

Coordinated monitoring of field crop insect pests in the Prairie Ecosystem

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SPG Contributions	Project Status	Duration/Timeline of Project (Year to Year)	Co-funders	Total Project Cost
\$20,000.00	Active	April 2018 – March 2023	Integrated Crop Agronomy Cluster	\$382,906.00

Project Description

To implement a coordinated insect monitoring program, fostering existing interprovincial partnerships, for the Prairie Ecozone (including the BC Peace region), designed to keep the Canadian agriculture industry informed of the risks posed by insect pests; to ensure timely response to new invasive pests with regulatory implications by immediately reporting finds to the Canadian Food Inspection Agency (CFIA) as per the guidelines being established by the CFIA national strategy for plant and animal health; to develop (or refine) and assess technologies and tools for identification, monitoring, tracking, and forecasting populations of insect pests of field crops using field surveillance and laboratory assays to record insect pest (and natural enemy) phenology, impact, and distribution to validate models used to predict threats, estimate insect impacts, and develop predictions to understand the impact of a changing climate on pest status; to highlight the role of natural enemies and make recommendations to conserve natural enemies of field crop pests; to develop technology transfer and communication tools to support the timely distribution of data collected by this project (i.e. weekly updates, annual risk and forecast maps with interpretive text, annual reports) to end-users, including agronomists and farmers.

Outcome

Research Objective

OBJECTIVE 1

To implement a coordinated insect monitoring program, fostering existing interprovincial partnerships, for the Prairie Ecozone (including the BC Peace region), designed to keep the Canadian agriculture industry informed of the risks posed by insect pests.

OBJECTIVE 4

To highlight the role of natural enemies and make recommendations to conserve natural enemies of field crop pests.

OBJECTIVE 2

To ensure timely response to new invasive pests with regulatory implications by immediately reporting finds to the Canadian Food Inspection Agency (CFIA) as per the guidelines being established by the CFIA national strategy for plant and animal health.

OBJECTIVE 5

To develop technology transfer and communication tools to support the timely distribution of data collected by this project (i.e. weekly updates, annual risk and forecast maps with interpretive text, annual reports) to end-users, including agronomists and farmers.

OBJECTIVE 3

To develop (or refine) and assess technologies and tools for identification, monitoring, tracking, and forecasting populations of insect pests of field crops using field surveillance and laboratory assays to record insect pest (and natural enemy) phenology, impact, and distribution to validate models used to predict threats, estimate insect impacts, and develop predictions to understand the impact of a changing climate on pest status.