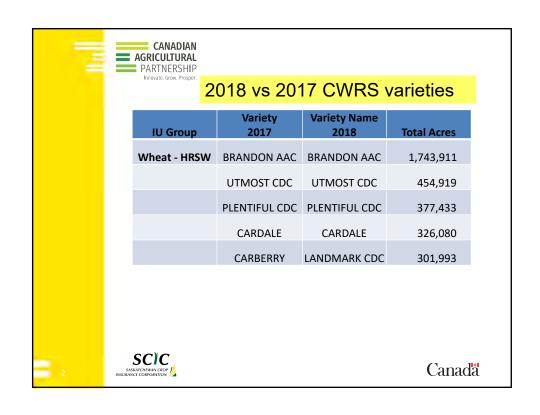
New Variety Update

Spring 2019









AAC Brandon CWRS 2015

- Parentage: Superb/CDC Osler//ND744

 (AC Carberry Parentage: Alsen /Superb)
- Replacement for AC® Carberry
- Awned, Semi-dwarf
- Yield: 5% > AC® Carberry
- MR (Good) rating for FHB
- 1 cm shorter than AC® Carberry
- Maturity: ½ day < AC® Carberry
- Resistant to leaf, stem stripe rust





AAC Elie CWRS (2015)



- Short Stature
- Semi Dwarf
- Awned
- Strong I for FHB
- High TWT
- Sprouting = Fair
- High Yield
- Mid Protein
- Improved Leaf Spotting
- Sister to AAC Brandon





AAC Redwater CWRS 2016

- Parentage: AC Intrepid//Harvest/Mckenzie
- A better "Harvest"
- Early 5 days earlier than AC Carberry
- Lodging = Fair
- Height = +9 cm
- Yield: 102% > AC Carberry
- FHB: Intermediate (Fair)
- Very Good sprouting tolerance





CDC Titanium VB

- Crop Production Services
 - Launch 2016
 - Midge Tolerant (awned) Yld 108 to 110% of Carberry
 - Height = +11 cm (Shorter than CDC Utmost +12)
 - -FHB = MR
 - Sprouting = Poor
 - Lodging = Poor
 - (Bearded CDC Utmost with better FHB)

SeCan Canada's Seed Partner

New CWRS Varieties for 2017

- AAC Jatharia VB
- AAC Cameron VB
- AAC Connery Awnless
- AAC Prevail VB
- · CDC Bradwell tall semi-dwarf



AAC Jatharia VB

midge tolerant CWRS (2017)

- Parentage: includes AC Kane, McKenzie, Grandin, Caldwell
- AC Unity VB replacement stronger straw
- Awned
- Yield: 4% > AC® Unity VB
- Maturity = AC Carberry
- FHB = Intermediate (Fair)
- High falling #
- Lodging = Fair



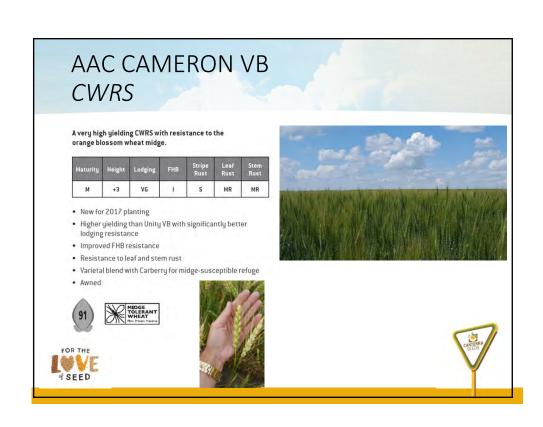
2011- 2013 Central Bread Wheat Coop

	Yield % Unity	Mat days	Height cm	Ldg 9=flat	Kernel Wt (mg)	2011-13 Grain Protein %	2011-13 Falling #
AC Unity VB	100	95	97	3.6	33.0	14.5	450
5603HR	94	97	97	2.4	31.7	14.3	440
AAC Jatharia VB	104	96	98	2.3	34.0	14.4	430

Superb = 37.2 mg seed size









Takes inputs and won't fall down — an awnless variety that combines big yields and early maturity with the benefits of short, strong straw.

