

AGTIV®

RELIABLE INOCULANTS for CANOLA & CEREALS

- ✓ Improves photosynthesis
- ✓ Better water management
- ✓ Increases nutrient absorption



2.5 bu/ac
6.7%

Average yield increase for canola
with AGTIV® IGNITE™ L
27 sites over 5 years, Canada

3.8 bu/ac
10%

Average yield increase for cereals
with AGTIV® IGNITE™ L
8 sites over 2 years, Canada

IGNITE CROP POTENTIAL

AGTIV® 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® offer.



PROMOTED BY:



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AGTIV® IGNITE™ L



ACTIVE INGREDIENT:

S SERENDIPITA – PTB299 Technology
Serendipita indica (formerly known as *Piriformospora indica*)
 2 x10⁶ viable spores/g

INERT INGREDIENT: Water

PARTICLE SIZE: < 1 mm (18 mesh)

Contains non-soluble particles

**COVERS
200
acres**

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

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.

BENEFITS

NUTRITIONAL 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^[1, 2].
- (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^[3].
- (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^[4].

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^[5]. 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^[6, 7].
- Improves biochemical pathways of plant partner which includes biosynthesis of prolines, organic acids and sugars, that serve as osmolytes in the cell^[6, 8, 9, 10]. 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^[11].

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CANOLA

| Year | Number of sites | Untreated check yield (bu/ac) | AGTIV® IGNITE™ L yield (bu/ac) | Yield increase (bu/ac) |
|--------------|-----------------|-------------------------------|--------------------------------|------------------------|
| 2018 | 1 | 63.5 | 68.0 | 4.5 |
| 2019 | 6 | 44.6 | 47.1 | 2.5 |
| 2020 | 5 | 37.2 | 39.6 | 2.4 |
| 2021 | 8 | 32.5 | 35.0 | 2.5 |
| 2022 | 7 | 33.6 | 36.2 | 2.6 |
| Total | 27 sites | 37.2^a | 41.8^b | 2.5 |

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 | 38.0^a | 41.8^b | 3.8 |