



## Shelby County Extension

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### Upcoming Events:

May 13<sup>th</sup> - New 4-H Family Orientation

May 17<sup>th</sup> - 4-H Livestock ID forms due

May 25<sup>th</sup> - PorkBridge registration  
deadline

A warm spring has led to a record early planting of corn across the state, and many gardeners have taken advantage to get their plants in the ground as well. Now we head into mid-May with a significant cool-down on the way and hope that all the efforts made early will pay off with a bumper crop and plants already in the ground will be able to shake this recent chill!! I suppose it wouldn't be Iowa if the weather didn't keep us guessing! Stay warm out there this spring...

-Kate Olson, Program Coordinator

### DID YOU KNOW??

Ag and Hort News is also available online!! Each month's newsletter is posted online, and past issues are archived on our county homepage: [www.extension.iastate.edu/shelby](http://www.extension.iastate.edu/shelby). Just click on the Ag and Hort News in the county news feed and find the month you are looking for!! Best of all- online newsletters contain active links to get you to websites and publications mentioned in the articles! Check it out today!! If you would like to receive an email when the latest issue is posted online, to help reduce papers in your mailbox, just drop me an email at [keolson@iastate.edu](mailto:keolson@iastate.edu) or get a hold of me at the Extension office with your email address!

### Ask the ISU Garden Expert

Get answers to all your yard and garden questions at [www.yardandgarden.extension.iastate.edu](http://www.yardandgarden.extension.iastate.edu). For specific questions, call the Hortline at (515) 294-3108, or email [hortline@iastate.edu](mailto:hortline@iastate.edu), Monday-Friday from 10 a.m. to noon and 1:00 to 4:30 p.m.

### When should I spray for bagworms on my evergreens?

Bagworms are caterpillars that live inside spindle-shaped bags. (The bags somewhat resemble small Christmas tree ornaments hanging from the tree.) Bagworms feed on the foliage of a wide variety of trees and shrubs. However, they are most commonly found on juniper, arborvitae, spruce and other evergreens. The spindle-shaped bags are made of silk and bits of foliage (needle) fragments. The bags protect the caterpillars from their natural enemies. Bagworms are most often found in the southern half of Iowa.

Bagworms over-winter in the egg stage inside female bags attached to plants. In Iowa, egg hatch typically occurs in late May to mid-June. Insecticides, such as *Bacillus thuringiensis*, spinosad, Sevin, permethrin or bifenthrin, should be applied shortly after egg hatch.

One way to determine the best time to treat is to frequently inspect trees and shrubs (beginning in late May) that were infested last year. This will take time and diligence as the newly emerged caterpillars and their bags are quite small. Also, newly constructed bags with fresh plant bits are effectively camouflaged amongst the needles and are hard to find. Mother Nature also provides some helpful clues. Bagworm egg hatch typically occurs when catalpas and Japanese tree lilacs are in bloom in the area.

### **How often should I water plants in hanging baskets?**

Plants in hanging baskets need to be watered frequently (especially in summer). Potting mixes are light, well-drained and dry out quickly. Plus, hanging baskets may contain several plants. In general, water plants in hanging baskets when the soil surface becomes dry to the touch. On hot, sunny days it may be necessary to water once a day. When watering hanging baskets, be sure to apply water until water begins to run out the bottom of the container. This ensures that the entire soil ball has been moistened.

Do not let the potting mix dry out completely. Plants will wilt if the potting mix dries out excessively. Plus, it's more difficult to moisten the potting mix when it has dried out completely. If the potting mix gets too dry, it will separate (pull away) from the side of the container. If you attempt to water from above, most of the water will flow between the soil ball and container and run out the drainage holes in the bottom of the basket. Unfortunately, most of the potting mix will remain dry. When the potting mix gets excessively dry, place the basket in a tub of water for one or two hours. This forces water to be absorbed slowly from the bottom of the container. Do not keep the basket in the tub of water for more than two hours as this may result in root rot problems.

