



Ag & Hort Update

January 2010

As I send this month's edition of the newsletter, I find myself wishing that I could somehow attach an extra snow shovel to each copy! I know most around here would certainly appreciate an extra hand "digging out" from all our recent snows. With three blizzards under our belt since I last wrote you in early December, and temperatures nearing record-lows, we seem to be getting more than our fair share of winter this year! I know the drifts I pass on my daily commute seem to get just a little bit taller every day... With all of this snow, it seems hard to imagine that spring will ever arrive, but I know that many of you are busily planning for next season's crops! Winter is a great opportunity to do this planning, as well as to take advantage of the many training opportunities offered this time of year. Over the next few months, ISU and many partner organizations will be offering classes and services to help prepare you to hit the ground running this spring. Whether your interests lie in livestock, crops, gardening or elsewhere- you're sure to find a class, conference, or other resource to give you new ideas for the coming spring. Take advantage of these great opportunities to learn, network and improve your productivity for 2010!

-Kate Olson

Upcoming Events:

- Jan. 12th - Private Pesticide Training (1:30 or 7:00)
- Jan. 13th - 4 State Beef Conference in Lewis
- Jan. 21st - Confinement Manure Applicator Cert.
- Jan. 26th - Crop Advantage in Carroll
- Jan. 28th - Crop Advantage in Atlantic
- Feb. 11th - FSQA Training (6:00 at Library)

Ask the ISU Garden Expert

What is the proper temperature for houseplants during the winter months?

Most houseplants grow well with daytime temperatures of 65 to 75 degrees F and night temperatures of 60 to 65 degrees F. Temperatures below 50 degrees F or rapid temperature fluctuations may harm some plants. Keep houseplants away from cold drafts, radiators, and hot air vents. Also make sure houseplant foliage doesn't touch cold windows.

The lower leaves on my African violet have turned yellow and become droopy. What could be wrong?

The symptoms suggest the African violet may have root rot. Root rot symptoms initially develop on the lower leaves. The lower leaves turn yellow and droop. As the root rot progresses, affected leaves turn brown and become mushy. Over time, the symptoms spread upward. Plants may eventually die if growing conditions are poor and no corrective actions are taken.

Root rots are usually caused by overwatering. African violets prefer an evenly moist soil. They don't like wet or dry potting soils. In wet situations, root rot fungi gradually destroy the African violet's roots, causing the plant to decline. Prevention is the best defense against root rot. Allow the soil surface to dry to the touch before watering African violets. Also, select a light, well-drained potting mix when potting or repotting African violets.

What causes pine wilt?

Pine wilt is a common disease that causes browning and death of pines, especially Scotch pines. Austrian, mugo, red, jack and white pine also may be affected, but less commonly than Scotch pines. Affected trees turn brown and die within a few months. Pine wilt is caused by the pinewood nematode, a microscopic worm. The nematodes clog the water-conducting vessels of the pine tree, causing the tree to wilt and die. It spreads from tree to tree by pine sawyer beetles. Infected, dying trees are often attacked by secondary bark beetles, which leave small holes in the trunk and carry a fungus that causes blue staining of the wood, often visible as blue radial wedges when the trunk is cut in cross-section. Unfortunately, there is no cure for pine wilt. Dying trees should be cut down and destroyed.

How do you care for cinerarias?

Cinerarias, a cool-season greenhouse crop, are typically available from January through April. The daisy-like flowers, which are 1 to 4 inches in diameter, are available in a wide range of colors, including pink, red, lavender, purple and blue. Many have white eyes. Cinerarias should be placed in bright, indirect light with a temperature near 60 degrees F. Keep the potting soil uniformly moist, but not saturated. If the potting soil becomes dry, the plant will wilt rapidly and may die if not promptly watered. Cinerarias should remain attractive for two or three weeks if given good care. After the flowers dry and shrivel, discard the plants.

Several houseplants that were brought indoors in fall are dropping leaves. Why?

When plants are brought indoors in fall they often drop leaves. Environmental conditions indoors are less favorable than those outdoors. The less favorable growing conditions are stressful to plants. Plants respond to this stress by dropping leaves. It usually takes plants one to two months to adjust to the indoor environment when brought indoors in fall. Leaf drop may occur during this one to two-month period. Plants will be able to adjust to their indoor environment fairly quickly if they receive good, consistent care. Poor or inconsistent care will prolong the adjustment period.

