

# Yuyuan Che

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## Education

Ph.D. *Agricultural, Food, and Resource Economics and Economics* (Dual Major), **Michigan State University**, 2016-2021

**Dissertation:** Four Essays on Farmers' Behavior When Making Insurance, Grazing, and Seed Decisions in the Face of Uncertainty

**Committee:** Hongli Feng (co-chair), David A. Hennessy (co-chair), Scott M. Swinton, Jeffrey M. Wooldridge, Jinhua Zhao

M.S. *Computer Technology*, **Peking University**, 2013-2016

B.S. *Mathematics and Applied Mathematics*, **Sun Yat-Sen University**, 2008-2012

## Professional Experience

Assistant Professor, Department of Agricultural and Applied Economics, **Texas Tech University**, 08/2023-Present

Postdoc Research Scholar, Department of Agricultural and Resource Economics, **North Carolina State University**, 09/2021-07/2023 (**Advisor:** Roderick M. Rejesus)

Affiliate, Climate Adaptation through Agriculture & Soil Management Research Team, 09/2021-07/2023 [Link]

## Fields of Interest

Agricultural Production and Policy, Risk Management, Behavioral Economics, Applied Econometrics, Environmental Economics

## Peer-Reviewed Publications

**Che, Y.**, H. Feng, and D.A. Hennessy. 2023. Will Adoption Occur if a Practice is Win-Win for Profit and the Environment? An Application to a Rancher's Grazing Practice Choices. *Ecological Economics* 209: 107826. [Link]

Lu, X., **Y. Che**, R.M. Rejesus, B.K. Goodwin, S.K. Ghosh, and J. Paudel. 2023. Unintended Environmental Benefits of Crop Insurance: Nitrogen and Phosphorus in Water Bodies. *Ecological Economics* 204: 107657. [Link]

**Che, Y.**, H. Feng, and D.A. Hennessy. 2022. Assessing Peer Effects and Subsidy Impacts in Conservation Technology Adoption: Application to Grazing Management Choices. *Journal of the Agricultural and Applied Economics Association* 1: 285-303. [Link]

\* 2022 AAEA Institutional, Behavioural, and Experimental Section Best Graduate Paper

Park, B., R.M. Rejesus, S. Aglasan, **Y. Che**, S. Hagen, and B. Salas. 2022. Payments from Agricultural Conservation Programs and Cover Crop Adoption. *Applied Economic Perspectives and Policy* 1-24. [Link]

Hennessy, D.A., A.J. Lindsey, **Y. Che**, L.E. Lindsey, M.P. Singh, H. Feng, E.M. Hawkins, S.K. Subburayalu, R. Black, and D.S. Ochse. 2022. Characterizing the Decision Process in Setting Corn and Soybean Seeding Rates. *The Journal of Extension* 60(1):3. [Link]

**Che, Y.**, H. Feng, and D.A. Hennessy. 2020. Recency Effects and Participation at the Extensive and Intensive Margins in the U.S. Federal Crop Insurance Program. *The Geneva Papers on Risk and Insurance-Issues and Practice* 45(1):52-85. [Link]

Wang, T., H. Jin, U. Kreuter, H. Feng, D.A. Hennessy, R. Teague, and **Y. Che**. 2020. Challenges for Rotational Grazing Practice: Views from Non-adopters across the Great Plains, USA. *Journal of Environmental Management* 256:109941. [Link]

Yu, Y., H. Li, **Y. Che**, and Q. Zheng. 2017. The Price Evolution of Wind Turbines in China: A Study Based on the Modified Multi-Factor Learning Curve. *Renewable Energy* 103:522-536. [Link]

## Working Papers

**Che, Y.**, D.A. Hennessy, and H. Feng. Seeding Rate Responses to Markets, Resources and Technologies (under review)

**Che, Y.**, S.K. Ghosh, and R.M. Rejesus. Estimating Stochastic Production Functions with Linear Inequality Constraints (under review)

**Che, Y.**, R.M. Rejesus, M. Cavigelli, K. White, S. Aglasan, L.G. Knight, C. Dell, D. Hollinger, and E.D. Lane. Long-Term Economic Impacts of No-Till Adoption (under review)

Quigley, D., **Y. Che**, M. Yasar, and R.M. Rejesus. Cover Crop Adoption and Climate Risks: An Application of Causal Random Forests (under review)

## Work in Progress

**Che, Y.**, H. Feng, D.A. Hennessy, and C. Lu. “Evidence on the Private-Excess Fertilization Hypothesis”

**Che, Y.**, H. Feng, and D.A. Hennessy. “Irrationality of Recency Effects on U.S. Crop Insurance Program Participation”

**Che, Y.**, R.M. Rejesus, S. Aglasan, and E.K. Burchfield. “Landscape Complexity, Crop Insurance Losses, and Resilience to Extreme Weather Events”

**Che, Y.**, R.M. Rejesus, M.A. Cavigelli, and K.E. White. “Assessing Medium-Term Economic Impacts of Cover Crop Adoption”

Aglasan, S., R.M. Rejesus, and **Y. Che**. “Do Reduced Tillage Practices Decrease Weather Related Losses and Production Risk”

The Impacts of Cover Crops on Corn and Soybean Yields

Payments from Agricultural Conservation Programs and No-Till Adoption

## Reports and Popular Press

Rejesus, R.M., and **Y. Che**. “Federal Cropland Conservation Programs and Conservation Practice Adoption” *Technical Report for American Soybean Association*, January, 2022.

