Susceptibility to frost damage depends on a tree’s stage of development, variety, and location, but certain preventative measures can be taken. The goal of all frost protection methods is to maintain the blossom temperature above the critical temperature.

When using wind machines, it is important that the machines are turned on when the air temperature in the orchard is still above critical temperatures. If air temperature is being monitored in a protected shelter within or outside of the orchard, the machines should be initiated when the air temperature is still above 32°F. It is very possible that bud temperatures may be several degrees below the air temperature due to radiational cooling, and they can experience damage even if the air is still above freezing.

More information about choosing and implementing frost protection systems can be obtained from your county extension educator or from commercial dealers that offer frost protection systems and components.

For additional information, please refer to the Penn State Extension Tree Fruit Production Guide.

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