Get a Grip on Controllable PESTS

WATCH WEED MANAGEMENT EXPENSES

TEST, THEN TREAT FOR SCN
MEMBERSHIP APPLICATION

Yes, I would like to belong to the Illinois Soybean Growers (ISG) and American Soybean Association (ASA).

Please sign me up as a **POLICY MEMBER** (benefits can be viewed online): 
- □ 1 year $150
- □ 3 years $300

Please sign me up as an **INFORMATIONAL MEMBER** (no fee): □

- □ Yes, I would like to auto renew my membership every year with the credit card used below. (60 days’ notice required to cancel.)
- □ Yes, I would like to contribute an additional amount to **Illinois Soybean Growers Political Action Committee (ISGPAC)**
  - □ $25
  - □ $50
  - □ $75
  - □ $100
  - □ Other $ __________________

Your name, email address and other information provided on this form are held in strict confidence. ISG does not sell or share your information with anyone. For more information, please visit www.ilsoy.org/privacy.

MEMBERSHIP INFORMATION (PLEASE PRINT)

Member Name: ___________________________________________ Date of Birth: ______________________
- □ Male
- □ Female
- □ Spouse’s Name: ___________________________________________

Farm/Company Name: _______________________________________________________________________________

Home Address: _____________________________________________________________________________________

City: ______________________________ State: ________ Zip: ___________________ County: ___________________

Home Phone: ______________________________________ Cell Phone: ______________________________________

- □ Yes, I would like to receive text message Voice for Soy Action Alerts via my cell phone.
  (Message and data rates may apply. Opt-out option available)

Work Phone: ____________________________ Email Address: ________________________________________________

- □ Yes
- □ No

- □ Cattle
- □ Dairy
- □ Hogs
- □ Poultry

PAYMENT INFORMATION (PLEASE PRINT)

- □ Check (payable to **Illinois Soybean Growers, 1605 Commerce Parkway, Bloomington, IL 61704**)

Credit Card: □ MasterCard □ Visa □ Discover

Card Number: ____________________________ Expiration Date: ______________________ (Month/Year)

Cardholder’s Name: _________________________________________________________________________________

Cardholder’s Signature: _______________________________________________________________________________

Dues are not tax deductible as a charitable contribution for federal tax purposes, but may be deductible as a business expense.

Illinois Soybean Growers (ISG) is a membership organization serving more than 43,000 Illinois soybean growers. ISG provides advocacy in Springfield and Washington, D.C. to promote the interests of soybean farmers, and research, promotion and education programs that enhance soybean production and use.

Please visit ilsoygrowers.org/membership-benefits for more information.

The application can be mailed to the address listed above in the payment box or can be completed online.
The Struggle is Real
When it comes to pathogens, insects and weeds, the struggle to control them is real. Every year presents different environmental conditions as the perfect breeding ground for different pests. It is just hard to prepare for which pests it may be. Crop experts weigh in on the 2017 outlook.

Test and Treat
Soybean cyst nematode (SCN) may not always be an obvious yield robber, but chances are good its destruction is evident in your bottom line whether you know it or not. Crop consultants advise farmers to perform the testing that leads to the best treatment decisions in any given year. Learn what some of the best strategies may be for your farm.

Professionals Offer Sustainability Perspectives
The ISA checkoff program promotes the good sustainable work farmers do, while encouraging continued improvement in implementing the Illinois Nutrient Loss Reduction Strategy. In this roundtable discussion, stakeholders offer their perspectives on NLRS opportunities.

Penny Wise versus Pound Foolish
Farmers need to protect investments in high-yielding soybean varieties. But less-than-desirable crop prices may call for prudent input use this season. Weed specialists advise farmers to avoid the temptation to make weed management product cuts for the sake of slashing budgets.

Find Your Success with Succession Planning
Farmers may think succession planning begins with meeting a financial advisor. But it starts much sooner than that — even the day the next generation is born. Review the considerations in this article to see where you can enhance your planning for the future.

LEADER PROFILE:
Sustainable Product Specialist Skip Laubach
Skip Laubach leads Vertec BioSolvents, a bio-based solvent formulations company that provides sustainable solutions to petroleum-based solvents, including soy-based solvents. Find out how this company is creating markets for soybean farmers while addressing environmental pressures.
Good Value in Production Research

Much has changed in the world of crop science in the 40-plus years that Illinois soybean farmers have been investing checkoff dollars in production research. Early in the history of the ISA checkoff program, funding basic university research was a priority. It was one of the few ways we could contribute to solving the state’s soybean production challenges.

Today, there still is good value in production research. But the structure and cost of research have changed. We have had to revise our approach to maximize the value of our dollars.

Universities are no longer the only source of good research. Private companies increasingly are doing their own research. What’s more, basic research is much more expensive to conduct, and can take several years to get the type of results that can be applied on the farm.

We have learned that one state checkoff program or entity cannot do all of the basic research funding alone. But we can make a difference when we band together.

ISA is a member of the North Central Soybean Research Program (NCSRP); one of four regional programs funded through checkoff dollars and the largest of the four programs. States are grouped by common production challenges. State organizations, including ISA, who choose to join NCSRP, contribute annually to research efforts as they see fit.

The NCSRP board issues requests for proposals each year based on the number of dollars available to invest. Illinois interests are represented on the board by ISA Director Jered Hooker. Projects chosen for funding include both basic and applied production research, and traditionally have focused on weed, pest and disease management. In some cases, NCSRP partners with the United Soybean Board (USB) to fund large research projects as well.

