

# AGTIV®



**EFFICACY REPORT 2025**  
**CHICKPEA**



# CHICKPEA

AVERAGE YIELD INCREASE

**AGTIV**  
**THRIVE**

**3.1** bu/ac  
**8.7%**

208 kg/ha  
6 sites over 7 years  
Canada





EFFICACY REPORT  
SUMMARY – MYCORRHIZAL & RHIZOBIAL INOCULANT

► PLOT TRIALS

**Research partners:**

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

**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 manufacturers recommended rate.

**Experimental design:**

Total of 40 replicated plots per treatment in randomized complete block design.

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

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

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

► PLOT TRIAL

**Research partner:** Ag-Quest inc.

**Research site:** Taber, AB

**Treatments\*:** a) Untreated check;  
b) AGTIV® THRIVE™;  
c) Competitor inoculant D.

\*Products applied according to manufacturers recommended rate.

**Experimental design:** Randomized Complete Block (RCB), 8 repetitions, 10.5 m<sup>2</sup> plots

**Variety:** CDC Palmer

**Previous crop:** Winter rye

**Seeding details:** Seeded on June 5 with a cone planter at a rate of 180 kg/ha in a coarse sandy loam soil (pH: 8.2, OM: 2.7%).  
Emergence on June 13.

OPERATIONAL NOTES AND RAIN FALL

**Fertilisation:** None

**Pesticides:**

- Roundup WeatherMax (1.74 l/ha): May 15
- Authority 480 EC (0.29 l/ha): June 1
- Tough (1.48 l/ha): June 14
- Select (0.19 l/ha): June 14
- Reglone Ion (2.2 l/ha): September 10, 16 & 27

**Harvesting:** October 3, 2024

Table 1. Summary of yields per treatment

Treatment	Yield (bu/ac)	Yield increase (bu/ac)
Untreated check	35.7	-
AGTIV® THRIVE™	39.7	4
Competitor inoculant D	38.8	3.1

Month	Precipitation (mm)	Irrigation (mm)
May	186.4	
June	75.7	12.5
July	100.7	134.7
August	41.8	14.6
September	71.9	
<b>TOTAL</b>	<b>476.5</b>	<b>161.8</b>

► PLOT TRIAL

<b>Research partners:</b>	Small Plot Inc
<b>Research sites:</b>	Vulcan, AB
<b>Treatments:</b>	a) Untreated check; b) AGTIV® THRIVE™ G CHICKPEA; c) Competitor inoculant D.
	*Products applied according to manufacturers recommended rate.
<b>Experimental design:</b>	Randomized Complete Block (RCB), 8 repetitions, 32.0 m <sup>2</sup> plots
<b>Variety:</b>	CDC Orion
<b>Previous crop:</b>	Lentil
<b>Seeding details:</b>	Seeded on May 11 with a plot drilling machine at a rate of 215 lb/ac in a loam soil (pH: 7.9, OM: 3.3%). Emergence on May 30.

OPERATIONAL NOTES AND RAIN FALL

<b>Fertilisation:</b>	19-40-10-12 kg/ha : May 11
<b>Pesticides:</b>	Assure II (0.75 l/ha): July 5
<b>Harvesting:</b>	September 2, 2023

Month	Precipitation (mm)
May	4.3
June	43.4
July	37.8
August	31.5
<b>TOTAL</b>	<b>117.0</b>

Table 1. Summary of yields per treatment

Treatment	Yield (bu/ac)	Yield increase (bu/ac)
Untreated check	6.1	-
AGTIV® THRIVE™ G CHICKPEA	6.3	0.2
Competitor inoculant D	6.0	-

► PLOT TRIALS

<b>Research partner:</b>	Prairie Ag Research
<b>Research site:</b>	Lethbridge, AB
<b>Treatments:</b>	a) Untreated check; b) AGTIV® THRIVE™ CHICKPEA*; c) Competitor inoculant B*.
	*Products applied according to manufacturers recommended rate.
<b>Experimental design:</b>	Complete Randomized Block Design, 6 repetitions, 12 m <sup>2</sup> plots.
<b>Variety:</b>	Alma Clearfield Kabuli
<b>Previous crop:</b>	Fallow
<b>Seeding details:</b>	Seeded on May 23, with a cone seeder at a rate of 150 kg/ha in a clay loam soil (pH: 7.4, OM: 4%). Emergence on June 3.

OPERATIONAL NOTES AND RAIN FALL

<b>Fertilisation:</b>	None
<b>Pesticides:</b>	• Glyphosate: May 20 • Odyssey and Merge: June 30
<b>Harvesting:</b>	September 14, 2022

Month	Precipitation (mm)
May	35.8
June	114.5*
July	57.4
August	31.7*
<b>TOTAL</b>	<b>239.4</b>

\*Plots were irrigated during those months.

