

SEARCH FOR EXCELLENCE IN CROP PRODUCTION - LONG TERM NO-TILL VS. CONVENTIONAL TILL PLOT AND COVER CROP PLOT

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Crop production makes up approximately 50% of the total farm income for Lyon County and contributes \$30 million to the local economy. Based on this information, it is easy to see the significance crop production education has in Lyon County. Producers involved in crop production desire unbiased research-based information that helps them maximize farm profits. No-till crop production is one tool that many producers across Kansas utilize in an attempt to maximize the efficiency of their operations. However, no-till production has been slow to catch on in Lyon County and the rest of eastern Kansas. Due to this fact, I have focused my crop production educational efforts the past three years on no-till crop production via no-till and cover crop demonstration plots. The objective of the Long Term No-Till vs. Conventional Till Plot is to increase the awareness of no-till crop production in Lyon County. It is hoped that we will determine if there is any economic advantage to no-till crop production, if there is any yield variation between no-till and conventional till production and to develop a comparison of long term soil nutrient levels between the two crop production systems. Likewise, the Cover Crop Plot was developed to explore the use of cover crops in crop rotations, to measure how much biomass (organic matter) cover crops can produce, and to determine if any residual nutrients are produced that could lower fertilizer and herbicide costs. Data that has been collected from the plots has been shared at plot tours; in monthly Extension newsletters; at county, state and multi-state producer and Extension Agent meetings and in one on one producer consultations.