Twig and branch dieback is a common sight in many juniper plantings in Kentucky. While other factors can cause these general symptoms, two fungal diseases are frequently responsible for the dieback.

These fungi (*Phomopsis juniperovora* and *Kabatina juniperi*) attack several species of *Juniperus*, including red cedar, common juniper and creeping juniper. Arborvitae is also susceptible.

**Phomopsis Twig Blight**

**SYMPTOMS**

This disease begins as a foliar infection, which then spreads to and kills stem tissues. Newly developing needles in the yellowish-green stage are especially susceptible, while more mature, darker green needles are not. Phomopsis blight can occur during the growing season anytime there is new shoot growth. Symptoms are evident a week or two after infection. When the fungus invades young stem tissue, terminals and branches distal to the point of infection become light green, red-brown and finally ashen-grey.

Small branches up to about ½ inch in diameter are generally girdled by the disease. When a side shoot is infected, Phomopsis twig blight may progress to a main branch. Lesions on larger branches, however, develop into cankers, but they seldom girdle the branch.
Fungal fruiting bodies (pycnidia) develop within 3 to 4 weeks after infection. Well-developed pycnidia can be found on needles and twigs that have dried up and turned grey. The pycnidia appear as tiny black specks at the base of the infected portion.

**Disease Management**
- Use regular, season-long applications of mancozeb or fixed copper to protect twig tips from infection. Weekly applications are generally needed as long as there is new shoot growth occurring.
- Prune out and destroy infected twig tips. Pruning should be done when the twigs are dry in order to minimize the spread of fungal spores.
- Overhead irrigation should be done early enough in the day that water has a chance to evaporate from the foliage prior to sunset.
- Avoid planting highly susceptible cultivars. Instead, select varieties that are known to be resistant to *Phomopsis*.

**Kabatina Twig Blight**

**Symptoms**
This twig blight disease causes symptoms very similar to those due to *Phomopsis*. *Kabatina* fruiting bodies (acervuli) are also produced at the base of infected tissues. The acervuli are initially white to grey in color, later becoming black.