

Title Temperature effects on peel spotting in 'Sucrier' banana fruit
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Abstract

Banana fruit of the cultivar 'Sucrier' (*Musa acuminata*, AA Group) develops peel spotting at a relatively early stage of development (when the peel is about as slightly more yellow than green). Holding ripening bananas at 15 and 18 °C instead of room temperature (26–27 °C) only temporarily reduced spotting, but holding the fruit at 12 °C completely prevented it. The 12 °C treatment resulted in a lower level of total free phenolics, but had no effect on PAL or PPO activity. Transfer of banana fruit previously held at 12 °C to room temperature rapidly increased peel spotting. Transfer of bananas that had some spotting, from room temperature to 12 °C did not prevent further development of the spotting. It is concluded that holding spotless fruit at 12 °C prevents the spotting, although only if they are kept at that temperature, and that PAL and PPO activities seem not rate-limiting.