



**BETTER TOGETHER** 

## TOGETHER WE CAN IMPROVE SOYBEAN PRODUCTION

Moving the U.S. soybean industry forward can't be done by a single person or organization. It takes everyone working together, from farmers to retailers, outreach groups, researchers, cooperative extensions, Qualified State Soybean Boards and more. It's a group effort.

Funded by the soy checkoff, this initiative, aptly named "Better Together," seeks to amplify the impact of checkoff investments through effective cross-disciplinary outreach and collaboration. The primary mission of Better Together is to deliver unbiased, research-based information to enhance U.S. soybean production, making it a cornerstone resource for soybean farmers and stakeholders.

Together, we are working to maximize the dissemination and application of research-based best management practices, benefiting U.S. soybean farmers and the broader agricultural community. In order to advance our efforts, everything we do aligns to a set of guiding principles:

- Coordinate with partners producing high-quality, research-based, unbiased best management practices for U.S. soybean farmers and other stakeholders.
- Synergize existing resources to improve efficiency in content generation and delivery.
- Elevate release of timely and relevant information developed by land-grant institutions.
- Cultivate effective collaboration between outreach groups, Qualified State Soybean Boards (QSSBs), and other checkoff programs that ensures time and resources can be invested in high-impact deliverables.

- Collect meaningful metrics that can be used to adapt outreach and allow groups to be more agile in responding to new or increasing threats to U.S. soybean production.
- Secure a diversity of funding for collaborative efforts, supporting outreach mechanisms that stay nationally impactful and regionally relevant.
- Establish a high-functioning organizational structure that is built on trust and positive team dynamics to provide the foundation for a lasting, meaningful initiative.

Adhering to these principles ensures that the information and resources we provide are not only reliable but readily accessible and adaptable to meet the evolving needs of farmers.

How can you benefit from our information and resources? How can you learn more? It's all in this booklet. Think of it as a go-to guide when evaluating your operation and seeking reliable information to make the best decisions.















## EVERYONE WINS WHEN WE WORK TOGETHER

The purpose of Better Together is to exchange information and enable collaboration.

In the following folders, you will find a variety of information relating to each of the Better Together organizations:



#### **OVERVIEW**



#### **FUNDING**



#### **OUTREACH MATERIALS**



#### **TOOLS AND RESEARCH MATERIALS**



#### **CONTACT INFORMATION**



#### **WEBSITE AND SOCIAL MEDIA**

The last folder showcases proof of what we can achieve through our collaborative efforts.

### **CROP PROTECTION NETWORK**



#### DEFENDING FIELDS. PROTECTING YIELDS.

- cropprotectionnetwork.org
- Crop Protection Network
- (a) @cropprotectionnetwork\_pod
- **X** @CropNetwork
- ► Crop Protection Network
- in The Crop Protection Network

#### **Contacts**

**Quinn Zuercher**, Project Manager quinnmz@iastate.edu

**Joey Cornelis**, Program Specialist jec@iastate.edu

**Daren Mueller**, Director dsmuelle@iastate.edu





### **CROP PROTECTION NETWORK**

#### DEFENDING FIELDS. PROTECTING YIELDS.

The Crop Protection Network (CPN) is a multistate and international partnership of university and provincial extension specialists, and public and private professionals, that provides unbiased, research-based information. Their goal is to communicate relevant information to farmers and agricultural personnel to help with decisions related to protecting alfalfa, corn, cotton, small grains and soybean. CPN enhances the visibility and success of agricultural extension while providing important crop protection information to farmers, agribusiness and educators.



### CPN IS Funded by:

Cotton, Inc.

Grain Farmers of Ontario

Iowa State University IPM Program

National Corn Growers Association

North Central IPM Center

Southern IPM Center

United Soybean Board, Misc.

University of Kentucky

USDA Projects

### **OUTREACH MATERIALS**



#### Intuitive, user-friendly website

The CPN homepage was carefully developed over several years with the expertise of third-party developers in collaboration with agriculture experts from a variety of backgrounds. Today, the site is fully supported with daily updates and maintained by an experienced team of communicators to produce a comprehensive platform that addresses the needs of various agricultural sectors.





#### **Knowledge sharing**

CPN keeps extension specialists connected internally, making collaboration and outreach easier and more streamlined. Extension specialists can utilize CPN to see the reach of their publications and research with real-time analytics or collaborate with other experts from around the country to produce new contributions with a behind-the-scenes dashboard and networking tools.

