

AGTIV[®]



EFFICACY SUMMARIES
2026

AGTIV[®] AVERAGE YIELD INCREASE BY CROP

Learn more at

PTAGTIV.COM/en/results



SOYBEAN



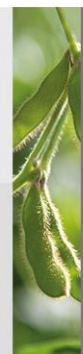
3.3 bu/ac
6.7%

AGTIV THRIVE[®] SOYBEAN
94 sites over 12 years, North America and Europe



1.8 bu/ac
3.3%

AGTIV ENRICH[®] SOYBEAN
11 sites over 5 years, Canada



PEA & LENTIL



FOR PEA

3.5 bu/ac
6.1%

AGTIV THRIVE[®] PEA & LENTIL
30 sites over 14 years, Canada

FOR LENTIL

2.7 bu/ac
8.6%

AGTIV THRIVE[®] PEA & LENTIL
68 sites over 16 years, Canada



POTATO



31.5 cwt/ac
9.1%

AGTIV REACH[®] POTATO
1202 sites over 15 years, North America and Europe



+10.3 cwt/ac

AGTIV REACH[®] + AGTIV STIMULATE[®]
16 third-party trials over 4 years, North America



BARLEY & DURUM WHEAT



FOR BARLEY

4.3 bu/ac
5.3%

AGTIV IGNITE[®]
7 sites over 3 years, Canada

FOR DURUM

4.1 bu/ac
8.5%

AGTIV IGNITE[®]
13 sites over 5 years, Canada



CANOLA & GRAIN CORN



FOR CANOLA

2.5 bu/ac
6.5%

AGTIV IGNITE[®]
38 sites over 8 years, Canada

FOR GRAIN CORN

7.2 bu/ac
4.2%

AGTIV IGNITE[®]
18 sites over 4 years, Canada



ONION & CARROT

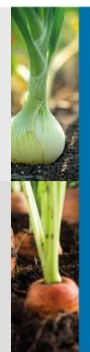


2766 lb/ac
6.8%

AGTIV REACH[®]
20 sites over 9 years, Canada and Europe

3837 lb/ac
9.4%

AGTIV REACH[®]
9 sites over 6 years, North America and Europe



BARLEY & DURUM WHEAT



FOR BARLEY

6.4 bu/ac
7.5%

AGTIV REACH[®]
34 sites over 14 years, Canada and Europe

FOR DURUM

3.5 bu/ac
5.8%

AGTIV REACH[®]
14 sites over 12 years, Canada



AGTIV[®] RELIABLE INOCULANTS

PEA, LENTIL & FABA BEAN

SOYBEAN

AGTIV THRIVE® P PEA & LENTIL

F: Powder (peat)
S: 4.7 kg (10.3 lb) pail – 2.4 kg (5.3 lb) pail
C: Pea & faba bean: Pail 4.7 kg: 16 ha (40 acres) – Pail 2.4 kg: 8 ha (20 acres)
Lentil: Pail 4.7 kg: 24 ha (60 acres)

M R

AGTIV THRIVE® G PEA & LENTIL

F: Granules (peat)
S: 18.2 kg (40 lb) bag – 364 kg (800 lb) tote bag
C: Pea, lentil & faba bean: Bag: 4 ha (10 acres) – Tote bag: 80 ha (200 acres)

M R

AGTIV THRIVE® PEA & LENTIL

F: Liquid
S: Combo box: 8 L (8 kg) bag-in-box + 4 x 950 ml (4 x 32 fl. oz) bottles
C: Pea, lentil & faba bean: 32 ha (80 acres)

M R

AGTIV FUEL® P PEA & LENTIL

F: Powder (peat)
S: 4.7 kg (10.3 lb) pail
C: Pea & faba bean: 16 ha (40 acres)
Lentil: 24 ha (60 acres)

R

AGTIV FUEL® G PEA & LENTIL

F: Granules (peat)
S: 18.2 kg (40 lb) bag – 364 kg (800 lb) tote bag
C: Pea, lentil & faba bean: Bag: 4 ha (10 acres) – Tote bag: 80 ha (200 acres)

R

AGTIV FUEL® L PEA & LENTIL

F: Liquid
S: 8 L (8 kg) bag-in-box
C: Pea, lentil & faba bean: 32 ha (80 acres) or 6530 kg of seeds (240 bu)

R

AGTIV THRIVE® P SOYBEAN

F: Powder (peat)
S: 4.7 kg (10.3 lb) pail
C: Soybean: 16 ha (40 acres)

M R

AGTIV THRIVE® G SOYBEAN

F: Granules (peat)
S: 18.2 kg (40 lb) bag – 364 kg (800 lb) tote bag
C: Soybean: Bag: 4 ha (10 acres) – Tote bag: 80 ha (200 acres)

M R

AGTIV THRIVE® SOYBEAN

F: Liquid
S: Combo box: 8 L (8 kg) bag-in-box + 2 x 950 ml (2 x 32 fl. oz) bottles
C: Soybean: 16 ha (40 acres)

M R

AGTIV FUEL® G SOYBEAN

F: Granules (peat)
S: 18.2 kg (40 lb) bag – 364 kg (800 lb) tote bag
C: Soybean: Bag: 4 ha (10 acres) – Tote bag: 80 ha (200 acres)

R

AGTIV FUEL® L SOYBEAN

F: Liquid
S: 8 L (8 kg) bag-in-box
C: Soybean: 16 ha (40 acres) or 5680 kg of seeds (250 units)

R

AGTIV ENRICH® SOYBEAN

F: Liquid
S: Combo box: 8 L (8 kg) (*Bradyrhizobium*) bag-in-box + 300 ml (*Bacillus*) bottle
C: Soybean: 16 ha (40 acres) or 5680 kg of seeds (250 units)

R B

CANOLA CORN & CEREAL	AGTIV IGNITE® L									
	F: Liquid S: 11 L (11 kg) bag-in-box C: Canola: 454 kg (1000 lb) of seeds or 81 ha (200 acres) Cereal: 9165 kg (20 205 lb) of seeds or 81 ha (200 acres) Corn: 3000 kg (6 614 lb) of seeds or 121 ha (300 acres)									
CHICKPEA	AGTIV THRIVE® P CHICKPEA									
	F: Powder (peat) S: 4.7 kg (10.3 lb) pail C: Chickpea: 16 ha (40 acres)									
	AGTIV THRIVE® G CHICKPEA									
	F: Granules (peat) S: 18.2 kg (40 lb) bag – 364 kg (800 lb) tote bag C: Chickpea: Bag: 4 ha (10 acres) – Tote bag: 80 ha (200 acres)									
	AGTIV REACH® P									
	F: Powder (peat) S: Case of 4 x 800 g (4 x 1.75 lb) pails C: Cereal, flax & dry bean: 32 ha (80 acres) per case Alfalfa, mix forages & grass: 16 ha (40 acres) per case Vegetables, berries & garlic: see page "Specialty Crops" for details.									
	AGTIV REACH® G									
	F: Granules (peat) S: 6 kg (13.2 lb) pail – 18.2 kg (40 lb) bag – 364 kg (800 lb) tote bag C: Cereal, flax & dry bean: Bag: 4 ha (10 acres) – Tote bag: 80 ha (200 acres) Alfalfa, mix forages & grass: Bag: 45 kg of seeds (99 lb) – Tote bag: 720 kg of seeds (1584 lb) Vegetables, herbs, berries & fruit trees: see page "Specialty Crops" for details.									
	AGTIV REACH® L									
	F: Liquid (spores in suspension) S: Case of 2 x 950 ml (2 x 32 fl. oz) bottles C: Cereal, flax & bean: 16 ha (40 acres) per case									
	AGTIV REACH® L POTATO									
	F: Liquid (spores in suspension) S: Case of 2 x 950 ml (2 x 32 fl. oz) bottles C: Potato: 8 ha (20 acres) per case									
	AGTIV REACH® P POTATO									
	F: Powder S: Case of 2 x 300 g (2 x 10.5 oz) bag C: Potato: 16 ha (40 acres) per case									
	AGTIV STIMULATE® L POTATO									
	F: Liquid S: 8 L (8 kg) bag-in-box C: Potato: 8 ha (20 acres)									

ACTIVE INGREDIENTS				LEGEND			
M MYCORRHIZAE PTB297 Technology	B BACILLUS PTB180 Technology PTB185 Technology	F: Formulation S: Size C: Crop/Coverage	⬢ Eligible with EXTENDER [™] L for AGTIV [®] inoculants ✓ For organic use * Non eligible for organic use. Contact us for more details.				
R RHIZOBIUM PTB160 Technology (pea & lentil) PTB162 Technology (soybean) PTB161 Technology (chickpea)	S SERENIDIPITA PTB299 Technology	FORMULATIONS		Liquid	Granular	Powder	

Learn more at
[PTAGTIV.COM/en/products](https://ptagtiv.com/en/products)



AGTIV[®]

TECHNOLOGIES

MORE THAN
40
years
OF EXPERTISE IN
ACTIVE INGREDIENTS

AGTIV[®] THRIVE

AGTIV THRIVE[®] POWERS PLANTS BY BOOSTING NITROGEN FIXATION, NUTRIENT AND WATER ABSORPTION THANKS TO **MYCORRHIZAE & RHIZOBIUM**

+ MYCORRHIZAE + RHIZOBIUM

PTB297 Technology
+
PTB160 (pea & lentil)
PTB162 (soybean)
PTB161 (chickpea)

- + Enhances P uptake
- + Provides more energy for better nitrogen fixation
- + Increases photosynthesis



AGTIV[®] ENRICH

AGTIV ENRICH[®] STRENGTHENS LEGUME NITROGEN FIXATION AND PROVIDES A VIGOROUS ROOT SYSTEM THANKS TO **RHIZOBIUM & BACILLUS**

+ RHIZOBIUM + BACILLUS

PTB162 Technology
+
PTB180 Technology

- + Increases nodulation and nitrogen fixation
- + Improves rooting environment
- + Enhances plant vigor and productivity



AGTIV[®] REACH

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

M MYCORRHIZAE

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

- + Expands root system
- + Enhances nutrient and water uptake
- + Promotes plant robustness and vigor



AGTIV[®] IGNITE

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

S SERENDIPITA

PTB299 Technology,
Serendipita indica

- + Mitigates abiotic stresses
- + Increases photosynthesis rate
- + Enhances plant establishment, growth and yield



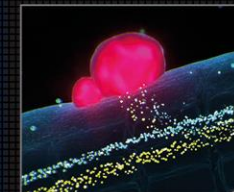
AGTIV[®] FUEL

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

R RHIZOBIUM

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

- + Increases nodulation
- + Fixes nitrogen
- + Provides nutrients to pulses



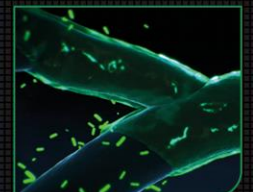
AGTIV[®] STIMULATE

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

B BACILLUS

PTB180 Technology,
Bacillus pumilus
PTB185 Technology,
Bacillus inaquosorum

- + Stimulates rooting environment
- + Improves plant establishment
- + Increases plant vigor and productivity



Learn more at

[PTAGTIV.COM/en/technologies](https://ptagtiv.com/en/technologies)

EFFICACY REPORT

SUMMARY – MYCORRHIZAL & RHIZOBIAL INOCULANT

► PLOT & STRIP TRIALS

Research partners:

- Ag-Quest;
- G-MAC's AgTeam;
- Palliser Triangle Research Inc.;
- Prairie Ag Research Inc.;
- Small Plot Inc.;
- Wheatland Conservation Area Inc.

Research sites:

- Saskatchewan;
- Alberta.

Treatments*:

- a) AGTIV THRIVE® PEA & LENTIL;
- b) Competitor inoculant A;
- c) Competitor inoculant B;
- d) Competitor inoculant C;
- e) Competitor inoculant D.

*Products applied according to the manufacturer's recommended rate.

Experimental design:

- Randomized Complete Block Design: 11 trials (6-8 repetitions each)
- Strip trial: 1 trial (2 repetitions)

Table 1. Summary of yields (bu/ac) per trial

Year	Location	Seed variety	AGTIV THRIVE® PEA & LENTIL	Competitor inoculant			
				A	B	C	D
2015	Brock	N.A.	18.4	13.4	11.4		
2016	Swift Current	Small Red Lentils, Imax CL	50.1	43.3	41.1	37.7	
2017	Coalhurst	N.A.	19.5	19.1	19.2	18.5	
2019	Vulcan	Pedigree CDC Proclaim	32.6	28.8			28.4
2021	Lethbridge	Proclaim	46.8		46.4		
	Vulcan	Impulse	10		8.4		
2022	Lethbridge	Impulse	32		31.9		
	Vulcan	Impulse	38.7		38.3		
	Swift Current	Impulse	35		32.6		
2023	Taber	Impulse	30.1		25.7		27.7
2025	Avonlea	CDC Nimble CL	49.0				47.0
	Vulcan	CDC Nimble	58.9				58.0

► GROWER DEMONSTRATIONS

Experimental design: Split field: 56 demos

► PLOT TRIAL

Research partner: Palliser Triangle Research Inc.

Research site: Avonlea, SK

Treatments*: a) Untreated check;
b) AGTIV THRIVE® PEA & LENTIL;
c) Competitor inoculant D.

*Products applied according to the manufacturer's recommended rate.

Experimental design: Randomized Complete Block Design,
8 repetitions, 7.2 m² plots

Variety: CDC Nimble CL treated with Vibrance Maxx

Previous crop: Canola

Seeding details: Seeded on May 13 with a custom-built R-tech seeder at a rate of
73 kg/ha in a loam soil (pH: 8.1, OM: 2.4%).
Emergence on May 27.

OPERATIONAL NOTES AND RAIN FALL

Fertilisation: 11-52-0 (50 kg/ha): May 13

Pesticides:

- Voraxor (19.5 mL/ac): May 3
- Zidua SC (49.0 mL/ac): May 3
- RT 540 (1.0 L/ac): May 3
- Merge (400 mL/ac) : May 3
- Interlock (100 mL/ac): May 3
- Solo ADV (325 mL/ac): May 31
- Delaro Complete (362 mL/ac): July 6
- Reglone Ion (0.83 L/ac): August 8
- Excel 70 (0.2% v/v): August 8

Harvesting: August 17, 2025

Table 1. Summary of yields per treatment

Treatment	Yield (bu/ac)	Yield increase (bu/ac)
Untreated check	47.3	-
AGTIV THRIVE® PEA & LENTIL	49.0	1.7
Competitor inoculant D	47.0	-

Month	Precipitation (mm)
May	83.1
June	47.7
July	73.7
August	16.0
TOTAL	220.5

EFFICACY REPORT
2025 – MYCORRHIZAL & RHIZOBIAL INOCULANT

► PLOT TRIAL

Research partner:	Small Plot Inc.
Research site:	Vulcan, AB
Treatments*:	a) Untreated check; b) AGTIV THRIVE® PEA & LENTIL; c) Competitor inoculant D.
	*Products applied according to the manufacturer’s recommended rate.
Experimental design:	Randomized Complete Block Design, 8 repetitions, 16 m² plots
Variety:	CDC Nimble
Previous crop:	Durum wheat
Seeding details:	Seeded on May 7 with a plot drilling machine at a rate of 71 kg/ha in a clay loam soil (pH: 8.1, OM: 2.1%). Emergence on May 20.

OPERATIONAL NOTES AND RAIN FALL

Fertilisation:	11-52-0 (90 kg/ha): May 7
Pesticides:	Odyssey NXT (17 g/ac): June 6
Harvesting:	August 25, 2025

Table 1. Summary of yields per treatment

Treatment	Yield (bu/ac)	Yield increase (bu/ac)
Untreated check	57.8	-
AGTIV THRIVE® PEA & LENTIL	58.9	1.1
Competitor inoculant D	58.0	0.2

Month	Precipitation (mm)
May	29.0
June	96.5
July	92.2
August	25.7
TOTAL	243.4

► PLOT TRIALS

Research partners:

- Ag-Quest Inc;
- ICMS;
- New Era Ag Research;
- Wheatland Conservation Area Inc.

Research sites:

- Alberta;
- Saskatchewan;
- Manitoba.

Treatments*:

- a) AGTIV THRIVE® PEA & LENTIL;
- b) Competitor inoculant A;
- c) Competitor inoculant B;
- d) Competitor inoculant D.

*Products applied according to the manufacturer's recommended rate.

Experimental design:

- Randomized Complete Block Design: 12 trials (5-8 repetitions each)

► GROWER DEMONSTRATIONS

Experimental design:

- Split field: 16 demos

Table 1. Summary of yields (bu/ac) per trial

Year	Location	Seed variety	AGTIV THRIVE® PEA & LENTIL	Competitor inoculant		
				A	B	D
2015	Fort Saskatchewan	Meadow	88.6	86.2	79.5	
2017	Swift Current	Amarillo	14	12.7	12.4	
2019	Saskatoon	AAC Ardill	65	52		63.2
2021	Portage la Prairie	Carver	45.2		41.3	
2022	Josephburg	Striker	45.4		46.6	
	Saskatoon	ACC Ardill	36.4		35.8	
	Saskatoon	CDC Spectrum	30.7		28.8	
	Swan River	Inca	91.5		87.1	
2023	Swan River	Inca	57.2		58.4	
2024	Olds	CDC Spectrum	75.5			74
2025	Moon Lake	CDC Lewochko	67.1			69.4
	Josephburg	CDC Canary	56.7			55.8

► PLOT TRIAL

Research partner:	ICMS
Research site:	Moon Lake, SK
Treatments*:	a) Untreated check; b) AGTIV THRIVE® PEA & LENTIL; c) Competitor inoculant D.
	*Products applied according to the manufacturer’s recommended rate.
Experimental design:	Randomized Complete Block Design, 8 repetitions, 33.12 m² plots
Variety:	CDC Lewochko
Previous crop:	Canola
Seeding details:	Seeded on May 23 with a cone planter at a rate of 225 kg/ha in a clay soil (pH: 8.0, OM: 6.6%). Emergence on June 6.

OPERATIONAL NOTES AND RAIN FALL

Fertilisation:	11-52-0 (31 kg/ha): May 23
Pesticides:	• Trico (6.07 L/ac): August 18 • Reglone Ion (0.83 L/ac): September 8
Harvesting:	September 15, 2025

Month	Precipitation (mm)
May	7.9
June	78.4
July	69.0
August	43.3
September	4.4
TOTAL	203.0

Table 1. Summary of yields per treatment

Treatment	Yield (bu/ac)	Yield increase (bu/ac)
Untreated check	63.0	-
AGTIV THRIVE® PEA & LENTIL	67.1	4.1
Competitor inoculant D	69.4	6.4

► PLOT TRIAL

Research partner:	ICMS
Research site:	Josephburg, AB
Treatments*:	a) Untreated check; b) AGTIV THRIVE® PEA & LENTIL; c) Competitor inoculant D.
	*Products applied according to the manufacturer’s recommended rate.
Experimental design:	Randomized Complete Block Design 8 repetitions, 29.28 m² plots
Variety:	CDC Canary
Previous crop:	Barley
Seeding details:	Seeded on May 15 with a cone planter at a rate of 225 kg/ha in a loam soil (pH: 6.2, OM: 7.9%). Emergence on May 29.

OPERATIONAL NOTES AND RAIN FALL

Fertilisation:	Blend of 46-0-0 (92 kg/ha) + 11-52-0 (63 kg/ha) + 16-0-0-40 (84 kg/ha): May 15
Pesticides:	- Odyssey NXT (43 g/ha): June 4 - Poast Ultra (0.19 L/ac): June 4 - Merge (0.5/100 L): June 4 and August 20 - Select (0.38 L/ha): June 22 - Roundup (1.25 L/ha): August 20 - Heat LQ (0.146 L/ha): August 20
Harvesting:	September 4, 2025

Table 1. Summary of yields per treatment

Treatment	Yield (bu/ac)	Yield increase (bu/ac)
Untreated check	54.4	-
AGTIV THRIVE® PEA & LENTIL	56.7	2.3
Competitor inoculant D	55.8	1.4

Month	Precipitation (mm)
May	18.6
June	72.0
July	64.8
August	63.7
TOTAL	219.1

EFFICACY REPORT

SUMMARY – MYCORRHIZAL & RHIZOBIAL INOCULANT

► PLOT & STRIP TRIALS

Research partners:

- Ag-Quest;
- ICMS;
- New Era Ag research;
- South East Research Farm;
- Stoney Ridge Ag Services.

Research sites:

- Manitoba;
- Saskatchewan.

Treatments*:

- a) AGTIV THRIVE® SOYBEAN;
- b) Competitor inoculant A;
- c) Competitor inoculant B;
- d) Competitor inoculant C;
- e) Competitor inoculant D;
- f) Competitor inoculant E.

*Products applied according to the manufacturer's recommended rate.

Experimental design:

- Randomized Complete Block Design: 17 trials (5-8 repetitions each)
- Strip trial: 2 trials (2 repetitions each)

► GROWER DEMONSTRATIONS

Experimental design:

Split field: 76 demos

Table 1. Summary of yields (bu/ac)¹ per trial

Year	Location	Seed variety	AGTIV THRIVE® SOYBEAN	Competitor inoculant				
				A	B	C	D	E
2015	Morden	Northstar	31.8 ^a	27.8 ^b	30.5 ^{a,b}			
	Portage la Prairie	Pride Seeds	57.3	55.4	58.2			
2016	Oakville	Legend Seeds	79.7	77.8	77.7			
2017	Swan River	Prograin	40.7 ^a	35 ^{b,c}		32.5 ^c		
	Portage la Prairie	Northstar	58.3	54.5	54.5	54.7		
	Binscarth	Pioneer	30.1 ^a	27.7 ^b	29 ^{a,b}	28.5 ^b		
2018	Redvers	Prograin	31.1	28.2	25.8			
	Swan River	Prograin	57.7	47.2	54.3	55.5		
	Portage la Prairie	Secan	49.4	47.2	47.8			
2019	Elm Creek	Gray R2	37.1	36.9			35.9	
	Redvers	NSC Watson	16.3	14.9		15.8		
	Swan River	Syngenta	35.7 ^a	29.9 ^b		35.7 ^a		
2021	Swan River	Syngenta	46.3 ^b					43.5 ^b
	Redvers	Watson	21					20
2022	Redvers	NSC Redvers	54.9	53.7				
	Portage la Prairie	NSC Redvers	64.9	63.4				
2025	Elm Creek	Bourke R2X	48.6		45.3			46.9
	Bright	P17Z39E	45.4		41.5			42.6

¹ Average yields followed by different letters are significantly different at p≤05.

► PLOT TRIAL

Research partner: Ag-Quest

Research site: Elm Creek, MB

Treatments*: a) Untreated check;
b) AGTIV THRIVE® SOYBEAN;
c) Competitor inoculant B;
d) Competitor inoculant E.

*Products applied according to the manufacturer’s recommended rate.

Experimental design: Randomized Complete Block Design,
6 repetitions, 27 m² plots

Variety: Bourke R2X treated with Vitaflo

Previous crop: Field pea

Seeding details: Seeded on May 9 with a cone planter at a rate of 100 kg/ha
in a coarse sandy loam soil (pH: 6.8, OM: 1.9%).
Emergence on May 27.

OPERATIONAL NOTES AND RAIN FALL

Fertilisation: 0-0-62 (48 kg/ha): May 9

Pesticides:

- Aim (0.07 L/ha): May 7
- StartUp (1.65 L/ha): May 7 and June 5
- Basagran Forte (2.25 L/ha): July 2
- Centurion (0.19 L/ha): July 2
- Priaxor (0.44 L/ha): August 22

Harvesting: October 1, 2025

Month	Precipitation (mm)
May	68.7
June	28.5
July	93.1
August	80.7
September	85.6
TOTAL	356.6

Table 1. Summary of yields per treatment

Treatment	Yield (bu/ac)	Yield increase (bu/ac)
Untreated check	45.1	-
AGTIV THRIVE® SOYBEAN	48.6	3.5
Competitor inoculant B	45.3	0.2
Competitor inoculant E	46.9	1.8

EFFICACY REPORT
2025 – MYCORRHIZAL & RHIZOBIAL INOCULANT

► PLOT TRIAL

Research partner:	BlackCreek Research Inc.
Research site:	Bright, ON
Treatments*:	a) Untreated check; b) AGTIV THRIVE® SOYBEAN; c) Competitor inoculant B; d) Competitor inoculant E.
	*Products applied according to the manufacturer’s recommended rate.
Experimental design:	Randomized Complete Block Design, 8 repetitions, 36 m² plots
Variety:	P17Z39E treated with Vitaflo
Previous crop:	Corn
Seeding details:	Seeded on May 27 with a plt planter at a rate of 48 kg/ha in a sandy loam soil (pH: 6.6, OM: 1.6%). Emergence on June 5.

OPERATIONAL NOTES AND RAIN FALL

Fertilisation:	3.4-16.1-29.3-6.5S-3.1Mg (364 kg/ha): May 27
Pesticides:	• Roundup Transorb (1.67 L/ha): May 26 and July 2 • Boundary LQD (2.5 L/ha): June 1 • Antler (125 mL/ha): July 2 • Merge (0.5% V/V): July 2
Harvesting:	September 29, 2025

Table 1. Summary of yields per treatment

Treatment	Yield (bu/ac)	Yield increase (bu/ac)
Untreated check	43.3	-
AGTIV THRIVE® SOYBEAN	45.4	2.1
Competitor inoculant B	41.5	-
Competitor inoculant E	42.6	-

Month	Precipitation (mm)
May	106.2
June	128.8
July	90.4
August	38.8
September	70.0
TOTAL	434.2

EFFICACY REPORT

SUMMARY – RHIZOBIAL & BACILLUS INOCULANT

► PLOT TRIALS

Research partners:

- Ag-Quest;
- BlackCreek Research Inc.;
- ICMS;
- New Era Ag Research;
- New-Marc Research Inc.;
- Tall Pines Agricultural Research Ltd.;
- Wellington Agricultural Research.

