2025 PTI Results

Redox Bio-Nutrients RDX-N™ CAC Nitrogen Management Study

Objective: To evaluate the effect on yield and economics using Redox Bio-Nutrients RDX-N™(Figure 1.) in a corn after corn rotation. It is a plant-active botanical extract designed to elevate nitrogen use efficiency by enhancing the plant's natural metabolism. RDX-N is the first and only bio-stimulant of its kind, as it is not a microbe nor a chemical delay. It works by activating metabolic pathways that support sufficient nitrogen uptake, assimilation, and utilization all season long.

Figure 1. RDX-N Active Ingredients

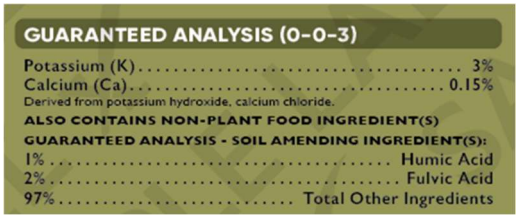
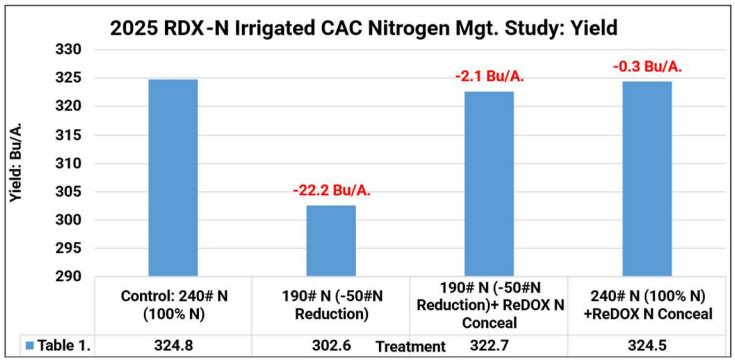


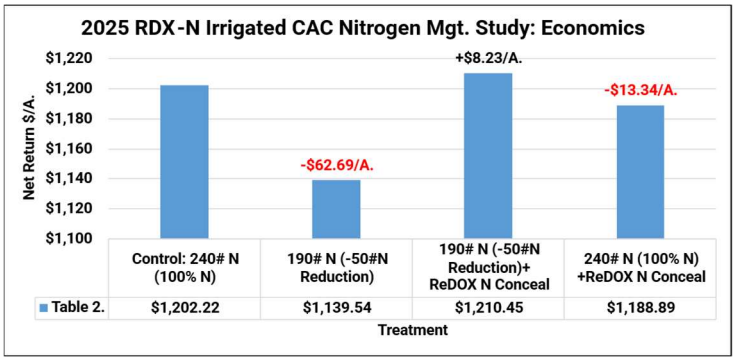
Figure 2. Furrow Jet® 3-way placement

For this agronomic study, nitrogen rate is evaluated at 100% full rates (240#N) as well as 50# N reductions (190# N). RDX-N was then tank-mixed with full rate nitrogen, as well as the 50#reduction. RDX-N was applied in-furrow at planting via Furrow Jet® treatments (Figure 2).

Results: Table 1. illustrates 100% nitrogen rates of 240#/A., offered yields of 324.8 Bu/A. Reducing nitrogen by 50#/A. resulted in yield losses of **-22.2 Bu/A.** with economic losses of **-62.69/A.** Adding RDX-N to the reduced 50# N rate brought overall yield to within **-2.1 Bu/A.** of the control and proved positive net returns of +$8.23/A. Full 100% rate of nitrogen plus RDX-N resulted in no additional yield gain and economic losses of **-$13.34/A.**

In summary Redox Bio-Nutrients RDX-N™ treatments did in fact offer the ability to reduce nitrogen rates without sacrificing economic losses.





Planting Date: May 10th Hybrid: DKC 68-35 Population: 36.5K Row Width: 30" Rotation: CAC Corn Price: $4.13 UAN 32%: $0.59/# RDX-N: $12.10/A.