Maturity	Height	Lodging	FHB	Stripe Rust	Leaf Rust	Stem Rust
E	-12	VG	MR	R	MR	R

- · Broad adaptation
- · Higher protein
- Semi-dwarf stature- suitable for intensive management
- Improved FHB rating
- Holds its colour and grade
- Awnless











AAC Prevail VB CWRS (Launching 2017)

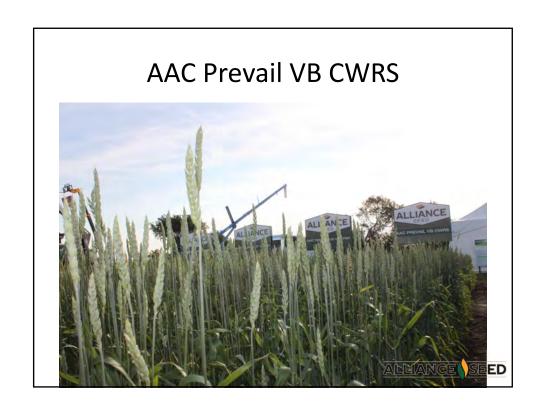


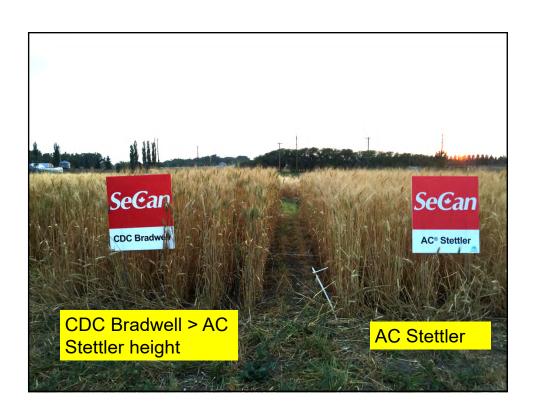


- Midge Tolerant Awnless
- 112 to 108% of Carberry
- High grade retention similar to Unity
- Lodging = Fair
- Sprouting = Good
- Excellent protein retention
- Resistance to all rusts
- FHB = Intermed
- Ht = 21 cm > Carberry









CDC Bradwell CWRS (2017)

- Parentage includes: 5602HR & AC Elsa
- Yield 100% to 107% of Carberry
- Lodging = Very Good
- Egg laying deterrence against Midge??
- FHB = Intermediate (Fair)
- Height = +9 cm > Carberry
- Awned, hollow stem
- Maturity = 1 day earlier than Carberry









New CWRS for 2018

- CDC Landmark VB (2018) semi-dwarf
- AAC Viewfield (2018) semi-dwarf
- SY Slate Syngenta Ldg = Poor,
 - Sprout = Poor, FHB = Intermed, Yld 102% to 108%. Ht +7 cm,





AAC Viewfield CWRS

(available 2018)

- Awned (FP Genetics)
- Yield: 109% to 105% of Carberry
- Lodging = Very Good
- Sprouting = Good
- Height = -3cm < Carberry (shortest)
- FHB = Intermediate (Fair)
- Maturity = -1 day < Carberry





CDC Landmark VB CWRS

(available 2018)

- Awned (FP Genetics) (midge tolerant)
- Yield: 111% to 114% of Carberry (2018 SK Seed Guide)
- Lodging = Good
- Sprouting = Good
- Height = +3cm > Carberry
- FHB = Intermediate (Fair)
- Maturity = -1 day < Carberry



New CWRS for 2019

- AAC Tisdale CWRS SeCan
- AAC Redberry CWRS Alliance
- CDC Adamant VB FPGenetics



CDC Adamant VB

- FPGenetics
- Launch 2019
- Yld 108% to 114% of AC Carberry
- FHB = Intermediate
- Height 3 cm > Carberry
- Lodging = Poor



AAC Tisdale CWRS (PT250)

- Launch 2019
- · Awned, semi-dwarf
- Yld = 100% to 109% of Carberry
- FHB = MR
- Early Maturity: 2 days earlier than Carberry
- Protein 0.7% > Carberry
- Lodging & Sprouting = Fair



AAC Tisdale CWRS (PT250)

- Very large seed size
- Ht and Ldg = Glenn
- 8 cm taller and weaker straw than AC[®]
 Carberry
- Resistant to leaf and stem rust
- · Mod resistant to bunt and loose smut
- Mod Suscept to stripe rust



