Acreage Living

August-September 2004 www.extension.iastate.edu/acreage/

In This Issue

Acreage Living is published bimonthly. Please share it with your acreage neighbors. Call your local ISU Extension Office to be placed on the mailing list or contact an ISU Extension staff member listed below to suggest topics for future articles.

Editors:
Shawn Shouse
sshouse@iastate.edu
(712) 769-2600

Linda Nelson
lsnelson@iastate.edu
(515) 993-4281

Joy Rouse
jmrouse@iastate.edu
(515) 961-6237

Designer:
Paulette Cambridge
paulette@iastate.edu
(712) 769-2600

Asian lady beetles and boxelder bugs

Asian lady beetles and boxelder bugs are accidental invaders. They do not feed or reproduce indoors. They cannot attack a house's structure, furniture, or fabrics; sting; or carry disease. They do not feed on people, although Asian lady beetles infrequently pinch exposed skin. Asian lady beetles may leave a slimy smear and they have a distinct odor when squashed.

Boxelder bugs live, feed, and reproduce on trees, shrubs, and other plants. They are sap-feeding insects with a beak that can only suck liquid food (sap) from the twigs and seeds of selected species of trees and shrubs.

The best way to deter Asian lady beetles and boxelder bugs is to prevent their entry by caulking and sealing cracks and gaps. Spraying indoors also may limit the number of bugs that get into the house. A lawn and garden insecticide such as Sevin® or Dursban® or soapy water (5 tablespoons liquid detergent per gallon water) can be used outside on masses of boxelder bugs perched on and along the foundation in the fall. For large infestations of Asian lady beetles, spraying pyrethroid insecticides such as permethrin to the outside of buildings when the beetles appear may help prevent pest entry.

Unfortunately, there is no easy cure for eliminating Asian lady beetles or boxelder bugs already inside the house. A sure control for bugs already in the house is to remove them as they appear by vacuuming or sweeping. More information and pictures can be found at www.ipm.iastate.edu/ipm/iiin/.

*This article references information found in the **Iowa Insect Information Notes** by Donald Lewis, ISU Extension entomologist.*

IOWA STATE UNIVERSITY
University Extension

Ten reasons to eat carbohydrates

by Paulelda Gilbert, ISU Extension Nutrition & Health Specialist

High protein, low carbohydrate diets are the rage. However, carbohydrates are an important part of our diet. There are many benefits to nutritionally balanced eating. Excluding any one of the basic nutrients can have a negative impact on health.

Here are 10 reasons why carbohydrates are necessary in the diet.

1. **Energy:** The Dietary Reference Intakes recommend 130gm of carbohydrates daily to provide adequate energy for tissues, which rely solely on glucose (carbohydrates) for energy.

2. **Brain power:** The preferred fuel for the brain is glucose, which comes from carbohydrates.

3. **Muscle power:** To support the energy demands of high-intensity exercise, muscles prefer glucose (carbohydrates). Carbohydrates can produce energy three times faster than fat for the working muscle.

4. **Weight control:** Weight loss is achieved by eating fewer calories or increasing physical activity. Carbohydrate foods are not higher in calories. Long-term weight control is difficult on a low carbohydrate diet because of the decreased food variety in the diet. The calories in a gram of protein are equal to the calories in a gram of carbohydrate food.

5. **Dehydration and constipation:** Much of the weight lost initially on the low carbohydrate diet is a result of water loss, not fat loss. For every gram or ounce of carbohydrate stored by the body, 3 grams or ounces of water are stored with it. As the body uses the stored carbohydrate, water is lost and accounts for much of the initial weight loss. In addition, high protein diets are low in fiber. Dehydration plus low fiber intake equals constipation.

6. **Heart disease:** A low carbohydrate, low-fiber diet that is high in animal protein, cholesterol and saturated fat increases risk of heart disease.

7. **Cancer:** Fruit and vegetable consumption has been shown to decrease the incidence of certain types of cancer. Fruits and vegetables contain a number of antioxidants and phytochemicals, which appear to inhibit or interfere with the development of cancerous cells.

8. **Blood pressure:** A low carbohydrate diet, which restricts fruit and vegetable intake, can lead to high blood pressure. Fruits and vegetables contain minerals such as potassium, calcium, and magnesium, which appear to exert a protective effect against high blood pressure.

