

# InVigor®

**BASF**  
We create chemistry

## 2021 INVIGOR HYBRID CANOLA LINEUP United States

### Often imitated, never duplicated.

Last year we introduced a whole new series of InVigor® hybrid canola: the 300 series. These hybrids demonstrated such unprecedented levels of performance that they deserved a whole new series. This year we're introducing a new hybrid that encompasses what it means to be a 300 series InVigor hybrid from BASF. The proof is in the bin.

## The 300 series grows.

**NEW**

### InVigor® L340PC

An exciting 300 series hybrid for growers that want it all. A high yield potential, mid-maturing, Pod Shatter Reduction hybrid that offers first generation clubroot resistance<sup>1</sup> and strong standability.

Yield	<b>108.9%</b> of the new checks (InVigor L233P and Pioneer® 45H33) in 2019 WCC/RRC <sup>2</sup> trials <b>107.8%</b> of InVigor L233P (n=16 trials, 2019)	Traits	Patented Pod Shatter Reduction technology First generation clubroot resistance
Standability	Strong	Maturity	1 day earlier than InVigor L252
Growing Zones	All growing zones in the U.S. spring canola market	Blackleg	R – Blackleg resistant

### InVigor® L345PC

InVigor L345PC offers a significant jump in yield potential over InVigor L233P and features our patented Pod Shatter Reduction technology plus first generation clubroot resistance. This hybrid is suitable for all growing zones.

Yield	<b>111.9%</b> of the checks (InVigor 5440 and Pioneer® 45H29) in the 2017/2018 WCC/RRC trials <b>111.4%</b> of InVigor L233P (n=28 trials, 2018)	Traits	Patented Pod Shatter Reduction technology First generation clubroot resistance
Standability	Strong	Maturity	1 day earlier than InVigor L252
Growing Zones	All growing zones in the U.S. spring canola market	Blackleg	R – Blackleg resistant

### InVigor® choice LR344PC

InVigor Choice hybrid with Pod Shatter Reduction and first generation clubroot resistance. InVigor Choice LR344PC<sup>3</sup> features both the LibertyLink® technology system and TruFlex™ canola with Roundup Ready® Technology. Perfect for growers looking to combine high yield potential InVigor genetics with the flexibility of Liberty® herbicide or Roundup® herbicide applications.

Yield	<b>104.1%</b> of the new checks (InVigor L233P and Pioneer® 45H33) in 2018 WCC/RRC trials <b>103.6%</b> of InVigor L233P (n=12 trials, 2018)	Traits	Patented Pod Shatter Reduction technology First generation clubroot resistance Both the LibertyLink technology system and TruFlex™ canola with Roundup Ready® Technology
Standability	Strong	Maturity	Over 1 day earlier than InVigor L252
Growing Zones	All growing zones in the U.S. spring canola market	Blackleg	R – Blackleg resistant

# InVigor<sup>®</sup> L255PC

InVigor L255PC offers Pod Shatter Reduction and first generation clubroot resistance and separates itself from other hybrids due to its very impressive standability. A great fit for growers in the mid to long growing zones.

<b>Yield</b>	109% of the checks (InVigor 5440 and Pioneer <sup>®</sup> 45H29) in 2016 WCC/RRC trials	<b>Traits</b>	Patented Pod Shatter Reduction technology First generation clubroot resistance
<b>Standability</b>	Very strong	<b>Maturity</b>	1.5 days later than the average of the checks
<b>Growing Zones</b>	All mid to long growing zones in the U.S. spring canola market	<b>Blackleg</b>	R – Blackleg resistant

# InVigor<sup>®</sup> L234PC

Featuring Pod Shatter Reduction technology and second generation clubroot resistance, this hybrid is a great fit for growers in known clubroot-affected areas. We recommend growing InVigor L234PC with second generation clubroot resistance after two cycles of growing first generation clubroot-resistant hybrids in clubroot-affected areas or when clubroot symptoms are noticed in first generation clubroot-resistant hybrids (whichever comes first).

