

Maximizing Cotton Performance with ESN

Benefits Of Using ESN Technology On Cotton

ESN technology protects your nitrogen (N) investment from loss mechanisms, ensuring your cotton crop gets N when it needs it most. ESN goes beyond traditional nitrogen by allowing you to:

- Maximize Yield – ESN has been proven to increase yields by providing a continuous N supply when cotton needs it most
- Maximize Quality – ESN has been shown to improve fiber quality
- Reduce Applications – ESN can reduce the number of required applications while still realizing yield and quality benefits.
- Convenient Application Window – ESN can allow more flexibility in nitrogen application timing
- Protect the Environment and qualify for US Government Incentive payments

Cotton Use Recommendations

ESN's controlled nitrogen release provides flexibility in nitrogen application timing. It can be used to enhance nitrogen-use efficiency and crop performance in a variety of cultural practices. The options below give general guidelines for preferred use in cotton under different nitrogen-management strategies.

Pre-Plant Nitrogen Management:

- A single ESN application at planting time is convenient and saves operations in a growing crop. This protects N while providing a single N application option.
- Apply N at recommended rates using ESN to supply 80 – 100% of the total recommended N. Apply before or at planting. Incorporate for dryland or furrow-irrigated cotton and where possible for sprinkler-irrigated cotton.

Side-Dress Or Top-Dress Applications:

- Side- or top-dress ESN applications may provide better synchronization of N release with crop N demand and allows the grower to make in-season decisions based on crop stand establishment and water availability.
- Apply N at recommended rates in a blend with ESN comprising 70-90% of the total recommended N two to four weeks after planting to provide the best match between cotton N uptake and N release from ESN. For dryland cotton, incorporation is highly recommended where possible. For furrow irrigation, ESN should be applied before irrigation furrows are cultivated to incorporate ESN and move it out of the irrigation furrows. For sprinkler irrigation, incorporation is preferred but not essential.

Split Nitrogen-Application Strategies:

- Combining the N-loss protection of a side- or top-dress ESN application with the immediate N availability of a Pre-Plant application of conventional fertilizer provides maximum flexibility in N timing.
- Apply sufficient soluble nitrogen at planting to supply crop needs for the first few weeks of growth followed by the balance of the N requirement as a side- or top-dress ESN application at normal side-/top-dress time. This provides N protection for traditional application practices.

Every type of nitrogen fertilizer is applied and handled differently. These general use recommendations for ESN are based on optimal growing conditions. Your specific conditions and goals should be considered to achieve best results.

ESN Marketing Representative:

