Oat Varieties: Selecting a Variety for Your Farm Mitchell Japp

CropSphere

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- What are we picking a new variety for?
 - Market (i.e. check with your miller)
 - Maturity
 - Disease/insect resistance (crown rust area)







WATCH FOR RUST

Rust can travel into Canada on wind currents originating in the United States. Early and continuous scouting for cereal rusts is important.

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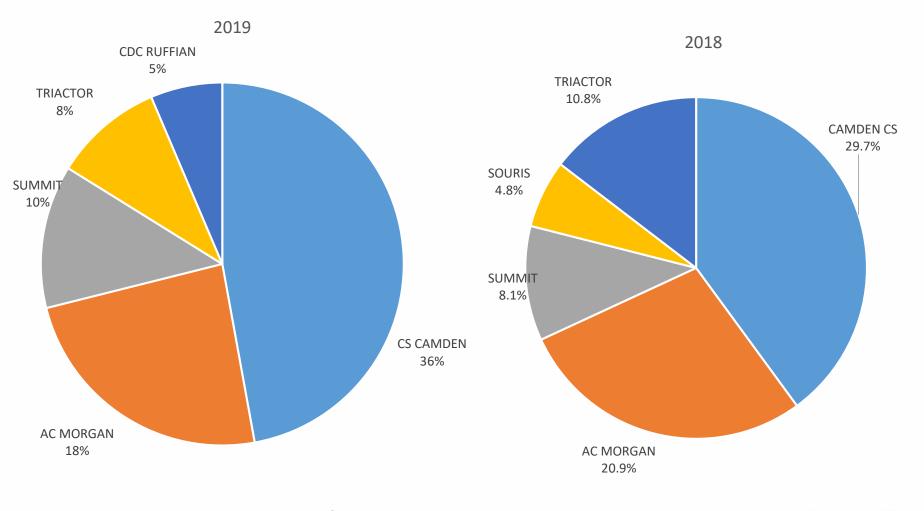




- What are we picking a new variety for?
 - Market (i.e. check with your miller)
 - Maturity
 - Disease/insect resistance (crown rust area)
 - Physiology
 - Yield



Top 5 Oat Varieties Grown



Data from Canadian Grain Commission

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SASKATCHEWAN SEED GUIDE 2020



Saskatchewan Seed Growers' Association

Saskatchewan Seed Grower Listings | P. 108

Canola Performance Trials | P. 95

SASKSEED **GUIDE GOES**

MIDGE TOLERANT WHEAT **CELEBRATES** 10 YEARS | P. 12

CDC BOW MAKES SPLASH AMONG CRAFT BREWERS | P. 40

Varieties of Grain Crops 2020 Table of Contents Regional Variety Testing Locations Testing Varieties in Saskatchewan What Are Plant Breeders' Rights? Seed Quality and Seeding Rates . Interpreting Seed Test Results Seed Borne and Seedling Diseases Plant Disease Resistance ... Fusarium Damaged Kernels

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Relative Maturity

Wheat

Triticale

Fall Rye.

Oat

Other Crons

Canaryseed

Puise Crops

Lentil

Chickpea

Field Pea

Eaba Bean

Dry Bean .

Camelina

Mustard

Canola

Sunflower

Flax

Oilseed Crops

Durum Wheat

Winter Wheat

Malting Barley

General Seed Facts

Safe Rates of Fertilizer Cereal Crops

Wheat Class Changes.

Feed and Food Barley

Safflower and Quinoa ...

Sovbean (Herbicide-Tolerant)

Innoculants and Nitrogen Fixation

Voluntary Changes to Labelling Blackleg Resistance

Understanding Clubroot Resistance in Canola

Breeding Institutions and Seed Distributors .

Soybean (Conventional) .

2020-21 Recommended Malting Barley Varieties

Buckwheat, Caraway, Coriander, Fenugreek

Symbols and Abbreviations Used:

- § Variety may not be described in 2021 Insufficient test data to describe
- n/a = Not applicable

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- Applied for PBR protection at time of printing (UPOV'91) Plant Breeders' Rights (UPOV'78) at time of printing
- Plant Breeders' Rights (UPOV'91) at time of printing

Relative maturity: VE = Very Early, E = Early, M = Medium, L = Late, VL = Very Late

Agronomic Rating: VG = Very Good, G = Good, F = Fair, P = Poor VP = Very Poo

Disease Resistance: R = Resistant, MR = Moderately Resistant. I = Intermediate Resistance, MS = Moderately Susceptible, S = Susceptible

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Accessing Public Release Varieties

Breeder seed of public release varieties is available to anyone (including farmers and seed growers) for multiplication, increase and marketing. There are no royalties or seed marketing agency fees attached to use or sale of seed produced from Breeder seed of public release varieties. While subsequent seed production may be Pedigreed, this is the buyer's choice and the buyer may increase the seed of public release varieties in any way he/ she wishes (only pedigreed seed can be sold by variety name, for most major crop kinds). To purchase Breeder seed of public release varieties, contact the breeding institution listed in the Breeding Institution and Seed Distributors listings on pages 38 to 40.

Legal Disclaimer

This guide is for informational purposes only. The information presented is based on aggregated data and observations, but significant individual variations may occur due to conditions such as farm management practices, climate, soil type and geographical location. While reasonable care was exercised in the preparation of the guide, no guarantees or warranties regarding the accuracy, reliability or completeness of the information are given. This guide may not reflect the newest information available and may not be regularly undated. It is the sole responsibility of the user to evaluate the accuracy and appropriateness of the information.

2020 SaskSeed Guide VR1

JANUARY 2020

PRO





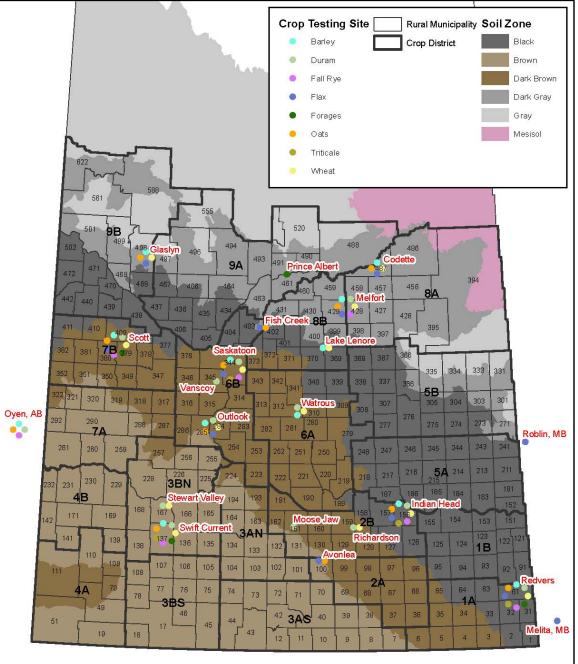
- PRCWRT
- PRCOB
- PRCPSC
- PRCO

- Agronomy
- Disease
- Quality











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Oat Main Characteristics of Varieties

Variety	Years	Yield (% CS Camden)		Test	%	Hull	%	Relative	Hoight	Resistance To ²			
	Tested	Area 1 & 2	Area 3 & 4	Weight (g/0.5L)	Hull	Colour	Plump	Maturity ¹	Height (cm)	Lodging	Stem Rust	Crown Rust	Smut
CS Camden 👳	7	100	100	242	24.3	White	82	L	94	VG	S	MS	I
CDC Arborg 👳	5	106	108	250	20.1	White	85	М	108	VG	S	I	R
CDC Boyer §	7	88	90	232	23.3	White	85	М	105	G	1	1	MS
CDC Dancer 🛞	7	88	88	253	19.8	White	86	М	103	G	I	I	R
Derby	7	87	92	247	22.9	White	79	Μ	107	G	S	S	MS
CDC Endure 🚷	3	109	110	245	21.2	White	89	М	102	VG	S	MR	R
CDC Haymaker 🕘	5	82	85	225	24.9	White	87	VL	111	G	S	S	MR
Leggett 🛞	7	92	94	256	22.0	White	82	L	96	G	I	R	R
CDC Minstrel 💩	7	95	97	245	21.0	White	92	L	98	VG	1	MS	R
AC Morgan	7	100	102	236	25.1	White	82	L	101	VG	S	S	I
CDC Morrison 🛞	7	91	86	248	24.4	Yellow	83	L	95	VG	I	MS	R
CDC Nasser §	7	98	97	233	21.8	White	79	VL	106	G	MS	S	R
CDC Norseman 🕘	7	95	95	241	20.0	White	81	М	102	G	S	MR	MS
ORe3541M 👳	6	94	88	257	21.5	White	90	L	93	VG	S	R	R
ORe3542M 👳	6	96	90	247	22.5	White	95	L	93	VG	S	R	R
CDC Orrin 💩	6	97	99	253	23.2	White	91	L	103	G	MS	S	R
Pinnacle 💩	7	102	99	244	23.6	White	89	VL	101	F	I.	S	R
CDC Ruffian 💩	7	101	97	247	20.4	White	88	L	95	G	S	Ι	R
Souris 🛞	7	97	93	253	21.5	White	72	М	98	VG	MR	MS	R
Stride 💩 §	7	99	93	255	22.9	White	80	L	103	G	I	R	R
Summit 🛞	7	93	95	256	21.6	White	81	М	94	G	I	I	R
Triactor 🛞	7	103	108	240	22.8	White	80	L	99	G	S	MR	Ι
Varieties being tested	d for adapt	ability in W	'estern Ca										
Akina 🕲	5	102	100	242	22.5	White		Μ	95	G		R	R
Kara 👳	5	102	100	247	23.2	White		М	88	G		MR	MR

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¹ Maturity Rating L = 98 days. ² Resistance ratings: R = Resistant; MR = Moderately Resistant; I = Intermediate Resistance; MS = Moderately Susceptible; S = Susceptible.

Newer Entries to Guide (since 2016)

- CDC Norseman (2016)
- ORe3541M (2017)
- ORe3542M (2017)
- CDC Arborg (2018)
- CDC Endure (2020)





Variety	Years Tested	Yield (% CS Camden)		Test Weight (g/0.5L)	% Hull	Hull Colour
		Area 1&2	Area 3&4			
CS Camden {	7	100	100	242	24.3	White
CDC Arborg {	5	106	108	250	20.1	White
CDC Endure ~	3	109	110	245	21.2	White
CDC Norseman {	7	95	95	241	20.0	White
ORe3541M {	6	94	88	257	21.5	White
ORe3542M {	6	96	90	247	22.5	White

Variety	% Plump	Relative Maturity	Height (cm)	Resistance to					
				Lodging	Stem Rust	Crown Rust	Smut		
CS Camden {	82	L	94	VG	S	MS	I		
CDC Arborg {	85	М	108	VG	S	Ι	R		
CDC Endure ~	89	Μ	102	VG	S	MR	R		
CDC Norseman {	81	М	102	G	S	MR	MS		
ORe3541M {	90	L	93	VG	S	R	R		
ORe3542M {	95	L	93	VG	S	R	R		

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ORe3541M and ORe3542M

- Milling trials in 2018 and 2019 underway
- Test results under review

Photo credit SeCan





CDC Arborg

- Very strong straw
- Medium maturity (nothing earlier than M)
- High beta glucan
- High yielding

Photo credit FP Genetics



CDC Endure

- Similar phenotype to AC Morgan
- Strong straw
- On one milling list already
- High yield

Photo credit Alliance Seed





Varieties Tested but not yet in Guide

- CFA1502 (tested 2018, 2019)
- CDC Skye (tested 2019)



What's Next?





Lodging

- Everything G or VG (except one F)
- Data comes from registration trials.
 - Use all data.
 - Sites with no lodging skew results to favourable ratings.
- Goal to collect additional data
 - only use site-years with a lodging differential,
 - increase confidence in lodging ratings.
 - Will take time.



Digital Seed Guide

- Led by Sask Seed Growers, with support from Ministry of Ag
- Expected for spring 2020
- Ability to generate short-list of varieties based on selected characteristics such as:
 - Yield
 - Lodging
 - Crown rust
 - Plump



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