Research sites:

- Ontario;
- Manitoba;
- Quebec.

Treatments*:

- a) AGTIV ENRICH® SOYBEAN;
- b) Competitor inoculant B;
- c) Competitor inoculant C;
- d) Competitor inoculant E.

*Products applied according to the manufacturer's recommended rate.

Experimental design:

Randomized Complete Block Design:
11 trials (6-8 repetitions each)

Table 1. Summary of yields (bu/ac) per trial

Year	Location	Seed variety	AGTIV ENRICH® SOYBEAN	Competitor inoculant		
				B	C	E
2021	Bright	Katonda R2	72.2	70.1	70.7	69.3
2022	Portage la Prairie	NCS Redvers RR2X	54.2	57	53	53
	Swan River	Syngenta D8X	57.4	56.9	57.6	55.5
	Bright	Pioneer 12T94E	52.8	52.8	51.9	52.4
	Saint-Marc-sur-Richelieu	Katonda R2	34.4	32.8	32.6	32.5
2023	Alma	Pioneer P08A44E	59.2	53.5		56.4
	Rockwood	Dekalb 03-25	105.1	101.1		104
2024	Swan River	S000-D8X	61.2			60.5
	Redvers	PV 22s002 RR2X	29			24.7
2025	Bright	P17Z39E	44.4	41.5		42.6
	Elm Creek	Bourke R2X	46.9	45.3		46.9

EFFICACY REPORT
2025 – RHIZOBIAL & BACILLUS INOCULANT

► PLOT TRIAL

Research partner:	BlackCreek Research Inc.
Research site:	Bright, ON
Treatments*:	a) Untreated check; b) AGTIV ENRICH® SOYBEAN; c) Competitor inoculant B; d) Competitor inoculant E.
	*Products applied according to the manufacturer's recommended rate.
Experimental design:	Randomized Complete Block Design, 8 repetitions, 36 m² plots
Variety:	P17Z39E treated with Vitaflo
Previous crop:	Corn
Seeding details:	Seeded on May 27 with a plt planter at a rate of 48 kg/ha in a sandy loam soil (pH: 6.6, OM: 1.6%). Emergence on June 5.

OPERATIONAL NOTES AND RAIN FALL

Fertilisation:	3.4-16.1-29.3-6.5S-3.1Mg (364 kg/ha): May 27
Pesticides:	• Roundup Transorb (1.67 L/ha): May 26 and July 2 • Boundary LQD (2.5 L/ha): June 1 • Antler (125 mL/ha): July 2 • Merge (0.5% V/V): July 2
Harvesting:	September 29, 2025

Table 1. Summary of yields per treatment

Treatment	Yield (bu/ac)	Yield increase (bu/ac)
Untreated check	43.3	-
AGTIV ENRICH® SOYBEAN	44.4	1.1
Competitor inoculant B	41.5	-
Competitor inoculant E	42.6	-

Month	Precipitation (mm)
May	106.2
June	128.8
July	90.4
August	38.8
September	70.0
TOTAL	434.2

EFFICACY REPORT
2025 – RHIZOBIAL & BACILLUS INOCULANT

► PLOT TRIAL

Research partner:	Ag-Quest
Research site:	Elm Creek, MB
Treatments*:	a) Untreated check; b) AGTIV ENRICH® SOYBEAN; c) Competitor inoculant B; d) Competitor inoculant E.
*Products applied according to the manufacturer's recommended rate.	
Experimental design:	Randomized Complete Block Design, 6 repetitions, 27 m² plots
Variety:	Bourke R2X treated with Vitaflo
Previous crop:	Field pea
Seeding details:	Seeded on May 9 with a cone planter at a rate of 100 kg/ha in a coarse sandy loam soil (pH: 6.8, OM: 1.9%). Emergence on May 27.

OPERATIONAL NOTES AND RAIN FALL

Fertilisation:	0-0-62 (48 kg/ha): May 9
Pesticides:	- StartUp (1.65 L/ha): May 7 and June 5 - Aim (0.07 L/ha): May 7 - Basagran Forte (2.25 L/ha): July 2 - Centurion (0.19 L/ha): July 2 - Priaxor (0.44 L/ha): August 22
Harvesting:	October 1, 2025

Table 1. Summary of yields per treatment

Treatment	Yield (bu/ac)	Yield increase (bu/ac)
Untreated check	45.1	-
AGTIV ENRICH® SOYBEAN	46.9	1.8
Competitor inoculant B	45.3	0.2
Competitor inoculant E	46.9	1.8

Month	Precipitation (mm)
May	68.7
June	28.5
July	93.1
August	80.7
September	85.6
TOTAL	356.6

EFFICACY REPORT
SUMMARY – MYCORRHIZAL INOCULANT

DRY BEAN



AGTIV

REACH

► PLOT TRIALS

Research partners:

- ICMS;
- Tall Pines Agricultural Research Ltd.

Research sites: Ontario

Treatments*:

- a) Untreated check;
- b) AGTIV REACH®.

*Products applied according to the manufacturer's recommended rate.

Experimental design:

- Randomized Complete Block Design: 3 trials (8 repetitions each)
- Split field: 15 demos

► GROWER DEMONSTRATIONS

Experimental design: Split field: 15 demos

Figure 1. Yields with and without AGTIV REACH®.

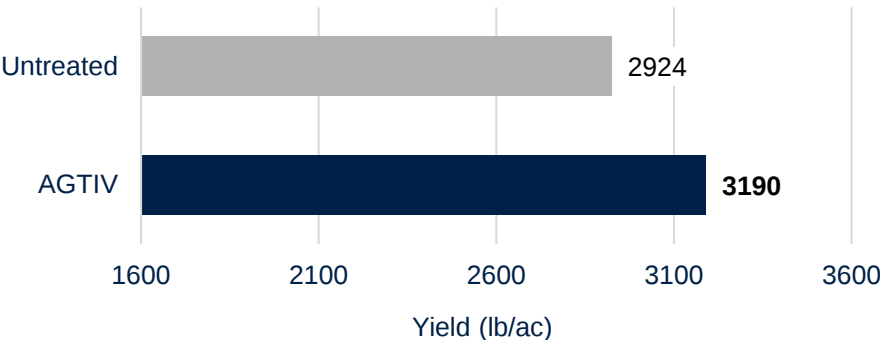


Table 1. Average yield increase with AGTIV REACH® per year for trials and demos

Year	Number of sites	Average increase		
		(lb/ac)	(kg/ha)	(%)
2014	2	337	378	13
2015	2	482	542	17.3
2016	5	130	146	5.5
2017	2	146	164	5.1
2020	1	462	518	10.7
2023	3	163	183	6.4
2024	1	589	660	25.5
2025	2	414	464	12
Total	18 sites	265.7 lb/ac	297.7 kg/ha	9.1%



Faster plant development, larger plants and quicker row closure.

► PLOT TRIAL

Research partner: ICMS

Research site: Portage la Prairie, MB

Treatments*: a) Untreated check;
b) AGTIV REACH® P;
c) AGTIV IGNITE® L.

*Products applied according to the manufacturer’s recommended rate.

Experimental design: Randomized Complete Block Design,
8 repetitions, 21.3 m² plots

Variety: AAC Argosy treated with Cruiser Maxx Vibrance, Dynasty, and Precede

Previous crop: Fallow

Seeding details: Seeded on May 28 with a plot drilling machine at a rate of 96 kg/ha
in a silty clay loam soil (pH: 7.9, OM: 6.5%).
Emergence on June 4.

OPERATIONAL NOTES AND RAIN FALL

Fertilisation: 45-39-11.2-11.2 (kg/ha) actual NPKS

Pesticides:

- Basagran Forte (0.145 L/ac): June 26
- Viper ADV (0.4 L/ac): June 26
- UAN (0.8 L/ac): June 26
- Acapela (0.35 L/ac): August 29
- Armory (1.11 L/ac): October 2
- Agral 90 (0.1 L/ 100 L): October 2

Harvesting: October 9, 2025

Month	Precipitation (mm)
May	25.1
June	11.9
July	46.3
August	197.9
September	39.6
TOTAL	320.8

Table 1. Summary of yields per treatment

Treatment	Yield (lb/ac)	Yield increase (lb/ac)
Untreated check	3024.0	-
AGTIV REACH® P	3504.0	480.0
AGTIV IGNITE® L	3366.0	342.0

► PLOT TRIAL

Research partner: Wellington Agricultural Research

Research site: Elmira, ON

Treatments*: a) Untreated check;
b) AGTIV REACH® P;
c) AGTIV IGNITE® L.

*Products applied according to the manufacturer’s recommended rate.

Experimental design: Randomized Complete Block Design,
8 repetitions, 18 m² plots

Variety: Rogue treated with Cruiser Maxx Vibrance, Apron XL, and
Rancona Trio

Previous crop: Corn

Seeding details: Seeded on June 13 with a cone planter at a rate of 44.4 kg/ha in a
loam soil (pH: 7.7, OM: 3.4%).
Emergence on June 20.

OPERATIONAL NOTES AND RAIN FALL

Fertilisation: 5-27-27 (67 kg/ha): June 9

Pesticides: Treflan (2.3 L/ha): June 13

Harvesting: October 3, 2025

Month	Precipitation (mm)
June	60.2
July	83.7
August	55.5
September	65.3
TOTAL	264.7

Table 1. Summary of yields per treatment

Treatment	Yield (lb/ac)	Yield increase (lb/ac)
Untreated check	3978.0	-
AGTIV REACH® P	4326.0	348.0
AGTIV IGNITE® L	4548.0	570.0

EFFICACY REPORT
SUMMARY – MYCORRHIZAL & RHIZOBIAL INOCULANT

► PLOT TRIALS

Research partners:

- Ag-Quest inc;
- Prairie Ag Research Inc.;
- Small Plot Inc.;
- Wheatland Conservation Area Inc.

Research sites:

- Alberta;
- Saskatchewan.

Treatments*:

- a) AGTIV THRIVE® CHICKPEA;
- b) Competitor inoculant A;
- c) Competitor inoculant B;
- d) Competitor inoculant D.

*Products applied according to the manufacturer's recommended rate.

Experimental design:

Randomized Complete Block Design:
6 trials (6-8 repetitions each)

Table 1. Summary of yields (bu/ac) per trial¹

Year	Location	Seed variety	AGTIV THRIVE® CHICKPEA	Competitor inoculant		
				A	B	D
2018	Lethbridge	Alma	73	71.3	71	
2018	Swift Current	Leader	28	28.8	26.1	
2022	Lethbridge	Clearfield Kabuli	43.1		41.2	
2022	Taber	CDC Pearl	41.7 ^b		39.4 ^{ab}	
2023	Vulcan	CDC Orion	6.3			6
2024	Taber	CDC Palmer	39.7			38.8

¹ Yields with the same letter are not statistically different according to a LSD test (p≤05).

EFFICACY REPORT

SUMMARY – SERENDIPITA INOCULANT

► PLOT TRIALS

Research partners:

- Ag-Quest;
- ICMS;
- New Era Ag Research;
- North Peace Applied Research Association;
- Olds College of Agriculture;
- Prairie Ag Research Inc.;
- Small Plot Inc.;
- South East Research Farm;
- Wellington Agricultural Research;
- Wheatland Conservation Area Inc.

Research sites:

- Ontario;
- Manitoba;
- Saskatchewan;
- Alberta.

Treatments*:

- a) Untreated check;
- b) AGTIV IGNITE® L.

*Products applied according to the manufacturer's recommended rate.

Experimental design:

- Randomized Complete Block Design: 29 trials (6-8 repetitions each)
- Latin square: 3 trials (6 repetitions each)

► GROWER DEMONSTRATIONS

Experimental design:

Split field: 5 demos

Table 1. Average increase of yield per year, trials and demos.

Year	Number of sites	Untreated check (bu/ac)	AGTIV IGNITE® L yield (bu/ac)	Yield increase (bu/ac)
2018	1	63.5	68	4.5
2019	6	44.6	47.1	2.5
2020	5	37.2	39.6	2.4
2021	8	32.5	35	2.5
2022	7	33.6	36.2	2.6
2023	5	36	37.7	1.7
2024	1	33.7	35.6	1.9
2025	4	48.5	51.9	3.4
Total	37 sites	38.1^a	40.6^b	2.5 bu/ac*

*Summary of means are significantly different following a combined site ANOVA and a Tukey test (p<0.05) p < 0.001

Table 2. Average increase in canola oil content per year.

