



RESEARCH CENTER FOR FARMING INNOVATION

2020-2021 FIELD REPORT

Dear farmer and soybean industry stakeholder:

Every growing season presents new opportunities for Iowa soybean farmers. The key is making the most of them. Whether a current or prospective participant in the Iowa Soybean Association's Research Center for Farming Innovation (RCFI), we value the opportunity to be a trusted partner in your soybean operation.

We take this responsibility to heart. RCFI is driven to deliver unbiased, innovative and data-driven expertise funded by farmers for farmers. As you'll note in this annual report, RCFI's approach and results are unrivaled in the industry. Our goal: to make your farm more productive, profitable and sustainable right now and for the generations to follow in your footsteps.

ISA's approach to agronomic and conservation research is constantly evolving – from the pests and diseases we monitor and the on-farm trials we conduct to the in-field and edge-of-field conservation practices we advocate that enhance air, water and soil quality.

What stands firm is RCFI's purpose-driven mission: to work hand-in-hand with farmers to increase their production, profitability, and sustainability. Our team of researchers, agronomists, technicians, analysts and field specialists glean insights learned from hundreds of trials conducted on farms located throughout Iowa. This unbiased, real-world data then goes to work to help farmers make the most of every acre planted to soybeans. Many examples of this farmer-focused work is referenced in this report.

To those involved in our work, thank you for the confidence you have placed in RCFI. I trust that your engagement has benefited your operation and look forward to continuing to work with you to the betterment of your operation and the industry.

For those just learning about RCFI, I invite you to sample what we have to offer. Start small and grow with us. Along the way, you'll gain a greater understanding of what RCFI can provide to enhance your productivity, profitability and resiliency.

Looking to the future, we recognize all that we have endured recently – from a global pandemic and trade wars to the devastation caused by the most destructive storm to ever strike Iowa. The RCFI, with the help of our family of farmers and partnering organizations, achieved tremendous results, including many featured in this report.

Every growing season is precious. Every farm is different. Every acre is unique. The RCFI team is ready to go to work with you, side by side, to make the most of the opportunity that accompanies every growing season.

Wishing you much success,



Jeff Jorgenson,
ISA President



WHO WE ARE

The Iowa Soybean Association's Research Center for Farming Innovation (RCFI) is driven to deliver innovative research, tools, and technical support to assist farmers when considering big picture management decisions for short- and long-term sustainability and profitability. We know that no two farms are alike. As a credible, trustworthy, and reliable resource for farmers, our team works at the intersection of cropping system solutions, data and spatial science analytics, and outcome-based natural resource management. We actively engage farmers by developing systems and practices to help maximize overall operation, one acre at a time!

Mission: Engage Iowa farmers through research and innovation to increase their productivity, profitability, and sustainability.

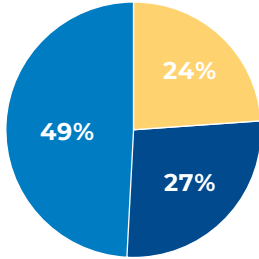
Vision: Recognized leader in expanding research and innovation opportunities with farmers to strengthen Iowa agriculture.



Financial Review

Year Ending September 30, 2020

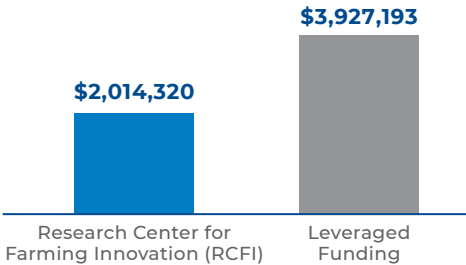
Checkoff Funding



- Research Coordination
- Contract Research
- Research Center for Farming Innovation