While we do not fund much at the state level anymore, we do have some critical production research underway. ISA continues to invest in the Six Secrets of Soybean Success and nitrogen on soybeans work at the University of Illinois. We also fund with USB a double-crop soybean best management practices (BMP) research project with JCB Ag Research in Effingham, Ill.

This issue of Illinois Field & Bean looks at some of the recent production solutions farmers have helped fund through ISA checkoff program activities. You can read more about pest management, soybean cyst nematode management and weed control for 2017. We also address some bigger picture farm management issues like succession planning and sustainability.

There is still good value in soybean production research. I hope you take advantage of applying ISA checkoff program-funded findings on your farm. Have a safe planting season.

DARYL CATES
ISA Chairman
As Illinois farmers celebrate record yields, I want to share with you the record yields you also contribute toward the Illinois Agriculture in the Classroom (IAITC) program.

With generous support from the IAA Foundation and its contributors, including the Illinois Soybean Association (ISA) checkoff program, 646,201 students were reached through direct county Agriculture in the Classroom programs last year.

Many of these students had multiple visits about the importance of agriculture and soybeans in their lives, with students ranging in age from pre-school through high school. Additionally, 37,563 teachers received local support, programming and teacher training to further implement agriculture into their existing curricular areas. Working with teachers to serve as local experts and resources in agriculture is just as important as reaching students.

Locally, our county IAITC programs provided more than 1,150 hours of professional development to teachers. Included in these hours were topics of general agriculture, trade, biotechnology and a special initiative on the Nutrient Loss Reduction Strategy (NLRS). Our county coordinators were trained in areas of NLRS, and shared with students the environmental stewardship Illinois farmers use in their day-to-day activities.

We started simply by explaining the importance of understanding watersheds, how water flows and the methods and practices farmers use to protect soil health and water quality. Teachers have been fascinated with gaining more information on watersheds, the technology used by farmers to help use and monitor nutrients, and how farmers determine strategies for managing water quality and producing bountiful crops.

Our 2016 Summer Agricultural Institute theme was "What is YOUR Strategy." Just as farming and agriculture face regulations and scrutiny, teachers across the state face equal regulations and scrutiny. Close to 500 teachers investigated bioreactors, discussed cover crops and learned the importance of the right source, the right rate, the right time and the right place. So much of the strategy of farmers protecting the environment runs parallel with teachers and their work with individual students, as well as their entire classrooms.

ISA also assisted the IAITC program in reaching 1,236 pre-service teachers. These students who are working on teacher certificates at our universities welcome the hands-on and minds-on resources agriculture can bring to their classrooms. From our award-winning Ag Mags, including the Soybean Ag Mag, to lesson plans ready to use during student teaching or in their first year, we showcase materials that are agriculturally accurate and also correlate to STEM Concepts and Illinois Learning Standards.

Most importantly, we could not implement county programs without volunteers. Last year, a record 5,057 volunteers helped implement ag literacy efforts. Many of these people have connections to the Illinois Soybean Association. Showcasing your farm at a Summer Ag Institute, hosting classroom field trips or even reading a book (like the new Pod to Plate: The Life Cycle of Soybeans by Julie Blunier funded by the ISA checkoff program), to classrooms, assist in promoting the concept of agriculture literacy.

Continue to celebrate your bumper crops — including that of classroom education.
How does that age-old phrase go? "Grant me the serenity to accept the things I cannot change, the courage to change the things I can, and the wisdom to know the difference?" When it comes to pathogens, insects and weeds, this quote could qualify as a soybean farmer’s mantra.

Every year presents different environmental conditions as the perfect breeding ground for certain pests, but it is hard to prepare for which pests it may be. “Up here in northern Illinois we struggle with sudden death syndrome (SDS) and white mold,” says Wayne Gehrke, third-generation farmer from Elgin, Ill. “Unfortunately, there’s not a lot you can do once SDS or white mold start to creep in, so we try to do as much up-front preparation as we can to prevent them.”

PREPARE FOR PATHOGENS

Gehrke farms about 800 acres of soybeans, rotated with corn and alongside wheat, with his dad and uncle in Kane and Stephenson counties. They spend the winter reviewing soybean yield results, standability, grain quality and plant health of the different varieties from the previous season’s crop. “We take all of these factors into consideration when making our seed selections for the next year. We do our best to select varieties that promote good yield and strong plant health, and avoid the ones that are typically more susceptible to disease,” he says.

With SDS, a field’s history is a useful map to determine which areas are most at risk. “I have been back on my family farm for
four years. I have seen each field in beans at least twice, so I have an idea of where we might see issues. I can scout and anticipate those pressures,” he says.

Field history and a soil test can determine if soybean cyst nematode (SCN) may be an issue.

“What concerns me more than anything is SCN because it is the single most destructive soybean pathogen,” warns Tim Laatsch, CPAg, GROWMARK insect and plant disease technical manager. He says SCN often goes undiagnosed and can generate as much as 10 percent yield loss without any above-ground symptoms. Farmers may not even know they have a problem.

Certain winter annual weeds may be a host to SCN, Laatsch adds, allowing it to extend the number of generations it experiences in a growing season. Disease pressure tends to appear more predominantly in no-till situations, as fields have a high amount of residue on the soil surface, which elevates disease risk. He encourages farmers to start with a solid, broad spectrum seed treatment package and strategically timed fungicide applications as needed.

WORK AGAINST WEEDS

Scouting also helps farmers get ahead of weed problems. Marestail, waterhemp, Palmer amaranth and giant ragweed continue to be some of the most difficult weeds in Illinois soybean fields.

