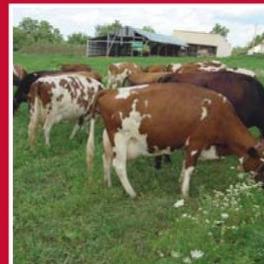


FIELD & FEEDLOT



IOWA STATE UNIVERSITY EXTENSION AND OUTREACH—NORTHWEST REGIONS

JULY 2014 ISSUE

Extension Web Sites

Ag Decision Maker

www.extension.iastate.edu/agdm/

Beef Center

www.iowabeefcenter.org/

Manure Management

www.agronext.iastate.edu/immag/

Pork Center

www.ipic.iastate.edu/

ISU Extension Dairy Team

www.extension.iastate.edu/DairyTeam/

Integrated Pest Management

Margaret Murphy, Regional Foods Coordinator/Horticulture Educator

As we make our way through the growing season, it's a good time to talk about pest management, specifically Integrated Pest Management, or IPM. The goal of IPM is to provide safe, effective, economical and environmentally sound pest management. It involves using a combination of techniques to keep pests from overtaking your garden.

There are four basic steps to IPM. The first is to identify the pest that is the source of the problem. Correct identification allows you to find the best approach to the problem. It is important to gather as much information as possible about the pest in order to arrive at an appropriate solution.

The second step is to set an action threshold. This basically means how many pests can you tolerate before needing to treat the problem? IPM works on the premise that most crops can tolerate a certain amount of damage. Thresholds will vary by type of pest as well as by situation. For example, a commercial grower who is concerned with selling blemish-free product may have a lower threshold than a home gardener who finds some chewed leaves to be acceptable.

The third step involves selecting an appropriate management strategy, which may include one or more of the following:

- 1) Cultural controls: Preventative measures such as selecting disease resistant cultivars, employing good sanitation practices, rotating crops, and promoting plant vigor with proper fertilization and irrigation.

- 2) Physical controls: Techniques that exclude pests from crops such as row covers or traps, and may involve manual removal of pests.
- 3) Biological controls: The use of natural predators to reduce pest populations.
- 4) Chemical controls: The use of synthetic or botanical pesticides, insecticides, or horticultural oils. Keep in mind that natural doesn't mean non-toxic. When using pesticides always follow the instructions on the product label carefully and check to ensure it is intended for the target pest and can be used on your crop. Choose low-toxicity products and try to spot treat instead of broadcasting the treatment whenever possible.

The final step in practicing IPM is to take notes and evaluate your results. It is helpful to keep track of your management strategy together with your successes and any failures.

IPM is a process that is designed to solve pest problems while minimizing risks to people and the environment. It allows for flexibility to fine-tune your approach as needed and can easily be practiced in your home garden.

Summer is time to Scout for Corn Rootworm Damage

Joel DeJong, Crops Field Agronomist

Corn rootworm has been a bigger problem in recent years for several reasons. First, we have had increased corn after corn acres due to economic reasons. Second, we have evidence that in some fields a couple of the Bt rootworm traits have not performed very well, sometimes due to the development of resistance to these traits by the rootworms. A severe corn rootworm larval infestation can destroy nodes 4 to 6 of the corn root system, and each node has approximately 10 nodal roots. Root pruning can interfere with water and nutrient uptake and might allow the plant to lodge later in the season. A recent analysis showed a 15 percent yield loss for every node pruned.

Rootworms in northwest Iowa were hatching in mid-June, and by about July 10 these larvae will likely begin to emerge as adult beetles in this region. That means these fields should be evaluated

for root injury to better understand the effectiveness of your management program during the last couple of weeks in July.

Crop rotation or the use of Bt corn should decrease populations in most fields. Regardless of the agronomic practices, every field should be scouted for corn rootworm injury (i.e., dig and rate corn roots even if Bt proteins are used). Continuous cornfields and areas with Bt performance issues are the highest priority for inspection.

