

Corn Silage Yield and Nutritional Testing

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Each day agriculturists must work harder to produce more food with less land in order to meet the rapidly growing population. By determining which silage corn hybrid yields the highest per acre as well as analyzing the product for Total Digestible Nutrients (TDN), farmers can then use this data to determine which corn hybrid to plant to meet their operational needs. In this study, 23 silage corn varieties were selected for testing based on their high yield and TDN potential. Approximately 6,000 seeds of each variety were grown in the mid-section of a selected field. The corn matured in early fall, 140 days after planting. Hybrids were harvested when their moisture content reached an average of 65-70%. Each variety was weighed, a sample was taken and vacuumed sealed. The sealed samples were sent to an analytical lab to be tested for yield and TDN. Yield data was obtained by eliminating moisture and then weighing the samples. TDN is calculated through the use of a Near Infrared Ray (NIR) machine. The data showed that, of the 23 varieties, the 6829 hybrid has the highest yield and the 8614 hybrid has the highest TDN. This data could potentially assist farmers in selecting a corn hybrid to make their farms more efficient and sustainable. By selecting a hybrid with a high TDN, waste is decreased. By selecting a hybrid with a high yield, a farmer can maximize production.