“Those are not all that unique to 2017, since we’ve been battling some for decades,” says Aaron Hager, Ph.D., University of Illinois Extension weed science specialist. “What catches farmers off guard is when they don’t realize herbicide resistance has occurred, so they apply herbicides that won’t control the weeds and will not have a positive effect on their bottom line.”

Herbicide resistance poses a real problem, especially for no-till soybean growers who have fewer options for weed control. Hager
COVER STORY

Funded by the Illinios soybean checkoff

recommends farmers gain the upper hand by leveraging diverse modes of action, chemical management and a yearlong weed control program. In addition, farmers should not let weeds go to seed and consider narrow row spacing for quicker ground cover by canopy. Crop rotation, a burndown program and soil-residual herbicides also are proven techniques for helping stop weeds in their tracks.

“There is a period of time where weeds and crops can coexist without real yield loss, but you can’t predict what that date is. It is hard to be too early when it comes to removing the weed interference to prevent yield loss,” says Hager. He suggests farmers target weeds of four inches or less for the most effective postemergence control.

“The weeds are there, and there is a lot of interest in what it costs to manage them. But if that’s the mindset, we overlook the fact that weeds don’t do anything to increase yield. It is a one-way relationship that always results in less grain in the hopper come harvest,” he says.

“When farmers invest in a tool, tactic or technique to manage weeds, what they are really doing is making an investment that ensures the genetic yield potential of the variety they purchase and the plant has every opportunity to express itself.”

GOOD NEWS FOR GROWERS

And while it may seem soybean farmers are fighting an uphill battle at times, with the many things that fall just outside the realm of influence, the good news is a variety of preventative and reactive measures can be taken to overcome in-season challenges and rescue yield potential.

“We’ve got better genetics and better tools than we’ve ever had before,” says Laatsch. “Mother Nature continues to fight against us, the pest spectrum continues to evolve, but there are plenty of good tools in the toolbox. That’s what I think should encourage farmers.”

BUILDING BACK THE BEE POPULATION

According to The Nature Conservancy, the number of honeybee colonies has dropped from more than four million in the 1970s to 2.5 million in 2015. And whatever the reasons for the declines in honeybee colonies, the drop in numbers is a concern for some crop watchers, who cite different studies showing soybeans produce higher yields when visited by honeybees.

Bayer CropSciences officials are working with bee experts in Brazil to improve bee health and increase yields through pollination. Even though soybeans can self-pollinate, yields in test fields visited by wild pollinators and honeybees were almost 20 percent higher than in control fields.

The FS System, along with regional supply cooperative GROWMARK Inc., is taking steps to provide habitat and help increase local honeybee populations. As part of their sustainability initiative, Endure, FS member cooperatives are selling wildflower seed mixes to farmers and providing tips for creating and maintaining habitats for healthier pollinators:

• SITE SELECTION: Any size plot can attract and support honeybees. Preferred locations are organic-rich, well-drained soils that receive a minimum of six hours of sunlight per day.

• PLANTING: Plant in full sun in spring, early summer or fall. In cool climates, fall plantings should follow several frosts so seeds do not germinate until spring.

• SOIL PREPARATION: Prepare soil as you would for a vegetable garden. Remove all vegetation or spray with glyphosate. Loosen soil two inches deep and rake smooth.

• SOWING SEEDS: Broadcast seeds evenly by hand or with a grass seed spreader. Mixing seeds with sand, vermiculite or corn meal facilitates even distribution. Rake seeds lightly into soil, about one eighth of an inch deep.

• WATER AND FERTILIZATION: Keep consistently moist for four to six weeks, then gradually reduce water to half an inch per week. Do not water fall plantings until spring. If soil is very poor, apply a 5-10-5 fertilizer.

• MAINTENANCE: Pull weeds as soon as they can be identified. In late fall, cut plants to five inches. To assure continuing color, overseed each year at one ounce per 400 square feet. Do not give up on weed control, watering and fall maintenance. Perennials grown from seed may take three to four years to reach full flowering potential.

Sweet Returns from Some “Pests”

While farmers put much energy and inputs into controlling insects, not all of those found in soybean fields are bad news. In fact, pollinators, such as honeybees, are responsible for almost 80 percent of all crop pollination. Ensuring honeybees are protected with a proper management plan is beneficial and should be a vital component of Illinois farmer efforts.
Test and Treat
SCN Management Requires Ongoing Attention

> BY BARB BAYLOR ANDERSON

Soybean cyst nematode (SCN) may not always be an obvious yield robber, but chances are good its destruction is evident in your bottom line whether you know it or not. Crop consultants advise farmers to perform the testing that leads to the best treatment decisions in any given year.

“The ultimate goal is to stop buildup of SCN in soils,” says Daryl Cates, soybean farmer from Columbia, Ill., and ISA chairman. Cates participated in a recent national SCN solutions conference. “SCN populations are high, and with only three sources of SCN resistance in varieties, yields of resistant varieties are not as expected. Farmers need to do more soil sampling to know what HG/races they have in fields, and to get support with treatment recommendations.”

To determine the HG type of an SCN population, a greenhouse test is performed on the nematode population from soil collected from an infested field. Tylka says results of an HG type test will indicate how well an SCN population can reproduce on the different sources of SCN resistance, such as the most common PI 88788, that is used in soybean varieties.

“In addition, if numerous SCN females are observed on roots of resistant soybeans during the growing season, an HG type test also might be warranted. It might be worthwhile to conduct an HG type test on SCN populations from SCN-infested fields in which resistant soybean varieties were grown numerous times in the past,” he says.

The number of SCN in a field can be greatly reduced through proper management, but it is impossible to eliminate SCN once it is established. “Crop rotation coupled with SCN-resistant varieties, is the cornerstone for SCN management,” he says. “Non-host crops, such as corn, can reduce SCN population densities each year grown.”