Some producers determine they had rootworm issues when they see lodging of corn late in the season, which is one common outcome of severe larval feeding. However, it is important to confirm that feeding from corn rootworm was the cause of lodging and that it did not result from other factors such as strong winds.

It is also important to remember that rootworm damage can occur without having lodged plants – that is why we need to dig and evaluate root systems each year.

The most common scale for rating root injury is the 0-3 scale developed at Iowa State University:

- 0 = no injury
- 1 = one complete node (approximately 10 roots) is pruned to within 1.5 inches of the stalk
- 2 = two complete nodes (approximately 20 roots) are pruned to within 1.5 inches of the stalk
- 3 = three complete nodes (approximately 30 roots) are pruned to within 1.5 inches of the stalk

Root injury that exceeds 0.25 is likely causing economic loss. For Bt hybrids, any injury ratings that exceed 1.0 would be considered unexpected. Resistance to Cry3Bb1 and mCry3a has been confirmed in Iowa since 2011. Consider diversifying corn rootworm management to delay resistance and improve larval management. Examples to consider include crop rotation, rotation of Bt traits, and rotations to soil-applied insecticide without a Bt trait.

Adult corn rootworm will feed on leaves and cause some scarring; however, this does not cause any real yield loss. Adults can cause yield loss if emergence occurs when corn is silking, and therefore, this is a critical time period to scout fields. Adults that trim silks during pollen shed will interfere with optimal pollination.

Weather plays an important role in determining how plants respond to silk feeding. Plants do not tolerate as much feeding during pollination in hot and dry weather. For example, under ideal moisture conditions, plants could tolerate 15 beetles per plant, but that number is reduced to just five per plant under drought stress.

Late-planted fields or late-flowering hybrids are generally attractive to adult corn rootworm. Silks will still be developing in these fields when older fields have brown or drying silks. Adults may migrate and aggregate in this later-maturing fields.

Farmland Leasing and Land Value Workshops - Updates on 2014 Farm Bill Decisions

*Melissa O'Rourke, ISU Extension Farm & Agribusiness
Management Specialist*

More than half of Iowa farmland is rented. In some Iowa locations, as much as 70 percent of the land is farmed by farmers who don't own the land. At the same time, northwest Iowa farmland values continue to stay strong, and so have farmland cash rental rates.

These are just a few reasons why **Iowa State University Extension and Outreach** offers workshops designed to answer questions that land owners and tenants have about farmland leasing and land values.

These workshops will be held across northwest Iowa counties during the week of July 28 through August 1.

And, as farmland owners and producers anticipate changes with the new federal farm bill, these meetings will include updates regarding roll-out of the new bill and decisions that will need to be made.

Melissa O'Rourke, ISU Extension Farm & Agribusiness Management Specialist will present information about a wide range of topics related to farmland values and leasing – including the new farm bill.

O'Rourke is a licensed attorney with extensive experience in working with farm, ranch and agribusiness interests.

"Each year I receive numerous contacts from persons who have questions about farmland values and rental rates," says O'Rourke.

"Over the years, I've continued to see increased interest in farm leasing arrangements," O'Rourke noted. "We expect significant attendance at these meetings."

O'Rourke noted several other trends in farmland ownership and leasing.

"Due to the volatility of land and commodity markets, we have seen had increased inquiries regarding flexible cash lease methodologies. For this reason, we have more focus on these kinds of arrangements. We will work through examples of various strategies for flexible cash leases."

Another area O'Rourke noted is the increasing age of farmland owners.

"ISU Extension research indicates that the average age of farmland owners continues to rise," stated O'Rourke. "Fifty-five percent of Iowa's farmland is owned by people over the age of 65, while 28 percent of the land is owned by individuals over age 75. We also find that children and surviving spouses of farmers are less likely to continue operating the farm themselves. That's a major reason why farmland leasing continues to increase."

