



## Environmentally Smart Nitrogen (ESN) vs Liquid Nitrogen

*Springtime in the south generally means unpredictable weather that can run the extremes from widespread flooding to drought conditions. Even in 'normal' years, growers have a slim window of opportunity for nitrogen (N) applications.*

*Upfront liquid appears to cost less per unit N, but in reality it will cost you more in terms of lost N, additional labor, and reduced yields. ESN is a flexible solution that can be applied at your convenience and provides maximum N use efficiency.*

- ESN's very uniform particle size makes for fast, even spread patterns vs fighting plugged knives with liquid rigs and potential costly streaks in the field.
- ESN is clean and nondamaging to equipment, while liquid applications are messy and corrosive to equipment.
- ESN's polymer coating protects your equipment as well as your nitrogen investment from the heavy spring rains after fertilization.
- Liquid is highly leachable, especially in fertile sandy soils, which necessitates multiple applications, further increasing the application cost per acre (*labor, diesel, equipment repairs, etc*). There is also the potential for physically being unable to access a wet spring field, delaying your side dress application, and no doubt reducing your yield.
- ESN is designed and proven to minimize the loss mechanisms that conventional N sources are prone to, including leaching, volatilization and denitrification.

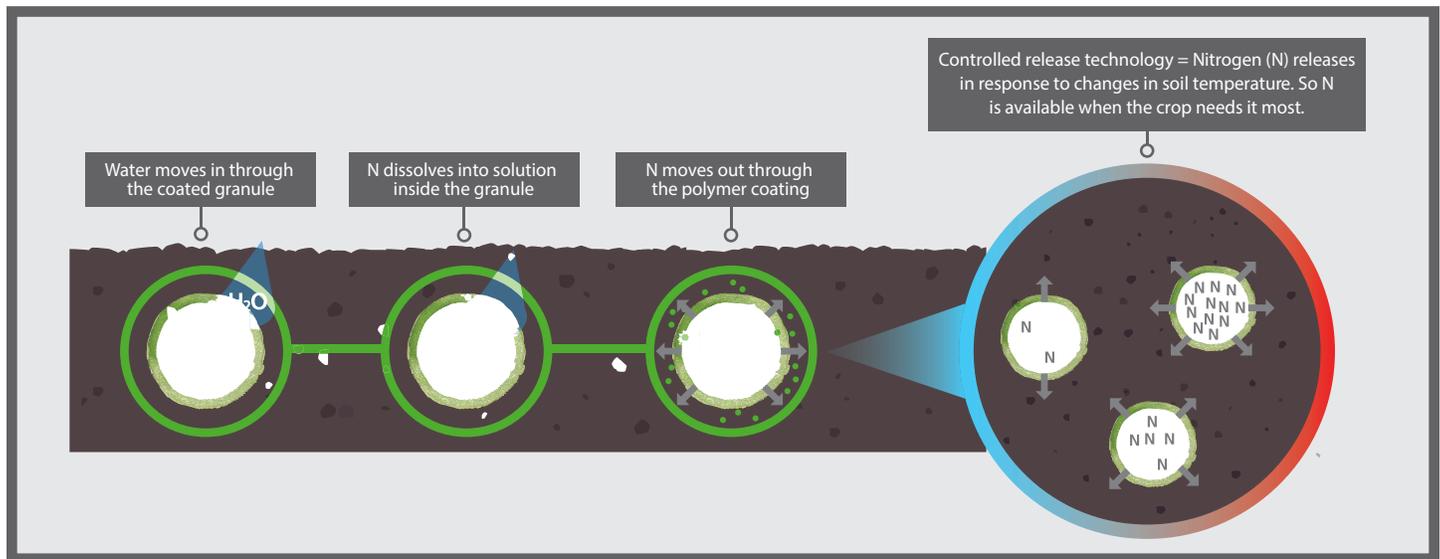
### What Growers are Saying about ESN

"We use ESN because of its controlled-release, which allows us to do one pass at application and reduce labor. Our first trial with ESN was during a wet season with a limited window for applying nitrogen to crops. After the success we saw during this first trial, we have continued to use ESN year after year. We also choose ESN because of the limited resources on our farm we can apply ESN at planting and don't have to worry about the availability of nitrogen to our crops for the rest of the season."

*Coley Bailey - grower  
Grenada, MS*

## How ESN Works

ESN is a urea granule comprised of 44% nitrogen, contained within a flexible polymer coating. This coating protects the nitrogen from loss mechanisms and releases nitrogen in response to plant demand. ESN gives crops the nitrogen they need, when they need it.



*Contact your local ESN Representative:*

## ESN Controlled Release Benefits

- As a controlled release product, ESN releases N in response to conditions that trigger plant growth.
- ESN provides application flexibility. It can be applied over a range of times during the year. And works well in a variety of weather conditions.
  - fall application (ESN won't release into cold or frozen ground)
  - wet conditions (ESN's polymer coating stops leaching while inhibitors may be affected by excess moisture),
  - dry conditions (ESN will conserve its N until enough moisture is available)
- ESN's polymer coated granule is designed to protect the N and allow it to release over 50 - 80 days; most inhibitors are effective for significantly shorter times.



For more information visit [www.SmartNitrogen.com](http://www.SmartNitrogen.com)