# 2022 Call for License Proposals: Dry Bean Cultivars

## Description

Twelve dry bean cultivars are available for license; a summary of each is appended to this document. The License will grant the successful proponent the sole rights to seed increase, distribution and commercialization within the Territory.

The University of Guelph reserves the full right to reject any proposal, or any terms thereof, for any reason and makes no promises whatsoever with respect to the terms under which any particular license may be issued, or that any license may be issued at all. No license for the aforementioned dry bean cultivars will be binding unless and until it is reduced to writing and signed by an authorized representative of the University of Guelph.

## **Territory Available**

Canada and US. Proposals for licensing for all or any portion of the Territory will be considered.

## **Closing Date**

Proposals must be received by <u>4pm ET on Friday</u>, May 27<sup>th</sup>, 2022 to be considered.

## Submission

Proposals (electronic copies) should be submitted to the Research Innovation Office, ATTN: Rebecka Carroll, Technology Transfer Manager – Germplasm (germplasm@uoguelph.ca).

## Additional Information/Seed Samples

For additional performance information or for viewing seed samples of the cultivars, contact:

Lyndsay Schram at 519-824-4120 x58339, email: <a href="mailto:lschram@uoguelph.ca">lschram@uoguelph.ca</a> or

Dr. Peter Pauls at 519-824-4120 x52460, email: ppauls@uoguelph.ca



#### 1. Guidelines for Submitting Proposals

- 1.1. Proponents are solely responsible for any and all costs incurred in the preparation of the proposal.
- 1.2. Proponents must be willing to keep their proposals valid and open for acceptance or for further negotiation for 45 days following the closing date.
- 1.3. Proposals will be evaluated solely on their content and the University of Guelph reserves the right to not select any proposal.
- 1.4. The University of Guelph reserves the right to negotiate any aspect of any proposal.
- 1.5. The successful proponent must undertake to enter into an agreement acceptable to the University of Guelph within 15 days from the date the proponent is notified.
- 1.6. All proposals will be treated as confidential business information.

#### 2. Assessment of Proposals

- 2.1. The Proponent. The proponent's capability of multiplication, distribution and protection of intellectual property rights of cultivars in the Territory. Preference will be given to proponents carrying out seed multiplication in Canada. Included in this assessment will be the proponent's experience in commercialization of similar cultivars and the proponent's record of research collaboration and/or support involving the University of Guelph.
- 2.2. Marketing Strategy. The strategy to promote and market the cultivar in the Territory with a view of maximizing sales and geographic distribution. The proponent must illustrate the strategy by providing the projected sales area, market promotion plans and estimated sales during each calendar year for the next 5 years.
- 2.3. Financial Offer. Proposals will be assessed based on all financial components including Execution or initial payment; Royalty; Amount of any guaranteed payments; Any other amounts or structures that would provide an income stream.

#### 3. Conditions of License

- 3.1. The University of Guelph may grant the successful proponent the sole seed increase, distribution and commercialization rights within the Territory.
- 3.2. Rights to the license shall be for a period of five (5) years, with an automatic fiveyear renewal with further extension by mutual consent.
- 3.3. The University of Guelph will maintain ownership of the cultivar and all intellectual property rights related to the cultivar are vested in and will continue to be vested in University of Guelph.

- 3.4. University of Guelph will reserve the right to name the cultivar in consultation with the successful proponent and to use the cultivar in breeding, research, extension and technology transfer programs.
- 3.5. The successful proponent will allow the University of Guelph access to records concerning its business with the University of Guelph. Upon reasonable demand, the successful proponent shall permit the University of Guelph, or any person designated by the University of Guelph, to examine, audit and copy invoices, accounts, receipts or other records or materials relating to its business with the University of Guelph. This provision shall survive for a period of five (5) years after the expiration or termination of any license agreement.
- 3.6. University of Guelph will retain the right to review the handling of the cultivar at any time, and if the successful proponent cannot or will not make an effort to meet the market demand, the license may be revoked, and the cultivar may be released to another company in order to meet the demand.
- 3.7. All costs associated with application and maintenance of intellectual property rights in the Territory, registration, seed increase, commercialization, and infringement by third parties will be borne by the successful proponent.

