



PEST MANAGEMENT & CROP DEVELOPMENT

BULLETIN

FOR IMMEDIATE RELEASE
No. 24 / November 7, 2003

Executive editor: Kevin Steffey,
Extension Entomologist

Available on the Web at
<http://www.ag.uiuc.edu/cespubs/pest/>
For subscription information, phone
217.244.5166, or e-mail
acesnews@uiuc.edu

Copyright © 2003, Board of Trustees,
University of Illinois

Also in This Issue

- Monsanto Receives U.S. EPA Approval for YieldGard Plus Corn, 212**
- Plenty of Interest in (and Questions About) Insecticidal Seed Treatments, 212**
- Soybean Yield Reports Coming In, 214**
- Illinois Soybean Diseases in 2003, 215**
- Weeds to Watch, 215**
- Regional Reports, 218**

Mike Gray Resumes Role as Extension Specialist in Entomology

After a brief assignment as an Extension administrator, I made the choice to resume my former role as an Extension entomologist in the Department of Crop Sciences. The decision was based on sustaining my long-term health and happiness. In addition to my duties as a faculty member in the Department of Crop Sciences, I will continue to perform my responsibilities as manager for the North Central Region IPM Competitive Grants Program and also as co-director of the North Central Region IPM Center. It's good to be back!—*Mike Gray*

Make Plans to Attend the 2004 Illinois Crop Protection Technology Conference

The conference co-chairs and planning committee would like to invite you to attend the 56th meeting of the Illinois Crop Protection Technology Conference, January 7 and 8, 2004, at the Illini Union on the University of Illinois campus. This conference has undergone many significant changes through the years, but the main objective has remained constant: to provide our clientele with the most current information available on pest management and crop production issues. We sincerely appreciate your continued dedication to this important educational program, and we hope you leave the 2004 conference better prepared to meet the challenges of the upcoming growing season.

The format of the 2004 conference remains similar to that of recent years. Our welcoming session will feature two distinguished people intimately involved with Illinois agriculture. We are very fortunate to welcome Dr. Robert Easter, dean of the College of Agricultural, Consumer and Environmental Sciences at the University of Illinois, and Mr. Charles Hartke, director of the Illinois Department of Agriculture, to our conference, and we eagerly anticipate their forthcoming remarks. Following the welcoming session, we will move into a session of keynote presentations that will discuss the future of integrated pest management and the agricultural input sector. The keynote speakers will offer some interesting perspectives related to where our industry is heading. Beginning with the first afternoon and continuing throughout the second day of the conference, you will have the opportunity to attend an assortment of symposia and specialized sessions.

You can choose from six symposia: (1) Pest Resistance; (2) Equipment and Application Technology; (3) Seed Purity Issues; (4) Emerging and Challenging Pest and Production Issues; (5) Pesticide Repackaging, Storage, Transport, and Application Concerns; and (6) New Developments in Crop Production and Protection Products. Each symposium will consist of three to four presentations followed by a discussion period where symposium speakers will address audience questions. The symposia sessions are organized to allow audience participants to interact with the speakers, so we hope you take advantage of the opportunity to have your questions addressed.

The specialized sessions are designed to provide more in-depth information about each topic. Ranging from pest management issues to professionalism in agriculture, the 15 specialized sessions offer a wide array of topics for you to choose from.

Many of the symposia and specialized sessions are approved for continuing education units (CEUs) for certified crop advisors. In the December issue of the *Bulletin*, we will provide a more detailed description of the symposia and specialized sessions, including titles, speakers, and CEUs.

For your convenience, we are providing a preregistration form in this issue of the *Bulletin*. In addition to mailing in the completed form, you can register for the conference by

- calling Conferences and Institutes at (217)333-2880 or toll-free at (877)455-2687,
- faxing the completed preregistration form to Conferences and Institutes at (217)333-9561, or
- going online at <http://www.conferences.uiuc.edu/cptc>.