O'Rourke encourages anyone with an interest in farmland rental rates to attend these meetings. "Both farmland owners and producer-tenants should attend. In fact, the ideal situation is for

Farmland Leasing and Land Value Workshops—*Call to Register*

Monday, July 28

Spirit Lake 1:30 p.m.
Cherokee 6:30 p.m.

Dickinson County • 712-336-3488
Cherokee County • 712-225-6196

Extension Office
Western Iowa Tech CC Auditorium

Tuesday, July 29

Sergeant Bluff 9 a.m.
Orange City 1:30 p.m.
Le Mars 6:30 p.m.

Woodbury County • 712-276-2157
Sioux County • 712-737-4230
Plymouth County • 712-546-7835

Sergeant Bluff Community Center
Extension Office—Main Floor Classroom
Le Mars Convention Center Lower Level

Wednesday, July 30

Emmetsburg 9 a.m.
Estherville 1:30 p.m.
Spencer 6:30 p.m.

Palo Alto County • 712-852-2865
Emmet County • 712-362-3434
Clay County • 712-262-2264

Extension Office (Old Library Bldg)
Iowa Lakes Electric Cooperative
Spencer School Admin Bldg

Thursday, July 31

Pocahontas 9 a.m.
Storm Lake 1:30 p.m.
Hull 6:30 p.m.

Pocahontas County • 712- 335-3103
Buena Vista County • 712-732-5056
Sioux/Lyon County • 712-737-4230

Extension Office
Extension Office
Hull Library Meeting Room—Main St

Friday, August 1

Sheldon 9 a.m.

O'Brien County • 712-957-5045

Iowa State Bank meeting room

these folks to attend together and then sit down at the kitchen table to discuss their farm lease arrangements for the coming year.”

O'Rourke explained that workshop attendees will receive a comprehensive workbook packed with information about land values, leasing and different types of farm lease arrangements.

Registration Information—A registration fee of \$20 per person is charged to cover costs and includes a 90-page workbook.

Pre-registration is preferred by calling the local county extension hosting the meeting. Walk-ins may attend for a \$25 fee at the door.

More information about this and other farmland leasing meetings in Iowa can be found at ISU Extension's Ag Decision Maker website:

www.extension.iastate.edu/agdm

Iowa Pork Producer Association Environment and Swine Health Conference

Matt Swantek, Swine Program Specialist

Free seminars to address current environmental issues and the Porcine Epidemic Diarrhea Virus (PEDV) that has decimated the Iowa and U.S. swine herds will be held in July for Iowa hog farmers at five different sites across the state. Iowa hog farmers are encourage to attend one of these valuable meetings. Meeting sites and dates in Western Iowa are Le Mars at the Convention Center Tuesday July 15 or the Swan Lake Conservation Education Center south of Carroll July 17 from 1 to 4:30 p.m.

Featured presenters are Iowa Pork Producers Association (IPPA) legal counsel Eldon McAfee and Rodney “Butch” Baker, DVM, director of the Iowa Pork Industry Center.

McAfee will discuss practical aspects of compliance with Iowa Department of Natural Resources' regulations, as well as other environmental compliance and protection. He will talk about state and federal regulatory efforts and provide current Iowa nuisance case information. McAfee also plans to cover details of the work plan between the Iowa DNR and EPA while offering considerations for farmers to be best prepared for on-site inspections.