CONSIDER TREATMENT STRATEGIES

Another new option might be use of soybean seed treatments. “Seed treatments are now available, and most show effectiveness in protecting soybeans and reducing SCN populations,” says Linda Kull, Illinois Soybean Association (ISA) director of strategic research programs. Tylka says several are treatments are available with nematode-protectant properties (see table). “My experience with nematode-protectant seed treatments is that performance and economic benefits vary,” he says. “There’s a greater chance of them providing benefits when conditions are favorable for SCN to cause damage, such as in sandy soils or hot, dry growing seasons.”

<table>
<thead>
<tr>
<th>BRAND NAME</th>
<th>CROP(S)</th>
<th>TARGETED PARASITE NEMATODES</th>
<th>ACTIVE INGREDIENT</th>
<th>MODE OF ACTION</th>
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<tbody>
<tr>
<td>Avicta Complete</td>
<td>cotton, corn, soybean</td>
<td>all</td>
<td>abamectin</td>
<td>inhibits nerve transmission</td>
</tr>
<tr>
<td>Votivo</td>
<td>soybean</td>
<td>all</td>
<td>Bacillus firmus</td>
<td>repels nematodes from roots</td>
</tr>
<tr>
<td>Clariva</td>
<td>soybean</td>
<td>SCN</td>
<td>Pasteuria nishizawai</td>
<td>nematode parasite</td>
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<tr>
<td>Ilevo</td>
<td>cotton, corn, soybean</td>
<td>SCN, RKN</td>
<td>fluopyram</td>
<td>SDHI enzyme inhibitor</td>
</tr>
<tr>
<td>Nematract</td>
<td>cotton, corn, soybean</td>
<td>SCN, RKN, reniform lesion</td>
<td>tioxazafen</td>
<td>mitochondrial translation inhibitor</td>
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<tr>
<td>Aveo</td>
<td>corn, soybean</td>
<td>SCN, reniform lesion</td>
<td>Bacillus amyloliquefaciens</td>
<td>under investigation</td>
</tr>
</tbody>
</table>

TAKE THE RIGHT TEST

Greg Tylka, Iowa State University plant pathologist, is a strong proponent of testing fields for SCN HG/race type to select appropriate resistance sources and to rotate resistance sources.

“Make the most of available management strategies. Soybean farmers who have experienced subpar yields from SCN-resistant varieties in SCN-infested fields should consider having an HG type test performed, which is a simplified replacement for the SCN race test,” he explains.

Checkoff COLLABORATION

Illinois Farmers Participate in National SCN Conference

ISA representatives participated in a two-day, industry-wide SCN conference last December. The meeting was supported by numerous sponsors, including the ISA checkoff program, national, regional and other state checkoff programs. Presentations from both public and private researchers were given on all aspects of SCN.
Professionals Offer Sustainability Perspectives

The Illinois Nutrient Loss Reduction Strategy (NLRS), developed by the Illinois Environmental Protection Agency and Illinois Department of Agriculture with input from groups including the Illinois Soybean Association (ISA), calls for a 15 percent reduction in nitrogen (N) loss and 25 percent reduction in phosphorus (P) loss by 2025. The ISA checkoff program is promoting the good work farmers already are doing, while encouraging continued improvement with the “Try One Thing” campaign.

The Illinois Field & Bean talked with sustainability professionals and other stakeholders about meeting NLRS goals. Here are perspectives that farmers can translate into their own operations.

Q. Why does continuous improvement matter to you and your customers?

DAVID DROSTE
ISA director and farmer from Nashville, Ill.

“Striving for continuous improvement and increased efficiency helps producers be more productive with less cost. Plus, it is better for the environment when input applications are managed to reduce nutrient loss.”

HOWARD BROWN, PH.D.
manager of agronomic and stewardship, Illini FS

“Continuous stewardship improvements matter, not to just our customers, but to independent entrepreneurs we call farmers. Improvements with environmental stewardship at the farm gate must be driven by farm profitability — M.O.M. — if we maximize input utilization while optimizing harvest yield and farm profitability, we will minimize the environmental impact of production agriculture. It is not about nutrient reduction, it is about nutrient utilization.”

JILL KOSTEL, PH.D.
senior environmental engineer, The Wetlands Initiative

“Continuous improvement means finding ways to reduce nutrient loss from the world’s most productive agricultural region without taking swaths of our great farmland out of production.”

FRANKLIN HOLLEY
Manager - sustainable food, World Wildlife Fund

“An approach of continuous improvement shares value along the entire supply chain. Sustainability should not just be on producers’ shoulders; it also is the responsibility of traders, retailers and consumers. Any approach needs to be economically sustainable for producers.”

SUZY FRIEDMAN
senior director of agricultural sustainability, Environmental Defense Fund

“Continuous improvement is critical because there is no single solution or silver bullet when it comes to agricultural sustainability. Instead, we need to focus on gathering information and knowledge that enables farmers and their advisors to make ever more informed decisions, identify and pursue opportunities to improve efficiency, reduce loss and improve resilience.”
Q. What sustainability goals are important to you, your organization and your customers. How do on-farm practices affect your operation’s goals?

DAVID DROSTE

“If we make good decisions, we can increase productivity and profits, while minimizing impacts beyond our farm. We need more research, outreach and education to help our industry adapt to these new challenges. We all need to work together to promote the voluntary management practices that make sense for our own operations.”

HOWARD BROWN, PH.D.

