Abstract

Evaluating fungicide efficacy in annual strawberry production systems can be labor intensive due to continuous harvesting over a relatively long season. The effect of reduced harvest number on the accuracy of least significant difference (LSD) separations for Botrytis fruit rot (*Botrytis cinerea*) incidence and marketable yield in fungicide efficacy studies was evaluated over three seasons. Fruit were harvested and graded twice a week for a total of 23 to 32 harvests each season. Data from each season were divided into different sample sets. Data from three different harvest periods (early, late, and whole season) and different harvesting frequencies (twice weekly, once weekly, every second, third, or fourth week) were compared with the complete data set (twice weekly for the whole season). Spearman's rank correlation and Pearson's product moment correlation coefficients were used to evaluate the correlation of the complete data sets with data sets from other sampling plans. Harvesting once a week for either the late- or whole-season periods accurately estimated LSD groupings for Botrytis fruit rot incidence among fungicide treatments. The precision of marketable yield estimates using once-a-week harvesting for the late or whole-season periods were relatively lower than for the incidence of Botrytis.