EASTERN REGION SOYBEAN BOARD ANNUAL REPORT

FISCAL YEAR 2020

OUR SOY CHECKOFF

Here's How the Soy Checkoff Works

The national soy checkoff was created as part of the 1990 Farm Bill. The Federal Act & Order that created the soy checkoff requires that all soybean farmers pay into the soy checkoff at the first point of sale of the soybeans. These funds are then used for promotion, research and education at both the state and national level.



Led by volunteer soybean farmers, the United Soybean Board and the Eastern Region Soybean Board invest and leverage soy checkoff dollars to MAXIMIZE PROFIT OPPORTUNITIES for all U.S. soybean farmers.

West Virginia Farmer Represents Eastern Region on United Soybean Board

Jefferson County, West Virginia, farmer Nick Kercheval is a successful soybean producer. He has grown soybeans on his farm in Harpers Ferry for the past 40 years and has contributed to the soybean checkoff since the assessment program was approved by Congress in 1990. Now that he's one of the volunteer farmer/leaders serving on the Eastern Region Soybean Board, and representing farmers on a national level as a director of the United Soybean Board (USB), he's gotten a first-hand, behind-the-scenes look at the work the checkoff is doing in support of soybean producers.

"It's an honor and a great opportunity to represent the soybean producers in the Eastern Region," says Kercheval. But, he admits, it's also a big responsibility.

"Ultimately our responsibility is to oversee the checkoff money that all of us as soybean farmers contribute to the checkoff," he says. "It's making sure that those funds are spent in an efficient, positive, responsible manner. I'd like farmers to know that they are getting a great return on their money. Every Board member is a farmer, a soybean producer. This is not someone else's money. This is our money as well, so we are vested in this. The entire Board feels it is their responsibility to manage the funds wisely and carefully.

"The Board has farmers of all sizes," he continues. "We share a common thread although we may approach things in a different way. There is no snobbery or hierarchy because of size. We're all equal on this Board. Every USB director is a farmer, and the time they devote to USB shows their dedication not just to the Board, but to all the soybean farmers."

The USB directors are divided into subcommittees that invest and leverage checkoff funds to build preference for U.S. soy by addressing and meeting end-users' needs specifically on three key areas meal, oil and sustainability. Checkoff funds are used to implement



Nick Kercheval

want farmers to know that they get a good bang for their buck," he continues, citing a recent survey that showed U.S. soybean farmers received \$12.34 in added value for every dollar invested in the soy checkoff over the last five years.

"If anyone in the Eastern Region wants more information on the checkoff, just shoot me an email at nickkercheval@outlook.com and I will respond to you," he says. "And if I don't know the answer, I will find out. I feel it's my responsibility to represent the soybean producers. It's farmers and their money that I'm representing."

consumer information, and industry information designed to strengthen the soybean industry's position in the marketplace. Funds are also used to maintain and expand existing domestic and foreign markets and to develop new markets and uses for soybeans and soybean products. Kercheval serves on the oil supply subcommittee. "We

promotion, research,

supply subcommittee. "We receive funding requests from universities and businesses on research and other projects. It's our job to evaluate the proposals and fund those that we feel will have a good return on investment," he says. "I

What is the Eastern Region Soybean Board?

The Eastern Region Soybean Board (ERSB) is the farmercontrolled Qualified State Soybean Board responsible for managing the West Virginia, Florida and New England states' share of funds received from the nationwide soybean checkoff program.

The mission of the Board is to invest checkoff resources to advance soybeans in the Eastern Region, enhance sustainability, and provide opportunities for Eastern Region soybean growers. This annual report outlines the projects and initiatives funded by the checkoff in the Eastern Region in Fiscal Year 2020.

In order to maximize funds available for projects and to reduce overhead costs, the ERSB participates in a sharedexecutive arrangement with the Pennsylvania Soybean Board.

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Eastern Region Soybean Board Adopts New Strategic Plan

STRATEGIC PLAN

A new strategic plan that charts the future course of the Eastern Region Soybean Board was adopted by the farmer/leaders of the Board at its February 2020 meeting. The strategic plan will guide the Board as it considers checkoff-funded research priorities, educational opportunities, outreach and other projects.

