

Shot Hole in Leaves Caused by *Pseudomonas syringae*, (Bacterial Canker) Glynn C. Percival

Introduction. Bacterial canker attacks many species of Cherry and Pear. The disease is caused by the bacteria *Pseudomonas syringae*. The disease usually occurs as enlarging lesions or cankers on trunks and scaffolds of young, vigorous trees, especially sweet cherry. Great amounts of gum are usually associated with active cankers, but gumming is not always a positive indication of this disease.

Symptoms: The disease attacks most parts of the tree. Cankers on trunks, limbs and branches exude gum during late spring and summer (Figure 1). Leaves on the terminal portions of cankered limbs and branches may wilt and die in summer or early autumn. Leaf and fruit infections occur sporadically, but they can be of economic significance in years with prolonged wet, cold weather during or shortly after bloom. Leaf spots are dark brown, circular to angular, and sometimes surrounded with yellow halos. The spots may coalesce to form large patches of dead tissue, especially at margins of leaves, or the centers of the necrotic spots may drop out, resulting in tattered leaves which form the distinctive shot hole symptoms (Figure 2). Infected leaves may abscise during midseason.



Figure 1. "Gumming" on tree trunk caused by bacterial canker.



Figure 2. Shot hole symptoms of leaves caused by caused by bacterial canker.

Control: Pruning of diseased wood should be carried out in the summer during dry weather, as infection of the branches occurs in autumn and winter. Prune off cankered limbs well below visible canker. Sterilize pruning tools before pruning healthy trees. The area around the base of young trees should be kept weed free. Spray the foliage with copper oxychloride in August, September and October to protect from infection. Useful suppression of bacterial canker can be achieved using high phosphite compounds as part of a fertilisation regime. Apply a foliar spray and soil drench