



# 2023 OAT & WHEAT TOUR

**AUGUST 2, 2023**

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**BRANDON**  
**RESEARCH AND DEVELOPMENT CENTRE**



# AGENDA

9:30 – 10:00 am Registration at the Beach

10:00 am Tour at the Beach site

Wheat & Oat Breeding overview

Oat nursery

Wheat nursery

Discussions:

Field management

Equipment

Data collection

Molecular markers

Phenocart

11:30am Tour at Quintaines site

Wheat yield plots

Sprouting nursery

Isolations plots

Oat yield plots

12:30 pm Move to lunch site – Shady Lane Tea Room  
Trans Canada HWY and Humesville RD  
Location: 3.75 km/2.25 mi. east on Hwy. 1 and  
north on Humesville Road

Following lunch – further viewing of plots if desired



# OAT AND WHEAT BREEDING AT BRDC: PROGRAM OVERVIEW

*The focus of Agriculture and Agri-Food Canada (AAFC) **Brandon Research and Development Centre (BRDC)** is to enhance the profitability for oat and Canada Western Red Spring (CWRS) wheat across the value chain. We develop new high-quality milling oat and CWRS varieties for production in western Canada and contribute to novel germplasm development for sustainable agriculture. This goal is achieved by engaging a multi-disciplinary, well-established team of scientists from public and private breeding institutions as well as universities across western Canada.*

The key areas of research include:

1. Oat and wheat germplasm development for climate resilience
2. Develop oat and wheat germplasm to promote a clean environment and clean food
3. Improve nutrient use efficiencies to reduce greenhouse gas emissions
4. Increase breeding efficiencies using innovative genomic tools and upstream research (such as targeted trait manipulation)



