

# Limus<sup>®</sup>

Nitrogen Management

## Enhanced Nitrogen Use Efficiency with Limus<sup>®</sup> Nitrogen Management

### Benefits of Limus Nitrogen Management

- Protection against loss of nitrogen, the most important element for plant development
- Optimal nitrogen availability during critical crop growth stages for more consistent yield
- Increased options for timing of nitrogen applications in your management system

Limus nitrogen management is a new product in nutrient management from BASF that protects urea and UAN fertilizers from ammonia volatilization. Limus nitrogen management contains a patented combination of two inhibitors; NBPT, the market standard, and NPPT, a new molecule from BASF, that together are more effective on the range of enzymes than a single inhibitor. This new technology builds on BASF's strong fertilizer history going back to the first synthesis of ammonia in 1913.

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For the 2015  
Growing Season

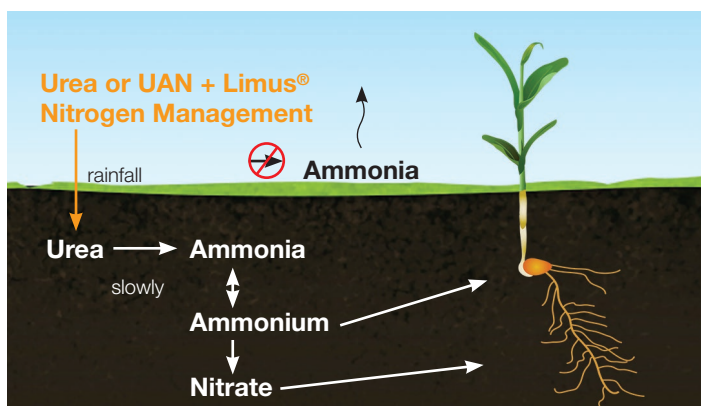
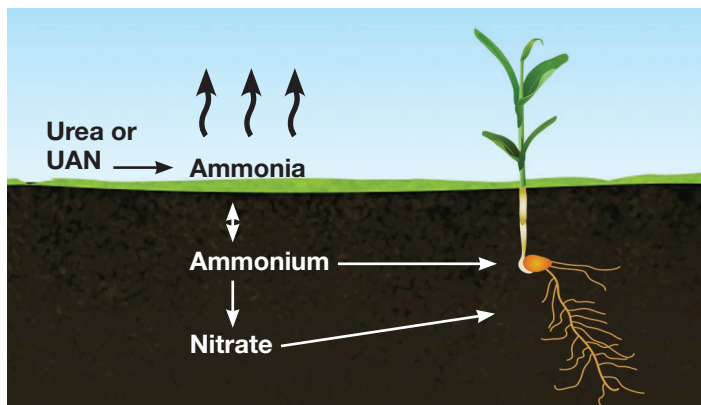
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Technical Information Bulletin

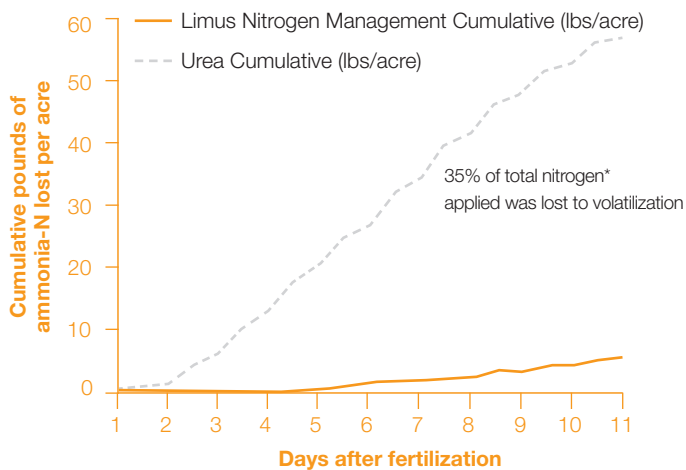
 **BASF**  
The Chemical Company

## Fate of Urea or UAN in the Nitrogen Cycle



Limus nitrogen management works by blocking a group of enzymes in the soil, preventing urea or UAN from being broken down to ammonia and allowing time for rainfall to move the fertilizer into the soil where the nitrogen is more protected. The end result is more nitrogen conserved for crop growth.

## Cumulative Nitrogen Loss of Untreated Urea Compared to Limus Nitrogen Management Treated Urea



\*Initial nitrogen application was 150 lbs/acre  
2013 North Carolina State University

## Best Use Recommendations

### Crops

- Corn
- Grain Sorghum
- Pasture/Hay
- Rice
- Wheat and Small Grains
- Others (N requiring crops)

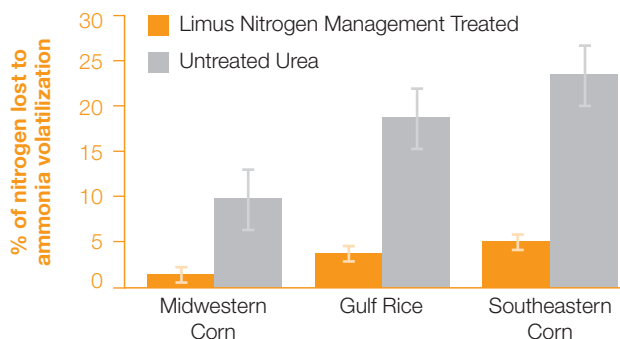
### Use Rate

- Urea: 3 quarts/ton
- UAN (28 or 32%): 1.5 quarts/ton

### Conditions that can Increase Ammonia Volatilization (N Loss)

- Heavy residue environments
- High temperature and humidity
- Soil moisture
- High soil pH
- Low CEC soils
- High organic matter

## Reduction in Ammonia Loss with Limus Nitrogen Management versus Untreated



**Limus®**  
Nitrogen Management

Refer to container label for use directions.

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