

University of Guelph Bean Breeding Program

Ontario Pulse Crop Committee

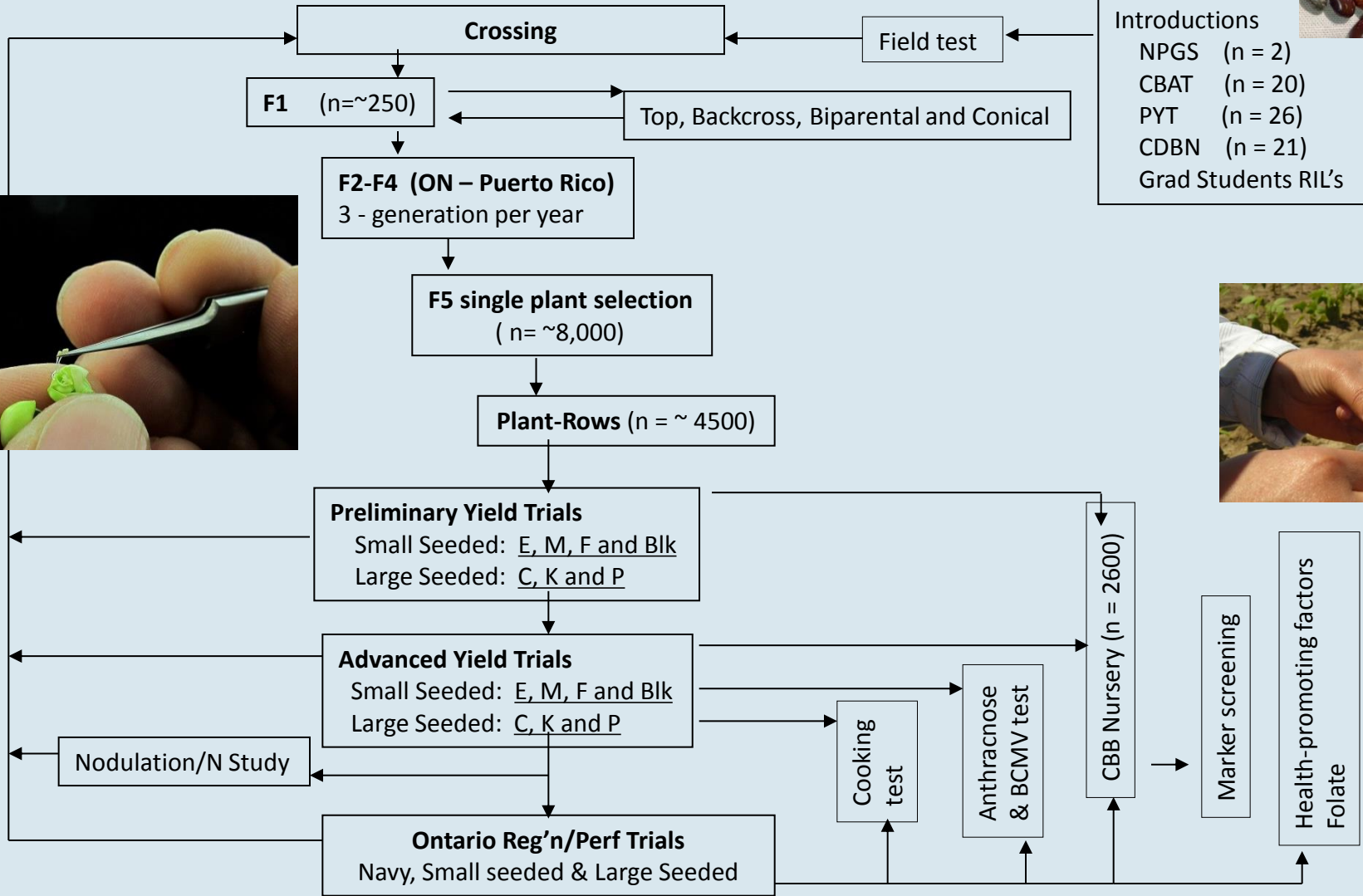
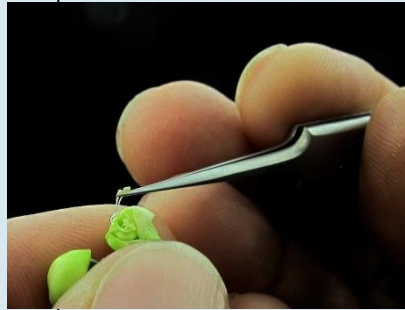
February 13, 2019



UofG/AAFC Bean Breeding Program Germplasm Cycle



- Introductions**
- NPGS (n = 2)
 - CBAT (n = 20)
 - PYT (n = 26)
 - CDBN (n = 21)
 - Grad Students RIL's





