

Technical Bulletin

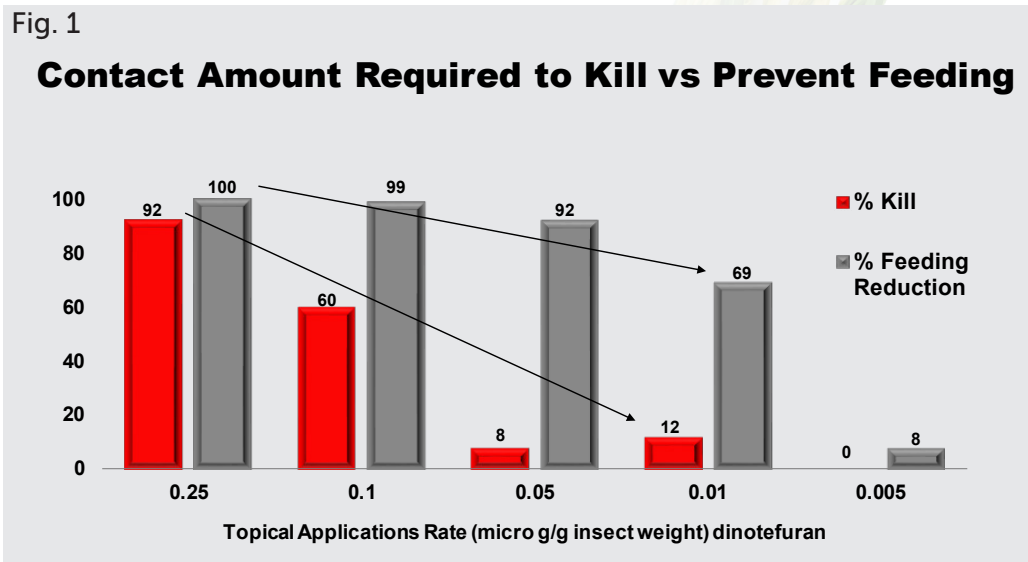


Quick Knockdown & Long Residual Anti-feeding = Greatest ROI!

When applied to the field, the active ingredient in TENCHU® 20SG (dinotefuran) causes quick kill of adult & nymphal stages of Rice Stink Bug (RSB). What happens after the 10-14 days of "direct kill" as the amount of active ingredient fades?

Data in Figure 1, demonstrate the quick kill and then, as the amount of active declines over time, the acute kill fades. It also demonstrates that even though there is not enough residue to cause quick kill, there is still enough to stop insect feeding. Dr. Mo Way, retired Professor of Entomology at the Texas AgriLife Research and Extension Center explains, "Even though they are not dead, they're not active and not doing any damage. They're not probing the grain and introducing the microorganisms to cause peck or breakage yield loss." Earl Garber, Field Services Manager with G & H Seed Company in Crowley, Louisiana echoed that experience; "We observed, and studies have shown, that TENCHU reduces the feeding following knockdown, which is important for protecting that grain."

Over time, the amount of TENCHU on the leaf surface fades and doesn't cause quick kill. However, even simple contact with a very small amount of TENCHU, triggers anti-feeding action. This leads to long residual for kernel protection and higher ROI!



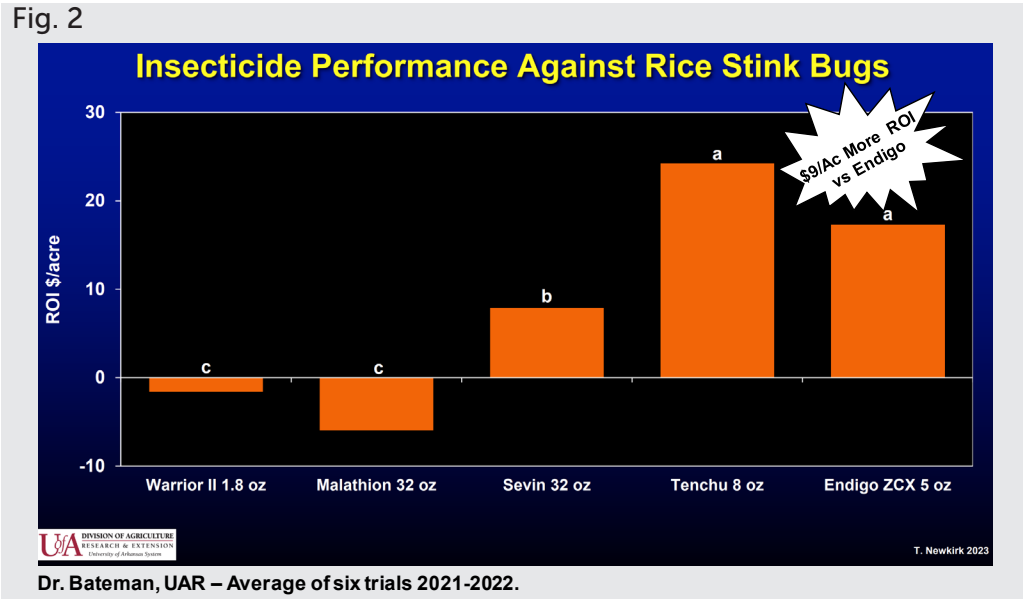
How Does The Return on Investment (ROI) of TENCHU 20SG Compare to Endigo ZCX?

