

Abstract:

Declines in cabbage crop quality may result from delaying harvest to allow for greater total yield. A rapid and reliable method to estimate marketable yield before harvest not requiring direct weight measurements would assist cabbage growers and handlers in harvest scheduling. Results from three years of study during which a tool to estimate cabbage marketable yield was developed and tested are reported here. Relationships between head size and weight and marketable yield were exhaustively studied in a total of thirteen fresh- and kraut-type cultivars grown over a three-year period in northwest Ohio. The relationships were then used to develop a tool (table) which may be used to obtain rapid and accurate estimates of marketable yield. Estimates of marketable yield based on head size and density, the basis of the table, were compared to direct measures of yield taken with a scale in three studies conducted in 1999-2001 in northwest Ohio, including on commercial farms. The R² for estimated marketable yield based on head size and density and actual marketable yield in commercial fields and experimental plots ranged from 0.72 to 0.97. Also, 96% of the 510 individual estimates of marketable yield equaled actual yield values measured with a scale $\pm 10\%$. The tool reported here may allow for rapid, accurate, in-field estimates of cabbage marketable yield and is easily adjusted for local conditions.