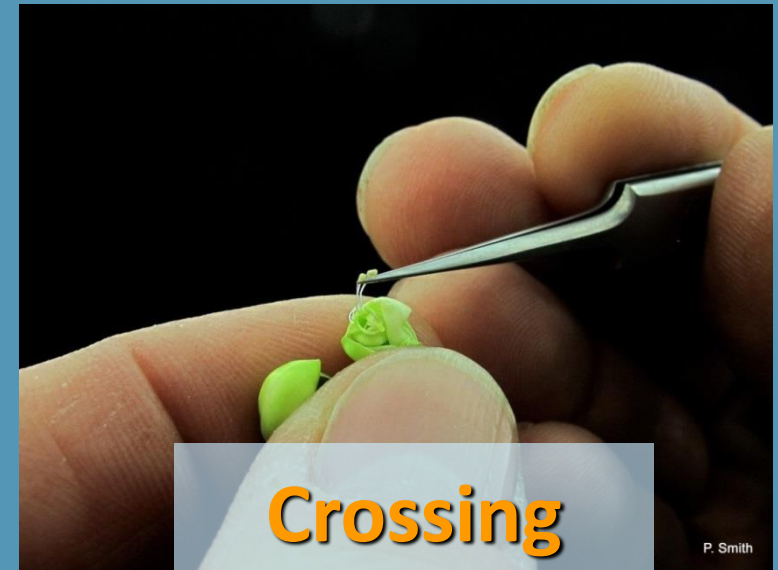
Winter Nursery



Adzuki



Plot planting



Crossing



Headrows



Yield Trials



**Registration
Trials**



**Mixture - Genetic
Diversity Study**



Herbicide Screening



Graduate students



Disease Screening



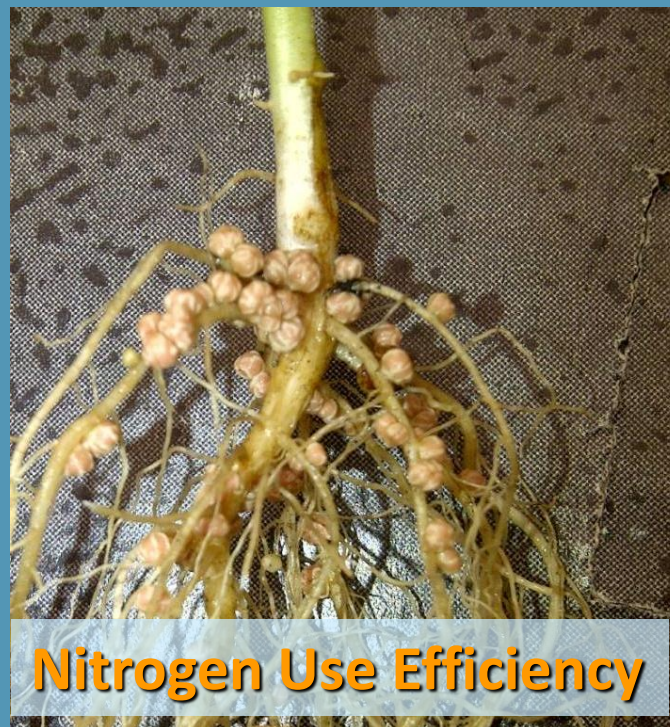
Plot Tours



Harvest



Idaho Breeder Seed

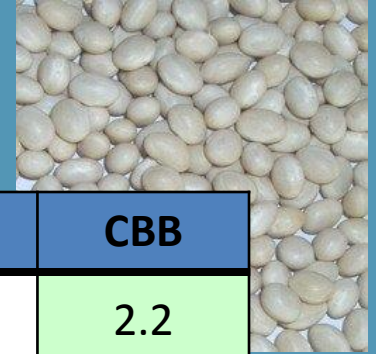


Nitrogen Use Efficiency

Research Results

- Seven 1st year whitebeans in the registration trials
- Three 2nd year whitebeans
- One 1st year ND cranberry bean, two 1st year LRK, one 1st year WK
- Two 2nd year cranberry and one 2nd year DRK, LRK and WK
- Advanced trials have many promising new lines

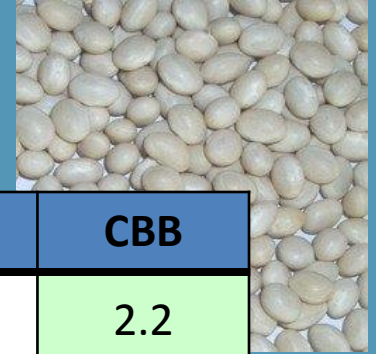
Future Varieties



Variety	Yield	Y/M	Maturity	Harv	Anth	CBB
ACUG 16-6	4159	40.6	103.1	3	S	2.2
Apex	4149	40.4	103.3	2	S	2.4
Fathom	4039	41.1	98.3	1.9	R	2.8
AAC Argosy	4011	38.9	103.4	2.2	R	2.0
Rexeter	3968	39.6	100.8	2.5	S	2.4
ACUG 16-5	3932	39.4	100.9	2.4	R	2.2
ACUG 17-5	3809	37.5	102.0	2.3	R	2.3
ACUG 16-3	3796	38.8	98.6	1.4	R	1.9
Bolt	3796	38.7	98.8	1.3	R	2.5
Test Mean*	3935	101.7	38.9	2.0	S	2.4
LSD(0.05%)*	268.9	1.6	2.8	0.4	-	1.14

*2018 Navy Regn/Perf trial

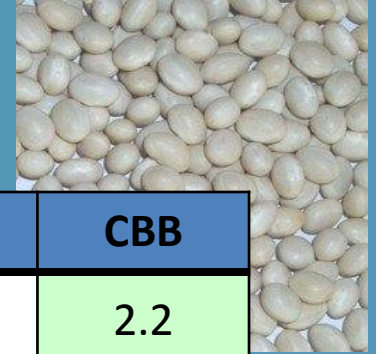
Future Varieties



Variety	Yield	Y/M	Maturity	Harv	Anth	CBB
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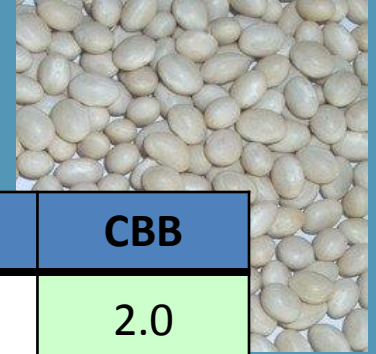
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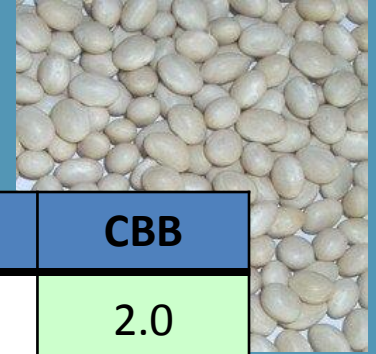
New Whitebeans



