



This bulletin from the Cooperative Extension Plant Health Clinic (Plant Disease Clinic) is an electronic update about diseases and other problems observed in our lab each month. Input from everybody interested in plants is welcome and appreciated.

## Rice

The rice water weevil adult is a beetle (about 0.125 inch or 4 mm long) has a prominent beak and is gray with a dark marking on its back from the base of its head to the middle of its wing covers. When temperatures rise above 70°F in the spring, they fly in search of plant hosts growing in water. Adult feeding appears as elongated slits of varying length on the upper surface of the leaves but generally does not cause economic losses. It is the root pruning by their larva that can cause significant damage and yield loss. After arriving in a rice field and feeding on leaves for a few days, they lay their eggs singly in the leaf sheath tissue under water above the plant crown. The larvae mine the leaf sheath before moving to the soil to feed on the roots, where they stay through four larval instars. Plants may be stunted with fewer tillers and delayed maturity. Weed control, drill seeding, and winter flooding all help to reduce populations. Alternatively, draining the field at about midseason as soon as the problem becomes apparent will kill feeding larvae. The ground should be allowed to dry to the crack stage before re-flooding. Pyrethroids applied to feeding adults before they can lay eggs also reduce populations. Additionally, seed treatment trials are being conducted by Dr. Gus Lorenz. Dermacor X100, active ingredient Rynayapyr has been very effective for control.

### Rice water weevil adult



Pest and Diseases Image Library, Bugwood.org

### Rice water weevil larva



Jan Yingling University of Arkansas Cooperative Extension

## Soybean

Frogeye leaf spot occurs everywhere soybean is grown. It is most destructive during warm humid weather. The disease, caused by *Cercospora sojina*, is primarily seen on leaves, but stems, pods, and seeds may also be affected. Symptoms on the leaves are small round to angular water-soaked spots less than 1-5mm. The lesions develop into brown spot with a red border. Older spots are light brown to gray with a narrow dark reddish border. Stem lesions are less noticeable. They occur late in the season as narrow lesions 2 to 4 times as long as they are wide, red brown in color. As they age they become brown, then gray with minute dark fruiting bodies. Pod lesions are circular to elongate, slightly sunken, and reddish brown. Infected seeds develop distinctive light to dark gray or brown areas. Some seed lesions show alternating bands of light and dark brown or gray. Some lesions may look like leaf lesions with a light center surrounded by a red border. Control consists of using resistant cultivars when possible. Fungicides such as Tilt, Quadris, Headline, Stratego, and Laredo, may be used at growth stage R2-R5.



### Frogeye leaf spot



Sherrie Smith University of Arkansas Cooperative Extension

### Frogeye on pods



J.T. Yorinori APS images

Canker (*Coniothyrium wernsdorffiae*) is often found on once-blooming rambler-type roses. Symptoms are lesions with light brown centers with a border of reddish-brown or purple. Minute fruiting bodies appear in the brown center, with longitudinal slits later appearing that expose black masses of spores. Brown Canker, (*Diaporthe umbrina*), is common on most rose varieties. Symptoms are purple to white spots on the canes and small dark gray, circular spots on the upper surface of the leaves. Small cane lesions are slightly raised, circular, purple and quite superficial. Lesions later become grayish-white. The massing together of these tiny spots produces a whitish patch that later is surrounded by a purple margin. Lesions continue to enlarge until the cane is girdled and destroyed, leaving a brown dead area. Stem Canker, (*Leptosphaeria coniothyrium*), begins as pale yellow or reddish spots on the cane. Spots enlarge and grow together, resulting in large infected areas on which small, black, fruiting bodies of the fungus may be found. Cankers may girdle entire stem, causing wilting and death of the parts above, or they may spread up one side of the stem, causing browning and cracking of the bark but not immediate death. This canker is very common on hybrid tea roses.

### Stem canker on hybrid tea



[www.rosecare.com](http://www.rosecare.com)

## Roses

Roses are susceptible to several canker diseases. *Nectria cinnabarina* is found on canes, usually at wound sites. Brown-reddish brown cankers with orange fruiting bodies are symptomatic of Nectria canker. Brand



### Rose brown canker



North Carolina State University Diagnostics

### Rose necrotic canker



Sherrie Smith University of Arkansas Cooperative Extension

Cankers often start at a point of injury on the cane. Winter injury, insect, or pruning wounds can provide entry points for canker pathogens. Rose cankers should be pruned out 5-6 inches below the canker and the clippings destroyed. Sterilize pruners between cuts, using alcohol or a 10% bleach solution (1 cup bleach to 9 cups water). Provide good air circulation between plants. Avoid overhead irrigation when watering. Roses require 2 inches of water a week, good soil, and 6 hours of direct sun for best results. A pH of 6.4-6.8 is ideal for roses. Although there are cultivars available with excellent disease resistance, most roses require a regular fungicide spray program to control fungal diseases. Daconil, Mancozeb, Sulfur, Copper, and Thiophanate-methyl fungicides are labeled for rose diseases. Many problems encountered growing roses will be minimized with good growing conditions and disease control measures.



### Rose brand canker



Sherrie Smith University of Arkansas Cooperative Extension

### Aphanomyces root rot



Sherrie Smith University of Arkansas Cooperative Extension

### Pea

Aphanomyces root rot is one of the most destructive diseases of peas. It occurs most often and seriously in wet soils. Losses can range from 10-100% in certain fields. One to two weeks after infection, the pathogen attacks the cortex of primary and lateral roots. Often, when plants are pulled from the soil, the cortex sloughs off, leaving only the central strand of vascular tissue. Other symptoms are rotted roots, severely stunted plants, yellowing, and wilting. The leaves yellow from the bottom of the plant upwards. There are a reduced number of nodules on the roots, reduced pod production, and pods containing fewer seed. Many times plants die before pod development. There are currently no registered fungicides in the United States that control this disease. Moderately to highly infested fields should be avoided. A field with low inoculum levels and only slight aboveground symptoms can build up enough inoculum to destroy the following year's pea crop. Long rotations with non-host crops have proven helpful.