

Yefan Nian

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Ph.D. candidate

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Education

Expected 2023	University of Florida , Gainesville, FL, US <i>Ph.D.</i> Food and Resource Economics <i>M.S.</i> Statistics Dissertation: Specialty crop producers' risk preference, technology adoption, and adaptation to climate change Committee: Zhifeng Gao (Chair), Kimberly Morgan (Co-Chair), Charles Moss , and Xin Zhao
2018	University of Arkansas , Fayetteville, AR, US <i>M.S.</i> Agricultural Economics Thesis: Can social capital boost irrigation capital? Empirical evidence from North China Committee: Qiuqiong Huang (Chair), Rodolfo M. Nayga Jr. , and Arya Gaduh
2013	South China University of Technology , Guangzhou, China <i>B.S.</i> Economics and Finance <i>B.S.</i> Public Policy

Research Fields

Primary: Behavioral Economics, Agribusiness, Economics of Agriculture Sustainability
Secondary: Consumer Preference, Technology Adoption

Research Publications

[Role: † denotes shared first authorship and ‡ denotes corresponding author]

Peer-Reviewed Journal Articles (6)

- 2023 | 6. Are people's daily life habits consistent with their preference for food sustainability labels?
Yefan Nian, Zhifeng Gao[‡], and Ruojin Zhao
Agribusiness: An International Journal Forthcoming
Abstract: Using a representative US consumer sample, this study systematically examines consumers' preferences for different food sustainability labels (USDA Organic, Non-GMO, Eco-Friendly, and Fair-Trade labels) and investigates whether consumers' life habits in other domains of life are consistent with their food purchasing decisions. We find that people's daily activities, such as pro-environmental behaviors away from home and physical exercise in everyday life, are correlated to consumers' WTP for sustainability-labeled food products. This study provides implications for designing proper strategies to improve sustainable food consumption, including targeting consumers who adopt a more environmentally sustainable and healthy lifestyle, such as conducting pro-environmental activities outside the home and physical exercise activities in daily life.
- 2022 | 5. [An economic analysis of grafted organic tomato production in high tunnels](#)
Yefan Nian, Ruojin Zhao, Shufang Tian, Xin Zhao, and Zhifeng Gao[‡]
HortTechnology 32: 459-470.
Abstract: Using 2-year on-station trial data collected in Citra, FL, this study examines the effect of using grafting on the economic returns of organic tomato production in high tunnels. Our analysis suggests that grafting tends to increase the marketable yield of organic tomato production in high tunnels. However, the enhanced yield does not necessarily increase the net return, depending on market conditions and the relative performance of grafted transplants. In addition, the net return of grafted production is highly sensitive to the tomato selling price. Obtaining a price premium is essential for increasing the profitability of grafted organic tomato production in high tunnels.
4. [Do plastic warning labels reduce consumers' willingness to pay for plastic egg packaging? Evidence from a choice experiment](#)
Joanna Van Asselt[‡], **Yefan Nian**[‡], Moonwon Soh[‡], Zhifeng Gao, and Stephen Morgan
Ecological Economics 196: 107460.
Abstract: Using a choice experiment with a difference-in-difference design, we investigate whether putting warning labels on plastic egg crates reduces consumers' willingness to pay (WTP) for plastic packaging. Our results reveal that warning labels are effective at reducing consumers' WTP for plastics. Compared with pulp-based packaging, we estimate that plastic warning labels reduce WTP for clear plastic packaging on average by \$1.02, and decreased WTP for plastic-based foam by \$0.51. However, the effectiveness of the warning label depends on the information content of the warning. While labels warning against the negative impacts of plastic on health, the environment, and safety all reduced WTP for plastic, respondents in the health label treatment reduced their WTP by the largest amount.

