CCA Exam Training Webinars Start December 1st, Signup Online
Bryan Jensen, IPM Program

Receive CCA exam training from UW-Madison and UWEX specialists starting Dec 1.

The University of Wisconsin Cooperative Extension Service and the UW Integrated Pest Management Program will offer a series of online webinar training sessions designed to complement and assist with your preparation for the state Certified Crop Advisors (CCA) exam. This webinar series features UW Extension specialists as instructors and will broadcast live via internet connection. Participants will be able to view the instructor’s PowerPoint presentation on their computer screen and ask questions through chat messaging. Webinars will be broadcast each Monday, Wednesday and Friday from Dec. 1 to December 19, 2014. All webinars will start at 9:00 am and conclude by either 11:00 or 11:30. Please see the webinar schedule for a list of dates, speakers and topics.

The vast majority of workplace computers (newer computer and a fast internet connection) are capable of handling webinar technology. A URL will be provided in advance to test hardware, sound and video capabilities. A list of electronic crop management resources will also be supplied to participants to help with self-study. Registration for the webinar series and electronic references is $75/person. Credit card payments can be made online at https://www.patstore.wisc.edu/ipm/register.asp

For questions, call or email Bryan Jensen at 608-263-4073 or email at bmjense1@wisc.edu For more information on the CCA program, international and state performance objectives and exam registration please go to the CCA website at https://www.certifiedcropadviser.org/

Android app, High moisture shell corn price calculator
Waupaca, Wis. – It’s that time of the year when Wisconsin dairy and beef producers and Wisconsin corn growers explore their options of buying or selling high moisture shell corn (HMSC). This is especially true this year in the northern two-thirds of the state with so much wet corn still in the field.

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What better way to pay respect to a colleague!
To help farmers better evaluate their options, the University of Wisconsin-Extension released a Smartphone app this fall to provide a simple way to help estimate the market value of HMSC based on three main variables – dry corn moisture, current corn moisture and price per bushel.

The HMScs app is free and available for Android smartphones and tablets on the Google Play store by searching for “HMScs”.

Farmers can use this app to help determine an equivalent value for wet shell corn when compared with a dry shell corn price – a link to current local elevator dry corn bid prices is built into the app. The equivalent wet price is then calculated and displayed in both price per ton and price per bushel. Additional costs for drying and/or shelling can be evaluated under the expense tab. The app also features the ability to email the results directly to others.

“Although a desktop Excel spreadsheet for pricing HMScs is available on the Wisconsin Center for Dairy Profitability website, it doesn’t have the ability to bring up current market information or automatically share the results”, said Greg Blonde, UW-Extension Waupaca County agriculture agent. “When you’re out in the field or on the go, the HMScs app is a great resource tool to have on your Smartphone or tablet computer.”

Blonde also noted the app may be useful to grain elevator managers, as well as Ag lenders and farm managers for valuing their grain or feed inventories.

Soil, Water, and Nutrient Management Meetings to be held in December

by Carrie Laboski, Professor of Soil Science

The annual Soil, Water, and Nutrient Management Meetings will be held December 2 through 11 at eight locations throughout the state. Current soil science research will be highlighted along with other topics of interest to agronomists, ag retailers, conservation professionals, and farmers.

Francisco Arriaga, Asst. Professor of Soil Science, will discuss using soil health concepts for management decisions along with understanding corn residue decomposition. Carrie Laboski, Professor of Soil Science, will provide an update on N sensors research for corn and wheat along with how to improve alfalfa productivity with S and K. Precision ag technologies for soil conservation and variable rate practices will be presented by Brian Luck, Asst. Professor of Biological Systems Engineering. Matt Ruark, Asst. Professor of Soil Science, will provide an update on cover crops research and understanding biological measures of soil health. Wisconsin Department of Agriculture, Trade, and Consumer Protection Nutrient Management Staff will give an agency update and Teresa Nelson, WI Department of Natural Resources, will discuss prioritizing water quality improvement efforts on agricultural lands using the Erosion Vulnerability Assessment for Ag Lands (EVAAL) tool.