“As farmers, suppliers and consultants, we have an opportunity to show the non-farm public and global marketplace that we truly have a focus on M.O.M, and we are the best place in the world to provide a sustainable, reliable source of grains. We still have a significant amount of work ahead to demonstrate how improvements in soil health can be accomplished while improving farm profitability.”

JILL KOSTEL, PH.D.

“Pairing in-field nitrogen management practices with edge-of-field nitrogen removal practices, such as constructed wetlands, is a great path to achieving nutrient reduction goals and keeping Illinois farms economically and environmentally sustainable.”

FRANKLIN HOLLEY

“When it comes to food, WWF’s goal is to drive sustainable food systems to conserve nature and feed humanity. This includes using natural resources more efficiently. Conservation practices can build soil health. Nutrient optimization and precision agriculture can slow nutrient losses and protect water resources.”

SUZY FRIEDMAN

“We want to expand collaborations across the commodity crop supply chain, from consumer-facing retailers and food companies to agribusiness and farmers, so that efficient use of nutrients and soil health practices are the cost-effective business norm for production.”

Checkoff COLLABORATION Try One Thing

To help meet Nutrient Loss Reduction Strategy goals, every Illinois farmer must consider voluntary best management practices for every acre. There’s no one right answer, so ISA encourages farmers to consider changes that make sense for their operations to reduce impact without compromising yields or profitability. Try One Thing is the ISA checkoff program activity for farmers to find a solution for improving their own strategies that can help enhance the entire industry and to meet the needs of end consumers around the world. Visit ilsoy.org for more information.
Farmers need to protect investments in high-yielding soybean varieties. But less-than-desirable crop prices may call for prudent input purchases this season. Even so, weed specialists advise farmers to avoid the temptation to make weed management cuts for the sake of slashing budgets.

“Farmers make money on the yield potential of their crop. However, weeds do nothing to enhance the yield potential you bought in that bag of seed,” says Aaron Hager, University of Illinois Extension weed specialist.

“Don’t cut corners so much that you affect weed control,” cautions Mike Wilson, certified crop adviser (CCA), Wabash Valley FS in Allendale, Ill. “You want to avoid a weed control failure because that’s much more expensive in the long run than money you save in the short run.”

Instead, Wilson says focus on a sound control program that takes into account the weed species present and the strategies needed to prevent those species from reducing profits. Farmers also must address any herbicide resistance issues for the strategy to work.

“It is a lot cheaper to build a good herbicide foundation than be forced into a rescue situation,” says Jenny Mennenga, CCA and soybean farmer from LeRoy, Ill. “Spending an extra $4 on foundation herbicides will keep you from having to spend $40 in a rescue spray situation. It also prevents yield loss from weeds or potential herbicide injury that can occur in a rescue situation.”

SHOP AROUND

Not all herbicide premixes are created equal, either.

“Study product labels. Make sure the herbicides you buy include the active ingredients you need to control the weed species in your fields,” says Wilson. “Analyze the combinations you use and consider removing the products that don’t fit the criteria. Shop around to make sure you get the right set of active ingredients for the best price, whether it is generic or name brand products.”

Wilson also advises using full-labeled rates to help make sure results sought are results obtained.

CONSIDER CULTURAL PRACTICES

Mennenga, who is a firm believer in no-till, says that in select cases and specific circumstances it may be necessary to employ tillage to supplement weed control with herbicides.

“Biology is driving us to do things we may not want to do, but we have to think differently if we want to win against weeds,” adds Hager. Tillage may not be right for everyone or every field, but it remains a viable option and should remain in the weed control toolbox.

“There are times when you have to reset the seed bed,” Mennenga says. “Aggressive weed escapes and resistance challenges may mean you need tillage to get ahead of weeds before they cause economic losses.”
The ISA board member also believes converting to narrow rows, especially in fields with heavy weed pressure, can give soybeans a leg up. The soybean canopy closes more quickly than in conventional rows, which effectively chokes out competition from weeds for water, sunlight and nutrients.

**SCOUT, SCOUT, SCOUT**

Finally, there is no substitute for scouting. Crop consultants say it is the only way to identify weed species present, whether the control program is working or if adjustments are warranted.

“It is a full-season task,” says Wilson. “We were scouting in January for escapes in fall-treated fields and for species present in non-treated fields so that we would be properly prepared for pre-emergence applications. Scouting shouldn’t wrap up until after the growing season ends.”

“We are in an era where no one solution will address all weed control challenges,” concludes Hager. “It is a series of actions and tools that fit into an overall integrated strategy, one that supports yield potential to help obtain the best return on your investment.”

“Don’t cut corners so much that you affect weed control. You want to avoid a weed control failure because that’s much more expensive in the long run than money you save in the short run.”

MIKE WILSON certified crop adviser (CCA), Wabash Valley FS in Allendale, Ill.

By the **Numbers**

<table>
<thead>
<tr>
<th>94%</th>
<th>49.5 percent</th>
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<tbody>
<tr>
<td>the amount of U.S. soybean acres planted with herbicide-tolerant varieties in 2016, based on USDA survey data. Only 17% was planted to such varieties in 1997.</td>
<td>The total average U.S. soybean yield loss if weeds were left unchecked.</td>
</tr>
</tbody>
</table>

Source: USDA

$2.7 BILLION

Potential average economic losses in Illinois soybean production if weeds were uncontrolled.

Source: Weed Science Society of America

**2005**

The first year glyphosate-resistant Palmer amaranth was confirmed in multiple states.

Source: International Survey of Herbicide-Resistant Weeds

43 BILLION DOLLARS

The estimated combined annual corn and soybean economic loss in the U.S. and Canada if weeds are left uncontrolled.