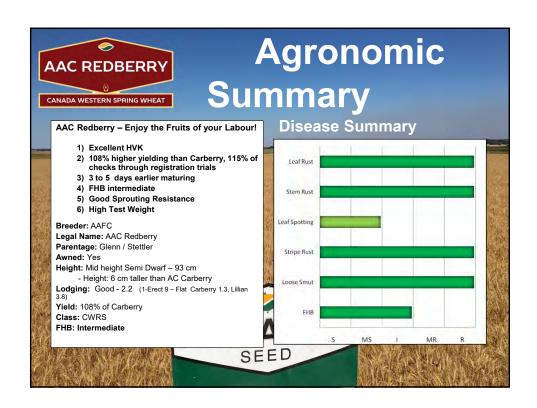














AAC Alida VB CWRS (BW980)

- Launch 2020
- AAFC Richard Cuthbert
- Parentage: AC[®] Carberry/99B61-AY30B5
- · Awned, semi-dwarf
- Midge Tolerant (refuge to be determined)
- Yield 105 to 108% > AC[®] Carberry
- Maturity = AC[®] Carberry
- Height 6 cm taller than AC[®] Carberry

AAC Alida VB CWRS (BW980)

- FHB = MR
- Low DON accumulation
- Very Good Lodging resistance
- Very Good sprouting resistance
- Resistant to: leaf rust, stem rust, stripe rust and loose smut
- Intermediate to bunt
- Protein 0.1% > AC[®] Carberry



SeCan

	Yield % Carberry	Mat days	Height cm	Ldg 9=flat	Kernel Wt (mg)	Grain Protein %	Falling #
Carberry	100	101	85	1.6	35.6	14.5	370 (F)
Viewfield	106	101	80	1.6	33.7	14.4	398 (G)
Glenn	100	101	93	2.0	34.4	14.3	327 (F)
Unity	105	98	99	<u>3.7</u>	34.5	<u>14.1</u>	433 (VG)
AAC Alida	104	101	<u>91</u>	1.7	36.7	14.6	416 (?)











AAC Warman VB CWRS

- To be offered: Fall 2017
- AAFC Santosh Kumar
- Parentage: BB07A*A637/Kane
 - (Alsen and Kane background)
- · Awned, conventional height
- Midge Tolerant (refuge = AAC Tisdale)
- Yield 111% > AC[®] Carberry
- Maturity 3 days earlier than AC[®] Carberry.
- Height 13 cm taller than AC[®] Carberry SeCan

AAC Warman VB CWRS

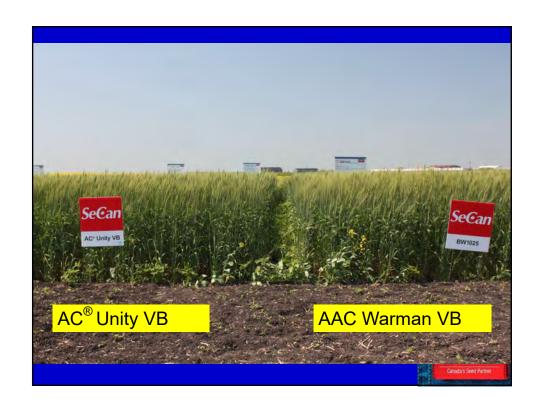
- FHB = MR
- Low DON accumulation
- Resistant to: leaf rust, stem rust, and loose smut
- Mod Suscept to stripe rust, Suscept to bunt
- Stronger straw than AC[®] Unity
- Protein 0.6% < AC[®] Carberry



	Yield % Carberry	Mat days	Height cm	Ldg 9=flat	Kernel Wt (mg)	Grain Protein %	Falling #
Carberry	100	96	84	1.7	31.9	15.0	343
Unity	108	92	98	3.0	31.5	15.0	412
Glenn	99	95	91	1.8	31.9	14.9	312
Viewfield	102	95	78	1.5	29.7	?	345
Warman	<u>111</u>	93	<u>95</u>	<u>2.6</u>	31.8	14.7	310



