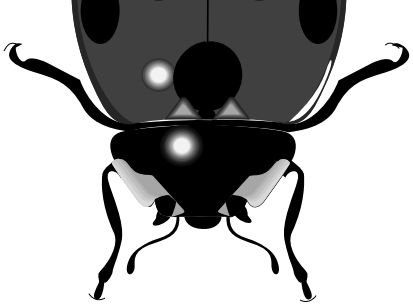

PEST MANAGEMENT & CROP DEVELOPMENT

BULLETIN

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In This Issue

- ❑ **Lock in the Dates for the 2003 Crop Protection Technology Conference and the Corn and Soybean Classics, 215**
- ❑ **Preliminary Root-Rating Results from Insecticide Efficacy Trials Available, 215**
- ❑ **Don't Forget About Hessian Fly and Fly-Free Dates, 216**
- ❑ **Stalk Rot of Corn in Illinois, 217**
- ❑ **Plant Disease Report, 218**
- ❑ **Survey for PPO-Resistant Waterhemp Populations, 220**
- ❑ **Regional Reports, 221**

Lock in the Dates for the 2003 Crop Protection Technology Conference and the Corn and Soybean Classics

Although most thoughts are on the upcoming harvest, don't forget to lock in the dates for the 2003 Crop Protection Technology Conference and the Corn and Soybean Classics. The dates for the Crop Protection Technology Conference are January 7 and 8, 2003, and it will be held at the Illini Union on the campus of the University of Illinois. Similar to last year's meeting, participants will be able to "tailor-make" their individual schedules for the 2-day conference, which will feature a keynote session on agricultural bioterrorism and also offer four symposia, including one on the implementation of environmental stewardship practices when using transgenic crops. In addition to the symposia, 15 specialized seminars will be presented by speakers covering a range of crop production and protection topics.

Also plan to attend the sixth annual Corn and Soybean Classic Meetings scheduled for January 2003. The meeting dates and locations for 2003 are as follows: January 14—Interstate Center, Bloomington; January 15—Hickory Grove Banquet Center, Rochelle; January 16—The Mark, Moline; January 21—Holiday Inn, Mt. Vernon; January 22—Holiday Inn, Collinsville; and January 23—Crowne Plaza, Springfield. These sessions have increased in popularity each year and are attended by producers as well as representatives of the agribusiness sector. Please let us know if you have any questions regarding these meetings.—*Mike Gray*

INSECTS

Preliminary Root-Rating Results from Insecticide Efficacy Trials Available

The preliminary root-rating results from the 2002 insecticide efficacy trials are provided for DeKalb, Monmouth, and Urbana in Tables 1 and 2. Root feeding was most intense at the DeKalb site (control = 4.65) with approximately 1 1/2 nodes of roots destroyed in the untreated check. Roots from the check treatment at Monmouth and Urbana averaged approximately 4.0 (one node of roots destroyed) on the Iowa State 1 to 6 root-injury scale. At the DeKalb location, most products failed to keep root injury below a rating of 3.0 (some pruning, but less than one node of roots destroyed), the so-called economic injury index.

Performance of the liquid treatments at DeKalb, Regent 4SC (root rating = 5.05, consistency rating = 0%) and Capture 2EC (root rating = 4.50, consistency rating = 5.0%), were particularly troublesome. Conditions at DeKalb were very hot and dry throughout much of the summer. These findings seem to suggest that under adverse environmental conditions (very dry soil conditions) accompanied by large densities of corn rootworm larvae, growers may be less than pleased with these two liquid products. Root-injury ratings for the insecticide treatments were lower at the Monmouth and Urbana experiments; however, the level of rootworm pressure was less intense. So this is to be expected. Most products kept root injury below a rating of 3.0 at these locations.

Table 1. Preliminary root-rating[1] results for corn rootworm trials, DeKalb,[2] Monmouth,[3] and Urbana,[4] Illinois, 2002.

