

EASTERN REGION SOYBEAN BOARD

ANNUAL REPORT & RESEARCH SUMMARY 2024

WHAT IS THE EASTERN REGION SOYBEAN BOARD?

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.

The Eastern Region Soybean Board (ERSB) is the farmer controlled Qualified State Soybean Board responsible for managing the West Virginia, Florida and New England states' share of funds received from the soybean checkoff program. In order to maximize funds available for projects and to reduce overhead costs, the ERSB participates in a shared executive arrangement with the Pennsylvania Soybean Board.

Contact us at:

Eastern Region Soybean Board

2215 Forest Hills Drive, Suite 40
Harrisburg, PA 17112

Jennifer Reed-Harry,
Executive Director
(717) 651-5922
jrharry@pennag.com

easternregionsoy.org

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Nick Kercheval

LOOKING FORWARD

With the drought in the Mid-Atlantic and Southern regions, slugs in West Virginia, and low soybean prices throughout, soybean farmers have faced numerous challenges in 2024. Despite this, some positive changes were seen this year that will impact the future of the soybean industry.

Announced last December, the United Soybean Board underwent a transition in leadership with Lucas Lentsch stepping in as CEO. The USB also appointed a new CEO management team who all come with their own areas of expertise, and were chosen to bring greater transparency, efficiency and accountability to the industry.

Most recently announced, Philip Good will serve as the next USB Chair. With his many years of experience on the Executive Committee and his two years as treasurer, he will be an excellent Chair. The new executive committee is a combination of experienced members and new members that show great promise as leaders. Please read about the checkoff ROI report recently published by USB. It provides great detail on how the checkoff dollars are spent and its impact on the industry.

On the research front Heather Darby, an Agronomic and Soil Specialist from the University of Vermont, continues to do great research on no-till and cover crops, particularly beneficial for the New England states. Her latest findings are featured in this year's report a

In 2024 the market usage of soybean oil in nonfood products continues to grow. The usage of soybean oil in car and truck tires is expanding as companies reduce their use of petroleum. This same type of rubber technology is also used in running shoes. More information on the latest in tire usage can be found in an article included in this report.

As the ERSB Chair, I am proud to be a soybean farmer and serve other soybean farmers. If you have any questions or suggestions of projects you'd like to see funded by the checkoff, please feel free to reach out to us.

I thank you for your support and look forward to seeing the progress and prosperity 2025 will bring!

EASTERN REGION SOYBEAN BOARD

Nick Kercheval
Chair, Eastern Region Soybean Board

ANNUAL FINANCIAL REPORT

Fiscal Year 10.1.23 to 9.30.24

CASH ASSETS:	
Operating Funds	$55,184
Emergency Preparedness Fund	$77,550
Dissolution Fund	$46,240
Less: Liabilities	$(646)
Net Assets at 9.30.24	$179,620

REVENUE:	
Assessment Income	$85,843
Less Assessments Paid to USB & other State QSSB's	$(26,058)
Other Revenue	$639

PROGRAM EXPENSES:	
Communications	$(16,021)
Promotion & Education	-
Research*	$33,081
Administration/Audits/ Compliance/Insurance/Other	$(17,723)
Increase/(Decrease) in Net Assets	$(15,870)

* This amount reflect the actual disbursement of the funds allocated for research as of September 30, 2024.

CHECKOFF DOLLARS INVESTED IN RESEARCH

The Eastern Region Soybean Board invests checkoff funds in research that helps answer farmer questions to ensure they are viable and profitable. In Fiscal Year 2024, more than $33,000 was designated for research projects.

DEVELOPING SOYBEAN PRODUCTION STRATEGIES THAT MAXIMIZE YIELD AND SOIL HEALTH

Principal researcher: D. Heather Darby, Agronomist, University of Vermont Extension

FUNDED AMOUNT: $29,074

RESEARCH SUMMARY

Farmers in northern areas often plant when soil conditions are still relatively cool, and soybean growth can be slow. Farmers want to know if adding nitrogen (N) fertilizer at planting will encourage early season growth and lead to enhanced yields. There were three N fertilizer application rates, 10, 20, and 30 lbs N ac^{-1}, and a control where no N was applied. The soybeans were planted on May 24 and the fertilizer was applied (UAN; 32-0-0) over the row at planting. Nitrogen applied as starter fertilizer did not have a significant impact on soybean yield or test weight (Figure 1). The average test weight was 58.9 lbs bu^{-1} and the average soybean yield was 52.0 bu ac^{-1}. Warm and dry conditions at planting may have diminished any impact of the N fertilizer. Additional years of data across more environments will help to further determine if starter N can help boost soybean yields in northern climates.