#### Social media

Currently maintaining a presence on every major social media platform, the CPN social media strategy has been a key pillar in the dissemination of knowledge and research content. By leveraging various platforms, including X and Instagram, we have engaged a broad audience, encouraged community interaction, and ensured timely updates on critical topics. This approach has enhanced the reach and impact of local extension specialists, fostering a well-informed and connected community.





#### **Podcasting**

CPN has developed "I See Dead Plants," a podcast that shares the stories of people and plants, pests and pathogens, as well as the conflicts among them. Hosted by Iowa State University extension specialist Ed Zaworski, "I See Dead Plants" is a relaxing way for a broad audience to engage and stay connected with a variety of plant disease and pest management topics.

#### YouTube

CPN has developed several video-based initiatives to provide educational opportunities to a wide audience. These video resources range from short updates directly from extension experts in the field to comprehensive e-lectures that can be utilized for certified crop advisor continuing education credits. The CPN video library has been growing rapidly in 2024 and currently features over 150 videos reaching thousands of monthly viewers.



### **TOOLS AND RESEARCH MATERIALS**





#### **Yield Loss Calculator**

Our advanced calculators are designed to provide crucial economic insights into estimated crop losses from diseases and insect pests. By analyzing diverse production and pest data across various user-defined factors, these tools deliver expert estimates to inform industry agronomists, researchers, extension workers, commodity groups and funding agencies.

#### **Severity Estimation Tool**

Users can access this web tool to assist with accurately assessing disease severity and defoliation in field crops. Designed for crop scouts and researchers, this tool addresses common challenges in overestimating disease impact and defoliation. Through targeted activities and assessments, users will enhance their ability to evaluate crop health with precision, improving overall effectiveness in managing crop diseases and insect pests.



### **SCIENCE FOR SUCCESS**

**BRINGING SOYBEAN RESEARCH TO LIGHT** 





soybeanscienceforsuccess.org



@SoybeanScience1



SoybeanScienceforSuccess

#### **Contacts**

**Rachel Vann**, Program Director rachel\_vann@ncsu.edu

**Haleigh Ortmeier-Clarke**, Program Manager ortmeierclarke@ncsu.edu

**Bethany Lee**, Outreach Communications Specialist bethany\_lee@ncsu.edu



### **SCIENCE FOR SUCCESS**

#### **BRINGING SOYBEAN RESEARCH TO LIGHT**

Science for Success is a collaborative partnership that brings together extension specialists from land-grant universities across the country, representing more than 90% of U.S. soybean acres. These specialists contribute their own state-gleaned knowledge and research results to the program. As demands of the soybean industry change, the Science for Success team adapts to future challenges and provides guidance through:

- Research: Conducting multistate trials to develop research-based information for U.S. soybean farmers.
- Outreach: Delivering best management practices through a diverse range of delivery mechanisms, including webinars, videos and fact sheets.
- Mentorship: Training the next generation of agronomists through networking and mentorship. Their annual graduate student tour introduces students from across the country to different career paths within agriculture.



SFS IS Funded by:

United Soybean Board

Qualified State Soybean Boards

Federal Research Grants

> Land Grant Universities

### **OUTREACH AND RESEARCH MATERIALS**



#### Webinar series

Science for Success hosts an annual webinar series to discuss strategies farmers can utilize to adapt to new challenges, increase productivity and optimize yield. In 2024, the series explored some of the many management decisions soybean farmers face throughout the growing season. Webinar recordings can be accessed on the Science for Success YouTube channel.





#### **Educational videos**

Science for Success has embraced digital media as a means of outreach, producing both short-form and long-form video content. This approach allows them to engage with a wider audience, providing valuable insights and practical advice in an accessible format.

#### Social media

The Science for Success team is active on social media platforms like X (Twitter), where they report timely updates from field sites across the United States. Team members regularly share best management practices and engage with farmers and agricultural professionals to foster a community of learning and collaboration.





#### **Fact sheets**

Science for Success translates research findings into educational content that is directly applicable to the many decisions farmers face in their day–to–day operations. Comprehensive research summaries and topical fact sheets can be found on the Science for Success website, designed to provide easy access to valuable information for effective decision–making.

### THE SCN COALITION

HELPING SOYBEAN GROWERS TO ACTIVELY MANAGE SCN





thescncoalition.com



The SCN Coalition



@TheSCNCoalition

#### **Contacts**

**Horacio Lopez-Nicora**, The Ohio State University lopez-nicora.1@osu.edu

**Dylan Mangel**, University of Nebraska-Lincoln dylan.mangel@unl.edu

**Tristan Watson**, Louisiana State University twatson@agcenter.lsu.edu





### THE SCN COALITION

#### HELPING SOYBEAN GROWERS TO ACTIVELY MANAGE SCN

The Soybean Cyst Nematode Coalition (SCNC) is a leading organization dedicated to addressing one of the most challenging threats to soybean production — soybean cyst nematodes (SCN). This cooperative effort is crucial in the agricultural sector, especially for those invested in the cultivation and sustainability of soybean crops.

