

Jeremy Irvine
Saskatoon, SK
jeremy.irvine@usask.ca
December 2025

ACADEMIC CREDENTIALS

Doctor of Philosophy in Plant Sciences	2025 – Present
University of Saskatchewan, Saskatoon, Saskatchewan, Canada <i>Development of an integrated pest management program for <i>Hypera nigrirostris</i> (Coleoptera: Curculionidae) in red clover seed production</i>	
Master of Science in Plant Sciences**	2023 – 2025
University of Saskatchewan, Saskatoon, Saskatchewan, Canada <i>Developing economic thresholds and sequential sampling plans for lesser clover leaf weevil in red clover seed production</i> 92 % GPA **Before completing this degree, I transitioned into the PhD program	
Bachelor of Science in Agriculture - Agronomy	2020 – 2023
University of Saskatchewan, Saskatoon, Saskatchewan <i>Effects of phytoplasma infection on leafhopper settling behaviour and development</i> 3.67 GPA with Great Distinction, Dean's Honour Roll 2020-2023	
Automotive Service Technician	2015 – 2016
Saskatchewan Polytechnic, Saskatoon, Saskatchewan Dean's Honour Roll, 88.01% average	

WORK EXPERIENCE

Agronomist/Producer , Irvine Ville Farms Ltd.	2012 – Present
Research Assistant , Prager Lab, University of Saskatchewan	2021 – 2023, 2025 – Present
Production Machinist , Bourgault Industries Ltd.	2017 – 2020

TEACHING EXPERIENCE

I – Teaching Assistant	
PLSC 450.3: Applied Entomology	2025
PLSC 382.2: Introduction to Field Scouting	2024 – 2025
PLSC 340.3: Weed Science	2024 – 2025
PLSC 260.3: Principles of Plant Protection	2024 – 2025
PLSC 222.3: Introduction to Field Crops	2024 – 2025
AGRC 111.3: Introduction to Plant and Soil Sciences	2023, 2025
AGRC 445.3: Experiential Learning in the Workplace	2023
II – Invited Guest Lecturer	
PLSC 990: Seminar	2025
PLSC 450: Applied Entomology (2)	2025
PLSC 220: Fundamentals of Horticulture	2025
PLSC 450: Applied Entomology	2024
PLSC 202: Introductory Precision Agriculture	2024
III – Other Teaching Experience	
Invited Panel Speaker: Graduate Program Information Session	2025
Invited Panel Speaker: Student Undergraduate Research Experience	2024

PUBLICATIONS

PUBLISHED ARTICLES

- Irvine, J. R., Prager, S. M. 2025. *Economic Thresholds for Hypera nigrirostris (Coleoptera: Curculionidae) in Red Clover Seed Production from On-Farm Trials*. Journal of Economic Entomology. <https://doi.org/10.1093/jee/toaf290>
- Irvine, J. R., Romero, B., Prager, S. M. 2025. *Effects of Phytoplasma Infection on Aster Leafhopper (Macrostelus quadrilineatus Forbes) (Hemiptera: Cicadellidae) Settling Behaviour and Development on Brassica napus*. Entomologia Experimentalis et Applicata. <https://doi.org/10.1111/eea.70036>
- Irvine, J. R., Hartl, T., Prager, S. 2025. *Climate Change Impact on Agricultural Entomology*. Bulletin of the Entomological Society of Canada, 57(1).
- Irvine, J. R. 2025. *Challenges in Undergraduate Research: Pathways to Stronger Graduate Programs*. American Entomologist, 71(3). <https://doi.org/10.1093/ae/tmaf042>
- Irvine, J. R. 2024. *Complementing the Western Scientific Approach with Indigenous Knowledge*. American Entomologist, 70(1). <https://doi.org/10.1093/ae/tmae016>

MANUSCRIPTS IN PREPARATION

- Irvine, J. R., Prager, S. M. In prep. *Spatial distribution and sequential sampling plans for Hypera nigrirostris (Coleoptera: Curculionidae) in red clover seed production*.

