




Agriculture and
Agri-Food Canada

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Breeding Success! Now, will the industry prefer them?

Organic Grain Industry
Monthly Teleconference

SPECIAL EDITION

March 28, 2018

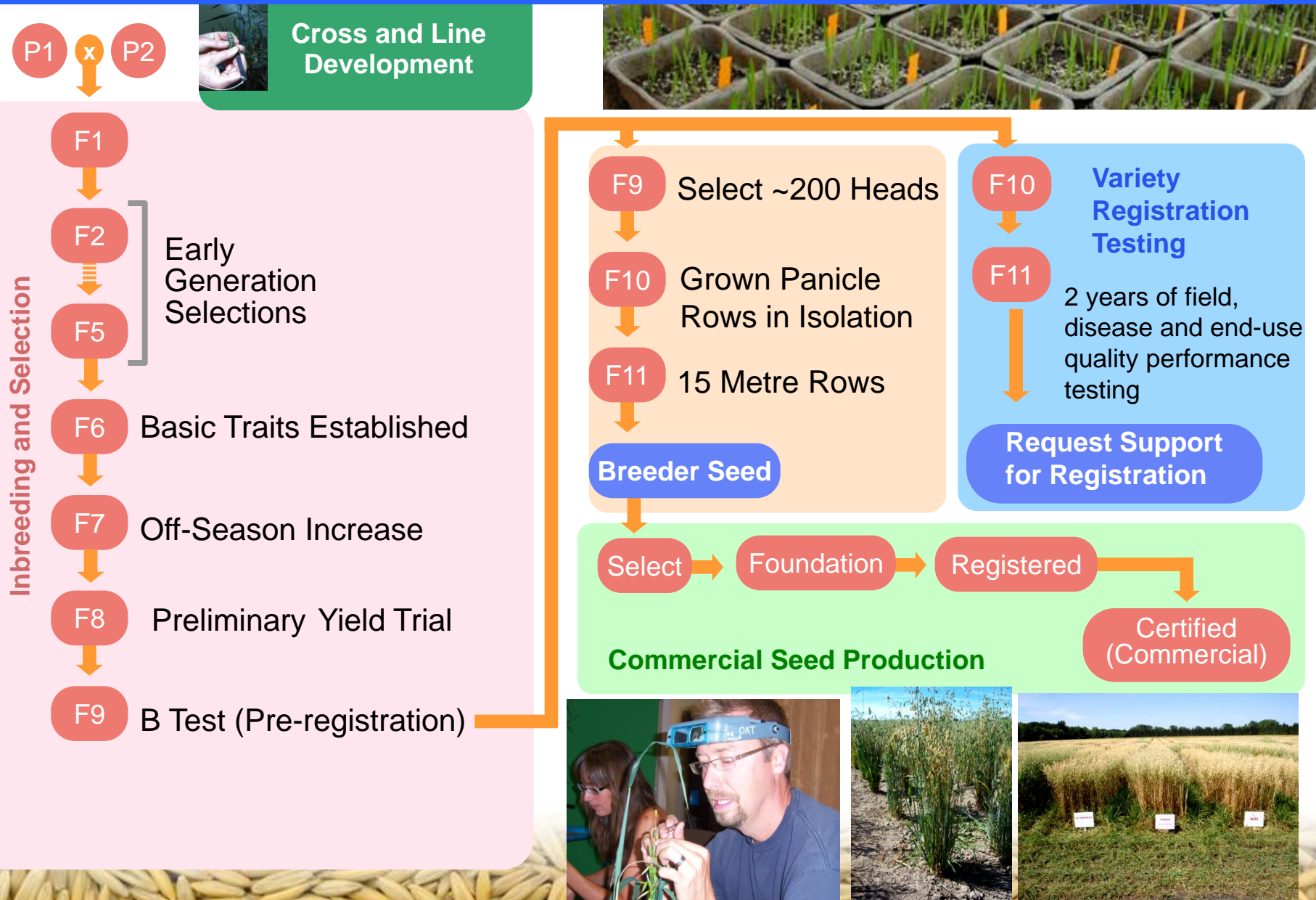
Canada 

AAFC Organic Oat Breeding Program

**Program objective is to provide
producers, processors, food and feed
consumers
as well as other end users
with superior oat cultivars for the Prairies**