Year	Number of sites	Untreated check (oil %)	AGTIV IGNITE® L (oil %)	Oil increase (%)
2019	3	41.2	42.1	0.9
2020	4	39.2	40.6	1.4
2021	5	38.1	38.5	0.4
2022	7	35.3	36.1	0.8
Total	19 sites	37.8^a	38.7^b	0.9%**

** Summary of means are significantly different following a combined site ANOVA and a Tukey test (p<0.1) p=0.05

EFFICACY REPORT

SUMMARY OF YIELD – SERENDIPITA INOCULANT

Table 1. Summary of yield per site and year – Ontario

Site	Year	Untreated check	AGTIV IGNITE® L	Increase
Alma	2022	20	21.4	1.4

Table 2. Summary of canola per site and year – Manitoba

Site	Year	Untreated check	AGTIV IGNITE® L	Increase
Elm Creek	2021	36.2	37.2	1
	2022	46.1	48	1.9
Portage la Prairie	2019	78	78	0
	2021	36.3	38.9	2.6
	2022	29.3	32.8	3.5
	2025	54.3	60.8	6.5
Sandy Ridge Farms	2021	41.8	44.1	2.3
Swan River	2018	63.5	68	4.5
	2019	53.7	55.4	1.7
	2020	61.2	64	2.8
	2021	46.9	48.2	1.3
	2022	60	62.2	2.2
	2023	71	72.8	1.8
	2025	61.9	66.0	4.1

Table 3. Summary of canola yield per site and year – Saskatchewan

Site	Year	Untreated check	AGTIV IGNITE® L	Increase
Farm Beechy	2020	24.2	27.8	3.6
Moon Lake	2020	16.3	18.2	1.9
	2023	23.8	24.9	1.1
Redvers	2022	32.2	34.1	1.9
	2023	32.2	33.8	1.6
Saskatoon	2019	38.8	41.8	3
	2021	10.3	12.5	2.2
	2022	19.6	21	1.4
Swift Current	2019	25	27.1	2.1

Table 4. Summary of canola yield per site and year – Alberta

Site	Year	Untreated check	AGTIV IGNITE® L	Increase
Josephburg	2019	46.8	53.2	6.4
	2020	47.2	49.5	2.3
	2021	23.9	25	1.1
	2023	45.6	47.7	2.1
Lillico Farms	2021	26.4	31.5	5.1
Manning	2024	33.7	35.6	1.9
MARA	2025	37.4	39.4	2.0
Olds	2025	40.4	41.5	1.1
Taber	2019	25.4	27	1.6
	2020	37.3	38.5	1.2
	2022	28.2	32.7	4.5
Westline Farms	2021	29.7	32.5	2.8
Vulcan	2023	7.3	9.3	2

EFFICACY REPORT

SUMMARY OF OIL CONTENT – SERENDIPITA INOCULANT

Table 1. Summary of canola seed oil content per site and year – Ontario

site	Year	Untreated check oil	AGTIV IGNITE® L (oil %)	oil increase (%)
Alma	2022	36.3	36.9	0.6

Table 2. Summary of canola seed oil content trials per site and year – Manitoba

site	Year	Untreated check oil	AGTIV IGNITE® L (oil %)	oil increase (%)
Elm Creek	2021	35.1	37.1	2
	2022	37.7	37.3	-0.4
Portage la Prairie	2019	45.5	45.7	0.2
	2021	36.6	36	-0.6
	2022	30.6	35.2	4.6
Swan River	2019	49.9	52.1	2.2
	2020	38.7	40.5	1.8
	2021	37.8	37.8	0
	2022	37.3	37.7	0.4

Table 3. Summary of canola seed oil content per site and year – Saskatchewan

site	Year	Untreated check oil	AGTIV IGNITE® L (oil %)	oil increase (%)
Moon Lake	2020	41.6	43.1	1.5
Redvers	2022	36.6	36.5	-0.1
Saskatoon	2021	41.8	42.1	0.3
	2022	36.6	36.3	-0.3

Table 4. Summary of canola seed oil content per site and year – Alberta

site	Year	Untreated check oil	AGTIV IGNITE® L (oil %)	Increase (%)
Josephburg	2019	28.1	28.6	0.5
	2020	34.7	36.6	1.9
	2021	39.1	39.7	0.6
Taber	2020	41.7	42.1	0.4
	2022	32.1	32.9	0.8

► PLOT TRIAL

Research partner:	Olds College of Agriculture
Research site:	Olds, AB
Treatments*:	a) Untreated check; b) AGTIV IGNITE® L.
*Products applied according to the manufacturer’s recommended rate.	
Experimental design:	Randomized Complete Block Design, 8 repetitions, 18 m² plots
Variety:	DK901TF treated with Prosper Evergol and Buteo Start
Previous crop:	Wheat
Seeding details:	Seeded on May 24 with a plot drilling machine at a rate of 7 kg/ha in a loam soil (pH: 7.4, OM: 7.7%). Emergence on June 3.

OPERATIONAL NOTES AND RAIN FALL

Fertilisation:	Blend of 46-0-0 + 11-52-0 + 21-0-0-24S (455 kg/ha): May 24
Pesticides:	Roundup (1 L/ha): May 29
Harvesting:	October 1, 2025

Month	Precipitation (mm)
May	70.4
June	81.5
July	75.8
August	46.3
September	0.5
TOTAL	274.5

Table 1. Summary of yields per treatment

Treatment	Yield (bu/ac)	Yield increase (bu/ac)
Untreated check	40.4	-
AGTIV IGNITE® L	41.5	1.1

► PLOT TRIAL

Research partner:	New Era Ag Research
Research site:	Swan River, MB
Treatments*:	a) Untreated check; b) AGTIV IGNITE® L; c) Competitor inoculant B.
	*Products applied according to the manufacturer's recommended rate.
Experimental design:	Randomized Complete Block Design, 8 repetitions, 30 m² plots
Variety:	L340PC treated with Helix Vibrance and Buteo Start
Previous crop:	Wheat
Seeding details:	Seeded on May 19 with a cone planter at a rate of 6.5 kg/ha in a sandy loam soil (pH: 7.6, OM: 4.6%). Emergence on May 27.

OPERATIONAL NOTES AND RAIN FALL

Fertilisation:	Blend of 46-0-0 + 11-52-0 + 21-0-0-24S (406 kg/ha): May 8
Pesticides:	• Edge MicroActiv (11.12 kg/ha): May 7 • RT 540 (0.33 L/ac): May 7 • Liberty 150SN (1.6 L/ac): June 11 • Arrow-All-In (0.05 L/ac): June 11 • Cotegra (0.27 L/ac): July 8 • Decis 5EC (0.06 L/ac): August 5
Harvesting:	September 10, 2025

Month	Precipitation (mm)
May	17.7
June	100.6
July	11.5
August	185.6
September	46.9
TOTAL	362.3

Table 1. Summary of yields per treatment

Treatment	Yield (bu/ac)	Yield increase (bu/ac)
Untreated check	61.9	-
AGTIV IGNITE® L	66.0	4.1
Competitor inoculant B	63.0	1.1

► PLOT TRIAL

Research partner: ICMS

Research site: Portage la Prairie, MB

Treatments*: a) Untreated check;
b) AGTIV IGNITE® L;
c) Competitor inoculant B

*Products applied according to the manufacturer’s recommended rate.

Experimental design: Randomized Complete Block Design,
8 repetitions, 21.3 m² plots

Variety: L345PC treated with Buteo Start and Helix Vibrance

Previous crop: Fallow

Seeding details: Seeded on May 27 with a plot drilling machine at a rate of
6.5 kg/ha in a silty clay loam soil (pH: 7.9, OM: 6.5%).
Emergence on June 3.

OPERATIONAL NOTES AND RAIN FALL

Fertilisation: 45-39-11.2-11.2 (kg/ha) actual NPKS

Pesticides: • Sevin (0.1 L/ac): June 13
• Liberty (1.33 L/ac): June 24

Harvesting: September 23, 2025

Month	Precipitation (mm)
May	25.1
June	11.9
July	46.3
August	197.9
September	39.6
TOTAL	320.8

Table 1. Summary of yields per treatment

Treatment	Yield (bu/ac)	Yield increase (bu/ac)
Untreated check	54.3	-
AGTIV IGNITE® L	60.8	6.5
Competitor inoculant B	58.6	4.3

EFFICACY REPORT
SUMMARY – SERENDIPITA ON SEED INOCULANT

DURUM WHEAT



AGTIV

IGNITE

► PLOT TRIALS

Research partners:

- Ag-Quest;
- Murphy et al Inc.;
- Prairie Ag Research Inc.;
- Small Plot Inc.;
- Wheatland Conservation Area Inc.

Research sites:

- Alberta;
- Saskatchewan.

Treatments*:

- a) Untreated check;
- b) AGTIV IGNITE® L.

*Products applied according to the manufacturer's recommended rate.

Experimental design:

Randomized Complete Block Design:
10 trials (6-8 repetitions each)

► GROWER DEMONSTRATIONS

Experimental design:

Split field: 3 demos

Table 1. **Summary of yield (bu/ac) per trial**

Year	Sites	Untreated check yield	AGTIV IGNITE® L yield	Yield increase
2021	Lethbridge	66.7	73.3	6.6
	Vulcan	25.8	28.8	3
	Taber	39	40.6	1.6
	Swift Current	11.8	14.4	2.6
2022	Lethbridge	50.2	59	8.8
	Swift Current	54	55.8	1.8
	Vulcan	29.2	31	1.8
	Taber	27.3	31.8	4.5
2023	Raymond	53	56.1	3.1
	Lethbridge	32.6	34.6	2

EFFICACY REPORT
SUMMARY – SERENDIPITA INOCULANT

SPRING WHEAT 



► PLOT TRIALS

Research partners:

- Ag-Quest;
- New Era Technologies.

Research sites:

- Manitoba;
- Saskatchewan.

Treatments*:

- a) Untreated check;
- b) AGTIV IGNITE® L.

*Products applied according to the manufacturer's recommended rate.

Experimental design:

Randomized Complete Block Design:
2 trials (6 repetitions each)

► GROWER DEMONSTRATIONS

Experimental design:

Split field: 3 demos

Table 1. Summary of yield (bu/ac) per trial

Year	Sites	Untreated check yield (bu/ac)	AGTIV IGNITE® L yield (bu/ac)	Yield increase (bu/ac)
2023	Swan River	68.1	74.7	6.6
2023	Saskatoon	13.9	17.6	3.7

EFFICACY REPORT
SUMMARY – SERENDIPITA INOCULANT

► PLOT TRIALS

Research partners:

- Ag-Quest;
- New Era Ag Research;
- Northeast Agriculture Research Foundation;
- Prairie Ag Research Inc.;
- Wheatland Conservation Area Inc.

Research sites:

- Manitoba;
- Saskatchewan.

Treatments*:

- a) Untreated check;
- b) AGTIV IGNITE® L.

*Products applied according to the manufacturer’s recommended rate.

Experimental design:

Randomized Complete Block Design:
6 trials (6-8 repetitions each)

► GROWER DEMONSTRATION

Experimental design:

Split field: 1 demo

Table 1. Summary of yield (bu/ac) per trial and demo

Year	Sites	Untreated check yield (bu/ac)	AGTIV IGNITE® L yield (bu/ac)	Yield increase (bu/ac)
2023	Elm Creek	101.9	104	2.1
	Swift Current	22.8	25.6	2.8
	Petruic Family farm	59.5	70.7	11.2
2025	Melfort	114.0	116.9	2.9
	Raymond	105.0	106.7	1.7
	Swan River	114.0	119.0	5.0
	Swift Current	52.9	57.1	4.2

► PLOT TRIAL

Research partner:	Northeast Agriculture Research Foundation
Research site:	Melfort, SK
Treatments*:	a) Untreated check; b) AGTIV IGNITE® L; c) Competitor inoculant B.
	*Products applied according to the manufacturer’s recommended rate.
Experimental design:	Randomized Complete Block Design, 8 repetitions,16.5 m² plots
Variety:	Claymore treated with Raxil Pro
Previous crop:	Canola
Seeding details:	Seeded on May 12 with a Fabro plot seeder at a rate of 167 lb/ac in a clay soil (pH: 7.1, OM: 5.7%). Emergence on May 28.

