



# Holmes Agro-Nomic Newsletter

April • 2026

Have you  
scheduled your  
soil sampling?

## Sulphur: The Overlooked Fourth Macronutrient

Everyone agrees that nitrogen, phosphorus, and potassium are the three primary macronutrients, however some would argue that sulphur is the fourth. This is particularly problematic in Southern Ontario, where the amount of sulphur from the atmosphere which was being used in crops has declined by an estimated 70-90% since the 1980's because of more strict emissions standards on coal power plants. As plant-available sulphur (sulphate) is negatively charged, it does not bind to your soil the same way phosphorus does. This means that year after year, the sulphur that crops were once getting from the atmosphere (through deposition) has been slowly going away, while many of our sulphur application rates have remained the same or not kept up with both leeching and plant removal. Without addressing this shift, hidden yield loss is becoming more common, especially in lighter soils.

In a study at Purdue University in 2017, researchers noted reduced weed pressure due to canopy closure, increased size, pod retention, and more branching in soybeans with 20lbs of sulphur applied when compared to an untreated check. When considering Liebig's barrel (yield being limited by the least available nutrient), this indicates that a sulphur deficiency can have significant impacts on yield. While the amount of sulphur that should be added to each field is completely dependent on the soil test, it can be done with yearly applications of elemental sulphur such as TigerSul S85 XP, and in season through products such as AMS and ATS. Do not hesitate to reach out to your Holmes Agro agronomist today to learn how to identify sulphur deficiencies in your field, and the best way to start building it back up.

## 2026 Compaction Day

The Georgian Central branch of the Ontario Soil and Crop Improvement Association is dedicated to seeking, testing, and adopting optimal farm production and stewardship practices for local agriculture. We are hosting a Soil Compaction Day on July 16, 2026, at Tupling Farms in Dufferin County to align with this vision. Attendees will see real-time comparisons of equipment and tire technologies in applicable, practical scenarios. This will be a hands-on educational event dedicated to raising awareness about soil compaction through equipment demonstration and data comparisons. This event is expected to draw hundreds of people from Grey, Bruce, Simcoe, and Dufferin Counties. Holmes Agro is excited to be a partner with OSCIA for this event and looks forward to seeing everyone there! Visit [Grey Ag Services](#) to learn more about this event or express interest in volunteering!

## Strong Stands, Smart Splits, Better Yields – Alex Zelem, C&M Seeds

### Stand Assessment

Spring is here—making it the ideal time to evaluate your wheat stand. A proper stand assessment helps guide key management decisions, including nitrogen and sulphur applications, crop protection, and plant growth regulator (PGR) use.

A strong stand typically has about 16–21 evenly distributed plants per foot (assuming one tiller per plant). Stands exceeding 66 heads/ft<sup>2</sup> may be prone to lodging, while those below 50 heads/ft<sup>2</sup> often require tiller encouragement to reach full yield potential. In most cases, lodging is caused by overly dense stands with thin stems—not excessive height.

### Nitrogen & Sulphur Strategies

Estimating head counts allows for more precise fertility planning. Split applications of nitrogen are preferred over a single pass, offering economic benefits, improved nutrient efficiency, reduced environmental impact, better standability, and more consistent protein levels. This approach aligns nutrient availability with peak crop demand.

Total nitrogen and sulphur requirements will vary depending on yield goals, protein targets, soil type, existing fertility, crop rotation, and manure history. General guidelines are as follows:

Soft Red: 120–150 lbs N/ac, 12–15 lbs S/ac (10:1 N/S Ratio) | Hard Red: 150–170 lbs N/ac, 21–25 lbs S/ac (7:1 N/S Ratio)

### Management by Stand Density

<50 heads/ft<sup>2</sup>: Encourage tillering. Apply ~60% of total nitrogen at green-up and 40% at GS32. Include sulphur in the first application.

>66 heads/ft<sup>2</sup>: Avoid overstimulation. Consider a 40/60 split or delay the first application to limit additional tillering. A PGR may be warranted, depending on the variety.