This anti-feeding action is common within the neonicotinoid class of chemistry. For the past several years, Endigo ZCX (thiamethoxam + I-cy) has been used under Section 18 Label and Dr. Bateman, University of Arkansas, has been evaluating total economics also considering peck damage docking fees. If TENCHU & Endigo are both neonicotinoids, how can TENCHU result in greater ROI? (See Figure 2 on reverse side)

See Reverse

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Fig. 2



University of Arkansas data, presented by Dr. Don Cook at Mississippi Agricultural Crop Consultants Association and Louisiana Agricultural Technical & Mechanical Conference in February 2024, clearly shows the increased ROI from one application of TENCHU.

TENCHU 20SG Superior Anti-Feeding Activity

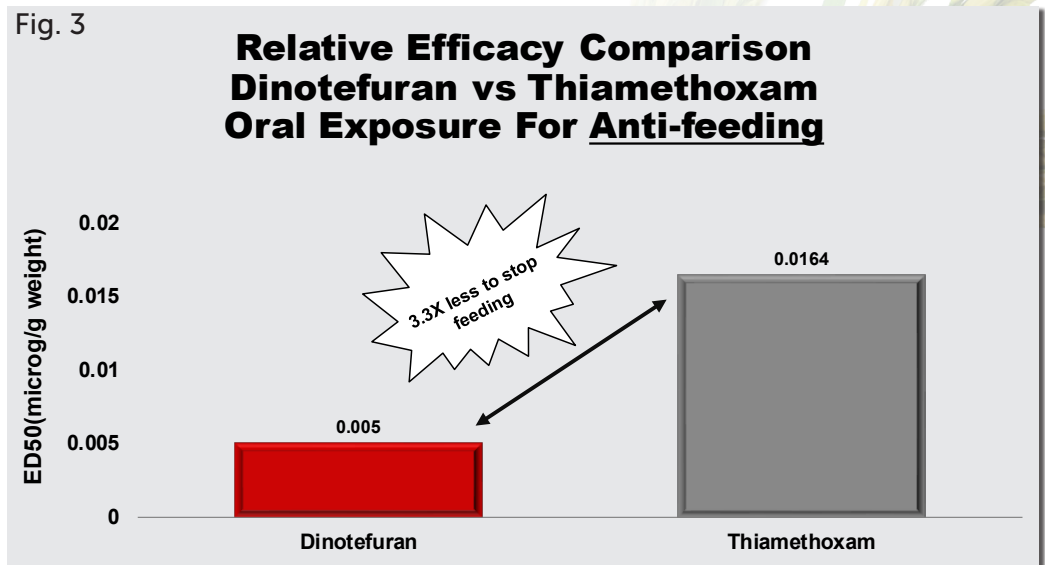
Both TENCHU and Endigo result in very quick "direct kill"; but what happens over time as both products are translocated from the leaf surface to the inside and throughout the crop? The feeding route then becomes the most important route of exposure and must have a dose on the first feeding probe to stop any further feeding. Data from a laboratory study demonstrated that it takes 3.3 times less dinotefuran to stop feeding vs thiamethoxam (Figure 3).

TENCHU is far more active than thiamethoxam. This leads to a greater reduction in peck damage.

Dennis Long, National Technical Service & Development Manager, further explains; "applying Endigo ZCX at 5 ounces per acre only provides 0.07 pounds of active ingredient of thiamethoxam. At 8 ounces per acre, TENCHU delivers 0.10 pounds of active ingredient of dinotefuran; that's 43% more neonicotinoid active ingredient.

When you combine that with the fact that dinotefuran is far more active than thiamethoxam, it's clear why TENCHU 20SG is the BEST, MOST PROFITABLE and ONLY CHOICE for RSB Control".

Fig. 3



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