The members of the SCNC are predominantly plant pathologists who specialize in nematology and soybean crop management. Their collective expertise enables the coalition to develop and implement cutting-edge strategies for managing soybean cyst nematodes. This specialized focus allows the SCNC to stay at the forefront of research and practical solutions, offering valuable insights to the agricultural community.





North Central Soybean Research Program

United Soybean Board

Various Industry Partnerships

### **OUTREACH AND RESEARCH MATERIALS**



The core mission of The SCN Coalition is to facilitate the development and implementation of effective and sustainable management strategies to minimize the impact of SCN on soybean production. This mission underscores the coalition's commitment to both advancing scientific understanding and translating that knowledge into practical solutions for soybean growers. By focusing on sustainable management, The SCN Coalition aims to enhance the resilience of soybean crops against SCN, thereby supporting agricultural productivity and sustainability.

The SCN Coalition takes advantage of robust industry partnerships, effective brand marketing and dynamic social media outreach. These strengths enable them to maintain a high profile within the agricultural community and to effectively communicate findings and recommendations. The strategic use of social media and other marketing channels helps to raise awareness about SCN, share best practices and engage a broad audience in its mission.

The SCN Coalition plays a pivotal role in the fight against soybean cyst nematodes, leveraging the expertise of its members, the support of its funding partners and the strength of its outreach efforts to achieve its mission. Through its dedicated work, the SCN Coalition contributes significantly to the sustainability and productivity of soybean farming, ensuring that growers have the tools and knowledge they need to effectively combat this persistent threat.



#### The SCN Profit Checker

The Powered by data collected from over 25,000 university research plots, the SCN Coalition's Profit Checker tool works like a budget audit, laying bare just how much yield and money SCN is costing farmers.

The SCN Profit Checker tool is available on the SCNC website.

## SOYBEAN RESEARCH & INFORMATION NETWORK



**EMPOWERING FARMERS THROUGH RESEARCH INSIGHTS** 



soybeanresearchinfo.com



Soybean Research Information Network



@SoyResearchInfo



Soybean Research Information





## SOYBEAN RESEARCH & INFORMATION NETWORK

#### **EMPOWERING FARMERS THROUGH RESEARCH INSIGHTS**

The Soybean Research and Information Network (SRIN) is revolutionizing access to essential agricultural research and resources for soybean farmers. As a central hub for the latest findings, practical solutions and innovative technologies, SRIN is dedicated to enhancing both the productivity and sustainability of soybean farming.

SRIN's impact is multifaceted, empowering farmers to make informed decisions that positively affect crop yields and promote sustainable practices. The network excels in communicating research findings, helping farmers stay ahead of industry trends and strategically manage their operations. Moreover, SRIN fosters a sense of community among soybean farmers, creating a resilient and collaborative network.



United Soybean Board

North Central Soybean Research Program



### **OUTREACH MATERIALS**



SRIN strives to provide a comprehensive and user-friendly platform that ensures soybean farmers have easy access to the latest research and practical resources. Their website, soybeanresearchinfo.com, hosts an extensive repository of information, featuring cutting-edge innovations and real-world solutions, particularly focusing on effective pest and disease management while promoting best practices among farmers.

Key benefits for soybean farmers:

- Ease of Access: Quickly locate essential information without the hassle of navigating multiple sources.
- Comprehensive Information: Explore a wide range of topics that support a holistic understanding of soybean farming.
- · Up-to-Date Research: Regular updates ensure the latest findings are always accessible.
- Expert Insights: Collaborative partnerships enrich the quality of available information.

SRIN primarily serves soybean farmers, extension agents and agricultural professionals. They actively engage collaborative partners to facilitate knowledge exchange, benefiting the broader soybean farming community.



#### E-newsletter

A key initiative that exemplifies SRIN's dedication to resource accessibility is the newly launched monthly e-newsletter. Featuring contributions from GROW, SRIN, the Crop Protection Network and Science for Success, this e-newsletter consolidates a wealth of research resources into a single platform. It enables SRIN to reach a broader audience, including extension agents, agronomists, and farmers, ensuring that valuable insights and updates are delivered directly to those who can benefit most.

The e-newsletter provides a streamlined way for stakeholders to stay informed about the latest developments in soybean research and innovation. By receiving this curated content, farmers and agricultural professionals can easily access the most relevant and up-to-date information, fostering informed decision-making and encouraging the adoption of best practices.

