

AGTIV

DESIGNED BY NATURE. PERFECTED BY SCIENCE.







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AGTIV®

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TOOLS

ONLINE TOOLS

BENEFITS FOR POTATO

AGTIV REACH® creates the expansion of the root network by hyphae to reach further and uptake more nutrients and water, increasing resistance to stresses.

AGTIV REACH® ensures your plants are stronger, healthier and more vigorous.

AGTIV STIMULATE® provides a **healthy root zone** which leads to better yield. As a root colonizer, it stimulates the plant to **grow more efficiently**.





EFFECTIVE ON POTATO



Quebec (Canada)



Quebec (Canada)



Ontario (Canada)



Pays de la Loire (France)



Quebec (Canada)



Artois (France)



AGTIV REACH® and AGTIV STIMULATE®

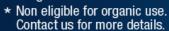






S: Size





AGTIV REACH® and AGTIV STIMULATE®

IN-FURROW APPLICATION OR SEED-PIECE TREATMENT

AGTIV REACH® L POTATO



ACTIVE INGREDIENT:

COVERS 20 acres

MYCORRHIZAE - PTB297 Technology Rhizophagus irregularis: 10 500 viable spores/g

INERT INGREDIENT: Water

PARTICLE SIZE: < 0.2 mm (70 mesh)

Contains non-soluble particles

SIZE	COVERS (1 case)	CODE (case)
2 x 950 ml (2 x 32 fl. oz) - bottles	8 ha (20 acres)	711004

DIRECTIONS FOR USE

IN-FURROW APPLICATION — Dilute the product in the required volume of clean, non-chlorinated water. Refer to the application charts available at PTAGTIV.COM/en/potato. Shake the bottle well before use and maintain a constant agitation in the tank during application to avoid settling and clogging. Apply directly on seed pieces into furrow.

SEED-PIECE TREATMENT — In a clean tank, pour the content of one 950 ml (32 fl. oz) bottle in the volume of liquid required to treat the amount of seed pieces for 4 hectares (10 acres) of seedbed (110 000 - 170 000 seed pieces). Shake the bottle well before use and maintain a constant agitation in the tank during application to avoid settling and clogging. Apply directly on seed pieces. Do not treat seed pieces more than 48 hours before seeding (could activate seed-piece sprouting).

IN-FURROW APPLICATION OR SEED-PIECE TREATMENT

AGTIV REACH® P POTATO



ACTIVE INGREDIENT:

COVERS 40 acres

MYCORRHIZAE - PTB297 Technology Rhizophagus irregularis: 67 000 viable spores/g

INERT INGREDIENT: Diatomaceous earth PARTICLE SIZE: < 0.2 mm (70 mesh)

SIZE	COVERS	CODE (case)
2 x 300 g (2 x 10.5 oz) - pouches	16 ha (40 acres)	711104

DIRECTIONS FOR USE

Pour the content of a 300 g pouch into 5.7 liters of clean and non-chlorinated water. Mix well and maintain under agitation during application. Apply directly on seed pieces into furrow.

IN-FURROW APPLICATION

AGTIV STIMULATE® L POTATO



ACTIVE INGREDIENT:

COVERS 20 acres

BACILLUS - PTB185 Technology

Bacillus inaquosorum: 2 x 109 viable spores/q

INERT INGREDIENT: Water PARTICLE SIZE: < 0.1 mm (150 mesh)

Contains non-soluble particles

SIZE	COVERS	CODE
8 L (8 kg) - bag-in-box	8 ha (20 acres)	711021

DIRECTIONS FOR USE

Apply inoculant in the furrow, directly on the seed pieces, at a rate of 1000 ml/ha (400 ml/acre).



RECOMMENDATIONS

IN-FURROW APPLICATION

RECOMMENDATIONS

LIQUID INJECTION:

The AGTIV® Liquid Injection Kit, integrating a Dosatron® pump, is a customized equipment designed for the precise application of AGTIV® liquid products. Easy to install on your existing in-furrow application system, it operates off the main solution flow.

- . Ensure the tank and the liquid injection system are clean and free of chemical residues, and agitation system is operational.
- . On the planter, remove all cylinder screens by the nozzles or use filters with openings of at least 50 mesh (0.28 mm).
- . Prepare your product mixture and adjust the Dosatron® injection rate following the calculation chart and application video at PTAGTIV.COM/en/liquid-injection-kit.
- Spray band width should be limited to 7 in (18 cm) or less.
- If the mixture does not contain pesticides or fertilizers, it can be emptied, refrigerated and used within 24 hours.