On behalf of the conference co-chairs, we look forward to seeing you on January 7 and 8, 2004.—*Aaron Hager*

INSECT

Monsanto Receives U.S. EPA Approval for YieldGard Plus Corn

On November 3, 2003, Monsanto announced that the U.S. Environmental Protection Agency (EPA) had approved the registration of YieldGard Plus corn, designed to prevent economic damage caused by European corn borers and western and northern corn rootworms. In the press release, Monsanto indicated that, after state regulatory approvals and the required Japanese import clearances are received, sales of YieldGard Plus hybrids may proceed. Monsanto indicated that all YieldGard Plus hybrids also will contain an insecticidal seed treatment that is designed to reduce secondary insect damage. YieldGard Plus hybrids will be marketed through the Market Choices program. This program familiarizes producers with those markets (does not include the European Union) that are appropriate for food and feed use only in the United States and Japan.

Monsanto describes two refuge options for YieldGard Plus hybrids. We believe the first option that utilizes a common refuge for both European corn borers and corn rootworms is the best choice from an insect resistance management (IRM) perspective. This common refuge approach requires that a minimum refuge (non-Bt corn) of 20% be planted within or immediately adjacent to YieldGard Plus corn. The common refuge approach also is less confusing than the second option proposed by Monsanto. Option two allows for a separate refuge to be used for each Bt technology. Under option two, a corn rootworm refuge would need to be deployed within or adjacent to a YieldGard Plus field. A separate European corn borer refuge could be utilized in the YieldGard Plus field or in a separate field (1/2 mile required, 1/4 mile preferred). Can you begin to see how this gets a little confusing? Other specifics related to the IRM program for YieldGard Plus include using the same crop rotation pattern for YieldGard Plus refuges. Although the rotational pattern for corn borer refuges is not an issue, for corn rootworms this is not the case. YieldGard Plus refuges may be treated with corn rootworm soil insecticides to prevent excessive root injury and lodging. We will provide further information and commentary on refuge specifics for YieldGard Plus hybrids as we move through this winter season.

In the December issue of the *Bulletin*, we will provide the results of our annual fall European corn borer survey. A preliminary review of these data indicates very low densities of European corn borer are present in many areas of Illinois. This follows a pattern that has persisted for several years. Although corn borer pressure was low in 2003, the level of corn rootworm larval injury in rotated corn continued to increase. On-farm surveys of corn rootworm larval injury were conducted in 36 counties by Jared Schroeder, a graduate research assistant in the Department of Crop Sciences, and others in August. Additional details about this survey are provided in issue no. 23 of

the *Bulletin* (<http://www.ag.uiuc.edu/cespubs/pest/articles/200323d.html>). Results from Jared's research indicated the percentage of larval injury (percentage of plants with root injury ≥ 3.0) in rotated corn increased greatly from 2002 to 2003 for central (18%), eastern (20%), northeastern (20%), northwestern (20%), and western (9%) regions of Illinois.

We are clearly at an interesting point with respect to implementing pest management programs in corn. In 2004, producers will have the option of planting hybrids that offer corn rootworm and European corn borer protection. In addition, these transgenic hybrids will be treated with systemic seed treatments that offer some protection against secondary insect pests. Is this level of insect protection needed on every acre of corn in Illinois? What are the costs and benefits? What are the risks? Does this approach represent a sound pest management approach for the long-term benefit of producers? We will continue to grapple with these questions for many years to come.—*Mike Gray and Kevin Steffey*