Source: Weed Science Society of America
Mull Over your Business Arrangements

The vast majority of Illinois farmers are sole proprietors. But farm management specialists urge farmers who plan to bring family members or employees into their business, add enterprises or make other changes to spend time mulling over their options for the ideal farm arrangements.

“Farmers need to determine their goals and how they want to reach those goals,” says Penny Lauritzen, professional farm manager and certified financial planner from Lanark, Ill. “Different options are available, and all should be reviewed with a qualified attorney.”

Lauritzen notes that sole proprietorship works well for many farmers, but other options should be evaluated, and include limited liability companies (LLC) or limited liability partnerships ( LLP) followed by more complex arrangements that include S-corporations and C-corporations. 

“Once you decide what you want to do, it is best to have your accountant, attorney and even your banker in the room with you,” says Kris Lauritzen, Penny’s husband and farm management consultant, tax preparer and accountant. “Be sure they all understand your goals.”

The Laurtizens encourage farmers to consider several factors in choosing the best arrangement.

Decide What’s Best for You

“The main thing to know is this is not a decision to take lightly and it may take some time to get everything in place. Have trust and confidence in your advisors,” says Penny. “Also, if something is not working, it can be changed. Doing something is better than doing nothing.”

SOLE PROPRIETOR

Sole proprietors are the easiest businesses to establish. Farmers who are sole proprietors claim all of the farm’s income and all of the expenses under their own social security numbers.

LLCs and LLPs are set up to protect individuals, families or partners from the high risks of farming. LLC and LLP owners are shielded from personal liability for any claims made against the operation. From a tax perspective, the Internal Revenue Service (IRS) considers LLCs to have pass-through status — farm profits and losses pass through the business to the owners with financial reporting tied to personal income tax returns, the same as standard partnerships.

They also can be set up under the rules that apply to S-corporations; owners receive salaries reported on personal income tax returns while remaining profits pass through to the owners to be reported on personal income taxes without being subject to social security. LLPs are similar to regular partnerships where all net income passes through to owners.

S-CORPORATION

The S-corporation is a hybrid that combines the legal aspects of a corporation with the tax structure of a partnership. S-corp member owners and personnel have salaries and limited liability coverage for business debt and some fringe benefits. Personal income taxes are paid on farm salaries. Like LLCs, all losses and profits go through to the owners with no entity tax.

C-CORPORATION

One of the big advantages of a C-corp might be that everyone is on salary. Owners make social security payments and can offer employees several fringe benefit package options. Since all participants are on salary, social security is only paid on the salary of each participant. Profits are taxed in the C-corp but are not subject to social security tax. A C-corp also has the same limited liability as other options. Advisors recommend farmland not be be put in the C-corp. Sometimes, even machinery should be left out for tax reasons. There is some downside; getting out of a C-corp is costly because of double taxation rules. In addition, payroll and quarterly tax filings can be time consuming for owners, if they had not been paying employees in the past.

“Government payment limits keep some farmers from C-corps,” says Kris Lauritzen, farm management consultant, tax preparer and accountant. “A C-corp is considered one entity, and is eligible for one payment versus other arrangements where you can have multiple entities and payments. Just know when you go to the Farm Service Agency office to file paperwork, all eligible members and operators must verify their involvement.”
Find Your Success with Succession Planning

> BY KENDALL HERREN

“"You don’t just start with, ‘I am 70 and have a 50-year-old son I want to pass the farm to when it comes to succession,’” jokes third-generation farmer Todd Burrus, 62. “It starts much earlier.”

Farmers may think successful succession planning begins with meeting a financial advisor to go over legalities and paperwork, but it really starts sooner. Planners suggest it starts the day the next generation is born and as they are raised on the farm, instilling passion for agriculture.

Burrus’ family has been proactive in succession planning over time, applying a business-focused approach. Every five years the family gathers to go over the plan, which represents one of the most important aspects of succession planning: honest, transparent communication with family.

Burrus has learned it is important to involve all family members in these conversations, including spouses and those who may not actively work on the farm. But before beginning such conversations, farmers should ask themselves a few questions.

Am I ready to begin succession planning?

“The hardest thing for anybody is to start,” says Kevin Spafford, certified financial planner (CFP) at Ryan Wealth Management. “The most difficult thing to admit is that they need help putting their thoughts and ideas together.”

Succession planning can be a daunting task. According to Spafford, denial, fear of conflict and the transfer of power are some of the most common concerns farmers share thinking about putting together a plan. Often, fears hinder progress and sometimes even stall the plan.

Have I discussed the plan with family?

When talking with family members it is crucial to first remind them they are loved. Fair does not always mean equal. If a family has a history of tension or dynamics are difficult to maneuver, Spafford recommends an experienced family business professional facilitate discussions and keep the process on track.

It also is critical to remember the farm is a business. Children should be treated like employees. Some families go as far as writing up job descriptions defining everyone’s role, just as a traditional business would. “Separating family emotions from the business can help guide everyone away from negative and hurtful conversations,” says Spafford.

Financial advisors suggest asking a combination of these questions before talking with family:

1. What is my end goal?
2. Am I ready to let go of day-to-day management?
3. When will I transfer management?
4. Do my kids have the right skills to be successful managers of the operation?
5. How will I ensure fairness to my off-farm children?
6. Who is going to help me make these decisions?

How can I separate business and family?

Understanding the difference between business and family relationships is crucial to planning success. Financial planner and risk management specialist Scott Dolven says one of the highest hurdles when succession planning is separating the roles of employer and parent.

