

Key Low-Spray and Organic Solutions



NATIONAL CENTER
FOR APPROPRIATE
TECHNOLOGY

Brown Rot

Cultural practices and orchard sanitation are the first lines of defense. Planting-site selection and pruning are critical to providing sufficient air circulation and sunlight penetration within the canopy. Keep the orchard some distance from surrounding woods so that air movement is not blocked or slowed by the presence of surrounding trees and the plum curculio does not have access to overwintering habitat. Recommended orchard sanitation practices include pruning out and removing infected twigs and cankers and disposing of dropped, culled, or mummified fruit. Organic growers have traditionally relied on sulfur or sulfur-containing fungicides to control brown rot. Apply wettable sulfur every 10 to 14 days from petal fall until harvest. Spray more often during wet seasons. Augmenting sulfur with Surround™ WP Crop Protectant provides better control, but may leave problematic residue on the fruit. The biofungicide, Serenade™ (*Bacillus subtilis*, QST 713 strain) is OMRI approved and has demonstrated laboratory and field control of brown rot in California, but has been less effective in other regions and climates.

Coryneum Blight

Remove and destroy all infected twigs and branches as you see them. Spray your tree with a fungicide (OMRI-approved copper or lime-sulfur sprays work) just as the buds begin to swell in the spring. Spray the tree again as soon as the petals begin to drop. In a wet year or location, sprays may have to continue every two weeks until symptoms subside or the weather turns dry.

Bacterial Spot

Selecting disease-resistant cultivars is the principal means of controlling bacterial spot. Copper fungicides—unique in that they also function as bactericides—are allowed in organic production for control of bacterial spot. The first spray should be applied before the tree leafs out in the spring. The next period when infection pressure is heavy is petal fall and three weeks thereafter. Additional spray coverage may be necessary depending on varietal susceptibility and humid weather conditions.

Cytospora Canker

The disease progresses slowly, and a tree with cytospora can survive for many years past the initial infection. Management begins by choosing planting sites away from older peach and plum trees and by eliminating wild or untended plums and peaches near the orchard. Because cold damage is often the primary infection site, painting trunks with whitewash to reflect the winter sun can be helpful. Other management techniques center around minimizing damage to the trees by pruning only in the early spring when temperatures have warmed, avoiding leaving pruning stubs, removing dead and diseased branches, and controlling borers.



Visit www.attra.ncat.org to see ATTRA's *Plums, Apricots, and Their Crosses: Organic and Low-spray Production* publication for more information.



ATTRA
SUSTAINABLE AGRICULTURE

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For more information on a wide range of topics related to sustainable agriculture, visit the ATTRA website at www.attra.ncat.org. You'll find hundreds of publications, webinars and videos, news, databases and other tools, and more!

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