

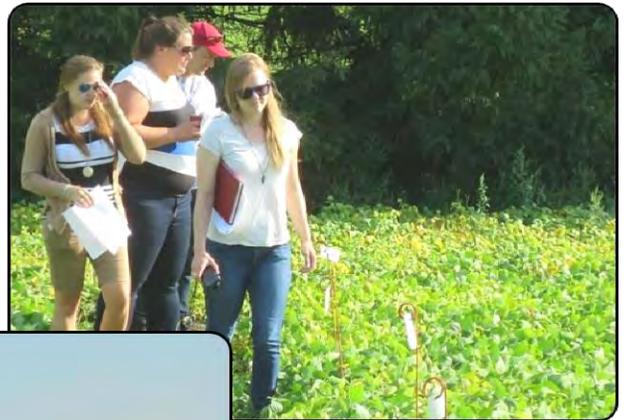
2018 Report

Ontario Dry Bean Variety Trials

prepared by the Ontario Pulse Crop Committee

Data collected 2013 - 2017

<http://www.gobeans.ca>



*Current as of
December 15, 2017*

This Infosheet contains the most recent variety information for registered dry edible bean varieties planted and harvested in 2017. Experimental and non-registered varieties may also be included in the trials, but data is not presented. Contact one of the individuals listed below, for information on other varieties or to comment on the trials. The information is prepared annually by the Ontario Pulse Crop Committee (OPCC).

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Table 1a - 2013-2017 White Bean Variety Performance Trial, Long Season Area

Variety	Days to Maturity ²	Yield (lbs/ac) ¹									
		Long Season All Locations				St Thomas		Woodstock			
		5 Year	4 Year	3 Year	2 Year	2 Year	2017	4 Year	3 Year	2 Year	2017
Bolt	93	2600	2515	2494	2439	2857	2909	2118	2135	1841	2230
AAC Shock	94	--	2692	2678	2522	3021	3014	2099	2098	1839	2159
Lightning	95	2605	2525	2408	2318	2764	2858	2236	2142	1769	2016
OAC Thunder	96	2693	2581	2483	2316	2798	3217	2042	2030	1625	2107
Fathom	98	2741	2594	2498	2274	2883	2671	1942	1991	1578	1728
Lighthouse	98	3027	2996	2830	2704	3488	3694	2347	2164	1844	2211
T9905	98	2966	2868	2853	2739	3291	3182	2620	2519	2201	2701
AAC Argosy	99	--	3078	2929	2816	3476	3773	2714	2567	2100	2531
Nautica	99	2905	2814	2736	2844	3599	3977	2451	2317	2149	2573
Mist	100	2961	2891	2740	2470	3073	2788	2475	2284	1752	2280
Rexeter	101	3046	2972	2879	2731	3380	3414	2438	2243	1806	2212
Apex	101	3130	3022	2884	2735	3484	3747	2548	2434	2057	2634
DS105W0	104	--	--	2846	2804	3486	4069	--	2424	2066	2774
Average Yield (lbs/ac) ¹		2867	2796	2712	2593	3200	3332	2336	2257	1894	2320
LSD (0.05) ³		102	116	159	197	395	586	156	202	244	331

¹ To convert lbs/acre to t/ha divide by 893.

² Maturity is 3 year average. Maturity rating is affected by planting date and area where variety is being grown. Varieties are rated as mature when 95% of the pods are ripe. Normally, 3-10 additional drying days are needed before the crop is dry enough for combining.

³ LSD (0.05) - the LSD is a measure of variability within the trial. There is a ninety five percent probability that yields that differ by an amount greater than the LSD are different. Yields that differ by an amount less or equal to the LSD should be considered the same.