“Most of the time, parents think more highly of their children than is merited,” he says. “We are biased in favor of our kids, and that can lead to bad decisions. People aren’t always capable of handling certain elements on the farm, whether that is because they aren’t hard workers or don’t train enough to understand and accomplish tasks they are assigned.”

Now am I prepared to turn ideas into plans?

Visiting a financial advisor can help guide the process to set a family business up for success. Dolven says starting early, having open conversations with family members, and remembering end goals will help ease any hardships. A financial advisor will counsel about decisions to be made and important documents to be signed, but farmers must turn ideas into family plans.
The U.S. is in the midst of President Donald Trump’s first 100 days in office. While the president continues to drive his initiatives, the Illinois Soybean Growers (ISG) is keeping a close eye on how some of those issues will impact farmers in the Land of Lincoln.

Following the successes of 2016, including loosening trade with Cuba, increasing biomass-based diesel volume requirements and preventing a messy patchwork of state GMO labeling laws, 2017 will bring a new set of challenges. Here are a few key issues ISG is monitoring:

**BIODIESEL TAX CREDIT EXTENSION**

- The biodiesel tax credit helps strengthen domestic energy outputs. However, year-to-year expirations inhibit farmers and investors from making long-term business decisions, preventing the industry from finding the stability it needs to grow. At the federal level, the biodiesel tax incentive lapsed on Dec. 31, 2016, and has yet to be extended by Congress. The Illinois biodiesel tax credit expires in 2018. It is a top priority for ISG to extend both tax credits to continue expanding this soybean oil market.

**EXPANDING CUBAN TRADE**

- Continuing to push for opening the Cuban market remains a priority for ISG. Soybean farmers made great strides in opening relations and expanding trade opportunities with Cuba in 2016. For the first time in 25 years, the United States abstained in a vote by the United Nations General Assembly as it again adopted a resolution to renew its call for an end to the economic, commercial and financial blockade imposed by the United States against Cuba. This was a major victory. However, there is still more work to be done to lift the trade embargo, especially with a new administration.

**INFRASTRUCTURE AND TRANSPORTATION**

- The Illinois transportation system is aging and in need of repairs to remain competitive in domestic and international markets. President Trump has promised a $1 trillion infrastructure plan that will take time to negotiate with Congress. While Congressional leaders have expressed similar support in infrastructure improvements, ensuring there is enough room in the budget for a proposal of this magnitude is to be determined. Considering approximately 60 percent of Illinois soybeans are exported, ISG is committed to making sure they can efficiently make it to the marketplace.

**RENEWABLE FUEL STANDARDS**

- In December, the Environmental Protection Agency (EPA) set the biomass-based diesel volumes for 2018 at 2.1 billion gallons. That is a 100-million-gallon increase from 2017. ISG is satisfied that growth was achieved, and prospects ahead are looking good. This year, the Renewable Fuel Standard (RFS) program will be up for debate by energy panels in both houses of Congress. President Trump is a proponent of energy independence. Both he and his administration will likely support a strong role for biofuels – including soy-based biodiesel – which creates an additional market for Illinois soybeans.
USSEC Hosts ISA on EU Trade Mission

Several ISA farmer-leaders were part of a trade mission to the European Union (EU) earlier this year that was organized with help from the U.S. Soybean Export Council (USSEC). The group visited several countries, including the Netherlands, Italy, Spain, Belgium and the United Kingdom. On the ten-day trip, farmers visited farmer co-ops, processing facilities, aquaculture facilities at the Spanish Oceanography Institute and more. The goal was to share Illinois soy’s sustainable approach, quality composition, consistent supply and transportation options.

ISA trade missions help enhance Illinois soybean farmer profitability by protecting existing markets and opening new markets as part of ongoing market expansion efforts. ISA partners with USSEC as one of its member organizations in this effort. USSEC works through a global network of international offices with U.S. support to build a preference for U.S. soybeans and products, to advocate for the use of soy in feed, aquaculture and human consumption, to promote the benefits of soy use through education and to connect industry leaders.

ISA Program Wins National Biodiesel Award

The B20 Club, an ISA checkoff program, recently was honored with the National Biodiesel Board’s Industry Partnership Award. The award recognizes the success of the B20 Club, which is a partnership program with the American Lung Association of Illinois.

The B20 Club was created to raise the profile of exemplary fleets using B20 in any type of diesel engine. Club members range from municipalities to school bus operators to over-the-road trucking companies. They share their success stories with other fleet managers and decision makers to promote B20 use. So far, they have had a significant impact on those hesitant to use B20 for reasons ranging from economics to engine warranty questions. The B20 Club provides confidence in biodiesel use and a platform for showcasing successful biodiesel consumption. The award was presented at the annual National Biodiesel Board conference in San Diego.

ISA Offers Expansion Resources during Pork Expo

The ISA checkoff program hosted two educational sessions at the Illinois Pork Expo last month to offer resources to producers considering farm expansion and diversification. One session featured pork integrators discussing the opportunities, expectations and experiences of contract growers. The second covered lending requirements for contract production as presented by ag lenders. Growth in the pork industry supports the primary market for soybean meal in Illinois.

WISHH Appoints New Illinois Member

Tom Kentner, a soybean farmer from Danville, Ill., and ISA District 7 director has been confirmed to serve on the World Initiative for Soy in Human Health (WISHH) committee for 2017. American Soybean Association (ASA) President Ron Moore approved the appointment of Kentner to one of the at-large seats. Kentner joins fellow Illinois soybean farmers Stan Born, Daryl Cates, Roberta Simpson-Dolbeare and Bill Wykes on the WISHH Committee.

WISHH is a partnership organization of ISA and a branch of ASA that promotes U.S. soy protein exports for use in human diets in developing countries. ISA helped found WISHH in 2000.