**Che, Y.**, and D.A. Hennessy. “Comments on ‘Expanding Grass-Based Agriculture on Marginal Land in the U.S. Great Plains: The Role of Management Intensive Grazing’ ” *Working Paper 21-WP 618. Center for Agricultural and Rural Development, Iowa State University*, May, 2021.

**Che, Y.**, H. Feng, and D.A. Hennessy. “Rotational Grazing: A Win-Win Practice for Rancher’s Bottom-line and the Environment?” *MSU Scicomm Blog*, October 16, 2020.

Hennessy, D.A., **Y. Che**, and H. Feng. “Sorry Crop Insurance: Michigan’s Not Really Into You” *MSU CANR News*, October 4, 2019.

**Che, Y.**, T. Wang, H. Feng, and D.A. Hennessy. “Understanding Grazing Management Intensity Choices on the U.S. Great Plains” *Proceedings of the 5th Biennial Conference on the Conservation of America’s Grasslands*. Bismarck, North Dakota, August 20-22, 2019.

Wang, T., H. Feng, D.A. Hennessy, U. Kreuter, W.R. Teague, and **Y. Che** “Challenges for Rotational Grazing Practice: Views from Non-adopters across the U.S. Great Plains” *Proceedings of the 5th Biennial Conference on the Conservation of America’s Grasslands*. Bismarck, North Dakota, August 20-22, 2019.

Hennessy, D.A., **Y. Che**, and H. Feng. “Rising Seed Costs & A Tale of Two Very Different Seeding Rates” *Michigan Farm News*, July 12, 2019.

## Teaching Experience

**Instructor**, Data Analysis for the Agri-Food System (ABM 203, undergraduate), Michigan State University, Spring 2020

**Teaching Assistant**, Comparative Study on Environmental Regulation and Legislation (02516040), Peking University, Fall 2014

## Consulting Experience

Consultant, American Soybean Association, October 2021-April 2022

## Seminars

“Plant Architecture and Seeding Rate Responses to Markets, Resources and Technologies.”

*University of Arizona, Department of Agricultural and Resource Economics*, March 13, 2023

*Mississippi State University, Department of Agricultural Economics*, March 03, 2023

*University of Tennessee, Department of Agricultural and Resource Economics*, January 30, 2023

*University of Florida, Food and Resource Economics Department*, January 23, 2023

*North Carolina State University, Center for Environmental and Resource Economic Policy, CEnREP Colloquia*, January 20, 2023

*Ohio State University, Department of Agricultural, Environmental, and Development Economics, January 17, 2023*

*Michigan State University, Department of Agricultural, Food, and Resource Economics, Brown-Bag Seminar, December 15, 2022*

“Recency Effects and Participation at the Extensive and Intensive Margins in the U.S. Federal Crop Insurance Program.”

*Texas Tech University, Department of Agricultural and Applied Economics, March 06, 2023*

“Assessing Peer Effects and Subsidy Impacts in Conservation Technology Adoption: Application to Grazing Management Choices.”

*University of Tennessee, Department of Agricultural and Resource Economics, June 24, 2022*

*Clemson University, Department of Agricultural Sciences, March 22, 2022*

“Understanding Grazing Management Intensity Choices on the U.S. Great Plains: The Role of Social Networks.”

*Michigan State University, Department of Agricultural, Food, and Resource Economics, Brown-Bag Seminar, October 06, 2020*

## Conference Presentations

### 2023

“Landscape Complexity, Crop Insurance Losses, and Resilience to Extreme Weather Events” (with R.M. Roderick, S. Aglasan, and B.K. Emily) **2023 AAEA Annual Meeting**, Washington D.C., July 23-25, 2023

“Cover Crop Adoption and Climate Risks: An Application of Causal Random Forests” (with D. Quigley, M. Yasar, and R.M. Rejesus) **2023 AAEA Annual Meeting**, Washington D.C., July 23-25, 2023

“Parametric Estimation of Stochastic Production Functions with Linear Inequality Constraints” (with S. Ghosh, and R.M. Rejesus) **SCC-76 2023 Annual Meeting**, Kansas City, MO, March 16-18, 2023

“Do Reduced Tillage Practices Decrease Weather Related Losses and Production Risk” (with S. Aglasan, and R.M. Rejesus\*) **SCC-76 2023 Annual Meeting**, Kansas City, MO, March 16-18, 2023

### 2022

“Parametric Estimation of Stochastic Production Functions with Linear Inequality Constraints” (with S. Ghosh, and R.M. Rejesus) **2022 AAEA Annual Meeting**, Anaheim, CA, July 31-August 2, 2022