Table 1. Summary of yields per treatment

Treatment	Yield (bu/ac)	Yield increase (bu/ac)
Untreated check	36.1	-
AGTIV® THRIVE™ CHICKPEA	43.2	7.1
Competitor inoculant B	41.2	5.1

► PLOT TRIALS

**Research partner:** Ag-Quest inc.

**Research site:** Taber, AB

**Treatments:** a) Untreated check;  
b) AGTIV® THRIVE™ CHICKPEA\*;  
c) Competitor inoculant B\*.

**Experimental design:** Complete Randomized Block Design, 6 repetitions, 10 m<sup>2</sup> plots.

**Variety:** CDC Pearl

**Previous crop:** Rye

**Seeding details:** Seeded on May 27, with a cone seeder at a rate of 150 kg/ha in a sandy loam soil (pH: 7.9, OM: 2.1%).  
Emergence on June 13.

\*Products applied according to manufacturers recommended rate.

OPERATIONAL NOTES AND RAIN FALL

**Fertilisation:** P<sub>2</sub>O<sub>5</sub> (36 kg/ha): preseeding

**Pesticides:**

- Authority: May 28
- Roundup Transorb: May 28
- Select: June 27
- AMIGO: June 27
- Solo: June 28
- Merge: June 28
- TOUGH: July 2

**Harvesting:** September 23, 2022

Month	Precipitation (mm)
May	17.5
June	140.5*
July	204.3*
August	84.9*
September	9.7
<b>TOTAL</b>	<b>456.9</b>

\*Plots were irrigated during those months.

Table 1. Summary of yields per treatment

Treatment	Yield (bu/ac) <sup>1</sup>	Yield increase (bu/ac)
Untreated check	37.2 <sup>a</sup>	-
AGTIV® THRIVE™ CHICKPEA	41.7 <sup>b</sup>	4.5
Competitor inoculant B	39.4 <sup>ab</sup>	2.2

<sup>1</sup> Yields with the same letter are not statistically different according to a LSD test (p≤0.05).

EFFICACY REPORT  
2018 – MYCORRHIZAL & RHIZOBIAL INOCULANT

► PLOT TRIALS

**Research partner:** Wheatland Conservation Area

**Research site:** Swift Current, SK

**Treatments:** a) AGTIV® THRIVE™ CHICKPEA applied at 5 lb/ac\*;  
b) AGTIV® FIELD CROPS • Granular applied at 5 lb/ac\*;  
c) Competitor inoculant A applied at 5 lb/ac\*;  
d) Competitor inoculant B applied at 3.6 lb/ac\*.

\*Products applied according to manufacturers recommended rate.

**Experimental design:** 6 replicated plots per treatment in randomized complete block design.

**Variety:** Leader

**Previous crop:** Canola stubble

**Seeding details:** Seeded with cone seeder May 14, 2018, at 40 plants/m<sup>2</sup> with 22.8 cm row spacing.

OPERATIONAL NOTES AND RAIN FALL

**Fertilisation:** 11-52-0 (96 lb/ac)

**Pesticides:** Authority (118 ml/ac): May 14

**Harvesting:** Combined on August 16, 2018.

Month	Precipitation (mm)
May	13
June	28
July	48
August	19
<b>TOTAL</b>	<b>108</b>

Table 1. Summary of yields per treatment

Treatment	Yield (bu/ac)	Yield (kg/ha)
AGTIV® THRIVE™ CHICKPEA	28.0	1882
AGTIV® FIELD CROPS • Granular	26.0	1747
Competitor inoculant A	28.8	1935
Competitor inoculant B	26.1	1754



EFFICACY REPORT  
2018 – MYCORRHIZAL & RHIZOBIAL INOCULANT

► PLOT TRIALS

**Research partner:** Prairie Ag Research

**Research site:** Lethbridge, AB

**Treatments:** a) AGTIV® THRIVE™ CHICKPEA applied at 5 lb/ac\*;  
b) AGTIV® FIELD CROPS • Granular applied at 5 lb/ac\*;  
c) Competitor inoculant A applied at 5 lb/ac\*;  
d) Competitor inoculant B applied at 3.6 lb/ac\*.

\*Products applied according to manufacturers recommended rate.

**Experimental design:** 6 replicated plots per treatment in randomized complete block design.

**Variety:** Alma

**Previous crop:** Canola stubble

**Seeding details:** Seeded with cone seeder May 22, in 2 X 8 m plots.

Table 1. Summary of yields per treatment

Treatment	Yield (bu/ac)	Yield (kg/ha)
AGTIV® THRIVE™ CHICKPEA	73.0	4906
AGTIV® FIELD CROPS • Granular	71.5	4805
Competitor inoculant A	71.3	4791
Competitor inoculant B	71.0	4771

OPERATIONAL NOTES AND RAIN FALL

**Fertilisation:** None

**Pesticides:** • Agral 90: May 15  
• Aim: May 15  
• Glyphosate: May 15  
• Merge: June 5  
• Odyssey: June 5

**Harvesting:** September 17, 2018

Month	Precipitation (mm)
May	25.1
June	45.8
July	13.6
August	21.5
September	19.1
<b>TOTAL</b>	<b>125.1</b>

# EFFICACY REPORT 2025

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**PTAGTIV.COM**  
**1 866 454-5867**  
**info@ptagtiv.com**