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Ministry of Agriculture, Food and Rural Affairs

2005 PERFORMANCE TRIAL REPORT FOR DRY EDIBLE BEANS

Ontario Pulse Crop Committee

(Replaces OMAF Factsheet , 2004 Performance Trial Report for Dry Edible Beans)

This Factsheet contains the most recent variety information for dry edible beans. The information is prepared annually by the Ontario Pulse Crop Committee and edited by OMAF.

REFERENCES

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TABLE 1. White Bean Variety Performance

Full Sease	on/Mid-Season A	Areas ¹	Short Season Areas ²				
Variety ³	Days to Maturity	Yield ⁴ (t/ha)	Variety ³	Days to Maturity	Yield ⁴ (t/ha)		
Envoy	85	2.54	Envoy	94	2.53		
AC Compass	89	3.32	Cirrus	96	2.65		
OAC Thunder	91	3.51	AC Compass	100	3.12		
Beacon	92	3.27	OAC Thunder	101	3.08		
Stingray	92	3.37	Beacon	103	3.20		
OAC Silvercreek	93	3.19	AC Cruiser	104	2.82		
AC Cruiser	93	3.21	Stingray	104	3.07		
T9905	93	3.65	OAC Gryphon	105	3.12		
OAC Gryphon	94	3.22	AC Mast	106	2.97		
Vista	94	3.27	AC Trident	106	3.17		
OAC Rex	94	3.45					
AC Mast	94	3.28					
AC Trident	95	3.13					
Scepter	97	3.43					

Yield and days to maturity are based on the mean of 7 trials at 3 locations (Kippen, St. Thomas and Granton) over 3 years (2002–2004). For a graphic picture of the data see Figure 1. Yield vs. Maturity for Full/Mid Season White Bean Varieties (Regression Chart)

Yield and days to maturity are based on the mean of 8 trials at 3 locations (Brussels, Elora and Winchester) over 3 years (2002–2004). For a graphic picture of the data see Figure 2. *Yield vs. Maturity for Short Season White Bean Varieties (Regression Chart)*

White bean varieties are arranged based on days to maturity. The maturity of most varieties change between areas due to environmental differences.

 $^{^{4}}$ 1 t/ha = 893 lbs./ac.

FIGURE 1. Yield vs. Maturity for Full/Mid Season Areas (Regression Chart)

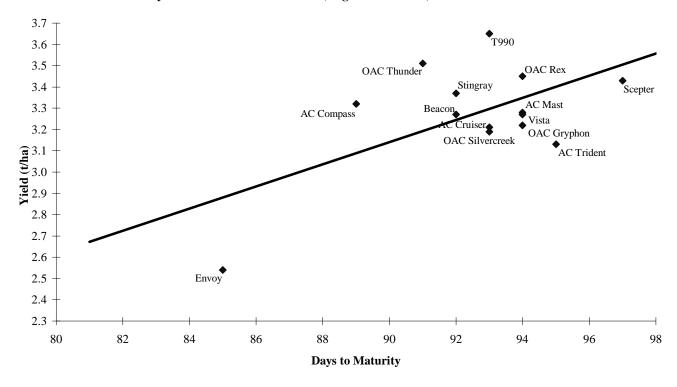


FIGURE 2. Yield vs. Maturity for Short Season Areas (Regression Chart)

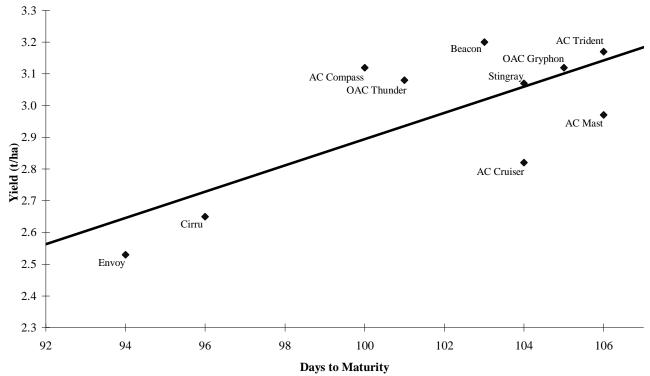


TABLE 2. White Bean Characteristics and Distributors

Disease Reaction ¹								
		Bean Common Mosaic Virus Anthracnose ² White Mould ³						
Variety	100 Seed Weight (g)	Race 1	Race 15	Race 17	Race 23	3 Year ⁴ Average	2 Year ⁴ Average	Distributor
Envoy	20.2	R	S	R	R	3.2	2.9	Cooks, Hyland, Hensall
AC Compass	22.4	R	R	S	S	3.1	3.3	Cooks
Cirrus	20.3	R	R	S	S	NA	3.9	Hyland
OAC Thunder	22.2	R	R	S	S	2.7	2.9	SeCan Association
AC Cruiser	20.5	R	R	S	S	NA	2.9	Hensall
Stingray	21.9	R	R	S	S	2.7	2.8	Hyland
Beacon	20.5	NA	NA	NA	NA	NA	3.8	Hyland
AC Mast	22.2	R	R	S	S	2.8	2.8	Advantage
AC Trident	20.6	R	R	S	S	2.6	2.7	Great Canadian Bean Company
OAC Silvercreek	20.8	R	R	R	R	2.4	2.7	SeCan Association
OAC Gryphon	20.0	R	R	R	R	2.9	3.0	Public Variety
T9905	21.6	R	R	R	R	NA	2.8	Hyland
OAC Rex*	21.2	R	R	S	S	2.5	2.7	Great Canadian Bean Company
Scepter	25.6	R	R	R	R	2.7	2.8	Cooks, Hyland, Hensall
Vista	19.0	R	R	R	R	2.5	2.6	Cooks, Hyland, Hensall