Plenty of Interest in (and Questions About) Insecticidal Seed Treatments

When ProShield with Force ST (Syngenta) and Gaucho and Prescribe (Gustafson) were registered for use in the United States, insecticidal seed treatments became alternatives to soil-applied insecticides for control of insect pests of corn. Hopper-box insecticidal seed treatments (such as Agrox DL Plus, Kernel Guard) had been available for control of seedcorn beetles, seedcorn maggots, and wireworms for many years, and many growers used such products to protect corn seeds from early season insect pests. But the new insecticidal seed treatments were applied to the seeds before they were bagged, eliminating the need for growers to apply the seed treatments themselves. In addition, the labels for the newer insecticidal seed treatments included insects that had

never appeared on the labels of hopper-box insecticidal seed treatments, including some that feed on corn above ground. Depending on the product and the rate of active ingredient per kernel, these new seed treatments were labeled for control of billbugs, chinch bugs, corn rootworms, flea beetles, and white grubs, as well as for seedcorn maggots and wireworms.

And now we have primarily two insecticidal seed treatments vying for the market—Cruiser (Syngenta) and Poncho (Gustafson). Don't misunderstand; hopper-box insecticidal seed treatments still are available. However, most of the interest in and questions about insecticidal seed treatments these days are focused on Cruiser and Poncho. So the intent of this article is to share with you what we know, and what we don't know, about the performance of these insecticidal seed treatments and their fit in insect management programs.

Following are the rates of active ingredient (a.i.) per kernel for both Cruiser (a.i. is thiamethoxam) and Poncho (a.i. is clothianidin) and the insects that are controlled or suppressed by the respective rates of active ingredient. Although these are the insects listed on the labels, we do not recommend the use of these seed treatments in Illinois for control of all of the insects listed. In fact, some of the insects listed do not threaten corn production in Illinois.

- Poncho 1250 (1.25 mg a.i. per kernel)—corn rootworms (northern, western, southern, and Mexican), southern corn billbug (*note*: follow-up foliar sprays of a locally registered insecticide may be needed under heavy pest pressure)
- Among the insects listed on the two seed treatment labels, those of greatest concern to most corn growers in Illinois are corn rootworms, cutworms, white grubs, and wireworms. Insects that feed above ground, especially flea beetles and southern corn leaf beetles, also cause concern to some Illinois growers every year. The systemic activity of both thiamethoxam and clothianidin is responsible for control of insects above ground.
- So the most important question regarding Cruiser and Poncho is, “Are these insecticidal seed treatments effective against the insects listed on the respective labels?” Considerable data regarding control of corn rootworm larvae with insecticidal seed treatments have been generated. And based on our experience, we state the following in the soon-to-be-published *2004 Illinois Agricultural Pest Management Handbook*: “These seed treatments have been evaluated in efficacy trials for several years at the University of Illinois and at other land-grant universities in the Midwest. In general, when rootworm densities and root injury have been moderate, seed treatments have provided acceptable protection of the roots. However, when rootworm densities have been high and root injury has been moderately high to severe, insecticidal seed treatments have not provided consistently acceptable control of corn rootworm larvae. Therefore, we do not recommend their use in fields where the risk of rootworm larval damage is significant.” We have ample data to support this statement—for example, the results from our corn rootworm efficacy trials in 2003 (“Root Ratings from 2003 Corn Rootworm Control Trials in Illinois” in issue no. 22, September 5, 2003, of the *Bulletin*). The Cruiser label indicates control of light to moderate infestations of corn rootworms.
- Cruiser 5FS (0.125 to 0.8 mg a.i. per kernel)—chinch bug, cutworms (suppression), flea beetles, seedcorn maggot, southern corn leaf beetle, white grubs, wireworms
 - Cruiser 5FS (1.25 mg a.i. per kernel)—billbugs, corn rootworms (light to moderate infestations), cutworms (suppression)
 - Poncho 250 (0.25 mg a.i. per kernel)—chinch bug, corn flea beetle, corn leaf aphid, cutworm (black), grape colaspis, seedcorn maggot, southern corn leaf beetle, southern green stink bug, white grubs (including European chafer larvae, May/June beetle larvae, Japanese beetle larvae), thrips, wireworms

However, the Poncho label does not designate the level of rootworm infestation. In fact, the Gustafson LLC Web site (http://www.gustafson.com/Poncho/Poncho_1250.asp) proclaims that “Poncho 1250 delivers rootworm control comparable to traditional soil-applied insecticides.” Although this statement is somewhat vague and some data can be selected to support it, there are plenty of university-generated data that would not support it.

