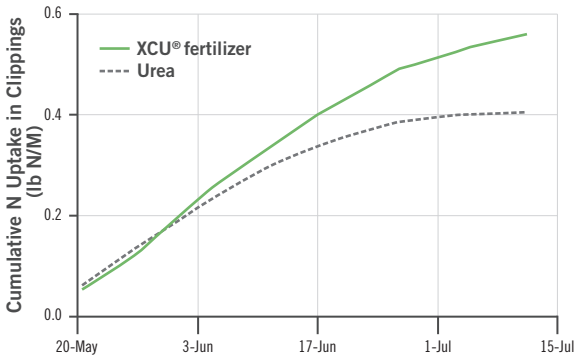


INCREASED NITROGEN UPTAKE



Methodology:

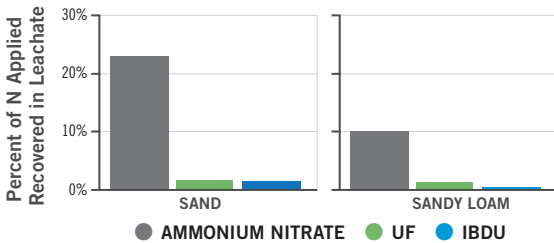
XCU® (PCSCU) fertilizer and urea were applied at a one-time N rate of 0.9 lb per 1000 sq. ft. Both were applied on May 14th. After application, the turfgrass was mowed once a week for nine weeks. Clippings were harvested after each mowing, and measured for N content.

Results:

Urea uptake 0.41 lb. of N
 XCU® fertilizer uptake 0.56 lb. of N
= 37% more uptake from XCU® fertilizer

Kentucky bluegrass, nitrogen uptake
 Source: Dr. Max Schlossberg
 Pennsylvania State University (2014)

REDUCED N LEACHING



Results: (Sand)

Ammonium nitrate, 23% loss
 UF slow release, 2% loss
 IBDU slow release, 2% loss

Results: (Sandy Loam)

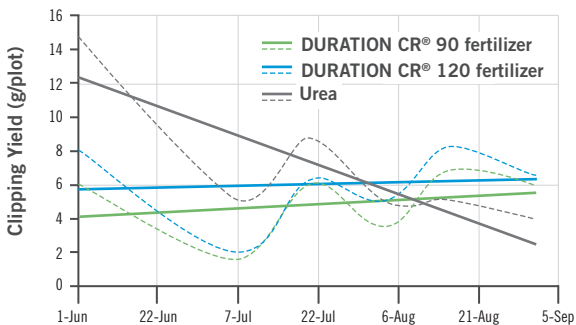
Ammonium nitrate, 10% loss
 UF slow release, 1.5% loss
 IBDU slow release, 1% loss

Methodology:

Ammonium nitrate, urea-formaldehyde (UF) and isobutylidenediurea (IBDU) fertilizers applied to sand and sandy loam-based golf greens. Measurements of percent of N applied that was recovered in leachate were taken in each soil type. Significantly more N loss in the uncoated ammonium nitrate.

Nitrogen leaching on golf greens
 Source: Adapted from K.W. Brown et al.,
Agronomy Journal 74:947-950
 Texas A&M University (1982)

CLIPPING YIELD



Methodology:

Urea and two DURATION CR® (90 and 120 day) fertilizer products were applied to Kentucky bluegrass. Clipping yield was measured from June 7th – September 5th.

Results:

The DURATION CR® fertilizer had far less clipping yield than urea, especially at the early stages. A more even growth with less “feast/famine” cycles was delivered by the DURATION CR® fertilizers.

Kentucky bluegrass clipping yield
 Source: Dr. Doug Soldat
 University of Wisconsin (2012)

The underlying data in university studies was provided under an agreement with the university and in some cases including financial support. Neither the university nor any person conducting research on their behalf endorse or recommend any product or service.