As soybean production expands throughout the northeast, it is important to understand the potential benefits, consequences, and risks associated with growing cover crops in these systems. Potential yield reductions following cereal rye can make growers wary about adopting cover crops. To increase our knowledge of the best methods and timing for cover crop termination, five cover crop termination

FIGURE 1. Nitrogen rates applied at planting and soybean yield and test weight, 2024.
†NS; No significant difference between treatments at p=0.10.

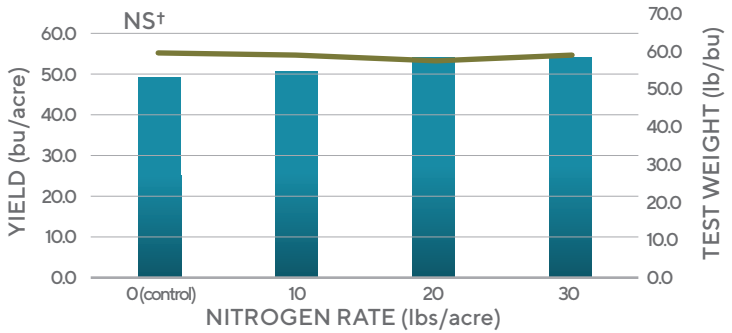
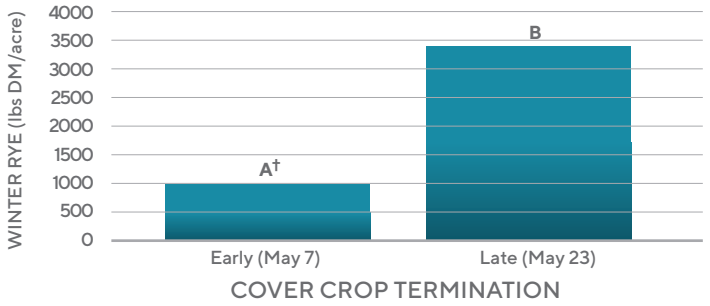


FIGURE 2. Winter rye dry matter yield by termination timing in Alburgh, VT in 2024.
†Treatments with the same letter did not perform statistically different from one another.





Cereal rye interseeded into soybeans prior to harvest.

methods were evaluated for their impact on soil health and soybean yield. Early termination methods included tillage (Tillage) or herbicide application (Early Spray) approximately 2 weeks prior to planting. Late terminated treatments included herbicide application just prior to planting (Late Spray), roll/crimp of winter rye at planting (Plant & Roll), and roll/crimp of winter rye after emergence of soybeans (Plant & Roll). Cereal rye cover crop biomass and soil health was assessed at an early and late termination time, May 7 and 23 respectively. Soybeans were planted in all treatments on May 23. In the Plant & Roll treatment, the cereal rye was rolled and crimped after the soybeans emerged 12 days after planting.

As expected, cover crop biomass significantly increased with later termination of the cereal rye (Figure 2). The significant increase in rye biomass did improve the overall soil health rating of the soil. The most substantial change was an improvement in aggregate stability (Table 1). Soil aggregate stability is a measure of how well soil aggregates resist breaking apart when exposed to weather conditions (i.e. rainfall). Waiting to terminate the rye also reduced soil moisture which could be viewed as beneficial or a challenge depending on the year (Figure 3). Overall, the additional cover crop biomass in the later termination did not negatively affect the soybean yield, and there were no statistical differences between any of the termination methods (Figure 4). Ten days after planting, it was observed that nearly all the soybeans had emerged in the Plow, Early Spray, and Roll & Plant treatments.

