NEW AND EMERGING CORN DISEASES: WHAT WE'VE LEARNED ABOUT BACTERIAL LEAF STREAK

Tamra A. Jackson-Ziems [1/]

Bacterial leaf streak (BLS), caused by *Xanthomonas vasicola* pv. *vasculorum*, was reported for the first time in the United States in Nebraska in 2016. Since then, the disease has been confirmed in 60 Nebraska counties and 8 additional states, including Colorado, Kansas, Illinois, Iowa, Minnesota, Oklahoma, South Dakota, and Texas. Previously, the pathogen had only been confirmed on corn in South Africa and on sugarcane in numerous other countries around the world. Numerous other grass and palm hosts were identified in other countries, as well, including sorghum species. Results from additional host range testing conducted in Nebraska also confirmed several additional crop, weed, and native perennial grass species as hosts. Symptoms on corn can be difficult to differentiate from other diseases, especially the gray leaf spot fungal disease. Typical symptoms of the disease on corn and other hosts are narrow interveinal streaks that can appear bright yellow when backlit. The pathogen overwinters in infested crop debris thus, disease develops in the same areas repeatedly when susceptible hybrids are grown and favorable weather conditions persist. Severity of the disease varies considerably on corn hybrids, particularly on some popcorn hybrids that can be quite susceptible. High relative humidity and leaf wetness favor disease development. Results from additional research trials will be shared, as well as more information on additional emerging diseases, such as tar spot and Diplodia leaf streak.

[1/] Extension Plant Pathologist and Professor, Dept. of Plant Pathology, Univ. of Nebraska-Lincoln, Lincoln, NE.