DIVISION OF AGRICULTURE
RESEARCH & EXTENSION
University of Arkansas System

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PLANT HEALTH CLINIC NEWS

Issue-9, April 29, 2019

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.

The Plant Health Clinic now has a Facebook page: https://www.facebook.com/UAEXPlantHealthClinic/?pnref=story

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. Hellebore requires moist, shady, locations with plenty of organic matter. They bloom is 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 by Keiddy Urrea

Los eléboro o rosas de cuaresma (Helleborus spp) son plantas herbáceas perennes, las cuales son apreciadas y por ser fáciles de cultivar y no les gustan a los venados. Estas plantas florecen al final de verano y comienzo de la primavera cuando otras plantas todavía no han florecido. Las plantas de eléboro requieren sombra, buena humedad en el suelo y alta cantidad de materia orgánica. Existen diferentes colores de flores, los más comunes son: blanco, rojo, rosado, negro y verde. Los eléboros son afectados por pocas enfermedades, En la clínica recientemente recibimos una muestra que resulto positiva para el virus conocido como Hellebore Net Necrosis Virus (HeNNV). Este virus pertenece al grupo de Carlavirus, el cual algunas veces es conocido como Black Death. Los síntomas de este virus son más pronunciados en plantas maduras y bien establecidas. Los principales síntomas son: rayas cafés o negras en los peciolos, flores, y pedúnculos, como también se pueden observar atrofia en el crecimiento de las plantas y en algunos casos los nuevos brotes toman una coloración negra. Otro síntoma característico es la presencia de manchas de anillos negros o rayas negras a lo largo de la nervadura. El Hellebore Net Necrosis Virus es transmitido por afidos. Como con todos los virus, no hay tratamiento que controle la enfermedad, lo único que se recomienda es remover las plantas infectadas.

Hellebore Net Necrosis Virus (HeNNV)- Carlavirus

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Rose

There is a lot of concern these days about viruses in roses. Rose Mosaic Virus does not receive as much attention as Rose Rosette Virus because it does not kill the plant and the symptoms are not as dramatic as they usually occur on just a few leaves. Rose Mosaic Virus is a disease of roses caused by a virus complex. Prunus Necrotic Ringspot Virus PNRSV), Apple Mosaic Virus (ApMV), and Arabis Mosaic Virus (ArMV), have been identified as components of the complex. These viruses may occur singly or together in a rose bush. Rose Mosaic Virus is endemic in the rose trade, as it is passed from plant to plant via vegetative propagation from an infected plant, or through grafting from infected stock during rose production. Symptoms are extremely variable, depending on rose variety, the virus, and the environment. Leaves may show bright yellow to white mosaic patterns, banding, wavy lines, blotches, oak leaf patterns, or net-like patterns. Rose Mosaic Virus can also cause flower distortion, reduced flower size, reduced vigor, reduced winter hardiness, and a shortened life-span. Usually, only a few leaves show the symptoms which may disappear later in the season. Rose Mosaic Virus is not contagious in the garden with the possible exception of naturally occurring root grafts. Viruses are not curable. Once a rose has the virus, it is always present whether there are visual symptoms or not.

Rose Mosaic Virus- Virus Complex

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Herbicide damage to ornamentals

The Plant Health Clinic is diagnosing a number of ornamental plant and vegetable samples with herbicide damage. Homeowners should be aware that valuable plants can be killed or injured by contact with herbicides. Roundup will drift up to 1500 feet from the point of origin if there is a breeze. I'm finding many homeowners are actually weeding in or around the garden with Roundup or 2-4-d.

Tomato Roundup Damage- abiotic

Sherrie Smith, University of Arkansas Cooperative Extension

Tomato Phenoxy Damage- abiotic

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Rose Roundup Damage- abiotic

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Bean phenoxy Damage- abiotic

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Rose Roundup Damage- abiotic

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