



Arkansas Plant Health Clinic Newsletter

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Pea

White Mold, also known as Sclerotinia Rot, is caused by the soil-borne fungal pathogen *Sclerotinia sclerotiorum* and can attack over 400 plant species. Susceptible plants include alfalfa, beans, cabbage, canola, celery, chickpeas, coriander, cucumber, lentils, lettuce, melon, peas, pepper, potato, radish, rhubarb, rutabaga, soybean, squash, strawberry, sunflower, tomato, and turnip, among others. Above ground symptoms are stunting, chlorosis, wilting, and death of the affected plant. The dense, white cottony growth of the fungus rapidly involves stems and can swiftly progress to engulf leaves and pods. Black, flat sclerotia develop in the white mycelial growth and inside the infected stems. The use of chemical fumigants in commercial fields and the immediate removal of plant debris may help to reduce the incidence and spread of this disease. A three-year crop rotation to cereals helps reduce numbers of sclerotia. Homeowners should immediately remove affected plants, along with the soil around the plant.

Pea White Mold-*Sclerotinia sclerotiorum*



Photo by Sherrie Smith, University of Arkansas Cooperative Extension

Pea White Mold-*Sclerotinia sclerotiorum*



Photo by Sherrie Smith, University of Arkansas Cooperative Extension



Tomato White Mold (Timber Rot)-*Sclerotinia sclerotiorum*



Photo by Sherrie Smith, University of Arkansas Cooperative Extension

Hellebore Natural Leaf Senescence-Abiotic



Photo by Sherrie Smith, University of Arkansas Cooperative Extension

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 in shades of white, red, plum, rose, black, and green. Some cultivars have double blooms. These plants are easy to care for, but the Clinic receives samples this time of year with the complaint of reddish lesions on the old foliage. Although the fungus botrytis is often found on the old foliage, it is normal for last year's foliage to look this way. The recommendation is to cut the old foliage and stems to the ground in the spring, leaving all the new growth. This will not affect flowering.

Spinach

Don't be afraid that your spinach has a disease problem if you see little clear drops on the undersides of the leaves. In the absence of insects, you are probably seeing Oxalic Acid. Oxalic Acid is found in greens such as beet tops, lambs' quarters, parsley, and rhubarb, sorrel, spinach, and Swiss chard. It is also found in almonds, buckwheat, cashews, chocolate, coffee, textured soy protein, and tea, among others. Older plant tissue has higher concentrations and can have a bitter taste. Foods high in Oxalic Acid will not harm you, although people prone to kidney stone formation should probably not consume copious amounts of such foods. For normal, healthy individuals, foods such as spinach, with



its high levels of iron and beneficial vitamins, are part of a healthy diet.

Spinach Oxalic Acid Exudate (leaf underside)-Abiotic



Photo by Ricky Corder, University of Arkansas Cooperative Extension

Euphorbia

African Milk Tree, *Euphorbia trigona*, is grown as a houseplant in areas colder than zone 10. It loves full sun and heat and is easy to grow and care for when its needs are met. It cannot tolerate freeze or soggy soils, and during times

of high relative humidity, it may get Powdery Mildew, caused by either *Microsphaera euphorbiae* or *Erysiphe euphorbiae*. A notable symptom is grayish-white patches on both the tops and undersides of the leaves. Other symptoms are yellowing of affected leaves and stunted growth. The most important control method for Powdery Mildew is excellent air circulation and full sun. African Milk Tree does poorly without at least half a day of sun. Fungicides labeled for ornamentals are useful in suppressing Powdery Mildew.

Euphorbia Powdery Mildew- *Microsphaera euphorbiae*, or *Erysiphe euphorbiae*



Photo by Ricky Corder, University of Arkansas Cooperative Extension

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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.

"This work is supported by the Crop Protection and Pest Management Program [grant no. 2017-70006-27279/project accession no. 1013890] from the USDA National Institute of Food and Agriculture."