TANK MIX:

- Use filters with openings of at least 50 mesh (0.28 mm).
- Use a diaphragm (or peristaltic) pump for product application.
- Up and down agitation at all times in the tank.
- Spray band width should be limited to 7 in (18 cm) or less.
- . Apply within 6 hours after mixing into the liquid tank.
- See the application video at PTAGTIV.COM/en/potato.

SEED-PIECE TREATMENT

RECOMMENDATIONS

MILESTONE TREATER:

 Validate that the atomizing head and the mixing paddles correspond to the approved specifications. Visit PTAGTIV.COM/en/equipment for more details or contact your representative.

OTHER MODELS:

- Validate that the atomizing head and the mixing paddles correspond to the approved specifications (ask your representative for more info).
- Use filters with openings of at least 50 mesh (0.28 mm).
- Use a diaphragm (or peristaltic) pump for product application.
- Up and down agitation at all times in the tank.

S: Size

C: Coverage

8 RULES TO SUCCESS







Product must be refrigerated (2-8 °C, 36-46 °F). Store the product at constant temperature at all times. Do not freeze product.



Use filters with openings of at least 0.28 mm (50 mesh).





Use diaphragm pump for product application (or peristaltic pump).





Shake the bottle well before use and maintain a constant and effective agitation in the tank during application.





Band width should be limited to 7 in (18 cm) or less.





Do not treat seed pieces more than 48 hours before seeding.

7



Apply within 6 hours after mixing into the liquid tank.

8



Do not use after the best before date indicated on the label.

PROGRAM

AGTIV® LIQUID INJECTION KIT

- The AGTIV[®] Liquid Injection Kit is designed to apply the AGTIV[®] liquid products.
- The kit must be installed on the existing in-furrow liquid system of the planter as shown in the application videos.
- The mycorrhizae must be injected directly in the furrow close to the seeds.
- GOAL: To facilitate the use and application of the AGTIV[®]
 with maximum accuracy and without affecting the
 mycorrhizae spores and in-furrow equipment.







POTATO YIELD RESULTS









EFFICACY REPORT

SUMMARY - MYCORRHIZAL INOCULANT



► GROWER SPLIT FIELDS AND TRIALS

Research sites:

• Belgium;

Canada;

France;Germany;

Mexico;

Switzerland;

• United States.

Treatments:

a) Untreated;

b) AGTIV REACH® L POTATO*.

*Products applied according to manufacturers recommended rate.

Experimental design:

1197 split fields

Table 1. Average increase of marketable yield* with AGTIV REACH® L POTATO

Territory	Number of sites	Yield increase (t/ha)	Yield increase (cwt/ac)	Yield increase (%)
Canada	598	3.1	27.6	9.9
United States	67	3.3	29.8	10.8
Mexico	4	2.3	20.0	8.6
Belgium, France & Switzerland	496	4.1	36.3	9.9
Germany	32	4.2	37.4	10.0
Total	1197 sites	3.5 t/ha*	31.6 cwt/ac**	9.1%

Table 2. Average increase of marketable yield* with AGTIV REACH® L POTATO

Year	Number of sites	Yield increase (t/ha)	Yield increase (cwt/ac)	Yield increase (%)
2011	32	2.6	23.3	6.6
2012	33	3.2	28.5	9.0
2013	70	3.6	31.9	11.2
2014	116	4.5	40.3	12.8
2015	145	4.0	35.3	10.7
2016	243	3.9	34.8	10.5
2017	213	2.7	24.0	7.7
2018	113	3.4	30.2	11.2
2019	117	3.5	31.1	8.6
2020	49	2.9	25.6	9.8
2021	41	4.1	36.4	10.2
2022	12	3.4	29.2	7.8
2023	13	2.7	23.9	8
Total	1197 sites	3.5 t/ha*	31.6 cwt/ac**	9.1%

^{*} Statistically significant at p<0.001 following a T test.

^{**}cwt/ac = 100 lb/ac

EFFICACY REPORT

SUMMARY - MYCORRHIZAL & BACILLUS INOCULANT





AGTIV.

STIMULATE.

► PLOT TRIALS

Research partners: AgriTech Inc

· Atlantic Agri Tech;

New Marc Research;

• Prairie Ag Research;

Progest inc.;

• Tall Pines Agricultural Research Ltd.;

· Wellington Agricultural Research Ltd.

Research sites:

Alberta;

· Ontario:

• Prince-Edward Island;

· Quebec.

Treatments:

a) AGTIV REACH® L POTATO*;

b) AGTIV REACH® L POTATO + AGTIV STIMULATE® POTATO*.

*Products applied according to manufacturers recommended rate.

Experimental design:

Latin square:

· 13 trials of 6 repetitions;

• 1 trial of 5 repetitions.