Long Season Testing Locations					
St Thomas	2017	2016	--	2014	2013
Exeter	--	2016	2015	--	2013
Woodstock	2017	2016	2015	2014	--
Highbury	--	--	--	2014	--

Table 1b - 2013-2017 White Bean Variety Performance Trial, Short Season Area

Variety	Days to Maturity ²	Yield (lbs/ac) ¹																	
		Short Season All Locations				Blyth					Elora					Woodstock			
		5 Year	4 Year	3 Year	2 Year	5 Year	4 Year	3 Year	2 Year	2017	5 Year	4 Year	3 Year	2 Year	2017	4 Year	3 Year	2 Year	2017
Bolt	99	2695	2578	2499	2396	2835	2878	2632	2520	2866	2907	2693	2617	2625	2966	2118	2135	1841	2230
AAC Shock	100	--	2864	2787	2555	--	3236	2976	2840	3191	--	3084	3007	2819	3245	2099	2098	1839	2159
Lightning	100	2744	2627	2491	2349	3007	2957	2693	2585	2688	2954	2777	2664	2606	2892	2236	2142	1769	2016
OAC Thunder	100	2713	2583	2539	2327	2972	2975	2799	2636	2784	2775	2601	2583	2517	3059	2042	2030	1625	2107
Fathom	104	2895	2771	2729	2509	3250	3333	3163	3103	3018	3195	2987	2937	2878	3062	1942	1991	1578	1728
Lighthouse	105	3124	3010	2823	2558	3250	3307	3093	2996	3232	3554	3297	2980	2685	3452	2347	2164	1844	2211
T9905	105	3073	2954	2816	2558	3216	3179	2876	2555	2288	3267	3079	2985	2839	2984	2620	2519	2201	2701
AAC Argosy	105	--	3065	2909	2700	--	3236	3027	2956	3319	--	3316	3123	2932	3669	2714	2567	2100	2531
Rexeter	105	3161	3074	2941	2757	3451	3462	3261	3224	3646	3331	3194	3059	2977	3395	2438	2243	1806	2212
Nautica	105	2985	2895	2844	2867	3245	3317	3198	3186	3191	3275	3113	3247	3339	3221	2451	2317	2149	2573
Mist	106	3070	2971	2830	2534	3191	3275	3095	3085	3423	3373	3101	2936	2682	3473	2475	2284	1752	2280
Apex	106	3128	2991	2825	2684	3374	3381	3153	3047	3403	3279	3059	2800	2993	3196	2548	2434	2057	2634
DS105W0	107	--	--	2972	2861	--	--	3352	3205	3225	--	--	3230	3285	3264	--	2424	2066	2774
Average Yield (lbs/ac) ¹		2959	2865	2770	2589	3179	3211	3025	2918	3098	3191	3025	2936	2860	3221	2336	2257	1894	2320
LSD (0.05) ³		78	87	107	144	127	154	198	281	437	154	167	218	296	431	156	202	244	331

¹ To convert lbs/acre to t/ha divide by 893.

