

## How is **Awaken ST** different from other seed-applied nutrients on the market?

Awaken ST is the first liquid seed-applied nutrient to be registered in Canada. It underwent CFIA's registration process, which included efficacy field test data and regulatory review over several years.

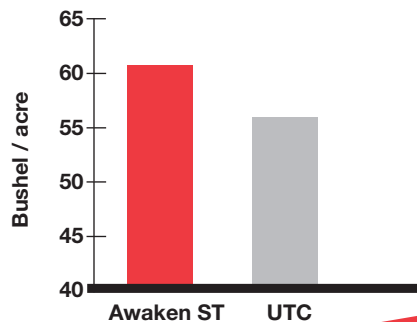
Awaken ST features the patented zinc ammonium acetate (ZAA) compound. Zinc is the micronutrient that drives auxin production and ZAA is the most effective form of zinc to increase plant auxin levels. Auxins promote cell division leading to increased lateral roots, and a more extensive root system for quicker emergence and greater plant biomass.

ZAA also helps to pull nutrients into the soil solution, making them more available to the roots to promote better plant health and vigour.

## What can I expect to achieve using **Awaken ST**?

Awaken ST loads seed with nutrients to enhance early plant growth, which contributes to strong yields at the end of the season.

Research conducted at North Dakota State University on hard red spring wheat showed a significant increase in plant emergence and an eight percent yield increase when compared to untreated seed. Trials in Canada over the past several years show that Awaken ST on spring wheat gives a four to five percent yield increase.



Source: Dr. Joel Ransom, NDSU 2009

Awaken ST delivers this yield advantage through quicker seedling emergence and root growth, producing a competitive crop that is able to better withstand stresses such as drought or excessive moisture.

## What growers are saying about **Awaken ST**

Nutritional seed treatments are a new technology gaining popularity among growers and proving effective in fields across Canada. Here's what some growers are saying about their experience with Awaken ST:

*“The wheat that was treated with Awaken ST was the most consistent and even wheat crop that we have ever produced on this field.”*

— Tim Pizzey, Inland Seeds Corp., Binscarth, MB

*“I was also very pleased with how quickly the crop emerged. The yield was also great at 58 bu/ac (#1 high protein wheat) even with 10% hail damage to the field.”*

— Clint Porter, Landis, SK

*“We saw an increase in yield by four bushels per acre with Awaken ST. It definitely paid for itself in a hurry. We also noticed quicker emergence and the plant count was significantly higher in our wheat treated with Awaken ST than without.”*

— Rory Gregoire, Gregoire Seed Farms Ltd., North Battleford, SK



**AWAKEN. ST**



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# Nutrition that grows results

## Answering your questions about **Awaken ST:**

Seed-applied nutrition that invigorates seed for **vigorous plants** and **strong yields**

# AWAKEN. ST



# Introducing Awaken ST

Awaken® ST is the only liquid seed-applied nutrient approved by the Canadian Food Inspection Agency (CFIA) and unlike any other product on the market. It is a balanced micronutrient package containing 5% zinc plus boron, copper, iron, manganese and molybdenum with a patented zinc ammonium acetate complex, offering growers an extra level of performance.



## What crops can it be used on?

Awaken ST consistently performs on wheat, barley, oat and corn crops. Independent research and CFIA registration trials show increased stand establishment, vigour, and root and shoot development.

## How is Awaken ST applied?

Awaken ST can be applied on its own, blended or applied sequentially with traditional fungicide and/or insecticide seed treatments. It is available in a convenient, easy flowing, clear liquid, which makes it simple to apply, tank-mix and clean up. The use rate for wheat, barley, oats and corn is 260-390 mL per 100 kg of seed.

## Frequently Asked Questions About Seed-Applied Nutrition

### What is it?

Seed-applied nutrition is a new, innovative class of seed treatment (also called “nutritional seed treatment”) that puts nutrients right where they are needed during germination – on the seed.

### How does seed-applied nutrition work?

It coats the seed with a nutritional package, giving germinating plants immediate access to nutrients well before they are able to utilize nutrients in the soil. Seed-applied nutrition starts to work the same day the treated seed goes into the ground, giving crops a vigorous start and their best chance at a strong yield.

## Do I need to handle Awaken ST treated seed differently?

No, Awaken ST can be applied using traditional treating equipment – in contrast to other registered seed-applied nutrients, which are only available in powder formulations and more difficult to apply.

## What are the benefits of using seed-applied nutrition?

Seed-applied nutrition is essential for progressive growers looking for maximum yield and return on investment. With the trend toward early seeding, growers can get into the field with confidence regardless of soil conditions by using seed-applied nutrition to get the crop off to the best possible start.

The result is increased emergence, stand uniformity, stress tolerance, root and shoot growth as well as reduced time to maturity, which can all boost yield potential.

An added benefit of quicker and even crop emergence is helping other aspects of your pest control program, including better crop competition for enhanced herbicide performance and even leaf staging for efficacious fungicide applications.

## Can I tank-mix Awaken ST with other seed treatments?

Yes, Awaken ST is compatible with all major conventional seed treatments, including: Vitaflo 280, Raxil MD, Raxil WW, Dividend XL, Cruiser Maxx Cereal, Cruiser Maxx Vibrance and Insure.



Awaken ST consistently supports a more extensive root system.

### Untreated Check

### Awaken ST



## Do all seed-applied nutrients offer the same benefits?

Not all nutritional seed treatments are created equally – be sure to make an informed choice. Only seed-applied nutrients that are approved by the CFIA have undergone the Agency’s stringent safety assessment process and efficacy evaluation.

Formulation is also a key consideration. For instance, liquid seed-applied nutrient, as opposed to a powdered formulation, mixes easily with other products, can be applied using “traditional” treating equipment, and is quick to clean up.

## Does seed-applied nutrition replace other nutrient applications?

Seed-applied nutrients are used in addition to other nutrient applications. They give germinating seed critical access to the nutrients it requires immediately – well before it is able to utilize nutrients in the soil.