We repeat the question—“Are these insecticidal seed treatments effective against the insects listed on the respective labels?”—regarding control of insects other than corn rootworms. As we have stated before, efficacy data for control of insects such as white grubs and wireworms are few and far between. And efficacy data for control of most of the other insects listed on the seed treatment labels are even more scarce. We and many of you have been bombarded with yield data, but more often than not, these data are not accompanied by any data associated with insect presence or injury caused by insects. We don't suggest that either Cruiser or Poncho will *not* control secondary insect pests of corn; we merely point out that there are few data to support the claims for control.

The bottom line of this discourse is relatively simple: Each grower must ask whether an insecticidal seed treatment is necessary. After all, the grower has to pay for the product. And most people know that the seed of all YieldGard Rootworm corn hybrids will be treated with an insecticidal seed treatment; growers don't even have the option of purchasing YieldGard Rootworm corn seed not so treated. So growers will have to pay for both the Bt technology and the seed treatment. Is the added expense necessary? Do growers really need to apply insecticides to lots of corn acres for control of insects that may not be present? In some respects, we are returning to the days of using soil insecticides such as chlorinated hydrocarbons without knowledge of the presence of insects. What has happened with the IPM approach?

We pose the questions in the previous paragraph as a focus for current and future discussion. We invite your opinions and welcome the dialogue.—
Kevin Steffey, Mike Gray, and Kelly Cook

Soybean Yield Reports Coming In

With the conclusion of harvest, we draw closer to closing the book on the 2003 soybean aphid outbreak. This past summer, populations of soybean aphids reached extremely high densities. With the threat of yield reduction, many growers used insecticides in an attempt to manage this pest. Based on information obtained from several members of the Illinois Agricultural Aviation Association, we estimate that 750,000 to 1 million soybean acres were treated aerially for control of soybean aphids in Illinois in 2003.

We are just now getting a glimpse of yield loss experienced by producers throughout Illinois. As of November 2, the Illinois Agricultural Statistics Service reports that 95% of soybeans have been harvested in Illinois. In the October report, the United States Department of Agriculture forecasted a soybean yield of 34 bushels per acre for Illinois (383 million bushels in Illinois), 6 bushels per acre less than the 2002 average. Although damage caused by the soybean aphid may include a reduction of pods per plant and seed weight, we cannot assume that these low yields are due entirely to the soybean aphid. As we analyze the yields this fall, we need to remember that dry weather conditions and disease most certainly affected plant health and development as well.

Last month we asked you to complete a report form to help us learn more about the effects of the soybean aphid on yield, and we've received several responses. Let's start off by thanking those who have submitted yield data thus far. We appreciate your help!

Tables 1 and 2 provide a summary of the yield data we have received from

16 different fields, representing eight counties in Illinois. Three different products were used in these fields: Lorsban 4E, Mustang Max, and Warrior. Dates of insecticide application ranged from the end of July through mid-August. Just as with reports across the state, soybean yields reported here were quite variable. Yields of treated fields had a range of 27.5 to 61.6 bushels per acre (average 48.6 bushels per acre), and untreated areas of fields had a range of 20.8 to 42.8 bushels per acre (average 36.1 bushels per acre). The average difference between yield of treated soybeans and yield of untreated soybeans was 12.5 bushels per acre.

We are still requesting submission of yield data. Please use this form to submit your information for individual

Table 1. Summary of soybean yields from fields or portions of fields treated and not treated for control of soybean aphids in Illinois, 2003.