ARTICLES IN PREPARATION

- Irvine, J. R. In prep. *Lab and Life: How Graduate Research Affects Personal Relationships*. American Entomologist.

EXTENSION ARTICLES

- Irvine, J. R., Prager, S. M. *Economic Thresholds for Lesser Clover Leaf Weevil in Red Clover Seed Production*. Forage Seed News 30(2). Fall 2025.

PRESENTATIONS

INVITED SPEAKER

- Irvine, J. R. *Integrated Pest Management Strategies for Red Clover Pests in Organic Seed Production*. Carrot River Organic Field Day. Saskatchewan, Canada. July 17, 2024
- Irvine, J. R. *Integrated Pest Management: Tools for better pest management*. Speaker Series: Ag in Motion. Saskatchewan, Canada. July 18, 2024

ORAL PRESENTATIONS

- Irvine, J. R., Prager, S. *Volatile organic compounds as behavioural modifiers in Hypera nigrirostris reproductive ecology*. Entomological Society of America's 2025 Meeting. Portland, OR, USA. November 9-12, 2025
- Irvine, J. R., Prager, S. *Targeting pests, not pollinators: Developing selective lures for Hypera nigrirostris*. Entomological Society of Canada's 2025 Meeting. Calgary, AB, CA. October 5-8, 2025
- Irvine, J. R., Prager, S. *Developing pheromone-based tools for sustainable management of Hypera nigrirostris in red clover*. 4th Annual Plant Sciences Graduate Student Field Day. Saskatoon, SK, CA. July 25, 2025
- Irvine, J. R., Prager, S. *Toward a volatile-based pest management strategy for the lesser clover leaf weevil*. International Chemical Ecology Course (ICE2025). Jena, Germany. June 23 - July 4, 2025
- Irvine, J. R., Prager, S. *Management of a clover weevil, Hypera nigrirostris (Fab.) (Coleoptera: Curculionidae), in red clover in the Canadian Prairies*. 40th Plant Science Graduate Student Symposium. Winnipeg, MB, CA. March 14-15, 2025.
- Irvine, J. R., Prager, S. *The ecology and economics of the lesser clover leaf weevil in red clover seed production systems*. Soils and Crops 2025. Saskatoon, SK, CA. March 4, 2025.

