

AGTIV®



EFFICACY REPORT 2026
CANOLA



CANOLA

AVERAGE YIELD INCREASE

AGTIV
IGNITE

2.5 bu/ac
6.5%

140 kg/ha
38 sites over 8 years
Canada



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
2024 – SERENDIPITA INOCULANT

► PLOT TRIAL

Research partner: North Peace Applied Research Association

Research site: Manning, AB

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

*Products applied according to manufacturer's recommended rate.

Experimental design: Randomized Complete Block,
6 repetitions, 12.8 m² plots.

Variety: CS2600 CR – T(RR) treated with Helix Saltro and Fortenza

Previous crop: Fallow

Seeding details: Seeded on May 28 with a cone planter at a rate of 7 kg/ha in a
heavy clay soil (pH: 4.8, OM: 6.8%).
Emergence on June 14.

Table 1. Summary of yields per treatment

Treatment	Yield (bu/ac)	Yield increase (bu/ac)
Untreated check	33.7	-
AGTIV [®] IGNITE [™] L	35.6	1.9

OPERATIONAL NOTES AND RAIN FALL

Fertilisation: 46-0-0 (120 lb/ac) and 13-33-0 -15 (80 lb/ac)
sidebanded at seeding

Pesticides: Glyphosate (1 L/ac): May 28 and July 9

Harvesting: October 3, 2024

Month	Precipitation (mm)
May	51.5
June	75.3
July	103.2
August	45.4
September	26.6
October	18.1
TOTAL	320.2

► PLOT TRIAL

Research partners: Integrated Crop Management Services (ICMS)

Research sites: Moon Lake, SK

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

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

Experimental design: Latin Square (LS),
6 repetitions, 16.56 m² plots.

Variety: InVigor L356PC treated with Helix Vibrance & Lumiderm

Previous crop: Spring wheat

Seeding details: Seeded on June 6 with a cone seeder of 7 kg/ha in a clay soil
(pH: 7.9, OM: 7.2%).
Emergence on June 13.

OPERATIONAL NOTES AND RAIN FALL

Fertilisation: 80-30-10-20 actual kg/ha: May 29

Pesticides:

- Amigo (0.5 L/100l): June 28
- Centurion (0.075 L/ac): June 28
- Liberty 150 (1.62 L/ac): June 28
- Decis 5 EC (0.06 L/ac): August 14

Harvesting: September 25, 2023

Table 1. **Summary of yields per treatment.**

Treatment	Yield (bu/ac)	Yield increase (bu/ac)
Untreated check	23.8	-
AGTIV IGNITE® L	24.9	1.1

Month	Precipitation (mm)
June	174.4
July	19.9
August	50.4
September	7.9
TOTAL	252.6

EFFICACY REPORT
2023 – SERENDIPITA INOCULANT

► PLOT TRIAL

Research partners: New Era Ag Research

Research sites: Swan River, MB

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

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

Experimental design: Randomized Complete Block,
6 repetitions, 33.9 m² plots.

Variety: InVigor L234PC treated with Helix Vibrance and Lumiderm

Previous crop: Wheat

Seeding details: Seeded on May 22, at a rate of 6.2 kg/ha with a cone seeder in a loam soil (pH: 6.9, OM: 4.8%).
Emergence on May 31.

OPERATIONAL NOTES AND RAIN FALL

Fertilisation: 102.5-0-0-20 (268 lbs/ac): May 21
5.3-25-0-0 (48 lbs/ac): May 22

Pesticides:

- Armory 240 (0.69 L/ac): September 12
- Arrow-All-In-One: (100 mL/ac) June 2, (150 mL/ac) June 8
- Cotegra (280 mL/ac): July 6
- Interline (1.35 L/ac): June 19
- Liberty 150 SN (1.35 L/ac) : June 8
- Pounce: (73 mL/ac) June 2, (100 mL/ac) June 8

Harvesting: September 19, 2023

Table 1. Summary of yields per treatment

Treatment	Yield (bu/ac)	Yield increase (bu/ac)
Untreated check	71.0	-
AGTIV IGNITE [®] L	72.8	1.8

Month	Precipitation (mm)
May	13.8
June	33.5
July	16.1
August	109.9
September	5.1
TOTAL	178.4



EFFICACY REPORT
2023 – SERENDIPITA INOCULANT

► PLOT TRIAL

Research partners: Integrated Crop Management Services (ICMS)

Research sites: Josephburg, AB

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

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

Experimental design: Latin Square (LS),
6 repetitions, 14.64 m² plots.