### **I would like to move some of my spring-flowering bulbs. When can they be dug?**

If you would like to dig and move spring-flowering bulbs, such as tulips and daffodils, wait until the foliage has turned brown and died. Once dug, the bulbs can be separated and replanted immediately. If planting isn't possible, dry the bulbs for one or two weeks and then store them until fall. Place the dried bulbs in mesh bags and store them in a cool (50 to 60 F), dry location until fall planting. Periodically check the bulbs during summer and discard any that show signs of decay.

### **Are there any irises that can be grown in shade?**

Most iris species (bearded, Siberian, Japanese, etc.) perform best when grown in partial to full sun. However, the crested iris (*Iris cristata*) prefers partial shade. A native of the eastern United States,

crested iris produces four- to six-inch-long leaves from woody, spindle-shaped rhizomes. Flowers are pale blue to violet with white or yellow crests on their falls. Plants bloom in mid-spring. It is hardy in USDA Hardiness Zones 3 to 8. Because of its small size, crested iris should be grown in the front of perennial beds and borders. It also can be grown as a groundcover in partial shade.

### **When is the best time to apply a broadleaf herbicide to the lawn to control dandelions and other broadleaf weeds?**

Fall (mid-September through October) is the best time to control perennial broadleaf weeds in the lawn with broadleaf herbicides. In fall, perennial broadleaf weeds are transporting food (carbohydrates) from their foliage to their roots in preparation for winter. Broadleaf herbicides applied in fall will be absorbed by the broadleaf weed's foliage and transported to the roots along with the carbohydrates, resulting in the destruction of the broadleaf weeds. Spring applications are generally less effective than fall applications.

### **What is the proper spacing when planting tomatoes in the garden?**

Tomato varieties are classified as determinate or indeterminate. Determinate tomatoes are small, compact plants. They grow to a certain height, stop, then flower and set all their fruit within a short period of time. The harvest period for determinate tomatoes is generally short, making them good choices for canning. Indeterminate tomatoes continue to grow, flower and set fruit until killed by the first frost in the fall. Accordingly, the harvest from indeterminate varieties often extends over a two or three month period.

Spacing of tomato plants depends on the growth habit of the variety and training system employed. Indeterminate varieties that are staked can be planted 1½ to two feet apart in the row. Indeterminate plants grown in wire cages should be spaced 2½ to three feet apart, while a three- to four-foot spacing would be appropriate for indeterminate tomatoes allowed to sprawl over the ground. Determinate tomatoes can be planted two feet apart. Rows should be spaced about four feet apart.

## **PorkBridge Educational Series Returns for Fifth Year**

The successful distance educational series, PorkBridge, will begin its fifth year in June. Driven by popular demand, the PorkBridge 2010-2011 educational series features new topics focused on the grow-finish segment of the pork production chain.

"PorkBridge provides relevant and accurate information on specific topics to people who own, manage or work in swine grow-finish facilities," Iowa State University (ISU) Extension swine specialist Ken Stalder said. "Producers and others in the industry can get the information they need without the hassle of traveling or giving up a whole day to attend a meeting."

Stalder, who also is the Iowa contact for PorkBridge, said the program is provided through a unique delivery method. It combines electronic information viewed on computer with live oral presentations by topic experts via phone. The week before each session, subscribers receive a CD containing that session's topic-specific presentation and additional information. Each session is approximately 90 minutes, beginning at noon Central time.

One of the best reasons to participate is the continued low cost of the program, Stalder said.

"We're happy to be able to keep the cost for participating in this subscription-only series at \$125, the same as the very first year," Stalder said. "This covers materials and phone calls for all six sessions, which are scheduled on an every-other-month basis from June 2010 through April 2011. People need to enroll by May 25, 2010, in order to participate in the first session on June 10, 2010."

An informational brochure with subscription information is available on the IPIC Web site at: [www.ipic.iastate.edu/PorkBridge/IPIC2010PB.pdf](http://www.ipic.iastate.edu/PorkBridge/IPIC2010PB.pdf).

Iowa residents who want more information can call Stalder at (800) 808-7675.