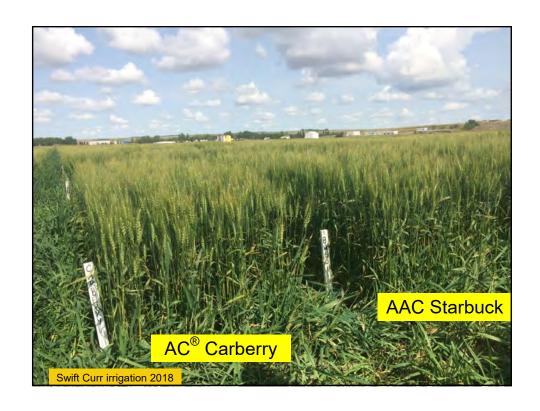




New CWRS for 2021

- AAC Starbuck VB
- AAC Wheatland VB





AAC Starbuck CWRS (BW5011)

- Launch: 2021
- AAFC Richard Cuthbert
- Parentage:Griffon/BW876//Carberry
 - (Superb, Alsen, Grandin, Caldwell, Augusta)
- · Awned, semi-dwarf
- Midge Tolerant (refuge = AAC Brandon)
- Yield 113 to 117% > AC[®] Carberry
- Maturity 1day < AC[®] Carberry
- Height = 3 cm > AC[®] Carberry



AAC Starbuck CWRS (BW5011)

- FHB = MR
- Low DON accumulation
- · Resistant to: leaf & stripe rust, loose smut
- · Intermediate to stem rust
- Susceptible to bunt
- Lodging slightly weaker than AC[®] Carberry
- Protein = AC[®] Carberry
- · High falling number



	Yield % Carberry	Mat days	Height cm	Ldg 9=flat	Test Wt Kg/hL	Kernel Wt (mg)	Grain Protein %	Falling #
Carberry	100	100	82	1.8	64.2	34.6	14.6	362 (F)
Viewfield	109	100	77	1.7	64.9	32.6	14.6	397 (G)
Glenn	98	100	88	2.1	66.2	33.5	14.6	317 (F)
Unity	104	97	93	<u>3.4</u>	64.3	33.0	<u>14.3</u>	415 (VG)
Starbuck	<u>114</u>	101	<u>82</u>	<u>2.1</u>	64.9	35.1	14.6	395 (?)

















AAC Wheatland CWRS (BW5013)

- To be offered: Fall 2018
- AAFC Richard Cuthbert
- Parentage:BD94B*D0248/*2 Carberry (Carberry = Alsen / Superb)
- · Awned, semi-dwarf
- Midge Tolerant (refuge = AAC Brandon)
- Yield 112% > AC[®] Carberry
- Maturity 0.4 day > AC[®] Carberry
- Height 1 cm < AC[®] Carberry



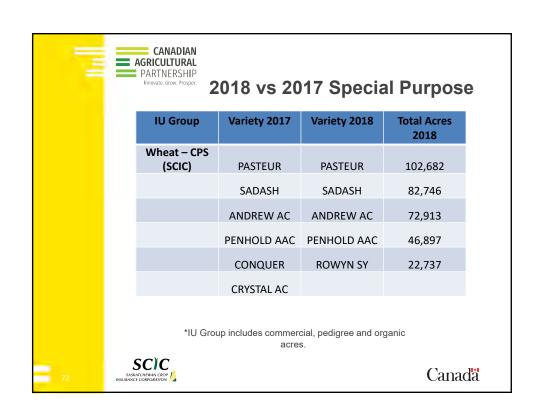
AAC Wheatland CWRS (BW5013)

- FHB = Intermediate
- · Resistant to: stem & leaf rust
- Moderately resistant to: bunt & loose smut
- Intermediate to stripe rust
- Lodging slightly stronger than AC[®]
 Carberry
- Protein 0.1% < AC[®] Carberry
- High falling number



							S	eCan
Wheatland	<u>112</u>	101	<u>81</u>	1.7	64.6	34.6	14.5	408
Starbuck	114	101	<u>82</u>	<u>2.1</u>	64.9	35.1	14.6	395
Unity	104	97	93	<u>3.4</u>	64.3	33.0	<u>14.3</u>	415 (VG)
Glenn	98	100	88	2.1	66.2	33.5	14.6	317 (F)
Viewfield	109	100	77	1.7	64.9	32.6	14.6	397 (G)
Carberry	100	100	82	1.8	64.2	34.6	14.6	362 (F)
	Yield % Carberr y	Mat days	Height cm	Ldg 9=flat	Test Wt Kg/hL	Kernel Wt (mg)	Grain Protein %	Falling #