Variety	Yield	Y/M	Maturity	Harv	Anth	CBB
ACUG 18-4	4383	41.7	105.6	2.0	S	2.0
ACUG 18-5	4228	41.3	102.9	2.5	S	2.2
ACUG 16-6	4159	40.6	103.1	3.0	S	2.2
Apex	4149	40.4	103.3	2.0	S	2.4
ACUG 18-3	3959	40.2	99.3	2.1	S	2.4
ACUG 18-1	3941	39.9	99.5	2.2	S	2.5
ACUG 16-5	3932	39.4	100.9	2.4	R	2.2
ACUG 16-3	3796	38.8	98.6	1.4	R	1.9
Bolt	3796	38.7	98.8	1.3	R	2.5
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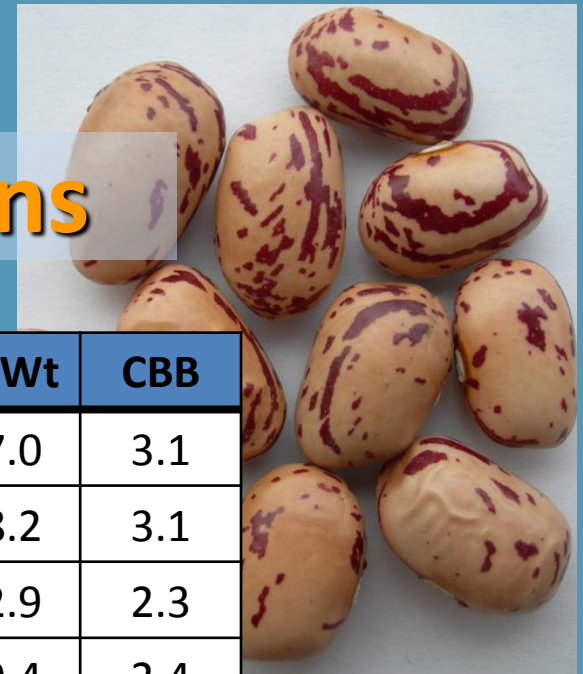
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ACUG 18-4	4383	41.7	105.6	2.0	S	2.0
ACUG 18-5	4228	41.3	102.9	2.5	S	2.2
ACUG 16-6	4159	40.6	103.1	3.0	S	2.2
Apex	4149	40.4	103.3	2.0	S	2.4
ACUG 18-3	3959	40.2	99.3	2.1	S	2.4
ACUG 18-1	3941	39.9	99.5	2.2	S	2.5
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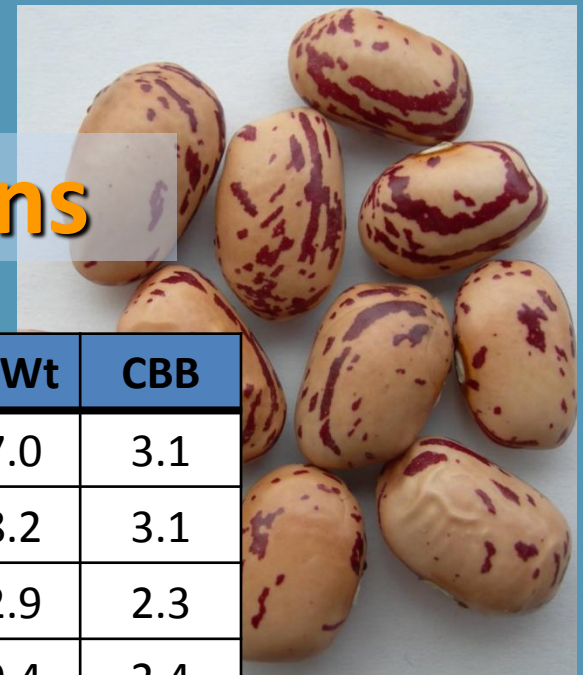
New Cranberry Beans



Variety	Yield	Y/M	Maturity	Harv	Sd Wt	CBB
17-C3	2961	31.4	95.1	1.9	67.0	3.1
15-C2	2846	29.7	96.9	2.6	68.2	3.1
Red Rider	2742	27.8	99.3	3.3	62.9	2.3
McEarly	2729	30.9	91.7	3.0	69.4	2.4
Etna	2695	29.3	91.6	2.5	70.5	3.4
17-C1	2621	29.7	92.5	2.3	66.6	3.1
14-C2	2490	28.2	93.5	2.8	63.9	2.9
18-NDC1	2342	24.4	93.4	2.3	65.7	3.2
Test Mean*	2665	28.6	95.1	2.8	66.4	2.9
LSD(0.05)*	285.8	-	-	-	-	0.86

*2018 Regn/Perf trial

New Cranberry Beans



Variety	Yield	Y/M	Maturity	Harv	Sd Wt	CBB
17-C3	2961	31.4	95.1	1.9	67.0	3.1
15-C2	2846	29.7	96.9	2.6	68.2	3.1
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Etna	2695	29.3	91.6	2.5	70.5	3.4
17-C1	2621	29.7	92.5	2.3	66.6	3.1
14-C2	2490	28.2	93.5	2.8	63.9	2.9
18-NDC1	2342	24.4	93.4	2.3	65.7	3.2
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LSD(0.05)*	285.8	-	-	-	-	0.86