Get answers to all your yard and garden questions at www.yardandgarden.extension.iastate.edu. For specific questions, call the Hortline at (515) 294-3108, Monday-Friday from 10 a.m. to noon and 1 to 4:30

ISU Resources for Managing Livestock Financial Issues Brought to One Web Page

At a time when Iowa livestock producers continue to grapple with the tough economy, Iowa State University Extension wants to make it easier for producers to find ISU educational resources they need.

“We want livestock producers to easily find ISU people and information that can help them work through year-end financial issues and develop financial plans for next year,” said John Lawrence, ISU Extension livestock economist. “We know many producers are feeling financial and emotional stress, so we have placed our materials on one Web page for their convenience.”

The new Web page, Managing Financial Tough Times for Livestock Producers, at www.extension.iastate.edu/livestock/managingFinancialLivestock.htm, has materials organized on seven sub-pages – Iowa Concern; Ag Decision Maker; Center for Agricultural Law and Taxation; financial management tools specific to beef, dairy and pork producers; and tips to help parents talk to kids about the financial situation.

The Iowa Concern page brings forward legal, financial and emotional support by providing a toll-free number, Web chat, frequently asked questions on its Web site. “We can help producers understand that it was market forces that created this situation, not errors in management on their part.” said John Baker, Iowa Concerns attorney. “Many will need to learn to communicate in new ways and to communicate well as they deal with the tremendous stress caused by this situation.”

What Do We Tell the Kids? Is a presentation linked to the new site that covers a topic related to livestock financial crisis, but not often discussed. “It is important that families know how to keep communications open and honest,” said Larry Tranel material presenter.

The Center for Agricultural Law and Taxation page has links to livestock financial issues information on the topics of bankruptcy, civil liabilities, contracts, insurance and secured transactions. The financial management section provides Ag Decision Maker files and tools that are specific to livestock economics.

Species specific information has been pulled from ISU Extension center resources for beef, dairy and pork. “We didn’t create new material for the Managing Financial Tough times Web page,” said Lawrence. “We have pulled from our vast resources the information that is most pertinent during these times and organized them in a way producers will find easy to use.”

The Managing Financial Tough Times for Livestock Producers Web page is one way Iowa State University Extension is helping Iowans through this economically difficult time. Other ISU Extension efforts include the Managing Tough Times Website at www.extension.iastate.edu/toughtimes/ and videos that explain programs such as the farm financial assistance program <http://video.extension.iastate.edu/2009/08/12/farm-financial-planning-program/>.

Winter Perils for Trees and Shrubs

By Richard Jauron, ISU Extension Horticulturalist

Winter can be tough on Iowa's trees and shrubs. Low temperatures, rapid temperature changes, winter desiccation and the weight of ice and snow can damage vulnerable trees and shrubs. Iowa is located in USDA Hardiness Zones 4 and 5. The average annual minimum temperature in Zone 5 is -10 to -20 F. The average annual minimum temperature in Zone 4 is -20 to -30 F. The dividing line between Zones 4 and 5 lies roughly from Shenandoah to Ames to Dubuque. Woody plants gradually acclimate to cold temperatures. Cold hardiness is initiated by decreasing daylength and temperature. Trees and shrubs gradually become more cold hardy during fall and early winter and possess maximum cold hardiness in mid-winter. Cold hardiness then decreases. As a result, a temperature of -10 F in January is generally not a problem for hardy plants. However, a temperature near zero in early November or late March may cause considerable damage to poorly adapted trees and shrubs.

A rapid drop in temperature over a short period of time also can cause severe plant damage. In Iowa, severe damage to trees and shrubs often occurs when there is a sudden drop in temperature in fall or early spring. The catastrophic effects of a sudden drop in temperature became painfully clear to apple growers in the spring of 1941. Prior to 1941, Iowa was one of the top apple producing states in the country. However, on Nov. 11, 1940, a blizzard accompanied by rapidly falling temperatures (temperatures dropped 40 degrees F or more in just a few hours) destroyed approximately two-thirds of the apple trees in the western half of Iowa. The best way to prevent damage caused by low temperatures or rapid temperature changes is to select trees and shrubs that are winter hardy in your area. Marginally hardy plants should be planted in protected sites, such as courtyards or eastern exposures. Avoid summer fertilization of trees and shrubs. Summer fertilization stimulates late season growth and delays the hardening process, making the plants more susceptible to winter injury.