- Irvine, J. R., Prager, S. *Insights from two-choice assays: Drought and soil microbial communities affect pollinator preferences*. Saskatchewan Forage Seed Development Commission Annual General Meeting. Arborfield, SK, CA. December 10, 2024.
- Irvine, J. R., Prager, S. *Insights from two-choice assays: Drought and soil microbial communities affect pollinator preferences*. Entomological Society of Saskatchewan's 2024 Meeting. Saskatoon, SK, CA. December 6, 2024
- Irvine, J. R., Prager, S. *Drought and soil microbial community: Implications for pollinators' preferences and colony fitness*. Entomological Society of America's 2024 Meeting. Phoenix, AZ, USA. November 10-13, 2024
- Irvine, J. R., Prager, S. *Economic injury levels and economic thresholds for the lesser clover leaf weevil in red clover seed production*. Entomological Society of Canada's 2024 Meeting. Quebec City, QC, CA. October 20-23, 2024
- Irvine, J. R., Prager, S., *Lesser clover leaf weevil (Hypera nigrirostris Fab.) in red clover seed production: Scouting, economic thresholds, and sequential sampling plans*. XXVII International Congress of Entomology. Kyoto, Japan. August 25-30, 2024
- Irvine, J. R., Prager, S. *Drought and soil microbial community: Implications for pollinators' preferences and colony fitness*. 3rd Annual Plant Sciences Graduate Student Field Day. Saskatoon, SK, CA. July 19, 2024
- Irvine, J. R., Prager, S. *Economic injury levels and economic thresholds for the lesser clover leaf weevil (Coleoptera: Curculionidae) in red clover seed production*. 39th Plant Science Graduate Student Symposium. Saskatoon, SK, CA. March 15-16, 2024.
- Irvine, J. R., Prager, S. *Optimizing thresholds and sampling strategies for controlling the lesser clover leaf weevils in Saskatchewan's red clover*. Soils and Crops 2024. Saskatoon, SK, CA. March 5-6, 2024.
- Irvine, J. R., Prager, S. *Lesser clover leaf weevil in red clover seed production: Scouting, economic thresholds, and sequential sampling plans*. Saskatchewan Forage Seed Development Commission's 2023 Meeting. Whitefox, SK, CA. December 11, 2023.
- Irvine, J. R., Prager, S. *Lesser clover leaf weevil (Hypera nigrirostris Fab.) in red clover seed production: Scouting, economic thresholds, and sequential sampling plans*. Entomological Society of Saskatchewan's 2023 Meeting. Saskatoon, SK, CA. December 8, 2023.
- Irvine, J. R., Prager, S. *Developing economic thresholds and sequential sampling plans for lesser clover leaf weevil in red clover*. Entomological Society of America's 2023 Meeting. National Harbor, MD, USA. November 5-8, 2023.
- Irvine, J. R., Romero, B. and Prager, S. *Effects of phytoplasma infection on aster leafhopper (Macrostelus quadrilineatus) settling behaviour, oviposition, and development*. Entomological Society of Canada's 2023 Meeting. Saskatoon, SK, CA. October 15-18, 2023.
- Irvine, J. R., Prager, S. *Development of economic thresholds for lesser clover leaf weevil (Coleoptera: Curculionidae) in red clover seed production systems*. Entomological Society of Canada's 2023 Meeting. Saskatoon, SK, CA. October 15-18, 2023.
- Irvine, J. R., Romero, B. and Prager, S. *Plant pathogen effects on hemipteran probing activity*. Student Undergraduate Research Experience 2022 Symposium. Saskatoon, SK, CA. August 22-31, 2022

POSTERS

- Irvine, J. R., Prager, S. M. *Development of economic injury levels and thresholds for Hypera nigrirostris in red clover (Trifolium pratense) seed systems*. Entomological Society of America's 2025 Meeting. Portland, OR, USA. November 9-12, 2025
- Irvine, J. R., Prager, S. M. *Scent signals and selectivity: Volatile cues for targeting Hypera nigrirostris*. USask Agriculture Research Day. Saskatoon, SK, CA. September 24, 2025
- Irvine, J. R., Romero, B., Prager, S. M. *Effects of phytoplasma infection on aster leafhopper settling behaviour, oviposition, and development*. Saskatchewan Forage Seed Development Commission's 2024 Meeting. Arborfield, SK, CA. December 10, 2024.

- Irvine, J. R., Romero, B., Prager, S. M. *Love Triangle? Brassica napus, Aster Yellows, and Aster leafhoppers (Hemiptera: Cicadellidae)*. Entomological Society of America's 2024 Meeting. Phoenix, AZ, USA. November 10-13, 2024
- Irvine, J. R., Prager, S. M. *Crop damage, economic loss, and weevils: Developing tools for growers of red clover seed*. Graduate Student Research Conference. Saskatoon, SK, CA. December 14, 2023.
- Irvine, J. R., Prager, S. M. *Effects of temperature on lesser clover leaf weevil developmental time: Implications for pest management and correlation to natural conditions*. Forage Seed Production Forum 23. Whitefox, SK, CA. December 11, 2023.
- Irvine, J. R., Prager, S. M. *Effects of temperature on lesser clover leaf weevil developmental time: Implications for pest management and correlation to natural conditions*. Entomological Society of America's 2023 Meeting. National Harbor, MD, USA. November 5-8, 2023.
- Irvine, J. R., Romero, B., Prager, S. M. *Effects of phytoplasma infection on aster leafhopper settling behaviour, oviposition, and development*. Entomological Societies of America and Canada Joint Meeting. Vancouver, BC, CA. November 13-16, 2022.
- Irvine, J. R., Romero, B., and Prager, S. *Plant pathogen effects on Hemipteran settling behavior*. AgBio Student Research Day, University of Saskatchewan. Saskatoon, SK, CA. September 7, 2022.

