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Arkansas Plant Health Clinic Newsletter

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Blueberry

Blueberry growers should be scouting for Mummyberry at this time. Mummyberry is a fungal disease that can cause severe crop losses, depending on environmental conditions, cultivar susceptibility, and amount of inoculum present. The causal agent is Monilinia vacinii corymbosi. Mummyberry damage is caused by the blighting of flowers, leaves, and twigs, resulting in fruit losses. The first symptom is wilting of developing leaves and shoots in the spring, followed within 24 hours by browning of the upper side of bent shoots, midribs, and lateral veins of leaves. Infected shoots, leaves, and flowers are killed within 3 days after discoloration appears. Dead tissue eventually drops off the plant. Plants are then free of symptoms until berries start to ripen. Berries that are infected become cream to salmon pink, then tan or whitish gray. The mummified berries shrivel and harden, and then drop to the ground. These mummies are called pseudosclerotia. They germinate to form apothecia which resemble tiny mushrooms. The apothecia produce the ascospores that infect new tissue in the spring. Conidiophores and conidia are produced on the tissue infected by ascospores and cause secondary infections of berries. Control of Mummyberry needs to be a combination of good cultural practices and fungicide treatments. In the fall, before leaf drop, shallowly cultivate to bury mummies. In early spring around budbreak, destroy developing apothecia by raking or cultivating soil. Some growers pile soil from between the rows at the base of the bushes and between the bushes to bury the mummies. They rake soil back into the rows later in spring after apothecia are gone. Practice good weed control and plant tolerant cultivars. Lime sulfur applied during the dormant season helps control Mummyberry. Captan, Ziram, Captevate, Abound, Cabrio, Pristine, Indar, and Switch are labeled for Mummyberry control during the growing season. Applications should begin at green tip and pink bud stage. Read labels for complete directions.

Blueberry Mummyberry-

Monilinia vacinii corymbosi

Photo by Sherrie Smith, University of Arkansas Cooperative Extension

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Blueberry Mummyberry-
Monilinia vacinii corymbosi

Photo by Sherrie Smith, University of Arkansas Cooperative Extension

Blueberry Mummyberry Conidia-
Monilinia vacinii corymbosi

Photo by Sherrie Smith, University of Arkansas Cooperative Extension

Blueberry Mummyberry-
Monilinia vacinii corymbosi

Photo by Sherrie Smith, University of Arkansas Cooperative Extension

Blueberry Mummyberry-
Monilinia vacinii corymbosi

Photo by University of Georgia Plant Pathology Archive, Bugwood.org1496520

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Fennel

Fennel, *Foeniculum vulgare*, is a hardy perennial herb with yellow flowers and feathery leaves. Although native to the Mediterranean, it has become widely naturalized in many parts of the world, favoring dry soils near the sea- coast and on riverbanks. Fennel is a highly aromatic and flavorful herb used in cooking and has medicinal uses. Fennel is also a major attractant in butterfly gardens, providing food for lepidopteran larvae. The bulb, foliage, and seeds of the fennel plant are all edible and a staple of many kitchens world-wide. The small flowers of wild fennel are the most potent form of fennel, but also the most expensive. Dried fennel seed is an aromatic, anise- flavored spice, widely used in cheese spreads, vegetable, and fish dishes. Fennel leaves are delicately flavored and similar in shape to those of dill. The bulb is a vegetable that can be sautéed, stewed, braised, grilled, or eaten raw. Young tender leaves are used in many ways; for garnishes, to add flavor to salads, to flavor sauces to be served with puddings, and in soups and fish sauce. In the proper environmental setting, fennel has few problems. However, it can't tolerate soggy soils and may develop root rots caused by Pythium and Phytophthora species under those conditions. Other soil pathogens that can cause problems are wilts caused by Rhizoctonia and Sclerotiorum. Fennel also may develop fungal leaf spots caused by Alternaria, Corynespora, Stemphylium and Cercospora species. Poor air circulation and high humidity may lead to an outbreak of powdery mildew, caused by *Erysiphe polygoni*. Control of foliage diseases is largely cultural. Avoid excess fertilization. Sulfur application can be used when infection occurs early in season.

Fennel Powdery Mildew-
Erysiphe polygoni

Photo by Sherrie Smith, University of Arkansas Cooperative Extension

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Dogwood

Homeowners are sometimes startled in the spring when they notice bright orange exudates (orange slime) on the trunk or branches of a dogwood tree, or another woody plant on their property. This is not a disease. The cause is injury to the bark or pruning in late winter or early spring before flowering. The tree begins weeping sap from the injury or “bleeding.” Yeast and fungi, such as the yeast *Cryptococcus macerans*, often colonize and feed on the sugar rich sap. Cryptococcus macerans stores energy in carotene-filled sacs, giving a startling orange color to the sap. Birches, maples, butternuts, muscadines, and walnuts are among other species of tree on which these phenomena can occur. The wounds themselves should not be covered or treated but allowed to heal naturally. The tree usually stops bleeding by early summer.

Dogwood Orange Slime-
Cryptococcus macerans

Photo by Roselyn Gira

Dogwood Orange Slime-
Cryptococcus macerans

Photo by Mitch Spanel, Lawn Doctor of West little Rock

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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