## Evaluation of Untreated UAN, UAN + Hi-Test, and UAN + Source NBPT 20 on ammonia volatilization

**Objective:** To quantify Nitrogen loss from volatilization from three UAN fertilizer sources when surface applied. This research was carried out by the LSU AgCenter H. Rouse Caffey Rice Research Station in Crowley, LA.



**Products:** Hi-Test<sup>™</sup> and Source NBPT 20 are AAPFCO approved nitrogen stabilizers available from MicroSource.



## **Key Results**

- The maximum daily ammonia loss from untreated UAN occurred between 2-3 days after fertilization.
- Nitrogen loss from ammonia volatilization was significantly greater for untreated UAN than Hi-Test and Source NBPT 20.
- The NBPT found in Hi-Test and Source NBPT 20 significantly reduced ammonia volatilization 61% and 66%, respectively, when compared to untreated UAN.
- Hi-Test also contains dicyandiamide (DCD) a university documented and AAPFCO approved nitrification inhibitor to prevent further nitrogen loss from leaching and denitrification.

**Suggested Use Rates:** UAN Solution (28-32% N) **Source NBPT 20:** 1.5 quarts / ton • **Hi-Test:** 2 quarts / ton

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## **Managing Risk**



**Volatilization:** Nitrogen on the surface



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