“Long-Term Economic Impacts of No-Till Adoption” (with R.M. Rejesus, M. Cavigelli, and K. White) **2022 AAEA Annual Meeting**, Anaheim, CA, July 31-August 2, 2022

“Do Cover Crops Reduce Production Risk?” (with S. Aglasan, and R.M. Rejesus\*) **2022 AAEA Annual Meeting**, Anaheim, CA, July 31-August 2, 2022

“Evidence on the Private-Excess Fertilization Hypothesis” (with H. Feng, D.A. Hennessy, and C. Lu) *2022 AERE Summer Conference*, Miami, FL, June 1-3, 2022

“Irrationality of Recency Effects on U.S. Crop Insurance Program Participation” (with H. Feng and D.A. Hennessy) *SCC-76 Annual Meeting*, Kansas City, MO, April 7-9, 2022

“Assessing Peer Effects and Subsidy Impacts in Conservation Technology Adoption: Application to Grazing Management Choices” (with H. Feng and D.A. Hennessy) *AERE @ the Midwest Economics Association (MEA) Annual Conference*, Minneapolis, MN, March 25-27, 2022

## 2021

“Assessing Peer Effects and Subsidy Impacts in Technology Adoption: Application to Grazing Management Choices with Farm Survey Data” (with H. Feng and D.A. Hennessy) *31st International Conference of Agricultural Economists (ICAE)*, Online, August 17-31, 2021

“Plant Architecture and Seeding Rate Responses to Markets, Resources and Technologies” (with H. Feng and D.A. Hennessy) *2021 AAEA Annual Meeting*, Austin, TX, August 1-3, 2021

“Rationality of Recency Effects on U.S. Crop Insurance Program Participation” (with H. Feng and D.A. Hennessy) *2021 AAEA Annual Meeting*, Austin, TX, August 1-3, 2021

“Assessing Peer Effects and Subsidy Impacts in Technology Adoption: Application to Grazing Management Choices with Farm Survey Data” (with H. Feng and D.A. Hennessy) *2021 AAEA Annual Meeting*, Austin, TX, August 1-3, 2021

“Grazing Practice Choices, Capital Constraints and the Environment” (with H. Feng, D.A. Hennessy) *2021 AAEA Annual Meeting*, Austin, TX, August 1-3, 2021

“Evidence on the Private-Excess Fertilization Hypothesis” (with H. Feng, D.A. Hennessy, and C. Lu) *76th Soil and Water Conservation Society (SWCS) International Annual Conference*, Online, July 26-28, 2021

## 2020

“Evidence on the Private-Excess Fertilization Hypothesis” (with H. Feng, D.A. Hennessy, and C. Lu) *2020 AAEA Annual Meeting*, Online, August 10-11, 2020

## 2019

“Understanding Grazing Intensity Choices on the U.S. Great Plains” (with H. Feng, T. Wang, and D.A. Hennessy) *America’s Grasslands Conference-Working Across Boundaries, the Fifth Biennial Conference on the Conservation of America’s Grasslands*, Bismarck, ND, August 20-22, 2019

“Challenges for Rotational Grazing Practice: Views from Non-adopters across the U.S. Great Plains” (with T. Wang\*, U. Kreuter, W.R. Teague, H. Feng, and D.A. Hennessy) *America’s Grasslands Conference-Working Across Boundaries, the Fifth Biennial Conference on the Conservation of America’s Grasslands*, Bismarck, ND, August 20-22, 2019.

“Understanding Grazing Intensity Choices on the U.S. Great Plains” (with H. Feng, T. Wang, and D.A. Hennessy) *2019 AAEA Annual Meeting*, Atlanta, GA, July 21-23, 2019

“Recent Events and Participation in U.S. Federal Crop Insurance Programs” (with H. Feng, and D.A. Hennessy) *SCC-76 Annual Meeting*, Kansas City, MO, April 4-9, 2019

## 2018

“Characterizing the Determinants of Seeding Rate Choices” (with H. Feng, D.A. Hennessy, and L. Lindsey) *2018 AAEA Annual Meeting*, Washington D.C., August 5-7, 2018

## 2017

“The Geography and Psychology of Participation in U.S. Federal Crop Insurance Programs” (with H. Feng, and D.A. Hennessy) *2017 AAEA Annual Meeting*, Chicago, IL, July 30-August 1, 2017

(\* presented by co-author)

## Awards

AAEA Institutional, Behavioural, and Experimental Section Best Graduate Paper Award, 2022

Pass with Distinction in Ph.D. Econometrics Qualifying Exam, Michigan State University, 2017

Distinguished Master Thesis, Peking University, 2016

Distinguished Graduate Award, Peking University, 2016

National Scholarship, Peking University, 2015

## Referee

*Agricultural Economics, Applied Economic Perspectives and Policy, Choices, Journal of Risk and Insurance, Journal of the Agricultural and Applied Economics Association, Renewable Agriculture and Food Systems (2)*

## Technical Strengths

Stata, R, ArcGIS, Matlab, Mathematica, Nlogit, Ngene, Gauss, C, C++, L<sup>A</sup>T<sub>E</sub>X

(Last updated: August 2023)