CROP NOTES for July 3, 2018
Iowa State University Extension Information for Northeast Iowa
Brian Lang, ISU Extension Agronomist, Decorah, IA
Past issues of Crop Notes are posted at:
http://www.extension.iastate.edu/winneshiek/page/crop-notes-brian-lang
To be removed from this email newsletter, please email me the request.

TABLE OF CONTENTS
WIND, HAIL, SATURATED FIELDS
Green-Snap from Saturday’s Storm
Mid- to Late Season Corn Lodging
Hail on Corn and Soybeans
EVENTS
July-August, Farmland Leasing Meetings; Many dates & locations across Iowa
July 10, Focus on Nitrogen Workshop Series, Crawfordsville
July 11, Field Diagnostic Clinic, Field Extension Lab west of Ames
July 12, Crop Management Clinic, Field Extension Lab west of Ames
July 14, Transition to Organic Field Day, Maynard
July 18, Howard County Experimental Farm Field Day, near Saratoga
July 18, Cover Crop Workshop, Grundy Center
July 30, Cattle Handling & BQA Workshop, West Union

WIND, HAIL, SATURATED FIELDS
A blog/reminder from Steve Johnson, ISU Extension Farm Management Specialist, encourages farmers to check fields and contact their insurance companies relative to possible damage from high winds (green-snap), hail and saturated fields: https://blogs.extension.iastate.edu/agdm/2018/07/02/heavy-rains-have-saturated-fields-forcing-producers-to-make-tough-decisions/

Green-Snap from Saturday’s Storm
On Saturday, 50 to 60 mph winds crossed much of northern Iowa. Further north towards Rochester, wind speed reached 70 mph. Corn is most vulnerable to green snap during the rapid elongation stage (V8 to VT). Conditions favorable for rapid growth, good moisture and heat increase the risk of stalks breakage. Row direction to wind, hybrid genetics and herbicides (growth regulators) can also impact the severity of damage. Plant orientation and plant populations are important factors also in understanding greensnap. With high plant densities, leaves tend to orient perpendicular to the row rather than parallel. Plants whose leaves are oriented perpendicular to the row are more likely to break than other plants when strong winds come in perpendicular to the rows. This is likely why we seldom have greensnap events (from
straight-line winds) that affect both north-south and east-west rows. Plant breakage will typically occur in one row orientation or the other but not both.

In 1999, a study was conducted by ISU to assess the effects of green-snap injury to corn. The study evaluated corn yield loss resulting from three levels of simulated green-snap injury (25, 50, and 75%) during three different stages of corn growth (V8, VT, and R2). Results from the study showed that yield losses averaged over timing of breakage were 53, 32, and 15% for 75, 50, and 25% breakage, respectively. A summary of the study is available at: https://www.extension.iastate.edu/Pages/eccrops/transfer/GreensnapFarnham.pdf

However, more recent research (2006) from ISU and the University of Nebraska suggest that yield loss is directly related to the amount of stalk breakage that occurred. In other words, yield loss from broken plants is directly related to stand loss. If 10 percent of plants are broken this will result in a 10 percent yield reduction. This is due to a lack of compensation ability to this reduced plant competition by the corn plant this time of year. The maximum of what that ear is capable of has already been largely determined. https://crops.extension.iastate.edu/corn/production/management/mid/greensnap.htm!

**Mid- to Late Season Corn Lodging**

High winds and saturated soils can also cause lodging. Warm, dry conditions during corn’s vegetative period result in deep root penetration while cool, wet conditions result in shallow root systems. The latter would result in corn that is more prone to root lodging from strong winds and saturated soils. The earlier in V-stage development, the less likely for significant yield reduction, as seen in the results from this simulated 2-year lodging study from the University of Wisconsin.

<table>
<thead>
<tr>
<th>Lodging treatments in Year 1</th>
<th>Grain yield (bu/acre)</th>
<th>Lodging treatments in Year 2</th>
<th>Grain yield (bu/acre)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td>199</td>
<td>Control</td>
<td>187</td>
</tr>
<tr>
<td>V10</td>
<td>191</td>
<td>V11--V12</td>
<td>181</td>
</tr>
<tr>
<td>V13--V14</td>
<td>182</td>
<td>V15</td>
<td>168</td>
</tr>
<tr>
<td>V17--R1</td>
<td>151</td>
<td>VT</td>
<td>160</td>
</tr>
<tr>
<td>LSD (0.05)</td>
<td>20</td>
<td>LSD (0.05)</td>
<td>10</td>
</tr>
</tbody>
</table>

More details about this are provided at: https://crops.extension.iastate.edu/corn/production/management/mid/silking.html

**Hail on Corn and Soybeans**

Hail reports from Saturday’s storm were few, but to help assess hail damage ISU Extension recently published two 8-page fact sheets that are free pdf downloads.