Dates and locations for the program are given below.

12/02/14 – Madison – Dane Co. Extension office – Host: Jennifer Blazek, dane.uwex.edu
12/03/14 – Sparta – Jake’s Northwoods – Host: Bill Halfman, 608-269-8722
12/04/14 – Eau Claire – Clarion Hotel Conf. Center (NEW location) – Host: Mark Hagedorn, 715-839-4712
12/05/14 – Marshfield – Marshfield Ag Research Station – Host: Don Genrich/Lynn Dolata, 608-339-4237
12/08/14 – Juneau – Dodge Co. Administration Building – Host: Sheri Lotzer, 920-386-3791
12/09/14 – Kiel – Millhome Supper Club – Host: Mike Ballweg, 920-459-5904
12/10/14 – Cecil – The Main Event (NEW location) – Host: Jamie Patton, 715-526-6136

Each meeting will begin at 10 am and end at 3 pm. The $40 registration fee includes lunch from noon to 1 pm and informational materials. A total of 4 CEUs for Certified Crop Advisors will be provided (2 CEUs in Soil & Water Management and 2 CEUs in Nutrient Management). Reservations should be made with the meeting host at least 1 week prior to the meeting you wish to attend.

The detailed program flyer can be downloaded as a PDF here >>>


Plant Disease Diagnostic Clinic (PDDC) Update

Brian Hudelson, Ann Joy, Joyce Wu, Tom Hinsenkamp, and Catherine Wendt, Plant Disease Diagnostics Clinic

The PDDC receives samples of many plant and soil samples from around the state. The following diseases/disorders have been identified at the PDDC from October 11, 2014 through October 17, 2014.

**FIELD CROPS,**
Corn, Gray Leaf Spot
Northern Corn Leaf Blight, Cercospora sp.
Exserohilum turcicum, Fond du Lac
Fond du Lac

**FRUIT CROPS,**
Raspberry, Root/Crown Rot, Rhizoctonia solani, Waukesha
The PDDC receives samples of many plant and soil samples from around the state. The following diseases/disorders have been identified at the PDDC from October 25, 2014 through October 31, 2014.

**Plant/Sample Type, Disease/Disorder, Pathogen, County**

**FRUIT CROPS,**

Blueberry, Cytospora Canker, Cytospora sp., Bayfield

The PDDC receives samples of many plant and soil samples from around the state. The following diseases/disorders have been identified at the PDDC from October 25, 2014 through October 31, 2014.

**Plant/Sample Type, Disease/Disorder, Pathogen, County**

**SOIL,**

Soybean Soil, Soybean Cyst Nematode, Heterodera glycines, Brown, Outagamie, Pepin

The PDDC receives samples of many plant and soil samples from around the state. The following diseases/disorders have been identified at the PDDC from October 25, 2014 through October 31, 2014.

**Plant/Sample Type, Disease/Disorder, Pathogen, County**

**FRUIT CROPS,**

Cranberry, Bitter Rot, Colletotrichum acutatum, Colletotrichum gloeosporioides, Monroe

Cranberry, Ripe Rot, Coleophoma empetri, Monroe

Cranberry, Viscid Rot, Phomopsis vaccinii, Monroe

For additional information on plant diseases and their control, visit the PDDC website at pddc.wisc.edu.

**Vegetable Crop Update 10/24/14**

The 24th issue of the Vegetable Crop Update is now available. Click here to view this update.

**Deciding when to harvest corn in 2014**

Scott Sanford, Sr. Outreach Specialist-Rural Energy Program, UW-Madison

Madison, Wis. – Recent reports from around the state indicate that the corn will have higher moisture contents at harvest than typical years. Reports from the week of Oct. 6-10 indicated that corn was ranging from 23% to 32% with most in the 28-32% range, according to Scott Sanford, University of Wisconsin-Extension/Madison agricultural engineer.

He added, “Some corn has been hit with early frost which could affect test weighs depending on maturity.”

Delaying harvest to allow for field drying can be used to reduce drying costs but field losses will start increasing the longer the corn is allowed to stand. The amount of field drying can be estimated using growing degree days (GDD) or reference evapotranspiration (RET) values – amount of water a growing plant will transpire.

