

CROP NOTES for April 1, 2009

Iowa State University Extension Information for Northeast Iowa

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Apr. 9, Understanding & Working with Nutrient Mgt Plans under the CAFO Rule, Des Moines

Apr. 21-22, BIGMAP Symposium – Food & Fuel Crops: Issues, Policies, and Regulation, Ames

WEATHER

Comments from Elwynn Taylor

On March 25 Elwynn mentioned that “the SOI (La Nina indicator) = 0.91, and that at this rate La Nina will diminish to a non-event (below 0.8) by mid-April.” And now (March 29) the SOI is below the level of significance (0.77). “This brings lower risk of hot summer temperatures.” “The July, August, September forecast is for hotter than normal west of the Continental Divide. This could be a set-up for cooler than normal to the east of the Continental Divide (the upper Midwest) & higher than normal crop yields.”

Soil Temperatures

Currently, average soil temperatures are in the high 30's.

Soil temperature readings are available at: <http://extension.agron.iastate.edu/NPKnowledge/>

CHECK GRAIN CONDITION IN BINS

Shorter Storage Life for 2008 Crop

The later maturing, wetter, more variable 2008 corn crop may have a greater than usual chance of going out of condition this year. Charles Hurburgh, ISU Extension Ag Engineer, is concerned that the 2008 corn crop has roughly half the storage life of normal corn under the same moisture and temperature conditions. See his article about this at: <http://www.extension.iastate.edu/CropNews/2009/0206hurburgh.htm>

FORAGES & SMALL GRAINS

Report of Alfalfa Heaving in Southern Illinois

There are some initial reports of alfalfa winter injury from heaving in southern Illinois. Earlier this week I scouted some fields in northeast Iowa and saw NO problems regarding heaving. However, those in southeast Iowa should scout their fields to see if any problem exists. Heaving is most likely to occur on heavier soils, in lower areas of the field, and impact younger plants more than older plants. More branched rooting of older plants helps hold them in the soil.

Planting Alfalfa, Small Grains and Other Forages

Plant small grains and other forages as soon as soil conditions permit, but there is no hurry to plant alfalfa until the soil temperatures are in the 40's. Alfalfa prefers a warmer soil temperature than the small grains. Small grains germinate at soil temperatures in the mid- to high 30's, whereas alfalfa germinates at soil temperatures in the high 40's. On average, after mid-April oats and wheat lose an average of 10% yield per week, and after May 1 about 15% per week. Seeding rates for pure small grain stands should be about 30 seeds per square foot, which is about 3 bu/ac for oats, 2 bu/ac for barley, and 2 bu/ac for wheat. As a companion crop with alfalfa, reduce small grain seeding rates by about one-third to reduce the competition on the alfalfa seedlings. Oats are seeded at about 1 inch deep, and alfalfa and other forages at about ¼-inch to ½-inch deep with soil firming by (1) press wheels, (2) cultipacker, (3) harrow, (4) a good rain following seeding. Last year ISU Extension published a fact sheet on spring wheat, which is available at: <http://www.extension.iastate.edu/Publications/AG202.pdf>.

CORN

Seeding Rates Relative to Yield and Seed Costs

The following link provides a summary of recent work on the economics of corn plant populations, yields, and seed costs. At this link you will also find on the left side of the page an index of many other subjects on corn production. Click on "Planting" in the left column to get other summaries on Planting Date, Row Spacing, Planting Speed, etc. <http://www.agronext.iastate.edu/corn/production/management/planting/seedcosts.html>

Corn N Rate Calculator Recently Updated to Include 2008 Data

Just an FYI that the Corn N Rate Calculator database now includes research results from 2008 added to the previous research results. There is just a slight shift in nitrogen recommendations with the addition of this data. The Corn N Rate Calculator is found at: <http://extension.agron.iastate.edu/soilfertility/nrate.aspx>

SOYBEANS

Seeding Rate, Date, Row Spacing, etc.

Dr. Petersen maintains a web page with soybean production information. The link is:

<http://extension.agron.iastate.edu/soybean/topicpage1.html>

At this site under "Planting and Tillage" is his information and recommendations on planting date, plant population, row spacing, seed inoculation (under the "Soil Fertility" heading), etc.

Dr. Pedersen also has a series of six Fact Sheets on these issues:

Planting date: http://extension.agron.iastate.edu/soybean/documents/PlantingDate_000.pdf

Plant Population: http://extension.agron.iastate.edu/soybean/documents/OptimumPlantPop_000.pdf
Row Spacing: http://extension.agron.iastate.edu/soybean/documents/RowSpacing_000.pdf
Managing for High Yield: <http://extension.agron.iastate.edu/soybean/documents/HighYield.pdf>
Variety Selection: http://extension.agron.iastate.edu/soybean/documents/VarietySelection_001.pdf
Soybean Cyst Nematode: <http://extension.agron.iastate.edu/soybean/documents/SCN.pdf>

INSECT UPDATE

Common Stalk Borer - Consider Option 1 Now

Those of you that lose corn plants in the first few rows along grassy field borders may have Common Stalk Borer problems. Go to the following web site for photos of the problem:

<http://www.ipm.iastate.edu/ipm/icm/1997/4-7-1997/toastborer.html>

Common stalk borer has basically 5 timing periods for management to reduce either "field border" problems, or "in-field" infestations. Below is option 1. Options 2-5 are listed in the March 18 Crop Notes.

Option 1. Burn grassy road ditches, grass-back terraces, etc. to reduce "field border" infestations. The recommended time to burn the grass is when the new grass growth is beginning to spike. This timing usually starts in late March. The burn will kill the eggs laid last fall. Actually the grass could have been burned at any time from late fall until now, but spring is the preferred time to minimize exposure to soil erosion.

However, there are some precautions to take:

- 1) If roadside crews have established native plantings in your road ditches, it would be harmful to burn these plantings in fall or spring.
- 2) Be aware of roadside utilities (gas, electrical, communications) that could be damaged and be held liable.
- 3) Much of the area is still drier than normal, and makes a roadside fire easy to get out of hand.
- 4) Also be careful of other trash in ditches (discarded oil or gas cans, broken glass, etc.).

Plan Your Non-Bt Corn Refuge Areas

EPA label is law, and according to EPA you are required to have a minimum of 20% non-Bt refuge when using Bt corn technology. The University of Wisconsin has a very nice publication that pictures different field layouts for non-Bt corn refuge areas. This publication is available at:

<http://learningstore.uwex.edu/pdf/A3857.pdf>

Black Cutworm – Setting Up Traps Now

Every April ISU Extension works with volunteers to establish a Black Cutworm trapping network across the state. The pheromone traps help detect when Black Cutworms are migrating north into Iowa, and provide us with a prediction on when to scout for the potential pest. When the time comes, initial scouting dates will be provided in the ICM Crop News at: <http://www.extension.iastate.edu/cropnews>

If you have not yet subscribed to this news site, please do. It's free. Just click on "Subscribe to Crop News" in the upper left hand corner of the page.

COMMERCIAL PESTICIDE APPLICATORS

Aerial Applicator Consultant Requirements

New rules were filed on February 4 2009 regarding aerial application. The new rule clears up the confusion regarding the duty of the commercial applicator working with the aerial applicator. The rule states that an Iowa-based commercial applicator may apply for certification to be an aerial applicator consultant. The Iowa Department of Agriculture and Land Stewardship has created two checklists to clarify the aerial applicator consultant's duties and procedures.

The following link provides the aerial applicator consultant checklist.

http://agribiz.org/pdfs/aerial_consultant.pdf

And this link provides the checklist for the aerial application job. http://agribiz.org/pdfs/aerial_job.pdf

The Pesticide Bureau lists their pesticide applicator test schedule at:

<http://www.iowaagriculture.gov/Pesticide/pdf/2009AprDecTestingLocationschedule.pdf>

Also, you can arrange to test by appointment at these locations:
<http://www.iowaagriculture.gov/Pesticide/pdf/collegetestsites.pdf>

MISCELLANEOUS

Previous Crop Notes

Past issues of Crop Notes are posted at the following website.
<http://www.extension.iastate.edu/winneshiek/info/crops.htm>

Finding Answers to Ag Law Issues, i.e. Iowa Fence Law

The ISU Center for Law and Taxation has a wealth of information on ag law issues. Their home page is:
<http://www.calt.iastate.edu/>

For example, if you wanted to find information on Iowa fence law, go to the home page, type fence in the search box, and you would get the following reference which provides “plain” language on Iowa’s fence law:
<http://www.calt.iastate.edu/briefs/CALTLegalBrief-IowaFenceLaw.pdf>

EVENT

Apr. 6-8, National Course on Comprehensive Nutrient Management Plans (CNMP), Des Moines

Completion of the CNMP Development Course is required to become certified as a Technical Service Provider by the Iowa State national TSP certification program. If you are interested in becoming a CNMP Technical Service Provider, certification information is available at: <http://www.abe.iastate.edu/wastemgmt/cnmp-curriculum.html>

The CNMP program details are available at: <http://www.ucs.iastate.edu/mnet/cnmp/home.html>

Apr. 9, Understanding & Working with Nutrient Management Plans under the Concentrated Animal Feeding Operations (CAFO) Final Rule, Des Moines

This program was developed to address the updated requirements released on Dec. 22, 2008 for the National Pollutant Discharge Elimination System (NPDES) permit process. As with the CNMP program on Apr. 6-8, additional information about this CAFO program is at: <http://www.ucs.iastate.edu/mnet/cnmp/home.html>

Apr. 21-22, BIGMAP Symposium – Food & Fuel Crops: Issues, Policies, and Regulation, Ames

Gateway Hotel & Conference Center

<http://www.ucs.iastate.edu/mnet/bigmap/home.html>

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