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Cooperative Extension Service

Farm Update

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AGRICULTURE & NATURAL RESOURCES EDUCATION
Clint Hardy
Daviess County Extension Office

Keep an Eye Open for Red Crown Rot in Soybean

Daviess County has not yet had a confirmed case of red crown rot, but there have been some cases across the river in southern Indiana, and a few confirmations in far western Kentucky counties. Red crown rot can occur on leaves, lower stems, and roots of soybean plants. On leaves, symptoms first appear as yellow flecks that occur between veins. These chlorotic flecks may continue to develop into yellowing between the leaf veins, while the veins remain green, very similar to sudden death syndrome. Leaf symptoms are caused by a phytotoxin produced by the causal fungus, which moves through the plant and accumulates in leaves. Lower stem and root symptoms may be observed prior to leaf symptoms. Infections result in a reddish discoloration of lower stem areas just above the soil line and roots. During the late soybean development stages, white fungal growth may develop on roots and lower stems. Fungal fruiting structures may develop, which are red to reddish-orange, spherical, and less than 1/16 inch in diameter.

Red crown rot can be confused with other soybean diseases, making diagnosis difficult. The most accurate diagnosis requires a laboratory analysis, and symptomatic soybean samples from Kentucky fields can be submitted to the University of Kentucky Plant Disease Diagnostic Laboratory through my office. Potential look-alike diseases that have symptoms of interveinal

chlorosis/necrosis on soybean leaves include sudden death syndrome (SDS), southern stem canker, and brown stem rot. Of these three diseases, only SDS and southern stem canker are currently known to occur in Kentucky, while brown stem rot occurs further north than Kentucky. Although these diseases have similar leaf symptoms to red crown rot, red crown rot generally can be distinguished by the reddish discoloration of lower stems and roots. Observance of the red, spherical perithecia on lower stems and roots is also distinctive of plants affected by red crown rot

Rotating to a non-host crop for two or more years may help reduce inoculum levels of the red crown rot fungus in the soil. Treating soybean seeds with a fungicide seed treatment that includes red crown rot on the label may help protect against early infections by the red crown rot fungus. Planting soybeans into soil temperature less than 77°F will help reduce infections by the red crown rot fungus. Management of soybean cyst nematode (SCN) may help reduce potential interactions between SCN and the red crown rot fungus, which have been shown to have an antagonistic effect on soybean plants when both are present. Currently, no commercial soybean varieties are marketed with resistance to red crown rot, and no foliar fungicides include red crown rot on their labels. Foliar fungicides will not be effective in managing red crown rot if applied.

Enroll in USDA's Grassland Conservation Reserve Program

The U.S. Department of Agriculture recently announced that farmers and landowners with hay and grazing land can enroll in the Grassland Conservation Reserve Program (Grassland CRP). The sign-up runs until next Friday, August 8, 2025. Grassland CRP, offered by USDA's Farm Service Agency (FSA), is a voluntary conservation program that pays participants to

implement practices that conserve grasslands while being allowed to continue grazing and haying activities. Grassland CRP emphasizes support for grasslands, grazing operations, and plant and animal biodiversity.

Currently, more than 25.8 million acres are enrolled in CRP, with nearly 9.7 million acres of that in Grassland CRP. Due to the 27-million-acre statutory cap, only 1.8 million acres are available for all CRP enrollment this fiscal year. A points system is used to determine the practices considered to be most beneficial. After the close of the CRP signup, FSA will rank all eligible offers based on their total point score. The county committee will then determine the ranking point threshold used to accept offers for the signup.

CRP, USDA's flagship conservation program, celebrates its 40th anniversary this year. For four decades, CRP has provided financial and technical support to agricultural producers and landowners whose accepted acres are placed under contract for 10-15 years, and agree to voluntarily convert the land to beneficial vegetative cover to improve water quality, prevent soil erosion, and support wildlife habitat. The American Relief Act, 2025, extended provisions for CRP through September 30, 2025.

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