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Bacterial Blight

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What is bacterial blight? Bacterial blight, also known as blossom blight or shoot blight, is a common and often serious disease of Chinese, Japanese, Persian and common lilac, as well as walnut, apple, pear, plum and cherry. White flowering varieties of common lilac are most susceptible to the disease.



Bacterial blight can cause death of lilac branch tips and leaves.

What does bacterial blight look like? Initial symptoms of bacterial blight may include dark brown necrotic (dead) leaf spots with yellow halos. If leaf spots develop before leaves are fully expanded, leaf curling and twisting may result. More advanced symptoms include necrotic blotches starting at the leaf margins and advancing inward, as well as black streaking on twigs. In its most severe form, bacterial blight can result in the death of branch tips, leaves and blossoms.

Where does bacterial blight come from? Bacterial blight is caused by the bacterium *Pseudomonas syringae* pv. *syringae* (*Pss*), which survives in diseased stem tissue (cankers), plant debris, and soil. *Pss* can be spread by insects and on pruning tools but is more commonly spread by wind and rain. Often *Pss* is found on the surface of healthy plants and does not cause disease. Infections can occur when the bacterium enters tissue through natural openings or through wounds caused by insects, pruning, wind damage or hail.

How do I save a plant with bacterial blight? Prune diseased twigs 10 to 12 inches below the point of visible symptoms, and dispose of

the branches by burning (where allowed by local ordinance) or burying them. Always prune in dry weather, and disinfest pruning tools after each cut by treating them for at least 30 seconds with a 10% bleach solution or preferably 70% alcohol (e.g., rubbing alcohol straight from the bottle or a spray disinfectant). If you decide to use bleach, be sure to thoroughly rinse and oil your tools after pruning is complete to prevent rusting.

How do I avoid problems with bacterial blight in the future? When planting lilacs, provide adequate spacing between shrubs. Thin individual shrubs each winter to promote good air circulation (see University of Wisconsin Garden Facts XHT1015, *Pruning Deciduous Shrubs*, for pruning tips). Properly water, fertilize and mulch shrubs to avoid stress that may predispose them to disease. Avoid overhead watering that may keep leaves wet. If you have had chronic problems with bacterial blight, you may want to use a combination of copper and mancozeb-containing fungicides for control. Apply fungicides two to three times at seven to 10 day intervals as leaves emerge, but before symptoms develop. Read and follow all label instructions of the fungicide that you select to ensure that you use the fungicide in the safest and most effective manner possible.

For more information on bacterial blight: Contact the University of Wisconsin Plant Disease Diagnostics Clinic (PDDC) at (608) 262-2863 or pddc@wisc.edu.

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