AAC Tenacious VB (2017)

- R rated for FHB
- R rated for Leaf Rust
- R rated for Stripe Rust
- R rated for Loose Smut
- MR rated for Stem Rust
- MR rated for Bunt



AAC Tenacious VB (Launch 2017)

- Wheat Midge tolerance (sm1)
- 2 days earlier maturing than Carberry
- 25cm > Carberry
- Yield 99 to 109% of Carberry







AAC Penhold CPS Red Wheat 2016

- AAFC Swift Current
- Shortest, strongest strawed CPS Red Wheat
- 108 to 114% of AC Carberry
- FHB = MR (Good)
- 2 days earlier than AC Carberry
- 0.5% to 1% higher protein than other CPS
- Very good resistance to sprouting, lodging Secan









AAC Foray VB CPS Red Wheat 2016

- AAFC Winnipeg Doug Brown
- Top Yield, Midge tolerant
- Refuge: AAC Penhold
- Yield 116 to 120% of Carberry
- FHB = Intermed
- 1 day < Carberry
- Height 8 cm > Carberry



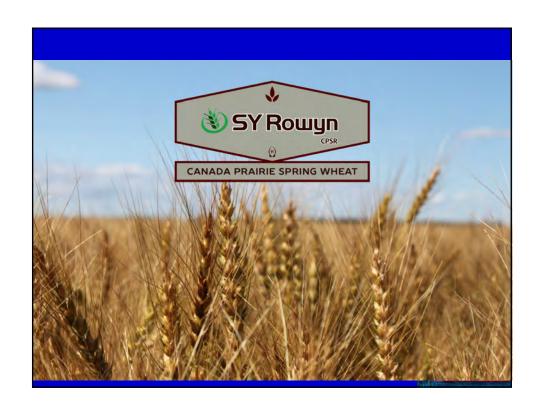
AAC Innova CWGP

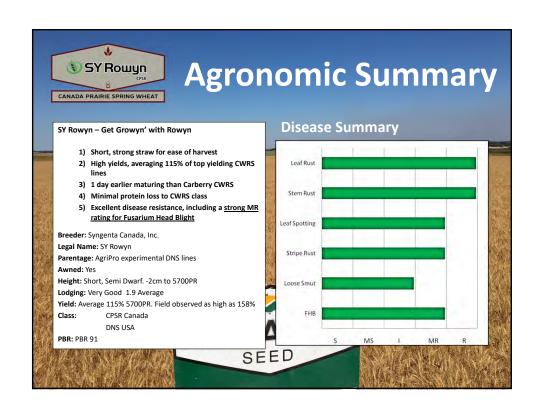




- High yields, 128% to 132% of Carberry
- Good Straw Strength
- Improved Threshing efficiency
- -3 days maturity vs Pasteur
- FHB = Susceptible









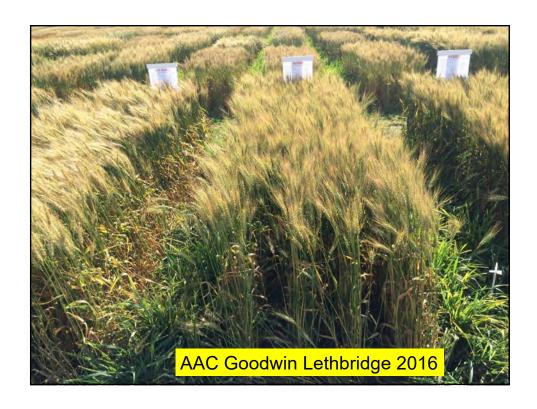
AAC Goodwin CPS Wheat (BW968)

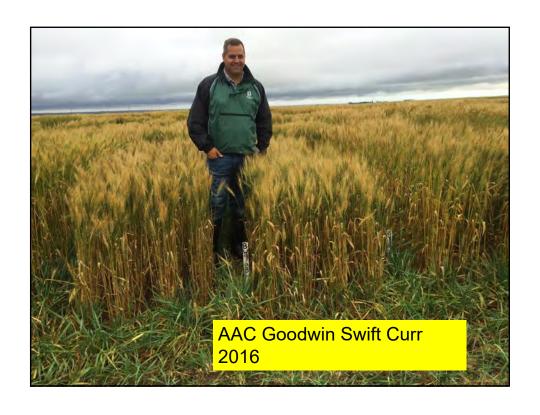
- Launch: Spring 2019
- Parentage: Carberry x AC Cadillac
- FHB = Intermed
- **Yld = 114% of Carberry**, 109% of Unity
- Yield similar to Penhold??
- Mat = Carberry
- Ht = Carberry
- Lodging slightly weaker than Carberny
 SeCan