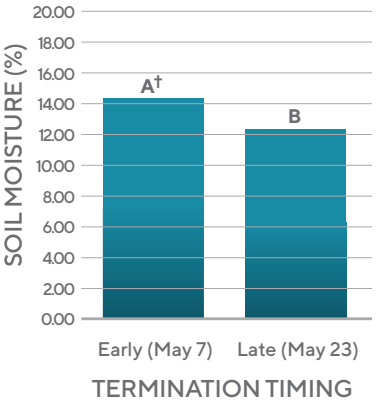


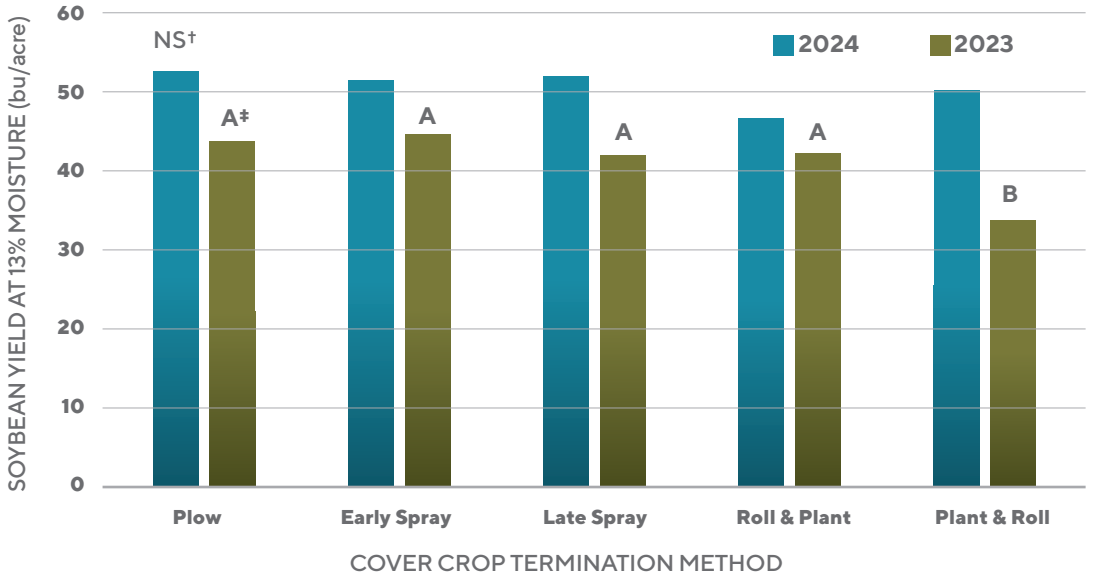
FIGURE 3. Soil moisture June 17, in early and late terminated winter rye cover crop, 2024. †Treatments marked with the same letter were statistically similar (p=0.10).

TABLE 1. Soil health characteristics by cover crop termination timing, 2024.

Termination Timing	Aggregate Stability	Organic Matter	Soil Organic Carbon	Soil Proteins	Soil Respiration	Active Carbon	OVERALL SCORE
	%			mg protein g soid^{-1}	mg CO_2 g soid^{-1}	ppm	
EARLY	25.4a†	4.31a	2.52a	6.62a	0.551a	758a	75.4b
LATE	36b	4.15a	2.75a	6.96a	0.520a	694b	78.9a

†Within a column, treatments marked with the same letter were statistically similar (p=0.10).

FIGURE 4. Soybean yield by cover crop termination method in 2024 and 2023.



†NS; no significant difference between treatments. ‡In 2023, treatments marked with the same letter were statistically similar (p=0.10).



Using a no-till planter, soybeans were planted into rolled and crimped cereal rye.

However, there was 50% emergence in the Late Spray and only 25% emergence in the Plant & Roll treatments. Despite delayed emergence in these treatments, there was no negative effect on yield. Temperatures in May were quite warm, ample moisture and warm fall temperatures resulted in favorable conditions for growth across all treatments. Interestingly in 2023, soybean yield was significantly reduced in the Plant &Roll treatment (Figure 4). In 2023 soil conditions at planting were dry but temperatures were much colder than what we observed in 2024. Cooler soils in conjunction with late germination, and possibly lower plant populations may have contributed to the yield reductions observed in the 2023 Plant & Roll treatment. While early cover crop termination may be the goal, unfavorable weather or field conditions may delay termination. These results suggest that delaying termination won't necessarily reduce the soybean yields and may improve overall soil health and help to manage soil moisture.