<b>Yield</b>	104% of the checks (InVigor 5440 and Pioneer <sup>®</sup> 45H29) in 2017 WCC/RRC trials	<b>Traits</b>	Patented Pod Shatter Reduction technology Second generation clubroot resistance
<b>Standability</b>	Strong	<b>Maturity</b>	3 days earlier than the average of the checks
<b>Growing Zones</b>	All growing zones in the U.S. spring canola market	<b>Blackleg</b>	R – Blackleg resistant

# InVigor<sup>®</sup> L233P

A strong performer, InVigor L233P features patented Pod Shatter reduction technology and very early maturity. This high yield potential hybrid provides the harvest flexibility you can count on.

<b>Yield</b>	108.8% of the checks (InVigor 5440 and Pioneer <sup>®</sup> 45H29) in 2014/2015 WCC/RRC trials	<b>Traits</b>	Patented Pod Shatter Reduction technology
<b>Standability</b>	Strong	<b>Maturity</b>	Over 3 days earlier than the average of the checks
<b>Growing Zones</b>	All growing zones in the U.S. spring canola market	<b>Blackleg</b>	R – Blackleg resistant

Please note: Maturity and standability are based on performance ratings and data compiled from several InVigor internal trials over multiple years. Results may vary on your farm due to environmental factors and preferred management practices.

n=number of balanced trials.

<sup>1</sup> To predominant clubroot pathotypes found in Canada at the time of registration. InVigor L340PC, InVigor Choice LR344PC, InVigor L345PC and InVigor L255PC share the same first generation clubroot resistance profile. InVigor L234PC has this resistance profile plus it contains second generation multigenic clubroot resistance to additional clubroot pathotypes to help combat evolving clubroot pathotypes.

<sup>2</sup> Western Canadian Canola/Rapeseed Recommending Committee.

<sup>3</sup> This product is approved for planting in Washington, Oregon, Idaho, Montana and the following counties of North Dakota: Divide, Williams, McKenzie. For additional information please contact your BASF representative.

**Get the most out of InVigor with industry-leading unit (seed count) packaging.**



**Every bag seeds 10 acres at 10 seeds/ft<sup>2</sup>.**

New InVigor packaging makes it easier to achieve the recommended InVigor target plant population (TPP) of 5 to 7 plants/ft<sup>2</sup>.

InVigor is packaged into bags featuring four different thousand seed weight (seeds per pound) ranges with recommended seeding rates to plant 10 acres at 10 seeds/ft<sup>2</sup>. Assuming a typical survival rate from seeding to harvest of 50 to 70%, that will result in the optimal TPP of 5 to 7 plants/ft<sup>2</sup> at harvest.

All four bag sizes contain at least 4.25 million seeds. InVigor bulk bags will contain 20 units, or a minimum of 85 million seeds, which plant 200 acres at 10 seeds/ft<sup>2</sup>.

Four seed size ranges = four different lb/A seeding rates to achieve 10 seeds/ft<sup>2</sup>.

