

Attachment C – Results Heirloom Dry Bean Variety Trial

Table 5. 2015 Heirloom dry bean plant populations and harvest measurements at Borderview Farm, Alburgh, VT.

Variety	Plant population	Pods per plant	Pod length	Beans per pod	Yield
	# per ac ⁻¹	#	cm	#	lbs ac ⁻¹
Black Calypso	23,740	14	10.4	5	402
Jacob's Cattle	33,323	15	13.3	4	806
King of the Early	39,857	8	13.6	4	946
Ocra	14,593	23*	10.4	5	451
Pinto	36,590	14	12.7	5	1,476*
Raquel	34,412	8	11.1	4	389
Rattlesnake	45,085*	12	15.4*	7*	993
Red Calypso	21,344	7	9.4	6	183
Light Red Kidney	28,967	12	14.3	5	1,027
Snow Cap	27,443	8	14.1	5	590
European Soldier	11,979	13	11.3	5	169
Spanish Talosna	58,370*	11	11.8	4	917
Tigers Eye	43,342*	9	12.3	4	857
Tongues of Fire	34,848	10	11.5	5	761
Vermont Appaloosa	49,005*	10	15.8*	5	1,043
Vermont Cranberry	33,977	14	10.3	5	818
Yellow Eye	30,492	11	11.4	5	1,076
<i>LSD (0.10)</i>	15,936	6	1.33	1	386
<i>Trial Mean</i>	23,740	12	12.3	5	759

Values shown in **bold** are of the highest value or top performing.

* Dry beans that did not perform significantly lower than the top performing variety in a particular column is indicated with an asterisk.

Table 6. 2015 Severity of pod disease, harvest moisture, and test weight at Broderview Farm, Alburgh, VT.

Variety	Diseased pods	Harvest moisture	Test weight
	# out of 10	%	lbs bu ⁻¹
Black Calypso	10a	13.0a	56.8a
Jacob's Cattle	10a	14.6a	57.9a
King of the Early	10a	14.0a	55.7ab
Ocra	9a	14.1a	57.5a
Pinto	10a	16.4a	52.3bc
Raquel	10a	16.1a	55.8ab
Rattlesnake	8a	13.9a	52.8bc
Red Calypso	10a	13.6a	-
Light Red Kidney	10a	16.7a	54.5ab

Snow Cap	9a	15.3a	47.0c
European Soldier	10a	-	-
Spanish Talosna	9a	14.8a	58.8a
Tigers Eye	10a	17.9a	52.8bc
Tongues of Fire	10a	13.2a	52.5
Vermont Appaloosa	10a	18.1a	58.5a
Vermont Cranberry	10a	16.1a	55.9ab
Yellow Eye	10a	14.0a	58.0a
<i>p-value</i>	NS	NS	<0.0001

Within a column values followed by the same letter are not significantly different.

‘-‘ indicates there wasn’t enough sample to measure.

NS – no significant difference.