Scan this QR code to learn more.

LATEST UNITED SOYBEAN BOARD'S ROI STUDY YIELDS

Impressive ROI Back to Farmers

In a challenging economic landscape of low commodity prices and tight margins, the United Soybean Board (USB) continues to deliver economic returns to U.S. soybean farmers through strategic investments. This remains critical to ensure farmers receive measurable value on-farm and through expanded market opportunities. A recent study confirms the soy checkoff's positive return of at least 4.5-to-1* on investment across the categories of export market development, domestic demand-enhancing research, on-farm production research and soybean promotion.

Beyond growing exports markets for food and feed, finding new industrial uses domestically, delivering value for animal agriculture or disseminating production research to grow a more resilient soybean, the real takeaway from this study is economic value. The soy checkoff creates more jobs, supports higher labor income, increases tax revenue and has tremendous impact on U.S. gross domestic product (GDP).

The study by Dr. Harry M. Kaiser of Cornell University highlights USB and the QSSB's return on investment in improving the demand for U.S. soybeans and increasing the efficiency of soybean production. It also provides perspective on the soy checkoff's significant impact on U.S. employment and income. Cumulatively, soy checkoff funded initiatives, at the national and state level, supported nearly 31,000 jobs, added $2.6 billion in labor income, contributed $5.9 billion in total value and increased the U.S. GDP by $9.8 billion.

These findings emphasize the soy checkoff's continued success in driving economic benefits and ROI for farmers. For every dollar invested, it returned $12.30 in net revenue to the soybean industry. In addition to fostering new revenue streams on-farm, USB's efforts in research and promotion create positive spillover effects. Whether it's increased demand for soybean products, supporting more jobs in agriculture or opening up new export markets to support a prolific harvest, USB and QSSB investments of the half-million U.S. soybean farmers create a stronger foundation for your farm's future.

*Across all categories of export market development, domestic demand-enhancing research, on-farm production research and soybean promotion, soy checkoff investments had a positive return of at least 4.5-to-1 (i.e. benefit-cost ratio (BCR)). Export market development had a BCR of 14.26-to-1. In other words, an extra dollar invested in export market development returned $14.26 in net revenue to soybean farmers. Domestic demand-enhancing research had a BCR of 42.88-to-1 or $42.88 returned. On-farm production research had a BCR of 5.78-to-1 or $5.78 returned. Soybean promotion had a BCR of 4.5-to-1 or $4.50 returned. Overall, the combined BCR for all USB/QSSB activities was 12.30-to-1, i.e., an extra dollar invested in all activities returned $12.30 in net revenue to the soybean industry.



For every dollar invested, [the soybean checkoff] returned $12.30 in net revenue to the soybean industry.



DOUBLE CROPPING BENEFICIAL TO FARMERS

The utilization and adoption of double cropping continues to gain acceptance as a production practice among U.S. farmers. A Michigan State University study concluded that double cropping, and large-scale production of diverse crops, could benefit food and biofuel production and "deserves more study for widespread application." The soy checkoff continues to invest in research to confirm the value of this production option to soybean farmers.

The Soybean Research and Information Network, or SRIN, shares double-cropping recommendations from checkoff-funded research across all soybean production regions. For example, Oklahoma research found that wheat residue has no impact on soybean yields. That means farmers can plant soybeans within hours of harvesting winter wheat if soil moisture is adequate.

Double-cropping soybeans along with corn and adding a wheat crop can be a profitable alternative to a traditional corn/soybean rotation. Good timing, careful planning and strong stand establishment are just some of the factors that are critical for a successful double-crop system.

If you are in an area where double cropping is a viable production option, timing is essential. A typical time frame for double cropping is to plant corn in April/May of one year and harvest it in September. A winter wheat crop would then be planted in October and harvested in June/July, followed by planting soybeans in June for an October harvest.

Research conducted in Kansas and Ohio, and featured on SRIN, verified the impact of planting date on double-crop soybean yields. Those studies recommend harvesting wheat early at a higher moisture content to allow soybeans to be planted sooner or to consider planting winter barley, which matures a couple weeks earlier than wheat.

The advantages of double cropping are not without some risk. As mentioned previously, consistency in production method is paramount. Without sticking to a management strategy, you may not see the benefits of double cropping.