REPORTS

- Irvine, J. R., Prager, S. M. *Ecology and management of the lesser clover leaf weevil (Hypera nigrirostris) in red clover seed systems*. Western Committee on Crop Pests Annual Meeting. Winnipeg, MB, CA. November 4-6, 2025
- Irvine, J. R., Prager, S. M. *Developing economic thresholds and sequential sampling plans for the lesser clover leaf weevil in red clover seed production*. Western Committee on Crop Pests Annual Meeting. Regina, SK, CA. November 5-6, 2024
- Irvine, J. R., Prager, S. M. *Lesser clover leaf weevil in the Canadian Prairies*. Western Committee on Crop Pests Annual Meeting. Kelowna, BC, CA. October 25-27, 2023.

POPULAR PRESS

- Graduate Voices: From Farm Fields to Research Fields – Jeremy Irvine's Journey*. Article from the Graduate Students Association by Palash Roy. October 2, 2025.
- World Wide Web*. Article from the Shaunavon Standard by Wendy Thienes. September 9, 2025. <https://paherald.sk.ca/world-wide-web-why-southern-saskatchewan-saw-more-spiders-this-year/>
- Trap-based approach targets lesser clover leaf weevil*. Featured research video by Real Agriculture. July 2025. <https://www.youtube.com/watch?v=JthFblliFvI>
- What Bugs You?* Radio segment (6) series by 92.9 The Bull. May - June 2025. <https://thebull.ca/what-bugs-you>
- Three USask students recognized nationally with Vanier scholarships*. Article from the University of Saskatchewan by Kassidy Guy. July 9, 2025. <https://tinyurl.com/c545nzym>
- USask MSc student awarded Saskatchewan Lieutenant Governor Indigenous Scholarship*. Article from the University of Saskatchewan. May 15, 2024. <https://tinyurl.com/49d8rsym>
- Pests & Predators, Ep 28: Research Roundup: Lesser Clover Leaf Weevil*. Field Heroes. May 1, 2024. <https://youtu.be/6Bxzg0fXXdQ?si=2Zs4tny1ZDXCksJ7>
- Young Researchers in the Spotlight*. Article in Forage Seed News 30(2) by Jo-Anne Relf-Eckstein, Executive Director, Saskatchewan Forage Seed Development Commission. Fall 2023.
- USask graduate student receives nationally funded scholarships to support agricultural research*. Article from the College of Agriculture and Bioresources. September 6, 2023. <https://tinyurl.com/4mrk35s2>
- Developing Economic Thresholds for Lesser Clover Leaf Weevil*. Article from the Prairie Pest Monitoring Network. July 12, 2023. <https://tinyurl.com/7z3r9hdh>
- Entomology, Exploration, and Embracing Setbacks: Jeremy Irvine on undergraduate research*. Article from the Office of the Research by Sydney Boulton. September 2, 2022. <https://tinyurl.com/yjwb3sp7>