Variety: InVigor L343PC treated with Buteo Start and Helix Vibrance

Previous crop: Spring barley

Seeding details: Seeded on June 13 with a cone seeder of 7 kg/ha in loam soil
(pH: 5.8, OM: 8%).
Emergence on July 4.

Table 1. Summary of yields per treatment

Treatment	Yield (bu/ac)	Yield increase (bu/ac)
Untreated check	45.6	-
AGTIV IGNITE® L	47.7	2.1

OPERATIONAL NOTES AND RAIN FALL

Fertilisation: Fertilizer blend of 33-8-0 actual kg/ha: June 5

Pesticides:

- Matador (0.83 L/ha): July 7
- Liberty 150 SN (3.33 L/ha): July 8
- Select (0.125 L/ha): July 8
- Amigo (0.1 L/100l): July 8
- Heat LQ (0.11 L/ha): October 5

Harvesting: October 13, 2023

Month	Precipitation (mm)
June	128.8
July	110.0
August	56.3
September	11.8
October	2.0
TOTAL	308.9

► PLOT TRIAL

Research partners: South East Research Farm

Research sites: Redvers, SK

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

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

Experimental design: Randomized Complete Block,
6 repetitions, 9 m² plots.

Variety: L233P treated with Buteo Start & Helix Vibrance

Previous crop: Spring barley

Seeding details: Seeded on June 7 with a cone seeder of 4.2 lb/ac in loam soil
(pH: 8.5, OM: 2.8%)

Table 1. Summary of yields per treatment

Treatment	Yield (bu/ac)	Yield increase (bu/ac)
Untreated check	32.2	-
AGTIV IGNITE® L	33.8	1.6

OPERATIONAL NOTES AND RAIN FALL

Fertilisation: 89.31-32.82-3.16-14.29 actual kg/ha: June 7

Pesticides: • RT 540 (0.75l/ac): May 19
• Liberty (1.35 L/ac): June 21

Harvesting: September 15, 2023

Month	Precipitation (mm)
May	70.0
June	25.0
July	11.0
August	49.4
September	22.0
TOTAL	177.4

EFFICACY REPORT
2023 – SERENDIPITA INOCULANT

► PLOT TRIAL

Research partner: Small Plot Inc.

Research site: Vulcan, AB

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

Experimental design: Latin square (LS),
6 repetitions, 32 m² plots.

Variety: LL variety treated with Buteo Start

Previous crop: Wheat

Seeding details: Seeded on June 7 with a direct drill at a rate of 4.5 kg/ha in
a loam soil (pH: 8.1, OM: 2.9%).
Emergence on June 22.

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

OPERATIONAL NOTES AND RAIN FALL

Fertilisation: 60-15-15-10 : June 7

Pesticides: No pesticide applied

Month	Precipitation (mm)
June	43.4
July	37.8
August	31.5
TOTAL	112.7

Harvesting: September 28, 2023

Table 1. Summary of yields per treatment

Treatment	Yield (bu/ac)	Yield increase (bu/ac)
Untreated check	7.3	-
AGTIV IGNITE® L	9.3	2.0

► PLOT TRIAL

Research partner:	ICMS
Research site:	Saskatoon, SK
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 m ² plots.
Variety:	PIONEER P509-L treated with Lumiderm, LumiGen and Helix vibrance.
Previous crop:	Wheat
Seeding details:	Seeded on May 26, with a cone seeder at a rate of 7 kg/ha in a clay soil (pH: 8.0, OM: 8.8%). Emergence on June 21.

OPERATIONAL NOTES AND RAIN FALL

Fertilisation:	80-30-10-20 kg/ha: prior to seeding
Pesticides:	- Liberty 150: July 4 - Decis 5EC: August 18 - Reglone Ion: September 6
Harvesting:	September 16, 2022

Month	Precipitation (mm)
May	25.8
June	38.0
July	46.5
August	25.6
September	6.8
TOTAL	142.7

Table 1. Summary of yields and oil content per treatment

Treatment	Yield (bu/ac)	Yield increase (bu/ac)	Oil content (%)
Untreated check	19.6	-	36.6
AGTIV IGNITE® L	21.0	1.4	36.3

► 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, 30 m² plots.