OPERATIONAL NOTES AND RAIN FALL

Fertilisation:	46-0-0 (151 kg/ha) and blend of 11-52-0 + 0-0-60-21-0-0-24S (73 kg/ha): May 12
Pesticides:	• Avadex (1.2 L/ac): May 15 • StartUp (650 mL/ac): May 15 • Puma Advance (413 mL/ac): June 11 • Momentum (0.45 L/ac):June 20 • MCPA (0.38 L/ac):June 20 • StartUp (670 mL/ac): August 28
Harvesting:	September 8, 2025

Table 1. Summary of yields per treatment

Treatment	Yield (bu/ac)	Yield increase (bu/ac)
Untreated check	114.0	-
AGTIV IGNITE® L	116.9	2.9
Competitor inoculant B	113.9	-

Month	Precipitation (mm)
May	4.8
June	93.0
July	26.0
August	114.0
September	20.0
TOTAL	257.8

EFFICACY REPORT
2025 – SERENDIPITA INOCULANT

► PLOT TRIAL

Research partner: Prairie Ag Research Inc.

Research site: Raymond, AB

Treatments*: a) Untreated check;
b) AGTIV IGNITE® L;
c) Competitor inoculant B.

*Products applied according to the manufacturer’s recommended rate.

Experimental design: Randomized Complete Block Design,
8 repetitions, 14 m² plots

Variety: CDC Austenson

Previous crop: Spring Barley (silage)

Seeding details: Seeded on May 25 with a cone planter at a rate of 100 kg/ha
in a clay loam soil (pH: 7.7, OM: 3.8%).
Emergence on June 2.

OPERATIONAL NOTES AND RAIN FALL

Fertilisation: None

Pesticides: Infinity: June 18

Harvesting: September 5, 2025

Month	Precipitation (mm)	Irrigation (mm)
May	43.8	25.0
June	96.9	
July	103.5	25.0
August	27.9	
TOTAL	272.1	50.0

Table 1. Summary of yields per treatment

Treatment	Yield (bu/ac)	Yield increase (bu/ac)
Untreated check	105.0	-
AGTIV IGNITE® L	106.7	1.7
Competitor inoculant B	108.3	3.3

EFFICACY REPORT
2025 – SERENDIPITA INOCULANT

► PLOT TRIAL

Research partner:	New Era Ag Research
Research site:	Swan River, MB
Treatments*:	a) Untreated check; b) AGTIV IGNITE® L; c) Competitor inoculant B.
	*Products applied according to the manufacturer’s recommended rate.
Experimental design:	Randomized Complete Block Design, 8 repetitions, 30 m² plots
Variety:	CDC Austenson treated with Vibrance Quattro
Previous crop:	Field pea
Seeding details:	Seeded on May 13 with a plot planter at a rate of 132 kg/ha in a sandy loam soil (pH: 7.5, OM: 3.9%). Emergence on May 23.

OPERATIONAL NOTES AND RAIN FALL

Fertilisation:	Blend of 46-0-0 + 11-52-0 (117 kg/ha): May 8
Pesticides:	• Stellar XL (0.405 L/ac): June 5 • Tilt 250EC (0.2L/ac): June 20
Harvesting:	August 31, 2025

Month	Precipitation (mm)
May	17.7
June	100.6
July	11.5
August	185.6
TOTAL	315.4

Table 1. Summary of yields per treatment

Treatment	Yield (bu/ac)	Yield increase (bu/ac)
Untreated check	114.0	-
AGTIV IGNITE® L	119.0	5.0
Competitor inoculant B	113.4	-

EFFICACY REPORT
2025 – SERENDIPITA INOCULANT

► PLOT TRIAL

Research partner: Wheatland Conservation Area Inc.

Research site: Swift Current, SK

Treatments*: a) Untreated check;
b) AGTIV IGNITE® L;
c) Competitor inoculant B.

*Products applied according to the manufacturer’s recommended rate.

Experimental design: Randomized Complete Block Design,
8 repetitions, 21.8 m² plots

Variety: Bow treated with Rancona Trio

Previous crop: Durum wheat

Seeding details: Seeded on April 28 with a cone planter at a rate of 132 kg/ha in a
silty loam soil (pH: 6.4, OM: 3.2%).
Emergence on May 13.

OPERATIONAL NOTES AND RAIN FALL

Fertilisation: 30-15-0-6 (298 kg/ha): April 28

Pesticides:

- Roundup Transorb (1 L/ac): April 18
- Aim EC +(47 mL/ac): April 18
- Merge (1 L/ac): April 18
- Buctril (0.4 L/ac): June 4
- Liquid Achieve (0.2 L/ac): June 4
- Carrier (0.5/100 L): June 4

Harvesting: September 29, 2025

Month	Precipitation (mm)
April	39.5
May	34.2
June	31.3
July	78.2
August	92.6
September	0.8
TOTAL	277.0

Table 1. Summary of yields per treatment

Treatment	Yield (bu/ac)	Yield increase (bu/ac)
Untreated check	52.9	-
AGTIV IGNITE® L	57.1	4.2
Competitor inoculant B	55.9	3.0

EFFICACY REPORT

SUMMARY – SERENDIPITA INOCULANT

► PLOT TRIALS

Research partners:

- BlackCreek Research Inc.;
- ICMS;
- New-Marc Research;
- Groupe PleineTerre;
- Tall Pines Agricultural Research Ltd.;
- Wellington Agricultural Research.

Research sites:

- Manitoba;
- Ontario;
- Quebec.

Treatments*:

a) Untreated check;
b) AGTIV IGNITE® L.

*Products applied according to the manufacturer's recommended rate.

Experimental design:

- Randomized Complete Block Design: 12 trials (6-8 repetitions each)
- Split plots: 6 trials (6 repetitions each)

Table 1. Summary of yield (bu/ac) per trial

Year	Sites	Variety	Untreated check yield (bu/ac)	AGTIV IGNITE® L yield (bu/ac)	Yield increase (bu/ac)
2021	Saint Marc	NK8618-5122A	157.9	158.9	1
	Sherrington	Dekalb 46-17	158.7	163.9	5.2
	Bright	DKB48-56RIB	245.4	251.7	6.3
	Carlisle	DKC 35-37 RIB	183.1	197.9	14.8
2022	Rockwood	Pionner 7527 PM	128.8	134.8	6
	Bright	Maizex 3120	158.9	167.1	8.2
	Elm Creek	PV 62181SRIB	152.8	153.5	0.7
2023	Portage la Prairie	CP2123VT2P/RIB	152.6	159.3	6.7
	Saint Marc	NK8519-DV	107.3	113.7	6.4
	Alma	Pioneer P7005	91.2	99.8	8.6
	Rockwood	Pioneer 8922AM	196.4	220.9	24.5
	Bright	DL 4555	227.5	232.1	4.6
	Sherrington	DKC 4640	163.8	170.2	6.4
2024	Sherrington	Dekalb 56-40	218.2	219.3	1.1
	Saint Marc	DK 44-13	109.9	116.1	6.2
	Bright	MZ3505 BDR RIB	229.5	236	6.5
	Bright	P9466 AML	227.2	235.6	8.4
	Carlisle	DKC 30-63 RIB	201.2	209.3	8.1
Total	18 sites		172.8	180	7.2 bu/ac*

* Yields are statistically different according to an ANOVA & a Tukey HSD test (p≤05).

► PLOT TRIAL

Research partner:	Groupe PleineTerre
Research site:	Sherrington, QC
Treatments*:	a) Untreated check; b) AGTIV IGNITE® L.
*Products applied according to the manufacturer’s recommended rate.	
Experimental design:	Randomized Complete Block Design, 6 repetitions, 30 m² plots
Variety:	Dekalb 56-40 treated with Accelaron
Previous crop:	Soybean
Seeding details:	Seeded on May 20 with a four-row planter at a rate of 10.5 kg/ac in a loam soil (pH: 7.3, OM: 3.4%). Emergence on May 29.

OPERATIONAL NOTES AND RAIN FALL

Fertilisation:	17.7-17.7-10.6-1.1Ca-0.7Mg-4.1S (335 kg/ha) applied at seeding; 46-0-0 (326 kg/ha) applied post emergence.
Pesticides:	Roundup (1 L/ha): May 20
Harvesting:	October 18, 2024

Month	Precipitation (mm)
May	28.7
June	128.2
July	211.8
August	186.6
September	67.1
October	31.3
TOTAL	653.7

Table 1. Summary of yields per treatment

Treatment	Yield (bu/ac)	Yield increase (bu/ac)
Untreated check	218.2	-
AGTIV IGNITE® L	219.3	1.1

Table 2. Summary of grain starch content per treatment

Treatment	Starch (%)	Starch increase (%)
Untreated check	68.7	
AGTIV IGNITE® L	69.8	1.1

► PLOT TRIAL

Research partner: Wellington Agricultural Research

Research site: Carlisle, ON

Treatments*: a) Untreated check;
b) AGTIV IGNITE® L.

*Products applied according to the manufacturer’s recommended rate.

Experimental design: Split-plot,
6 répétitions, 18 m² plots.

Variety: DKC 30-63 RIB

Previous crop: Soybean

Seeding details: Seeded on June 5 with a cone planter at a rate of 32 000 seeds/ac
in a loam soil (pH: 7.3, OM: 3.4%).
Emergence on June 12.

OPERATIONAL NOTES AND RAIN FALL

Fertilisation: 46-0-0 (326 lb/ac) and 5-27-27 (227 lb/ac): June 4

Pesticides: Roundup WeatherMax (2 L/ha): June 18 and July 8

Harvesting: October 31, 2024

Table 1. Summary of yields per treatment

Treatment	Yield (bu/ac)	Yield increase (bu/ac)
Untreated check	201.2	-
AGTIV IGNITE® L	209.3	8.1

Month	Precipitation (mm)
June	103.6
July	176.4
August	67.6
September	2.6
October	14.7
TOTAL	362.9

EFFICACY REPORT
2024 – SERENDIPITA INOCULANT

► PLOT TRIAL

Research partner: BlackCreek Research Inc.

Research site: Bright, ON

Treatments*: a) Untreated check;
b) AGTIV IGNITE® L.

*Products applied according to the manufacturer’s recommended rate.

Experimental design: Split-plot,
6 repetitions, 24 m² plots

Variety: MZ3505 BDR RIB treated with Vibrance Cinco

Previous crop: Soybean

Seeding details: Seeded on May 17 with a four-row planter at a rate of 9.6 kg/ac in a sandy loam soil (pH: 7, OM: 2.8%).
Emergence on May 24.

OPERATIONAL NOTES AND RAIN FALL

Fertilisation: 180-67-75-22 kg/ha actual NPKS

Pesticides:

- Primextra II Magnum (4l/ha): May 23
- Eragon LQ (300 ml/ha): May 23
- Roundup WeatherMax (1.67 L/ha): July 7
- Delaro Complete (586 ml/ac): July 29
- Proline (210 ml/ac): July 29

Harvesting: October 28, 2024

Table 1. Summary of yields per treatment

Treatment	Yield (bu/ac)	Yield increase (bu/ac)
Untreated check	229.5	-
AGTIV IGNITE® L	236	6.5

Month	Precipitation (mm)
May	104.8
June	112.8
July	216.6
August	99.8
September	21.8
October	43
TOTAL	598.8

► PLOT TRIAL

Research partner: BlackCreek Research Inc.

Research site: Bright, ON

Treatments*: a) Untreated check;
b) AGTIV IGNITE® L.

*Products applied according to the manufacturer’s recommended rate.

Experimental design: Split-plot,
6 repetitions, 24 m² plots

Variety: P9466 AML treated with Lumigen

Previous crop: Winter wheat

Seeding details: Seeded on May 16 with a four-row planter at a rate of
9.6 kg/ac in a clay loam soil (pH: 7.8, OM: 4.1%).
Emergence on May 23.

OPERATIONAL NOTES AND RAIN FALL

Fertilisation: 180-67-75-22 kg/ha actual NPKS

Pesticides:

- Roundup WeatherMax (1.67 L/ha): May 7
- Primextra II Magnum (4 L/ha): May 20
- Eragon LQ (300 ml/ha): May 20
- Delaro Complete (586 ml/ac): August 6

Harvesting: October 27, 2024

Month	Precipitation (mm)
May	104.8
June	112.8
July	216.6
August	99.8
September	21.8
October	43
TOTAL	598.8

Table 1. Summary of yields per treatment

Treatment	Yield (bu/ac)	Yield increase (bu/ac)
Untreated check	227.2	-
AGTIV IGNITE® L	235.6	8.4

Table 2. Summary of grain starch content per treatment

Treatment	Starch (%)	Starch increase (%)
Untreated check	55.3	
AGTIV IGNITE® L	59.1	3.8

► PLOT TRIAL

Research partner:	New-Marc Research
Research site:	Saint-Marc-sur-Richelieu, QC
Treatments*:	a) Untreated check; b) AGTIV IGNITE® L.
*Products applied according to the manufacturer’s recommended rate.	
Experimental design:	Split plot, 6 repetitions, 18 m² plots
Variety:	DK 44-13
Previous crop:	Soybean
Seeding details:	Seeded on May 24 with a cone planter at a rate of 9.7 kg/ac in a clay soil (pH: 6.1, OM: 5.1%). Emergence on June 1.