### **GROW**

NO SEEDS. NO WEEDS.



growiwm.org



GROW IWM



@grow.iwm



@GetRidOfWeeds



GROW IWM



GROW (Getting Rid of Weeds)



#### Contacts

**Michael Flessner**, Virginia Tech flessner@vt.edu

**Steven Mirsky**, USDA-ARS steven.mirsky@usda.gov

**Emily Unglesbee**, Virginia Tech emilysu@vt.edu

**Mark VanGessel**, University of Delaware mjv@udel.edu





### **GROW (GETTING RID OF WEEDS)**

NO SEEDS. NO WEEDS.

GROW (Getting Rid of Weeds) is a scientist-led organization working to help farmers adopt integrated weed management practices to help stem the growing epidemic of herbicide-resistant weeds. This national network of more than 30 university and USDA weed scientists, weed ecologists, and communications professionals are coordinating research and outreach on new weed control tactics, namely cover crops, harvest weed seed control (such as seed impact mills and chaff lining), and precision weed management technology.



USDA Area-Wide Management of Agricultural Pests

USDA NIFA

United Soybean Board

Bayer



### **OVERVIEW (CONT'D)**



The GROW website (www.growiwm.org) aims to be a resource on ALL integrated weed management developments in the industry, both chemical and non-chemical, with the goal of providing farmers and the crop-advising industry with a vetted, trusted toolkit of options to manage weeds more sustainably.

#### Visit the GROW website to find the following and more:

- The weekly news page provides timely updates on research and developments in new weed management tactics from across the country.
- GROW Farmer Forums are a webinar series inviting farmers to lead educational sessions on new weed management systems that they have experimented with and mastered.
- The GROW Weed ID Library not only helps identify weeds but also provides details on management of major weed species around the country.

 The Weed Management Toolbox has educational webpages and resources on the primary weed management

tactics available today.

 Herbicide Resistance pages provide a detailed overview of the basics of herbicide resistance and how to manage it with integrated weed management.

- Cover Crop Management and Termination pages detail the weed suppression potential of this increasingly popular farming practice.
- Integrated Weed Management pages introduce readers to the future of weed control: integrated programs of both chemical and non-chemical tactics, which target weeds throughout the growing season and never rely on a single tactic or mode of action.



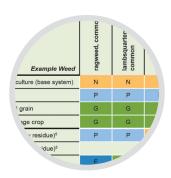
- The GROW Weed Management Planner charts help farmers quickly sort through how common weed and crop management tactics affect the individual weed species on their farm.
- The GROW YouTube channel is full of videos featuring innovative farmers, new IWM research and the latest in precision weed technology.

### **OUTREACH MATERIALS**



#### **GROW Weed Management Planner**

GROW's Weed Management Planner is designed to help farmers sort through many different weed control tactics, both chemical and non-chemical, quickly and comprehensively. The planner consists of two charts — one devoted to preplanting options, the other to post-planting. Both charts detail the effect common crop and weed management tactics have on each individual weed throughout the growing season.





Farmers can simply find their problem weed and quickly scan through the efficacy ratings of a long list of management options, including:

- Crop Rotation
- Planting Date & Methods
- Cover Crop Use
- · Fertility Practices
- Tillage and Cultivation
- · Chemical Use

Efficacy ratings range from detrimental (D) to no effect (N), poor (P), fair (F), good (G) and excellent (E).

"Integrated weed management is complicated because every change a farmer makes to their production system has a ripple effect on everything else in the system," explains Dr. Michael Flessner, Virginia Tech weed specialist. "These tables allow farmers to easily glance through many tactics to see options that can be added to their operation, as well as tactics to avoid that might make the weed problem worse."



The goal is to help farmers manage the growing need to supplement their herbicide use.

"As many extension specialists have said for years, herbicide resistance is outpacing new herbicide commercialization," Flessner says. "I hope that farmers can use this as a quick reference to improve use of non-chemical weed control measures to complement herbicides."

### **OUTREACH MATERIALS (CONT'D)**



The Weed Management Planner represents two years of work by a group of weed scientists in the mid-Atlantic from Virginia Tech, Penn State, Rutgers, West Virginia University, Delaware University and Maryland University. The group first conceived of the planner during an annual meeting to update the mid-Atlantic Weed Management Guide, which — while full of valuable information — packs over 100 pages of texts, charts and graphics.

Dr. Mark VanGessel, of the University of Delaware, pitched the idea of a guide that zoomed in on non-chemical options, and the group quickly agreed that a quick-reference chart would be a welcome resource for the fast-moving farming community.

