Optimizing Low-Temperature Tolerance in Wheat

Objective: To identify genes critical to winter survival, develop genetic markers, and provide strategies for plant breeding and agronomy programs.

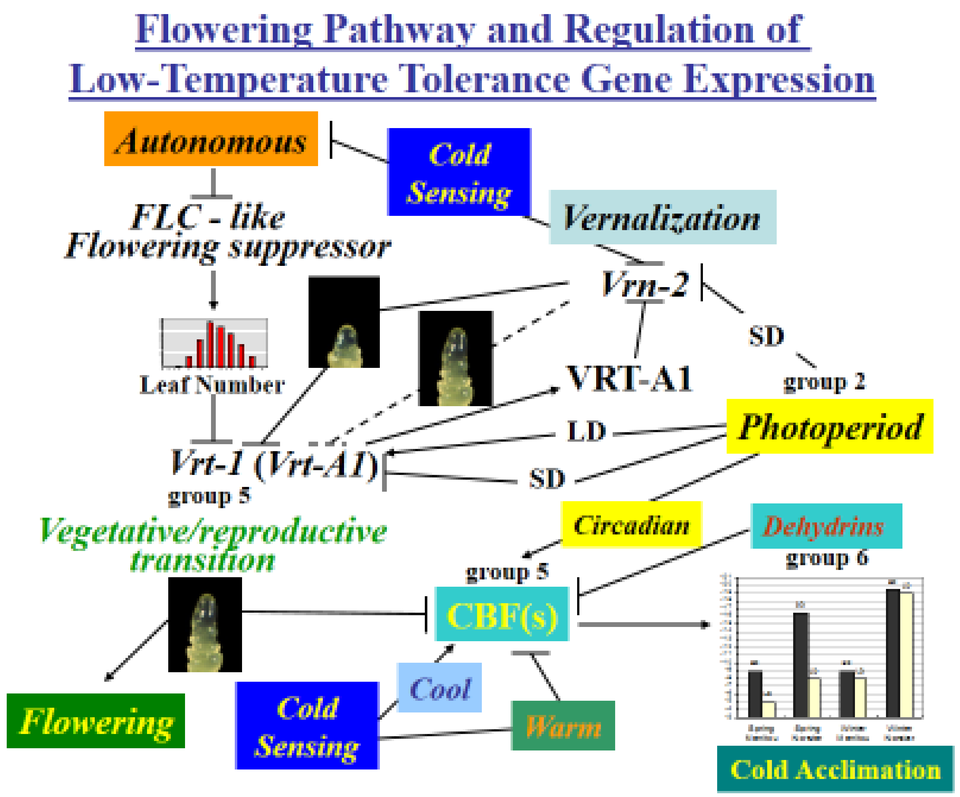
Outputs: Winter survival model developed, field validated, published and deployed as an interactive web-based tool for researchers, farming community and general public. Molecular markers identified and made available to breeding programs.

Impact: Wide geographic application, strategies to mitigate effects of climate change, extension and teaching tool, systematic investigation of production risks, cause-and-effect processes, genetic and genomic theories, Marker Assisted Breeding. Additional marker related research and gene network analyses in progress.

Deployment path: Publication, breeding and crop management programs, extension and web based interactive winter survival simulation.

http://www.wheatworkers.ca/wcsm.php

Delivery date: 2018



Resources committed: ADF-CWA + U. of Sask. = $1,250,000 over 5 year ending March 31, 2018

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