Insecticide	*Rate*[5]	*Application*	*DeKalb*	*Monmouth*	*Urbana*
Aztec 2.1G	0.15	Band	----	2.10	2.20
Aztec 4.67G	0.15	Band (smart box)	3.10	2.05	2.00
Aztec 4.67G	0.15	Furrow (smart box)	4.40	2.25	1.95
Capture 2EC	0.082	Band	4.50	3.10	4.32
clothianidin	1.25	Seed treatment	3.45	2.50	2.25
Counter CR	1.3	Band	----	2.50	2.30
Cruiser	1.25	Seed treatment	3.65	3.75	2.20
Force 3G	0.13	Band	----	2.71	2.50
Fortress 3.5G	0.202	Furrow (smart box)	2.60	2.85	1.90
Fortress 3.5G	0.24	Furrow (smart box)	3.10	2.59	2.60
Fortress 5G	0.201	Furrow (smart box)	3.00	2.15	1.85
Fortress 5G	0.24	Furrow (smart box)	3.45	2.50	2.15
Lorsban 15G	1.3	Band	----	2.55	2.15
Prescribe	1.34	Seed treatment	3.50	2.85	2.60
ProShield	329.6 g/100 kg	Seed treatment	4.00	2.94	3.10
Regent 4SC	0.13	Microtube	5.05	3.55	3.85
Control			4.65	3.94	3.95

[1]Iowa State University 1 to 6 root-rating scale used: 1 = no visible damage or only a few minor feeding scars, 2 = some roots with feeding scars but none eaten off to within 1.5 inches of the plant, 3 = several roots eaten off to within 1.5 inches of the plant but never the equivalent of an entire node of roots destroyed, 4 = one node of roots destroyed or the equivalent, 5 = two nodes of roots destroyed or the equivalent, and 6 = three or more nodes of roots destroyed.
[2]Plots were planted with Pioneer 34G81 on May 7, 2002, in a field that had been planted to a trap crop of corn in 2001. Roots were dug on July 22 and evaluated on July 23, 2002.
[3]Plots were planted with Pioneer 34G81 on May 7, 2002, in a field that had been planted to a trap crop of corn in 2001. Roots were dug on July 22 and evaluated on July 23, 2002.
[4]Plots were planted with Pioneer 34G81 on May 23, 2002, in a field that had been planted to a trap crop of corn in 2001. Roots were dug and evaluated on July 25, 2002.
[5]Rates are specified as pounds (AI)/acre, except for seed treatments that are expressed as mg/seed.
All microtube applications were applied using 2.0 GPA; all other liquids were applied at 4.2 GPA.

There were exceptions. Regent 4SC and Capture 2EC again did not perform very well, particularly in Urbana with root ratings of 3.85 (consistency rating = 50%) and 4.32 (consistency rating = 28%), respectively.

In 1998 I spoke at the Crop Protection Technology Conference and suggested that almost any insecticide product will "stumble" from time to time. In fact, I compared the use of a soil insecticide with the "roll of dice." In recent years, considerable interest has been focused on the efficacy of new liquid products and seed treatments. To date, consistency of these new approaches has been lacking. Under the right of set of conditions, product performance of any soil insecticide is likely to be compromised. These include early planting (first week of April), delayed corn rootworm larval hatch (second week of June), hot and dry soil conditions (particularly during pollination in July), and large numbers of corn rootworm larvae. The bottom line is that producers take a chance when they purchase a soil insecticide because none of the products are "rootworm proof." No wonder there is so much interest in the potential registration of transgenic corn rootworm hybrids. They too will provide a unique set of challenges for producers.—*Mike Gray*

Don't Forget About Hessian Fly and Fly-Free Dates

Hessian fly adults emerge in late summer and early fall; the fly-free dates typically occur after peak emergence of the fly. By planting wheat after the fly-free date, the egg-laying females are not able to find a suitable host, so they die without laying a full complement of eggs. If the Hessian fly female finds wheat that has been planted early enough, she will lay her eggs. The destructive maggots will hatch and feed in the fall and then overwinter in puparia at the bases of the plants. Infested plants become weakened in the fall and fail to tiller.

We encourage all wheat growers to plant wheat in 2002 after the fly-free dates that are provided in Table 3 for all counties of Illinois. Implementation of this cultural practice in 2002 could prevent economic losses in 2003. In addition, the use of fly-free dates reduces the selection pressure on the Hessian fly population to develop additional resistant biotypes. The Hessian fly has not caused significant problems in wheat in Illinois for many years, primarily because most of the commercial wheat varieties have had genes for resistance to this insect pest.

