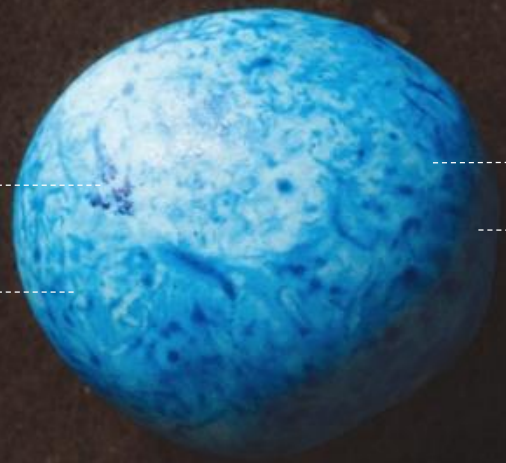
AgCelence®
Expect more

THE ANATOMY OF THE NEWEST PULSE SEED TREATMENT.

{ And how its benefits go well beyond the seed. }



The first truly systemic pulse seed treatment with Xemium®, for broad-spectrum disease control

Increased seedling vigour both above and below ground

More consistent and increased emergence, including under cold conditions

Enhanced ability to manage environmental stresses

Insure® Pulse
Fungicide Seed Treatment

BASF
We create chemistry

NEW - Insure Pulse

150 years

BASF
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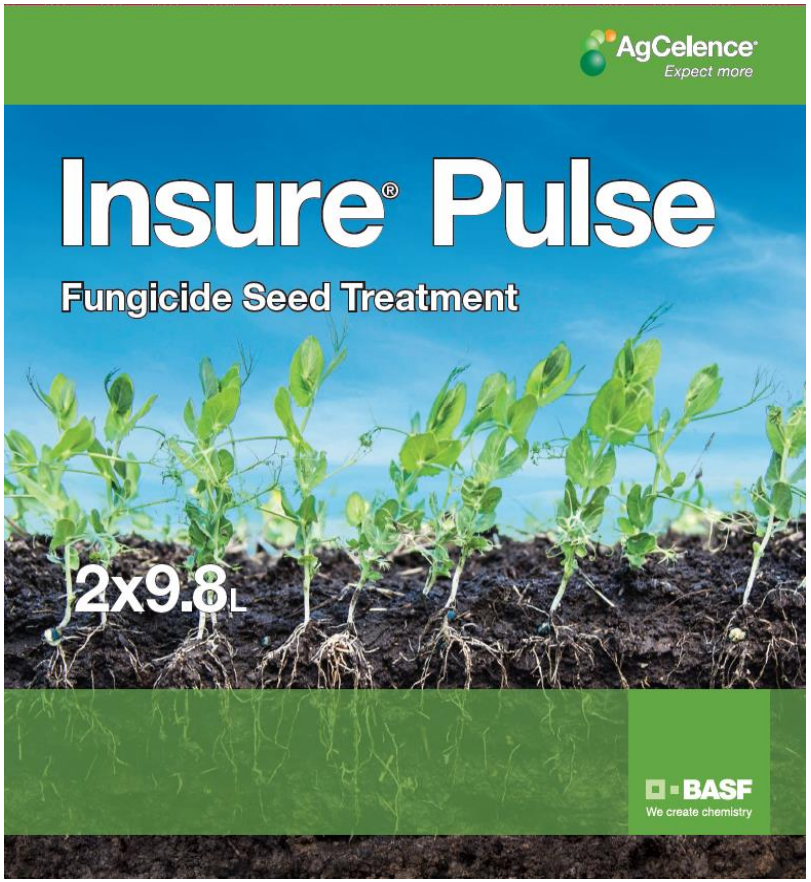
- **Active Ingredients;**
  - Xemium
  - Pyraclostrobin
  - Metalaxyl
- **Registered Crops:**
  (Crop Subgroup 6C)
  - Field Pea
  - Chickpea
  - Lentils
  - Dry bean
  - Faba bean
  - Flax
- **RTU Formulation**
- **Propylene Glycol based formulation**
- **Now registered for sale in Canada**

Insure® Pulse
Fungicide Seed Treatment

NEW - Insure Pulse

- **First Seed Treatment in Canada to contain Xemium**
  - First truly systemic seed treatment for pulse & flax crops
  - More continuous & consistent disease control

