

# AGTIV®



**EFFICACY REPORT 2026**  
**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 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 trial<sup>1</sup>

| 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 <sup>b</sup>      |                      | 39.4 <sup>ab</sup> |      |
| 2023 | Vulcan        | CDC Orion         | 6.3                    |                      |                    | 6    |
| 2024 | Taber         | 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).

EFFICACY REPORT  
2024 – MYCORRHIZAL & RHIZOBIAL INOCULANT

► PLOT TRIAL

**Research partner:** Ag-Quest

**Research site:** Taber, AB

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

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

**Experimental design:** Randomized Complete Block,  
8 repetitions, 10.5 m² 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;<br>b) AGTIV THRIVE® G CHICKPEA;<br>c) Competitor inoculant D.                                                   |
|                             | *Products applied according to the manufacturer's recommended rate.                                                                 |
| <b>Experimental design:</b> | Randomized Complete Block,<br>8 repetitions, 32 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<br>in a loam soil (pH: 7.9, OM: 3.3%).<br>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           | -                      |

# EFFICACY REPORT

## 2022 – MYCORRHIZAL & RHIZOBIAL INOCULANT

### ► PLOT TRIALS

|                             |                                                                                                                               |
|-----------------------------|-------------------------------------------------------------------------------------------------------------------------------|
| <b>Research partner:</b>    | Prairie Ag Research Inc.                                                                                                      |
| <b>Research site:</b>       | Lethbridge, AB                                                                                                                |
| <b>Treatments:</b>          | a) Untreated check;<br>b) AGTIV THRIVE® CHICKPEA*;<br>c) Competitor inoculant B*.                                             |
|                             | *Products applied according to the manufacturer's recommended rate.                                                           |
| <b>Experimental design:</b> | Randomized Complete Block Design,<br>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<br>150 kg/ha in a clay loam soil (pH: 7.4, OM: 4%).<br>Emergence on June 3. |

### OPERATIONAL NOTES AND RAIN FALL

|                       |                                                                                                           |
|-----------------------|-----------------------------------------------------------------------------------------------------------|
| <b>Fertilisation:</b> | None                                                                                                      |
| <b>Pesticides:</b>    | <ul style="list-style-type: none"><li>• Glyphosate: May 20</li><li>• Odyssey and Merge: June 30</li></ul> |
| <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                    |

# EFFICACY REPORT

## 2022 – MYCORRHIZAL & RHIZOBIAL INOCULANT

### ► PLOT TRIALS

**Research partner:** Ag-Quest

**Research site:** Taber, AB

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

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

**Experimental design:** Randomized Complete 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.

### 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

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).

| 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.

**EFFICACY REPORT**  
**2018 – MYCORRHIZAL & RHIZOBIAL INOCULANT**

► PLOT TRIALS

**Research partner:** Wheatland Conservation Area Inc.

**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 the manufacturer's recommended rate.

**Experimental design:** Randomized Complete Block Design, 6 repetitions.

**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 Inc.

**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 the manufacturer's recommended rate.

**Experimental design:** Randomized Complete Block Design, 6 repetitions.

**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 2026

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RD20260219