Table 2. Preliminary consistency percentages[1] for corn rootworm trials, DeKalb,[2] Monmouth,[3] and Urbana,[4] Illinois, 2002.

Insecticide	*Rate*[5]	*Application*	*DeKalb*	*Monmouth*	*Urbana*
Aztec 2.1G	0.15	Band	----	100%	100%
Aztec 4.67G	0.15	Band (smart box)	75%	100%	100%
Aztec 4.67G	0.15	Furrow (smart box)	15%	95%	100%
Capture 2EC	0.082	Band	5.0%	70%	28%
clothianidin	1.25	Seed treatment	50%	95%	100%
Counter CR	1.3	Band	----	85%	85%
Cruiser	1.25	Seed treatment	35%	40%	95%
Force 3G	0.13	Band	----	80%	95%
Fortress 3.5G	0.202	Furrow (smart box)	95%	75%	100%
Fortress 3.5G	0.24	Furrow (smart box)	70%	84%	80%
Fortress 5G	0.201	Furrow (smart box)	90%	100%	100%
Fortress 5G	0.24	Furrow (smart box)	70%	95%	95%
Lorsban 15G	1.3	Band	----	85%	100%
Prescribe	1.34	Seed treatment	45%	80%	80%
ProShield	329.6 g/100 kg	Seed treatment	25%	64%	50%
Regent 4SC	0.13	Microtube	0%	50%	50%
Control			20%	40%	40%

[1]Consistency is measured as the percentage of roots examined with a root rating less than 4.0.
[2]Plots were planted with Pioneer 34G81 on May 7, 2002, in a field that had been planted to a trap crop of corn in 2001. Roots were dug on July 22 and evaluated on July 23, 2002.
[3]Plots were planted with Pioneer 34G81 on May 7, 2002, in a field that had been planted to a trap crop of corn in 2001. Roots were dug on July 22 and evaluated on July 23, 2002.
[4]Plots were planted with Pioneer 34G81 on May 23, 2002, in a field that had been planted to a trap crop of corn in 2001. Roots were dug and evaluated on July 25, 2002.
[5]Rates are specified as pounds (AI)/acre, except for seed treatments that are expressed as mg/seed.
All microtube applications were applied using 2.0 GPA; all other liquids were applied at 4.2 GPA.

However, biotypes of Hessian fly that overcome individual genes for resistance have developed over the years. These biotypes develop in response to selection pressure by exposure to wheat varieties that carry specific genes for resistance. The Hessian fly population evolves, eventually rendering resistance genes in wheat ineffective. During 1995 to 1998, USDA-ARS entomologists from West Lafayette, Indiana, sampled wheat fields in Illinois and indicated that flies collected from southwestern Illinois were primarily Biotype L. This biotype is able to infest and damage wheat varieties that carry one or more of the four resistance genes available in soft winter wheat varieties. By using fly-free dates in concert with resistant wheat varieties, producers should be able to effectively manage Hessian flies and also enhance the longevity of resistant genes in wheat.—*Mike Gray and Kevin Steffey*

PLANT DISEASES

Stalk Rot of Corn in Illinois

We have received questions concerning stalk rot of corn and whether it will be a major problem in Illinois this season. The extreme stresses put on corn this season in many parts of Illinois suggest that stalk rot may become a problem. Cornfields should be scouted now for stalk rot and decisions made regarding possible early harvest dates for fields at risk.

Several types of corn stalk rot are in Illinois. These include diplodia stalk rot, anthracnose stalk rot, fusarium stalk rot, giberella stalk rot, and occasionally charcoal rot. These different types of stalk rot are all caused by different pathogens and are characterized by different symptoms. The fungal pathogens that cause the stalk rots tend to be widespread and opportunistic, taking advantage of plants weakened by various stresses. The pathogens survive most readily in infested stalk debris on or near the soil surface, hence no-till environments and continuous or short rotations out of corn can favor survival and infection by the stalk rot pathogens.