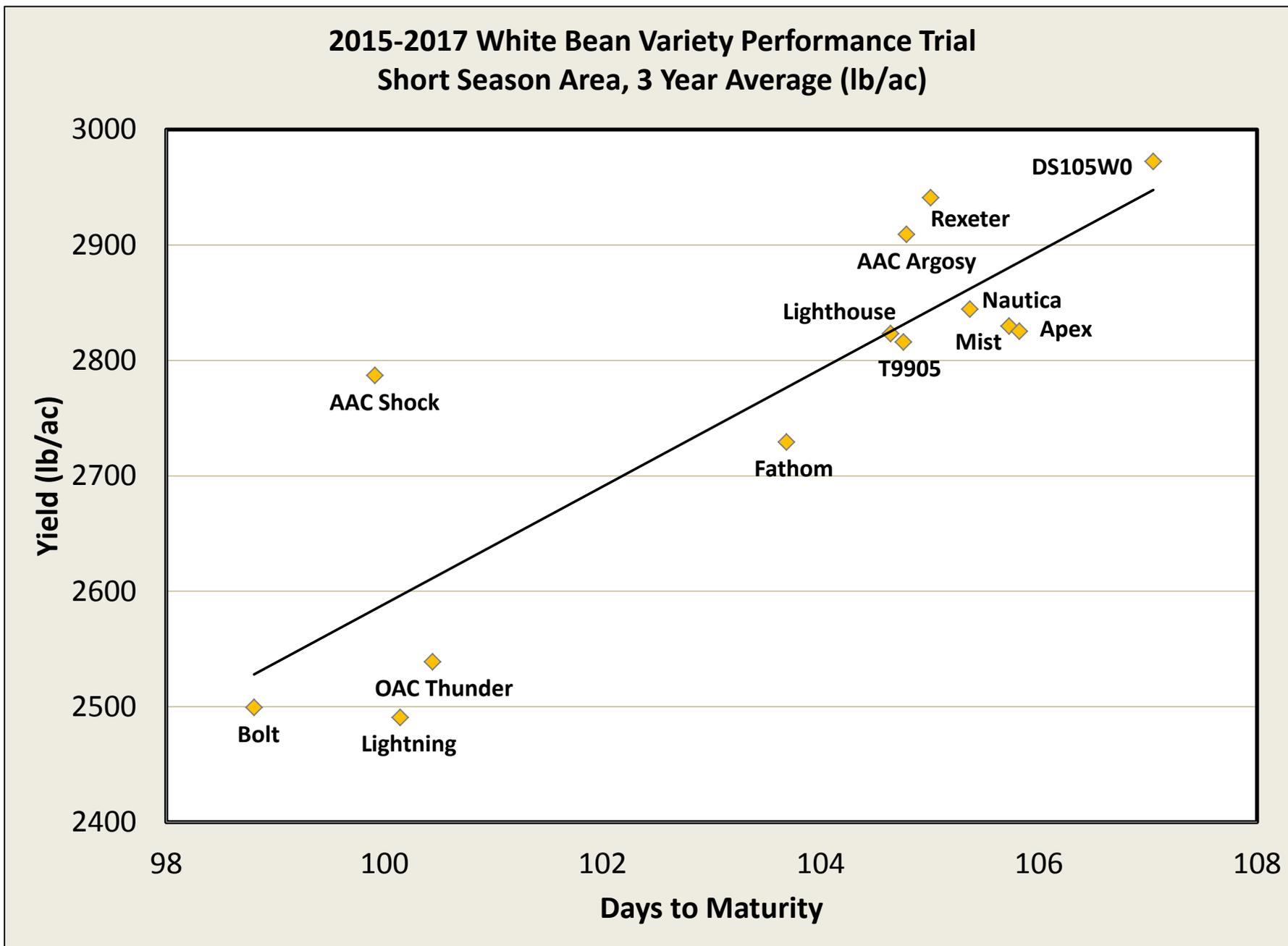
² Maturity is 3 year average. Maturity rating is affected by planting date and area where variety is being grown. Varieties are rated as mature when 95% of the pods are ripe. Normally, 3-10 additional drying days are needed before the crop is dry enough for combining.

³ LSD (0.05) - the LSD is a measure of variability within the trial. There is a ninety five percent probability that yields that differ by an amount greater than the LSD are different.

Yields that differ by an amount less or equal to the LSD should be considered the same.

Short Season Testing Locations					
Blyth	2017	2016	2015	2014	2013
Exeter	--	2016	2015	--	2013
Elora	2017	2016	2015	2014	2013
Woodstock	2017	2016	2015	2014	--