AAC Goodwin CPS Wheat (BW968)

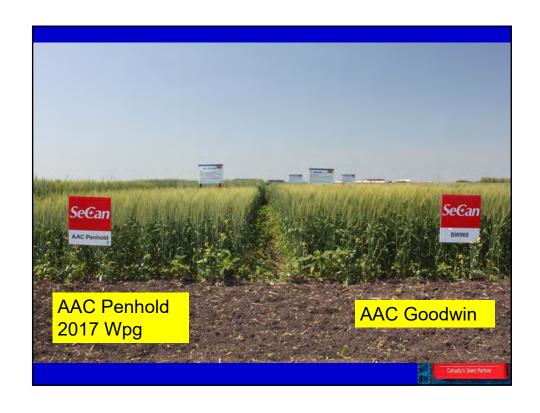
- Protein 0.3% < Carberry
- Leaf rust = R
- Stem rust = Intermed
- Stripe rust = R
- FHB = Intermed
- Smut = Mod Suscept
- Bunt = Intermed
- 2 days later than Penhold
- Yld, Protein than Penhold?













	Yield % Carberry	Mat days	Height cm	Ldg 9=flat	Kernel Wt (mg)	2012-14 Grain Protein %	2012-14 Falling #
AC Carberry	100	101	87	1.3	34.5	14.5	398
AAC Goodwin	<u>114</u>	101	<u>87</u>	<u>1.5</u>	35.9	14.2	445
oodwin							
						Destroy	FFTEE MASSE





AAC Paramount VB (SWS 433) Soft White Wheat

- Launch: 2019
- Parentage: SWS 366 X Sadash
- 106% yield > AC Andrew
- 103% yld > AC Sadash
- Maturity = AC Andrew & Sadash
- Height 4 cm > AC Andrew
- Lodging = AC Sadash
- Large kernel



AAC Paramount VB (SWS 433) Soft White Wheat

- Resistant: Stripe rust, loose smut, Powdery Mildew
- Intermediate resistance: leaf & stem rust, black point
- Suceptible: bunt and FHB
- Improved falling number
- Midge tolerant



	2012-	2014	Soft V	Vhite V	Vheat (Coop	
	Yield % AC Andrew	Yield % AC Andrew (dryland)	Mat days	Height cm	Ldg 9=flat	Kernel Wt (mg)	Grain Protein %
AC Andrew	100	100	105	92	2.5	38.0	??
Sadash VB	103	103	105	94	2.6	37.7	11.3
Paramount VB	106	106	105	96	2.6	39.6	11.7
						<u>•</u>	seCan





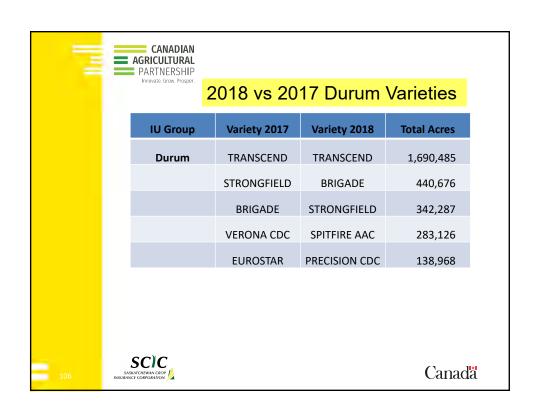


















AAC Spitfire (DT844) 2017

- Hollow stem AC Strongfield replacement
- Yield 108 to 110% > AC® Strongfield
- Lodging = Good (Stronger Straw than AC Strongfield)
- Maturity = Strongfield
- Height 2 cm < Strongfield
- · Lower protein than Strongfield
- FHB = Susceptible



Other New Durum Lines 2017

- CDC Fortitude (Crop Prod Services)
 - 2017
 - Solid Stem Sawfly tolerant
 - Yield 103% of Strongfield
 - Lodging = Fair
 - FHB = MS
- CDC Carbide VB (Crop Prod Services)
 - 2017
 - Midge Tolerant
 - Yield 108% of Strongfield
 - Maturity, Height = Strongfield
 - Lodging = Poor, FHB = MS









