



Advancing Eco Agriculture

# Nitrogen Efficiency

reduce leaching and carbon loss through nitrogen stabilization

AEA's Nitrogen Efficiency Program helps to maximize your nitrogen availability throughout the entire season.



## Rethink Nitrogen Management

[advancingecoag.com](http://advancingecoag.com)

Discover a stable, slow-release, plant-available approach to profitable nitrogen management.

## Get the most out of your nitrogen applications!



No matter the form applied, nitrogen only remains in the soil when bound or used by living things or soil carbon. Stabilize free nitrogen in the tank by compounding it with the humic substances found in AEA's HumaCarb™. Use Rejuvenate™ to promote quick microbial banking of nitrogen. Ensure complete nitrate conversion by including Rebound™ Molybdenum.

While it is not realistic to make universal recommendations given the wide variability in soils, crops, and management practices, we commonly observe that many growers are able to reduce nitrogen application rates by 30%-50% from conventional recommendations in the first year. Yet, these growers are able to produce the same or higher yields.

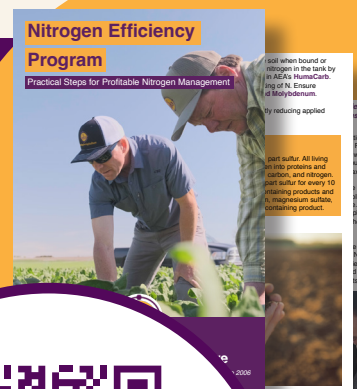
Specific application rates may vary according to practice and need. This calculation works in the majority of situations, but for farms that have already reduced N significantly through no-tilling, cover cropping, and soil health practices, reductions of 5-25% may be more appropriate.

## Here's How it Works...

1. Assess current nitrogen soil inventory through Haney Analysis or estimated nitrogen release soil test, including any nitrogen credits from cover crop, compost, and residues.
2. Reduce the total crop nitrogen plan to the degree you are comfortable (5-50%).
3. Subtract soil nitrogen credits from the nitrogen plan to find applied nitrogen units/lbs needed.
4. Translate from N units to volume of fertilizer material used, as the formula below is based on total product volume—not units/lbs of nitrogen.

### The rates are calculated according to this formula:

- $X$  = total amount of nitrogen product, not units of N
- Maintain 10 : 1 nitrogen to sulfur ratio unit per unit
- 3% of  $X$  as HumaCarb™
- 1 pint Rebound™ Molybdenum
- 3% of  $X$  as Rejuvenate™ (optional)



Scan to download our Nitrogen Efficiency booklet