The Canadian Wheat ALLIANCE

Markers For Drought Tolerant Wheat

Objectives: Find stress-related genetic markers to be used in plant breeding

Outputs: Identified genetic loci or markers for glaucousness, root proliferation, height and seed size.

Impact: Selecting for lines and cultivars that are consistently productive under varying water deficit conditions

Deployment path: Markers will be deployed in the next generation of ‘breeder chip’ by April 2017

Delivery date: April 2017

Pictures show removal of blue-white glaucousness (wax) from wheat heads by virus-induced gene silencing (T1F3 and T1F4). Control infections with phytoene desaturase (PDS) have no effect.

Resources committed: $2.3M over 5 years

Opportunity for collaboration: Working with collaborator-selected traits and introgression of traits and/or markers into collaborator lines

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