ACADEMIC SERVICE

Council Member , Saskatchewan Post-Secondary Council Student Council	2025 – Present
Voting Member , CGPS Graduate Faculty Council	2025 – Present
Member , Graduate & Postdoctoral Council (GPC)	2025 – Present
Member , Occupational Health and Safety Committee, University of Saskatchewan	2024 – Present
Departmental Steward , PSAC Local 40004	2024 – Present
President , Plant Sciences Graduate Students' Association	2024 – 2025
Council Member , Graduate Students' Association	2024 – 2025
Member , Election and Referenda Committee, Graduate Students' Association	Winter 2025
Judge , Images of Research, University of Saskatchewan	Winter 2025
Judge , USSU Undergraduate Symposium, University of Saskatchewan	Winter 2025
Industry Liaison , Plant Sciences Graduate Students' Association	2023 – 2024
Organizing Committee , Plant Science Graduate Student Symposium	2023 – 2024
Computer Systems Specialist , Plant Sciences Graduate Students' Association	2023 – 2024
Associate Editor , University of Saskatchewan Undergraduate Research Journal	2022 – 2023

PROFESSIONAL SERVICE

President , Ent. Soc. Saskatchewan	2025 – Present
Member-At-Large , Committee on Diversity, Equity and Inclusion. Ent. Soc. America.	2025 – Present
Member , Student and Early Professional Affairs, Ent. Soc. Canada	2025 – Present
Member , Youth & Amateur Encouragement, Ent. Soc. Saskatchewan	2025 – Present
Member , Scholarship Committee, Ent. Soc. Saskatchewan	2025 – Present
Member , Species-at-Risk Committee, Ent. Soc. Saskatchewan	2024 – Present
Vice President , Ent. Soc. Saskatchewan	2024 – 2025
Member , Scholarship and Award Committee, Canadian Society of Agronomy	2025 – 2025
Member , Scientific Organizing Committee: CSA-CSHS Joint Meeting	2024 – 2025
Student Director , Canadian Society of Agronomy	2024 – 2025
Member , Social Media Committee, Ent. Soc. Saskatchewan	2023 – 2025
External Director , Science FUNDamentals	2022 – 2023

OUTREACH AND EXTENSION

Programming Provider , Montgomery School, Saskatoon, Saskatchewan	2025
Programming Provider , CanoLAB SK, Canola Council of Canada	2025
Programming Provider , Nawigizigweyas Education Centre	2023 – 2025
Programming Provider , Skype a Scientist	2023 – 2025
Facilitator for Gardenscape , Ent. Soc. Saskatchewan	2023 – 2025
Facilitator for Ag in Motion , University of Saskatchewan	2023 – 2025
Programming Facilitator , Agriculture in the Classroom	2022 – 2025

VOLUNTEER ACTIVITIES AND COMMUNITY ENGAGEMENT

General Volunteer , Native Plant Society of Saskatchewan	2022 – 2025
Registration Volunteer , Ent. Soc. Canada AGM	2025
General Volunteer , Ag in Motion, University of Saskatchewan	2025
General Volunteer , USask Open House, University of Saskatchewan	2024 – 2025
General Volunteer , Career Fair, Nawigizigweyas Education Centre	2023 – 2024
Registration Volunteer , Entomological Society of Canada AGM	2023
Volunteer , Ent. Soc. Canada AGM	2022
General Volunteer , Saskatchewan Invasive Species Council	2022
Food Centre Volunteer , University of Saskatchewan Students' Union	2022

REVIEWER FOR PEER-REVIEWED JOURNALS

Canadian Journal of Plant Science (2), University of Saskatchewan Undergraduate Research Journal (1)
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AWARDS AND HONOURS