Another risk is a reduction in yield potential from later-planted soybeans than conventional soybeans planted in the spring, particularly if rainfall is insufficient. The tight time frame that comes with double cropping could introduce some labor logistic issues, so be prepared to adjust accordingly, as you'll likely be finishing up planting and spraying your full-season soybeans and harvesting your wheat crop at the same time.

Choosing your variety is a critical decision when double cropping. Soybeans planted after wheat will not have the opportunity to get as tall as your full-season soybean crop, so you will need to plant varieties with later maturities. Planting at higher populations and choosing a taller variety that's suitable for your environment and market are also important.

Double-cropping soybeans increases land use efficiency and could add to your farm's bottom line.

TIRES CONTAINING SOY OIL GAIN TRACTION

As a result of USB's partnership with Goodyear Tire & Rubber Company, four of the nation's fleets have switched to tires made with soy: New York City; Cobb County, Georgia; Washington, D.C.; and Madison, Wisconsin. Soy checkoff funds are instrumental in supporting Goodyear's research and development as well as in educating major fleets about the benefits of U.S. Soy in tires.

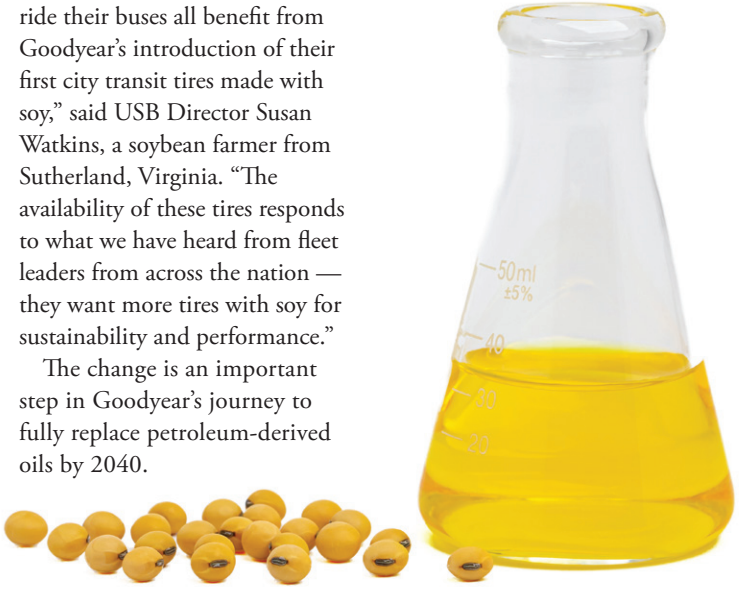
City transit buses are one of the eight choices that Goodyear offers with a sustainable soybean oil compound. The majority of Goodyear Metro Miler™ G152 and G652 tires now use soybean oil to displace petroleum while delivering the same performance benefits.

"The use of soybean oil in the majority of the Metro Miler G152 and G652 tires in production today is a significant Goodyear innovation that reduces the amount of petroleum-based materials needed for production," said Dustin Lancy, commercial product marketing manager, Goodyear North America.

"U.S. soybean farmers as well as cities and the people who ride their buses all benefit from Goodyear's introduction of their first city transit tires made with soy," said USB Director Susan Watkins, a soybean farmer from Sutherland, Virginia. "The availability of these tires responds to what we have heard from fleet leaders from across the nation — they want more tires with soy for sustainability and performance."

The change is an important step in Goodyear's journey to fully replace petroleum-derived oils by 2040.

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VISIT THE NEW ERSB WEBSITE

The Eastern Region Soybean Board's website underwent a full redesign that went live in July of 2024. To better serve the needs of growers, First Purchasers, teachers and consumers the ERSB site is now easier to navigate with updated functionality, new content, and is more mobile responsive.

The user-friendly platform offers a range of new features that make it easier than ever to access valuable information, learn about the latest soybean research, and explore the educational resources available.

Whether you're a grower looking to enhance your knowledge, a First Purchaser looking for forms or contact information, or an educator looking for ag resources for the classroom, the website is a go-to resource.

If you haven't yet, please visit the new and improved website at *www.easternregionsoy.org* today!



Visit our NEW SITE