STRATEGIC OBJECTIVES

- 1. Preserve and advance animal agriculture, the largest consumer of soybean meal
- 2. Promote biofuels and bioheat through partnering opportunities
- 3. Identify and promote sustainable practices that provide ROI
- 4. Drive new innovations to increase the value of soy
- 5. Increase the understanding of soy

The Board's internal priorities for meeting these objections will be accomplished through education, future focus, partnering and collaboration, and stewardship.

The road map for determining how to invest checkoff dollars will be determined by:

- 1. Addressing key needs of all our audiences and stakeholders
- 2. Exploring "outside the box" new varieties, uses and markets, ag and food issues, and reaching the next generation
- 3. Seeking out new opportunities, collaborating with other state checkoffs and farming organizations
- 4. Practices for economic and ecological sustainability, success planning

ANNUAL FINANCIAL REPORT

Fiscal Year 10.1.19 to 9.30.20

CASH ASSETS:

Operating Funds	\$124,722
Emergency Preparedness Fund	\$87,570
Dissolution Fund	\$53,073
Equipment	-
Less: Liabilities	-
Net Assets at 9.30.20	\$265,365
REVENUE:	
Assessment Income	\$56,116
Less: Assessments Paid to USB & QSSB's	\$(32,407)
Interest/Other Revenue	\$3,464
PROGRAM EXPENSES:	
Communications	\$(15,064)
Promotion & Education	\$(12,279)
Research	\$(31,282)
Administration/Audits/ Compliance/Insurance/Other	\$(15,594)
Increase/(Decrease) in Net Assets	\$(47,046)

Soy checkoff provides return on farmer investments

An independent, third-party study found that soy checkoff investments provided added value to soybean producers, even in recent down-market times.

According to a recent independent economic study, the soy checkoff continues to translate farmer investments into significant benefits for U.S. soybean farmers. The results of the 2019 return-on-investment (ROI) study, which is required by the U.S. Department of Agriculture, found that U.S. soybean farmers received \$12.34 in added value for every dollar they invested in the soy checkoff.

The ROI study analyzed the demand-and supplyenhancing activities funded by the soy checkoff between 2014 and 2018. The study was conducted by Dr. Harry Kaiser, a leading research expert at Cornell University in the field of agricultural economics and its application to commodity checkoff programs.

"The study finds that USB's activities have had a positive and significant impact on soybean demand between 2014 and 2018," Dr. Kaiser said.

Key findings included:

- U.S. soybean farmers received \$12.34 in added value for every dollar they invested in the soy checkoff over the last five years.
- Every dollar U.S. soybean farmers invested in international promotion activities produced \$17.95 in return value.
- Soy checkoff investments made toward demandenhancing research and promotion returned an average value of \$18.18.
- Collaborative soy checkoff investments in production research that leverage industry and academic partners continue to provide promising returns to U.S. soybean farmers, returning an average value of \$9.42.

These estimates were reached using econometric models of domestic and international soybean markets that allowed the research team to net out the impacts of other important factors — such as other crops, substitute commodities, income, exchange rates and economic conditions in importing countries — to determine the estimated impact of the soy checkoff's work and investments.



\$12.34 IN ADDED VALUE FOR EVERY \$1 INVESTED



CHECKOFF WORKING FOR YOU

The results of a 2019 independent economic study, which is required by USDA and takes place every five years, found that between 2014 and 2018, U.S. soybean farmers received \$12.34 in added value for every dollar they invested in the soy checkoff.

PRODUCTION RESEARCH

Impact of Cover Crops and Double Cropping on Soybean Yield and Profitability

University of Florida

Improving productivity and profitability through sustainable means of production is one of the challenges that producers in the Eastern Region face amid weather extremes and limited resources. Use of cover crops to enhance soil health and benefit the following crop is gaining importance.

In a research project funded by the Eastern

Region Soybean Board, Dr. David Wright, lead researcher, examined the use of cover crop to improve soybean productivity and soil health by comparing soybean yield and performance with and without a prior cover crop. A crop rotation including winter Brassica carinata (carinata), winter oats and a corn-soybean summer rotation was established with enough plots to represent all winter and summer crops in a given year.