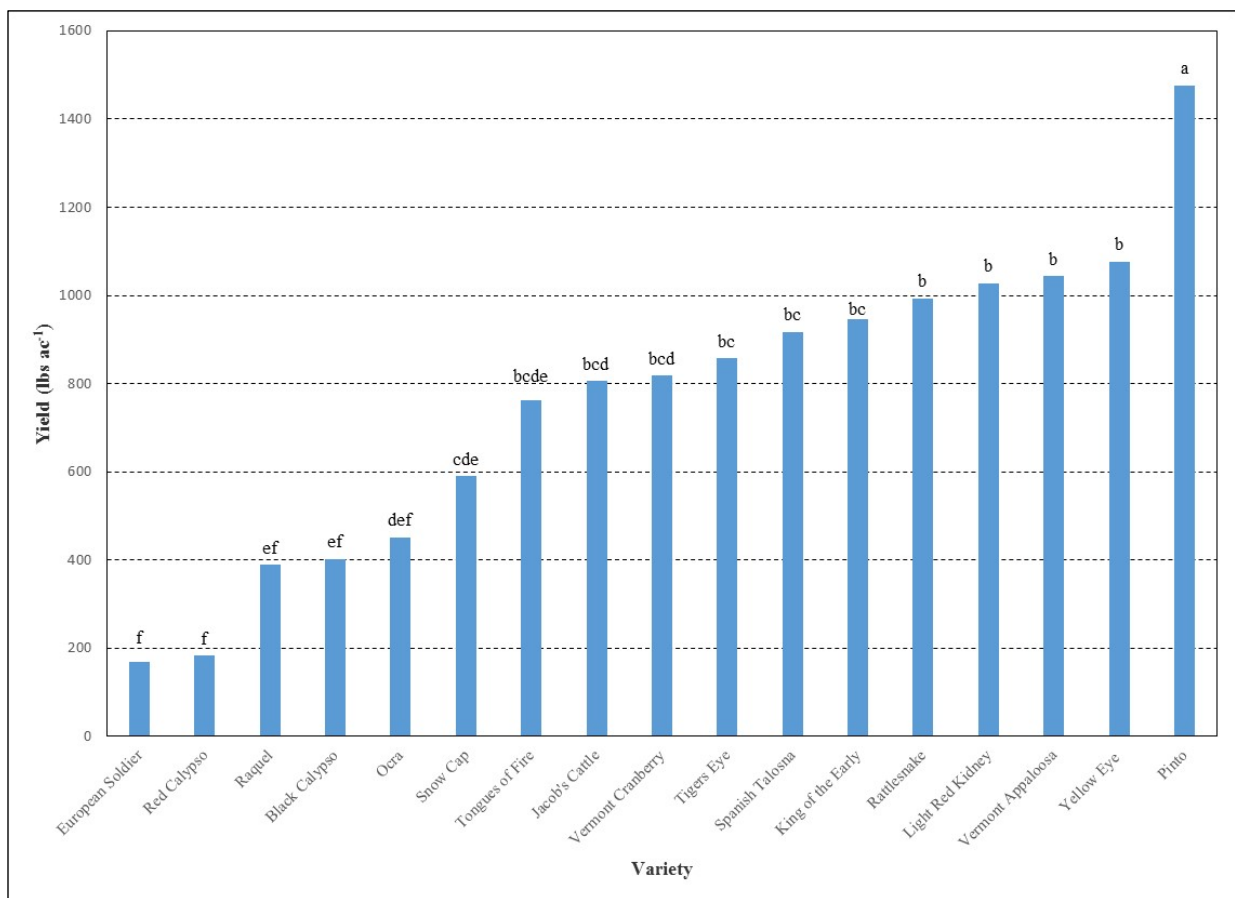


Figure 1. 2015 Heirloom dry bean yields at Borderview Farm, Alburgh, VT.

Varieties with the same letter did not differ significantly in yield

Table 7. 2015 Heirloom dry bean plant populations and harvest measurements at Moringstar Meadow Farm in Glover, VT.

Variety	Plant population	Pods per plant	Beans per pod	Diseased pods
	# per ac ⁻¹	#	#	# out of 10
Black Calypso	45,012	14	5	8
Orca	59,242*	22*	6	7
Raquel	41,818	14	4	7
Rattlesnake	42,398	16	7*	3*
Red Calypso	61,274*	5	5	9
Snow Cap	48,206	10	5	10
Spanish Talosna	11,906	13	4	9
Tongues of Fire	27,588	8	5	8
Vermont Appaloosa	28,750	10	6	9
Vermont Cranberry	20,328	14	5	9
<i>LSD (0.10)</i>	7646	6	1	2
<i>Trial Mean</i>	38652	13	5	8

Values shown in **bold** are of the highest value or top performing.

* Dry beans that did not perform significantly lower than the top performing variety in a particular column is indicated with an asterisk.

Table 8. 2015 Heirloom dry bean yield and quality at Moringstar Meadow Farm, Glover, VT.

Variety	Yield	Harvest moisture	Test weight
	lbs ac ⁻¹	%	lbs bu ⁻¹
Black Calypso	651	20.2	57.4
Orca	596	7.33*	57.0
Raquel	814	22.2	57.8
Rattlesnake	1,774*	7.40*	56.7
Red Calypso	-	-	-
Snow Cap	259	13.2	50.0
Spanish Talosna	1,364*	9.97*	61.0*
Tongues of Fire	1,052	17.9	55.0
Vermont Appaloosa	785	19.0	62.5*
Vermont Cranberry	1,011	24.9	57.5
<i>LSD (0.10)</i>	461	4.90	3.14
<i>Trial Mean</i>	923	15.8	57.2

Values shown in **bold** are of the highest value or top performing.