*2018 Regn/Perf trial

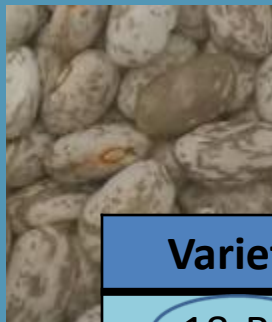
New Blackbeans and Pinto Beans



Variety	Yield	Y/M	Maturity	Harv	Sd Wt	Anth	CBB
18-B5	4144	36.6	113.3	1.9	26.7	S	3.1
ACUG 15-B4	4048	35.7	113.5	2.1	25.1	S	1.5
Zorro	3933	35.1	112.0	2.1	25.1	S	1.9
Zenith	3882	33.9	114.5	1.6	25.4	R	1.9
17-B2	3765	33.7	111.8	2.4	23.5	R	2.9
17-B3	3723	33.0	112.8	3.1	24.0	R	2.4
17-B5	3608	31.9	113.0	2.1	23.7	R	3.5
16-NDP1	3403	30.4	112.0	1.6	39.3	R	3.9
La Paz	3338	29.6	112.8	2.8	39.3	S	2.9
Test Mean*	3750	33.3	112.5	2.2	29.1	S	2.9
LSD(0.05)*	456.8	3.96	1.27	0.47	1.18	-	0.99

*2018 Regn/Perf trial

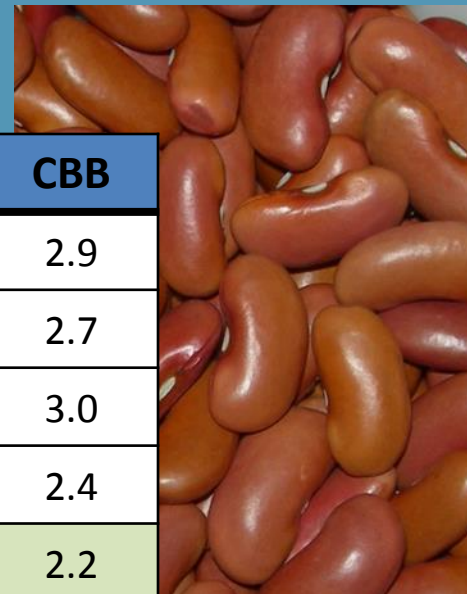
New Blackbeans and Pinto Beans



Variety	Yield	Y/M	Maturity	Harv	Sd Wt	Anth	CBB
18-B5	4144	36.6	113.3	1.9	26.7	S	3.1
ACUG 15-B4	4048	35.7	113.5	2.1	25.1	S	1.5
Zorro	3933	35.1	112.0	2.1	25.1	S	1.9
Zenith	3882	33.9	114.5	1.6	25.4	R	1.9
17-B2	3765	33.7	111.8	2.4	23.5	R	2.9
17-B3	3723	33.0	112.8	3.1	24.0	R	2.4
17-B5	3608	31.9	113.0	2.1	23.7	R	3.5
16-NDP1	3403	30.4	112.0	1.6	39.3	R	3.9
La Paz	3338	29.6	112.8	2.8	39.3	S	2.9
Test Mean*	3750	33.3	112.5	2.2	29.1	S	2.9
LSD(0.05)*	456.8	3.96	1.27	0.47	1.18	-	0.99

*2018 Regn/Perf trial

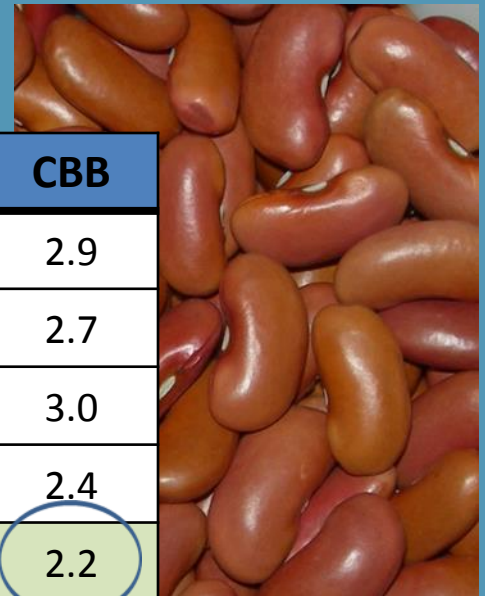
New Kidney Beans



Variety	Yield	Y/M	Maturity	Harv	Sd Wt	CBB
Dynasty	2798	28.9	97.6	3.0	67.9	2.9
ACUG 16-D2	2564	26.8	95.4	2.3	58.9	2.7
ACUG 17-D2	2528	26.2	96.4	2.7	73.9	3.0
OAC Inferno	3183	31.5	101.8	3.3	70.8	2.4
ACUG 18-L1	2873	29.1	97.6	3.2	64.3	2.2
ACUG 15-L1	2645	28.7	96.8	2.7	65.1	2.5
ACUG 18-L2	2644	28.1	96.8	2.6	62.4	2.7
ACUG 17-L1	2551	28.1	95.0	2.8	62.7	3.0
ACUG 17-W1	3063	31.7	97.4	2.8	66.9	3.3
ACUG 18-W1	2827	27.1	101.6	2.8	64.8	2.6
Yeti	2624	27.2	99.5	2.7	66.9	2.8
Mean*	2665	28.6	95.1	2.8	66.4	2.9
LSD(0.05)*	285.8	-	-	-	-	0.86