It generally takes 30 GDD for each percentage point of grain moisture reduction from 30% down to 25% and 45 GDD per percentage point of grain moisture reduction from 25% down to 20%. Based on a typical year, we can expect 4% drydown in northern Wisconsin to 6% in southern Wisconsin by Nov. 1, 0 to 1% during November and none in December.

The percentage of drydown based on RET is about 4% for each inch of reference evapotranspiration. The potential field drying is about 1/2% per day in September, early to mid-October it drops to 1/4% per day, mid to late October it drops to 1/8% per day and by early November the field drydown rate is only about 0.1% per day. After mid-November very little field drying occurs.

Sanford said, “Growers will have to balance time needed to complete harvest, crop condition (lodging) and increases in field losses during combining with savings in drying costs from delaying harvest.”

The general recommendation is to start combining corn for dry grain at 25-26% moisture. As the corn gets dryer, combine shatter losses caused by the header increase. The longer the corn is allowed to stand in the field, the higher the losses. A two year study of field losses of corn left standing after October reported 3-5% loss in November, 22% in December and if the corn is allowed to stand in the field all winter, a loss of up to 40%.

If corn is being fed to cattle, it could be harvested and stored as high moisture corn to feed out over the winter in silos or poly bags to avoid drying. Corn for dry market should not be stored in poly bags unless temperatures are below freezing and storage should be considered very short term as heating and ensiling can occur if temperatures in the bag go above freezing.

It takes about 0.02 gallons of propane to remove one point of moisture from a bushel of corn, according to Sanford.

“To estimate drying costs for a high temperature dryer, multiply the propane price by 0.02 and then multiply by the number of percentage points of moisture to be removed,” he said. “For example, if propane is $2.00 per gallon and corn is to be dried from 28 to 15% moisture reduction from 30% down to 25% and 45 GDD per percentage point of grain moisture reduction from 25% down to 20%.”

He provided these tips to reduce drying costs:

- Screen corn before the dryer to remove broken kernels and bees wings so you are only drying salable product
- Use the highest plenum temperature possible without scorching the corn – higher drying temperatures are
more energy efficient – less energy required to remove a pound of water.

- Clean screens and air intakes daily so they are free of debris (bees wings, cracked kernels, leaves) to maximize air flow
- Check gas pressure regulators and burners to ensure efficient and complete combustion before the drying season starts
- Use dryers with heat recovery or in-bin cooling to reduce the amount of drying needed
- Prevent condensation under the roof of bins so moisture doesn’t drip back onto the grain. Make sure eaves are open. Adding a ventilation fan to increase air flow under the bin roof may aid in reducing the formation of condensation.

Determining the right drying temperature depends on what the grain will be used for. If corn is being used for feeding or ethanol, the kernel temperature should not get above 140-150°F.

The maximum plenum temperature will depend on the grain moisture and type of drying system being used:

- high-temperature in-bin and batch dryers a maximum plenum temperature of 140 to 150°F is recommended,
- cross-flow dryers are typically 180 to 220°F but if they have multiple stages, the first stage could be higher for higher moisture grains.
- mixed flow dryers can be operated at higher temperatures because the grain is only exposed to intermittent full plenum heat.

For growers with low temperature dryers, this may be a year when the corn will be too wet to use this type of dryer in many areas, Sanford noted. Corn above 22% may heat or mold before it dries if the bin is loaded in a single fill. Options are to layer corn in small layers to increase the air flow per bushel or install a high temperature heater and dry the corn down to 20-22% with heat (140 to 150°F) and then switch to air-only drying to remove the remaining moisture. This is called combination drying and is one of the most energy efficient and cost effective drying methods.

2014 Wisconsin Soybean Variety Test Results
Shawn Conley, Soybean and Wheat Extension Specialist

The 2014 Wisconsin Soybean Variety Test Results are now available. Click on the link below to view the results.

http://www.coolbean.info/pdf/soybean_research/variety_trail_results/2014_Soybean_Trials_FINAL.pdf