The Weed Management Planner is currently focused on common weeds in the mid-Atlantic region, but should be a useful reference for growers in other regions with similar weed spectrums and crop production practices, such as the Midwest. Plus, each weed is categorized by its growing characteristics, such as perennial or annual, vining or upright, small seed or large seed — a brainchild of Dr. John Wallace at Penn State. "Since these key attributes of the weeds really drive the efficacy ratings, this addition allows the table to be used for weeds that are not specifically listed," Flessner notes.

The group also hopes that the format and approach of the Weed Management Planner will ultimately be adopted by scientists in different regions.

"While creating the table, we looked for other examples from other regions and didn't find any," Flessner recalls. "A comment was made during our lengthy debates that we now know why no one has made this kind of reference before — because it is really hard to do! And like most things in agriculture, it is regionally specific. So, we hope that by creating this example for the mid-Atlantic region, other regions can leverage the formatting and approach to create similar versions for their farmers."





Scan here to get the GROW Weed Management Planner

### TAKE ACTION

SEIZE CONTROL OF HERBICIDE RESISTANCE





iwilltakeaction.com



Take Action: Pesticide Resistance Management



@TakeActionWeeds

#### Contacts

**Bill Johnson**, Purdue University wgj@purdue.edu

**Sarah Lancaster**, Kansas State University slancaster@ksu.edu

**Christy Sprague**, Michigan State University sprague1@msu.edu

**Rodrigo Werle**, University of Wisconsin rwerle@wisc.edu





### TAKE ACTION

#### SEIZE CONTROL OF HERBICIDE RESISTANCE

Take Action Herbicide–Resistance Management is a farmer–focused education platform designed to help farmers manage herbicide resistance and encourage them to adopt management practices that help preserve current and future herbicide technologies.

Take Action started as a collaboration between several Midwest weed extension specialists who were concerned about the mixed messaging taking place around the growing threat of herbicide–resistant weeds. This effort was funded by the United Soybean Board and endorsed by representatives from major ag chemical companies, the Weed Science Society of America, and several other commodity groups, including corn, cotton, sorghum, and wheat. Currently, the group is led each year by between six and 15 weed extension specialists from the primary soybean growing regions of the U.S.

The goal of the organization has been to provide a unified message for weed management recommendations from extension specialists.

Take Action's four areas of focus are:

- Herbicides
- · Weed biology
- Cultural practices
- · Economics



United Soybean Board

### **OUTREACH MATERIALS**





#### Take Action Herbicide Classification Chart

The Take Action Herbicide Classification Chart is the flagship product of the Take Action research group. Created and maintained by Michigan State weed scientist Christy Sprague, the chart is updated annually and designed to help farmers sort through commercially available herbicide products and determine their modes of action quickly and efficiently.

The chart groups herbicides and herbicide premixes by their modes of action, which are organized by group number (0 to 29). Checking their herbicide program against the chart can help farmers rotate among effective herbicides with different sites of action to delay the development of herbicide resistance.

Every year, thousands of Herbicide Classification Charts are distributed at farmer meetings, conferences and educational events.



Scan here to get the Herbicide Classification Chart



#### **Educational webinars**

These webinars cover new research and developments in current and future weed management technologies.

#### Weed fact sheets

These fact sheets detail the biology and best management practices for common herbicide–resistant weeds.



### **COLLABORATION EFFORTS**

WHAT WE CAN DO WHEN WE WORK TOGETHER



# Contact Haleigh Ortmeier-Clarke, Program Manager ortmeierclarke@ncsu.edu

### **BEAN BINOCULARS**



## WHAT WE CAN DO WHEN WE WORK TOGETHER

A digital database funded by the soy checkoff and fueled by extension specialists from the Better Together collaborative, Bean Binoculars tracks soybean issues from across the country in real time. The interactive map includes entries describing soybean production issues, paired with high-quality photos and research-based management recommendations that can help farmers be aware of potential issues and act to reduce potential impacts on their own crops. Entries are submitted as issues arise by extension specialists in each state.



#### Bean Binoculars can help:

- · Keep farmers up to date on regional and national soybean issues
- Elevate research-based information from trusted sources
- · Catalog soybean issues into a comprehensive online database

Taking the time to document soybean issues and pairing them with high-quality photos that can be interacted with at any time can broaden the impact for a variety of soybean stakeholders. "We believe there's educational value in releasing a map like this," said Rachel Vann, program leader for Better Together. "For students, future crop consultants, future farmers and extension agents."



Scan here to view the Bean Binoculars Interactive Map



Funded by the soy checkoff

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