Variety: DEKALB 75-65 RR treated with Prosper Evergol

Previous crop: Carrots

Seeding details: Seeded on June 17, with a cone planter at a rate of
8.2 kg/ha in a clay soil (pH: 7.7, OM: 6.9%).
Emergence on June 23.

Table 1. Summary of yields and oil content per treatment

Treatment	Yield (bu/ac)	Yield increase (bu/ac)	Oil content (%)
Untreated check	29.3	-	30.6
AGTIV IGNITE® L	32.8	3.5	35.2

OPERATIONAL NOTES AND RAIN FALL

Fertilisation: None

Pesticides: • Roundup WeatherMax: June 24 and July 14
• Sevin XLR: June 24

Harvesting: September 26, 2022

Month	Precipitation (mm)
May	140.7
June	70.3
July	96.3
August	89.0
September	50.3
TOTAL	446.6

EFFICACY REPORT

2022 – SERENDIPITA INOCULANT

► PLOT TRIAL

Research partner: Ag-Quest

Research site: Taber, AB

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 DKTF96 SC treated with Buteo, Prosper EverGol and Fortenza.

Previous crop: Rye

Seeding details: Seeded on May 24, with a cone seeder at a rate of 8 kg/ha in a loam soil (pH: 7.8, OM: 2.6%).
Emergence on June 6.

Table 1. Summary of yields and oil content per treatment

Treatment	Yield (bu/ac)	Yield increase (bu/ac)	Oil content (%)
Untreated check	28.8	-	32.1
AGTIV IGNITE® L	32.7	3.9	32.9

OPERATIONAL NOTES AND RAIN FALL

Fertilisation: 0-58-0-17 kg/ha: May 16

Pesticides:

- Roundup Transorb: May 18, June 9, 17 & 29
- Decis: June 22, July 6 & 15
- Sevin XLR Plus: June 22, July 6 & 15

Harvesting: August 31, 2022

Month	Precipitation (mm)
May	55.1
June	78.2
July	204.3*
August	89.3*
TOTAL	426.9

* Plots were irrigated during those months

► 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, 34 m² plots.

Variety: In Vigor L233P treated with Lumiderm

Previous crop: Rye

Seeding details: Seeded on June 5, with a cone seeder at a rate of 5.5 kg/ha in a sandy loam soil (pH: 8.3, OM: 2.2%).
Emergence on June 10.

OPERATIONAL NOTES AND RAIN FALL

Fertilisation: 137-36-22-28 kg/ha: prior to seeding

Pesticides:

- Liberty: June 17
- AMIGO: July 1
- Centurion: July 1
- Coragen: July 1
- Reglone Ion: September 8

Harvesting: September 13, 2022

Month	Precipitation (mm)
May	131.0
June	65.6
July	92.6
August	57.6
September	30.8
TOTAL	377.6

Table 1. Summary of yields and oil content per treatment

Treatment	Yield (bu/ac)	Yield increase (bu/ac)	Oil content (%)
Untreated check	46.1	-	37.7
AGTIV IGNITE® L	48.0	1.9	37.3

► 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, 10 m² plots.

Variety: In Vigor L233P treated with Prosper Evergol

Previous crop: Soybean

Seeding details: Seeded on May 30, with a cone seeder at a rate of 5.5 kg/ha in a
loam soil (pH: 7.5, OM: 3.7%).
Emergence on June 6.

Table 1. Summary of yields and oil content per treatment

Treatment	Yield (bu/ac)	Yield increase (bu/ac)	Oil content (%)
Untreated check	20.0	-	36.3
AGTIV IGNITE® L	21.4	1.4	36.9

OPERATIONAL NOTES AND RAIN FALL

Fertilisation: 160-20-0 kg/ha: May 10

Pesticides: • Liberty: June 21
• Matador: June 21

Harvesting: September 17, 2022

Month	Precipitation (mm)
May	76.4
June	46.2
July	29.8
August	69.6
TOTAL	222.0

► PLOT TRIAL

Research partner: South East Research Farm

Research site: Redvers, SK

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, 12 m² plots.