*2018 Regn/Perf trial

New Kidney Beans



Variety	Yield	Y/M	Maturity	Harv	Sd Wt	CBB
Dynasty	2798	28.9	97.6	3.0	67.9	2.9
ACUG 16-D2	2564	26.8	95.4	2.3	58.9	2.7
ACUG 17-D2	2528	26.2	96.4	2.7	73.9	3.0
OAC Inferno	3183	31.5	101.8	3.3	70.8	2.4
ACUG 18-L1	2873	29.1	97.6	3.2	64.3	2.2
ACUG 15-L1	2645	28.7	96.8	2.7	65.1	2.5
ACUG 18-L2	2644	28.1	96.8	2.6	62.4	2.7
ACUG 17-L1	2551	28.1	95.0	2.8	62.7	3.0
ACUG 17-W1	3063	31.7	97.4	2.8	66.9	3.3
ACUG 18-W1	2827	27.1	101.6	2.8	64.8	2.6
Yeti	2624	27.2	99.5	2.7	66.9	2.8
Mean*	2665	28.6	95.1	2.8	66.4	2.9
LSD(0.05)*	285.8	-	-	-	-	0.86

*2018 Regn/Perf trial

Advanced Navy Full Maturity 2018 Trial Highlights



Variety	Maturity	Yield	Y/M	Harv	Anth	CBB
Bolt	88.9	3647	41.0	1.7	R	2.4
Shock	90.1	3778	41.9	2.8	S	1.7
W16HR0152	92.9	3956	42.6	3.3	S	1.8
W16HR0106	93.5	4150	44.4	2.0	S	2.1
59876	97.7	4392	44.9	3.3	R	1.3
Apex	98.9	3871	39.2	3.2	S	1.8
58564	100.3	4382	43.7	2.9	R	1.2
60062	100.7	4602	45.7	3.1	S	1.3
Mean*	97.7	3831	43.1	3.5	S	1.6
LSD (0.05%)*		625.7		3.0		

*Elora and St. Thomas 2018

Advanced Navy Full Maturity 2018 Trial Highlights



Variety	Maturity	Yield	Y/M	Harv	Anth	CBB
Bolt	88.9	3647	41.0	1.7	R	2.4
Shock	90.1	3778	41.9	2.8	S	1.7
W16HR0152	92.9	3956	42.6	3.3	S	1.8
W16HR0106	93.5	4150	44.4	2.0	S	2.1
59876	97.7	4392	44.9	3.3	R	1.3
Apex	98.9	3871	39.2	3.2	S	1.8
58564	100.3	4382	43.7	2.9	R	1.2
60062	100.7	4602	45.7	3.1	S	1.3
Mean*	97.7	3831	43.1	3.5	S	1.6
LSD (0.05%)*		625.7		3.0		

*Elora and St. Thomas 2018

Advanced Navy Mid Maturity 2018 Trial Highlights



Variety	Maturity	Yield	Y/M	Harv	Anth	CBB
Bolt	88.3	3960	44.8	2.1	R	3.9
Shock	90.7	3615	39.9	2.9	S	1.8
58812	93.6	4551	48.6	2.0	S	1.9
W16HR0151	93.8	4052	43.2	3.3	R	1.9
W16HR0135	94.4	4052	42.9	2.7	R	2.5
60122	97.8	4057	41.5	2.6	R	2.5
Apex	99.7	3833	38.5	3.5	S	1.4
60053	101.6	4486	44.2	3.7	S	2.9
Mean*	96.7	3794		2.9		2.31
LSD(0.05%)*		513.9				0.96

*Elora and St. Thomas 2018

Advanced Navy Mid Maturity 2018 Trial Highlights



Variety	Maturity	Yield	Y/M	Harv	Anth	CBB
Bolt	88.3	3960	44.8	2.1	R	3.9
Shock	90.7	3615	39.9	2.9	S	1.8
58812	93.6	4551	48.6	2.0	S	1.9
W16HR0151	93.8	4052	43.2	3.3	R	1.9
W16HR0135	94.4	4052	42.9	2.7	R	2.5
60122	97.8	4057	41.5	2.6	R	2.5
Apex	99.7	3833	38.5	3.5	S	1.4
60053	101.6	4486	44.2	3.7	S	2.9
Mean*	96.7	3794		2.9		2.31
LSD(0.05%)*		513.9				0.96

*Elora and St. Thomas 2018

Advanced Navy Early Maturity 2018 Trial Highlights



Variety	Maturity	Yield	Y/M	Harv	Anth	CBB (0-4)
W16HR0308	88.6	3754	42.3	2.8	R	1.8
W16HR0189	89.2	4279	48.0	2.2	S	2.1
Bolt	89.9	3686	41.0	2.4	R	2.8
Shock	90.7	3762	41.5	3.0	S	1.8
W16HR0204	90.9	3875	42.6	2.8	S	1.9
W16HR1102	94.8	3908	41.2	2.5	R	2.0
W16HR0870	97.3	4231	43.5	2.7	S	1.6
60084	97.3	4583	47.1	3.3	S	2.1
Apex	98.9	3831	38.8	2.7	S	2.4
Mean*	93.4	3743	40.1	2.7		2.0
LSD(0.05%)*		540				0.85

*Elora and St. Thomas 2018

Advanced Navy Early Maturity 2018 Trial Highlights



Variety	Maturity	Yield	Y/M	Harv	Anth	CBB (0-4)
W16HR0308	88.6	3754	42.3	2.8	R	1.8
W16HR0189	89.2	4279	48.0	2.2	S	2.1
Bolt	89.9	3686	41.0	2.4	R	2.8
Shock	90.7	3762	41.5	3.0	S	1.8
W16HR0204	90.9	3875	42.6	2.8	S	1.9
W16HR1102	94.8	3908	41.2	2.5	R	2.0
W16HR0870	97.3	4231	43.5	2.7	S	1.6
60084	97.3	4583	47.1	3.3	S	2.1
Apex	98.9	3831	38.8	2.7	S	2.4
Mean*	93.4	3743	40.1	2.7		2.0
LSD(0.05%)*		540				0.85

