Raspberry disorders:
Spur blight and cane blight

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Spur blight and cane blight are two distinct diseases of raspberry caused by the fungi *Didymella applanata* and *Leptosphaeria coniothyrium*, respectively. Symptoms and disease cycles differ, but control measures are similar for these two diseases. Spur blight occurs on red and purple varieties of raspberry. Cane blight is most common on black raspberry, but it also occurs on red and purple raspberry, blackberry, and dewberry. The diseases often occur together on the same cane making it difficult to distinguish the damage caused by each. Infected canes are generally weak and more susceptible to cold injury during the winter.

**Spur blight**

**Symptoms**

In late spring or early summer, brown or purple discoloration appears on new canes just below the point of leaf attachment, often on the lower portions of canes. The leaf blade may turn yellow and fall off, but the petiole frequently remains attached. The discoloration extends up and down the cane but stops before it reaches the next leaf attachment site in either direction. Infected tissue remains brown or black throughout the summer but turns gray in the fall. About the time it turns gray, the bark splits along the length of the cane, and small, black, spore-bearing bodies are visible. Fruiting canes infected the previous season may produce lateral shoots.

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**Advanced cane blight symptoms on raspberry.**
*(Photo courtesy Michael Ellis, Ohio State University)*

**Cane blight on thornless blackberry.**
The shoot is wilting and the cane has turned dark brown. *(Photo courtesy Michael Ellis, Ohio State University)*
from buds in the diseased area, but they will be weak. Leaves will be small and yellow. However, healthy buds in the upper portions of canes will often compensate for the loss in the lower portions.

**Disease cycle**

The fungus overwinters in fruiting bodies on infected canes. Spores are discharged during rainy periods from midspring through early summer. Spores that become lodged in the axils of leaves on new canes germinate during wet periods. The fungus grows above and below the point of leaf attachment and eventually forms a second kind of spore that is spread during summer rains.

**Cane blight**

**Symptoms**

Symptoms of cane blight occur in association with wounds or insect feeding sites. Dark brown discoloration extends up and down canes from wounds but is not restricted to leaf attachment sites as is the case with spur blight. Eventually small, black fungal fruiting bodies appear in the infected areas. These release large amounts of spores that cover the bark surface, giving it a dusty, gray appearance. Lateral shoots that grow from affected areas of canes are weak and leaves wilt.

**Disease cycle**

The fungus overwinters in fruiting bodies on infected canes. In the spring, spores are released during rainy periods and are carried by wind and splashing rain to wound sites on first-year canes (primocanes) where infection occurs. New fruiting bodies are formed throughout the summer, providing many spores for repeated rounds of infection. Infection is favored by warm, wet weather. If infected canes are not destroyed, they can continue to be a source of spores for up to 4 years.

**Control**

Cultural practices that emphasize sanitation and air circulation within plantings will help reduce both spur blight and cane blight. After harvest, remove and destroy all fruited canes and severely infected primocanes. This will help eliminate sources of spores. Weed control, maintenance of narrow rows, and removal of fruited canes will promote air movement and minimize the time that foliage is wet. Cane blight infection can be reduced by minimizing wounding of canes. Try to schedule pruning during dry periods, at least 3 days before anticipated rain, to allow wounds to heal before being exposed to germinating spores. For current information on fungicides, see Extension publications *Strawberry and Raspberry Pest Management in Wisconsin* (A1934) and *Raspberry Pest Management for Home Gardeners* (A2128).

**Related publications**

The following Extension publications offer additional information on cultural practices, current pest control recommendations, and other diseases of raspberries.

- Growing Raspberries in Wisconsin (A1610)
- Strawberry and Raspberry Pest Management in Wisconsin (A1934), for commercial growers
- Raspberry Pest Management for Home Gardeners (A2128)
- Raspberry Disorder: Anthracnose (A3241)
- Raspberry Disorder: Fire Blight (A3499)
- Raspberry Disorder: Verticillium Wilt (A3267)
- Midwest Small Fruit Pest Management Handbook (available from Ohio State University, bulletin 861)