Variety: InVigor L340 PC treated with Vercoras & Poncho.

Previous crop: Pea

Seeding details: Seeded on June 1, with a cone seeder at a rate of 9 kg/ha in a
loam soil (pH: 7.6, OM: 4.2%).

Table 1. Summary of yields and oil content per treatment

Treatment	Yield (bu/ac)	Yield increase (bu/ac)	Oil content (%)
Untreated check	32.2	-	36.6
AGTIV IGNITE® L	34.1	1.9	36.5

OPERATIONAL NOTES AND RAIN FALL

Fertilisation: 100-25-0-6 (kg/ha): at seeding

Pesticides:

- Roundup: June 6
- Voliam: June 23
- Liberty: June 23

Harvesting: September 16, 2022

Month	Precipitation (mm)
May	121.0
June	75.0
July	259.0
August	25.2
September	15.0
TOTAL	495.2

► PLOT TRIAL

Research partner: New Era Ag Research

Research site: Swan River, 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, 30 m² plots.

Variety: InVigor LL 234 PC treated with Lumiderm & Helix Vibrance.

Previous crop: Carrots

Seeding details: Seeded on June 5, with a cone seeder at a rate of 6 kg/ha in a clay loam soil (pH: 7.1, OM: 6.2%).

OPERATIONAL NOTES AND RAIN FALL

Fertilisation: 100-25-0-6 (kg/ha): at seeding

Pesticides: • ARROW ALL IN: June 19 & 28
• Pounce: June 23 & 28
• Cotegra: July 22

Harvesting: September 28, 2022

Month	Precipitation (mm)
May	114.0
June	59.4
July	40.6
August	41.8
September	34.7
TOTAL	290.5

Table 1. Summary of yields and oil content per treatment

Treatment	Yield (bu/ac)	Yield increase (bu/ac)	Oil content (%)
Untreated check	60.0	-	30.6
AGTIV IGNITE® L	62.2	2.2	35.2

EFFICACY REPORT

2021 – SERENDIPITA INOCULANT

► PLOT TRIAL

Research partner: ICMS

Research site: Josephburg, 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, 24.4 m² plots.

Variety: RR Canola 6086 CR

Previous crop: Wheat

Seeding details: Seeded on May 31, with a cone drill at a rate of 7 kg/ha.

Table 1. Summary of yields and oil content per treatment

Treatment	Yield (bu/ac)	Yield increase (bu/ac)	Oil content (%)
Untreated check	23.9	-	39.1
AGTIV IGNITE® L	25	1.1	40.2

OPERATIONAL NOTES AND RAIN FALL

Fertilisation: N-P-K 81-41-0 lb/ac

Pesticides: • Round up WeatherMax: June 12
• Heat LQ: September 20

Harvesting: Combined on October 7, 2021.

Month	Precipitation (mm)
June	85.3
July	112.1
August	52.5
September	53.7
TOTAL	303.6

EFFICACY REPORT

2021 – SERENDIPITA INOCULANT

► PLOT TRIALS

Research partner: New Era Ag Research

Research site: Swan River, MB

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, 30 m² plots.

Variety: InVigor LL234PC

Previous crop: Wheat

Seeding details: Seeded on May 18, with a cone planter at a rate of 4 kg/ha.

Table 1. **Summary of yields and oil content per treatment**

Treatment	Yield (bu/ac)	Yield increase (bu/ac)	Oil content (%)
Untreated check	46.9	-	37.8
AGTIV IGNITE® L	48.2	1.3	37.8

OPERATIONAL NOTES AND RAIN FALL

Fertilisation: • Urea (46-0-0): May 28
• MAP (11-52-0): May 28

Pesticides: • Edge: May 7
• RT 540: May 27
• Pounce: June 13
• Arrow: June 13
• Arrow all-in-one: June 18
• Liberty: June 18
• Guardsman: August 26

Harvesting: Combined on September 11, 2021.