9. **Calcium counts:** Milk contains carbohydrates, but it also contains calcium. High protein intakes over time, especially from animal sources, can increase the loss of calcium in the urine. This loss of calcium can increase the risk of kidney stones and contribute to osteoporosis.

10. **Tastes good!** Carbohydrates, including cereal, bread, pastas, rice, fruits and vegetables add variety and flavor!

For more nutrition information, contact your local Extension office or call ISU Extension's Answer Line toll free at (800) 262-3804.

Fencing for appearance

by Shawn Shouse, ISU Extension Ag Engineering Specialist

Fences serve many purposes on the landscape. They may be built to contain or exclude animals, to mark property boundaries, to provide privacy, or to add beauty to the property. When the primary purpose is appearance, board or rail fences often are chosen.

For small enclosures such as yards, picket fences or vertical board fences provide privacy and wind protection. For larger enclosures such as pastures or entire properties, horizontal board or rail fences are more practical and economical.

The common horizontal wooden fence uses three or four boards (1" x 6" lumber) nailed or screwed to wooden posts every 8 to 10 feet. This fence adds striking contrast and definition, especially when painted white. The boards may be parallel horizontal or arranged in decorative "crossbuck" patterns.

Rail fences consist of heavy horizontal rails that generally have their ends chiseled down and inserted into holes in the posts. The rails may be round or rectangular in section, with smooth or rough split surfaces.

Livestock pressure and cribbing (biting) of the wood can be reduced by placing one or more electric wires on the inside of board or rail fences.

Wood fences can be painted, stained, or left to weather to a natural wood color. Woods with natural decay resistance such as cedar, redwood, and hedge (Osage orange) may be used without treatment. Other woods must be painted or treated with preservatives. Posts must be naturally decay resistant or pressure treated with preservatives and rated for permanent ground contact (preservative retention of 0.4 to 0.6 pounds per cubic foot of wood).

An alternative to painted wood is vinyl fencing. Rails and posts of polyvinyl chloride (PVC) plastic require no painting, but may require occasional washing to remove mildew and dirt. They are highly resistant to decay, but don't have the strength or stiffness of wood. Flexible vinyl fencing uses high-tensile wires encased in a flexible PVC jacket that looks like a thin board. The resulting fence looks like a board fence at a lower cost.

White board fences look great when they are new and straight, but show the slightest imperfections. Be prepared to straighten leaning posts or replace warped rails. Painted fences will require frequent touch-up.

Wood and plastic fences may cost $4 to $10 per running foot. Wire fences can be built for less than $1 per foot. For some situations, a compromise may be a wire fence with a single rail at the top or flexible vinyl fence at $3 to $5 per foot.

Additional information on fencing can be found in the following resources:

Estimated Costs for Livestock Fencing, Iowa State University Extension
www.extension.iastate.edu/Publications/FM1855.pdf

Equine Fencing, University of Maryland
www.equinestudies.umd.edu/Extension/HWE-Fencing.pdf

Fences for Horses, University of Georgia Extension
http://pubs.caes.uga.edu/caespubs/pubcd/b1192.htm

Dealing with herbicide drift

by Bob Hartzler, ISU Extension Weed Specialist

Herbicides are widely used by homeowners to manage landscape weeds. When used properly, these chemicals provide safe, efficient weed control. But herbicide applications can be made under conditions that favor off-target movement.

Drift problems usually are first noticed when affected plants display injury symptoms. Growth regulator herbicides such as 2,4-D and dicamba are responsible for most off-target injury reports. However, it is important to manage drift for all herbicides, not just those that may injure plants on adjacent properties.

Most cases of drift involve relatively low concentrations of herbicides that will not threaten the long-term health of trees and other landscape plants. This assumes that the plants were healthy at the time of drift and that other environmental stresses are minimized. A more difficult issue involves what to do when drift contacts garden plants.

The Environmental Protection Agency is responsible for regulating pesticide residues in the food system. Before any pesticides can be registered for use on a crop, tolerance levels are established that specify safe residue levels.

Herbicide drift usually involves products not registered for use on garden crops, so there are no tolerance levels established to determine whether the produce is safe for consumption. Factors to consider include the amount of herbicide contacting the plants, the time elapsed between drift exposure and harvest, and the personal biases of the property owner.