Session dates, speakers and their industry affiliations and topics are:

- June 10, 2010, Bob Thaler, South Dakota State University, "Mycotoxins -- What We've Learned and What You Need to Know"
- Aug. 5, 2010, Larry Jacobson and David Schmidt, University of Minnesota, "Current Understanding on Pit Foaming, Barn Explosions, and Safety Precautions"
- Oct. 7, 2010, Mike Brumm, Brumm Swine Consultancy, Inc., "Preparing Your Ventilation and Heating Systems for Winter's Challenges"
- Dec. 9, 2010, Allan Evers, Cooper Farms, and Matt Ritter, Elanco Animal Health, "Going Hot-Shot Free: Tips to Improve Hog Handling"
- Feb. 3, 2011, Michelle Sprague, AMVC Management Services, "Euthanasia Techniques, Tools, and Protocols"
- April 7, 2011, Jennifer Greiner, National Pork Producers Council, "National Update on the Livestock Antibiotic Use Issue"

IPIC coordinates all program details, including registration and subscriber mailings. Mark Whitney and Lee Johnston of the University of Minnesota coordinate the PorkBridge program.

IPIC was established in 1994 as a coordinated effort of the College of Agriculture and Life Sciences and the College of Veterinary Medicine at ISU. Its mission is to promote efficient pork production technologies in Iowa, maintain Iowa's pork industry leadership and strengthen rural development efforts. IPIC focuses its efforts on programs that are integral and complementary to ISU Extension. Through IPIC, Iowa producers receive accurate and timely information to make their operations more efficient and profitable.

## **More Farmers Using ISU Extension Farm Financial Planning Analysis**

An increasing number of Iowa farm families are turning to Iowa State University Extension for a farm financial and production evaluation before making changes. Mike Duffy, ISU Extension farm financial planning program director, said demand for the program has picked up in recent months. Forty families requested the analysis during the first three months of 2010, compared to 57 families served by the program the previous 18 months.

“Evaluating your farm business and determining whether or not a change is desirable is an essential part of any farm management plan,” said Duffy. “The farm financial planning program helps farmers and farm families evaluate their situation. Some want to analyze their current operation as to its profitability, liquidity and risk bearing ability; others are looking at areas where improvements can be beneficial to their operation.”

ISU Extension farm management associates conduct the farm financial planning program in a one-on-one counseling setting using a computerized model to evaluate the changes. In addition to the analysis, they often provide referrals to other sources of information that might be available to the family. The program is currently funded by a grant from CF Industries which covers the time and travel of the associates running the analysis.

Ralph Mayer is one of the 12 Iowa farm management associates. “I begin by talking to the farmer, or farm family, to get a general idea what they are looking for from the analysis, as that will impact the information we need to run it.”

Mayer says that most frequently farmers want to evaluate a change to the operation – that might be renting an additional farm, buying a farm or changing a crop or livestock enterprise. At the conclusion of the conversation, Mayer asks the farmer to supply the basic information needed to run the analysis – financial and production information for the operation and information about any potential changes. “Having this

information is extremely critical because the more detailed and accurate that information is, the more meaningful and useful the analysis will be.”

FINPAK, the computer analysis used by the program, provides in-depth information about the farm, evaluates it as it currently exists and gives information as to the financial impact that a change may have going forward. This “third party” point of view was exactly what Mary Clare and Anne Sweeney needed when they contacted ISU Extension for an analysis last winter.

The Sweeney sisters, fourth generation Dubuque County farmers, manage and work on the family farm with some help from their three brothers. “This computer assessment has helped us make better financial decisions, especially regarding our dilemma and uncertainty about whether to continue raising livestock or rent our entire farm,” said Mary Clare Sweeney in an email to Duffy. “The clear and concise printouts presented the financial ramifications of each of our options; we can now make much more realistic decisions.”

Sweeney was also impressed with the dedication of her farm associate, Charles Morine, when he traveled through bad weather and at a distance to conduct the program’s services. “Chuck explained the program very clearly and left no doubt in our minds as to the benefit of the analysis,” she continued. “He was able to answer related financial questions and direct us to other resources available in our area. We are very grateful for the help we received.”

Farmers interested in the farm financial planning analysis should contact the Shelby County Extension Office or Duffy at [mduffy@iastate.edu](mailto:mduffy@iastate.edu). To learn more about the program, visit the farm financial planning Web site [www.extension.iastate.edu/farmanalysis](http://www.extension.iastate.edu/farmanalysis).