As stalk rot develops, often the first symptom is leaves changing to dull green or gray. Other symptoms are wilting, drooping of the ears, straw-colored lower stalks, and internal pith tissue that is decayed and discolored. Anthracnose stalk rot often appears earlier than other stalk rots, prior to normal senescence. Several internodes may rot, and a shiny black color develops on the outer stalk.

Scouting should be in progress for stalk rot. About 100 plants should be inspected with the "pinch" or "push" tests in each field. Ten plants should be tested in 10 different parts of a

Table 3. Average dates of seeding wheat for the highest yield (fly-free dates).

County	Average date of seeding wheat for the highest yield	County	Average date of seeding wheat for the highest yield
Adams	Sep. 30–Oct. 1	Lee	Sep. 19–21
Alexander	Oct. 12	Livingston	Sep. 23–25
Bond	Oct. 7–9	Logan	Sep. 29–Oct. 3
Boone	Sep. 17–19	Macon	Oct. 1–3
Brown	Sep. 30–Oct. 2	Macoupin	Oct. 4–7
Bureau	Sep. 21–24	Madison	Oct. 7–9
Calhoun	Oct. 4–8	Marion	Oct. 8–10
Carroll	Sep. 19–21	Marshall-Putnam	Sep. 23–26
Cass	Sep. 30–Oct. 2	Mason	Sep. 29–Oct. 1
Champaign	Sep. 29–Oct. 2	Massac	Oct. 11–12
Christian	Oct. 2–4	McDonough	Sep. 29–Oct. 1
Clark	Oct. 4–6	McHenry	Sep. 17–20
Clay	Oct. 7–10	McLean	Sep. 27–Oct. 1
Clinton	Oct. 8–10	Menard	Sep. 30–Oct. 2
Coles	Oct. 3–5	Mercer	Sep. 22–25
Cook	Sep. 19–22	Monroe	Oct. 9–11
Crawford	Oct. 6–8	Montgomery	Oct. 4–7
Cumberland	Oct. 4–5	Morgan	Oct. 2–4
DeKalb	Sep. 19–21	Moultrie	Oct. 2–4
DeWitt	Sep. 29–Oct. 1	Ogle	Sep. 19–21
Douglas	Oct. 2–3	Peoria	Sep. 23–28
DuPage	Sep. 19–21	Perry	Oct. 10–11
Edgar	Oct. 2–4	Piatt	Sep. 29–Oct. 2
Edwards	Oct. 9–10	Pike	Oct. 2–4
Effingham	Oct. 5–8	Pope	Oct. 11–12
Fayette	Oct. 4–8	Pulaski	Oct. 11–12
Ford	Sep. 23–29	Randolph	Oct. 9–11
Franklin	Oct. 10–12	Richland	Oct. 8–10
Fulton	Sep. 27–30	Rock Island	Sep. 20–22
Gallatin	Oct. 11–12	St. Clair	Oct. 9–11
Greene	Oct. 4–7	Saline	Oct. 11–12
Grundy	Sep. 22–24	Sangamon	Oct. 1–5
Hamilton	Oct. 10–11	Schuyler	Sep. 29–Oct. 1
Hancock	Sep. 27–30	Scott	Oct. 2–4
Hardin	Oct. 11–12	Shelby	Oct. 3–5
Henderson	Sep. 23–28	Stark	Sep. 23–25
Henry	Sep. 21–24	Stephenson	Sep. 17–20
Iroquois	Sep. 24–29	Tazewell	Sep. 27–Oct. 1
Jackson	Oct. 11–12	Union	Oct. 11–12
Jasper	Oct. 6–8	Vermilion	Sep. 28–Oct. 2
Jefferson	Oct. 9–11	Wabash	Oct. 9–11
Jersey	Oct. 6–8	Warren	Sep. 23–27
JoDaviess	Sep. 17–20	Washington	Oct. 9–11
Johnson	Oct. 10–12	Wayne	Oct. 9–11
Kane	Sep. 19–21	White	Oct. 9–11
Kankakee	Sep. 22–25	Whiteside	Sep. 20–22
Kendall	Sep. 20–22	Will	Sep.21–24
Knox	Sep. 23–27	Williamson	Oct. 11–12
Lake	Sep. 17–20	Winnebago	Sep. 17–20
LaSalle	Sep. 19–24	Woodford	Sep. 26–28
Lawrence	Oct. 8–10		

field. If stalk rot is well developed, the lower internode will easily compress when pinched firmly, and stalks will break or remain bent over when pushed 6 to 8 inches to the side at ear height. If 10 to 15 percent of plants in a field have stalk rot, then the potential for significant lodging is high and early harvest should be considered.