Month	Precipitation (mm)
May	33.0
June	65.9
July	45.5
August	77.1
September	39.0
TOTAL	260.5

EFFICACY REPORT

2021 – SERENDIPITA INOCULANT

► 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,
8 repetitions, 24.4 m² plots.

Variety: RR Canola CS2100

Previous crop: Wheat

Seeding details: Seeded on June 2, with a cone drill at a rate of 6 kg/ha.

Table 1. Summary of yields and oil content per treatment

Treatment	Yield (bu/ac)	Yield increase (bu/ac)	Oil content (%) ¹
Untreated check	36.3	-	36.8 ^{ab}
AGTIV IGNITE® L	38.9	2.6	37.1 ^a

¹ Oil content with the same letter are not statistically different according to a Tukey HSD test (p≤0.05).

OPERATIONAL NOTES AND RAIN FALL

Fertilisation: None

Pesticides:

- Pounce: June 14, July 7 and August 9
- Roundup Transorb: June 19 and July 9
- Proline 480 SC: July 8

Harvesting: Combined on September 10, 2021.

Month	Precipitation (mm)
June	90.0
July	78.4
August	68.3
TOTAL	236.7

► PLOT TRIAL

Research partner: ICMS

Research site: Saskatoon, SK

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, 24.4 m² plots.

Variety: LL canola P501L

Previous crop: Wheat

Seeding details: Seeded on May 20, with a cone drill at a rate of 7 kg/ha.

OPERATIONAL NOTES AND RAIN FALL

Fertilisation: 80-40-10-20: preseeding.

Pesticides: • Centurion: June 21
• Liberty: June 21

Harvesting: Combined on August 26, 2021.

Month	Precipitation (mm)
May	35.5
June	41.7
July	17.7
August	28.9
TOTAL	123.8

Table 1. Summary of yields and oil content per treatment

Treatment	Yield (bu/ac)	Yield increase (bu/ac)	Oil content (%)
Untreated check	10.3	-	41.8
AGTIV IGNITE® L	12.5	2.2	42.3

► 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,
8 repetitions, 33 m² plots.

Variety: DEKALB DKTF 96 SC

Previous crop: Soybean

Seeding details: Seeded on May 18, with a cone drill at a rate of 6 kg/ha.

OPERATIONAL NOTES AND RAIN FALL

Fertilisation: Blend of Urea, MAP, MOP and AMS 94-79-90-11: at seeding
Foliar copper: June 22

Pesticides:

- Roundup WeatherMax: May 19, June 10 and 24
- Pounce: June 4, 16 and August 13
- Coragen: June 16
- Reglone: August 31

Harvesting: Combined on September 7, 2021.

Month	Precipitation (mm)
May	61.9
June	101.5
July	25.4
August	103.3
TOTAL	292.1

Table 1. Summary of yields and oil content per treatment

Treatment	Yield (bu/ac)	Yield increase (bu/ac)	Oil content (%)
Untreated check	36.3	-	35.1
AGTIV IGNITE® L	37.4	1.1	37.1

EFFICACY REPORT

2020 – SERENDIPITA INOCULANT

► PLOT TRIAL

Research partner: Ag-Quest

Research site: Taber, 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, 25.2 m² plots.

Variety: Pioneer 45CS40

Previous crop: Wheat

Seeding details: Seeded on June 11, with a cone planter at a rate of 6.41 kg/ha.

Table 1. Summary of yields per treatment

Treatment	Yield (bu/ac)	Yield increase (bu/ac)
Untreated check	37.3	-
AGTIV IGNITE® L	38.5	1.2

OPERATIONAL NOTES AND RAIN FALL

Fertilisation: 11-52-0 and 20-0-0-24 (116.3 kg/ha and 56.3 kg/ha): June 11

Pesticides:

- Roundup WeatherMax: May 24
- Decis: July 17
- Weed Whacker: August 20

Harvesting: Combined on September 23, 2020.

Month	Precipitation (mm)
June	80.8
July	23.1
August	18.8
September	47.3
TOTAL	170.0

EFFICACY REPORT

2020 – SERENDIPITA INOCULANT

► PLOT TRIAL

Research partner:	New Era Ag Research
Research site:	Swan River, MB
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, 30 m ² plots.
Variety:	Pioneer 45CS40
Previous crop:	Soybean
Seeding details:	Seeded on May 21, with a cone planter at a rate of 6 kg/ha.