Graph 1c: White Bean Short Season Area



Graph 1d: White Bean Long Season Area

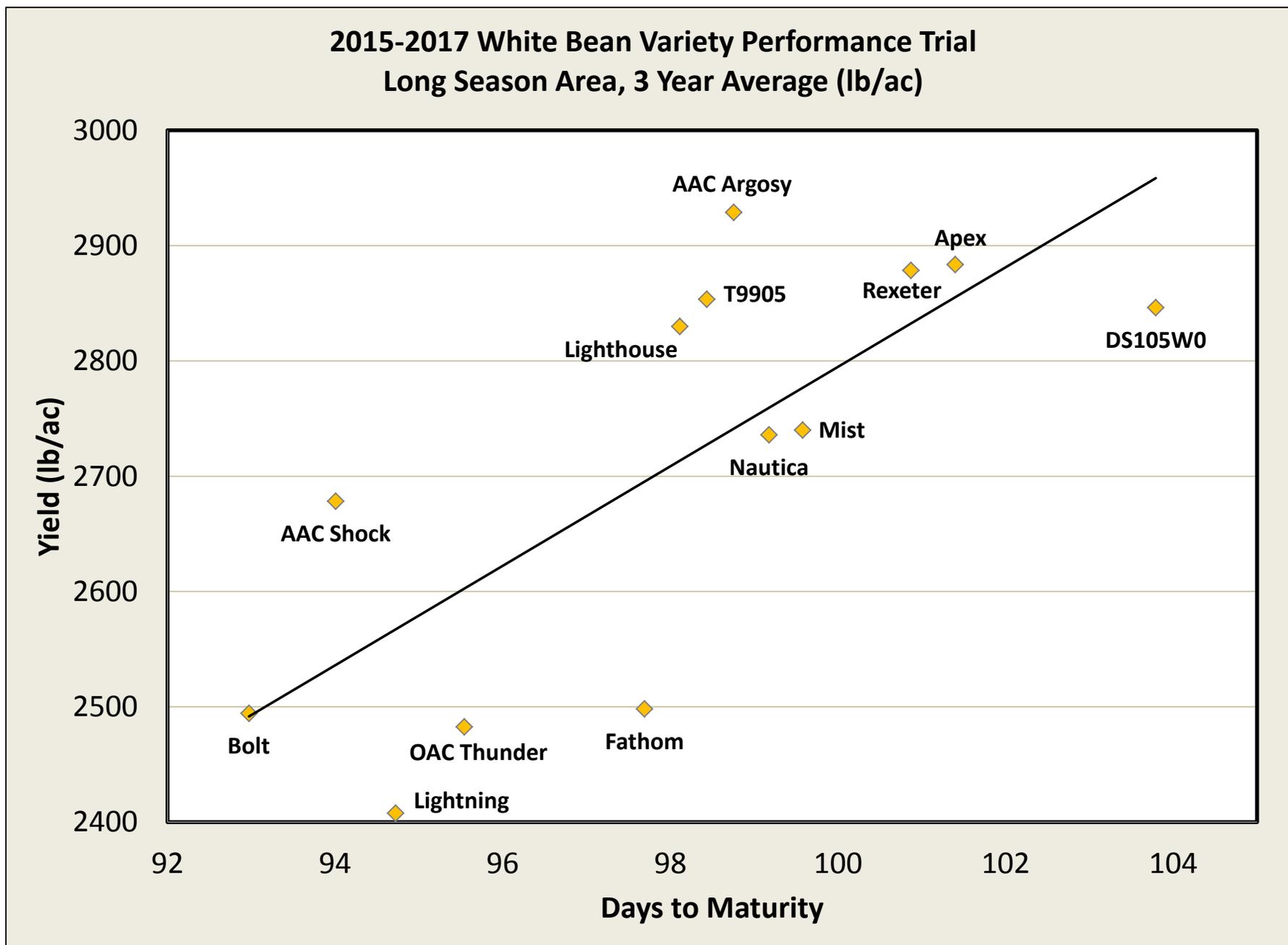


Table 2 - 2015-2017 White Bean Characteristics and Distributors

Variety	100 Seed Weight ³ (g)	Disease Reaction ¹					Common Blight	Suitability for Direct Harvest ⁴	Distributor
		Bean Common Mosaic Virus		Anthracnose ²					
		Race		Race					
		1	15	17	23	73			
Bolt	24.7	R	R	S	S	R	S	1.5	Hensall DC
AAC Shock	24.1	R	R	S	S	S	R	2.7	Hensall DC
OAC Thunder	23.0	R	R	S	S	S	S	2.0	SeCan
Lightning	22.0	R	R	S	S	S	S	2.0	Hensall DC
Fathom	23.7	R	R	NA	NA	R	R	2.1	Hensall DC
AAC Argosy	24.6	R	R	S	S	S	R	2.2	Hensall DC
T9905	23.5	R	R	R	R	S	S	2.3	Treasure Valley
Lighthouse	23.1	R	R	NA	R	S	R	1.6	R.T. Bolton
Nautica	19.9	R	R	S	S	S	S	1.6	SeCan
Mist	23.4	R	R	S	S	S	R	1.8	Hensall DC
Rexeter	21.3	R	S	S	S	S	R	2.5	Hensall DC
Apex	24.5	R	R	S	R	S	R	1.8	SeCan
DS105W0	23.7	NA	NA	NA	NA	S	S	3.1	Treasure Valley

¹ R = Resistant, S = Susceptible, NA = Not Available

² Anthracose ratings, the predominant race found now in Ontario is Race 73. Race 17 (binary system) is equivalent to the Alpha race, race 23 (binary system) is equivalent to the Delta race.

