

Protect Fruit from Spring Frost and Wind



Foothill gardeners can use simple home tools like Christmas tree lights, jugs of water and trellises to protect fruit from spring frost and wind. Late-spring frost occurs in part because heat accumulated in daytime reradiates into the atmosphere at night. However, gardeners can take advantage of the re-radiation process by placing materials that absorb daytime heat, such as jugs filled with water, underneath trees and vines.

Water stores almost 95 percent of the solar radiation it receives. As the heat leaves the water-filled containers at night, it will warm the crops. Irrigating the soil during the day will also capture heat and release it at night. Try training blackberry canes up an east-facing cement block wall. The wall will absorb solar heat during the day and warm the canes at night. During hot summer days, the leafy canes will shade the wall and prevent heat damage. In addition, the wall will shade canes in the afternoon, when it's hottest.

Because cold air sinks and warm air rises, plant grapes and other fruit at the highest elevation in the garden for more frost protection. Plant dwarf fruit trees and cover them with a blanket or tarp at night. Place 150 watt light bulb lamps under the tarp for more protection. Also, try stringing Christmas tree lights through fruit trees for nighttime heating.

Wind can be a major problem in spring. It desiccates flower buds and blows young fruit off trees. Set up windbreaks to slow the wind, but don't try to block it, because that can cause the wind to whirl and tumble, resulting in greater damage to crops. Trees, hedges and trellises make good windbreaks because they reduce wind severity without blocking it. They also allow greater air circulation during the summer, reducing the occurrence of mildews and other diseases.

This article adapted from Cooperative State Research, Education and Extension Service, USDA. Please contact Ken Churches at cocalaveras@ucdavis.edu or (209) 754-6475 with your agricultural questions. To speak with a Certified Master Gardener: Calaveras (209) 754-2880, Tuolumne (209) 533-5696, Amador (209) 223-6837, El Dorado (530) 621-5543.