Stalk rot is favored by a combination of stress factors. Root or lower stalk damage may enhance infection by stalk rot pathogens, and stresses on the plant that reduce photosynthesis can result in depletion of carbohydrates in the lower stalk and enhance stalk rot. This season, drought stress, root damage such as that caused by rootworms, and dry, compacted soils were stresses to the corn crop in many parts of Illinois that may increase problems with stalk rot. In addition, a number of other stresses have been reported to be related to stalk rot, including high-yielding hybrids, leaf disease and insect damage to leaves, high plant populations, early maturation, high N fertility, low P and K levels, root and crown rot, and wind damage.

Stalk rots can often be reduced by avoiding or reducing as many stresses as possible, managing balanced fertility throughout the season, and harvesting early to minimize losses due to lodging. Hybrids with resistance to stalk rots and leaf diseases, and with good stalk strength ratings, should also reduce problems with stalk rot.—*Dean Malvick*

Plant Disease Report

Fall virus concerns for winter wheat: Management of viral disease of wheat can be tricky business. There isn't anything out there to spray on the plants once they are infected to minimize the yield loss from virus infection. Management balances around avoidance, disease resistance through variety selection, and sanitation of secondary hosts.

Cultural control ("avoidance"): Table 4 describes and compares the variety of virus diseases that are important to wheat production in Illinois. For example, two serious diseases, barley yellow dwarf virus (BYDV) and wheat steak mosaic virus (WSMV) infections, can take place both in the fall and again in the spring. Fall virus infections are generally the more damaging, both in terms of yield loss and in direct plant loss from winterkill. You can reduce the impact of virus diseases by reducing fall infections, which is called "avoidance."

To accomplish avoidance, winter wheat should be planted after the Hessian fly-free date. This takes advantage of the fact that a virus is not

Table 4. Comparison and management of winter wheat viral diseases.

	Barley yellow dwarf virus (BYDV)	*Wheat streak mosaic virus* (WSMV)	*Wheat soilborne mosaic virus* (WSBMV)	*Wheat yellow mosaic virus** (WYMV)
Vector	A variety of aphids, some of which are blown in from the south.	Wheat curl mite (Aceria toschella).	A soilborne fungus (Polymyxa graminis).	A soilborne fungus (Polymyxa graminis).
Time of infection	Fall and spring; spring infections usually don't affect yield significantly.	Fall infections are frequent, but rarely develop before spring.	Important infections take place during cool, wet periods in the fall.	Important infections take place during cool, wet periods in the fall.
Typical field pattern	Field borders are often affected first, but large patches may develop anywhere in the field.	Field borders are often the first, and sometimes the only areas, affected.	May be uniform, but typically associated with low-lying areas.	Typically more uniform than WSBMV.
Plant symptoms	*Seedling infection:* winter kill, stunted growth, reduced tillers, older leaves brilliant yellow. *Post-seedling infection:* fairly uniform yellow, red or purple leaf coloration.	Light green to faint yellow leaf blotches, dashes or streaks, parallel to the leaf veins. Leaf edges often curl upward and inward. Stunted growth and sterile or partially sterile heads.	Moderate to severe stunting; leaves are typically twisted and colored from mild green to prominent yellow; leaf sheaths and new leaves appear mottled and develop parallel dashes and streaks.	Leaves have yellow-green mottling and develop parallel dashes and streaks like WSBMV. However, WYMV streaks have tapered ends which resemble spindles. Later, the yellow-green areas become brown or reddish.
Recovery with warm weather	No.	No.	Yes, but symptoms remain on older leaves.	No.
Other known hosts ("green bridge")	Grasses and volunteer crops such as corn and wheat.	Grasses and volunteer crops such as corn and wheat.	Rye, barley, and hairy bromegrass.	None known.
Management	Most varieties have intermediate resistance. Plant after the fly-free date in your area. Gaucho insecticide seed treatment may reduce BYDV by controlling aphid vectors.	Few varieties with decent resistance. Plant after the fly-free date in your area. No evidence to suggest insecticides will control the mite vector and WSMV.	Varieties tend to be either highly resistant or highly susceptible. Crop rotation to reduce excessive vector and pathogen build-up.	Varieties tend to be either highly resistant or highly susceptible. Crop rotation to reduce excessive vector and pathogen build-up.