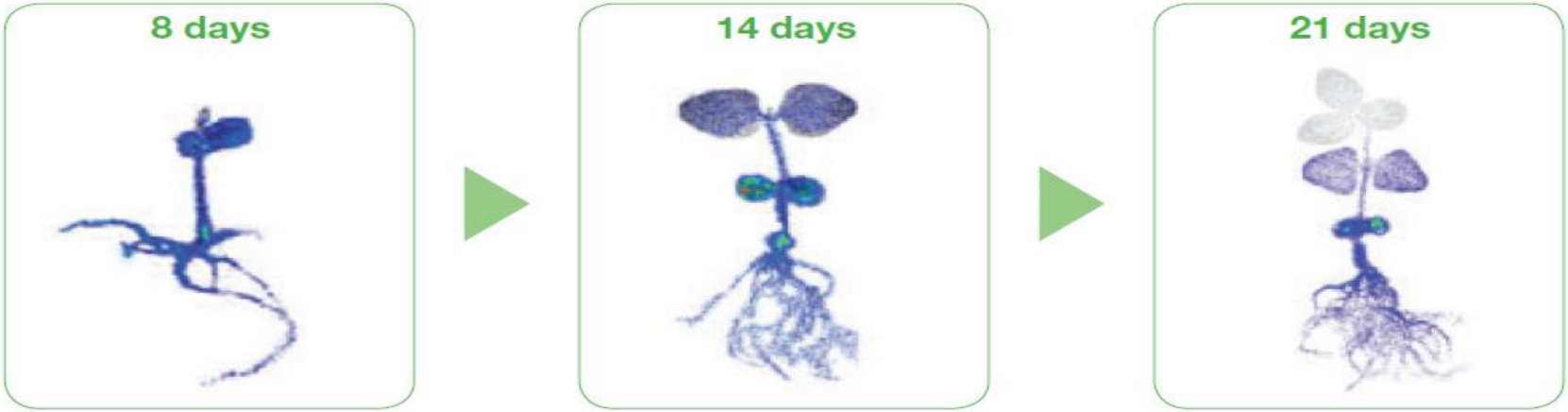
- **First Pulse and Flax Seed Treatment to offer benefits of AgCelence**
  - More consistent & increased germination
  - Enhanced seedling vigour above & below ground
  - Enhanced ability to manage exposure to environmental stress



Insure® Pulse
Fungicide Seed Treatment

What makes Insure Pulse unique?

- **Insure Pulse** is the first truly systemic pulse seed treatment containing the new active ingredient, Xemium, for more consistent and continuous disease control
  - Xemium exhibits unique plant mobility and translocation characteristics, enabling it to spread throughout entire seedling, roots and shoots
  - Plant wide distribution ensures protection right from initial developmental stages, providing reliable, consistent disease control
  - Contributes to a better plant stand, which is the foundation for a healthier crop and yield potential



Insure Pulse is not registered for use on Soybeans in Canada – research purposes only

Radiolabelled Xemium, shown to translocate from the seed throughout the seedling providing continuous, consistent disease control. BASF Internal Study. Germany 2012.

Insure® Pulse
Fungicide Seed Treatment

What makes Insure Pulse unique?

150 years

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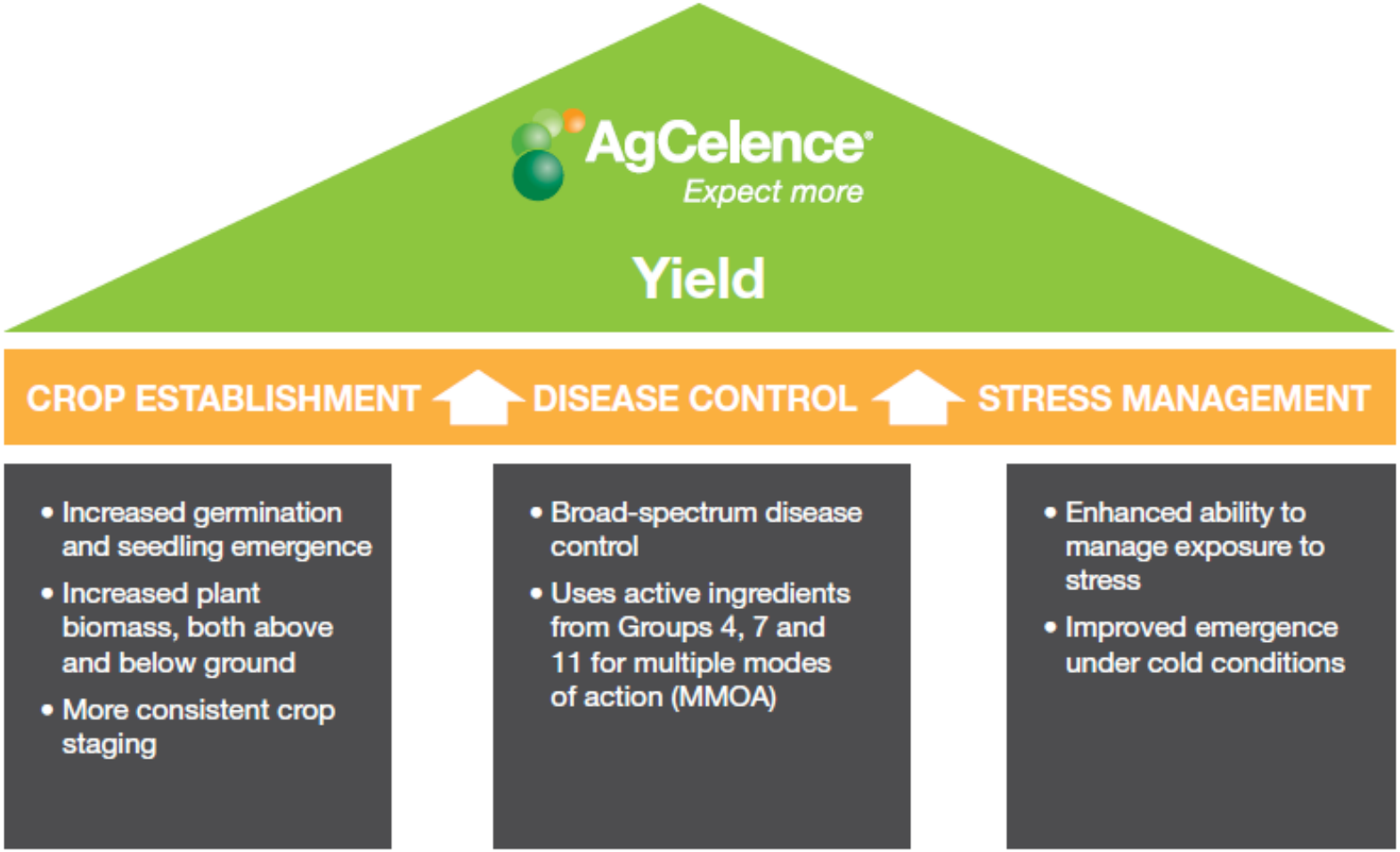

Insure® Pulse
Fungicide Seed Treatment

Insure Pulse - Technical Information

150 years

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Active Ingredients

Metalaxyl (Group 4), Xemium (Fluxapyroxad, Group 7), Pyraclostrobin (Group 11)

Crops registered (Crop Subgroup 6C)

Field peas, lentils, flax, faba beans, dry beans and chickpeas

Package size

Case: 2 x 9.8 L jugs.
Also available in 120 L drum.

Application rates

For pulse crops, apply Insure Pulse at 300 mL/100kg seed.
For flax, apply Insure Pulse at 300 to 600 mL/100 kg seed.[1]

	bu/jug	bu/drum
Field pea	120	1469
Small red lentil	120	1469
Large green lentil	120	1469
Chickpea	120	1469
Flax[1]	64 to 128	787 to 1575
Faba bean	120	1469
Dry bean	120	1469

[1] For flax (*Linum usitatissimum*), use the higher rate if: a) there is a history of high disease pressures in the field or b) where field conditions favour seed- and soil-borne pathogens. If using the 600 ml per 100 kg rate, it is highly recommended that the seed be treated in a bin or truck box to allow the treated seed to dry prior to placing into the seeder hopper. This will prevent clumping and bridging in the seeder.

See label for complete application rates.

Diseases controlled and suppressed

Pulse diseases controlled

- Seed rot and seedling blight caused by soil-borne *Fusarium* spp. and *Pythium* spp.
- Seed rot, seedling blight and root rot caused by soil-borne *Rhizoctonia solani*
- Seedling blight caused by seed-borne *Ascochyta* spp.

Pulse diseases suppressed

- Root rot caused by soil-borne *Fusarium* spp.
- Seed rot and seedling blight caused by seed-borne *Botrytis cinerea*
- Anthracnose seeding blight caused by seed-borne *Colletotrichum lindemuthianum*

Flax diseases controlled

- Seed rot, seedling blight and root rot caused by soil-borne *Fusarium* spp. and *Rhizoctonia solani*

Insure Pulse - Disease control in Peas

150 years

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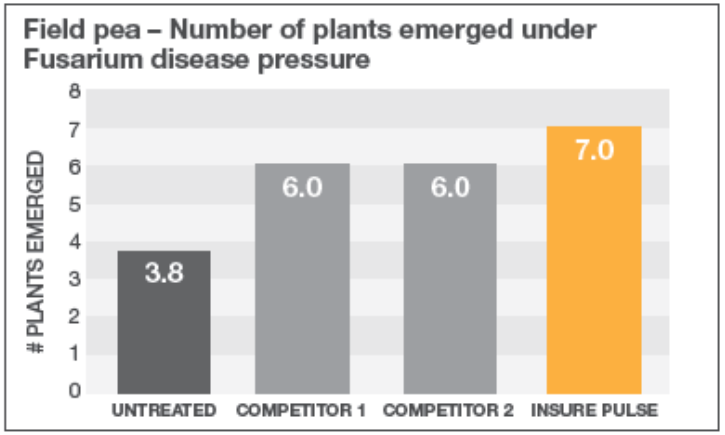
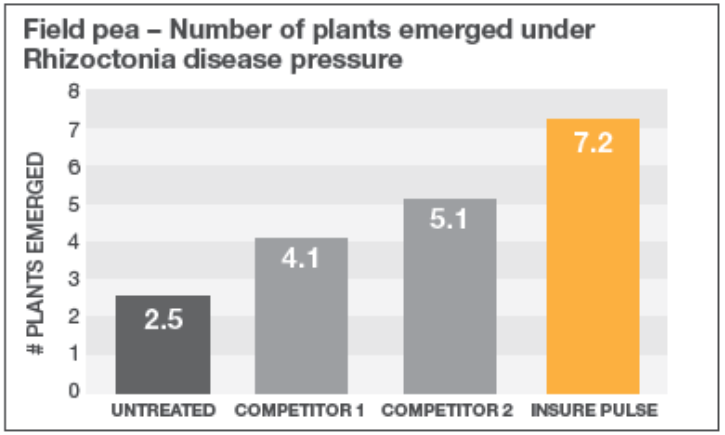
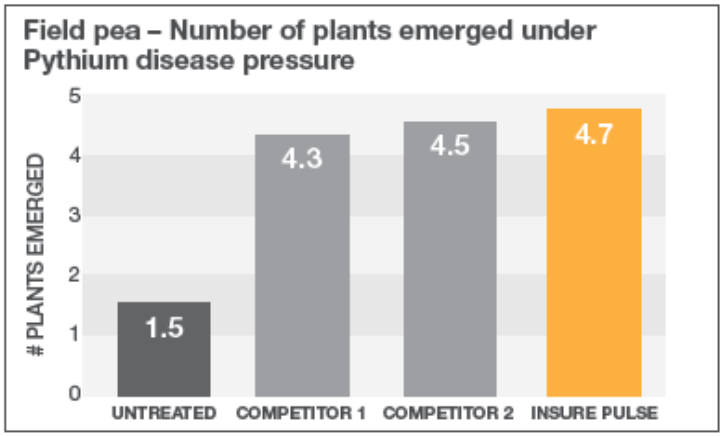
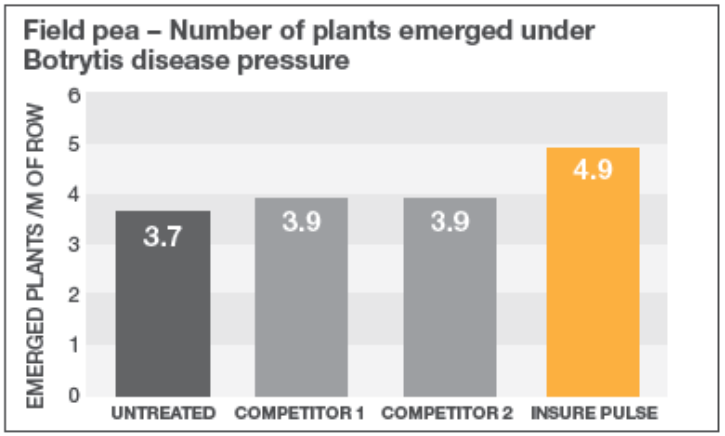
Insure® Pulse has the highest degree of disease control offered in a pulse and flax seed treatment









Source: Third party generated registration data, 2015

Insure Pulse - Disease control in Lentil & Chickpea

150 years

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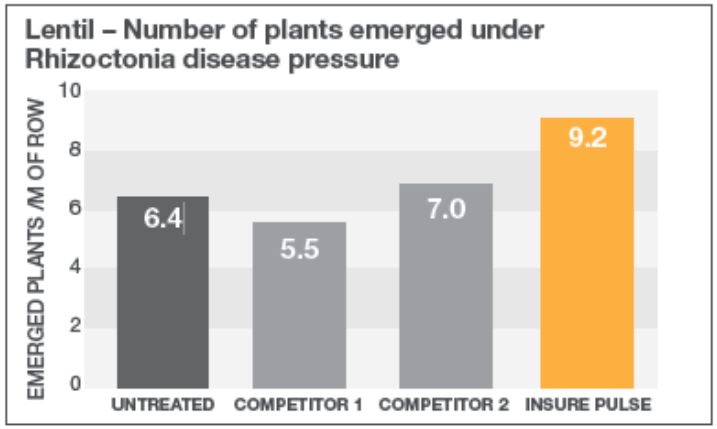
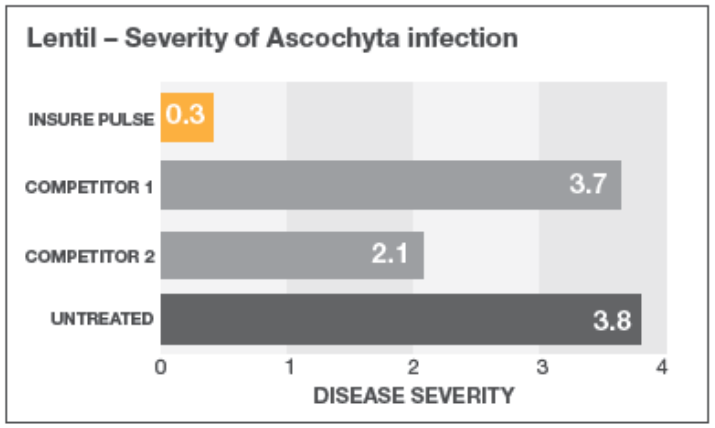
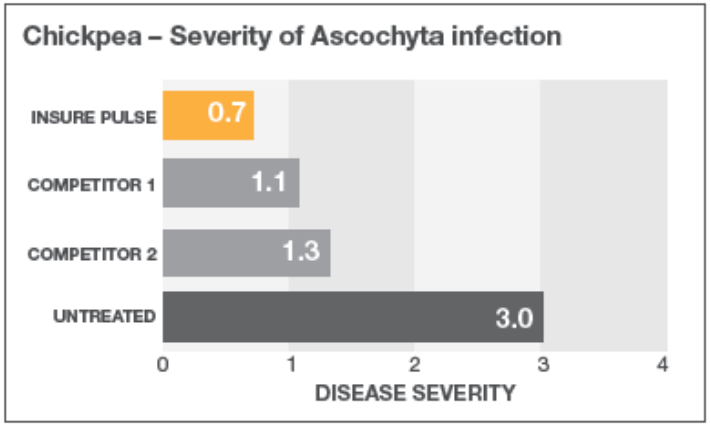
Insure® Pulse has the highest degree of disease control offered in a pulse and flax seed treatment