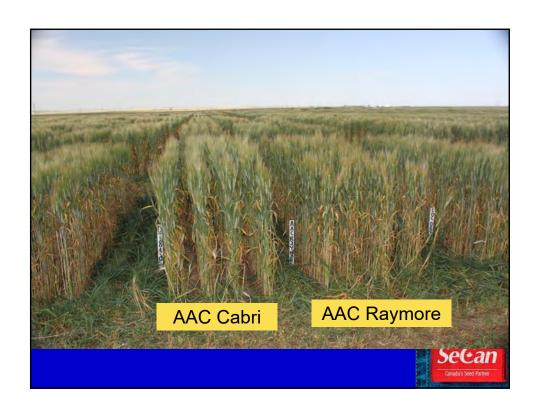
New Durum Varieties 2018

- AAC Cabri SeCan
- CDC Precision Alliance
- CDC Alloy FPGenetics
- CDC Dynamic Nutrien/Proven Seed

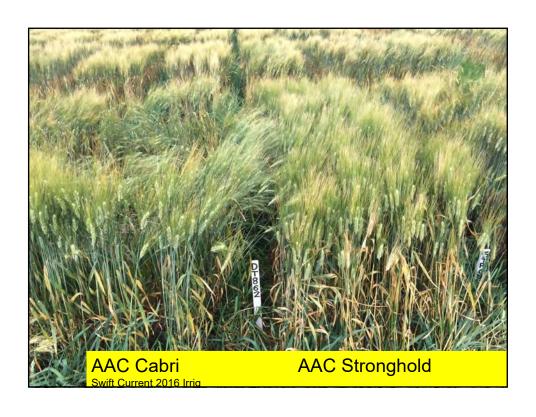


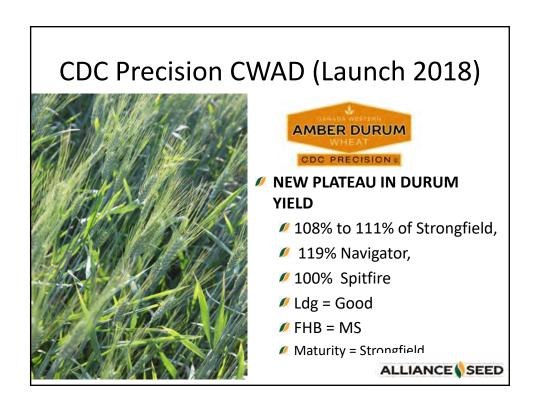
AAC Cabri (DT840)

- Launch 2018
- Solid Stem (Sawfly Tolerant)
- Yield 104 to 105% > AC® Strongfield
- 1 day later than AC® Strongfield
- Lodging = AC[®] Strongfield
- 3 cm taller than AC[®] Strongfield
- 0.3% < Protein than AC[®] Strongfield
- FHB = Moderately Susceptible (Poor









CDC Precision CWAD





- Standability better than Strongfield (2.0 vs 2.9), Brigade (2.1), Navigator (1.9)
- Height 2.5 inches shorter than Brigade (+4 cm vs Stgfld)
- FHB = MS



Other New Durum Lines 2018

- CDC Alloy (FP Genetics)
 - Yield 108 to 109% of Strongfield
 - Lodging = Fair
 - Maturity 1 day > Strongfield, Ht 4cm > Strongfield
 - FHB = MS, lower protein than Strongfield
- CDC Dynamic (Nutrien/Proven Seed)
 - Yield 105 to 106% of Strongfield
 - Lodging = Fair
 - Maturity = Strongfield, Ht 2cm > Strongfield
 - FHB = MS, Protein = Strongfield



New Durum Varieties 2019

- AAC Congress Canterra
- AAC Stronghold SeCan



CWAD — AAC Congress AAFC (Swift Current) 2019 Yld 109 – 107% > Stgfld 1 day later than Strongfield 2 cm taller than Strongfield Lodging = Poor Test weight similar to checks Reduced DON accumulation FHB = Mod Susceptible Canada Let's Grow







AAC Stronghold Durum (DT862)