* Dry beans that did not perform significantly lower than the top performing variety in a particular column is indicated with an asterisk.

‘-‘ indicates crop failure.

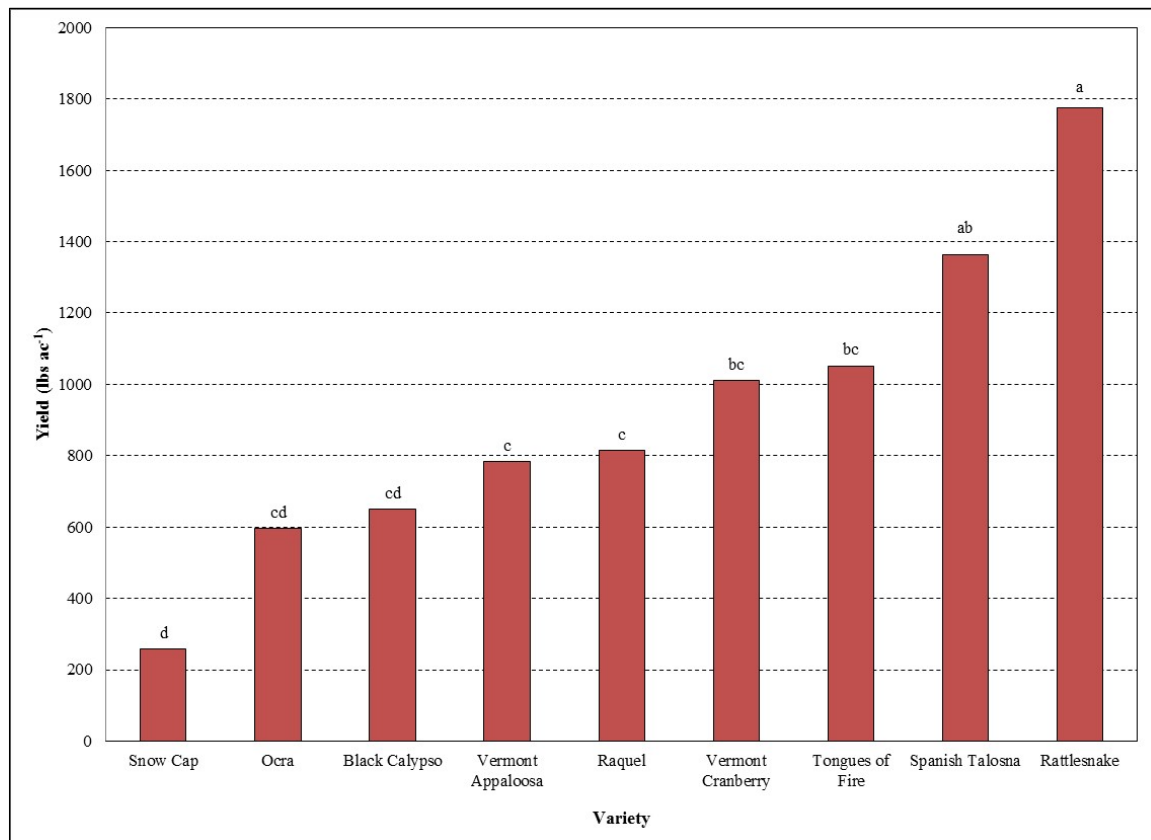


Figure 2. 2015 Heirloom dry bean yields at Morningstar Meadow Farm in Glover, VT. Varieties with the same letter did not differ significantly in yield.

Table 9. 2015 Heirloom dry bean seed germination rate.

Dry bean variety	Seed germination
	%
Black Calypso	60
European Soldier	0
Eye of Goat	25
Jacob's Cattle	55
King of the Early	95
Light Red Kidney	40
Orca	80
Pinto	36
Raquel	70
Rattlesnake	100
Red Calypso	5
Snow Cap	45
Spanish Talosna	95
Tiger Eyes	90
Tongues of Fire	95
Vermont Appaloosa	90
Vermont Cranberry	100
Yellow Eye	29