*Elora and St. Thomas 2018

Advanced Kidney 2018 Trial Highlights

Variety	Maturity	Yield	Y/M	Harv	Sd Wt	CBB (0-4)
K16HR073	90.5	3031.06	33.6	2.2	56.7	3.6
Dynasty	94.4	3472.5	36.7	2.6	68.9	3.4
57925	95.8	3571.72	37.2	3.0	60.1	3.2
K16HR078	101.4	3524.03	34.8	3.9	57.7	2.8
15_L1	97.0	3830.99	39.6	2.4	67.7	4.0
58044	97.3	3456.66	35.4	3.1	75.8	3.2
Inferno	98.5	4205.72	42.6	3.8	67.7	3.3
K16HR019	103.1	3929.77	38.0	4.0	65.1	2.7
Yeti	98.2	3704.32	37.7	3.0	61.9	3.4
Mean*	98.5	3502	33.6	2.2	56.7	3.6
LSD*(0.05%)						

*Woodstock and St. Thomas 2018

Advanced Kidney 2018 Trial Highlights

Variety	Maturity	Yield	Y/M	Harv	Sd Wt	CBB (0-4)
K16HR073	90.5	3031.06	33.6	2.2	56.7	3.6
Dynasty	94.4	3472.5	36.7	2.6	68.9	3.4
57925	95.8	3571.72	37.2	3.0	60.1	3.2
K16HR078	101.4	3524.03	34.8	3.9	57.7	2.8
15_L1	97.0	3830.99	39.6	2.4	67.7	4.0
58044	97.3	3456.66	35.4	3.1	75.8	3.2
Inferno	98.5	4205.72	42.6	3.8	67.7	3.3
K16HR019	103.1	3929.77	38.0	4.0	65.1	2.7
Yeti	98.2	3704.32	37.7	3.0	61.9	3.4
Mean*	98.5	3502	33.6	2.2	56.7	3.6
LSD*(0.05%)						

*Woodstock and St. Thomas 2018

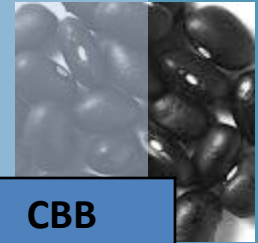
Advanced Cranberry 2018 Trial Highlights



Variety	Maturity	Yield	Y/M	Harv	Sd Wt	Blight	Seedcoat
Etna	89.8	3765	42.0	2.4	65.3	2.8	rd
56199	90.1	3210	35.6	2.3	57.8	3.5	nd
14-C2	91.1	3621	39.8	2.4	68.5	3.3	rd
58207	94.8	4504	47.5	2.8	59.3	2.5	rd
Red Rider	94.8	3993	42.1	3.0	67.8	3.4	rd
58213	95.3	4419	46.3	2.8	60.8	2.9	rd
58206	95.7	4529	47.3	2.8	62.5	2.7	rd
C16HR412	95.7	4484	46.9	2.7	60.0	2.8	sd
C16HR383	95.8	4664	48.7	2.8	60.8	2.5	rd
15-C2	97.2	4558	46.9	2.6	68.6	2.1	rd
C16HR232	99.6	4358	43.8	3.2	68.2	1.8	rd
Mean*	94.8	4161.5		2.7	63.6	2.8	
LSD(0.05%)*		736.2					

*Woodstock and St. Thomas 2018

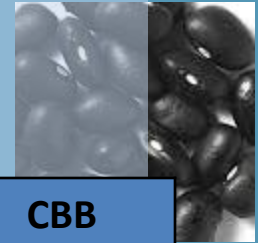
Advanced Blackbean 2018 Trial Highlights



Variety	Maturity	Yield	Y/M	Harv	Anth	CBB
59512	95.9	5067	52.9	1.9	S	3.2
Zenith	96.9	4941	51.0	2.0	R	2.7
B16HR044	97.3	5026	51.7	2.5	S	3.4
Zorro	97.7	5332	54.6	2.0	S	3.2
59546	97.9	5297	54.1	2.5	S	2.7
B16HR188	98.2	5354	54.5	1.8	S	3.2
15-B4	98.3	4801	48.8	3.3	S	3.5
B16HR565	98.4	5048	51.3	2.3	S	3.0
59536	99.6	5187	52.1	2.3	S	3.3
B16HR178	100.2	5520	55.1	2.6	S	3.5
Mean*	98.4	4861		2.7		3.1
LSD(0.05%)*		739.0				

*Woodstock and St. Thomas 2018

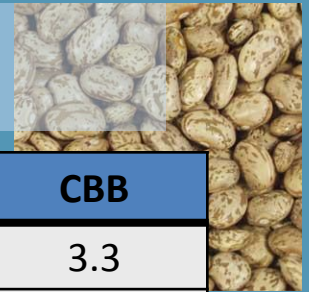
Advanced Blackbean 2018 Trial Highlights



Variety	Maturity	Yield	Y/M	Harv	Anth	CBB
59512	95.9	5067	52.9	1.9	S	3.2
Zenith	96.9	4941	51.0	2.0	R	2.7
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Zorro	97.7	5332	54.6	2.0	S	3.2
59546	97.9	5297	54.1	2.5	S	2.7
B16HR188	98.2	5354	54.5	1.8	S	3.2
15-B4	98.3	4801	48.8	3.3	S	3.5
B16HR565	98.4	5048	51.3	2.3	S	3.0
59536	99.6	5187	52.1	2.3	S	3.3
B16HR178	100.2	5520	55.1	2.6	S	3.5
Mean*	98.4	4861		2.7		3.1
LSD(0.05%)*		739.0				

