

## GRAY LEAF SPOT QUICK FACTS

### IMPACT ON YOUR CROP

- Reductions in yield from gray leaf spot (GLS) are attributed to a loss of photosynthetic area from leaf blight, which can also result in stalk lodging.
- Blighted leaves above the ears and infection before or at silking will have the greatest impact on yield potential.

Fields that are at highest risk for potential yield loss are those that have had a history of GLS and are planted to continuous corn under no-till or reduced-tillage.

### TIPS TO MANAGE

- The use of tolerant corn products is the most effective means to manage GLS. Tolerance levels vary among corn products (Figure 1).
- Fungicide applications can minimize yield losses; tasseling to early silking (VT-R1) is the critical time to protect yield potential.
- Tillage and/or rotation to a crop other than corn for 1-2 years can reduce levels of disease inocula.

### WHAT TO SCOUT

- Immature lesions appear as small, brown or tan spots on the leaf surface surrounded by a yellow halo.
- Initial symptoms appear similar to other diseases such as anthracnose, eyespot, or common rust (Figure 2).
- Mature lesions are diagnostic for the disease and appear as rectangular, brown to gray necrotic regions that run parallel to the leaf, spanning the spaces between the major leaf veins (Figure 3).
- In severe infestations, large portions of the leaf or entire plant may be blighted.



Figure 1. (L-R) Resistant, mildly resistant, and susceptible reactions.



Figure 2. Initial symptoms of GLS (L) may appear similar to eyespot (R).



Figure 3. Mature, rectangular GLS lesions diagnostic for the disease.

*Photo courtesy of Daren Mueller, Iowa State University, Bugwood.org.*

*For additional resources on this topic, contact your local seed representative or visit your seed brand website. Developed in partnership with Technology, Development & Agronomy by Monsanto.*

**Sources:** Lipps, P.E. 1998. Gray leaf spot: a global threat to corn production. American Phytopathological Society. [www.apsnet.org](http://www.apsnet.org). Rees, J.M. and Jackson, T.A. 2008. Gray leaf spot of corn. NebGuide G1902. University of Nebraska-Lincoln Extension. [www.ianrpubs.unl.edu](http://www.ianrpubs.unl.edu). Stromberg, E.L. 2009. Gray leaf spot disease of corn. Virginia Cooperative Extension. [www.pubs.ext.vt.edu](http://www.pubs.ext.vt.edu). Wise, K. 2010. Diseases of corn: gray leaf spot. Purdue University Extension. [www.extension.purdue.edu](http://www.extension.purdue.edu). Web sources verified 5/11/15

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