No. of fields	16	
Application method	Ground	8
	Aerial	8
Yield (treated)	Range	27.5–61.6
	Average	48.6
Yield (untreated)	Range	20.8–42.8
	Average	36.1
Difference in yield	Range	5.1–30.7
	Average	12.5

Table 2. Summary of soybean yields from fields or portions of fields treated and not treated with different insecticides for control of soybean aphids in Illinois, 2003.

Product	Yield (treated)	Yield (untreated)	Difference in yield
Unknown	44.1	33.6	10.5
Warrior	44	37	7
Warrior	42	34	8
Warrior	45	38	7
Warrior	50	39	11
Warrior	58	38 (surrounding untreated fields)	20
Unknown	27.5	20.8	6.7
Warrior	51.3	37.3	14
Warrior	49.9	40.9	9
Mustang Max	44.7	38.1	6.6
Mustang Max	43.6	38.5	5.1
Mustang Max	60	42.8	17.2
Warrior	61.6	30.9	30.7
Lorsban 4E	52	40	12
Warrior	56.2	30.3	25.9
Warrior	48.1	39.1	9

fields or trials. You may not be able to supply all of the information listed, but don't let that prevent you from filling in what you do know. Any information you can supply will be helpful! If we receive some more useful responses, we will summarize the additional information and publish it in the next issue of the *Bulletin*. As before, anonymity of individuals who submit information will be retained in any articles we write.

Please mail or fax responses to Kevin Steffey, Mike Gray, or Kelly Cook at Department of Crop Sciences, Turner Hall, MC 046, 1102 S. Goodwin Ave., Urbana, IL 61801; fax: (217)333-5245.

Responses also may be sent electronically to ksteffey@uiuc.edu, megray@uiuc.edu, or kcook8@uiuc.edu. Please copy the form from the Web into a word-processing (Word or WordPerfect) document and complete the form. Attach the completed form to an e-mail message. Please address any questions to Kevin Steffey, Mike Gray, or Kelly Cook, (217)333-6652.—*Kelly Cook, Kevin Steffey, and Mike Gray*

PLANT DISEASES

Why were soybean yields so low in many Illinois fields in 2003? There is obviously no simple or single answer. Much has been discussed about dry weather, aphids, and charcoal rot, partly because these were common and relatively easy to see and diagnose. All of these were important and affected yields, but observations suggest that additional factors were involved. Another question has been asked: How much did disease reduce yields?

Several diseases affected soybean in Illinois. Charcoal rot was widespread and damaging late in the season due in large part to the hot and dry conditions present over much of Illinois in August. Other diseases included seed and seedling diseases, Phytophthora rot, sudden death syndrome, brown stem rot, and the soybean cyst nematode. Stem canker was a significant problem in some areas late in the season. Wet and cool weather in July prompted outbreaks of white mold in scattered areas in northern areas of Illinois. Root rots were also very common, which affected plants directly and exacerbated the effects of dry weather.

The first indication of root rot came in July, when conditions were relatively cool and wet. A disease problem was reported in soybean fields in central Illinois that damaged and killed plants about a week after heavy rain (<http://www.ag.uiuc.edu/cespubs/pest/articles/200319d.html>). The visible symptoms soon subsided and some plants seemed to recover, but many plants had root rot. It was suggested at that time that the root rot associated with this disease problem may continue to stress plants, especially if the soils became dry later in the summer. To some degree this appears to have happened. Root rot was common in September at many Illinois locations, and many soybean plants brought in to the UIUC Plant Clinic for diagnosis had root rot. The causes for the root rot problems are multiple and unclear. *Fusarium*, *Phytophthora*, and *Pythium* were associated with the root rot in July, but the roots on

plants later in the season were generally too decomposed for diagnosis.

Additional scouting throughout the season would have helped to reveal and diagnose the diseases that reduced yields. In addition, proper sampling helps diagnosis. Often only the top part of a plant is brought in, but then it is difficult or impossible to diagnose the problem if it originated with unhealthy roots. Whole soybean plants (roots, stems, and leaves) always should be taken in for diagnosis.