CALENDAR OF EVENTS

ASA Board Meetings
> March 21-23 • Arlington, Virginia

ILSoyAdvisor Gypsum Webinar
> March 22 • visit ilsoyadvisor.com

Illinois Agricultural Legislative Day
> March 30 • Springfield, Illinois
Issues including the biodiesel tax credit and the upcoming farm bill are heating up with the spring weather in Springfield and Washington, D.C. With a new administration and ag committees, Illinois Soybean Growers (ISG) knows it is important to stay on top of issues and take action quickly.

But doing so doesn’t need to be cumbersome for farmers, especially with today’s technology.

A recent National Association of Farm Broadcasting poll reported a significant increase in the use of Twitter for agribusiness. While most agrimarketers reported favoring Facebook for business purposes in 2015, this year, 54 percent report they are now using Twitter most frequently.

If you are one of the many farmers already active on Twitter, it can be a useful platform to engage in advocacy. According to the Pew Research Center, 66 percent of social media users are politically active — that means they use sites like Twitter to post their thoughts about political issues, react to others’ postings, and encourage friends to take action on issues that matter.

Advocacy is at the center of ISG activity. Expanding use of the Voice for Soy legislative action network via social media is an obvious choice. Recently, Voice for Soy launched the new @VoiceforSoy Twitter handle so farmers and agribusiness professionals can more easily support critical issues.

Whether you are already Tweeting or prefer to advocate through the online legislative action network, Voice for Soy provides a go-to resource for information on key issues, recommendations on how to take action and a legislative contact finder.

“If you don’t advocate for your own business, who will?” says John Longley, ISG director, Advocacy Champion and farmer from Aledo, Ill. “The number of farmers is declining, and our voice matters. With just a few clicks on voiceforsoy.org, you make sure legislators and regulators hear your side.”

Make Your Voice Heard on Twitter:
Follow @VoiceForSoy

Follow @VoiceForSoy on Twitter:

- Stay up to date on important issues like the biodiesel tax credit, trade agreements and the upcoming farm bill.
- Learn what other advocates are doing in the industry.
- Make your voice heard by legislators and regulators.
Skip Laubach has led Vertec BioSolvents for two years as president and chief operating officer. The bio-based solvent formulations company provides alternative, sustainable solutions to petroleum-based solvents in coating, ink, adhesive and agricultural chemical formulations, graffiti removal, petroleum exploration and transportation and industrial cleaning applications.

Prior to joining Vertec BioSolvents, Laubach held various product management and sales leadership positions at LA-CO Industries, Nalco (an Ecolab company) and BOC Gases. He has a bachelor’s degree in biology from the University of Illinois and an MBA from Northern Illinois University. He grew up in farm country, outside of Rochelle, Ill., and now resides with his family next to a soybean field west of Elgin, Ill. He is proud to work for an Illinois business serving Illinois farmers.

**WHAT ARE THE COMPANY’S SUSTAINABILITY GOALS?**

We are focused on the core tenets of sustainability: protecting the environment, balancing a growing economy and social responsibility. Since 2000, we have been developing innovative products with bio-based formulas to provide sustainable and high-performing alternatives to petroleum-based products.

Our products are manufactured with renewable ingredients, such as corn, soy, citrus fruits and wood by-products. By using bio-based products, we reduce the negative impact of petroleum-based solvents in the environment and improve worker health and safety. Our biodegradable line of solvents breaks down into lactic acid and other organic compounds that are safely transformed in water and soil.

**WHAT ARE THE ENVIRONMENTAL BENEFITS TO USING SOY IN YOUR PRODUCTS?**

It is very important to find alternatives to petroleum-based products in industrial manufacturing and agricultural products. Renewable ingredients like soy-based esters reduce the impact of contamination in the air, soil and water, and provide a more sustainable future.

An additional benefit to using soy-derived solvents is that they are biodegradable. Soy allows us to develop products with no hazardous air pollutants. Often, petroleum-based product use will have environmental residuals that risk entering the groundwater or soil. Using soy-based products reduces the impact on air, soil and water, which is good for all of us.

**HOW CAN ILLINOIS SOYBEAN FARMERS HELP FURTHER YOUR SUSTAINABILITY MISSION?**

Soybean farmers can use our products in cleaning applications on their machinery, or as a more environmentally-friendly option to apply bio-based containing solvents in agricultural formulations to their crops for weed and pest control. By using our products, farmers can reduce their environmental impact, and they can benefit by investing in their own soy market as well.

**WHAT ARE YOUR FUTURE PLANS FOR SUSTAINABILITY EFFORTS?**

We plan to develop more bio-based products that can go into agricultural chemical formulations. In addition, we continue to develop other bio-based products for applications that also will continue to reduce negative impacts on water and soil. We plan to continue to use soy to help develop new products and reach new markets, growing the demand for soybeans.

— Skip Laubach

president and COO, Vertec BioSolvents

“**It is very important to find alternatives to petroleum-based products in industrial manufacturing and agricultural products. Renewable ingredients like soy-based esters reduce the impact of contamination in the air, soil and water, and provide a more sustainable future.”**

Skip Laubach

president and COO, Vertec BioSolvents

I am a leader

Sustainable Product Specialist

**Skip Laubach**
It pays to have the right connections.

SoybeanPremiums.org

Want to make more profit off your soybeans? Have your people connect with our people! SoybeanPremiums.org makes it easy for soybean growers to find premium programs and buyers. So take a look at the latest program opportunities in your area – food-grade, identity-preserved, non-GMO and watch your profits grow.
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