

**IGNITE CROP POTENTIAL** 

AGTIV<sup>®</sup> is an innovative technology brand made of high-quality and proven natural active ingredients that deliver superior quality and performance for producers. Ask your local representative, or scan to learn more about the AGTIV<sup>®</sup> offer.







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### LIQUID ON SEED

COVERS

200

acres

# **AGTIV<sup>®</sup> IGNITE<sup>™</sup> L**

### ACTIVE INGREDIENT:

S SERENDIPITA – PTB299 Technology Serendipita indica (formerly known as Piriformospora indica) 2 x10<sup>6</sup> viable spores/g

### **INERT INGREDIENT: Water**

PARTICLE SIZE: < 1 mm (18 mesh)

Contains n	ion-soluble	particles
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SIZE	COVERS	CODE
11 L (11 kg) – bag-in-box	Canola: 454 kg of seeds (1000 lb)	714114
	Cereal: 9165 kg of seeds (20 205 lb)	

### **DIRECTIONS FOR USE**

Ensure the seed treating equipment has been properly cleaned and calibrated and that applicator's tank is clean. Remove any filters on the treating system that are smaller than 1 mm (18 mesh) to prevent clogging. Shake thoroughly the 11 liters bladder and add it completely to the applicator's tank.

For canola and other Brassicaceae, one bladder of 11 liters can treat up to 454 kg (1000 lb) or 81 ha (200 acres) of seeds.

For wheat and other cereals, one bladder of 11 liters can treat up to 9165 kg (20 205 lb) or 81 ha (200 acres) of seeds. It is recommended to dilute in non-chlorinated water to reach a total volume of liquid to add between 12 to 20 ml/kg of seeds.

Spray on seeds and ensure full coverage.

	CANOL	A	\$\$ \$			
	Year	Number of sites	Untreated check yield (bu/ac)	AGTIV® IGNITE™ L yield (bu/ac)	Yield increase (bu/ac)	/
-7	2018	1	63.5	68.0	4.5	
	2019	6	44.6	47.1	2.5	
1	2020	5	37.2	39.6	2.4	
36	2021	8	32.5	35.0	2.5	10
E.	2022	7	33.6	36.2	2.6	0
	Total	27 sites	<b>37.2</b> ª	<b>41.8</b> ⁵	2.5	1
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## DURUM WHEAT

Year	Number of sites	Untreated check yield (bu/ac)	AGTIV® IGNITE™ L yield (bu/ac)	Yield increase (bu/ac)
2021	4	35.8	39.3	3.5
2022	4	40.2	44.4	4.2
Total	8 sites	38.0ª	<b>41.8</b> ⁵	3.8

# BENEFITS

### **NUTRIONAL** ASPECTS

### (P) PHOSPHORUS - essential for energy storage and availability to cells

Stimulates the plant's production of phosphate transporters, enabling it to absorb phosphorus from the soil more efficiently<sup>[1, 2]</sup>.

### (N) NITROGEN - key element involved in protein and chlorophyll synthesis

Improves the plant's nitrogen utilization efficiency by increasing the expression of nitrate reductase, the primary enzyme used to transform absorbed mineral nitrogen into organic nitrogen, which plants use for amino acid synthesis<sup>[3]</sup>.

### (S) SULPHUR - essential for protein synthesis

Serendipita has high affinity sulfur transporters to absorb sulfur from the soil very efficiently, which is then transferred to the plant<sup>[4]</sup>.

## **ABIOTIC STRESS** TOLERANCE

- Mitigates detrimental effects of water stress by stimulating the expression of protective enzymes, which play a major role in regulating reactive oxygen derivatives<sup>[5]</sup>. These compounds accumulate under water or salt stress and can damage cell membranes and chloroplasts, affecting plant growth.
- Enhances drought tolerance by improving stomatal conductance<sup>[6,7]</sup>.
- Improves biochemical pathways of plant partner which includes biosynthesis of prolines, organic acids and sugars, that serve as osmolytes in the cell<sup>[6,8,9,10]</sup>. This aids plants to maintain water potential gradient for the flow of water from soil into root and further to aerial parts under water deficit conditions<sup>[11]</sup>.
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