Stalk rots and corn lodging

Gary P. Munkvold
Iowa State University, munkvold@iastate.edu

Follow this and additional works at: http://lib.dr.iastate.edu/cropnews

Part of the Agricultural Science Commons, Agriculture Commons, and the Plant Pathology Commons

Recommended Citation
http://lib.dr.iastate.edu/cropnews/2314

The Iowa State University Digital Repository provides access to Integrated Crop Management News for historical purposes only. Users are hereby notified that the content may be inaccurate, out of date, incomplete and/or may not meet the needs and requirements of the user. Users should make their own assessment of the information and whether it is suitable for their intended purpose. For current information on integrated crop management from Iowa State University Extension and Outreach, please visit https://crops.extension.iastate.edu/.
Stalk rots and corn lodging

Abstract
Iowa has experienced two consecutive years with conditions very favorable for stalk rot development. Some producers have been realizing this over the last few weeks as they struggle to harvest fields that lodged due to stalk rot. The good news is that lodging is not as widespread this year as it was last year. According to Iowa Agricultural Statistics reports, about 19 percent of the acreage has moderate to severe lodging this year compared with last year when about 39 percent of the acres was reported to have moderate to severe lodging. This improvement, however, is probably not related to stalk rots; the light European corn borer pressure this year compared with last year has certainly made a difference.

Keywords
Plant Pathology

Disciplines
Agricultural Science | Agriculture | Plant Pathology

This article is available at Iowa State University Digital Repository: http://lib.dr.iastate.edu/cropnews/2314
Stalk rots and corn lodging

Iowa has experienced two consecutive years with conditions very favorable for stalk rot development. Some producers have been realizing this over the last few weeks as they struggle to harvest fields that lodged due to stalk rot. The good news is that lodging is not as widespread this year as it was last year. According to Iowa Agricultural Statistics reports, about 19 percent of the acreage has moderate to severe lodging this year compared with last year when about 39 percent of the acres was reported to have moderate to severe lodging. This improvement, however, is probably not related to stalk rots; the light European corn borer pressure this year compared with last year has certainly made a difference.

We have had numerous stalk rot samples submitted to the Plant Disease Clinic [4], including all the usual fungal suspects: Gibberella, Fusarium, and anthracnose, as well as a variety of secondary colonizers such as Nigrospora, Bipolaris, and Trichoderma. Most of the samples also show very decayed roots, and some plants were root lodged as a result of the root rot.

A close eye has been kept on Bt hybrids this fall, and with the light corn borer infestations, big differences between Bt and non-Bt hybrids in lodging are not expected. I have not looked at yields yet from ISU Bt corn plots throughout the state. In a plot near Ames, five pairs of Bt hybrids and non-Bt isolines were planted. In each pair, the Bt hybrid had less stalk rot and less lodging, but the difference in lodging was statistically significant in only one pair of hybrids. Lodging ranged from 2 to about 23 percent in the plots.

See ISU Extension publication Corn Stalk Rot in Iowa (IPM-49), or the ISU Plant Pathology website [5] for more information on corn stalk rot management.
Stalk rots and corn lodging

This article originally appeared on pages 190-191 of the IC-480(24) -- November 9, 1998 issue.

Source URL:

Links: