FROST AND FORAGES

As of this morning (Friday, October 27, 2017), the National Weather Service is forecasting temperatures in the mid-twenties as far south as the city of Keokuk on Saturday night. The first freeze of the Fall always raises questions and concerns about the safety of grazing or mechanically harvesting forages. The bottom line is that there are two concerns.

1. Farmers who have planted sudangrass, sorghum, or sorghum-sudangrass hybrids as an annual forage should exercise good management to avoid prussic acid poisoning.
2. There may be a slight increase in bloat potential from alfalfa and clover.


Brian Lang, Iowa State University (ISU) Extension Field Agronomist in northeast Iowa, made some additional comments at http://www.extension.iastate.edu/Pages/eccrops/Frost and Forages - Lang.pdf. He pointed out an article on increased bloat potential at http://www.extension.iastate.edu/Pages/eccrops/Alfalfa is not Bloat Safe After a Killing Frost.pdf.

COOLING STORED GRAIN

From Greg Brenneman, ISU Extension Ag Engineer

Starting Friday morning (October 27, 2017) there will be great conditions to get grain cooled down from this falls harvest. With the average daily temperatures predicted to be in the mid 30s to low 40s for Friday well into next week, this will be a perfect time to get recently harvested corn and soybeans cooled to a temperature close to what we want for winter storage.
Allowable storage time for grain roughly doubles for every 10 degree drop in temperature. So, getting grain cooled down soon after harvest will significantly improve chances of keeping it in good condition while in storage.

In order to determine how long it will take to cool a bin of grain, first determine how much fan horsepower you have per 1000 bushels. For example, if you have a 5 hp fan on a 20,000 bushel bin, you have 0.25 hp/1000 bu. Divide this number into 15 and you get an estimate of the hours it will take to cool the full bin. In this example, 15 / 0.25 = 60 hours.

So, let's get that great crop cooled down for the best storage this winter.

SOIL TEMPERATURES

ISU recommends that fall anhydrous or manure applications not begin until the 4" soil temperatures are below 50 degrees F and the forecast indicates it will stay below 50 degrees F. The 4" soil temperature in your county is shown on the ISU state soil temperature map page.

It is recommended to wait until soils temperatures are 50 degrees F or cooler to slow the nitrification process, which converts the ammonium to nitrate. Nitrate is subject to both leaching and denitrification.

DICAMBA RULE CHANGES

On October 13, 2017, the Environmental Protection Agency (EPA) issued new rules for dicamba formulations used to control weeds in genetically modified cotton and soybeans. The highlights are

1. Issues to address before application season:
   a. These formulations of dicamba are now classified as restricted use. Farmers wishing to use these products who do not have a private pesticide applicator certificate will need to become certified, which is by taking a test.
      i. To prepare for the test, farmers should study the Private Pesticide Applicator Study Guide (PSEP 1), which is available at ISU Extension County offices or can be ordered on-line at https://store.extension.iastate.edu/product/3577.
      ii. Testing dates and locations for the remainder of 2017 are at http://www.iowaagriculture.gov/Pesticide/pesticidetesting.asp. When the Pesticide Bureau of the Iowa Department of Agriculture and Land Stewardship (IDALS) finalizes 2018 testing dates, they will appear at the same site.
   b. All applicators (private and commercial) will need to attend dicamba (or auxin)-specific training. ISU and IDALS are working with their counterparts in other states to develop this training, but specifics have not yet been finalized. Most likely this will be done via distance education in some fashion. (The Continuing Instruction Courses for certified applicators cannot address the requirements for the dicamba (or auxin)-specific training.)

2. Issues during application season:
   a. The maximum wind speed is now 10 mph, down from the original 15 mph limit.
b. The time of day when applications may occur is limited to between sunrise and sunset.

c. Labels have improved language on tank clean-out.

d. Labels have enhanced language describing susceptible crops and record keeping with sensitive crop registries.


**FOR YOUR CALENDAR**

**Continuing Instruction Course (C-CIC) for Commercial Agricultural Pesticide Applicators**

9:00 a.m., Wednesday, November 15, 2017

Many ISU Extension and Outreach offices (Check with yours.)

Details and registration for this and other C-CICs are at http://www.extension.iastate.edu/psep/ComAp.html.

**17th Annual Iowa Organic Conference**

6:00 p.m., Sunday, November 19 - Monday, November 20, 2017

Iowa City, IA

Details are at http://sustainability.uiowa.edu/2017-iowa-organic-conference.

**Ag Chemical Dealer Update**

9:00 a.m., Tuesday, November 21, 2017

Iowa City, IA

Details are at: http://www.aep.iastate.edu/acu/

**Integrated Crop Management Conference**

November 29 - 30, 2017

Ames, IA

Details are at: http://www.aep.iastate.edu/icm/

**Private Pesticide Applicator Continuing Instruction Courses (P-CICs)**

December 1, 2017 - April 15, 2018

Tentative dates and times for this winter's P-CICs in east-central and southeast Iowa will soon posted at http://www.extension.iastate.edu/Pages/eccrops/pcic.html

**Crop Advantage Series**

January 5, 2018 - Burlington

January 11, 2018 - Moravia

January 18, 2018 - Waterloo

January 24, 2018 - Iowa City

January 26, 2018 - Davenport

Details will soon be at: http://www.cropadvantage.org
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