Narrow and broadleaf evergreens lose considerable amounts of moisture through their leaves or needles, buds and stems during the winter months. The cold, dry winds and sun are mainly responsible for the water loss. Once the ground freezes, however, plant roots are no longer able to absorb water. Plant foliage that loses a large amount of moisture may dry and suffer desiccation injury. Plants susceptible to desiccation injury should be planted in protected areas. A shield or screen can be erected to deflect drying winds or shade exposed plants. A simple screen can be constructed with wooden posts and burlap. Anti-desiccants also can be used to prevent desiccation injury. When sprayed on plant foliage, these materials form a protective film that slows water loss. In dry years, water evergreens susceptible to desiccation injury in fall.

Major damage to trees and shrubs also can be caused by the weight of ice or heavy, wet snow. Multi-stemmed evergreens, such as arborvitae, and weak-wooded deciduous trees, such as green ash and silver maple, are most susceptible to branch breakage. High winds during an ice or snow storm can greatly increase tree and shrub damage. To prevent the weight of ice and snow from damaging arborvitae and other multi-stemmed evergreens, wrap the plants with twine or soft rope in fall. When heavy, wet snow accumulates on shrubs and small trees, home gardeners can gently shake the snow from their branches or carefully brush off the snow with a broom. Sharply bent, ice-covered branches on small trees and shrubs can be propped up to prevent breakage. Individuals should stay away from large, ice-covered trees. Nothing can be done to prevent damage to large, ice-covered trees. However, an individual can be severely injured or killed if a large, ice-laden branch or tree were to suddenly crash to the ground while he or she were underneath it.

Trees and shrubs in Iowa often have to endure a long and harsh winter. Proper plant selection, correct placement in the landscape and good cultural practices can reduce winter injury to woody ornamentals.

2010 Confinement Site Manure Applicator Training Scheduled in Shelby County

Confinement site manure applicators should plan to attend a two-hour workshop offered by Iowa State University (ISU) Extension and the Iowa Department of Natural Resources in January or February 2010 to maintain manure applicator certification requirements. The Shelby County workshop will be offered on Thursday, January 21st at 1:30 PM at the Shelby County Extension Office.

“Iowa law requires confinement site manure applicators to obtain two hours of continuing education each year of their three-year certification period, or take and pass the exam once every three years,” said Angela Rieck-Hinz, ISU Extension program specialist and coordinator of the manure applicator certification program. “If applicators fail to get the two hours of continuing education each year, they will be required to pass a written exam to be eligible to recertify.”

Workshop participants will learn about land application rules and proposed rules for application of manure on snow-covered or frozen ground. Applicators will also review manure spill case studies and how to interpret a manure analysis report. The workshop serves as initial certification for those applicators that are not currently certified, recertification for those renewing licenses and as continuing education for those applicators in their second or third year of their license.

“Even crop and livestock producers who do not need certification will find the workshop to be an excellent way to stay on top of manure regulatory requirements,” said Rieck-Hinz. “Producers who are receiving manure from confinement facilities with manure management plans will need to meet certification requirements if they are handling, transporting or applying manure from those facilities.”

Operators must be certified to handle, transport and apply manure if the confinement livestock operation has more than a 500 animal unit capacity, unless the manure is applied by a commercial manure applicator. The certification fee is \$100 for a three-year certificate. This fee is paid when applicators initially get certified and then every three years when they re-certify to apply manure. Confinement site applicators also are required to pay an annual education fee of \$25. All fees and application forms must be sent to the Iowa Department of Natural Resources to complete certification requirements. There is no fee to attend the workshop and only those needing to be certified must pay the certification fees.

Applicators are encouraged to attend workshops prior to March 1 to meet certification deadlines and avoid being assessed a \$12.50 late fee for re-certification. Training video tapes will be available for viewing sometime in February by contacting the ISU Extension county office and scheduling a viewing time. If you have questions about meeting dates and locations, or need to schedule an appointment to attend training, contact the Shelby County Extension office, or visit <http://www.agronext.iastate.edu/immag/mac.html> to see the 2010 workshop schedule.