




# Leaf blight of carrot

*Alternaria dauci*

	Prevention	Monitoring	Direct Control
	<ul style="list-style-type: none"> <li>• Use tolerant varieties if available</li> <li>• Plant clean, certified seed or seed which has been treated with hot water at 50°C for 20 minutes</li> <li>• Remove any volunteer carrots as they are sources of inoculum</li> <li>• Do not plant carrots downwind of, or next to, an infected field since the disease can spread via wind and water</li> <li>• Apply farmyard manure as necessary to maintain soil nutrient levels. Nutrient deficiency can increase the susceptibility of carrot to the disease (particularly lack of potassium)</li> <li>• Use furrow irrigation if possible and maintain optimum irrigation levels. Avoid overhead irrigation since this leaves the plant wet and encourages spread of the disease</li> <li>• Irrigate early in the day to allow crop to dry - irrigating at night will leave crop damp and promote disease development</li> <li>• Plant on raised beds with wide row spacing to allow soil to drain</li> <li>• Keep carrots free of injury - injured carrots are more susceptible to the disease</li> <li>• If growing carrots in a greenhouse, cover it with a UV-absorbing vinyl film to inhibit development of <i>A. dauci</i></li> <li>• Clean machinery after use since it can spread the disease</li> <li>• Rotate crop for at least three years with non-susceptible crops. Do not rotate with alternative hosts garlic, dill, celery, cabbage, cucumber, carnation, lettuce, parsnip, parsley, radish, tomato, aubergine</li> </ul>	<ul style="list-style-type: none"> <li>• Look out for:                             <ul style="list-style-type: none"> <li>• Leaves: dark brown to irregularly shaped lesions/spots on leaf blades and petioles. These lesions usually appear on older leaves first and have a yellow margin</li> <li>• Leaves: lesions gradually join together causing leaves to shrivel and die. Results in a burnt appearance</li> <li>• Seeds: shrivel and will not germinate</li> </ul> </li> <li>• Disease will first appear in small patches in a field and will gradually spread</li> <li>• Monitor crop particularly closely when temperatures are around 27°C and there are long periods of rain/there is high humidity. These are optimal conditions for disease development</li> <li>• Symptoms can be similar to <i>Cercospora</i> leaf blight, but lesions caused by <i>Cercospora</i> become elliptical with tan centres and brown borders, whereas lesions caused by <i>Alternaria</i> become dark brown and irregular</li> <li>• Symptoms of bacterial blight are also similar but leaf spots are usually confined between leaf veins</li> </ul>	<ul style="list-style-type: none"> <li>• Rogue infected leaves to reduce disease spread. Burn the leaves (if allowed in your area) to completely remove the source if inoculum</li> <li>• After harvest, plough in crop debris to speed up decomposition. The pathogen only survives in the soil on infected carrot residue</li> </ul>
<p>Symptoms of leaf blight on carrot plants at the end of vegetation (first year of seed production). (Krystyna Tylkowska)</p>			
			
<p>Diseased carrot leaf. (Krystyna Tylkowska)</p>			
			
<p>Symptoms of leaf blight on flower - stalks (second year of seed production). (Krystyna Tylkowska)</p>			

Note: Pesticides may be available to control this pest. Please check with the Ministry of Agriculture in your country to find out which pesticides are registered in your country and the local restrictions for their use.