3. [What can we learn from the interactions of food traceable attributes: A case study of Fuji apple product in China](#)
Ruifeng Liu, Jian Wang, Fei Liang, **Yefan Nian**, and Hengyun Ma‡
Applied Economics 2022:1-21.
Abstract: Using a face-to-face consumer survey in six cities across China, this study examines consumers' preferences for Fuji apple products' food traceability attributes and region of origin claims. The results show that consumers are willing to pay a positive premium for food-traceable attributes. There is a strong complementary effect between food-traceable attributes. Besides, substitution and complementary effects between attributes may vary over the sample cities.
- 2020
2. [Water management practices: Use patterns, related factors, and correlations with irrigated acres](#)
Yefan Nian, Qiuqiong Huang‡, Kent F. Kovacs, Christopher Henry, and Jason Krutz
Water Resources Research 2020(56): e2019WR025360.
Abstract: Using data from the 2016 Arkansas Irrigation Survey, this study describes the water management practice (WMP) use patterns by producers in Arkansas, USA, identifies the factors related to producers' choices among WMP groups, and examines the correlations between WMP uses and irrigated acreage. This study finds that about 77% of producers in the study area use two or more groups of WMPs to manage multiple aspects of irrigation, but that the factors that are associated with choices of WMPs vary by WMP group. The use of water flow meters, providing producers with education on the looming groundwater shortage problems and awareness of financial assistance available for conservation efforts, such as the state tax credits program, and use of WMPs by family members, friends, and neighbors are associated with increased use of WMPs. However, producers that are older, have smaller farms, and rely more on groundwater are less likely to use some of the WMPs. In addition, using water flow meters positively correlates with total irrigated acres, and irrigated acres in rice and soybeans. Therefore, to achieve the goal of water conservation, the promotion of WMPs should be accompanied by measures to control the total quantity of water allowed for irrigation.
 1. [Does social relation or economic interest affect the choice behavior of land lease agreement in China? Evidence from the largest wheat producing Henan province](#)
Ruifeng Liu, Zhifeng Gao, **Yefan Nian**, and Hengyun Ma‡
Sustainability 2020(12):4279.
Abstract: This study investigates the choice behavior of land lease agreements based on the household data collected from the largest wheat-producing province in China, Henan province. The results provide strong evidence that economic interest plays a key role in the choice of land lease agreements. Meanwhile, social relations between farmers also affect the choice of land lease agreements.

Peer-Reviewed Proceedings (1)

- 2021 | 1. [Developing an economic decision-support tool for growers' adoption of vegetable grafting production in the United States](#)
Yefan Nian, Zhifeng Gao, and Xin Zhao
Acta Horticulturae 2021:1302.
Abstract: This project develops a decision-support tool that allows vegetable growers to examine the economic cost-benefit of adopting grafting technology under different production scenarios. By providing growers a tool to better assess the economic feasibility of vegetable grafting, taking into consideration of some real-time factors directly relevant to their production systems and scenarios, it is expected to motivate more vegetable growers to consider using the grafting technology to benefit their vegetable production systems.

Working Papers (5)

1. Perception of food fraud and preferences for authenticity test in the Chinese online food market
Erpeng Wang, Zhifeng Gao, and **Yefan Nian**
Under review Food Policy.
2. Will stated attribute non-attendance questions introduce bias to respondents' behaviors in choice experiments?
Yefan Nian, Zhifeng Gao, Rodolfo M. Nayga Jr., and Yuning Zhao
Ready to submit to a journal. Target journal: Journal of Agricultural Economics.
3. Can social capital boost irrigation capital? Empirical evidence from North China
Yefan Nian, Qiuqiong Huang, Rodolfo M. Nayga Jr., and Arya Gaduh
Ready to submit to a journal. Target journal: World Development.
4. Do fertilizer subsidies improve soil quality: Myopic vs. dynamic analysis of smallholder farmers in Ghana
Joanna Van Asselt†, **Yefan Nian**†, and Kelly Grogan
Manuscript under preparation. Target journal: American Journal of Agricultural Economics.
5. Crop insurance, cost-sharing program, and growers' adaptation to climate change: An agent-based modelling approach
Yefan Nian, Zhifeng Gao, Kimberly Morgan, Charles Moss, and Xin Zhao
Manuscript under preparation. Target journal: American Journal of Agricultural Economics.

Works in Progress (5)

1. Intra- and inter- temporal risks in specialty crop producers' technology adoption
Yefan Nian, Zhifeng Gao, Kimberly Morgan, Charles Moss, and Xin Zhao

2. The role of reference points in specialty producers' decision making under risks
Yefan Nian, Zhifeng Gao, Kimberly Morgan, Charles Moss, and Xin Zhao
3. Tracing the trend in consumer preferences for eco-labeled food: A text-mining and topic modeling approach
Dingling Duan, Azhar Uddin, **Yefan Nian**, Ly Thi Y Nguyen, and Zhifeng Gao
4. Does date label matter for aquaculture food product waste?
Yefan Nian, Julio Cruz, Joanna Van Asselt, Stephen Morgan, and Zhifeng Gao
5. The impact of health claims on consumers' willingness-to-pay for food products: Does the format matter?
Yefan Nian, Matt Mattia, Fred Gmitter, and Zhifeng Gao

Teaching Experiences

University of Florida

Instructor

1. Math Camp for Incoming Ph.D. Students (*Ph.D. level*, 2022 Fall and 2021 Fall)

Lab Instructor

1. AEB 3510 Quantitative Methods for Microeconomics (*Undergraduate level*, 2019 Spring and Fall)

Guest Lecturer

1. AEB 6553 Elements of Econometrics (*Master level*, 2019 Spring)
2. AEB 3510 Quantitative Methods for Microeconomics (*Undergraduate level*, 2018 Fall)

