

## Fruit Trees and Frost

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If you are considering purchasing fruit trees this spring, there are certain factors that should be considered for some fruit tree species. Spring in Kansas is often unsettled with apricot and peach tree flowers being very vulnerable to late frosts that can kill fruit buds. Of course, the tree itself will be fine but there will be no to little fruit for that year. Other species of trees can also be affected but apricots and peaches are by far the most sensitive. Also, the closer a tree is to full bloom, the more sensitive it becomes to frost.

Apricots are more likely to have frost kill flowers than peaches because they bloom a bit earlier. Though there are late-blooming apricot varieties, the differences between full bloom on early and late-blooming varieties appears to be slight. Research at Virginia Tech in the 1990's showed a maximum of a 4-day difference between early and late varieties. However, in some years that may be all that is needed. The trees in the study that were considered late blooming included Hungarian Rose, Tilton and Harlayne. Harglow was not included in the study but is also considered late-blooming. See <https://tinyurl.com/y35ntxau> for more information.

Peaches are next on the list for being likely to be caught by a late frost. With peaches, two characteristics become important when considering whether they will be damaged. Like apricots, bloom time is very important but fruit bud hardiness should also be considered. In this case, fruit bud hardiness refers to hardiness to late frosts rather than the ability to survive extreme low temperatures during the winter. Late bloomers included 'China Pearl', 'Encore', 'Intrepid', and 'Risingstar.' See <https://tinyurl.com/y35ntxau> for more information. The 'Intrepid' cultivar also has shown excellent cold hardiness when in flower.

So, are there other considerations when looking at possible frost damage? Location can be very important. Planting on a hill which allows cold air to drain to lower elevations can help. Also, a location in town will be more likely to have a warmer micro-climate than an exposed location. Some gardeners will add a heat source under a tree during cold nights if they are close to a building. Heat lamps and charcoal briquettes are sometimes used but safety should be the first consideration.

For more information, please contact the local K-State Research and Extension Office. K-State Research and Extension is an equal opportunity provider and employer.