# CONTACTS



## **KIRBY NILSEN**

Oat Breeder

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## **SANTOSH KUMAR**

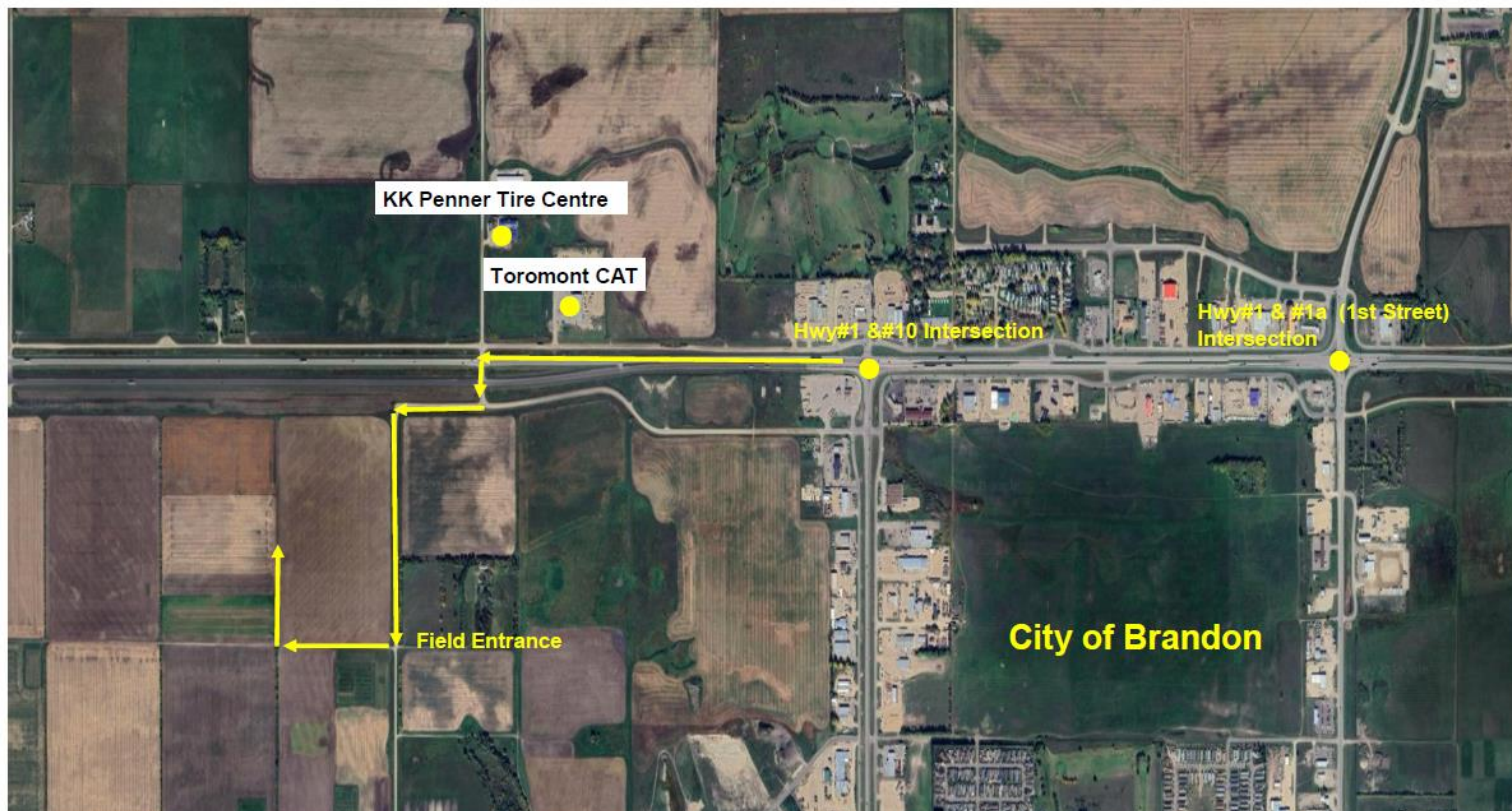
Wheat Breeder

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# Directions to Site 1: Beach Field

