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Using Field-Level Data to Address Profit and Yield Impacts of Climate-Smart Production Practices: An Application to Soybean Production in Illinois

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Using Field-Level Data to Address Profit and Yield Impacts of Climate-Smart Production

Practices: An Application to Soybean Production in Illinois

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Intended Track: Agribusiness

Using Field-Level Data to Address Profit and Yield Impacts of Climate-Smart Production
Practices: An Application to Soybean Production in Illinois

This study investigates the effect of cover crops on soybean yield and profit in Illinois. The analysis utilizes a unique and precise field-level panel data set of farmer data combined with weather data for 2015 to 2022. Using a linear fixed effects econometric model, we estimate the effect of cover crops and tillage on yield and profit. We find no difference in yield and a decrease in profit of \$40 per acre from using cover crops. No-till systems have a one bushel per acre lower yield than one pass tillage system, but we find no difference in profit.