

# Navy Bean ‘Lightning’



**Developed by University of Guelph Dry Bean Breeding Program Breeders:  
Tom Smith & K. Peter Pauls.**

‘**Lightning**’ is a navy bean with good yield, a large seed size, an excellent harvestability and resistance to Bean Common Mosaic Virus race 1 and race 15 as well.

## Performance Data\*

Varieties	Market Class	Yield (Lb/acre) <sup>a</sup>	Maturity (DAP) <sup>b</sup>	Suitability for Direct Harvest <sup>c</sup>	100 Seed Weight (g)
<b>Lightning</b>	<b>White</b>	<b>2828.1</b>	<b>95.84</b>	<b>2</b>	<b>23.2</b>
AAC Shock	White	3068.7	93.7	2.7	25.26
Apex	White	3224.7	99.2	1.8	26.24
Bolt	White	2896.7	92.57	1.5	25.56
AAC Argosy	White	3272.1	98.38	2.2	24.98
Lighthouse	White	3248.8	97.26	1.6	23.18
Nautica	White	3034.8	98.81	1.6	21.1
Rexeter	White	3178.8	100.62	3	21.94
T9905	White	3328	97.35	2.3	24.98
Mean		3120.08	97.08	2.08	24.05
LSD(0.05) <sup>d</sup>		95.74			

<sup>a</sup> 2016-2020 OPCC Performance data, 10 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> LSD (0.05) – the LSD is a measure of variability within a 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.

\* Adapted from GoBeans.ca Infosheets



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## Disease Reaction <sup>a</sup>

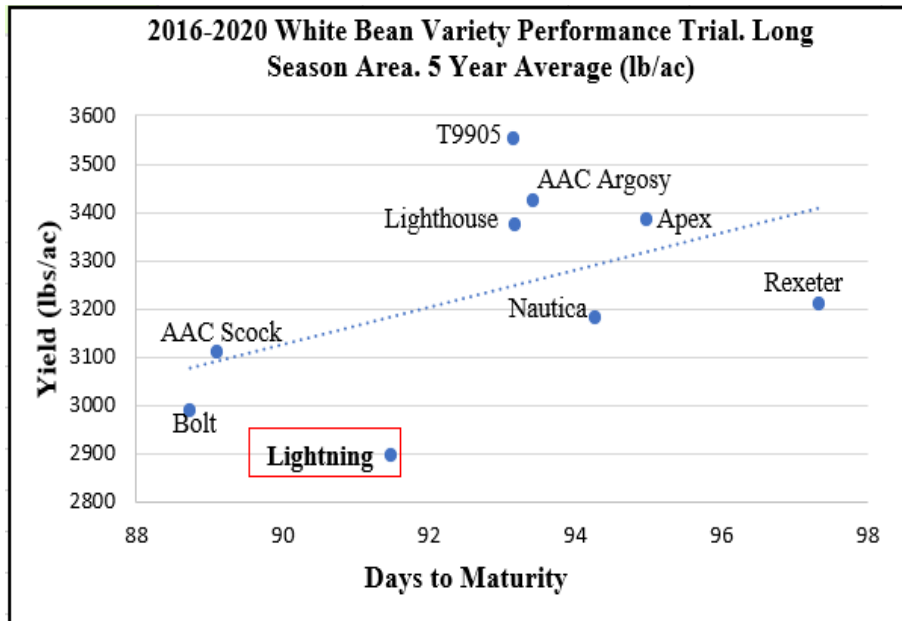
Variety	Bean Common Mosaic Virus		Anthracnose			Common Bacterial Blight
	R 1	R 15	R 17	R 23	R 73	
<b>Lightning</b>	<b>R</b>	<b>R</b>	<b>S</b>	<b>S</b>	<b>S</b>	<b>S</b>
AAC Argosy	R	R	S	S	S	R
AAC Shock	R	R	S	S	S	R
Apex	R	R	S	R	S	R
Bolt	R	R	S	S	R	S
Lighthouse	R	R	NA	R	S	R
Nautica	R	R	S	S	S	S
Rexeter	R	S	S	S	S	R
T9905	R	R	R	R	S	S

<sup>a</sup> R = Resistant, S = Susceptible, NA = Not Available.

<sup>b</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.

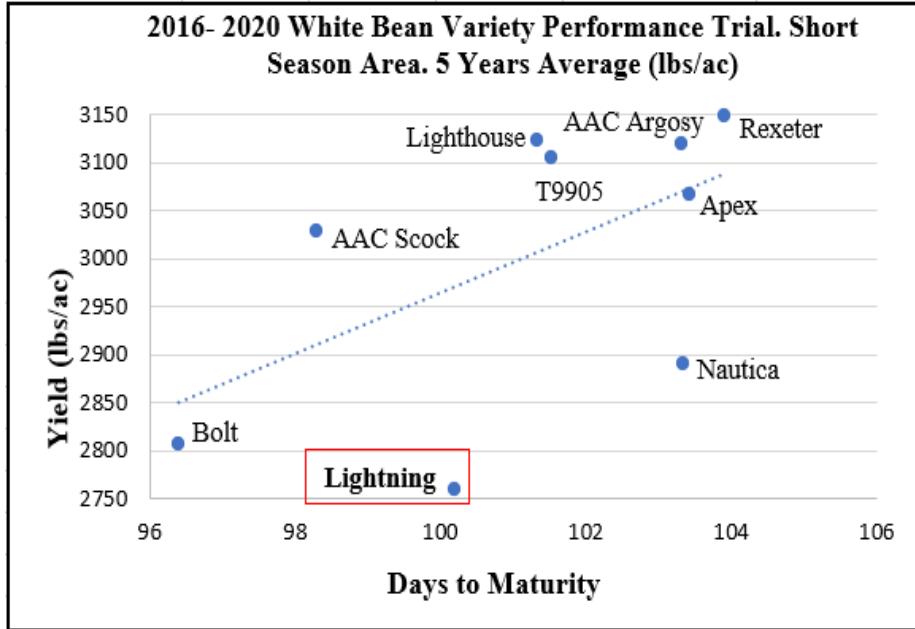
<sup>c</sup> Resistance gene for common bacterial blight (*Xanthomonas phaseoli* pv. *phaseoli* / *Xanthomonas citri* pv. *fuscans*).

## Yield and Maturity



Data from 2016-2020 OPCC Performance Trials, 5 location years.

\* Adapted from GoBeans.ca Infosheets



Data from 2016-2020 OPCC Performance Trials,  
7 location years.

\* Adapted from GoBeans.ca Infosheets

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