

Tar Spot

By Andy Luke, Field Specialist in Agronomy

Farmers should scout their corn fields for tar spot this growing season. Tar spot, a fungal disease, is common in Central and South America but was first identified in the United States in 2015. Since then it has spread throughout the Corn Belt and was found in three counties in Northeast Missouri in 2019.

Tar spot can be found on upper and lower leaf surfaces and appears as small raised black dots that look very similar to tar (those who named it weren't very creative). The spots do not bust through the leaf epidermis so can't be scraped off of the leaf surface, unlike rust or other disease pustules. Tan to brown lesions can surround the tar spots, and occasionally in heavy infestations the spots can be found on the husks and leaf sheaths.

The pathogen that causes tar spot overwinters on infested corn residue and can be spread via wind and rain splashing. Disease symptoms have been observed as early as V3, but have been seen most often on corn during mid-to-late grain fill on leaves at or below the ear level. Cool temperatures and high relative humidity are thought to favor infection, and periods of persistent rain have been shown to promote disease development. In heavy infestations, yield losses of up to 30 bushels per acre have resulted from reduced ear weight, poor kernel fill and loose kernels.

Best management practices for tar spot are still being developed. Fungicides have shown to reduce tar spot, but the best application timing and effective modes of action are still being researched. Because the inoculum survives on residue, tillage of infected fields and crop rotation are the best management options at this time for fields with tar spot.

Scouting for tar spot will help researchers track the spread of the disease and understand its behavior and severity. If you suspect you have tar spot in your corn fields, contact me, Andy Luke, at (660) 425-6434.

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