Disease Rating Scale
0 = No disease present
4.0 = Dead





Source: Third party generated registration data, 2015

150 years

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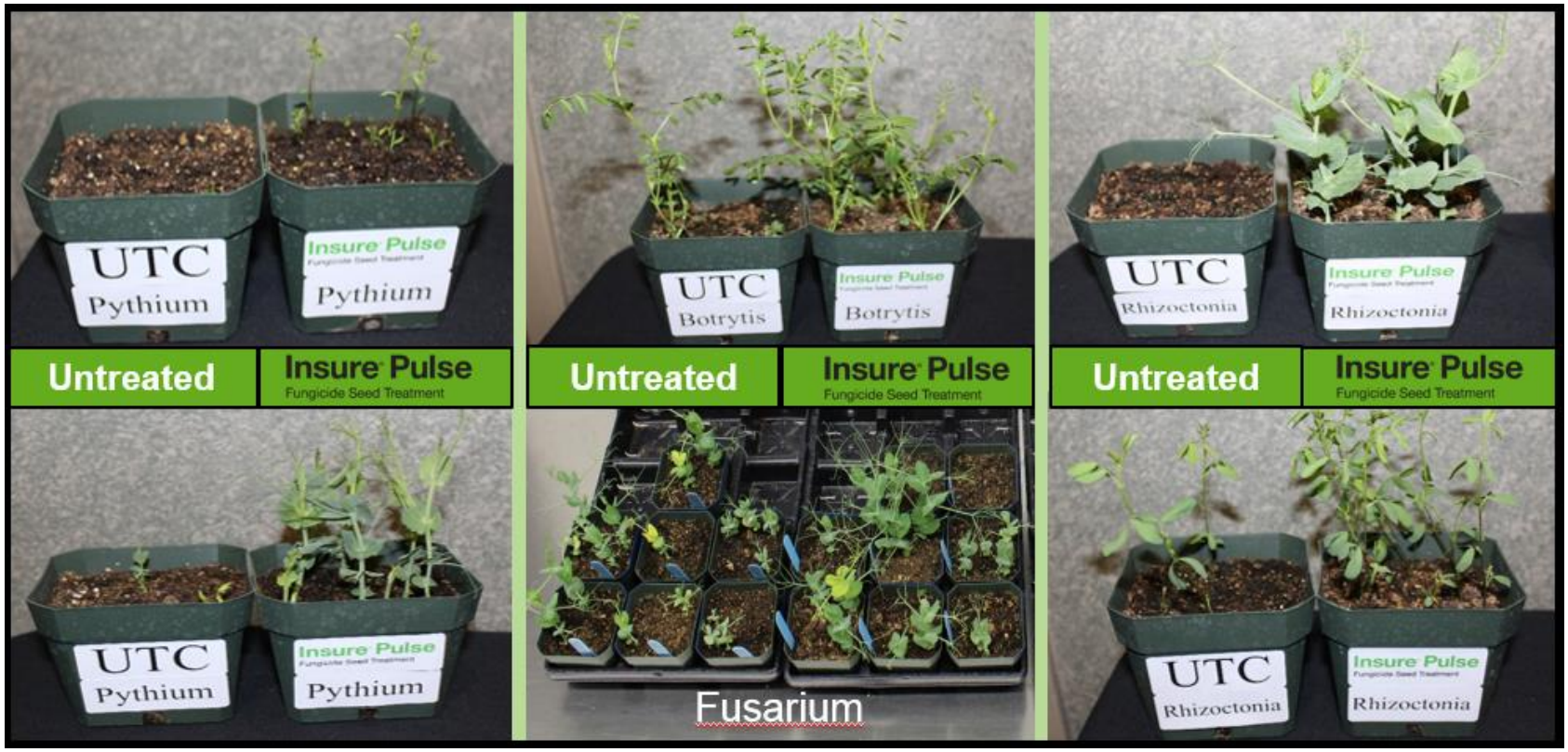
Insure Pulse - Disease control

