blown or washed into bark fissures where they (most importantly) provide the means for the fungus to survive the winter and cause potential problems in 2010. Previous research at WSU has shown that a large portion (but not all) of these survival propagules can be eliminated using liquid lime sulfur. Reducing the amount of overwintering inoculum should delay the onset of disease next spring. Given the large amount of "survival" inoculum that we currently have in some of our orchards it is advisable to apply the compound this fall.

The decision to apply lime sulfur should be made only after careful consideration of several other factors. First, the application of this compound would not preclude the application of fungicides during the 2010 growing season. Second, the practice will not eliminate all carryover inoculum, which indicates that the need for a fungicide program is virtually guaranteed next year. Third, lime sulfur should be applied only where powdery mildew was a severe problem in 2009. There is little reason for application if mildew was kept at acceptable levels. Fourth, growers should carefully weigh the economics of lime sulfur and all other fungicide applications before making the decision to treat.

### **Usage directions:**

- 1) apply just prior to leaf fall and again next spring (several weeks prior to bud break) (if you can afford only 1 application, make it this autumn)
- 2) allow for thorough wetting of foliage, tree trunks, and scaffold limbs
- 3) apply 10-20 gallons per acre just prior to leaf fall. If applying in spring, use 7.5 gallons per acre in the delayed dormant period
- 4) always read the pesticide label

*Use pesticides with care. Apply them only to plants, animals, or sites listed on the labels. When mixing and applying pesticides, follow all label precautions to protect yourself and others around you. It is a violation of the law to disregard label directions. If pesticides are spilled on skin or clothing, remove clothing and wash skin thoroughly. Store pesticides in their original containers and keep them out of the reach of children, pets, and livestock.*