# **2022 Dry Bean Cultivar Highlights**

## White Navy Bean 'OAC 20-3'



- Mid Maturity
- Very High Yield
- Anthracnose resistant
- Very good upright plant architecture for direct combining

## White Navy Bean 'OAC 20-6'



- Full Maturity
- Excellent Yield
- Anthracnose resistant
- Very good upright plant architecture for direct combining

### White Navy Bean 'OAC 20-7'



- Full Maturity
- Very High Yield
- Very good upright plant architecture for direct combining

## White Navy Bean 'OAC 20-8'



- Full Maturity
- Excellent Yield
- Anthracnose resistant
- Excellent upright plant architecture for direct combining

## Black Bean 'OAC 20-B4'



- Full Maturity
- Very High Yield
- Excellent upright plant architecture for direct combining

Black Bean 'OAC 20-B5'



- Full Maturity
- High Yield
- Very good upright plant architecture for direct combining

## Cranberry Bean 'OAC 20-C1'



- Mid Maturity
- Very Good Yield
- Very good plant architecture for direct combining

## Cranberry Bean 'OAC 20-C3'



- Mid Maturity
- Excellent Yield
- Excellent plant architecture for direct combining

## Dark Red Kidney Bean 'OAC 20-D1'



- Mid Maturity
- Good Yield
- Excellent upright plant architecture for direct combining

## Dark Red Kidney Bean 'OAC 20-D2'



- Full Maturity
- Excellent Yield
- Very good upright plant architecture for direct combining

## Light Red Kidney Bean 'OAC 20-L1'



- Full Maturity
- Excellent Yield
- Good upright plant architecture for direct combining

## Pinto Bean 'P16HR025'



- Full Maturity
- Very Good Yield
- Non-darkening seeds
- Good plant architecture for direct combining

# Navy Beans Summary 'OAC 20-3, OAC 20-6, OAC 20-7, OAC 20-8'

Developed by: University of Guelph Dry Bean Breeding Program

Breeders: Tom Smith & K. Peter Pauls

## Navy Bean Performance Data and Disease Reactions

Variety	Yield (kg/ha) <sup>a</sup>	Maturity (DAP) <sup>b</sup>	Suitability for Direct	Hundred Seed	Anthracnose Race 73 <sup>e</sup>	CBB <sup>f</sup>
			Harvest <sup>c</sup>	Weight (g) <sup>d</sup>		
OAC 20-3	3890	101	1.9	21.3	R	S
OAC 20-6	3694	102	2.0	18.7	R	S
OAC 20-7	3934	104	1.9	22.0	S	S
OAC 20-8	3797	104	2.3	20.1	R	S
AAC Argosy	3605	103	2.2	23.1	S	S
AAC Shock	3601	100	2.2	23.7	R	S
AC Apex	3532	104	2.1	24.4	S	R
OAC Seal (ACUG 19-3)	3707	102	2.1	21.8	R	R
OAC Souper (ACUG 19-5)	3653	105	2.6	20.9	S	R
Armada	3688	100	1.8	22.7	S	S
Blizzard	3798	99	1.7	20.5	S	S
Bolt	3219	98	1.6	24.1	R	S
Medalist	3696	100	1.9	20.5	S	S
Indi	3724	97	1.5	19.8	S	S
Lighthouse	3606	103	1.9	22.0	S	R
Nautica	3142	104	2.1	19.6	S	S
OAC Award	3594	104	2.3	21.9	S	R
OAC Charm	3737	99	2.1	22.2	R	S
OAC Equinox	3843	105	1.7	23.8	S	R
OAC Fusion	3400	96	1.6	19.4	R	S
OAC Marker	3634	99	2.0	20.3	S	R
OAC Plasma	3609	101	2.4	21.1	R	S
OAC Thunder	3429	100	2.4	22.3	S	S
Rexeter	3371	106	2.7	20.6	S	R
Rogue	3594	105	3.1	19.5	R	S
T9905	3699	101	2.2	23.1	S	S
Average	3623	102	2.1	21.5	-	-

<sup>a</sup> 2020-2021 Ontario Pulse Crop Committee Performance data, 9 location years.

<sup>b</sup> Days to maturity after planting.

<sup>c</sup> Suitability for direct harvest (harvestability) 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 that are not erect, with poor bottom pod height.

<sup>d</sup> To convert Hundred Seed Weight (g) to number of seeds/lb, divide 45,400 by seed weight. e.g., 45,400/63 = 720 seeds/lb.

<sup>e</sup> Anthracnose ratings, the predominant race found 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.

<sup>f</sup> Resistance gene for common bacterial blight (Xanthomonas campestris pv. phaseoli). R = Resistant, S = Susceptible, NA = Not Available.

