

## **BROWN ROT**



Brown rot (*Monilinia fructicola*) is a common fungal disease that affects trees in the "stone fruit" category such as peaches, nectarines, plums, cherries, and apricots. Brown rot can be very devastating, causing a majority of the fruit to rot in a bad year and twigs to become cankered. Fruits infected with brown rot first appear with soft brown spots. As the infection grows quickly, the fruit becomes covered in a powdery mass of fungus. Wet weather conditions can increase the development of this infection.

Month	Tasks	Observations & Dates Completed
Jan - Feb	<ol> <li>Prune fruit trees during dormant period to open up the tree to sunlight and air circulation. Check out the <u>POP Pruning Guide</u> for more information on winter fruit tree pruning.</li> </ol>	
	2. Remove fruit mummies during weekly orchard walk throughs and prunings on stone fruit trees such as peaches and plums, ideally before bud break. Pick up mummified or infected fruit on orchard floor and dispose immediately.	
Mar - Apr	<ol> <li>Be on the lookout for infected blooms. Infected blooms may have dark brown lesions starting at the base and out towards the petals, may begin to shrivel, may turn brown and die early. Remove and dispose of them immediately.</li> </ol>	
	2. Prune out any sign of canker on twigs.	
	3. Apply holistic sprays such as compost tea, Effective Microbes, and/or neem oil for tree immunity every two weeks from late March to early May.	
	4. Continue orchard sanitation by removing fruit mummies on both the trees and dropped on the orchard floor.	
	5. For trees or sites with previous seasons of severe infection, apply Serenade biofungicide at bud break through petal fall, repeating at 7 day intervals for approximately 1 month. You can read more about biofungicides on the <a href="POP Blog">POP Blog</a> . Please read labels carefully before application. Note: Biofungicides are a preventative measure and cannot be applied to already injured fruit. Fungicides can also negatively impact existing beneficial micro-organisms.	



Month	Tasks	Observations & Dates Completed
May - Jun	1. When fruitlets on stone fruit such as peaches and plums are about 3/4 inch, thin fruitlets to increase light and air circulation and reduce rate of infection from fruits too closely touching. Plums and apricots should be thinned 2-3" apart, while peaches should be thinned about 8" apart (if you have squirrels, thin to 4"). You can read more about thinning on the POP blog.	
	2. At this stage, infected fruitlets may have soft, brown spots that will quickly expand and produce a brownish-gray powdery mass of spores. Remove and dispose of them immediately.	
	3. In May, if trees have ongoing brown rot challenges, Serenade can be applied after petal drop at 10-14 day intervals through harvest. Note: This amount of continuous spraying is an option for <b>severe brown rot challenges</b> .	
	4. Consider a <u>beneficial insect release</u> of trichogramma wasps in May or June that will prey on orchard pests that can cause injury to fruit that will later become entry sites for spores.	
Jul - Sep	• It's harvesting time! Throughout the summer, look out for signs of infected fruit that are still on the trees or have rotted and dropped on the orchard floor. At this time, fruit infected by brown rot will be very soft, brown and often completely covered in spore masses that can infect other fruit. Remove infected fruit from orchard site and dispose of it immediately.	
Oct - Dec	<ul> <li>During weekly orchard walk throughs, remove and dispose of any remaining "fruit mummies" on trees. Brown rot survives through winter season on mummified fruit left on the tree or on the orchard floor. Fruit mummies will look like dark, dried, shrunken and wrinkled. For prevention, apply neem or fermented teas around the base of the tree to destroy spores.</li> </ul>	

## **Resources Used:**