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ECONOMIC VIABILITY OF DIFFERENT SWEET CORN PRODUCTION SYSTEMS

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Abstract

Crops productions are influenced by several factors throughout the year, which directly affect yield and production costs. The objective of the study is to estimate the production costs and profitability indicators of the irrigated sweet corn crop. Data collected from two experiments were used. The treatments consisted of three soil tillage systems (conventional tillage; reduced tillage; no-tillage) and five water depths defined regarding the crop evapotranspiration (L1 – 25 %, L2 – 50 %, L3 – 75 %, L4 – 100 %, and L5 – 150 %). Total production costs and profitability indicators (gross profit, contribution margin, contribution margin index, and cost/benefit ratio) were evaluated. The total operational cost of sweet corn under no-tillage was 2,56 % lower in all water depths. The profitability indicators showed that the sweet corn crop in August - November does not present satisfactory profitability to the producer. This is observed by the cost-benefit ratio, which was, on average, 75.5 % higher than first season, and the contribution margin index ranging from 15.10 to 176.76 %.

Key words: conservation tillage, crop production costs, farmers decision, irrigation levels, *Zea mays*

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