2025–2028	Vanier Canada Graduate Scholarship
2025–2028	Department of Plant Science 75 th Anniversary Recruitment Scholarship
2025–2028	Saskatchewan Innovation & Opportunity Scholars
2025–2028	Canada Graduate Scholarship (CGS-D) – <i>declined</i>
2025–2028	Indigenous Graduate Leadership Scholarship – <i>declined</i>
2025	Justice Favel Outstanding Leadership Award in Community Involvement
2025	Plant Science Indigenous Student Award
2025	Mitacs Globalink Research Award
2025	NSERC – Michael Smith Foreign Study Supplement
2025	USask Student Travel Award
2025	Bayer Pest Management Award
2025	Ali Navabi Graduate Student Travel Award – <i>declined</i>
2025	Education Enhancement Grant
2025	University of Saskatchewan – Outstanding MSc Student
2025	Excellence in Community Service (GSA)
2024	Entomological Activities Award
2024	BASF Canada Indigenous Student Award
2024	USask Student Travel Award
2024	Gopalan Selvaraj Innovation Scholarship in Plant Sciences
2024	Norman and Kathleen Lean Postgraduate Scholarship in Agriculture
2024	Rene Vandeveld Post Graduate Award
2024	Irrigation Saskatchewan Graduate Student Award
2024	Saskatchewan Lieutenant Governor Scholarship
2024	Education Enhancement Grant
2024	Yellow Quill Holdings Inc. Scholarship Program
2024	Building Brighter Futures Scholarship
2024	Indigenous Achievement Week Award
2023	Entomological Activities Award
2023	Saskatchewan Mentorship Network Award
2023	USask Student Travel Award
2023	Education Enhancement Grant
2023	Entomological Society of America Travel Award – <i>declined</i>
2023	Graduate Travel Award
2023	Agriculture Signature Area
2023	CGPS 75th Recruitment Scholarship
2023	NSERC – Canada Graduate Scholarship (CGS-M)
2023	NSERC – Indigenous Scholars Award (ISA)
2023	Native Plant Society of Saskatchewan – Volunteer of the Year
2023	Dean’s Honour Roll
2022	William G. Ewart and Mary Noreen Ewart Award
2022	CIBC Student Grant
2022	Saskatchewan Mentorship Network Award
2022	Education Enhancement Grant
2022	Building Brighter Futures Scholarship
2022	NSERC – Undergraduate Student Research Award (USRA)
2022	Dean’s Honour Roll
2021	Blaine and Pat Holmund Scholarship
2021	CIC Indigenous Student Award
2021	Dean’s Honour Roll

Total

COURSES AND CERTIFICATIONS

International Chemical Ecology Course – Max Planck Institute for Chemical Ecology	2025
USask Data Governance	2025
Cascade Training and User Guide - USask	2025
Project and Time Management – MITACS	2025
Research and Development Management - MITACS	2025
High Performing Leadership and Teams - MITACS	2025
Responsible Conduct of Research (RCR) - Life Science - Canada	2024
Good Clinical Practices (GCP) – Canada Version 2	2024
TCPS 2: CORE 2022	2024
Biohazardous Waste Management	2024
Supervision and Safety	2024
Occupational Health Committee Level 2	2024
Occupational Health Committee Level 1	2024
Articling Agrologist AAg	2023
Biosafety Training	2024
First Aid Level C	2024
WHMIS 2015	2024
Commercial Drivers Licence (Class 1A)	2019

MEMBERSHIPS AND ASSOCIATIONS

International Society of Chemical Ecology	2025 – Present
Canadian Society of Zoology	2024 – Present
Ecological Society of America	2024 – Present
Royal Entomological Society	2024 – Present
American Indian Science and Engineering Society	2024 – Present
Plant Science Graduate Students Association	2023 – Present
Canadian Society of Soil Science	2022 – Present
Canadian Society of Horticultural Sciences	2022 – Present
Native Plant Society of Saskatchewan	2022 – Present
Canadian Society of Agronomy	2022 – Present
Entomological Society of Canada	2021 – Present
Entomological Society of America	2021 – Present
Entomological Society of Saskatchewan	2021 – Present
Saskatchewan Institute of Agrologists	2021 – Present
Saskatchewan Invasive Species Council	2022 – 2024
Saskatchewan Indigenous Mentorship Network (SK-IMN)	2022 – 2024
Agricultural Student's Association	2021 – 2023
Prairie Oat Growers Association	2017 – 2023
Wheat Growers Association	2017 – 2023
Canadian Tooling & Machining Association	2017 – 2020