## Navy Bean Yield and Maturity

#### 2020 & 2021 Ontario White Navy Bean Registration and Performance Trials.

- 6 locations in 2020 (Auburn, Elora, Exete, London, Winchester and Woodstock)
- 3 locations in 2021 (Blyth, Exeter and Winchester)



#### Average Yields 2020 & 2021 OPCC Trials (9 sites)

# Black Beans Summary 'OAC 20-B4, OAC 20-B5'

Developed by: University of Guelph Dry Bean Breeding Program

Breeders: Tom Smith & K. Peter Pauls

Variety	Yield (kg/ha)ª	Maturity (DAP) <sup>b</sup>	Suitability for Direct Harvest <sup>c</sup>	Hundred Seed Weight (g) <sup>d</sup>	Anthracnose Race 73 <sup>e</sup>	CBB <sup>f</sup>
OAC 20-B4	4384	97	1.8	23.3	S	S
OAC 20-B5	4265.5	98	2.4	23.9	S	S
Black Tails	4102	96	1.9	23.1	S	S
Blackbeard	4101	97	1.8	24.3	S	S
OAC Vortex	4354.5	97	2.6	22.1	S	R
Spectre	4192.5	101	1.9	23.3	S	S
Zenith	4315	93	1.7	23.3	R	S
Average	4222	97	2	23	-	-

## **Black Bean Performance Data and Disease Reactions**

<sup>a</sup> 2020-2021 Ontario Pulse Crop Committee Performance data, 6 location years.

<sup>b</sup> Days to maturity after planting.

<sup>c</sup> Suitability for direct harvest (harvestability) 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 that are not erect, with poor bottom pod height.

<sup>d</sup> To convert Hundred Seed Weight (g) to number of seeds/lb, divide 45,400 by seed weight. e.g., 45,400/63 = 720 seeds/lb.

<sup>e</sup> Anthracnose ratings, the predominant race found 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.

<sup>f</sup> Resistance gene for common bacterial blight (Xanthomonas campestris pv. phaseoli). R = Resistant, S = Susceptible, NA = Not Available.

## **Black Bean Yield and Maturity**

#### 2020 & 2021 Ontario Minor Coloured Bean Registration and Performance Trials.

- 3 locations in 2020 (Exeter, London and Winchester)
- 3 locations in 2021 (Exeter, St Thomas and Winchester)



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## Cranberry Beans Summary 'OAC 20-C1, OAC 20-C3'

Developed by: University of Guelph Dry Bean Breeding Program

Breeders: Tom Smith & K. Peter Pauls

## **Cranberry Bean Performance Data and Disease Reactions**

Variety	Yield (kg/ha)ª	Maturity (DAP) <sup>b</sup>	Suitability for Direct Harvest <sup>c</sup>	Hundred Seed Weight (g) <sup>d</sup>	Anthracnose Race 73 <sup>e</sup>	CBB <sup>f</sup>
OAC 20-C1	2618	85	2.6	57.7	R	S
OAC 20-C3	2765	85	2.3	62.5	R	S
Prairie Rich (ACUG 19- NDC1)	2692	83	2.4	53.3	R	S
Etna	2087	79	2.7	62.3	R	S
Jester	2500	90	3.1	61.0	R	S
OAC Candycane	2796	85	2.2	63.3	R	S
OAC Firestripe	2605	84	2.4	66.0	R	S
OAC Navabi	2507	80	2.7	63.2	R	S
OAC Racer	2197	80	3.1	67.1	R	S
Red Rider	2478	87	3.3	58.9	R	S
Vero	2056	82	3.5	60.6	R	S
Average	2482	84	2.7	61.4	-	-

<sup>a</sup> 2020-2021 Ontario Pulse Crop Committee Performance data, 7 location years.

<sup>b</sup> Days to maturity after planting.

<sup>c</sup> Suitability for direct harvest (harvestability) 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 that are not erect, with poor bottom pod height.

<sup>d</sup> To convert Hundred Seed Weight (g) to number of seeds/lb, divide 45,400 by seed weight. e.g., 45,400/63 = 720 seeds/lb.

<sup>e</sup> Anthracnose ratings, the predominant race found 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.

<sup>f</sup> Resistance gene for common bacterial blight (Xanthomonas campestris pv. phaseoli). R = Resistant, S = Susceptible, NA = Not Available.