³ To convert 100 seed weight (g) to seeds per pound divide 45,400 by seed weight. Example: 45,400 / 63 gm = 720 seeds/lb

⁴ A variety's suitability of direct harvest is based on a scale of 1-5, where 1 = upright plant type, standing erect with good bottom pod height and 5 = more prostrate plant type or plants that are not erect, with poor bottom pod height.

* Resistance gene for common bacterial blight (*Xanthomonas campestris* pv. *Phaseoli*). Very little disease will develop on this variety.

Table 3 - 2015-2017 Coloured Bean Variety Performance and Characteristics

Variety	Market Class	Days to Maturity ²	Yield (lbs/ac) ^{1,2}	100 Seed Weight ² (g)	Disease Reaction ³					Distributor
					Bean Common Mosaic Virus		Anthracnose ⁴			
					Race 1	Race 15	Alpha Race 17	Delta Race 23	Race 73	
Etna	Cranberry	88	2066	59	R	R	S	S	S	Public
Red Rider	Cranberry	93	2211	59	R	R	R	R	S	SeCan
Red Hawk	Dark Red Kidney	90	1775	53	R	R	R	S	R	Public
Dynasty	Dark Red Kidney	93	2267	62	R	S	R	S	R	Hensall DC
Majesty	Dark Red Kidney	93	2188	67	R	R	R	S	S	Hensall DC
GTS 104	Dark Red Kidney	94	1780	56	NA	NA	NA	NA	NA	Gen-Tec
Pink Panther	Light Red Kidney	87	1929	62	R	R	R	S	R	Public
OAC Inferno	Light Red Kidney	97	2128	64	R	S	R	S	R	Hensall DC
Yeti	White Kidney	95	2029	56	R	R	NA	S	R	Hensall DC

¹ To convert lbs/acre to t/ha divide by 893.

² Yield, Days to Maturity and Seed weight are 3 year averages. Maturity rating is affected by planting date and area where variety is being grown.

Varieties are rated as mature when 95% of the pods are ripe. Normally, 3-10 additional drying days are needed before the crop is dry enough for combining.

³ R = Resistant, S = Susceptible, NA = Not Available

⁴ Anthracnose ratings- the predominant race in Ontario is Race 73. Race 17 (binary system) is equivalent to the Alpha race, race 23 (binary system) is equivalent to the Delta race.

Coloured Bean Testing Locations			
St Thomas	2017	2016	2015
Exeter	--	2016	2015
Elora	2017	2016	2015
Woodstock	2017	2016	2015

Table 4a - St Thomas Station Report: 2013-2017 Coloured Bean Performance Trial

Variety	Market Class	Days to Maturity St Thomas ²	100 Seed Weight ³ (g)	Yield (lbs/ac) ¹					3 Year All Locations
				St Thomas					
				5 Year	4 Year	3 Year	2 Year	2017	
Etna	Cran	79	59	2776	2671	2717	2897	2974	2066
Red Rider	Cran	86	59	2667	2736	2691	2761	2833	2211
Average (lbs/ac)				2722	2703	2704	2829	2904	2139
Red Hawk	DRK	82	53	2253	2284	2203	2530	2239	1775
Dynasty	DRK	86	62	2777	2785	2856	3030	3322	2267
GTS 104	DRK	87	56	2108	2076	2092	2394	2387	1780
Majesty	DRK	87	67	2510	2533	2547	2667	2567	2188
Average (lbs/ac)				2412	2420	2424	2655	2629	2002
Pink Panther	LRK	79	62	2605	2473	2452	2846	2616	1929
OAC Inferno	LRK	94	64	2502	2411	2383	2573	2935	2128
Average (lbs/ac)				2554	2442	2417	2710	2775	2029
Yeti	WK	90	56	2481	2606	2585	2805	2486	2029
Average (lbs/ac)				2481	2606	2585	2805	2486	2029

¹ To convert lbs/acre to t/ha divide by 893.

