Tree vigour influences disease susceptibility of 'Hass' avocado fruits

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Abstract

Differences in tree vigour as a result of feeder root destruction by *Phytophthora cinnamomi* were found to significantly ($P < 0.05$) influence disease susceptibility, fruit ripening rates and fruit size of 'Hass' avocado. Fruits from root rot-affected, non-vigorous trees had less anthracnose and took longer to ripen. However, they were probably unmarketable due to their small fruit size compared with fruits from healthy vigorous trees. Fruits from non-vigorous trees also had less pepper spot than vigorous trees, but only on the inside of the tree canopy. The increased disease resistance of fruits from non-vigorous trees was related to a 40% increase in the concentration of Ca in the fruit flesh.

Keywords: Colletotrichum gloeosporioides, Phytophthora, pepper spot, nutrition.

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