Soybeans were produced under three trial conditions: following winter carinata, following winter oats and following winter fallow. To evaluate the performance in each of the three trial conditions, soybean yields, oil quality and quantity are being measured and compared.

The trial plots were scouted for insect pests and common diseases of soybean. There are normally high populations of corn earworms and stinkbugs in late August and early September, but populations were not as high as in many years in any of the systems.

Weed diversity in each of the soybean plots was

estimated. Very little differences in weeds were noted between the three systems.

In the two trial conditions with cover crops, the nutrient benefits from carinata and oats to the following soybean crop are being assessed. Putting a brassica winter crop provides the benefit of both a cover crop and a winter cash crop. Carinata provides all the benefits of a cover crop: it returns biomass to the soil. reduces nutrient runoff. improves soil moisture and improves soil characteristics as compared to fallow. Further, carinata seed has a market for drop-in renewable fuel and as a high protein feed supplement. So unlike other cover crops, it gives returns to the farmer

in the form of an additional off-season income, while building soil health.

Soybean is better suited to a rotation with carinata as compared to corn, cotton or peanuts based on data so far, due to the timing of soybean planting. Moreover, inputs were not different in the three treatments.

Dr. Wright and his team at the University of Florida are currently analyzing the data from the 2020 harvest. Yields from the season will provide insight into the productivity of the different systems being compared. Final results will also provide information on soil health status, nematodes, and nutrient leaching potential of the three systems being compared.



PRODUCTION RESEARCH

Developing Soybean Production Practices that Maximize Yield & Enhance Environmental Stewardship in Northern Climates

University of Vermont

Due to extended periods of low milk prices and high input costs, many farmers in the Northeast are looking for ways to increase on-farm feed production and diversify their operations to increase profitability. However, due to the relatively short growing season, soybeans have not been a crop of major focus for yield or quality research.

"To overcome these economic and environmental challenges, farmers need region-specific agronomic information to maximize soybean yields while minimizing environmental impacts," says Dr. Heather Darby, University of Vermont, lead researcher on the project.

Understanding how crops are impacted by varying planting dates can help producers make important management decisions. With a growing concern of agriculturally related water quality implications in Vermont waterways, farmers are now required in some instances to cover crop their annually cropped fields. However, with this increase in cover cropping there is a need to investigate potential impacts on following cash crops and best practices for establishing cover crops into and following soybeans.

Similarly, with the concerted effort to reduce nutrient loading in waterways due to soil erosion, farmers are becoming more interested in adopting reduced and no-till practices. Understanding how to best combine these two practices into soybean cropping systems specifically for the Northeast is critical to the success of soybean crops in the region.

This year, the researchers initiated several soybean trials at Borderview Research Farm in Alburgh, Vermont. These trials included a conventional variety trial, a planting date trial, and a cover crop trial in which soybeans follow fall planted cover crops under varying tillage regimes.

Objective 1: Provide up-todate information on soybean varieties that produce maximum yields in the far North.

The variety trial included 23 varieties from three different seed companies spanning maturity groups 0.90 to 2.1. Throughout the season the trials were inspected for insect and disease issues. However, due to extremely hot and dry conditions, very little disease and insect pressure was seen. The trials will be evaluated for populations, yield, quality.

Objective 2: Determine the impact of planting date on soybean yield and quality.

The planting date trial included two varieties, one early and one mid-group 1 maturity, planted approximately weekly from mid-May through mid-June. After the planting of four planting dates, an error was made in herbicide application which severely impacted some of the planting dates. Therefore, weekly planting was continued until July 8.

One of the goals of this planting date study was to determine how late soybeans can be planted in Vermont while still reaching maturity and producing adequate yields. Although the trial this year did not have the exact treatments the researchers anticipated, they will have later planting dates than usual to help understand how late is too late to plant in Vermont.

In addition, the researchers wanted to determine how soybeans respond to shifting planting dates in terms of other characteristics such as pest and disease pressure. In a planting date study in



sunflowers, they found that shifting planting dates can be a tool for farmers to avoid certain insect or bird pest pressures.

