

Natural Systems



Pioneering a Resilient Future for Saskatchewan Wheat Production



A new chapter in Saskatchewan's wheat breeding is underway with the appointment of the Saskatchewan Wheat Development Commission Applied Genomics and Pre-breeding Chair. Supported by SaskWheat and operating out of the University of Saskatchewan's Crop Development Centre, this role is focused on accelerating the development of new, high-performing crop varieties that are well suited to Saskatchewan's growing conditions.

This research uses modern genomic tools and breeding techniques to improve how wheat varieties are developed. Researchers study the genetic traits of wheat and its wild relatives to better understand natural strengths such as disease tolerance and performance under variable weather conditions. This work helps move promising discoveries out of the laboratory and into farmers' fields more quickly.

Scientific leadership for the program is provided by Dr. Valentyna Klymiuk, an experienced researcher with advanced training in plant biology and genetics. Dr. Klymiuk's work focuses on using the natural diversity found in wheat to strengthen resistance to disease and improve long-term performance. This research supports the development of wheat varieties designed for Saskatchewan's soils, climate and farming systems.

Why It Matters

Wheat is a cornerstone of Saskatchewan's agricultural economy and rural communities. Research that carefully improves wheat varieties helps ensure stable yields, consistent grain quality and reliable production despite weather variability.

By strengthening disease resistance and improving yield stability, this work supports food security, farm viability and emissions stewardship through efficient crop performance. Continued investment in practical, science-based breeding helps Saskatchewan maintain its reputation as a global leader in high quality wheat while preparing producers to face future challenges with confidence.

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