

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	\$150,000
2025–2028	Department of Plant Science 75 th Anniversary Recruitment Scholarship	\$30,000
2025–2028	Saskatchewan Innovation & Opportunity Scholars	\$30,000
2025–2028	Canada Graduate Scholarship (CGS-D) – <i>declined</i>	\$120,000
2025–2028	Indigenous Graduate Leadership Scholarship – <i>declined</i>	\$75,000
2025	Justice Favel Outstanding Leadership Award in Community Involvement	\$5,000
2025	Plant Science Indigenous Student Award	\$5,000
2025	Mitacs Globalink Research Award	\$6,000
2025	NSERC – Michael Smith Foreign Study Supplement	\$6,000
2025	USask Student Travel Award	\$1,000
2025	Bayer Pest Management Award	\$1,500
2025	Ali Navabi Graduate Student Travel Award – <i>declined</i>	\$500
2025	Education Enhancement Grant	\$500
2025	University of Saskatchewan – Outstanding MSc Student	\$500
2025	Excellence in Community Service (GSA)	\$1,000
2024	Entomological Activities Award	\$165
2024	BASF Canada Indigenous Student Award	\$3,300
2024	USask Student Travel Award	\$1,000
2024	Gopalan Selvaraj Innovation Scholarship in Plant Sciences	\$1,500
2024	Norman and Kathleen Lean Postgraduate Scholarship in Agriculture	\$1,000
2024	Rene Vandeveld Post Graduate Award	\$5,000
2024	Irrigation Saskatchewan Graduate Student Award	\$2,000
2024	Saskatchewan Lieutenant Governor Scholarship	\$20,000
2024	Education Enhancement Grant	\$500
2024	Yellow Quill Holdings Inc. Scholarship Program	\$5,000
2024	Building Brighter Futures Scholarship	\$2,000
2024	Indigenous Achievement Week Award	–
2023	Entomological Activities Award	\$370
2023	Saskatchewan Mentorship Network Award	\$1,500
2023	USask Student Travel Award	\$500
2023	Education Enhancement Grant	\$500
2023	Entomological Society of America Travel Award – <i>declined</i>	\$950
2023	Graduate Travel Award	\$500
2023	Agriculture Signature Area	\$2,500
2023	CGPS 75th Recruitment Scholarship	\$6,000
2023	NSERC – Canada Graduate Scholarship (CGS-M)	\$17,500
2023	NSERC – Indigenous Scholars Award (ISA)	\$5,000
2023	Native Plant Society of Saskatchewan – Volunteer of the Year	\$500
2023	Dean’s Honour Roll	–
2022	William G. Ewart and Mary Noreen Ewart Award	\$5,600
2022	CIBC Student Grant	\$1,000
2022	Saskatchewan Mentorship Network Award	\$1,500
2022	Education Enhancement Grant	\$500
2022	Building Brighter Futures Scholarship	\$3,000
2022	NSERC – Undergraduate Student Research Award (USRA)	\$6,500
2022	Dean’s Honour Roll	–
2021	Blaine and Pat Holmund Scholarship	\$1,300
2021	CIC Indigenous Student Award	\$6,000
2021	Dean’s Honour Roll	–
Total		\$534,685

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