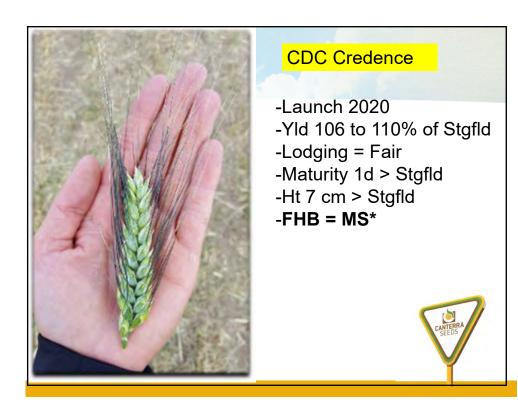
- Launch: 2019
- Solid stem
- Best straw strength in durum
- (VG lodging resistance)
- Stronger straw than Strongfield & Cabri
- Yld = 105% of Strongfield
- Yld = 114% of Strongfield Irrigated
- Ht 2 cm shorter than Strongfield

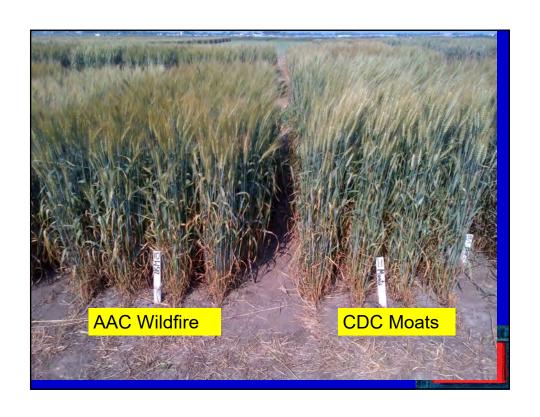


AAC Stronghold Durum (DT862)

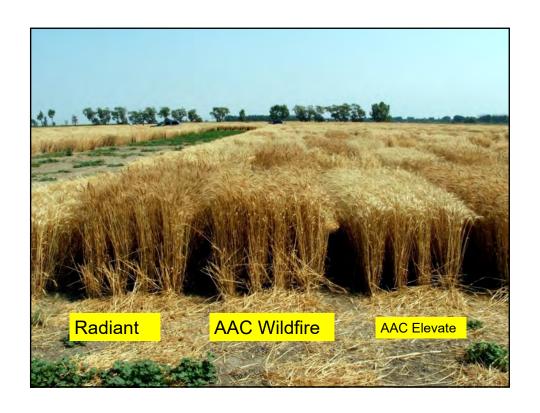
- Leaf rust = R
- Stem rust = R
- Stripe rust = MR
- Bunt = Interned
- Smut = R
- FHB = Mod suscept











AAC Elevate Hard Red Winter

- Available fall 2017
- Yld = 110% to 103% of CDC Buteo
- Loding = Very Good
- Height 7 cm < Buteo (Short, strong straw) (7 cm < Radiant)
- FHB = Intermediate (Fair)
- Resistant to leaf and stem rust
- Winter survival = Good
- Resistant to wheat curl mite (Wheat streak Mosaic virus)

 SeCan

AAC Wildfire (W512) Hard Red Winter

- Available fall 2018
- Parentage: L99-1236 X AC Bellatrix
- SK and AB adaptation (AC Radiant adaptation)
- Grain yield Coop: 109%>Radiant, 109%>Moats
- SK YId = 116% of CDC Buteo
- Short, strong straw (5 cm < Radiant)
- FHB = MR (Good)
- · Russian Wheat Aphid resistant
- Susceptible to stem and leaf rust, inferior to Moats

AAC Wildfire (W512) Hard Red Winter

- Stripe rust resistant
- Bronze Chaff
- Good winter survival
- Later maturity
- · Medium height
- Lodging = Good



SeCan

2012- 2014 Western Winter Wheat Coop

	Yield % Moats	Winter Survival (%)	Mat days	Height cm	Ldg 9=flat	Kernel Wt (mg)	Grain Protein %
Moats	100	84	218	98	3.0	31.9	12.4
Radiant	100	84	220	96	2.1	33.4	11.6
Flourish	102	85	215	86	2.3	34.4	12.2
AAC Elevate	104	83	218	90	2.4	36.6	11.8
Wildfire	<u>109</u>	<u>85</u>	221	<u>92</u>	2.3	34.9	11.9