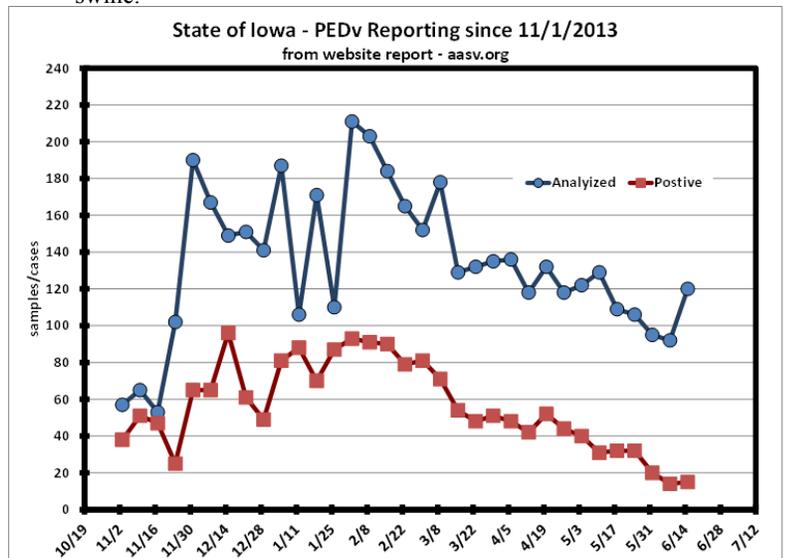
Dr. Baker will be updating the current research and status of the PEDV knowledge base. The IPPA has committed to nearly \$350,000 toward research for Iowa pork producers and most recently the USDA has received \$26.2 million towards understanding and researching solutions to this swine virus. Included in Dr. Baker's discussion will be how the USDA mandatory reporting will affect producer and help reduce the spread of this devastating virus.

Remember this is not a human health risk or a food safety issue but rather the virus' impact is on newly born piglets and because of the diarrhea they die from dehydration. Older pigs may get the virus but should recover within a few days.

Updates:

In the state of Iowa the number of positive cases reported per week has dropped from a high of over 90 this past February to 20 and less the last 3 weeks in June.

The United States Department of Agriculture's Animal and Plant Health Inspection Service (APHIS) yesterday issued a conditional license to Harrisvaccines, Inc., of Ames for a vaccine that may aid in the control of Porcine Epidemic Diarrhea Virus (PEDV) in swine.



IOWA STATE UNIVERSITY

Cooperative Extension

Iowa State University Cooperative
Extension Plymouth Co. District
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Le Mars, Iowa 51031

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IOWA STATE UNIVERSITY

Extension and Outreach

JULY ISSUE 2014

PLYMOUTH COUNTY

Farmland Leasing Program

Le Mars - Tuesday, July 29, 2014

6:30 p.m.—9:00 p.m.

Plymouth County Extension - 712 - 546-7835

\$20 / person if pre-registered and \$25 / person for walk-ins

Registration Forms are included

Join us at the Fair!
Plymouth County Fair
July 23-27, 2014

Don't miss the 2014

Plymouth County

Farmland Leasing & Land Value Meeting



Tuesday, July 29th

**6:30 p.m. in Le Mars at the
Plymouth County Extension and
Outreach Office**

If you're unable to attend this meeting, ask about other meetings being held in neighboring counties.



- Updated land values & cash rental rates
- Writing and terminating a farm lease
- Determining fair cash rents, understanding flexible leasing
- Landlord-Tenant & Family communication
- ISU EXTENSION web-based & other resources
- Types of farmland leases
- 2½-hour workshop! Comprehensive workbook provided!

Registration Fee: \$20 per person if pre-registered. \$25 per person at the door.



**Registration or Questions: Call ISU EXTENSION AND OUTREACH – Plymouth County:
712-546-7835 –or– use this REGISTRATION FORM:**

Name #1	Name #2		
Mailing Address	City	State	Zip
Phone: _____	Email: _____		

Please mail registration form to the Plymouth County Extension and Outreach with check made payable to ISU Extension.
Address: 251 12th St SE, Le Mars IA 51031

Iowa State University Extension and Outreach programs are available to all without regard to race, color, age, religion, national origin, sexual orientation, gender identity, genetic information, sex, marital status, disability, or status as a U.S. veteran. Inquiries can be directed to the Director of Equal Opportunity and Compliance, 3280 Beardshear Hall, (515) 294-7612. Fees for service will be used to offset direct expenses and to support the Agricultural and Natural Resources County Extension Program.