Total: \$4,149,516

Leveraged Funding

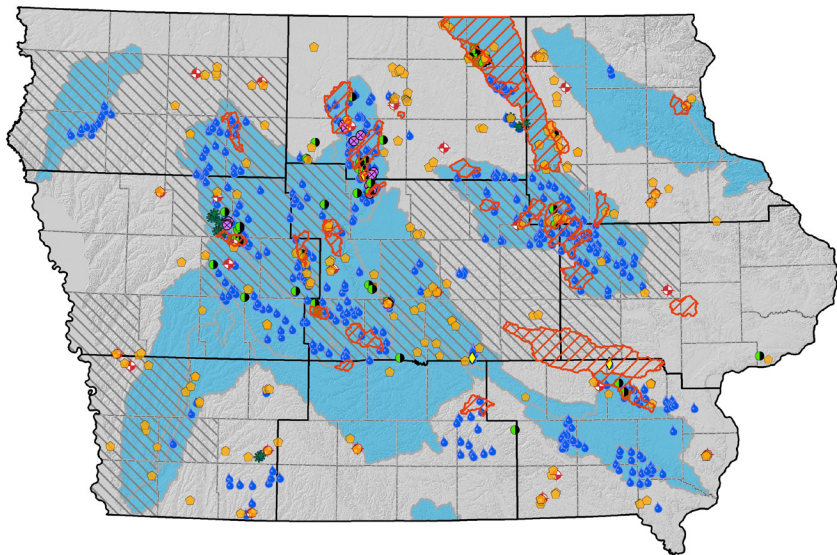


The RCFI leverages non-checkoff funding resources at levels as high as 2 times.

It is critical that soybean checkoff dollars are fully utilized to help increase the productivity, profitability, and sustainability of soybean farmers. The ISA Research Center for Farming Innovation (RCFI) is dedicated to this mission by conducting basic and applied farmer-focused research. Our internal research programs and projects (RCFI) complement university-based contract research projects and also leverage non-checkoff funding resources at levels as high as 2 times. Company partnerships, state, federal, and private grants/contracts help support the ISA Research Center and advance its program. The Center has a large portfolio of integrated and innovative projects with broad areas of research focused on soil health, water quality, cropping systems, and analytics.

RESEARCH PROJECT MAP

- ◆ Replicated Strip Trials = 219
- * Soybean Quality Mapping = 11
- ⊕ Nitrogen Balance Analysis = 45
- ◇ Crop Systems Modeling = 4
- Bioreactors = 51
- Saturated Buffers = 26
- ⊗ Oxbow Restorations = 23
- 💧 Water Monitoring = 585
- ☒ Ag Retailer Conservation Partnership = 31
- ▨ Watershed Plans = 31
- Priority Watersheds = 31



PRIORITIES



Research Highlights

- Cover Crops for Improved Soil Health and Water Quality
- Interactive online agronomic decision making applications
- Cover Crop Business Project Update
- ISA Data-Driven Simulation Tools: Reducing Costs and Improving Management
- Cover Crop Termination and Relay Crop Trials
- ISA's Water Monitoring Lab
- Watershed Planning: The Long-Term Value
- Manure management
- Drainage Water Recycling Research
- Online Decision Tools for Soil Health & Cover Crops
- Adaption and Resilience in Nitrogen Fertilizer Management

Advisors and Partners

Thank you for your support!

ISA's Research Center for Farming Innovation collaborates with Federal and State agencies, County SWCDs, Universities, ag retail, cooperatives, private industry, and non-profit organizations.

ISA – 2020-21 RCFI Advisory Council

Jeff Frank, Chair
Chris Gaesser
Brent Swart
Tom Adam
Dave Walton
Dave Struthers
Mark Schleisman
Sheila Hebenstreit
Randy Miller
Marty Danzer
Klint Bissell
Aimee Bissell

ISA – 2020-21 Supply Committee

Staff: Dr. Ed Anderson
Jeff Frank, Chair
Chuck White, Vice Chair
Robb Ewoldt
Rick Juchems
Morey Hill
Tom Vincent
Tim Bardole
Brent Renner
Casey Schlichting
Marty Danzer
Warren Bachman
Brian Kemp,
ASA ex-officio
Stan Nelson,
ICGA
Dean Dan Robison,
*ISU College of Ag & Life Sciences,
ex-officio*





When you consider any management change, you must look at all of the variables, from inputs to time to costs. But visuals don't always equal success. Verification is key when you test these things out. I can map things out and do some testing on my own, but I value the analysis of the data and the extra scouting from ISA. That third-party verification of what I am looking at is valuable.