- *Hail on Corn in Iowa*: https://store.extension.iastate.edu/product/14776
- *Hail on Soybean in Iowa*: https://store.extension.iastate.edu/product/14792
EVENTS

July-August, Farmland Leasing Meetings; Many dates & locations across Iowa
Check the following website calendar for dates, times and locations of the upcoming Farmland Leasing Meetings: https://www.extension.iastate.edu/agdm/info/meetings.html Although most of the meeting locations for northeast Iowa are in August; here’s a short list of those:
- Aug. 8, 1:00 PM-4:00 PM, Charles City
- Aug. 9, 9:00 AM-11:30 AM, Manchester
- Aug. 9, 1:30 PM-4:00 PM, Elkader
- Aug. 14, 1:00 PM-4:00 PM, New Hampton
- Aug. 16, 9:00 AM-12:00 PM, Fayette
- Aug. 21, 1:00 PM-4:00 PM, Epworth
- Aug. 22, 6:00 PM-9:00 PM, Cedar Rapids

July 10, Focus on Nitrogen Workshop Series, Crawfordsville
The workshop will share research-based information on maximizing profitability with nitrogen management while also minimizing nitrate-nitrogen loss. Similar programs will be conducted in August at other ISU Research Farm locations. Details soon to be provided. For this workshop on July 10, please find details at: https://www.extension.iastate.edu/news/crawfordsville-workshop-july-10-focus-nitrogen

July 11, Field Diagnostic Clinic, Field Extension Lab west of Ames
The ISU Field Extension Education Laboratory (FEEL) offers the Summer 2018 Field Diagnostic Clinic from 8:55 AM to 4:00 PM. The clinic focuses on identifying common issues within crop fields. Extension specialists will discuss diagnostic methods and skills, management options and decision making for future crops. This program is meant for new crop advisors as well as individuals interested in a diagnostics refresher. For more information, go to: http://www.aep.iastate.edu/feel/diagnostic.html

July 12, Crop Management Clinic, Field Extension Lab west of Ames
The ISU Field Extension Education Laboratory (FEEL) offers the Summer 2018 Crop Management Clinic from 9 AM to 4 PM. The clinic provides interactive workshops and discussions to give patrons the best tools, resources and means-tested strategies to make the best crop management decisions in their corn or soybean fields. The clinic topics cover four primary areas: crop management, pest management, nutrient management, and soil and water management. Small group sizes encourage discussion and interaction with Extension instructors, and practical exercises in field situations. For more information, go to: http://www.aep.iastate.edu/feel/management

July 14, Transition to Organic Field Day, Maynard
10:00 AM to 2:00 PM, hosted on the Gary and Scott Wedemeier farm. They will share their experience with the organic transition process as part of a Practical Farmers of Iowa field day. RSVPs are appreciated for the meal to Debra Boekholder, debra@practicalfarmers.org or (515) 232-5661, by Tuesday July 10. More information about the event is available at: https://www.practicalfarmers.org/news-events/newsroom/news-release-archive/29347/

July 18, Howard County Experimental Farm Field Day, near Saratoga
10:00 to Noon. The Howard County Experimental Farm located on Hwy 9 between Davis Corners and Saratoga is hosting a Crops Field Day to include discussions lead by Brian Lang, ISU Extension agronomist, on current crop growth and development and crop scouting issues (insect, disease, weeds and fertility). Tentatively to also include a short update on windmill construction in the area. The program is free and open to the public. Light snacks included while supplies last. Two CCA credits available for free (1 CM, 1 PM). The location is 3.5 miles west of Davis Corners and 2 miles east of Saratoga. More information to follow.

**July 18, Cover Crop Workshop, Grundy Center**
9:00 AM to 1:30 PM at the Grundy County Fairgrounds, Practical Farmers of Iowa in partnership with Grundy County Extension and Grundy County Soil and Water Conservation District are hosting a free cover crop workshop. For details, go to: [https://www.practicalfarmers.org/news-events/newsroom/news-release-archive/29351/](https://www.practicalfarmers.org/news-events/newsroom/news-release-archive/29351/)

**July 30, Cattle Handling & BQA Workshop, West Union**
9:30 AM to 1:00 PM with Dr. Tom Noffsinger at the Fayette County Fairgrounds, sponsored by the Fayette County Cattlemen. Proper cattle handling not only is important for the safety of the cattleman, but is also important for the health, growth, efficiency and safety of the cattle. Noffsinger will share the basics of animal behavior and how to utilize that to improve our animal handling. He’ll also demonstrate how to use a Bud Box to work calves through a chute, and achieving cattle flow. Participants will also complete the BQA training. Register in advance by contacting the Benton County Extension office at 319-472-4739. The Fayette County Cattlemen will be providing lunch.

_Iowa State University Extension and Outreach does not discriminate on the basis of age, disability, ethnicity, gender identity, genetic information, marital status, national origin, pregnancy, race, religion, sex, sexual orientation, socioeconomic status, or status as a U.S. veteran. (Not all prohibited bases apply to all programs.) Inquiries regarding non-discrimination policies may be directed to Ross Wilburn, Diversity Officer, 2150 Beardshear Hall, 515 Morrill Road, Ames, Iowa 50011, 515-294-1482, wilburn@iastate.edu._

**Brian Lang**
**Iowa State University Extension Agronomist**
325 Washington St., Suite B, Decorah, IA 52101
Office 563-382-2949; Cell 563-387-7058; Fax 563-382-2940
[https://crops.extension.iastate.edu/](https://crops.extension.iastate.edu/)