

# Stabilizer Products to Inhibit Volatilization

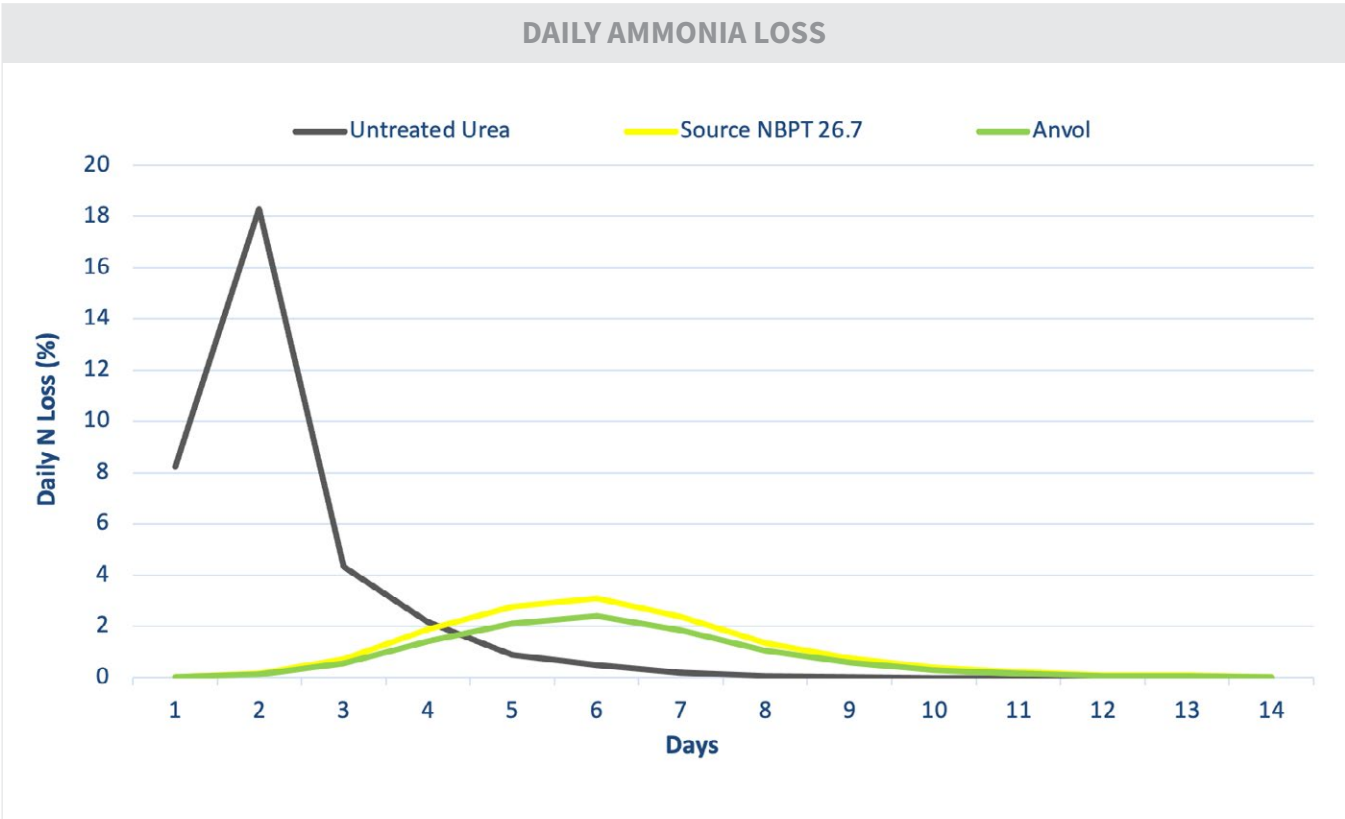
## Objective

Quantify daily and cumulative ammonia losses from urea-based N fertilizers in a controlled laboratory environment. This research was carried out by the Auburn University Crop, Soil and Environmental Sciences. 2022

