



## **Arkansas Plant Health Clinic Newsletter**

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### **Ground Bees**

Ground bees, also called digger bees or miner bees, are valuable pollinators of many garden and orchard crops. They are not aggressive bees. The males do not sting and the females only sting if handled. Although solitary in that each female bee builds its own belowground nest, they are gregarious in that hundreds or more females will build nests very close to each other. The nests are easy to spot above ground because of the conical piles of dirt with a hole in the middle. One of the benefits of these bees is that their nests function as aeration holes, improving the penetration of water and nutrients. The nests are abandoned after the spring nesting season, the nests disappearing with rain. Ground bees are considered extremely beneficial. We do not recommend chemical controls. If you don't want them in your yard, try overhead watering to discourage them. Note that if many bees are coming out of the same hole in the ground, you are not looking at ground bees but possibly at yellow jackets. Yellow jackets are VERY aggressive.

### **Ground Bee colony**



**Photo by Rick Cartwright, formerly University of Arkansas Cooperative Extension**

### **Ground Bee conical nest entry**



**Photo by Rick Cartwright, formerly University of Arkansas Cooperative Extension**



## Ground Bee



Photo by Rick Cartwright, formerly University of Arkansas Cooperative Extension

## Ground Bee habitat



Photo by Rick Cartwright, formerly University of Arkansas Cooperative Extension

## Hellebore

One of the easiest and most rewarding of shade perennials is hellebore. Hellebores, also known as Lenten roses, are a long-lived shade perennial. They have the advantage of being deer and vole resistant and blooming in late winter to early spring when little else is in flower. Hellebores require moist, shady locations with plenty of organic matter. They bloom in shades of white, red, plum, rose, black, and green. Some cultivars have double blooms. Although hellebores have few disease problems in general, we recently received a sample infected with a virus known as Hellebore Net Necrosis Virus (HeNNV), sometimes referred to as Black Death. This virus belongs to the Carlavirus group of viruses. Symptoms are usually noticed on older, well established plants. Blackened dark brown to black streaks on petioles and flower bracts, and brittle, stunted brown to black new growth. There may be black rings spots or black streaks following leaf veins. This virus may be transmitted by aphids. As with all viruses, there is no treatment or cure. Affected plants should be removed from the planting and destroyed.

## Hellebore Net Necrosis Virus (HeNNV)-Carlavirus



Photo by Sherrie Smith, University of Arkansas Cooperative Extension



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## Cuphea

Members of the *Solanaceae* family such as morning glory, peppers, and tomatoes, and Cuphea in the *Lythraceae* family are prone to an abiotic disorder called intumescence. This produces small blisters on leaf surfaces and can result in defoliation. The condition may be mistaken for blister mites or oedema. Oedema occurs on the undersides of leaves while blisters from intumescence may be on both sides of the leaves or just the upper side of leaves. Intumescence may be distinguished from blister mites by the absence of mites when examined microscopically. It is believed intumescence is caused by decreased UVB radiation that may occur as a result of a long stretch of cloudy weather or from the application of shade cloth. Symptoms are almost exclusively seen in greenhouses or growth chambers and rarely seen outdoors. The most useful recommendation is spacing plants to allow full sun exposure.

## Cuphea Intumescence-Abiotic



Photo by Sherrie Smith, University of Arkansas Cooperative Extension



## **Cuphea Intumescence-Abiotic**



**Photo by Sherrie Smith, University of Arkansas  
Cooperative Extension**

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.

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