OPERATIONAL NOTES AND RAIN FALL

Fertilisation:	14.6-21.8-12.8 (335 kg/ha) and 46-0-0 (217 kg/ha): June 21
Pesticides:	Credit Xtreme (2.5 L/ha): June 22
Harvesting:	October 21, 2024

Month	Precipitation (mm)
May	61.1
June	176.3
July	130.8
August	232.6
TOTAL	600.6

Table 1. Summary of yields per treatment

Treatment	Yield (bu/ac)	Yield increase (bu/ac)
Untreated check	109.9	-
AGTIV IGNITE® L	116.1	6.2

► PLOT TRIAL

Research partner:	ICMS
Research site:	Portage la Prairie, MB
Treatments*:	a) Untreated check; b) AGTIV IGNITE® L.
*Products applied according to the manufacturer's recommended rate.	
Experimental design:	Randomized Complete Block Design, 6 repetitions, 18 m ² plots
Variety:	CP2123VT2P/RIB treated with Acceleron and Nutriseed Zn
Previous crop:	Potato
Seeding details:	Seeded on June 1 with a cone planter at a rate of 33.8 lb/ac in a fine loam soil (pH: 7.9, OM: 3.5%). Emergence on June 8.

OPERATIONAL NOTES AND RAIN FALL

Fertilisation:	Blend at rate of 138, 84, 33.6 and 22.4 kg/ha N-P-K-S: May 19
Pesticides:	Roundup WeatherMAX (1.67 L/ha): June 16 & August 3
Harvesting:	November 13, 2023

Table 1. Summary of yields per treatment

Treatment	Yield (bu/ac)	Yield increase (bu/ac)
Untreated check	152.6	
AGTIV IGNITE® L	159.3	6.7

Month	Precipitation (mm)
June	23.3
July	23.4
August	24.1
September	24.1
October	65.3
November	8.8
TOTAL	169

► PLOT TRIAL

Research partner: Tall Pines Agricultural Research Ltd.

Research site: Rockwood, ON

Treatments*: a) Untreated check;
b) AGTIV IGNITE® L.

*Products applied according to the manufacturer's recommended rate.

Experimental design: Randomized Complete Block Design,
6 repetitions, 18 m² plots

Variety: Pioneer 8922AM

Previous crop: Winter wheat

Seeding details: Seeded on June 2 with a finger pickup planter at a rate of
33 500 seeds/ac in a sandy loam (pH: 7.2, OM: 3.4%).
Emergence on June 10.

Table 1. Summary of yields per treatment

Treatment	Yield (bu/ac)	Yield increase (bu/ac)
Untreated check	196.4	
AGTIV IGNITE® L	220.9	24.5

OPERATIONAL NOTES AND RAIN FALL

Fertilisation: 120 - 52 - 60 (516 kg/ha): May 15

Pesticides: • Acuron (4.91 L/ha): June 13
• Roundup WeatherMAX (2.47 L/ha): June 13 & July 10

Harvesting: November 26, 2023

Month	Precipitation (mm)
June	75.6
July	162.8
August	86.5
September	16.2
October	45.9
November	28
TOTAL	415

► PLOT TRIAL

Research partner: BlackCreek Research Inc.

Research site: Bright, ON

Treatments*: a) Untreated check;
b) AGTIV IGNITE® L.

*Products applied according to the manufacturer's recommended rate.

Experimental design: Split plot,
6 repetitions, 24 m² plots

Variety: DL 4555

Previous crop: Winter wheat

Seeding details: Seeded on May 29 with a cone planter at a rate of 27 lb/ac in a sandy loam soil (pH: 7.5, OM: 3.1%).
Emergence on June 6.

Table 1. Summary of yields per treatment

Treatment	Yield (bu/ac)	Yield increase (bu/ac)
Untreated check	227.5	
AGTIV IGNITE® L	232.1	4.6

OPERATIONAL NOTES AND RAIN FALL

Fertilisation: 24.3-10.8-14.6-2.2S-1Mg (725 lb/ac): May 29

Pesticides: • Primextra II Magnum (4l/ha): May 29
• Eragon LQ (0.3 L/ha): May 29

Harvesting: November 11, 2023

Month	Precipitation (mm)
May	47
June	92.8
July	227
August	130.2
TOTAL	497

► PLOT TRIAL

Research partner:	Groupe PleineTerre
Research site:	Saint-Patrice-de-Sherrington, QC
Treatments*:	a) Untreated check; b) AGTIV IGNITE® L.
	*Products applied according to the manufacturer's recommended rate.
Experimental design:	Split plot, 6 repetitions, 30 m² plots
Variety:	DKC 4640 treated with Acceleron
Previous crop:	Soybean
Seeding details:	Seeded on May 11 with a four- row planter at a rate of 35 000 seeds/ac in a soil sandy loam (pH: 7, OM: 5%). Emergence on May 23.

Table 1. Summary of yields per treatment

Treatment	Yield (bu/ac)	Yield increase (bu/ac)
Untreated check	163.8	
AGTIV IGNITE® L	170.2	6.4

Table 2. Summary of grain starch content per treatment

Treatment	Starch (%)	Starch increase (%)
Untreated check	70.8	
AGTIV IGNITE® L	71.8	1

OPERATIONAL NOTES AND RAIN FALL

Fertilisation:	• 40 -48 - 24 - 9.1S (230 kg/ha): May 10 • 46-0-0 (245 kg/ha): June 6
Pesticides:	Glyphosate (1.4 L/ac): May 18
Harvesting:	October 20, 2023

Month	Precipitation (mm)
May	40.9
June	92.6
July	199.2
August	132.8
September	20.9
October	148.7
TOTAL	635.1

► PLOT TRIAL

Research partner:	Wellington Agricultural Research.
Research site:	Alma, ON
Treatments*:	a) Untreated check; b) AGTIV IGNITE® L.
	*Products applied according to the manufacturer’s recommended rate.
Experimental design:	Randomized Complete Block Design, 6 repetitions, 18 m² plots
Variety:	Pioneer P7005
Previous crop:	Soybean
Seeding details:	Seeded on May 26 with a cone planter at a rate of 37 000 seeds/ac in a loam soil (pH: 7.6, OM: 2.6%).

Table 1. Summary of yields per treatment

Treatment	Yield (bu/ac)	Yield increase (bu/ac)
Untreated check	91.2	
AGTIV IGNITE® L	99.8	8.6

OPERATIONAL NOTES AND RAIN FALL

Fertilisation:	46-0-0 (330 lb/ac) and 5-27-27 (2220 lb/ac): May 15	Month	Precipitation (mm)
Pesticides:	Roundup WeatherMAX (1.67 L/ha): June 8	May	38.7
Harvesting:	October 28, 2023	June	79.3
		July	168.6
		August	115.8
		September	40.3
		TOTAL	442.7

► PLOT TRIAL

Research partner: New-Marc Research

Research site: St-Marc-sur-Richelieu, QC

Treatments*: a) Untreated check;
b) AGTIV IGNITE® L.

*Products applied according to the manufacturer's recommended rate.

Experimental design: Randomized Complete Block Design, 6 repetitions, 24 m² plots

Variety: NK8519-DV

Previous crop: Soybean

Seeding details: Seeded on May 29 with a plot planter at a rate of 80 000 seeds/ha in a clay soil (pH: 6.1, OM: 3.2%).
Emergence on June 5.

OPERATIONAL NOTES AND RAIN FALL

Fertilisation: • 14.5-21.7-12.7 (345 kg/ha): May 29
• 46-0-0 (217 kg/ha): June 21

Pesticides: Roundup WeatherMAX (2.5 L/ha): June 22

Harvesting: November 5, 2023

Month	Precipitation (mm)
May	51.6
June	111.5
July	218.9
August	126.8
September	42.8
October	222.8
TOTAL	774.4

Table 1. Summary of yields per treatment

Treatment	Yield (bu/ac)	Yield increase (bu/ac)
Untreated check	107.3	-
AGTIV IGNITE® L	113.7	6.4

► PLOT TRIAL

Research partner: BlackCreek Research Inc.

Research site: Bright, ON

Treatments*: a) Untreated check;
b) AGTIV IGNITE® L.

*Products applied according to the manufacturer's recommended rate.

Experimental design: Randomized Complete Block Design,
6 repetitions, 24 m² plots

Variety: MZ 3120 SMX

Previous crop: Soybean

Seeding details: Seeded on May 24 with a cone planter at a rate of 9.7 kg/ac in a
sandy loam soil (pH: 7.5, OM: 3.2%).
Emergence on June 2.

OPERATIONAL NOTES AND RAIN FALL

Fertilisation: 24.5-10.8-14.6-2.2S-1Mg (725 lb/ac): May 17

Pesticides: • Primextra II Magnum (4 L/ha): May 29
• Roundup Transorb (1.67 L/ha): June 24

Harvesting: November 11, 2022

Month	Precipitation (mm)
May	82
June	56.8
July	48.2
August	83.6
September	52.6
October	54.6
TOTAL	377.8

Table 1. Summary of yields per treatment

Treatment	Yield (bu/ac)	Yield increase (bu/ac)
Untreated check	158.9	-
AGTIV IGNITE® L	167.1	8.2

► PLOT TRIAL

Research partner: Tall Pines Agricultural Research

Research site: Rockwood, ON

Treatments*: a) Untreated check;
b) AGTIV IGNITE® L.

*Products applied according to the manufacturer's recommended rate.

Experimental design: Randomized Complete Block Design,
6 repetitions, 18 m² plots

Variety: Pioneer 7527 AM treated with Lumivia

Previous crop: Soybean

Seeding details: Seeded on June 20 with a cone planter at a rate of 10.2 kg/ac in a
sandy loam soil (pH: 7.2, OM: 3.4%).
Emergence on June 28.

OPERATIONAL NOTES AND RAIN FALL

Fertilisation: 120-70-90 (610 kg/ha): May 5

Pesticides: • Acuron (4.91 L/ha): July 18
• Roundup WeatherMax (2.47 L/ha): July 18

Harvesting: December 7, 2022

Month	Precipitation (mm)
June	42.8
July	24
August	90
TOTAL	156.8

Table 1. Summary of yields per treatment

Treatment	Yield (bu/ac)	Yield increase (bu/ac)
Untreated check	128.8	-
AGTIV IGNITE® L	134.8	6

► PLOT TRIAL

Research partner: Ag-Quest

Research site: Elm Creek, MB

Treatments*: a) Untreated check;
b) AGTIV IGNITE® L.

*Products applied according to the manufacturer's recommended rate.

Experimental design: Randomized Complete Block Design,
6 repetitions, 22.5 m² plots

Variety: PV 62181SRIB treated with Acceleron

Previous crop: Oats

Seeding details: Seeded on May 26 with a two-row plot planter at a rate of
23.7 kg/ha in a sandy loam soil (pH: 8.2, OM: 3%).
Emergence on June 9.

OPERATIONAL NOTES AND RAIN FALL

Fertilisation: 59-39-62 kg/ha actual NPK sidebanded at seeding

Pesticides: Roundup WeatherMax (1.67 L/ha): June 24

Harvesting: October 18, 2022

Month	Precipitation (mm)
May	121.2
June	65.8
July	93.6
August	59.4
September	27.6
October	1.4
TOTAL	369

Table 1. Summary of yields per treatment

Treatment	Yield (bu/ac)	Yield increase (bu/ac)
Untreated check	152.8	-
AGTIV IGNITE® L	153.5	0.7

► PLOT TRIAL

Research partner: BlackCreek Research Inc.

Research site: Bright, ON

Treatments*: a) Untreated check;
b) AGTIV IGNITE® L.

*Products applied according to the manufacturer's recommended rate.

Experimental design: Randomized Complete Block Design,
8 repetitions, 24 m² plots

Variety: DBB48-56 RIB treated with Acceleron

Previous crop: Soybean stubble

Seeding details: Seeded on May 20 with a four-row cone seeder at a rate of
9.7 kg/ac in a sandy loam soil (pH: 7.5, OM: 3.2%).
Emergence on May 30.

OPERATIONAL NOTES AND RAIN FALL

Fertilisation: None

Pesticides:

- Primextra II Magnum (4 L/ha): May 19
- Eragon LQ (200 ml/ha): May 19
- Roundup Transorb (1.67 L/ha): June 23

Harvesting: November 3, 2021

Month	Precipitation (mm)
May	26.4
June	86.3
July	84.6
August	23.2
September	148.8
TOTAL	369.3

Table 1. Summary of yields per treatment

Treatment	Yield (bu/ac)	Yield increase (bu/ac)
Untreated check	245.4	-
AGTIV IGNITE® L	251.7	6.3

► PLOT TRIAL

Research partner:	Wellington Agricultural Research.
Research site:	Carlisle, ON
Treatments*:	a) Untreated check; b) AGTIV IGNITE® L.
*Products applied according to the manufacturer's recommended rate.	
Experimental design:	Randomized Complete Block Design, 8 repetitions, 24 m² plots
Variety:	DKC 35-37 RIB treated with Acceleron
Previous crop:	Soybean
Seeding details:	Seeded on May 23 with a cone planter at a rate of 9.6 kg/ac in a loam soil (pH: 7.7, OM: 1.7%). Emergence on May 30.