OPERATIONAL NOTES AND RAIN FALL

Fertilisation:	NH ₃ , MAP, potash and AMS (163-30-35-60): fall 2019
Pesticides:	• Pounce: June 5 and 16 • Roundup: June 23 • Clethodim: July 10 • Proline: July 17 • Guardsman: September 5
Harvesting:	Combined on September 22, 2020.

Month	Precipitation (mm)
May	12.0
June	62.8
July	122.7
August	43.2
September	9.9
TOTAL	250.6

Table 1. Summary of yields and oil content per treatment

Treatment	Yield (bu/ac)	Yield increase (bu/ac)	Oil content (%) ¹
Untreated check	61.2	-	38.7 ^a
AGTIV IGNITE® L	64	2.8	40.5 ^b

¹ Oil content with the same letter are not statistically different according to a Tukey HSD test ($p \leq 0.05$).

EFFICACY REPORT

2020 – SERENDIPITA INOCULANT



IGNITE

► PLOT TRIAL

Research partner:	ICMS
Research site:	Moon Lake, SK
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, 30 m ² plots.
Variety:	Pioneer 45CS40
Previous crop:	Field pea
Seeding details:	Seeded on May 19, with a cone planter at a rate of 7 kg/ha.

Table 1. Summary of yields and oil content per treatment

Treatment	Yield (bu/ac)	Yield increase (bu/ac)	Oil content (%) ¹
Untreated check	16.3	-	41.6 ^a
AGTIV IGNITE® L	18.2	1.9	43.6 ^b

¹ Oil content with the same letter are not statistically different according to a Tukey HSD test ($p \leq 0.05$).

OPERATIONAL NOTES AND RAIN FALL

Fertilisation:	Blend of 70-30-0-20: preseeding with the tillage
Pesticides:	None
Harvesting:	Combined on August 31, 2020.

Month	Precipitation (mm)
May	42.1
June	106.9
July	52.1
August	16.2
TOTAL	217.3

► PLOT TRIAL

Research partner:	ICMS
Research site:	Josephburg, 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, 30 m ² plots.
Variety:	Pioneer 45CS40
Previous crop:	Barley
Seeding details:	Seeded on May 25, with a cone planter at a rate of 7 kg/ha.

Table 1. Summary of yields and oil content per treatment

Treatment	Yield (bu/ac)	Yield increase (bu/ac)	Oil content (%)
Untreated check	47.2	-	34.7
AGTIV IGNITE® L	49.5	2.3	36.3

OPERATIONAL NOTES AND RAIN FALL

Fertilisation:	Blend of 51-22-26: preseeding with the tillage
Pesticides:	• Lontrel: June 12 • Roundup WeatherMax: June 12
Harvesting:	Combined on October 6, 2020.

Month	Precipitation (mm)
May	93.5
June	121.4
July	121.9
August	68.4
September	4.9
TOTAL	410.1

► PLOT TRIAL

Research partner: ICMS

Research site: Saskatoon, SK

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: In Vigor L252

Previous crop: Wheat

Seeding details: Seeded on June 7, with a drill seeder at a rate of 7 kg/ha.

Table 1. Summary of yields per treatment

Treatment	Yield (bu/ac)	Yield increase (bu/ac)
Untreated check	38.8	-
AGTIV IGNITE® L	41.8	3

OPERATIONAL NOTES AND RAIN FALL

Fertilisation: Blend of 70-30-10-20: preseeding with the tillage

Pesticides:

- Centurion: July 12
- Liberty 150: July 12
- Matador: September 9

Harvesting: Combined on October 21, 2019.

Month	Precipitation (mm)
June	84.8
July	67.6
August	20.3
September	39.5
October	3.0
TOTAL	215.2

► PLOT TRIAL

Research partner: ICMS

Research site: Josephburg, AB

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 75-42BL

Previous crop: Barley

Seeding details: Seeded on June 1, with a cone planter at a rate of 7 kg/ha.

