

# EVALUATION AND COMMERCIALIZATION OF SOYLEIC VARIETIES IN ILLINOIS

## PROJECT SUMMARY

To help Illinois soybean farmers capitalize on market opportunities for high oleic, low linolenic (HOLL) soybean oil, this project continues the breeding efforts to select and license varieties that combine competitive yields with the value-added SOYLEIC™ trait.

## INSIGHTS GLEANED TO-DATE

- 🔍 Five new SOYLEIC lines are being increased in Puerto Rico and Illinois for release in 2024.

## QUESTIONS THIS PROJECT WILL ADDRESS

- ❓ How can Illinois soybean farmers extract more value from their crop?

## WHY THIS RESEARCH IS IMPORTANT

- ⚠️ Health concerns over trans-fats have decreased use of soybean oil as a food product. The University of Missouri has developed a soybean trait that has improved oil quality via non-GMO breeding. Marketed as SOYLEIC, the varieties contain greater than 80% oleic acid and less than 3% linolenic acid (high oleic and low linolenic, or HOLL).
- ⚠️ The improved stability of SOYLEIC oil is opening the door to other industrial/non-food markets, including as a base for motor oil, in automotive lubricants, in marine oils, in hydraulic fluids and more.
- ⚠️ ISA checkoff funding will give the Illinois SOYLEIC breeding program the ability to expand agronomic testing across environments to help identify high-yielding, Illinois-adapted SOYLEIC varieties.

## HOW THIS RESEARCH BENEFITS THE FARMER

- 🎯 Illinois farmers will have more options for high-yielding SOYLEIC varieties adapted to the various growing environments across the state. This will allow them to capitalize on premium market opportunities in the food industry and various industrial uses.


## ABOUT THE LEAD RESEARCHER


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### DR. ELIANA MONTEVERDE

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Dr. Monteverde is realizing her dream of being a plant breeder in her role leading the soybean breeding program at UIUC, where she also teaches undergraduate and graduate students and advises graduate students. Her research focusing on seed composition traits will help soybeans play an important role as a source of oil and protein around the globe. A native of Uruguay and with family spread across the globe, she loves traveling to visit them and spend time near the water.

## RESEARCH TEAM

- **Jacob Tammen**, Senior Research Specialist, UIUC
- **Sarah Schultz**, Senior Research Specialist, UIUC
- **Troy Cary**, Research Specialist, UIUC

## TRIAL LOCATIONS

- **2-row preliminary tests in four locations in Illinois**
- **SOYLEIC lines in 4-row advanced yield tests in five Illinois locations**



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See updates and learn more about this project, the research team and other projects at [ILSoyAdvisor.com](https://ilsoyadvisor.com) and [@ILSoyAdvisor](https://www.facebook.com/ILSoyAdvisor) on Facebook and X.

## YOUR ISA AGRONOMY TEAM CONTACTS



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**ILLINOIS  
SOYBEAN  
ASSOCIATION**

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The Illinois Soybean Association (ISA) checkoff and membership programs represent more than 43,000 soybean farmers in Illinois. The checkoff program funds market development, soybean production and government relations efforts, while the membership program, Illinois Soybean Growers (ISG) and the ISG Political Action Committee actively advocates for positive and impactful legislation for farmers at local, state and national levels. ISA upholds the interests of Illinois soybean farmers through promotion, advocacy, research and education with the vision of becoming a trusted partner of Illinois soybean farmers to ensure their profitability now and for future generations. For more information, visit the websites [www.ilsoy.org](http://www.ilsoy.org) and [www.ilsoygrowers.com](http://www.ilsoygrowers.com).