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### **Influence of Harvest Date on Sugarbeet Yield and Quality**

Sugarbeet yields in Michigan have increased by approximately 25 percent during the past fifteen years which has put a strain on the processing capacity of Michigan Sugar Company. Earlier harvesting has become necessary to avoid pile spoilage that can occur in late March. Small plot replicated trials were conducted from 2010-2016 to determine sugarbeet yield and quality levels at early, mid and late harvest dates. The harvest date treatments were: August 15, September 1, September 15, October 1, October 15 and November 1. Temperatures and soil moisture levels were favorable for sugarbeet growth during the harvest period in each year. Averaged over six years (2010-2015), sugarbeet yields in small plot replicated trials increased by 1.35 tons per week and sugar content increased by 0.43 points per week. Recoverable sugar per ton increased by 7.8 pounds per week, and recoverable sugar per acre increased by 572 pounds per week. Control of diseases throughout this period is critical to achieve the continued yield and sugar increases. Michigan Sugar Company applies an early harvest premium to the crop harvested prior to permanent pile to incentivize grower participation. Early harvest has also proven to maximize grower income by distributing the fixed costs of campaign over a longer time period, as well as reducing pile storage losses. Data from 2016 trials will also be included when results are available.