* Wheat yellow mosaic virus was formerly known as wheat spindle streak mosaic virus (WSSMV).

alive and needs a vector (e.g., typically an aphid or wheat curl mite) to get around. Vector populations should be much reduced after the fly-free date. Utilize the information that typically for wheat viruses neither a vector nor a virus can function without a living host in the fall (called a "green bridge"), nor can they function at low temperatures.

Delayed planting breaks up the green bridge, or the overlap in the growing seasons between two viral host crops such as corn and winter wheat. Essentially, the virus and vector population crash because virtually no live hosts are left, and then it gets too cold for the vector to function. Virus diseases do not disappear forever because they typically overwinter in weed or volunteer crop hosts and await the appearance of their insect vector in the spring, or they arrive with the vector as it moves north in the spring. Fly-free dates for each county are listed in the *Illinois Agronomy Handbook,* available through your local Extension office or online at http://web.aces.uiuc.edu/iah/.

Variety selection: Check the *Wheat Performance in Illinois Trials 2002* published by the University of Illinois (contact your Extension office for a copy or go online to http://vt.cropsci.uiuc.edu/wheat.html) for variety selection information on yield, test weight, and plant height data for numerous locations across Illinois. The report contains information about many other important agronomic and pest-related characteristics. However, for a number of reasons, published data on varietal resistance to virus diseases are scarce in the Midwest. In most cases, you should be able to get some resistance information from your seed sales representative.

Field diagnosis of viral diseases is a not an absolute confirmation of the actual virus that is out in the field. Symptoms, while they can be "typical" for various viruses, get murky when dual infections or nutrient problems are factors as well. So if you really need to know for certain what virus is out there, confirm the observations via laboratory diagnosis. A good example of something that should be tested would be a field that was, for instance, planted with a soilborne mosaic virus resistant variety that seems to have SBMV symptomatology.

Virus pathogens cannot be cultured in the lab like fungi or bacteria, so plant disease clinics around the country often send suspected virus-infected samples to a company called Agdia, Inc., for ELISA testing. It's expensive, often $50 or more per sample, plus shipping. In the past, Agdia offered a reduced fee structure when samples were routed through plant diagnostic clinics, but this is no longer the case. As a result, the University of Illinois Plant Clinic recommends that growers and consultants work directly with Agdia, or similar companies, when seeking laboratory virus confirmation. Agdia's address is Agdia, Inc., 30380 County Road 6, Elkhart, IN 46514. Call them for the current "wheat screen" test price and for instructions on submitting the sample [(219)264-2014 or (800)622-4342]. You can also access Agdia on the Internet at http://www.agdia.com/testing.—*Suzanne Bissonnette and Bruce Paulsrud*

WEEDS

Survey for PPO-Resistant Waterhemp Populations

Earlier this season, we reported confirming PPO-inhibitor resistance in a waterhemp population from western Illinois (see issue 14, June 28). Since that initial report, we have received several other anecdotal reports of PPO-inhibiting herbicides (Ultra Blazer, Flexstar, Cobra/Phoenix) failing to control waterhemp. Not all of these reports have originated from western Illinois, however, and we are concerned that PPO-inhibitor resistance in Illinois waterhemp populations may be more widespread than initially perceived.

