

Extension Crop Update

This newsletter, and previous issues from recent years, can be found on-line at:

<http://www.extension.iastate.edu/plymouth/info/cropupdate.htm>

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Counties in NW Iowa.*

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Interesting July Weather! Usually we are hoping for rain in July. I don't remember many years when we have producers hoping it stops! It is great to have moisture for most in NW Iowa, but I also know that there are problems out there related to these rain events - like hail loss, lodging, some green snap, and areas of saturated soils. Don't get me wrong, many of NW Iowa's crops are in excellent shape right now as we approach pollination. It isn't often we get to this period of time when we are not looking for another shower, and soon, in this part of Iowa. We aren't done yet, but the potential for a good crop in NW Iowa looks quite good at this time.

If you have farms in those neighborhoods that aren't as fortunate, here is some information that might be of benefit to you. Roger Elmore has a good article on **hail loss in corn**, if you want to see what kind of losses are typical for different levels of hail damage: <http://www.extension.iastate.edu/CropNews/2009/061901.htm>.

I know that research continues to update the expected yield from hailed beans. I was recently looking for a current hail loss chart to give expectations of losses from hail in soybeans at this time of year, and was unable to find those loss charts in my search. I did, however, find an archived version of a Nebraska publication from 1985 on "**Soybean Yield Loss Due to Hail Damage**" that is probably not accurate, but can at least give you a close estimate. You can find it here: <http://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=1738&context=extensionhist>.

Root lodging in corn was frequently reported this past week, too. On the ISU Extension Corn Page there is an article titled "Mid to Late Season Lodging" that shows research about yield loss from lodging at various stages. This work was done in Wisconsin. In general, lodging at V-13 to V-15 cost about 10% yield. Lodging later in the season causes more yield loss. See this article here:

<http://www.agronext.iastate.edu/corn/production/management/mid/silking.html>.

Green snap losses? Yield loss from broken plants is directly related to stand loss, according to research. 10% snapped off would equal about 10% yield loss. See Roger's article here:

<http://www.agronext.iastate.edu/corn/production/management/mid/greensnap.html>.

What about fungicides on hailed crops? According to Alison Robertson, ISU Plant Pathologist, in a recent ICM News article: "It is important to remember that a fungicide application cannot recover yield potential lost due to hail damage. Fungicides protect yield potential by reducing disease. There are some diseases of corn that are favored by wounding, e.g., Goss's wilt, common smut and stalk rot. Similarly bacterial blight and bacterial pustule on soybeans are favored by wounding. Fungicides are not effective against the pathogens that cause these diseases. The foliar diseases that are managed by fungicides (e.g., gray leaf spot, northern corn leaf blight, eye spot, and common

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rust on corn, and brown spot and frog eye on soybeans) are caused by pathogens that do not require wounds for infection. These foliar diseases will influence the yield response to fungicides more so than hail damage.” To see the remainder of this article, which includes a Wisconsin study on simulated hail damage and fungicide response, go here: <http://www.extension.iastate.edu/CropNews/2009/0713robertsonmueller.htm>.

Fungicides on Soybeans: Two diseases have been somewhat prevalent on soybean fields that I have been looking at recently. Brown spot is a fungus that effects lower leaves of plants, and can be found on the bottom of the canopy again this year. It rarely spreads very high into the canopy of the beans. I am on the lookout for frog eye leaf spot, another fungal disease, but I can't say I have really seen it yet. The most prevalent disease I see right now is Bacterial Blight, but note that Bacterial Blight cannot be managed by fungicides, only variety selection.

If considering fungicide applications to soybeans, applying before the R-3 stage isn't very effective. The most mature beans I have observed so far are R-2 beans (flowers up the entire stem). So, it is still too early to treat at this time. ISU Plant Pathologist XB Yang recently wrote an article about this in the ICM News titled “Scouting for Foliar Diseases in a Cool Summer”: <http://www.extension.iastate.edu/CropNews/2009/0710yang.htm>.

Fungicides on Corn? Here are two articles for you to review before you make the decision to treat corn acres. One is from Alison Robertson at ISU: <http://www.extension.iastate.edu/CropNews/2009/0706robertsonmueller.htm>, and the other from Carl Bradley in Illinois: <http://ipm.illinois.edu/bulletin/article.php?id=1180>. It isn't an easy call, to be honest with you. Fields I have observed this week have been quite disease free, but take a look, it can help with your decision!

Last Chance to Join Us on the Bus! On July 22 we are loading a bus from LeMars and Sioux Center to go to the **Upper Midwest Manure Handlers Expo** near Boone. This show will feature dry and liquid applicator demonstrations, and many educational sessions. See their website for details: http://www.ag.iastate.edu/wastemgmt/expo_home.htm

Several great sponsors are helping to cover some of the cost of a bus going down to the Expo, including Roda Manufacturing, Farmers Co-op Society (Sioux Center), Farmers Cooperative Company (Hinton, LeMars, Oyens, Akron) and the Hull Co-op for helping us out on this. Because of their help, it will cost only \$20/person to get to the site and get into the field day! Send me an e-mail at jldejong@iastate.edu to reserve a seat ASAP if you are going.

Potato Leafhoppers are Out There! I have observed more than a few alfalfa fields with obvious potato leafhopper injury lately. Don't forget to manage this pest! ISU Entomologist Erin Hodgson has a good article on managing these bugs here: <http://www.extension.iastate.edu/CropNews/2009/0615hodgson.htm>.

Iowa's Bee Rule! As we approach the season when insecticides are likely to be used on soybean acres and other crops, remember that these products pose risks to Iowa's bees, and there are rules to help protect them. Here is what the new rule says: "... between 8 a.m. and 6 p.m., a commercial applicator shall not apply to blooming crops pesticides labeled as toxic to bees when the commercial applicator is located within one mile of a registered apiary. A commercial applicator shall be responsible for maintaining the one-mile distance from apiaries that are registered and listed on the sensitive crop registry on the first day of each month." In addition, a pesticide applicator must "Record the time pesticide application begins and ends." To see the list of registered apiaries (bee hives) and other crops listed on the Iowa Sensitive Crop Directory, go to this web site: http://www.iowaagriculture.gov/Horticulture_and_FarmersMarkets/sensitiveCropDirectory.asp
There are sites listed from all of the NW Iowa counties where I work!