

## Botrytis concerns

Turner B. Sutton, Department of Plant Pathology, NCSU

*Botrytis cinerea* primarily infects and colonized weak and dead tissues. Consequently the recent freeze that has left many dead shoots in most vineyards has created a situation that has significantly increased the risk of botrytis infection during bloom this year. Many of these dead shoots will fall off as they dry, but from what I saw last week there are still many left on the cordons. The information below is primarily for growers who have had freeze damage but still have enough fruit to spray and harvest.

Most botrytis infections that occur during bloom remain quiescent (latent) and do not show up until berries begin to ripen. However if it is wet during bloom, entire blossom clusters can be blighted. Research conducted in New York several years ago demonstrated that in some years fungicides active on botrytis applied during bloom reduced the amount of botrytis rot at harvest. Generally if it is dry during bloom the risk of botrytis is not great and a fungicide spray is not needed, but if it is wet some infection may occur. However whether the weather during bloom this year is wet or dry, I think that a spray of a fungicide with activity on botrytis is warranted because of the high inoculum that could be in many vineyards.

There are several good botrytis fungicides: Vanguard, Scala, Elevate, Rovral and Endura. Read the labels for the correct rate of each product. Be sure to rotate them in subsequent applications (closing, veraison, preharvest) to avoid resistance. Note: Vanguard and Scala are in the same group of chemistry so limit their use to 1 or 2 applications collectively during the season. These botrytis fungicides have very little activity on any of the other diseases of concern during bloom so they should be tank mixed with other fungicides, depending on your spray schedule.

I'm hopeful that most of the dead shoots are going to fall off in the next month or so. If not they have the potential to significantly increase summer bunch rot diseases, especially ripe rot. I'm also concerned about the dead spurs which could also be colonized by the ripe rot fungus and provide inoculum as the fruit begin to ripen. I've seen a similar problem on apples on many occasions when shoots killed by the fire blight bacterium are colonized by rot fungi and increase rots in the orchard. I'll send some additional information on management of bunch rots after bloom.