OPERATIONAL NOTES AND RAIN FALL

Fertilisation:	46-0-0 (330 lb/ac) and 5-27-27 (220 lb/ac): May 21
Pesticides:	Roundup WeatherMax (2 L/ha): June 13 and July 14
Harvesting:	October 11, 2021

Month	Precipitation (mm)
May	34.8
June	98.8
July	99.1
August	60.9
September	183.8
TOTAL	477.4

Table 1. Summary of yields per treatment

Treatment	Yield (bu/ac)	Yield increase (bu/ac)
Untreated check	183.1	-
AGTIV IGNITE® L	197.9	14.8

EFFICACY REPORT

2021 – SERENDIPITA INOCULANT



IGNITE

► PLOT TRIAL

Research partner:	New-Marc Research Inc
Research site:	Saint-Marc-sur-Richelieu, QC
Treatments*:	a) Untreated check; b) AGTIV IGNITE® L.
*Products applied according to the manufacturer's recommended rate.	
Experimental design:	Randomized Complete Block Design, 8 repetitions, 15 m ² plots
Variety:	NK8618-5122A treated with Fortenza Maxim Quatro and Vibrance 500 FS
Previous crop:	Soybean
Seeding details:	Seeded on May 15 with a cone planter at a rate of 24 kg/ha in a clay soil (pH: 6.6, OM: 3.7%). Emergence on May 22.

OPERATIONAL NOTES AND RAIN FALL

Fertilisation:	16.9-22-12.7 (360 kg/ha) sidebanded at seeding and 46-0-0 (240 kg/ha): June 18
Pesticides:	Roundup Transorb (2.5 L/ha): June 9
Harvesting:	October 12, 2021

Month	Precipitation (mm)
May	15.9
June	56.3
July	47.4
August	49.2
September	55.0
TOTAL	223

Table 1. Summary of yields per treatment

Treatment	Yield (bu/ac)	Yield increase (bu/ac)
Untreated check	157.9	-
AGTIV IGNITE® L	158.9	1

► PLOT TRIAL

Research partner: Groupe PleineTerre

Research site: Sherrington, QC

Treatments*: a) Untreated check;
b) AGTIV IGNITE® L.

*Products applied according to the manufacturer's recommended rate.

Experimental design: Randomized Complete Block Design,
6 repetitions, 30 m² plots

Variety: DKC 46-17RIB treated with Acceleron

Previous crop: Soybean

Seeding details: Seeded on May 13 with a four-row planter at a rate of 25.9 kg/ha
in a sandy loam soil (pH: 6.3, OM: 5.1%).

OPERATIONAL NOTES AND RAIN FALL

Fertilisation: 17.4-20.4-11.2 (295 kg/ha) at seeding
plus 46-0-0 (325 kg/ha): June 11

Pesticides: None

Harvesting: October 29, 2021

Month	Precipitation (mm)
May	3.5
June	26.2
July	48.8
August	62
September	65.3
October	154.5
TOTAL	360.3

Table 1. Summary of yields per treatment

Treatment	Yield (bu/ac)	Yield increase (bu/ac)
Untreated check	158.7	-
AGTIV IGNITE® L	163.9	5.2



► SPLIT FIELD DEMOS

Research partners: Growers

Research sites:

- Canada;
- Europe.

Treatments*:

- a) Untreated check;
- b) AGTIV REACH®.

*Products applied according to the manufacturer's recommended rate.

Experimental design: Split field: 45 demos

Table 1. Average yield increase with AGTIV REACH® in Canada and Europe

Number of sites	Average increase (%)
45	6.4%

Table 2. Average yield increase with AGTIV REACH® in Canada

Number of sites	Average increase (bu/ac)	Average increase (%)
14	3.5	5.8%

Table 3. Average yield increase with AGTIV® mycorrhizal inoculant in France and Germany, Europe

Number of sites	Average increase (bu/ac)	Average increase (%)
31	8.3	6.5%

EFFICACY REPORT

SUMMARY – MYCORRHIZAL INOCULANT

► SPLIT FIELD DEMOS

Research partners: Growers

Research sites:

- Canada;
- Europe.

Treatments*:

- a) Untreated;
- b) AGTIV REACH®.

*Products applied according to the manufacturer's recommended rate.

Experimental design: Split field: 28 demos

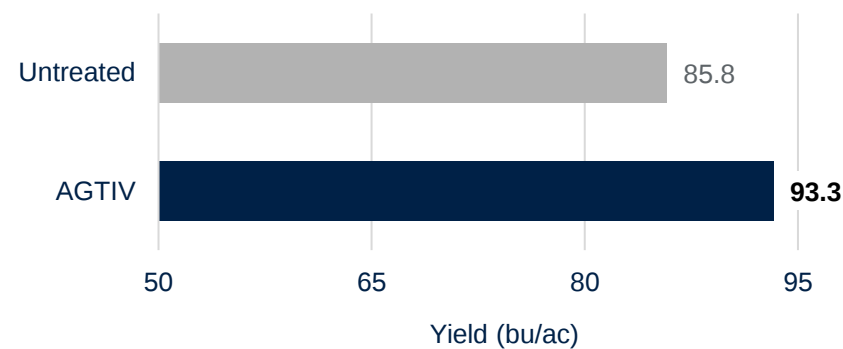


Barley plants have an increased root mass on the right with AGTIV®, which leads to enhanced plant health and growth.

Table 1. Average yield increase with AGTIV REACH®

Number of sites	Average increase (bu/ac)	Average increase (kg/ha)	Average increase (%)
28	7.5	394.4	8.7%

Figure 1. Average yield increase with AGTIV® mycorrhizal inoculant in Canada and Europe (28 sites, 2012 to 2017).



► SPLIT FIELDS DEMOS

Research partners: Growers

Research sites: Quebec

Treatments*: a) Untreated;
b) AGTIV REACH®.

*Products applied according to the manufacturer's recommended rate.

Experimental design: Split field: 15 demos

Table 1. Increase in dry weight per cut over two years with AGTIV REACH®

Cut	Yield increase 2016 season	Yield increase 2017 season
1 st	17.5%	23.8%
2 nd	20.8%	5.9%
3 rd	12.7%	10.6%
Average	18.7%¹	13.5%¹

Table 2. Winter 2016 Alfalfa survival²

Treatment	Survival winter 2016
Untreated	86.4% ^a
AGTIV®	92.2% ^b
Decrease loss	+42.8%

¹ Statistically significant at p<05 using t-test for dependent samples.

² Averages followed by different letters are significantly different (p<05, t-test for dependent samples).

EFFICACY REPORT

SUMMARY – MYCORRHIZAL INOCULANT

► GROWER SPLIT FIELDS AND TRIALS

Research sites:

- Belgium;
- Canada;
- France;
- Germany;
- Mexico;
- Switzerland;
- United States.

Treatments*:

- Untreated;
- AGTIV REACH® L POTATO.

*Products applied according to the manufacturer's recommended rate.

Experimental design:

- Randomized Complete Block Design: 21 trials (4-8 repetitions each)
- Split plot block: 1 trial (6 repetitions)
- Split field: 1180 demos

Table 1. Average increase of marketable yield* per region

Territory	Number of sites	Yield increase (t/ha)	Yield increase (cwt/ac)	Yield increase (%)
Canada	603	3.1	27.6	9.2
United States	67	3.3	29.8	10.8
Mexico	4	2.3	20	8.6
Belgium, France & Switzerland	496	4.1	36.3	9.9
Germany	32	4.2	37.4	10
Total	1 202 sites	3.6 t/ha*	31.5 cwt/ac**	9.1%

Table 2. Average increase of marketable yield* per year

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
2013	70	3.6	31.9	11.2
2014	116	4.5	40.3	12.8
2015	145	4	35.3	10.7
2016	243	3.9	34.8	10.5
2017	213	2.7	24	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
2024	2	2.1	18.7	8.7
2025	3	2.2	19.5	6.5
Total	1 202 sites	3.6 t/ha*	31.5 cwt/ac**	9.1%

* Statistically significant at p<001 following a T test.

**cwt/ac = 100 lb/ac

EFFICACY REPORT

SUMMARY – MYCORRHIZAL & BACILLUS INOCULANT



► PLOT TRIALS

Research partners:

- Atlantic AgriTech Inc.;
- ICMS;
- New-Marc Research Inc.;
- Prairie Ag Research Inc.;
- Progest inc.;
- Tall Pines Agricultural Research Ltd.;
- Wellington Agricultural Research.

Research sites:

- Alberta;
- Manitoba;
- Ontario;
- Prince-Edward Island;
- Quebec.

Treatments*:

- AGTIV REACH® L POTATO;
- AGTIV REACH® L POTATO + AGTIV STIMULATE® POTATO.

*Products applied according to the manufacturer's recommended rate.

Experimental design:

- Randomized Complete Block Design: 3 trials (6 repetitions each)
- Latin square: 13 trials (5-6 repetitions each)

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

Year	Sites	AGTIV REACH®	AGTIV REACH® and AGTIV STIMULATE®	Yield increase*
2021	Sainte-Croix	320.3	319.3	-1
	Saint-Marc	107.8	112.8	5
	New Glasgow	242.1	247.4	5.3
	Rockwood	279.7	322.3	42.6
	Elmira	320.7	343.9	23.2
2022	Saint-Marc	145.4	142.2	-3.2
	Newton	235.9	237.8	1.9
	Newton	92.5	109.3	16.8
	Rockwood	402.5	429	26.5
2023	New Glasgow	413.1	425.6	12.5
	Raymond	138.5	141.1	2.6
	Underhills Farm	361.8	360	-1.8
	Newton	282.4	291.2	8.8
	Newton	482.7	502.3	19.6
2024	Portage la Prairie	238	235.7	-2.3
	Raymond	228	236.3	8.3
Average	16 sites	268.2^a	278.5^b	10.3 cwt/ac

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

^{a,b}Yields with different letters are statistically different according (Tukey HSD test (p<0.05)).

EFFICACY REPORT

SUMMARY – MYCORRHIZAL INOCULANT

► PLOT TRIALS

Research partners:

- Agricultural Development Group Inc. Research;
- Antedis;
- BlackCreek Research Inc.;
- Bröring;
- Prisme

Research sites:

- North America;
- Europe.

Treatments*:

a) Untreated;
b) AGTIV REACH®.

*Products applied according to the manufacturer's recommended rate.

Experimental design:

Randomized Complete Block Design: 9 trials

► GROWER DEMONSTRATIONS

Experimental design:

Split field: 11 demos

Table 1. Summary of marketable yields (t/ha) per trial and demo.

Year	Location	Seed variety	Yield Untreated	Yield AGTIV®
2014	Holland Marsh, ON	N/A	67.7	74.5
		N/A	67.7	71.8
2015	La somme, France	N/A	23.9	27.9
		N/A	54.8	55.7
		N/A	54.8	60.5
		N/A	43.6	46.4
2016	Bonneval, France	N/A	60.7	64.1
2017	Bright, ON	Norstar	8.1	6.8
	Napierville, QC	Trailblazer	16.2	17.4
2018	Issé, France	Santero F1	32.2	34.9
	Earl du Meurisier, France	N/A	59.9	66.2
	Bright, ON	Catskill	20.9	30.9
	Napierville, ON	Catskill	68.6	66.1
2019	Boisseaux, France	Santero F1	46.1	44.4
	Issé, France	Santero F1	62	63.3
	Yèvres la Ville, France	Santero F1	40.8	36.2
	Cézarville, France	Santero F1	47.4	44.2
	Allemagne	N/A	48.2	53
	Loiret, France	N/A	57.4	74.3
2022	Hoerdt, France	Hybound	25.8	29.9
Total	20 sites		45.3	48.4

EFFICACY REPORT
SUMMARY – MYCORRHIZAL & BACILLUS INOCULANT



► PLOT TRIALS

Research partners:

- Agricultural Development Group Inc. Research;
- BlackCreek Research Inc.;
- Prisme.

Research sites:

- Quebec;
- Ontario;
- Washington.

Treatments*:

- a) Untreated;
- b) Commercial seed encrusting with AGTIV REACH® P and AGTIV STIMULATE® L.

*Products applied according to the manufacturer’s recommended rate.