## **Cranberry Bean Yield and Maturity**

#### 2020 & 2021 Ontario Major Coloured Bean Registration and Performance Trials.

- 3 locations in 2020 (Exeter, London and Winchester)
- 4 locations in 2021 (Exeter, London, Elora and Woodstock)



#### Performance 2020 & 2021 OPCC Trials

# Kidney Beans Summary 'OAC 20-L1, OAC 20-D1, OAC 20-D2'

Developed by: University of Guelph Dry Bean Breeding Program

Breeders: Tom Smith & K. Peter Pauls

## **Kidney Bean Performance Data and Disease Reactions**

Variety	Yield (kg/ha)ª	Maturity (DAP) <sup>b</sup>	Suitability for Direct Harvest <sup>c</sup>	Hundred Seed Weight (g) <sup>d</sup>	Anthracnose Race 73 <sup>e</sup>	CBB <sup>f</sup>
OAC 20-L1	2510	88	4.1	63.1	R	S
OAC 20-D1	2267	85	3.1	65.9	R	S
OAC 20-D2	2560	87	3.4	66.0	R	S
Big Red	2137	81	3.0	61.5	R	S
Dynasty	2486	88	3.0	61.2	R	S
Epic	2132	87	3.1	59.2	R	S
Gallantry	2624	87	2.5	57.3	R	S
OAC	2780	90	2.9	53.5	R	S
Firebrand						
OAC	2169	92	2.8	54.3	R	S
Iceberg						
OAC Inferno	2826	92	3.5	59.3	R	S
OAC Jasper	2213	87	2.7	60.1	R	S
OAC Jewel	2404	89	2.7	60.6	R	S
OAC	2654	89	2.8	60.1	R	S
Snowshoe						
Pink	1913	82	3.0	63.8	R	S
Panther						
Rampart	1906	85	3.0	54.0	R	S
Red Dawn	1680	75	2.8	62.1	R	S
Red Hawk	1955	85	3.2	53.5	R	S
Yeti	2427	90	2.9	54.7	R	S
Average	2313	87	3.0	59.4	-	-

<sup>a</sup> 2020-2021 Ontario Pulse Crop Committee Performance data, 7 location years.

<sup>b</sup> Days to maturity after planting.

<sup>c</sup> Suitability for direct harvest (harvestability) 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 that are not erect, with poor bottom pod height.

<sup>d</sup> To convert Hundred Seed Weight (g) to number of seeds/lb, divide 45,400 by seed weight. e.g., 45,400/63 = 720 seeds/lb.

<sup>e</sup> Anthracnose ratings, the predominant race found 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.

<sup>f</sup> Resistance gene for common bacterial blight (Xanthomonas campestris pv. phaseoli). R = Resistant, S = Susceptible, NA = Not Available.

## **Kidney Bean Yield and Maturity**

#### 2020 & 2021 Ontario Major Coloured Bean Registration and Performance Trials.

- 3 locations in 2020 (Exeter, London and Winchester)
- 4 locations in 2021 (Exeter, London, Elora and Woodstock)



Performance OPCC Trials 2020 & 2021

## Pinto Beans Summary 'P16HR025'

Developed by: University of Guelph Dry Bean Breeding Program

Breeders: Tom Smith & K. Peter Pauls

Variety	Yield (kg/ha)ª	Maturity (DAP) <sup>ь</sup>	Suitability for Direct Harvest <sup>c</sup>	Hundred Seed Weight (g) <sup>d</sup>	Anthracnose Race 73 <sup>e</sup>	CBB <sup>f</sup>
P16HR025	2224	90	3.3	36.4	S	S
La Paz	2419	83	2.2	38.6	S	S
OAC Blaze (ME24)	1837	81	2.9	37.5	S	S
Prairie Omega (ME78)	2099	83	2.1	38.1	S	S
OAC Paint (P15HR077)	2369	91	3.1	36.4	S	S
PALOMINO	2056	82	2.9	36.1	S	S
Staybright	2254	83	2.6	36.5	S	S
Windbreaker	1905	79	4.0	38.4	S	S
Average	2145	84	2.9	37.2	-	-

## **Pinto Bean Performance Data and Disease Reactions**

<sup>a</sup> 2020-2021 Ontario Pulse Crop Committee Performance data, 8 location years.

<sup>b</sup> Days to maturity after planting.

<sup>c</sup> Suitability for direct harvest (harvestability) 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 that are not erect, with poor bottom pod height.

<sup>d</sup> To convert Hundred Seed Weight (g) to number of seeds/lb, divide 45,400 by seed weight. e.g., 45,400/63 = 720 seeds/lb.

<sup>e</sup> Anthracnose ratings, the predominant race found 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.

<sup>f</sup> Resistance gene for common bacterial blight (Xanthomonas campestris pv. phaseoli). R = Resistant, S = Susceptible, NA = Not Available.

## Pinto Bean Yield and Maturity

#### 2020 & 2021 Private Pinto Trials.

- 4 locations in 2020 (2 x Woodstock, 2 x Elora)
- 4 locations in 2021 (2 x Woodstock, 2 x Elora)