Objective 3: Investigate cover cropping termination strategies for soybean production systems that maximize yield, protect soil health, and minimize pest and disease pressure.

In the fall of 2019, 10 cover crop treatments were planted at Borderview Research Farm. Four of the treatments included an overwintering species (red clover, winter



rye, or hairy vetch) and were intended to provide both fall and spring living soil coverage. The other treatments included species that regularly winterkill (oats, annual ryegrass, and tillage radish) in the region and were intended to provide living fall coverage and winterkilled spring coverage. There was also a control treatment in which no cover crop was planted.

In October 2019, biomass was collected in all plots and dried to determine dry matter content and yield. In the spring of 2020, ground cover was assessed in all plots to capture ground cover from both living and winterkilled cover crop residue. Cover crop height was also measured at that time. Biomass was collected in each plot with living residue only in May in the plow, pre-spray, and post-spray treatment blocks respectively. Soil health samples were also collected in each plot.

The oat cover crop had the highest fall biomass and the winter rye had the highest spring biomass. These data are being statistically analyzed and quality analyses of nutrient content are being performed.

Cover crop residue was incorporated into the soil in the plow block with disc harrows and the soil finished for planting with a spiketooth harrow on May 9. In the pre-spray block, cover crops were terminated using an application of Roundup[®] herbicide. Finally, cover crops were terminated with a post-planting application of Roundup[®] on May 20.

Soybeans were planted in all plots on May 22 at a rate of 185,000 seeds ac-1, treated with soybean inoculant, and planted with 5 gal. ac-1 9-18-9 liquid starter fertilizer. To understand the nutrient release rates of the different cover crop treatments and how this is impacted by termination method, soil nitrate content was assessed in each plot prior to termination and biweekly following termination and planting. These analyses are underway.

Soil temperature and moisture were also measured weekly in all plots to understand differences between cover crop and tillage treatments. The soybeans were also scouted for slug damage to investigate differences between residue levels and potential slug harboring habitat between termination methods and cover crop treatments. These data are being statistically analyzed.

"As more producers in the region look for additional crops to diversify their operations, we hope to provide this type of additional management information to farmers in order to increase the number of soybean producers in the region, "says Dr. Darby. "At the conclusion of our season research reports will be available through our website at uvm.edu/extension/nwcrops."



BRINGING RESEARCH FINDINGS TO FARMERS

The findings from the research projects the soy checkoff invests in at the national and state levels can now be found on the Soybean Research & Information Network (SRIN) website.

The Soybean Research & Information Network is designed for farmers to read about all the benefits of checkoff-funded research projects. Videos summarizing the research are available as well.

- Read summaries and highlights of the latest research
- Discover resources and publications
- Explore topics including agronomics, diseases, and pests

Each article on the SRIN website provides insight and explanation on the research findings and links directly to the study in the research database for further exploration. Projects have sought to combat all sorts of challenges, from obstacles associated with unpredictable weather patterns to insect management and variety performance.





BIODIESEL HEATS UP THE MARKET

Biodiesel is an important component of the soybean market and is one of the key strategic areas of focus for the Eastern Region Soybean Board. It's estimated that as much as a quarter of U.S. soybean oil is used for biofuels and Bioheat[®].

Over 5 million U.S. households, primarily in the Northeast, warm their homes with heating oil. Biodiesel advocates see opportunities to become an increasing part of that mix with Bioheat, a blend of biodiesel and ultralow sulfur heating oil.

Biodiesel works for the U.S., for the country's rural economies, soybean farmers, and poultry and livestock farmers. Biodiesel production supports animal agriculture because soybeans can be crushed for both oil and meal. More demand for soybean oil to make biodiesel increases the supply of soybean meal that can be used to make animal feed, and that increased supply leads to lower feed prices for poultry and livestock producers.



For more information on the Eastern Region Soybean Board, visit us at easternregionsoy.org. **Contact us at:** Eastern Region Soybean Board 2215 Forest Hills Drive, Suite 40 Harrisburg, PA 17112

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