Table 1. Average increase of marketable yield* in cwt/ac per trial

Year	Sites	AGTIV REACH® L	AGTIV REACH® L and AGTIV STIMULATE®	Yield increase*
2021	Sainte-Croix	320.3	319.3	-1
2021	Saint-Marc	107.8	112.8	5
2021	New Glasgow	242.1	247.4	5.3
2021	Rockwood	279.7	322.3	42.6
2021	Elmira	320.7	343.9	23.2
2022	Saint-Marc	145.4	142.2	-3.2
2022	Newton	235.9	237.8	1.9
2022	Newton	92.5	109.3	16.8
2022	Rockwood	402.5	429	26.5
2023	New Glasgow	413.1	425.6	12.5
2023	Raymond	138.5	141.1	2.6
2023	Underhills Farm	361.8	360	-1.8
2023	Newton	282.4	291.2	8.8
2023	Newton	482.7	502.3	19.6
Average	14 sites	273.2	284.5	11.3 cwt/ac

^{*}Comparison of the double inoculation vs AGTIV REACH® L POTATO

AGTIV REACH® COMPATIBILITY

Single action mycorrhizae products **REACH** into the soil and help uptake more nutrients and water.

Mycorrhizal inoculant is compatible with most pesticides and liquid fertilizers.











THRIVE.

AGTIV.

ENRICH.

AGTIV

REACH.

AGTIV

IGNITE.

AGTIV

FUEL

AGTIV

STIMULATE.

AGTIV THRIVE® POWERS PLANTS BY BOOSTING NITROGEN FIXATION. **NUTRIENT AND WATER ABSORPTION THANKS TO** MYCORRHIZAE & RHIZOBIUM AGTIV ENRICH® STRENGTHENS LEGUME NITROGEN FIXATION AND **PROVIDES A VIGOROUS ROOT SYSTEM THANKS TO** RHIZOBIUM & BACILLUS

AGTIV REACH® HELPS PLANTS REACH AND ABSORB MORE NUTRIENTS AND WATER THANKS TO **MYCORRHIZAE**

AGTIV IGNITE® IMPROVES PHOTOSYNTHESIS AND MITIGATES IMPACT OF **ENVIRONMENTAL STRESSES** THANKS TO SERENDIPITA

AGTIV FUEL® FEEDS LEGUMES BY FIXING ATMOSPHERIC NITROGEN THANKS TO RHIZOBIUM

AGTIV STIMULATE® REINFORCES PLANTS WITH A HEALTHY ROOT ZONE THANKS TO BACILLUS



PTB297 Technology

PTB160 (pea & lentil) PTB162 (soybean) PTB161 (chickpea)

+ RHIZOBIUM +

PTB162 Technology PTB180 Technology



PTB297 Technology, Rhizophagus irregularis (formerly known as Glomus intraradices)



PTB299 Technology, Serendipita indica

R RHIZOBIUM

PTB160 Technology (pea & lentil) Rhizobium leguminosarum biovar viciae PTB162 Technology (soybean) Bradyrhizobium japonicum PTB161 Technology (chickpea) Mesorhizobium onobrychidis

- Enhances Puptake
- Provides more energy for better nitrogen fixation
- Increases photosynthesis



- Increases nodulation and nitrogen fixation
- Improves rooting environment
- Enhances plant vigor and productivity
- Expands root system
- Enhances nutrient and water uptake
- Promotes plant robustness and vigor
- Mitigates abiotic stresses
- Increases photosynthesis rate
- Enhances plant establishment. growth and yield
- + Increases nodulation
- + Fixes nitrogen
- + Provides nutrients to pulses

Stimulates rooting environment

B BACILLUS

PTB180 Technology,

PTB185 Technology,

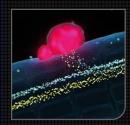
Bacillus inaquosorum

Bacillus pumilus

- Improves plant establishment
- Increases plant vigor and productivity









Learn more at

PTAGTIV.COM/en/technologies

CLICK ON A PICTURE TO SEE THE TECHNOLOGY IN ACTION

Since entering the agriculture market 15 years ago, we are constantly widening our AGTIV® inoculant offering to suit and benefit more crops.

While staying true to the AGTIV® brand's three pillars:

NATURE, SCIENCE and PERFORMANCE, we are introducing new product names reflecting the actions of our inoculants for plants.



AGTIV

DESIGNED BY NATURE.
PERFECTED BY SCIENCE.

Born from **nature** and perfected by **science**, AGTIV® is an innovative technology brand made of high-quality and proven natural active ingredients that deliver superior **performance** for agricultural producers.

Discover more at

PTAGTIV.COM/brand

ONLINE TOOLS





BROCHURES









AND MUCH MORE

Safety data sheets, organic certificates



PT**AGTIV**.COM