

Environmentally Friendly Fertilizers

Enhanced Efficiency Nitrogen Fertilizer: Coated Urea

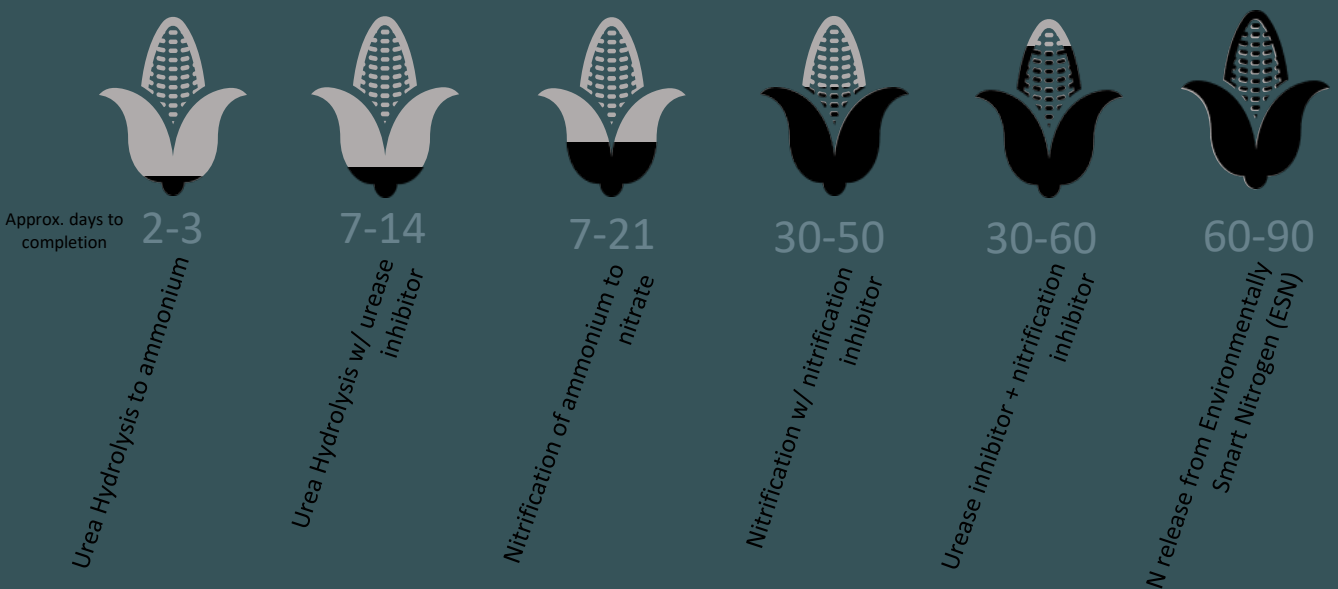
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INTRODUCTION

- Nitrogen (N) is an essential plant nutrient (most commonly deficient)
 - Makes up about half of global fertilizer sales
 - N use efficiency is low, much is lost to atmosphere /leached into water
- Environmental concerns: greenhouse gases, reactive gaseous N, water quality
- Enhanced Efficiency Fertilizers (EEF) should:
 - Increase N uptake by plants
 - Reduce environmental impacts of N fertilizers
 - Maintain or improve crop yield/quality
 - Be affordable (generally have higher cost, but needs to be offset by reduced rates and/or increased crop value)

Stabilizer and Inhibitors: Longevity



CONCLUSION

- EEFs have been effective to improve crop yield and/or quality, but not under all circumstances
- EEFs vary in mode-of-action and, thus, vary in effectiveness in various situations
- Greatest benefit is where N loss risk is high