Teaching Assistant

1. AEB 4138 Advanced Agribusiness Management (*Undergraduate level*, 2023 Spring)
2. AEB 3133 Agribusiness Management (*Undergraduate level*, 2022 Spring)
3. AEB 3103 Principles of Food and Resource Economics (*Undergraduate level*, 2021 Fall)
4. AEB 3341 Selling Strategically (*Undergraduate level*, 2021 Spring and 2020 Fall)
5. AEB4342 Food Marketing and Management (*Undergraduate level*, 2020 Spring)
6. AEB 3510 Quantitative Methods for Microeconomics, *Undergraduate level* (*Undergraduate level*, 2019 Spring and Fall, and 2018 Fall)

University of Arkansas

Teaching Assistant

1. AGE 2403 Quantitative Tools for Agribusiness (*Undergraduate level*, 2017 Fall and 2016 Fall)

Extension Works

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| 2022 | <p>4. The cost of high tunnel and caterpillar tunnel establishment for vegetable production
 Yefan Nian, Zhifeng Gao, and Xin Zhao
 <i>University of Florida EDIS extension publication</i> Forthcoming</p> |
| | <p>3. Grafting for high tunnel organic tomato production
 Shufang Tian, Xin Zhao, Zachary T. Ray, Issac R. Vincent, Daniel J. Freed, and Yefan Nian
 <i>Ready to submit to University of Florida EDIS extension publication</i></p> |
| 2020 | <p>2. Vegetable grafting economic decision support tool
 Yefan Nian, Zhifeng Gao, and Xin Zhao
 http://graftingtool.ifas.ufl.edu/</p> |
| 2019 | <p>1. The use pattern of irrigation practices by Arkansas producers
 Yefan Nian, Qiuqiong Huang, Kent Kovacs, Christopher Henry, and Jason Krutz
 <i>University of Arkansas extension publication: Arkansas rice research studies 2018</i></p> |

Outreach Talks

[Role: * denotes the presenter]

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| 2022 | <p>5. Economics of using high tunnels for vegetable production
 Yefan Nian* and Zhifeng Gao
 <i>High tunnel field day, UF/IFAS Plant Science Research and Education Unit, Citra, Florida, US</i></p> |
| | <p>4. High tunnel economics and growers' adoption
 Yefan Nian* and Zhifeng Gao
 <i>High tunnel organic vegetable production workshop, UF/IFAS Plant Science Research and Education Unit, Citra, Florida, US</i></p> |
| 2019 | <p>3. Developing an economic decision tools for vegetable grafting in the US
 Yefan Nian*, Zhifeng Gao, and Xin Zhao
 <i>II international symposium on vegetable grafting, Charlotte, North Carolina, US</i></p> |
| 2018 | <p>2. Factors influencing the adoption of water management practices in Arkansas
 Yefan Nian*, Qiuqiong Huang, and Kent Kovacs
 <i>Arkansas water resources center annual watershed and research conference, Fayetteville, Arkansas, US</i></p> |
| | <p>1. Status of the use of irrigation practices in Arkansas
 Yefan Nian*, Qiuqiong Huang, and Kent Kovacs
 <i>SERA35: Delta region farm management and agricultural policy working group meeting, Vicksburg, Mississippi, US</i></p> |

Conference Presentations

[Role: * denotes the presenter]

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| 2022 | <p>9. Tracing the trend in consumer preferences for eco-labeled food: A text-mining and topic modeling approach
 Dinglin Duan*, Azhar Uddin, Yefan Nian, Ly Thi Y Nguyen, and Zhifeng Gao
 <i>Selected paper presentation, American Agricultural and Applied Economics Association Annual Meeting, Anaheim, California, US</i></p> <p>8. Does date label matter for aquaculture food product waste?
 Yefan Nian*, Julio Cruz, Zhifeng Gao, and Stephen Morgan
 <i>Selected paper presentation, American Agricultural and Applied Economics Association Annual Meeting, Anaheim, California, US</i></p> <p>7. Value, attitude, belief, and sustainable food consumption
 Junhong Chen, Yefan Nian*, and Zhifeng Gao
 <i>Selected paper presentation, American Agricultural and Applied Economics Association Annual Meeting, Anaheim, California, US</i></p> |
| 2021 | <p>6. Information treatment, cognitive load, and attribute attendance in choice experiments
 Yefan Nian* and Zhifeng Gao
 <i>Selected paper presentation, American Agricultural and Applied Economics Association Annual Meeting, virtual meeting</i></p> <p>5. Do plastic warning labels reduce consumers' willingness to pay for plastic packaging?
 Joanna Van Asselt*, Yefan Nian, Moonwon Soh, Zhifeng Gao, and Stephen Morgan
 <i>Selected paper presentation, American Agricultural and Applied Economics Association Annual Meeting, virtual meeting</i></p> |
| 2019 | <p>4. The impact of health-related information on consumers' WTP for food products: Does the format matter?'
 Yefan Nian*, Zhifeng Gao, and Junhong Chen
 <i>Selected paper presentation, American Agricultural and Applied Economics Association Annual Meeting, Atlanta, Georgia, US</i></p> <p>3. Is people's daily lifestyle consistent with their food purchasing behavior?
 Yefan Nian*, Lijia Shi, Zhifeng Gao and Ruojin Zhao
 <i>Selected poster presentation, American Agricultural and Applied Economics Association Annual Meeting, Atlanta, Georgia, US</i></p> |
| 2018 | <p>2. The use of irrigation practices by Arkansas producers, the impacts and influence Factors
 Yefan Nian*, Qiuqiong Huang, and Kent Kovacs
 <i>Selected paper presentation, Southern Agricultural and Applied Economics Association Annual Meeting, Jacksonville, Florida, US</i></p> |

