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## Corn leaf diseases appearing in 2002

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## Corn leaf diseases appearing in 2002

### **Abstract**

During the past week, leaf diseases have become noticeable on corn scattered throughout the state. Field specialists from several areas reported anthracnose is common. In addition, I have seen eyespot and common rust in central and southeastern Iowa. Gray leaf spot is showing up in some inbreds in our research plots in eastern Iowa.

### **Keywords**

Plant Pathology

### **Disciplines**

Agricultural Science | Agriculture | Plant Pathology

# INTEGRATED CROP MANAGEMENT

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During the past week, leaf diseases have become noticeable on corn scattered throughout the state. Field specialists from several areas reported anthracnose is common. In addition, I have seen eyespot and common rust in central and southeastern Iowa. Gray leaf spot is showing up in some inbreds in our research plots in eastern Iowa.

Anthracnose leaf blight is caused by the fungus *Colletotrichum graminicola*. The fungus survives in crop residue and is splashed onto the leaves. Anthracnose is definitely more severe where corn follows corn. Symptoms are brown, oval, or elliptical spots (up to 1/2 inch in length) with a dark brown or purplish border, often surrounded by a yellowed zone. There may be black speckles within the dead tissue. I have noticed this year (and previously) that this fungus often infects leaves showing potassium (K) deficiency symptoms. Anthracnose can cause significant damage to very young plants and contribute to postemergence stand loss, but at this stage it is not likely to cause economic injury. Usually, it occurs only on the lower leaves and does not move up the plant after those leaves are shaded out and fall off.



**Anthracnose lesions on corn.**

[Enlarge](#) [1]



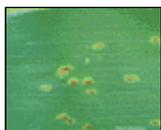
**Anthracnose symptoms on leaf with potassium deficiency symptoms.**

[Enlarge](#) [2]

Eyespot is caused by the fungus *Aureobasidium zeae*, which also survives in crop residue and is splashed onto the leaves. Like anthracnose, eyespot is more severe where corn

follows corn, especially in reduced tillage. If it gets an early start (as it has done in some fields this year), it is capable of causing significant yield losses. Symptoms are small round spots approximately 1/8 inch in diameter with a brown border and a yellow halo. Eyespot can be confused with another disease, holcus spot, but holcus spots are all different sizes, very pale in color, and may or may not have a brown border.

Common rust (*Puccinia sorghi*) produces characteristic brick-red pustules on the upper and lower leaf surfaces. It is easy to identify rust but not so easy to distinguish southern rust and common rust. However, I have never seen southern rust in Iowa this early in the season, so if you see rust pustules in early July, it is almost certain to be common rust.



**Common rust on corn.**

[Enlarge](#) [3]

Seed corn producers should keep a close eye on these diseases in case fungicidal control is needed (see [July 1, 2002, ICM newsletter](#) [4]). In grain production, it is unlikely that any action is warranted, but if eyespot or gray leaf spot become severe, a fungicide application can sometimes be profitable. Other control measures for these diseases (hybrid selection, crop rotation, residue management) are preventative and might be considered if the diseases become severe enough to cause yield loss this year.

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**Links:**

[1] [http://www.ent.iastate.edu/imagegal/plantpath/corn/anthracnose/anthracnose\\_2002c.html](http://www.ent.iastate.edu/imagegal/plantpath/corn/anthracnose/anthracnose_2002c.html)

[2] [http://www.ent.iastate.edu/imagegal/plantpath/corn/anthracnose/anthracnose\\_small.html](http://www.ent.iastate.edu/imagegal/plantpath/corn/anthracnose/anthracnose_small.html)

[3] <http://www.ent.iastate.edu/imagegal/plantpath/corn/comrust/0796.37comrust.html>

[4] <http://www.ipm.iastate.edu/ipm/icm/2002/7-1-2002/>

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