Schematic of a Breeding Program and Cultivar Registration



Variety Registration

Prospective lines must have
merit

= Improved grain yield, disease
resistance or end-use quality



PRCOB- Oat and Barley Agronomy Evaluation Team specifications for oat

Agronomic Traits	Target Values
Yield	Equal to or better than AC Morgan
Heading Date	As early as possible
Maturity	As early as possible
Height	Shorter
Lodging	Similar to AC Morgan
Test Weight	>48.6 Kg/hl (38# Winchester bushel)
Kernel Weight	>30g/1000
%Plump	Similar to CDC Dancer
%Thins	Similar to CDC Dancer
%Groat	Similar to CDC Dancer



PRCOB- Oat QET Compositional specifications for food oat

Quality Trait	Recommended Target Values
Hull Colour	White to yellow preferred
Groat Colour	white to cream, similar to checks
Plumpness	>50% Over
Thin Oats	<2%
Test Weight	48.6 Kg/hl (38# Winchester bushel)
Kernel Weight	>30g/1000
% Groats	Target 75%
Total Dietary Fiber ¹ , minimum:	>10% dwb
Oil ² , maximum:	<7.5%dwb (will increase to 8%)
Protein ³ , minimum:	>13%dwb
β-glucan ⁴ , minimum:	≥4.5%dwb

¹AOAC 991.43, ²AOAC 996.06, ³AACC 46-30 /*corresponds to AOAC 992.23

⁴AOAC 995.16 or AACC 32-23



Oat & Barley Disease Evaluation Team

Minimum Accepted Disease Resistance

Priority 1 Disease	Minimum Accepted Resistance
Smuts	Intermediate
Barley Yellow Dwarf Virus	Moderately Susceptible
Oat Stem Rust	Intermediate
Oat Crown Rust	Intermediate
Fusarium Head Blight	Intermediate (based on DON)



AAC Oravena (OT8003)

- **First oat cultivar developed under organic management**
- **Officially registered July 3, 2014**
- **Licensed to GRAIN MILLERS CANADA CORP.**
- **Pedigreed seed production under organic management**



AAC Oravena---Traits

- **Good Yield**
- **Good lodging resistance**
- **High Test Weight**
- **High Thousand Kernel Weight**
- **High Total Dietary Fibre**
- **High Betaglucan**
- **Oil content similar to Leggett**
- **Resistant to smut, crown rust resistance, intermediate resistance to stem rust**



AAC Kongsore (OT8006)

- **Stainless/OT3013**

OT3013=AC Morgan//AC Rebel/Dumont 48

- **F3 generation was moved into the organic program, where it remained**
- **Supported for registration in February 2017**
- **Registered March 2018**
- **Licensed to GRAIN MILLERS CANADA CORP.**



AAC Kongsore (OT8006)

- **Good yield**
- **Good lodging resistance**
- **High test weight**
- **High thousand kernel weight**
- **High percent plumps**
- **High protein**
- **Good betaglucan & Total Dietary Fibre**
- **Resistant to smut**
- **Intermediate reaction to Crown Rust (Pc91)**



The hope is that producers will notice the new cultivar(s).....



.....Producers will grow the cultivar



...and Millers will want to use that cultivar in their products



**...and consumers will want to purchase
and consume the products**



AAFC-BRDC Wheat & Oat Breeding Crew



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THANK YOU

**AAFC & GFII, OSC, Grain Millers,
Clif Bar, OACC, OFC, POGI,
POGA, Martin Entz, Dean Spaner
and so many others**

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