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| 2017 | <p>1. Can social capital boost irrigation capital? Evidence from North China
 Yefan Nian* and Qiuqiong Huang
 <i>Selected poster presentation, American Agricultural and Applied Economics Association Annual Meeting, Chicago, Illinois, US</i>
 <i>Selected paper presentation, Western Agricultural Economics Association 2018 Annual Meeting, Lake Tahoe, Nevada, US</i></p> |
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Grant and Projects

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| 2020-2022 | <p>Title: "Adapting and expanding high tunnel organic vegetable production for the Southeast"
 Program: Organic Research and Extension Initiative
 Source: USDA National Institute of Food and Agriculture
 Role: Lead research assistant (<i>Led and designed the survey, participated interdisciplinary team to analyze economic feasibility to organic vegetable production in high tunnels, prepared extension workshops, and wrote manuscripts for journal publications</i>)</p> |
| 2020-2022 | <p>Title: "Developing a research-extension network to advance the emerging high tunnel vegetable industry in Florida"
 Source: Institute of Food and Agricultural Sciences, University of Florida
 Role: Lead research assistant (<i>Led and designed the survey, prepared extension report prepared project report</i>)</p> |
| 2019 | <p>Title: "CALS Mini-grant to develop educational materials to improve students' learning experience of online Food and Resource Economics courses at Plant City and Gainesville"
 Source: College of Agriculture and Life Science, University of Florida
 Role: Co-PI (<i>Prepared online class materials, hosted in-person lab lectures, and assisted Dr. Pena-Leavno's Teaching</i>)</p> |
| 2018-2021 | <p>Title: "Growing new roots: Grafting to enhance resiliency in US vegetable industries"
 Source: USDA National Institute of Food and Agriculture
 Role: Lead research assistant (<i>Led and designed the survey, developed online economic decision support tool, participated interdisciplinary team to analyze economic feasibility vegetable grafting, wrote manuscripts for journal publications</i>)</p> |

Fellowships and Awards

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| 2020 | <p>Ofelia Anzola Memorial Scholarship, College of Agriculture and Life Science, University of Florida</p> <p>Phillip L. Herndon Endowment in Economic, Food and Resource Economics Department, University of Florida</p> |
| 2019 | <p>Harold B. Clark Award, Food and Resource Economics Department, University of Florida</p> <p>AAEA Travel Grant Travel in support to attend 2019 AAEA annual meeting in Atlanta, Georgia, US</p> |

	Certificate Teaching with Technology, University of Florida
2018	Outstanding Graduate Student, Department of Agricultural Economics and Agribusiness, University of Arkansas
2017	AAEA Travel Grant Travel in support to attend 2017 AAEA annual meeting in Chicago, Illinois, US
	WAEA Travel Grant Travel in support to attend 2017 AAEA annual meeting in Lake Tahoe, Nevada, US

Professional and University Services

Journal Reviewer

2020-Present *Agribusiness: An International Journal* (1), *Applied Economics* (1), *Heliyon*(1), *PLOS One*(3)

Other Services

2022 Moderator, 2022 Agricultural and Applied Economics Association Annual Meetings

2019-2022 Mentor for incoming Ph.D. student, Food and Resource Economics Department, University of Florida

2019-2020 Treasurer, Graduate Student Organization (GSO), Food and Resource Economics Department, University of Florida

2019 Moderator, 2019 Agricultural and Applied Economics Association Annual Meetings

Skills

Statistics Coding: R, Stata, Julia, Python, GeoDa, GAUSS, and Matlab

Programming Coding: Python, Visual Basic, JavaScript, and HTML

Document Skills: L^AT_EX, Word, Excel, Power point, and Markdown

References

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