Experimental design:

Randomized Complete Block Design:
4 trials

Table 1. Summary of marketable yields (t/ha) per trial.¹

Year	Sites	Variety	Untreated check yield (t/ha)	AGTIV® yield (t/ha)	Yield increase (t/ha)	Yield increase (%)
2017	Bright, ON	Frontier	8.1	9.9	1.8	22.2
2017	Napierville, QC	Trailblazer	16.2	17	0.8	5
2018	Napierville, QC	Catskill	68.6	68	-	-
2018	Bright, ON	Catskill	20.9	29.1	8.2	39.2
Total	4 sites		28.5 ^a	31 ^b	2.5 t/ha*	8.8%

¹Summary of means are significantly different following a combined site ANOVA and a Tukey test (p<05) p = 036

EFFICACY REPORT

SUMMARY – MYCORRHIZAL INOCULANT



REACH

► PLOT TRIALS

Research partners:

- Agricultural Development Group Inc. Research;
- Antedis;
- BlackCreek Research Inc.;
- Eurofins Agrosience services;
- Prisme.

Research sites:

- France;
- USA;
- Canada.

Treatments*:

- a) Untreated check;
- b) AGTIV REACH®.

*Products applied according to the manufacturer's recommended rate.

Experimental design: Randomized Complete Block Design:
8 trials (8 repetitions each)

► GROWER DEMONSTRATION

Experimental design: Split field: 1 demo

Table 1. Summary of yields (lb/ac) per trial and demo.

Year	Location	Seed variety	Untreated check	AGTIV REACH®
2019	Ploërmel, France	Bolero F1	87 450	96 285
	Meneac, France	Bolero F1	79 062	84 773
	Onesse-Laharie, France	Bolero F1	44 975	45 510
2018	Eltopia, WA	Envy	12 493	16 955
	Bright, ON	Envy	24 450	27 217
	Napierville, QC	Envy	25 789	24 004
2017	Napierville, QC	Olympus	29 269	35 069
	Bright, ON	Bolero	36 586	38 550
2014	Saint Simon, QC	Olympus	28 823	34 445

Table 2. Summary of yields (t/ha) per trial and demo.

Year	Location	Seed variety	Untreated check	AGTIV REACH®
2019	Ploërmel, France	Bolero F1	98	107.9
	Meneac, France	Bolero F1	88.6	95
	Onesse-Laharie, France	Bolero F1	50.4	51
2018	Eltopia, WA	Envy	14	19
	Bright, ON	Envy	27.4	30.5
	Napierville, QC	Envy	28.9	26.9
2017	Napierville, QC	Olympus	32.8	39.3
	Bright, ON	Bolero	41	43.2
2014	Saint Simon, QC	Olympus	32.3	38.6

EFFICACY REPORT
SUMMARY – MYCORRHIZAL & BACILLUS INOCULANT



► PLOT TRIALS

Research partners:

- Agricultural Development Group Inc. Research;
- BlackCreek Research Inc.;
- Prisme.

Research sites:

- Quebec;
- Ontario;
- Washington.

Treatments*:

- a) Untreated;
- b) Commercial seed encrusting with AGTIV REACH® P and AGTIV STIMULATE® L.

*Products applied according to the manufacturer's recommended rate.

Experimental design:

Randomized Complete Block Design:
5 trials (8 repetitions each)

Table 1. Summary of marketable yields (t/ha) per trial.¹

Year	Sites	Variety	Untreated check yield (t/ha)	AGTIV® yield (t/ha)	Yield increase (t/ha)	Yield increase (%)
2017	Bright, ON	Bolero	41	47.3	6.3	15.4
2017	Napierville, QC	Olympus	32.8	36.2	3.9	10.4
2018	Bright, ON	Envy	27.4	31.4	4	14.6
2018	Napierville, QC	Envy	28.9	28.1	-	-
2018	Eltopia, WA	Envy	14	17.2	3.2	22.9
Total	5 sites		28.8 ^a	32.0 ^b	3.2 t/ha*	11.1%

^aSummary of means are significantly different following a combined site ANOVA and a Tukey test (p<05) p = 03

► PLOT TRIALS

Research partners:

- BlackCreek Research Inc.;
- Sandy Knolls Research Inc.

Research sites:

Ontario

Treatments*:

- a) Untreated check;
- b) AGTIV REACH® film coating.

*Products applied according to the manufacturer's recommended rate.

Experimental design:

Randomized Complete Block Design:
2 trials (8 repetitions each)

Table 1. Summary of yields (lb/ac) per trial

Year	Location	Seed variety	Untreated check	AGTIV REACH®	Yield increase
2023	Vienna, ON	Fast Lane SE	3 022.6	3 274.8	252.2
2023	Bright, ON	Fast Lane SE	12 618	13 347	729

EFFICACY REPORT
SUMMARY – MYCORRHIZAL INOCULANT

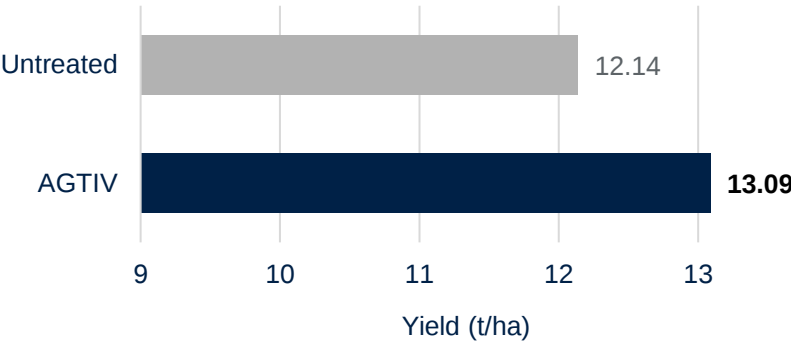
► SPLIT FIELDS DEMONSTRATIONS

Research partners:	Growers
Research sites:	France
Treatments*:	a) Untreated; b) AGTIV REACH®.
	*Products applied according to the manufacturer's recommended rate.
Experimental design:	Split field: 6 demos

Table 1. Summary of yields per demo

Variety	Untreated		AGTIV® mycorrhizal inoculant		Increase (%) AGTIV® vs untreated
	(lb/ac)	(t/ha)	(lb/ac)	(t/ha)	
Stanley	13 561	15.16	14 810	16.56	9.2
Costal	11 865	13.31	12 668	14.24	7
Bamaco	15 167	16.98	16 594	18.57	9.4
Compass	8 297	9.27	9 635	10.8	16.5
Paloma	9 546	10.73	9 367	10.47	-2.4
Linex	6 512	7.33	6 959	7.83	6.8
Average	10 825	12.14	11 672	13.09	7.8%

Figure 1. Yield increase with AGTIV® mycorrhizal inoculant.



EFFICACY REPORT
SUMMARY – MYCORRHIZAL & RHIZOBIAL INOCULANT

► **SPLIT FIELDS DEMONSTRATIONS**

Research partners: Growers

Research sites:

- Ontario;
- Quebec.

Treatments*: a) Untreated;
b) AGTIV THRIVE®.

*Products applied according to the manufacturer’s recommended rate.

Experimental design: Split field: 12 demos

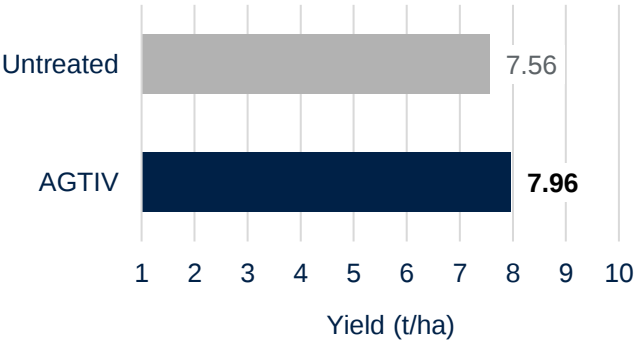


Plant growth and health is enhanced on the right, and the leaf area is increased with AGTIV®.

Table 1. Summary of yields per year

Year	Number of sites	Average increase (t/ac)	Average increase (t/ha)	Average increase (%)
2015	4	0.31	0.77	23.3
2016	7	08	0.20	3.5
2017	1	0.12	0.30	3.7
Total	12 sites	0.16 t/ac	0.40 t/ha	5.3%

Figure 1. Average yield increase



EFFICACY REPORT
SUMMARY – MYCORRHIZAL INOCULANT

► SPLIT FIELDS DEMONSTRATIONS

Research partners: Growers

Research sites:

- Ontario;
- Quebec.

Treatments*:

- a) Untreated;
- b) AGTIV REACH®.

*Products applied according to the manufacturer’s recommended rate.

Experimental design: Split field: 5 demos



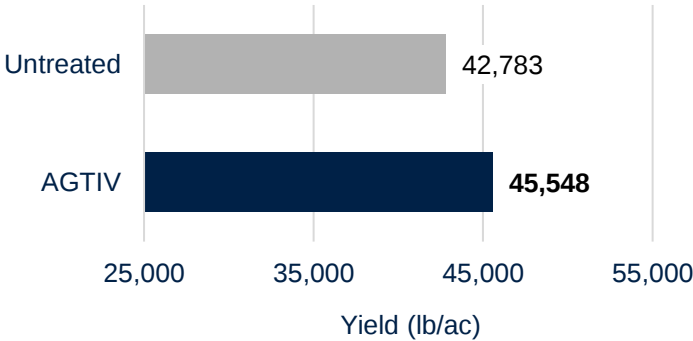
More developed root system, more leaves and bigger fruits with AGTIV®.

Table 1. Summary of yields per year

Year	Number of sites	Average increase		
		(lb/ac)	(t/ha)	(%)
2002	2	*	*	5.1
2015	2	2 840	3.18	10
2016	1	2 617	2.93	3.7
Total	5 sites	2 766 lb/ac **	3.1 t/ha**	6.8%

* Plot trial data for 2002: average increase of 95 g/plant.
** The 2766 lb/ac average refers only to 2015-2016 data.

Figure 1. Average yield increase



EXPERTISE, AUTONOMY, AND RELIABILITY AT EVERY STEP

As an established manufacturer and marketer, Premier Tech offers reliable, high-quality inoculants through innovation and collaboration with local partners and growers. From the lab to the field, our team transforms research into impactful, results-driven solutions.

Our recent innovation, Premier Tech peat granules for AGTIV® inoculants, is engineered to be robust and free-flowing, ensuring biological viability and delivering excellent agronomic performance. From peat harvest to production, we guarantee consistent quality at every step, supported by a fully controlled, dependable supply chain.

Every day, we deliver products that enhance crop performance and profitability.

[PTAGTIV.COM/en/expertise](https://ptagtiv.com/en/expertise)



PRODUCTION

In 2000, Premier Tech set up a world-first endomycorrhizal inoculum plant, developing a new mycoreactor process for industrial scale production. Backed by more than 40 years of expertise in active ingredients, Premier Tech constantly develops and innovates in terms of production of MYCORRHIZAE, RHIZOBIUM, BACILLUS, SERENDIPITA and other active ingredients:

- ✓ No contamination through a strictly controlled and aseptic environment
- ✓ Large-scale manufacturing production
- ✓ Adapted quality control for each step of the production processes, ensuring consistent high-quality inoculum



FORMULATION

Premier Tech's know-how makes it possible to adapt formulations with multiple active ingredients, concentrations and carriers tailored to different crops and application methods. Because a quality inoculant makes all the difference, our proven formulations are based on these important elements:

- ✓ Carriers compatible with the active ingredients
- ✓ Formulations that guarantee active ingredient viability until use
- ✓ Quality control at several key points ensuring the performance of active ingredients
- ✓ Various formulations tailored for organic production



APPLICATION

Caring about our clients' crop performance, each recommendation for product use takes into consideration validation by our field experts and by farmers themselves, which ensures:

- ✓ Effective application rates, at the right time and place, with the right inoculant
- ✓ Products adapted to growers' equipment
- ✓ Easy integration into farming practices
- ✓ Validation of compatibility with other agricultural inputs



SERVICE

The AGTIV® experience combines highly effective value-added products and the access to a team of field experts dedicated to supporting your growth. From our management and research teams to our field specialists, our multidisciplinary team is listening to growers' needs to continuously improve our products and level of service:

- ✓ Technical support for product application, equipment compatibility and field demonstration
- ✓ Proud promoter of science education and knowledge sharing
- ✓ Partnership with agriculture retailers throughout Canada, the United States and Europe



RENOWN BRANDS

AGTIV® PROMIX®



EFFICACY SUMMARIES 2026

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WE CARE ABOUT YOUR SUCCESS!



PEOPLE AND TECHNOLOGIES MAKING A DIFFERENCE

At Premier Tech, we are all about making a difference by connecting People and Technologies for more than 100 years. One team driven by a shared will to deliver sustainable solutions that help feed, protect and improve our world. Premier Tech has a wide range of products, services, brands, and technologies allowing to increase crop yields, bring beautiful gardens to life, automate the handling and packaging operations of many manufacturing facilities, treat and recycle water, support companies in their digital transformation, and offer bio-ingredients for the well-being of humans and animals.



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