– AJ Blair, Dayton

New in 2021 and Beyond

- Over the last 20 years, ISA, through its On-Farm Network and Environmental Programs & Services, has invested in and actively conducted projects and programs with farmers as active participants. This work generated locally relevant projects with data and information about how cropping systems perform, impacts on natural resources and enhanced the long-term sustainability of our soybean farmers.
- In 2020, ISA consolidated its internal research programs into the ISA Research Center for Farming Innovation (RCFI). In 2021, Center staff are developing four regional roadmaps for holistic on-farm research programming across Iowa. These roadmaps are designed to be geographically explicit, inventorying the status of soybean cropping and related farming systems, characterizing the unique geophysical attributes and other supporting systems, and provide farmers unique practical research apps.
- The thrust of the roadmaps is forward focused - prioritizing opportunities, working actively to engage more farmers across more acres with continuous improvement thereby helping our farmers become more profitable, productive, and sustainable.
- Throughout the year, RCFI staff will be sharing program roadmap information from its assessments and discussing challenges and opportunities that can be acted upon locally. Meetings will also be held, forging new collaborations, and launching new strategic initiatives.

Value for Iowa Farmers

- If RCFI has a bias – it is that its farmer driven, farmer focused. Staff share desire and passion for agriculture.
 - RCFI works to bring cutting edge science and data informing farmers about cropping systems and practice improvements. Equipping them with ability to consider whether a practice fits into their operation. Will the practice be advantageous? Are the benefits of the practice observable and what outcomes may be beneficial verses the costs? And how will new practices impact their other practices?
- RCFI ...
- helps farmers address long term stewardship and drives continuous improvement.
 - works to address farmers' desire for return on investment.
 - works with farmers finding solutions that perform and deliver value.
 - helps tell the farmer story to broader public about how agriculture is becoming more sustainable in feeding and fueling the world.



I am driven to deliver healthy soils and clean water through continuous improvement. The Iowa Soybean Association's Research Center for Farming Innovation helps me do just that. I encourage every soybean farmer in Iowa to get involved and realize the direct benefit that involvement can have on your operation. ”

– **Aimee Bissell,
Bedford**



Engage with RCFI

We work in partnership with farmers helping them:

GET STARTED with using efficient and productive cropping systems and for farmers further along, assist in continuing to refine their systems so yield and profits are more consistent year in and year out.

ASSESS RISK FACTORS when considering new practices.

EVALUATE OUTCOMES from management including impacts on natural resources.

SUPPORT DECISION-MAKING processes to finding practices and systems that work in their specific settings.

IMPROVE STEWARDSHIP on your farm with information and support on integrating practices that address natural resource opportunities.

PROVIDE ADVICE AND CONNECTIONS with agencies and private sector programs that share costs or pay for ecosystem services, as well as other farmers who are also working to be successful and with a team of staff with expertise in Agronomy, Engineering, Data and Spatial Analytics, and Natural Resource Management.

WORK WITH US

Fill out our interest form to let us know what trials or projects interest you. We'll work with you and provide information that can help your farm be more profitable and productive.

iasoybeans.com/research/work-with-us

CONTACT

Contact one of our expert staff members to help you find what you are interested in with agronomy, conservation and technology.

iasoybeans.com/contactRCFI

For other inquiries, contact Kristen Dearden, Customer Service Coordinator at kdearden@iasoybeans.com or (515) 334-1482.