**Advantages of unit packaging:**

**Planning:** Each unit will plant 10 acres.

**Consistency:** Each unit contains the same number of seeds.

**Simplicity:** Recommended seeding rate (lb/A) is clearly displayed.

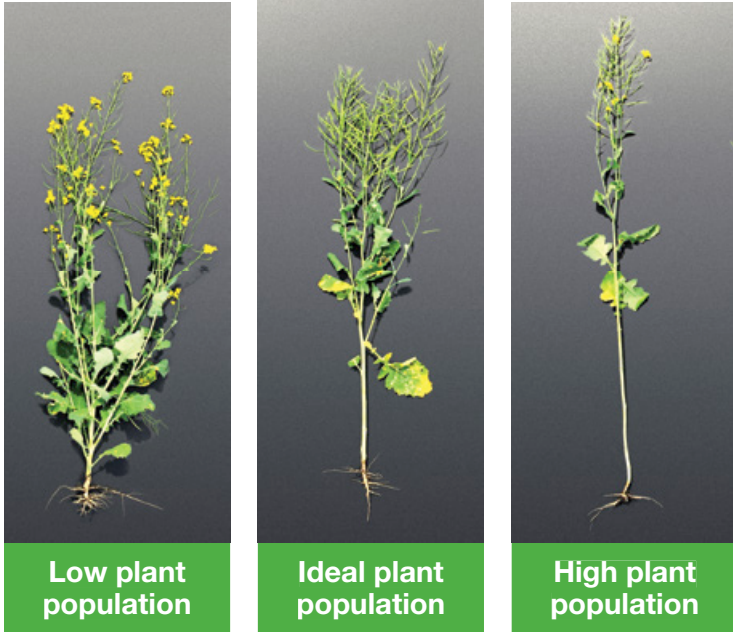
**Optimal yield:** Seeding 10 seeds/ft<sup>2</sup> results in optimal final plant population.

**Clear packaging:** Seed size ranges and seeding rates simplify drill calibration.

BAG RANGE	A	B	C	D
Recommended seeding rate*	4.2 lb/A (~10 SEEDS/FT <sup>2</sup> )	4.7 lb/A (~10 SEEDS/FT <sup>2</sup> )	5.2 lb/A (~10 SEEDS/FT <sup>2</sup> )	5.7 lb/A (~10 SEEDS/FT <sup>2</sup> )
Thousand seeds/lb	~113-103	~103-92	~92-84	~84-77
Unit bag weight	42.2 lbs	47.0 lbs	51,8 lbs	56.7 lbs
Minimum seeds/unit bag	4.25 million	4.25 million	4.25 million	4.25 million
Bulk bag weight (20 units)	844 lbs	940 lbs	1,036 lbs	1,134 lbs
Minimum seeds/tote (mini-bulk) bag	85 million	85 million	85 million	85 million

\* Recommended seeding rates are calculated according to seeding approximately 10 seeds/ft<sup>2</sup> and an average survivability of 50 to 70%, resulting in 5 to 7 plants/ft<sup>2</sup> at harvest. Results may vary on your farm due to environmental factors and preferred management practices.

## Get the most out of InVigor by targeting a harvest plant population of 5 to 7 plants/ft<sup>2</sup>.



Extensive field-scale research trials conducted by the BASF Agronomic Excellence team show that a TPP of 5 to 7 plants/ft<sup>2</sup> at harvest optimizes the agronomic performance, consistency and yield of InVigor hybrid canola.

Source: 42 BASF Agronomic Excellence trials (2013–2016).

### Low plant population

More tillering, woody stems and earlier maturity.

### Ideal plant population

Ideal plant structure and maturity will optimize yield.

### High plant population

Reduced branching, weaker stems and delayed maturity.

## The agronomic benefits of a TPP of 5 to 7 plants/ft<sup>2</sup>:

- Increased plant productivity and yield performance
- More efficient use of available moisture, nutrient and sunlight resources
- Improved weed control and reduced intra-crop competition
- Elevated stress tolerance
- More even maturity and uniform plant structure
- Improved lodging resistance and lower sclerotinia incidence

## Canola solutions.

Our complete line of canola crop protection solutions can help you harvest even greater success. Learn how each of our products supports your InVigor hybrid canola right from the start to help maximize yield potential.

**Liberty**<sup>®</sup>  
Herbicide

**Endura**<sup>®</sup>  
Fungicide

**Priaxor**<sup>®</sup>  
Xemium<sup>®</sup> Fungicide

**Sharpen**<sup>®</sup>  
Powered by **Kixor**<sup>®</sup> Herbicide

Contact your BASF Sales Representative or retailer for more information.

**InVigor**<sup>®</sup>

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### Always read and follow label directions.

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