Table 1. Summary of yields per treatment

Treatment	Yield (bu/ac)	Yield increase (bu/ac)
Untreated check	46.8	-
AGTIV IGNITE® L	53.2	6.4

OPERATIONAL NOTES AND RAIN FALL

Fertilisation: Blend of 31-0-10-8: : preseeding with the tillage

Pesticides: Roundup WeatherMax: June 26

Harvesting: Combined on October 4, 2019.

Month	Precipitation (mm)
May	0
June	0
July	153.7
August	31
September	43.7
TOTAL	228.4

► PLOT TRIAL

Research partner: New Era Ag Research

Research site: Swan River, 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, 30 m² plots.

Variety: InVigor L255PC

Previous crop: Canola stubble

Seeding details: Seeded on May 21, with a drill planter at a rate of 7 kg/ha.

Table 1. Summary of yields and oil content per treatment

Treatment	Yield (bu/ac)	Yield increase (bu/ac)	Oil content (%)
Untreated check	53.7	-	49.9
AGTIV IGNITE® L	55.4	1.7	52.1

OPERATIONAL NOTES AND RAIN FALL

Fertilisation: 90-50-0-25: broadcast at seeding.

Pesticides:

- Avadex: May 3
- Liberty: June 6 and 27
- Pounce: June 6
- Arrow: June 11 and 27
- Proline: July 12
- Heat: September 6

Harvesting: Combined on September 22, 2019.

Month	Precipitation (mm)
May	25.4
June	26.1
July	59.3
August	51.8
September	48.7
TOTAL	211.3

EFFICACY REPORT
2019 – SERENDIPITA INOCULANT

► PLOT TRIAL

Research partner: Prairie Ag Research Inc.

Research site: Taber, AB

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, 16 m² plots.

Variety: Pioneer 45M35

Previous crop: Wheat

Seeding details: Seeded on May 27, with a drill planter at a rate of 5.6 kg/ha.

Table 1. **Summary of yields per treatment**

Treatment	Yield (bu/ac)	Yield increase (bu/ac)
Untreated check	25.4	-
AGTIV IGNITE® L	27.0	1.6

OPERATIONAL NOTES AND RAIN FALL

Fertilisation: Broadcast of 29-37-0-30

Pesticides:

- Roundup WeatherMax: May 20 and July 3
- Pounce: July 3 and August 8

Harvesting: Combined on September 25, 2019.

Month	Precipitation (mm)
May	58.7
June	47.0
July	31.3
August	22.8
TOTAL	159.8

► PLOT TRIAL

Research partner: Wheatland Conservation Area Inc.

Research site: Swift Current, SK

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, 9 m² plots.

Variety: In Vigor L233P

Previous crop: Wheat

Seeding details: Seeded on May 28, with a cone seeder at a rate of 6.7 kg/ha.

OPERATIONAL NOTES AND RAIN FALL

Fertilisation: Broadcast of 29-37-0-30: May 27

Pesticides: Roundup WeatherMax: June 25

Harvesting: Combined on September 25, 2019.

Month	Precipitation (mm)
May	13.3
June	156.0
July	11.1
August	42.6
September	92.1
TOTAL	315.1

Table 1. Summary of yields per treatment

Treatment	Yield (bu/ac)	Yield increase (bu/ac)
Untreated check	25.0	-
AGTIV IGNITE® L	27.1	2.1

► PLOT TRIAL

Research partner: New Era Ag Research

Research site: Swan River, MB

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 m² plots.

Variety: In Vigor L140P

Previous crop: Canola stubble

Seeding details: Seeded on June 4, with a drill planter at a rate of 5.6 kg/ha.

OPERATIONAL NOTES AND RAIN FALL

Fertilisation: Midrow band 20-58-5-8 and broadcast 125-0-35-25.

Pesticides: None

Harvesting: Combined on October 4, 2018.

Month	Precipitation (mm)
June	127.6
July	59.3
August	35.4
September	51.1
TOTAL	273.4

Table 1. Summary of yields per treatment

Treatment	Yield ¹ (bu/ac)	Yield increase (bu/ac)
Untreated check	63.5 ^b	-
AGTIV IGNITE® L	68.0 ^a	4.5

¹ Yield mean with the same letter are not statistically different according to a Tukey HSD test (p≤0.05).

EFFICACY REPORT 2026

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