Before going any further, let's also say it is unlikely that every instance of PPO inhibitors failing to provide complete control of waterhemp is attributable to resistance. Less than complete control of waterhemp with PPO-inhibiting herbicides is not something that is unique to the 2002 growing season. For many years, we (and many others, for that matter) have observed waterhemp control range from complete to much less than satisfactory with these herbicides. Regrowth of susceptible waterhemp plants tends to happen more frequently when postemergence applications are made to plants larger than 5 inches in height and/or under adverse growing conditions (primarily extended periods of dry soils). Late-season applications of these herbicides, usually made when waterhemp are very large and nearing the reproductive stage, also can result in poor control. Please note that instances of poor waterhemp control such as these are *not* necessarily attributable to herbicide resistance.

What have we observed from field and greenhouse experiments on the waterhemp population that we have confirmed to be resistant? First of all, the field on which we conducted our research in 2002 had a large percentage of PPO-resistant plants (although some susceptible plants were present within the population also). With such a large percentage of PPO-resistant waterhemp plants, the level of control achieved with our applications could be described as a complete failure. In other words, by 7 days after treatment it was fairly obvious that we had a resistant population. Following a postemergence application of a PPO-inhibiting herbicide, the resistant waterhemp plants typically demonstrate the leaf burn characteristic of this herbicide family. However, unlike susceptible plants, the leaf burning is generally much less than complete, and the resistant plants usually begin to recover within 5 to 7 days after the application. New leaves typically continued to emerge from the apical meristem of resistant plants compared with leaf emergence from lower axils

on susceptible plants that recovered. Additionally, as the resistant plants begin to resume growth, the plants appear to have a more bushy appearance, and their coloration often becomes pale green.

We would like to conduct a survey of Illinois waterhemp populations to determine how widespread resistance to PPO-inhibiting herbicides is, and we can use your assistance. If you know of a field in which waterhemp plants that were treated with a postemergence PPO-inhibiting herbicide were not controlled and demonstrated recovery as previously described, we would be grateful to receive a sample of seed from three to six female plants. Please bag seed from each female plant separately, and send seed samples to me at N321 Turner Hall, 1102 S. Goodwin Ave., Urbana, IL 61801. We will plant the seed in the greenhouse and screen the plants to determine their level of response to PPO-inhibiting herbicides. Please include your contact information and, if possible, a brief history of herbicides that have been used on the field over the past 3 to 5 years.—*Aaron Hager*

REGIONAL REPORTS

Extension center educators, unit educators, and unit assistants in northern, west-central, east-central, and southern Illinois prepare regional reports to provide more localized insight into pest situations and crop conditions in Illinois. The reports will keep you up to date on situations in field and forage crops as they develop throughout the season. The regions have been defined broadly to include the agricultural statistics districts as designated by the Illinois Agricultural Statistics Service, with slight modifications:

- North (Northwest and Northeast districts, plus Stark and Marshall counties)
- West central (West and West Southwest districts, and Peoria, Woodford, Tazewell, Mason, Menard, and Logan counties from the Central district)
- East central (East and East Southeast districts [except Marion, Clay, Richland, and Lawrence counties], McLean, DeWitt, and Macon counties from the Central district)
- South (Southwest and Southeast districts, and Marion, Clay, Richland, and Lawrence counties from the East Southeast district)

We hope these reports will provide additional benefits for staying current as the season progresses.

Northern Illinois

Limited seed corn harvest has begun in the area, but there have been no reports of corn silage being harvested. Field activity over the last few weeks has included herbicide application in soybeans.

There have been some scattered reports of soybean sudden death syndrome over the past few weeks.

Alfalfa producers are reminded that the last harvest during the growing season should be made in late August for the northern quarter of the state.

West-Central Illinois

Sufficient rainfall has been received across the region the past few weeks. Most soybeans appear to be in good condition and are filling pods nicely. However, symptoms of SDS are visible in many fields in various parts of the region. Fortunately, the disease has been delayed in making its appearance, and most fields will only be affected to a limited extent. Early-planted fields are showing signs of senescence, indicating that harvest is rapidly approaching.

Corn is progressing nicely and has reached black layer in some fields, but a majority of the corn is still about a week away from maturity. Gray leaf spot is evident throughout the region, but progression of the disease appears to be limited to the lower portions of the canopy. A high level of corn earworm and second-generation corn borer feeding has been reported in many areas.

Activities in the area have included putting up the last cutting of hay, seeding and renovation of pastures and hayland, and preparing equipment for harvest and other fall field operations.

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