## Methods

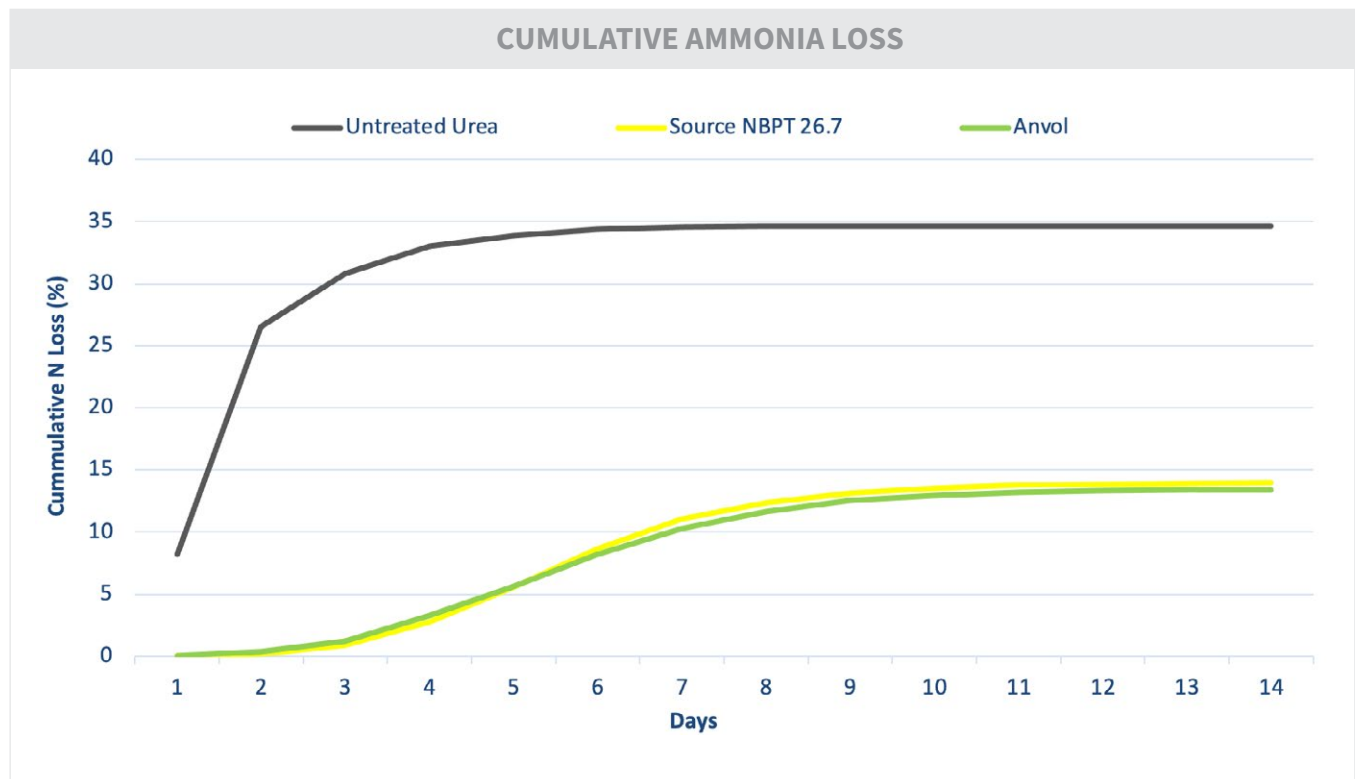
- Cabinet Temperature: 70°F
- Southeastern ultisol soil
- Randomized design, 3 replications
- Nitrogen Rate: 120 lbs N/A equivalent surface applied

Treatments		
Product	Rate	Active Ingredients
Urea (untreated)	-	-
Urea + Source NBPT 26.7	2 qts / ton	26.7% NBPT
Urea + Anvol®	1.5 qts / ton	16% NBPT, 27% Duromide



\*Anvol® is a registered trademark of Koch Agronomic Services, LLC

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## Key Results

- Daily Loss: nearly all ammonia loss occurred in first 6 days. Untreated urea experienced 77% of the loss by day 2, and 99% by day 6.
- Cumulative Loss: ammonia losses significantly higher for untreated urea, peaking at 35%. Curve flattens beyond 4 days; the cumulative loss from Day 4 - 14 is less than 2%.
- Nitrogen stabilizer treatments reduced ammonia volatilization by over 20%
- Total cumulative ammonia-N losses from treatments were not significantly different from each other, as displayed by the stacked lines.
- Source NBPT 26.7 was effective at reducing volatility loss, especially in the first 6 days of major loss. MicroSource is dedicated to offering the right product, at the right rate, to protect against the period of greatest risk.

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