Insure® Pulse has the highest degree of disease control offered in a pulse and flax seed treatment



Insure Pulse – Enhanced Emergence

150 years

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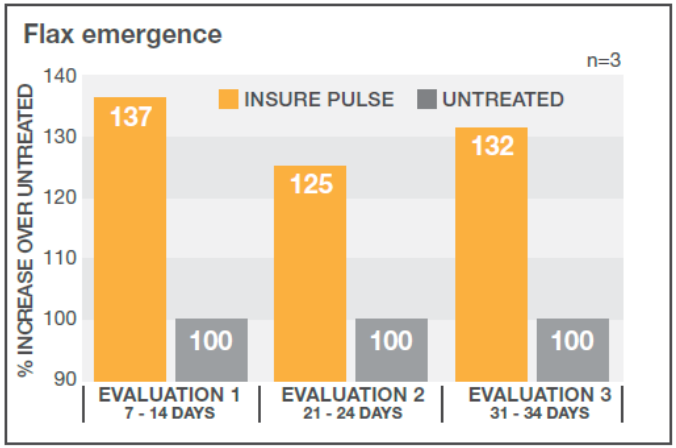
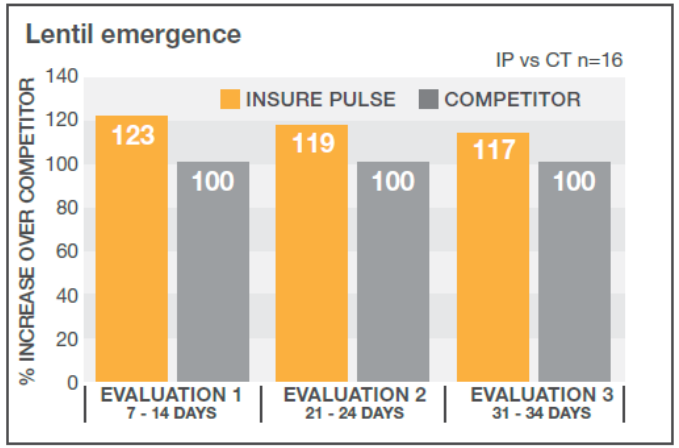
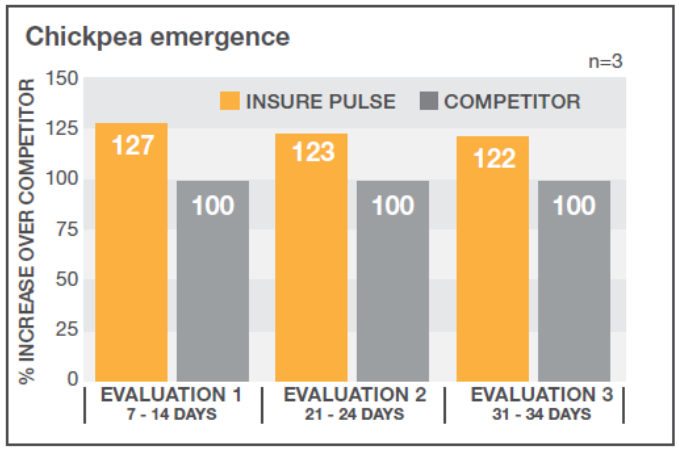
Insure® Pulse provides more consistent and increased emergence, including under cold conditions.