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

TABLE 3. Coloured Bean Variety Performance

					Disease Reaction ²				
					Bean Common				
					Mosaid	e Virus	Anthra	cnose4	
		Days to	Yield ^{1,3}	100 Seed ¹			Race	Race	
Variety	Market Class	Maturity ¹	(t/ha)	Weight (g)	Race 1	Race 15	17	23	Distributor
Cran 09	Cranberry	86	2.53	55.4	S	R	S	S	Cooks, Hyland, Hensall
SVM Taylor Cranberry	Cranberry	86	2.63	57.6	S	S	S	S	ADM A.S.I.
Hooter	Cranberry	96	2.80	65.6	R	R	S	S	Cooks
Red Hawk	dark red kidney	91	2.49	54.0	R	R	R	R	Hyland Seeds
Montcalm	dark red kidney	97	2.24	56.1	R	R	R	S	Public
AC Calmont	dark red kidney	96	2.68	56.7	R	R	R	R	G.C.B.C.
AC Elk	light red kidney	88	2.34	60.7	R	S	R	S	Public Variety
AC Litekid	light red kidney	98	2.70	53.5	R	R	R	S	Public Variety

¹ Yields, maturities and seed weights are based on the means of 11 trials at 5 locations (Kippen, Monkton, St. Thomas and Thorndale) over 3 years (2002-2004).

Anthracnose race 17 (binary system) is equivalent to the Alpha race, race 23 (binary system) is equivalent to the Delta race.

White mould ratings are based on a scale of 1–5, where 1 = very tolerant or low levels of natural infestation, 5 = very susceptible. White mould trials were located at Kippen, St. Thomas and Elora in 1997, Kippen and Winchester in 2000, and Granton, St. Thomas and Winchester in 2004. NA = Not Available.

Comparisons between varieties should be made only within the same column of data.

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

Disease Ratings (R = Resistant, S - Susceptible, NA = Not Available)

 $^{1 \}text{ t/ha} = 893 \text{ lbs./ac.}$

⁴ Anthracnose race 17 (binary system) is equivalent to the Alpha race, race 23 (binary system) is equivalent to the Delta race.

TABLE 4. Coloured Bean Variety Performance

					Disease Reaction ² Bean Common				
					Mosai	c Virus	Anthra	cnose	
		Days to	Yield ^{1,3}	100 Seed ¹			Race	Race	
Variety	Market Class	Maturity 1	(t/ha)	Weight (g)	Race 1	Race 15	17	23	Distributor
AC Harblack	Black	96	2.96	19.7	R	R	S	R	SeCan Assoc.
Blackjack	Black	98	3.09	22.8	R	R	R	R	Cooks, Hyland, Hensall
GTS 401	White Kidney	101	2.63	42.9	R	R	R	S	Cooks, Hyland, Hensall

Yields, maturities and seed weights are based on the means of 5 trials at 2 locations (Kippen, and Thorndale) over 3 years (2002-2004).

TABLE 5. Addresses of Distributors for Edible Bean Varieties

Advantage Seed Growers and Processors Inc.	Cook's Division of Parrish and	Hensall District Co-op		
Box 29, 323 Havelock Street,	Heimbecker	P.O. Box 219, Hensall, ON		
Lucknow, Ontario N0G 2H0	P.O. Box 10, Centralia ON	NOM 1X0		
1-800-651-7333	NOM 1KO	(519) 262-3002		
	(519) 228-7000			
ADM Agri Sales Inc. (ADM A.S.I.)	Gen-Tec Seeds Ltd.	Hyland Seeds Div. of Thompsons Ltd.		
2385 Wright Ave.	P. O. Box 98, Woodslee ON	P. O. Box 130, Blenheim ON		
Twin Falls, Idaho	N0R 1V0	N0P 1A0		
(208) 734-2550	(519) 975-2557	(519) 676-8146		
Great Canadian Bean Co. (G.C.B.C.)	SeCan Association	Syngenta Seeds Inc.		
R. R. #1, Ailsa Craig ON	201-52 Antares Drive	P.O. Box 4188		
N0M 1A0	Ottawa ON K2E 7Z1	Boise Idaho 83704-4188		
(519) 232-4449	(613) 225-6891	(208) 322-7272		



Disease Ratings (R = Resistant, S - Susceptible, NA = Not Available)

 $^{1 \}text{ t/ha} = 893 \text{ lbs./ac.}$

⁴ Anthracnose race 17 (binary system) is equivalent to the Alpha race, race 23 (binary system) is equivalent to the Delta race.