² Days to Maturity is 3 year average for St Thomas Station. Maturity rating is affected by planting date and area where variety is being grown. Varieties are rated as mature when 95% of the pods are ripe. Normally, 3-10 additional drying days are needed before the crop is dry enough for combining.

³ To convert 100 Seed weight (g) to seeds per pound divide 45,400 by seed weight. Example: 45,400 / 63 gm = 720 seeds/lb

Table 4b - Elora Station Report: 2013-2017 Coloured Bean Performance Trial

Variety	Market Class	Days to Maturity Elora ²	100 Seed Weight ³ (g)	Yield (lbs/ac) ¹					3 Year All Locations
				Elora					
				5 Year	4 Year	3 Year	2 Year	2017	
Etna	Cran	94	59	2259	2050	1859	1621	1611	2066
Red Rider	Cran	97	59	2327	2251	2145	1984	2139	2211
Average (lbs/ac)				2293	2151	2002	1802	1875	2139
Red Hawk	DRK	94	53	1837	1761	1628	1603	1660	1775
Dynasty	DRK	96	62	2345	2279	2112	1934	2238	2267
Majesty	DRK	98	67	2254	2188	2084	1891	2156	2188
GTS 104	DRK	99	56	1957	1826	1639	1560	1621	1780
Average (lbs/ac)				2098	2013	1866	1747	1919	2002
Pink Panther	LRK	92	62	2174	2035	1790	1715	1842	1929
OAC Inferno	LRK	102	64	2273	2343	2150	2033	2457	2128
Average (lbs/ac)				2223	2189	1970	1874	2149	2029
Yeti	WK	99	56	2135	2046	1841	1717	1775	2029
Average (lbs/ac)				2135	2046	1841	1717	1775	2029

¹ To convert lbs/acre to t/ha divide by 893.

² Days to Maturity is 3 year average for Elora Station. Maturity rating is affected by planting date and area where variety is being grown. Varieties are rated as mature when 95% of the pods are ripe. Normally, 3-10 additional drying days are needed before the crop is dry enough for combining.

³ To convert 100 Seed weight (g) to seeds per pound divide 45,400 by seed weight. Example: 45,400 / 63 gm = 720 seeds/lb

Table 4c - Woodstock Station Report: 2013-2017 Coloured Bean Performance Trial

Variety	Market Class	Days to Maturity Woodstock ²	100 Seed Weight ³ (g)	Yield (lbs/ac) ¹					3 Year All Locations
				Woodstock					
				5 Year	4 Year	3 Year	2 Year	2017	
Etna	Cran	89	59	1761	1702	1569	1344	1336	2066
Red Rider	Cran	91	59	1735	1730	1713	1388	1270	2211
Average (lbs/ac)				1748	1716	1641	1366	1303	2139
Red Hawk	DRK	90	53	1481	1532	1396	1258	1201	1775
Dynasty	DRK	91	62	1831	1909	1795	1592	1454	2267
GTS 104	DRK	92	56	1551	1571	1377	1221	1212	1780
Majesty	DRK	93	67	1761	1842	1928	1590	1545	2188
Average (lbs/ac)				1656	1713	1624	1415	1353	2002
Pink Panther	LRK	90	62	1674	1622	1483	1132	1208	1929
OAC Inferno	LRK	93	64	1822	1870	1616	1330	1239	2128
Average (lbs/ac)				1748	1746	1550	1231	1224	2029
Yeti	WK	93	56	1686	1707	1630	1306	1186	2029
Average (lbs/ac)				1686	1707	1630	1306	1186	2029

¹ To convert lbs/acre to t/ha divide by 893.

² Days to Maturity is 3 year average for Woodstock Station. Maturity rating is affected by planting date and area where variety is being grown. Varieties are rated as mature when 95% of the pods are ripe. Normally, 3-10 additional drying days are needed before the crop is dry enough for combining.