Most cases of drift involve a very small amount of pesticide; therefore, the risks associated with the drift are relatively low. However, it is difficult to determine the amount of pesticide that has contacted garden plants. If symptoms on tomatoes and other sensitive plants are limited to minor distortion of leaves, it is likely that only a small amount of herbicide contacted the garden.

If sensitive plants are severely injured by the herbicide, it probably would be wise not to harvest produce from any plants in the garden, even those plants not displaying significant injury symptoms. In the majority of cases, the amount of herbicide contacting plants on adjacent property is relatively low and should not pose a long-term threat to plant health.

This fall, give tough weeds the ol' one-two punch

by Mary Ann deVries, Polk County Extension Horticulturalist

Like a bear coming out of hibernation, weeds emerge in the spring well rested and ready to grow. Eradicating tough weeds like Creeping Charlie (also called ground ivy), poison ivy, or bind weed is hard to do early in the season. You can fight them back in the spring and summer, but if you're really looking for a knock-out punch, fall is the time to go after weeds.

In the fall, weeds are settling down for the winter, moving their reserves from the foliage to the roots. Herbicides applied to leaves in the fall are carried into the root zone where they can be truly effective.

Mid-September through early November is generally the best time to control tough weeds. Two applications of an appropriate herbicide are usually necessary. The second application should be 10 to 14 days after the first.

The most effective product for controlling Creeping Charlie in lawns is dicamba, a selective herbicide that will kill a broadleaf weed without damaging surrounding grass. Trimec® and

continued on next page

Insects in firewood

by Laura Jesse, Extension Associate, ISU Entomology Department

Each fall as we cut firewood and bring it into our homes, we also may bring in some unexpected hitchhikers. Luckily, most insects living in firewood pose no danger to humans, our homes, or our furniture. Insects in firewood either feed directly on the wood, nest in the wood, or overwinter under the bark.

The best way to prevent insects from emerging from firewood into your house is to leave the firewood outside until it is to be burned, bringing, at most, a few days' supply into the house at one time. Insects in firewood stored outdoors generally require several days to warm up in your home before they become active.

Spraying firewood with insecticide is of very little benefit and potentially dangerous. Therefore, we strongly advise against treating firewood. Insecticides will not penetrate deeply enough into firewood to control the insects. In addition, storing and burning insecticide-treated firewood indoors could be a health hazard if the insecticide is vaporized into the living area of the house.

Two insects that may cause problems if you keep your firewood stacked against the outside walls of your house are carpenter ants and termites.

Carpenter ants

Wood that remains moist for an extended period is a likely candidate for infestation by carpenter ants. Carpenter ants do not feed on the wood, but they hollow out galleries in the wood for nesting. If infested firewood is brought into the house the ants may warm up and move out of the wood.

Although an annoyance, the chances of these ants establishing a nest in your house are very slim. Stacking wood against the outside of your home may provide an avenue for these insects to enter your home.

Termites

Wood that is stacked directly on the ground may be fed upon by termites. Mud tunnels may be visible on the outside of the wood, or there may be mud-lined galleries within the log. The main termite nest containing the queen is in soil, but the workers will tunnel into the firewood and feed on it.

Termites brought into your home in firewood cannot establish a new nest and will not damage your home or furniture. But, as with carpenter ants, wood piles stacked against the house can provide a way for termites to extend their feeding into your home.

Stacking firewood off the ground is the best method to prevent termites from feeding on your firewood. If you discover a termite infestation in firewood stacked next to your house, you should have your home treated or inspected by a pest management professional.

There are several groups of beetles that feed on wood and can be brought accidentally into your home in firewood. These beetles can be a nuisance if they emerge from firewood; however, none of these beetles will harm your home or furniture. For more information about insects in firewood, go to www.ipm.iastate.edu/ipm/hortnews/2003/3-7-2003/firewood.html.

A longer version of this article originally appeared in ***Horticulture and Home Pest News****, ISU Extension, March 7, 2003.*

(WEEDS) *continued from page 4*

Weed-B-Gon® Lawn Weed Killer 2 are two widely sold products that contain dicamba.

For poison ivy and bind weed, you can use a nonselective herbicide (i.e. will kill whatever it touches) such as Roundup®. This can be sprayed carefully or "wicked" on with a foam paint brush to target unwanted plants. Again, two applications two weeks apart are recommended.

As always, when using any pesticide, read and follow label directions carefully.