For additional support, use the [Seedingrate.ca](#) web-based app, this is a great tool for growers who are **Serious about Wheat!**

## #WatchUsGrow – We're Hiring

Holmes Agro is hiring seasonal AZ/DZ Driver-Operators for the growing season. We're looking to add to our team of dedicated and reliable individuals who provide excellent customer service and represent Holmes Agro. In this role, you'll not only drive but also serve as an ambassador for Holmes Agro, ensuring great service for our valued customers. The position offers flexibility, making it ideal for those combining it with other seasonal work. Explore exciting career opportunities at

[www.holmesagro.com/careers](http://www.holmesagro.com/careers) or submit your resume to [WatchUsGrow@holmesagro.com](mailto:WatchUsGrow@holmesagro.com).

\*\*\*\*\* Check the website [holmesagro.com](http://holmesagro.com) for general information and upcoming important dates \*\*\*\*\*

## Spring Burndown: Timing, Tillage, and Residual Decisions – Rob Miller, BASF Canada

As spring approaches, Ontario growers are once again thinking of weed control. Last fall's dry conditions, combined with softer commodity prices, resulted in many skipping the fall herbicide pass. Now, winter annual and perennial weeds such as dandelion, Canada fleabane, chickweed, and perennial sow-thistle will be challenging to control.

While vertical tillage and high-speed discs can help prepare seedbeds, they are not aggressive enough to reliably uproot deep-rooted weeds. In fact, tillage often stimulates additional annual weed flushes, making residual herbicides an essential part of a strong spring program. If planning to conduct any vertical tillage, it is best to apply prior to, and wait 3 days, if possible, to allow the herbicide to work. As soil temperatures rise, apply burndown products before Canada fleabane begins to bolt, and be sure to use at least two modes of action for effective control.

### START CLEAN, STAY CLEAN

Spring is a busy time, and soybeans are usually the last crop to be sprayed. By utilizing soil-applied residual herbicides, growers can:

- Reduce the urgency to spray in non-ideal conditions and gain more flexibility during weather or equipment delays.
- Reduce selection pressure on in-crop herbicides.
- Maintain weed-free conditions during the crop's critical weed-free period.

### APPLICATION TIPS FOR SPRING SUCCESS

- Apply early, especially in horticultural crops and dry beans, and ensure product rates are matched to weed size and density; do not reduce glyphosate rates.
- Use proper adjuvants—not all are interchangeable.
- Target warm, sunny conditions and avoid large temperature swings.
- Prioritize spray coverage: contact herbicides such as Eragon® Plus or Integrity® may require 20 gal/ac water on larger weeds.
- Record detailed application and field notes, including escapes and unusual species and plan for a follow-up pass if needed.
- Follow label guidelines, including required pre-plant intervals.

Proper weed identification is key to selecting the right active ingredient and herbicide timing. Resistant weed testing is available through contacting Holmes Agro or your BASF representative.

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## Population Matters: Fine-Tuning Seeding Rates in Corn and Soybeans

Adjusting your seeding rates is one way to increase yield but ensure you're aligning your seeding rate with your yield environment and adjusting your other management factors to reflect that, e.g. higher populations increase the need for fungicide, or a different hybrid that can handle higher populations

When it comes to corn, seeding rate decisions have become more straightforward. Years of research show clear yield benefits from increasing plant populations, supported by modern hybrids with superior stress tolerance. Corn yields continue to climb as populations increase, and optimal ranges have risen from ~30,500 plants/acre in the late 1980s to nearly 38,000 by the mid-2010s. Most farms now begin around 34,000 seeds/acre, adjusting up or down based on field productivity. While pushing populations higher will continue to drive yield, 30-inch rows will eventually limit how far populations can climb before crowding reduces ear size and overall performance.

Soybean seeding rates, on the other hand, require far more customization. Soybeans naturally have lower germination and higher early-season loss, so planting with an assumed 15% stand reduction is standard. Optimal rates can vary widely—from 80,000 to 220,000 seeds/acre—depending on soil type, tillage system, planter or drill accuracy, and residue conditions. Row width is also a major factor: narrower rows improve canopy closure but may raise white mold risk, while 30-inch rows reduce disease pressure but rely on today's bushier hybrids to fill gaps. Soybeans' ability to branch helps compensate in thinner stands, but establishing a strong, uniform stand remains key to protecting yield potential.

Accurate seeding rate starts at the planter. Checking your seeding rate, spacing, and depth field by field helped right-size populations to protect yield without unnecessary input costs and risks!