## 2023 BRDC Oat and Wheat Nursery Tour Site

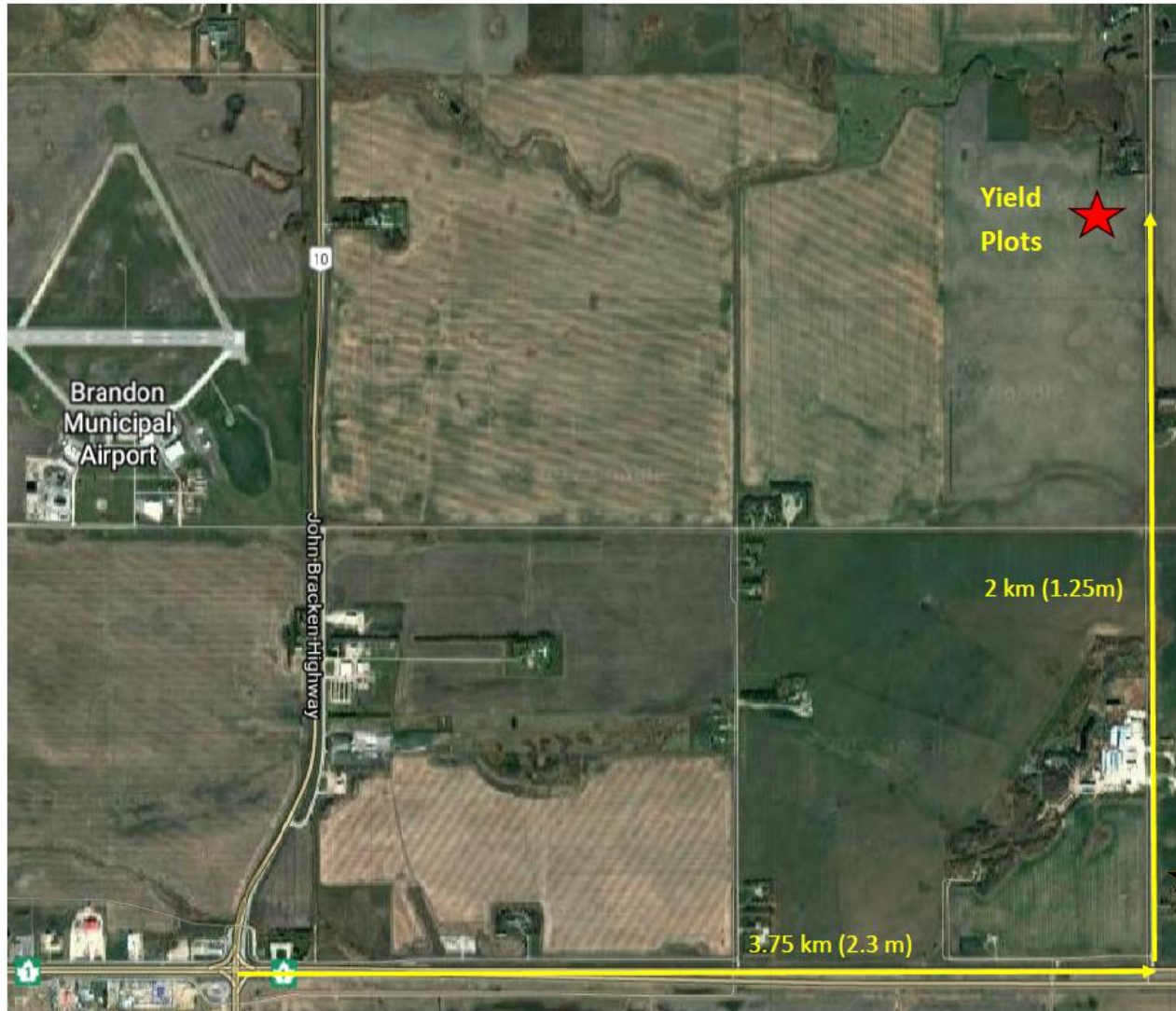


Directions: From Junction of Hwys #1 & #10, travel 1.35km's West and turn South (left) at Service Road. Turn West (Right) on Service Road (34th Street) and follow road 0.85 km's, Turn West again (right) into Field and follow parking attendants. (49.881044,-99.984947)



# Directions to Site 2: Quintaines Field

## Directions to Quintaines Field from Brandon



Directions: From the Junction of Hwys #1 & #10, travel 2.3 miles (3.75km) East and turn North at Quintaine's Livestock Dealer (there is a white bull statue on a pole) and go 1.5 miles. Entrance on west side by black water tank. (49.904510, -99.889048)



# Quintaines Field Overview

## 2023 Quintaines Field Map









# Varieties Released by the Cereal Research Centre and Brandon Research & Development Centre

Agriculture and Agri-Food Canada, Brandon Research & Development Centre, Brandon, Manitoba



## OAT

1936	Vanguard
1941	Ajax
1941	Exeter
1948	Garry
1953	New Garry
1954	Rodney
1965	Harmon
1967	Kelsey
1967	Sioux
1974	Hudson
1980	Fidler
1982	Dumont
1985	Riel
1987	Robert
1991	AC Marie
1993	AC Preakness
1995	AC Assiniboia
1996	AC Medallion
1998	AC Rebel
1999	Pinnacle
2000	Ronald
2003	Furlong
2004	Leggett
2006	Jordan
2008	Stainless
2008	Summit
2012	Stride
2013	AAC Justice
2014	AAC Oravena
2017	AAC Kongsore
2018	AAC Douglas

2022	AAC Wesley
2022	AAC Neville

## HULLESS OAT

1956	Vicar
1976	Terra
1992	AC Belmont
2000	AC Gwen



## BREAD WHEAT

1937	Renown
1937	Coronation
1939	Regent
1946	Redman
1953	Selkirk
1959	Pembina
1959	Canthatch
1965	Manitou
1969	Neepawa
1972	Napayo
1979	Benito
1980	Columbus
1981	Katepwa
1986	Roblin
1990	Pasqua
1991	AC Minto
1993	AC Domain
1994	AC Cora
1994	AC Pacific
1995	AC Majestic
1996	AC Splendor
1998	AC Tahoe
2000	Superb
2002	Harvest
2003	Lillian
2004	Peace
2004	Somerset
2006	Kane
2007	Waskada
2007	Unity
2008	Fieldstar
2008	Propel
2009	Shaw
2010	Vesper
2011	Cardale
2014	AAC Jatharia
2014	AAC Cameron
2017	AAC Warman
2018	AAC Magnet
2018	AAC LeRoy
2019	AAC Redstar
2020	AAC Hodge
2022	AAC Dutton
2022	AAC Darby
2022	AAC Hassler
2023	AAC Spike*
2023	AAC Walker*



## HARD WHITE WHEAT

2000	Snowbird
2001	Kanata
2007	Snowstar
2011	Whitehawk

## EXTRA STRONG WHEAT

1999	AC Corinne
1999	Glenavon
2004	Burnside
2008	Glencross
2009	CDN Bison

## CPS RED WHEAT

1994	AC Foremost
2009	Conquer
2011	Enchant

## GENERAL PURPOSE WHEAT

2008	Minnedosa
2013	AAC Tradition

## DURUM WHEAT

1969	Hercules
1975	Macoun
1977	Coulter
1981	Medora
1994	AC Melita
1995	Dressler
1996	AC Morse
2000	Napoleon

## BARLEY

1980	Norbert
1987	Ellice
1991	AC Oxbow