

Title Temperature effects on kiwifruit dry matter at harvest
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Abstract

Kiwifruit with a high percentage of dry matter at harvest have a higher concentration of soluble solids when eating ripe and are preferred by consumers. For this reason, growers in New Zealand are paid a price premium for fruit lines that meet specified dry matter standards. However, the ability of growers to meet these standards can be affected by the weather during the season, and in particular, by the temperature pattern. By comparing harvest data from ten years in one region with temperature records measured at a nearby meteorological site, we show that fruit dry matter at harvest is enhanced by warm springs, cool summers, and warm autumns. Consideration of a shorter data record from two other regions suggests that a single model could be used to describe dry matter at harvest in all three regions provided that the periods defining the spring, summer, and autumn seasons in each region are permitted to vary in a reasonable way.