





Arkansas Plant Health Clinic Newsletter

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Sorghum

The clinic is seeing samples of grain sorghum with midge damage. The adult sorghum midge (Stenodiplosis sorghicola) is a small, mosquitosized, orange-colored insect that blends in with sorghum flower parts. The adult midge lays its eggs at bloom time. The first two or three generations often develop in Johnson grass. As they move into grain sorghum, numbers increase during flowering. Damage occurs when larvae feed on newly fertilized ovaries, preventing normal kernel development. Scouting should be done at bloom time. One adult midge per head when 25-30% of the plants are flowering is the threshold for treatment. Baythroid XL 1 EC, Lorsban 4 EC, Dimethoate, Asana XL, Prolex/Declare, Karate Z, Besiege, Lannate, and Mustang Max are labeled for control of Sorghum midge.

Sorghum Midge Damage-*Stenodiplosis sorghicola*



Photo by Sherrie Smith, University of Arkansas Cooperative Extension

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Oak

We tend to take our oak trees for granted. After all, they form a large part of our forests in Arkansas and are ubiquitous in the landscape. Therefore, it is no surprise that the Plant Health Clinic receives many oak samples. They are hosts to many insect pests and fungal and bacterial pathogens. Oak trees have enough problems without improper planting practices. Pictured below is an oak that was planted fifteen years ago as a ball and burlap specimen. Unfortunately, the twine was not removed from the ball at planting. Fifteen years later, that twine is girdling the roots and trunk. Symptoms above ground are dieback in the crown.

Oak Improperly Planted-Abiotic



Photo by Brenda Kennedy, Department of Plant Pathology, University of Kentucky

Oak Improperly Planted-Abiotic



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Zinnia

Cercospora Leaf Spot

Nothing says summer like a cheerful bed of zinnias. They come in an enormous array of sizes, colors, and petal forms. Zinnias don't require much in the way of care except for average fertility, adequate soil moisture, and six hours of sun per day. Despite their easycare requirements, they can be bothered by several fungal diseases during humid, warm, weather. Cercospora Leaf Spot, caused by Cercospora zinniae, produces nearly round, reddish-brown, or dark purple spots with white or light gray centers. Leaves that are heavily infected turn brown and dry. Alternaria leaf spot, caused by Alternaria zinniae, produces nearly identical symptoms, but may also infect the stems, petioles, and flowers. Homeowners may use Spectracide Immunox; or Ferti-Lome Liquid Systemic Fungicide; or Ortho Max Garden Disease Control; or Ferti-Lome Liquid

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Ricky Corder

Fungicide; or Garden Tech Daconil Fungicide Conc.; or Green Light Fung-Away Fungicide; or Bonide Fung-onil Multipurpose Fungicide; or Green Light Systemic Fungicide; or Ferti-Lome Halt Systemic; or Ortho Rose Pride Rose & Shrub Disease Control; or BioAdvanced Disease Control for Roses, Flowers, and Shrubs. All zinnia debris should be removed from the garden at the end of the season.

Zinnia Cercospora Leaf Spot-

Cercospora zinniae



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

Zinnia Cercospora Leaf Spot-Cercospora zinniae



Photo by Brenda Kennedy, Department of Plant Pathology, University of Kentucky

Powdery Mildew

Powdery Mildew attacks a wide range of annuals, perennials, vegetables, field crops, shrubs, and turf. Bee balms, columbines, crape myrtles, cucurbits, dogwoods, lilacs, tall garden phlox, roses, and zinnias, are just a few species vulnerable to Powdery Mildew. Zinnia Powdery Mildew, caused by Golovinomyces spadiceus (formerly Erysiphe cichoracearum), attacks zinnias in late summer as nights start to cool. Plants with too much shade and poor air circulation are the most susceptible. Symptoms are gray to white powdery growth on leaves and flower buds, distorted buds, and vellowed leaves. Powdery Mildew seldom kills zinnias, but it is ugly and can weaken the The most important preventative plants. measure is planting resistant cultivars. cultivars Zahara. Profusion. Bluepoint,

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Pinwheel, and the Star series are very resistant to Powdery Mildew. Fungicides don't cure but can suppress Powdery Mildew. Ornamental fungicides such as those containing chlorothalonil or Maneb give good control if applied at 7-10-day intervals at the first sign of disease. Watering the plants at ground level instead of by overhead irrigation also helps greatly to control diseases.

Zinnia Powdery Mildew-Golovinomyces spadiceus (formerly

Erysiphe cichoracearum)



Photo by Jim Robbins, 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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