*Woodstock and St. Thomas 2018

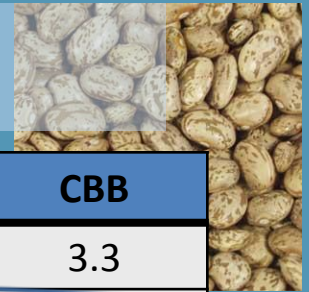
Private Pinto Trial 2018



Variety	Maturity	Yield	Y/M	Harv	Anth	CBB
P15HR041	95.6	3292	34.4	2.9	S	3.3
P15HR079	93.0	3555	38.2	1.8	S	2.7
P15HR077	104.0	3917	37.7	3.3	S	2.4
ME24	93.0	3546	38.1	2.2	S	3.2
ME70	91.0	2694	29.6	1.8	S	3.3
ME78	93.9	3668	39.1	1.8	S	3.5
ME87	91.8	2553	27.8	1.6	R	3.3
16-NDP1	92.1	2447	26.6	1.6	R	3.1
La Paz	95.3	4232	44.4	2.5	S	2.5
AAC Burdett	81.8	2215	27.1	2.1	R	2.8
CDC WM-2	87.3	2365	27.1	2.3	S	3.4
Staybright	98.9	4101	41.5	2.4	S	3.3
PALOMINO	92.3	3527	38.2	2.1	S	3.2
Mean*	93.06	3239	34.8	2.2		3.1
LSD(0.05%)*	2.2	444.0		0.55		

*Woodstock and Elora 2018

Private Pinto Trial 2018



Variety	Maturity	Yield	Y/M	Harv	Anth	CBB
P15HR041	95.6	3292	34.4	2.9	S	3.3
P15HR079	93.0	3555	38.2	1.8	S	2.7
P15HR077	104.0	3917	37.7	3.3	S	2.4
ME24	93.0	3546	38.1	2.2	S	3.2
ME70	91.0	2694	29.6	1.8	S	3.3
ME78	93.9	3668	39.1	1.8	S	3.5
ME87	91.8	2553	27.8	1.6	R	3.3
16-NDP1	92.1	2447	26.6	1.6	R	3.1
La Paz	95.3	4232	44.4	2.5	S	2.5
AAC Burdett	81.8	2215	27.1	2.1	R	2.8
CDC WM-2	87.3	2365	27.1	2.3	S	3.4
Staybright	98.9	4101	41.5	2.4	S	3.3
PALOMINO	92.3	3527	38.2	2.1	S	3.2
Mean*	93.06	3239	34.8	2.2		3.1
LSD(0.05%)*	2.2	444.0		0.55		

*Woodstock and Elora 2018

Non Darkening Crans and Pintos



- UV screening of advanced, preliminary lines and headrows
- Crossing of improved lines
- Increasing 16-NDP1 in Idaho



Private Other Trial 2018



Variety	Maturity	Yield	Y/M	Harv	Anth	CBB	Seed Type
O15HR007	92.4	3661	39.6	2.0	T	3.0	 cow
O15HR008	90.9	3422	37.7	2.0	R	3.5	 cow
O15HR010	93.8	3546	37.8	3.4	R	2.6	GN
O15HR041	102.9	3334	32.4	3.0	R	3.7	GN
AAC Whitehorse	84.3	2388	28.3	2.7	R	4.0	GN
56130	92.7	2869	31.0	3.1	R	3.8	kintoki
Kintoki	95.5	3052	32.0	2.2	R	3.7	kintoki
BCKK	87.3	1729	19.8	1.3	R	3.8	kintoki
GT 2-4	98.4	1971	20.0	1.9	R	3.7	kintoki
GT 2-12	102.0	1873	18.4	2.8	R	3.3	kintoki
Mist	101.1	3685	36.5	2.0	S	3.3	navy
O15HR029	89.4	2806	31.4	1.2	R	3.4	 tiger
C15HR054	95.4	3884	40.7	2.9	T	3.3	 tiger
Mean*	94.3	2940		2.35		3.5	
LSD(0.05%)*	2.14	508.8		0.65			

*Woodstock and Elora 2018

Pursuit Tolerance

- 9 lines were screened in a 4 rep split plot trial, sprayed 1X full soybean post rate, 4X and 0X (adjuvant and N only)
- Sprayed at 2nd trifoliolate
- A few lines show response similar to or better than the soybean check



Pursuit Tolerance



0X



4X

1X

Pursuit Tolerance

Examples of 4X Damage



Pursuit Tolerance

Name	Colour	1X		4X	
		% Yield Reduction	DAPMAT Increase (days)	% Yield Reduction	DAPMAT Increase (days)
E6	white	13.5	6.0	1.7	12.0
E17	white	3.2	0.3	0.5	6.8
E50	black	9.2	1.5	4.2	12.3
E42	pink	4.3	2.8	1.5	6.3
E87	large pink	2.0	-1.3	29.2	1.8
E88t	tan	6.2	5.5	14.1	8.5
OAC Rex-wt	white	9.7	2.3	6.9	15.5
Lakeview	soy	7.8	0.8	20.5	3.3
Apex	check	2.5	0.3	5.5	7.0
Mean		6.49	2.0	9.34	8.1
LSD(0.05)		5.65	1.24	5.83	1.24