So what caused the low yields in 2003? Unfortunately, we don't have data to suggest the relative impact of disease, drought, and aphids (or other factors). All of these were important in some areas in Illinois, and there were interactions. The root rots increased problems with drought, drought increased charcoal rot, and we are not sure yet about possible interactions with the soybean aphid. We cannot focus just on one problem because, as has often been said, causality is multiple.—*Dean Malvick*

WEEDS

Weeds to Watch

A new 8 1/2" x 11" glossy publication titled "Weeds to Watch" is available. This bulletin will help focus attention on weed species that may pose new threats in corn and soybean fields. It can also be used as an identification guide for the 16 weed species that may be uncommon to your area. Each species is characterized by its current distribution and occurrence. The back of the bulletin contains information about identification, an explanation about why a species is a problem, and management tactics to aid in controlling the weed.

You may ask, "Why is it important to identify new weeds when they first enter a new field?" Preventing a weed from becoming permanently established is the most effective way of avoiding future problems. Prevention relies on the ability to properly identify a weed when it first appears in an area.

Misidentifying a new species can result in implementing control tactics with a high probability of failure. Not only does this allow the weed to become firmly established, but misidentification can result in reduced income due to control failures and increased costs.

Most farmers know weeds common to agronomic fields of their local area. They monitor fields for increasing densities of these weeds and adjust their management programs accordingly. However, farmers may have limited knowledge of weeds not common to their immediate area. When a new species moves into a region, farmers may misidentify the plant or assume the presence of the weed is an isolated event and that it will not become permanently established in their fields.

Examples of misidentification include woolly cupgrass being mistaken for giant foxtail and biennial wormwood being identified as common ragweed. The establishment of wild four-o'clock in no-till fields is an example of failure to account for the potential weediness of a species. Failure to properly identify a weed or mistake its potential weediness significantly affects weed management and farm profitability.

Weed shifts occur at increasingly rapid rates due to the simplification of weed management systems. While many of these shifts occur among the prevalent weeds of the area, included in these shifts are weeds recently introduced to an area or plants that previously were poorly adapted to survival in agricultural fields. Responding quickly to invasion by new weeds can result in significant reductions in weed management expenses by preventing establishment of these invaders.

We will attempt to include a copy of this new publication in a future issue of the *Bulletin*. For those with access to the World Wide Web, the publication can be viewed on the Web version of the *Bulletin* or at the University of Illinois Weed Science Web site (<http://weeds.crops.uiuc.edu>).—*Dawn Nordby and Aaron Hager*

2003 Soybean Aphid Reporting Form

Name: _____ *Grower:* _____ *Agronomic advice by:* _____
Address: _____
City: _____
Phone: _____
Email: _____

Field information:

County: _____ Township: _____
 Date planted: _____ Variety: _____
 Maturity group: _____ Row spacing: _____

Yield information:

Product	Rate	Application date(s)	Application method <i>(ground or aerial)</i>	GPA	Yield (bu/A)	Test wt. (lbs)	Moisture (%)
<i>Untreated</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>			

Counts of aphids before insecticide was applied:

Date	Plant growth stage	Aphid infestation levels <i>(please estimate & circle)</i>
		per plant or per trifoliolate
		per plant or per trifoliolate

Counts of aphids after insecticide was applied:

Product	Date	Plant growth stage	Aphid infestation levels <i>(please estimate & circle)</i>
<i>Untreated</i>			per plant or per trifoliolate
			per plant or per trifoliolate
			per plant or per trifoliolate

**Comments on field conditions, insect infestations, plant health
(use additional paper if necessary):**

Mail or Fax to:
 Kevin Steffey or Kelly Cook
 Department of Crop Sciences
 Turner Hall, MC 046
 1102 S. Goodwin Ave.
 Urbana, IL 61801
 Fax: (217) 333-5245