Click here to view [Farm Financial Planning Program](#) from [Iowa State University Extension](#) on [Vimeo](#).

## **Temperature Fluctuations Have and May Continue to Inhibit Corn Emergence**

*By Roger Elmore and Lori Abendroth, Department of Agronomy*

Corn planting proceeded at an all-time record this spring. We've experienced one of the best planting seasons ever in Iowa. According to the most recent [USDA-NASS report](#) (2 May 2010), 84 percent of Iowa's corn was planted with cropping districts ranging from 69 percent complete in south central Iowa to 92 percent complete in north central Iowa. Overall, corn has been planted within the [recommended window](#) which should serve to maximize yield potential relative to planting date.

Soil and weather conditions at planting and emergence were excellent for most of the state. Alison Robertson is emphasizing the need to assess seedling health when doing stand counts (see next article) in response to some of the problems occurring in southeast Iowa this spring. Seedling emergence problems there are correlated with swings in April soil temperature. Cooler soil temperatures slow the germination process and predispose seedlings to fungal infection. We have also observed, or heard reports of, seedling growth problems in some parts of Iowa already this year, including:

- [Imbibitional chilling](#) damage, which is the chilling effect seeds may experience when they imbibe, or absorb, water when soil temperatures are less than 55 F for an extended time. Seedlings may "corkscrew" or not emerge when exposed to these cool soil temperatures. This may happen also when there are rapid swings in air temperatures of nearly 30 F.
- Soil crusting due to wet soils at planting or heavy rains after planting reducing plant stands. Significant [stand reductions](#) lower yield potential.
- "Leafing out" underground - see Photo 1. This occurs most often in crusted soils and also appears associated with imbibitional chilling, mentioned above.
- [Variable plant emergence](#) and reduced plant population. Variable emergence and growth will reduce yield.

### **Cool Temperatures Soon?**

The forecast for the next several days is for air temperatures dropping into the high 30's at night; soil temperatures will also lower respectively. Growers and agronomists should pay particular attention to corn fields planted recently as they are the most likely to

exhibit seedling rot or poorer emergence associated with some of the issues mentioned here. [Frost](#) is likely to occur in low lying areas causing leaf necrosis and delayed growth of sprouted seeds. Any of the situations mentioned above may result in a need to replant. [Assess stands](#) well before making this decision.

Irrespective of all of these issues, 2010 has provided one of the best planting seasons to date. Most of Iowa's corn was planted within a timeframe that should serve to maximize yield potential.

## **Assess Seedling Health When Doing Stand Counts** *By Alison Robertson, Department of Plant Pathology*

Corn planting is virtually done, and across Iowa small green spikes are becoming visible as seed germinates. Now is the time to start assessing stands. Doing stand counts involves more than just counting the number of seedlings that have emerged. Seedling health should also be assessed. ISU Extension field agronomists Virgil Schmitt and Mark Carlton have reported that seedling rots are prevalent in southeast Iowa.

Rotted seedlings may result from fungal infections, anhydrous ammonia injury, wireworms and cold injury. Seedling susceptibility to fungal infection increases the longer the seed sits in the ground, and the more stress germinating corn undergoes. Wet and cool (less than 55 F) soil conditions predispose seedlings to infection by a number of fungi.

Corn germinates well at soil temperatures above 68 F. When soil temperatures are below 55 F, germination is greatly retarded. This growing season, soil temperatures across much of the state were above 55 F from April 13 through April 23, when temperatures dropped below 55 F for two (central and northwest Iowa) to five (southeast Iowa) days (Figure 1).

Last year, Gary Munkvold and I reviewed seedling diseases of corn and discussed some of the seed treatments that are available for corn in the ICM News article, [Check General Root and Mesocotyl Health when Assessing Corn Stands](#). I encourage you to read through the article again. As you evaluate corn stands, remember to dig up seedlings and check for symptoms of seed rots and seedling blights. This will also give you an opportunity to evaluate the effectiveness of the seed treatment that was applied to the seed planted. If you have significant seedling rot, you may have to replant.