Pursuit Tolerance

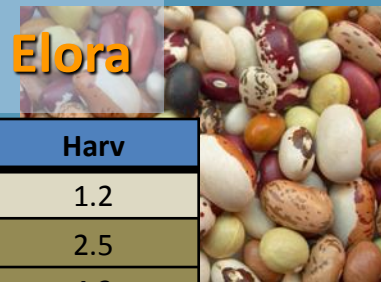
Name	Colour	1X - Percent Injury			4X - Percent Injury		
		7 DAA	14 DAA	21 DAA	7 DAA	14 DAA	21 DAA
E6	white	10.0	12.5	0.3	37.5	33.8	21.3
E17	white	20.0	7.5	0.0	45.0	28.8	8.8
E50	black	27.5	13.8	4.0	42.5	37.5	23.8
E42	pink	20.0	1.3	0.0	47.5	26.3	3.8
E87	large pink	20.0	3.8	0.0	35.0	42.5	5.0
E88t	tan	27.5	21.3	6.3	47.5	40.0	13.8
OAC Rex-wt	white	20.0	21.3	5.5	57.5	43.8	26.3
Lakeview	soy	12.5	0.0	0.0	30.0	3.8	0.0
Apex	check	17.5	3.8	0.3	45.0	28.8	10.0
Mean		19.44	9.44	1.81	43.06	31.67	12.50
LSD(0.05)		3.07	2.97	1.96	3.07	2.97	2.0

Canadian Bean Adaptation Trial Highlights 2018



Variety	Class	Yield	Y/M	Maturity	Harv	100SW	Ht cm
ACUG 15-B4	black	3807.3	38.2	99.7	3.1	31.8	58
ACUG 17-B3	black	3161.7	36.5	86.6	2.9	23.1	42
CDC Blackstrap	black	2087.5	26.0	80.3	1.0	31.2	41
ACUG 15-C2	cran	2352.1	27.0	87.0	1.0	65.7	55
ACUG 14-C2	cran	2182.6	26.0	83.9	1.4	72.7	36
Dynasty	drk	2533.9	28.0	90.4	1.5	70.0	43
ACUG 16-D2	drk	2108.4	23.2	90.9	1.1	63.1	45
CDC Ray	Flor de Mayo	2690.9	31.6	85.2	4.5	38.5	34
Inferno	LRK	3009.6	33.0	91.1	2.4	73.1	55
ACUG 15-L1	LRK	2207.3	25.0	88.3	1.0	66.3	47
ACUG 16-5	navy	3693.7	40.6	91.0	2.8	23.4	37
Apex	navy	3629.4	37.3	97.4	2.8	27.7	55
ACUG 16-6	navy	3615.3	38.5	93.9	3.1	22.9	37
ACUG 17-2	navy	3412.6	39.6	86.2	2.1	26.7	44
ACUG 16-3	navy	3318.9	38.7	85.8	1.8	23.0	44
Bolt	navy	3257.2	37.7	86.3	1.0	26.3	41
ACUG 17-1	navy	2730.6	32.6	83.7	1.5	20.5	40
16-NDP1	ndp	2075.5	23.7	87.7	1.1	34.1	59
CDC WM-2	pinto	1173.1	14.2	82.3	2.4	47.8	31
Rosito	sm red	3269.6	35.3	92.7	3.0	25.9	45
Mean		2815.85		88.5	2.07		
LSD(0.05%)		279.12		2.0	0.4		

Cooperative Dry Bean Nursery 2018 Trial Highlights - Elora



Name	Class	Yield	Y/M	Maturity	Harv
ACUG 16-NDP1	ndp	1996.8	22.6	88.3	1.2
La Paz	Pinto	2943.9	34.1	86.2	2.5
Othello	Pinto	1313.9	15.8	83.0	4.3
PT16-18	Pinto	3003.0	33.1	90.8	3.5
PT11-13B	Pinto	3642.8	40.4	90.2	1.8
NE2-17-18	sdp	3074.4	35.9	85.5	4.1
NE2-17-39	sdp	2555.0	30.0	85.2	3.7
ND-Palomino	sdp	2801.5	32.6	86.0	2.5
NE1-17-10	GN	2318.6	27.2	85.3	2.2
ACUG 15-B4	black	4000.8	38.3	104.5	3.6
Eclipse	black	2416.8	27.6	87.7	1.3
AAC Shock	navy	3248.1	37.3	87.1	1.5
AAC Argosy	navy	3663.8	38.8	94.4	2.0
Yeti	WK	1965.0	21.2	92.6	1.3
Dynasty	DRK	2763.7	30.5	90.6	1.2
Inferno	LRK	3054.0	32.8	93.1	2.4
CELRK	LRK	2061.6	25.6	80.4	1.3
LRK 6	LRK	2691.1	30.6	88.0	1.3
OAC Rosito	sm red	3096.7	32.7	94.7	2.0
SR10-2-1	sm red	2865.1	33.4	85.9	1.9
PK7-4	Pink	1980.3	23.5	84.2	3.9
Mean		2736.04		88.7	2.36
LSD(0.05%)		223.39		1.44	0.55

Breeder Seed in Idaho

Plots were inspected by Terry Rupert, Jamie Larsen and Tom Smith

Varieties inspected included Yeti, Dynasty, Mist, 15-B4, 14-C2, 15-C2, 15-L1, 16-NDP1, 16-D2, 16-3, 16-5 and 16-6



Future Outlook

- Variety improvement : diseases, yield , architecture
- Combining both CBB and anthracnose resistance
- Non darkening crans and pintos
- Whitemould tolerance
- Herbicide tolerance
- Adzuki breeding
- Mixtures
- Nitrogen efficiency



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