Insure® Pulse
Fungicide Seed Treatment

Source: Third party generated registration data, 2015

150 years

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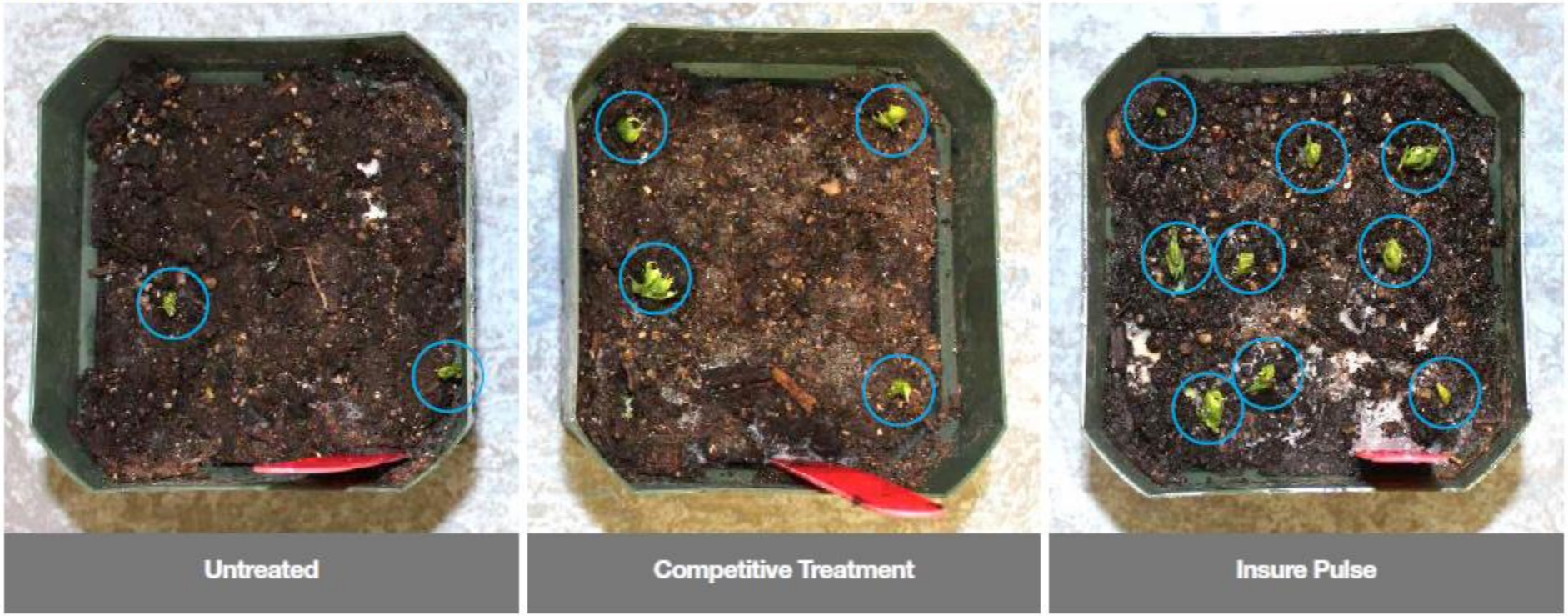
Insure Pulse – Enhanced Emergence

Insure® Pulse provides more consistent and increased emergence, including under cold conditions.

Meadow pea – 10 days after planting, 9 seeds per pot at 10°C



Source: BASF Greenhouse program, 2015.

Insure® Pulse
Fungicide Seed Treatment

Insure Pulse – Enhanced Seedling Vigour

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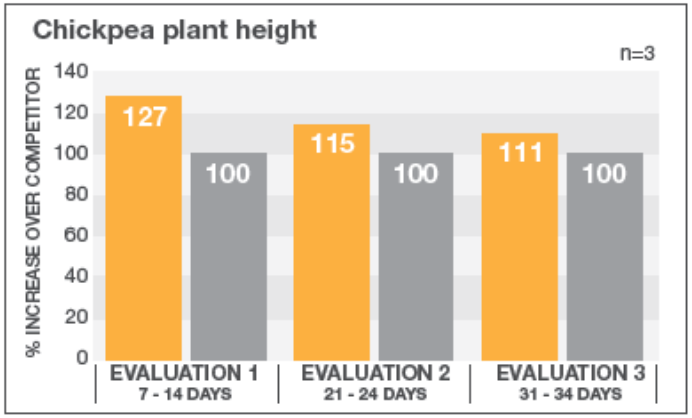
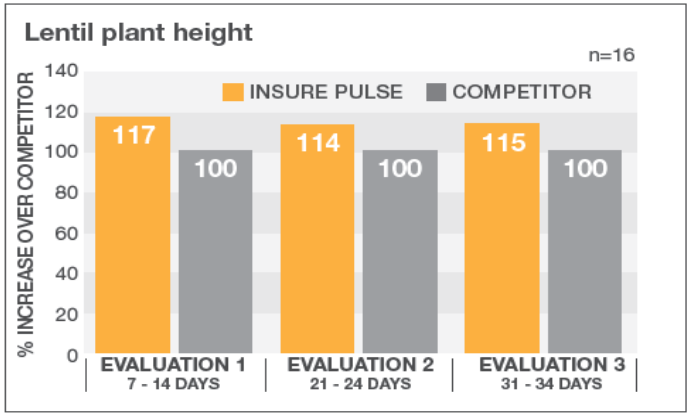
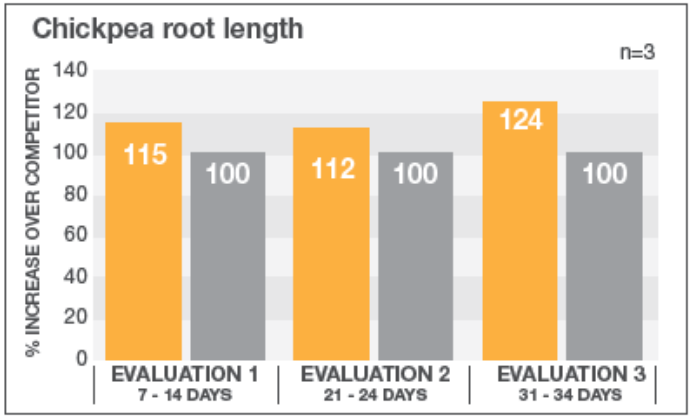
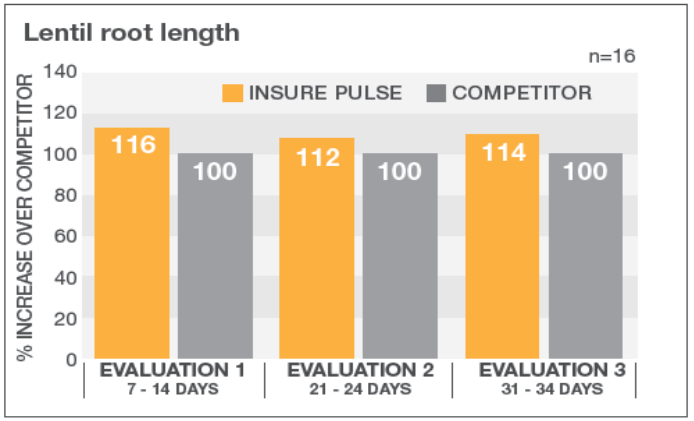
Insure® Pulse provides increased seedling vigour, both above and below ground.



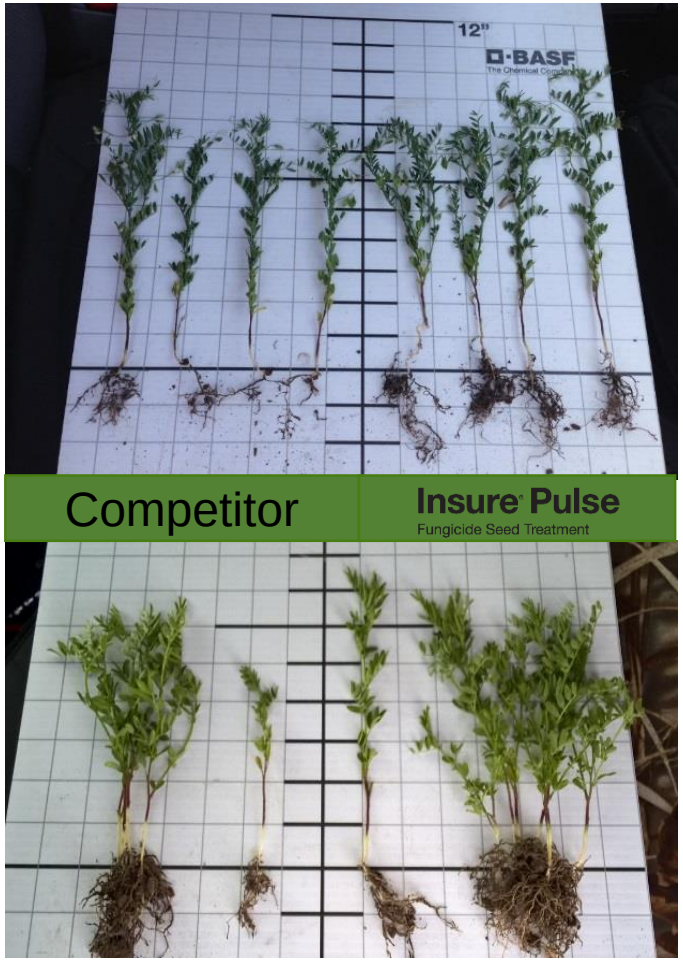






Source: Third party generated registration data, 2015

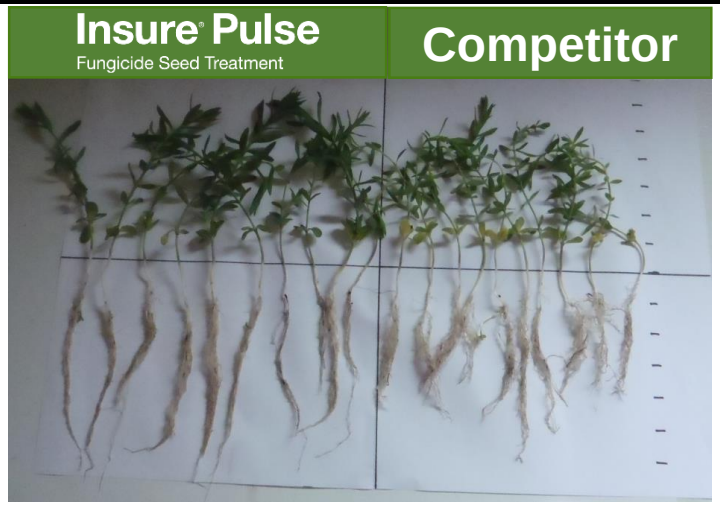
Insure Pulse - Benefits



Insure Pulse - Benefits

150 years

BASF
We create chemistry



Insure® Pulse
Fungicide Seed Treatment

Source: BASF Research Authorization Trial, Wynyard, SK. 2014

Insure Pulse – Environmental Stress Tolerance

Insure® Pulse

Fungicide Seed Treatment

Enhanced Ability to Manage Stress

150 years

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Control -3°C 1 h -4°C 1 h -5°C 1 h -6°C 1 h

Source: U of S 3rd Party Study, 2013. .

We create chemistry