2004 ILLINOIS CROP PROTECTION TECHNOLOGY CONFERENCE

WEDNESDAY, JANUARY 7—THURSDAY, JANUARY 8, 2004

ILLINI UNION

UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN

Conference Registration Form

Four ways to register:

1. **Online** registration at <http://www.conferences.uiuc.edu/cptc>
2. **Mail** the registration form and payment to: Cashiering Office, University of Illinois, 162 Administration Building, 506 S. Wright St., Urbana, IL, 61801.
3. **Fax** your registration form to 217-333-9561.
4. **Call** 217-333-2880 or toll-free 877-455-2687 to register by phone. Registration form and check or credit card information must then be received at the above address.

FEIN# 37-6000511 - C-FOAP # 1-301768-912010-305300-912098 - Title: Crop Tech 2004

Registration Fee

On or before December 19th \$90 \$ _____

After December 19th \$105 \$ _____

Registration fee includes one copy each of the *2004 Illinois Agricultural Pest Management Handbook (IAPMH)* and the *Proceedings* of the conference.

Name: _____

Organization: _____

Address: _____

City: _____ County: _____

State: _____ Zip: _____

Telephone #: _____ Fax #: _____

E-mail: _____

Check Enclosed (Payable to the University of Illinois)

I prefer to pay by credit card (complete the following information):

American Express Visa Mastercard Discover

Credit Card #: _____ Expiration Date: _____

Signature: _____

NOTE: If paying for more than one person, please **enclose a completed registration form for each person** (one check may be written to cover total payment).

U of I Extension Newsletter Service
University of Illinois
at Urbana-Champaign
528 Bevier Hall, MC-184
905 S. Goodwin Avenue
Urbana, IL 61801

Presorted First Class Mail
U.S. Postage Paid
Permit No. 75
Champaign, IL

Return Service Requested

REGIONAL REPORTS

Northern Illinois

Rainfall throughout the region, over the weekend and Monday, has stopped most fieldwork. Jim Morrison, Rockford Extension Center, reported 3.5 inches of rainfall at Freeport since last Saturday.

Corn harvest throughout the northern region ranges from nearly complete in the south and parts of the central region to 60% complete in the Freeport/Rockford area. Generally corn yields have been very good, 170 to 200 bushels per acre, except for areas that were very dry.

Soybean yields were very disappointing, with yields commonly 25 to 35 bushels in the north and 30 to 40 bushels in the southern portion of the region.

Soybean cyst nematode soil screening clinics and a discussion of U of I insecticide evaluation trials, sponsored

by U of I Extension, have been scheduled for November 21 in LaSalle County and November 24 in Bureau County. Interested parties are encouraged to contact the host Extension unit office for program locations and times.

Contributing Authors

Kelly Cook (kcook8@uiuc.edu), Extension Entomology, (217)333-6651

Mike Gray (megray@uiuc.edu), Extension Entomology, (217)333-6652

Aaron Hager (hager@uiuc.edu), Extension Weed Science, (217)333-4424

Dean Malvick (dmalvick@uiuc.edu), Extension Plant Pathology, (217)265-5166

Dawn Nordby (dnordby@uiuc.edu), Extension Weed Science, (217)333-4424

Kevin Steffey (ksteffey@uiuc.edu), Extension Entomology, (217)333-6652

Published by University of Illinois Extension and Information Technology and Communication Services, College of Agricultural, Consumer and Environmental Sciences, University of Illinois.
Editor: Erin Cler; formatter: Virginia Cuppernell.

Copyright © 2003, Board of Trustees, University of Illinois



UNIVERSITY OF ILLINOIS
EXTENSION

Helping You Put Knowledge to Work

University of Illinois
U.S. Department of Agriculture
Local Extension Councils Cooperating

University of Illinois Extension provides equal opportunities in programs and employment.