³ To convert 100 Seed weight (g) to seeds per pound divide 45,400 by seed weight. Example: 45,400 / 63 gm = 720 seeds/lb

Table 5 - 2015-2017 Coloured Minor Bean Variety Performance Trial

Variety	Days to Maturity ²	Yield (lbs/ac) ¹								
		All Locations		St Thomas			Exeter			Winchester
		3 Year	2 Year ²	3 Year	2 Year	2017	3 Year	2 Year	2017	2017
La Paz	95	3433	3566	3520	3612	3859	3200	3368	3878	3870
Viper	96	3371	3584	3443	3843	3997	3234	3336	3727	3564
Ruby	97	3051	3319	3014	3568	3317	3093	3212	3474	3036
OAC Rosito	97	3129	3435	3008	3481	3666	3149	3391	3797	3432
Zorro	98	3483	3715	3564	3936	3879	3331	3504	3561	3693
Average Yield (lbs/ac) ¹		3293	3524	3310	3688	3743	3201	3362	3688	3519
LSD (0.05) ³		na	270	na	414	462	na	397	655	709

¹ To convert lbs/acre to t/ha divide by 893.

² 2 Year average yield and days to maturity is average of St Thomas, Kippen in 2016 and 2017..

Maturity rating is affected by planting date and area where variety is being grown.

Varieties are rated as mature when 95% of the pods are ripe. Normally, 3-10 additional drying days are needed before the crop is dry enough for combining.

³ LSD (0.05) - the LSD is a measure of variability within the trial. There is a ninety five percent probability that yields that differ by an amount greater than the LSD are different.

Yields that differ by an amount less or equal to the LSD should be considered the same.

Testing Locations			
St Thomas	2017	2016	2015
Exeter	2017	2016	2015
Winchester	2017	--	--

Table 6 - 2015-2017 Coloured Minor Bean Characteristics and Distributors

Variety	Market Class	100 Seed Weight ³ (g)	Disease Reaction ¹					Suitability for Direct Harvest 4	Distributor
			Bean Common Mosaic Virus		Anthracnose ²				
			Race		Race				
			1	15	17	23	73		
La Paz	Pinto	36.2	NA	NA	NA	NA	S	2.0	ADM Seedwest
Viper	Small Red	30.3	NA	NA	NA	NA	S	2.1	ADM Seedwest
Ruby	Small Red	32.4	NA	NA	NA	NA	S	3.5	ADM Seedwest
OAC Rosito	Small Red	22.7	NA	NA	NA	NA	S	2.0	AAFC/U of G
Zorro	Black	21.8	R	R	R	R	S	1.6	Hensall DC

¹ R = Resistant, S = Susceptible, NA = Not Available

² Anthracnose ratings, the predominant race found now in Ontario is Race 73. Race 17 (binary system) is equivalent to the Alpha race, race 23 (binary system) is equivalent to the Delta race.

³ To convert 100 seed weight (g) to seeds per pound divide 45,400 by seed weight. Example: 45,400 / 63 gm = 720 seeds/lb

⁴ A variety's suitability of direct harvest is based on a scale of 1-5, where 1 = upright plant type, standing erect with good bottom pod height and 5 = more prostrate plant type or plants that are not erect, with poor bottom pod height.

Table 7. Addresses of Distributors for Edible Bean Varieties

<p>ADM Seedwest 4666 Faries Parkway Decatur, ID 62526 800-637-5843 x4707 https://www.adm.com/products-services/food/edible-beans/seedwest</p>	<p>Elliott Grain Ltd. 21964 Fairview Road, RR3 Thorndale, ON N0M 2P0 519-461-1545</p>	<p>Gen-Tec Seeds Ltd. P. O. Box 98 Woodslee, ON N0R 1V0 (519) 975-2557</p>
<p>Hensall District Co-op P.O. Box 219 Hensall, ON N0M 1X0 1-800-265-5190 www.hdc.on.ca</p>	<p>R.T. Bolton and Sons 43234 Winthrop Road, RR#1 Dublin, ON N0K 1E0 (519) 527-0455</p>	<p>SeCan Association 400-300 Terry Fox Drive Kanata, ON K2K 0E3 (613) 592-8600 www.secan.com</p>
<p>Thompsons 2 Hyland Drive, P. O. Box 250 Blenheim, ON N0P 1A0 1-800-265-5225 www.thompsonslimited.com/food-products/</p>	<p>Treasure Valley Seed Co. 4633 E. River Road Freeland, MI 48623 www.tvseed.com</p>	