

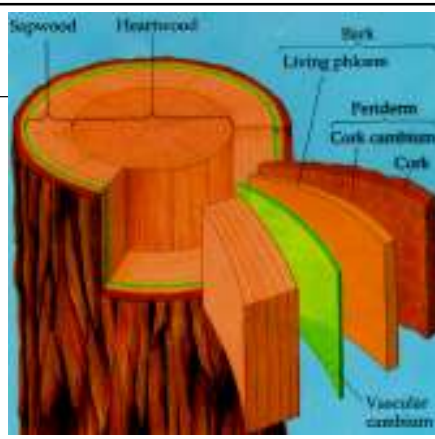
Girdling: A Sustainable Method for Increasing Fruit Tree Yield

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What is girdling?



The Trunk



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What is girdling?



Removal or restriction of a strip of bark

Why girdle?

Influencing fruit set, size, total yield,
harvest date...

- Grapes
- Peaches
- Apples
- Citrus

What about the avocado?



Avocado Girdling Study



Objective

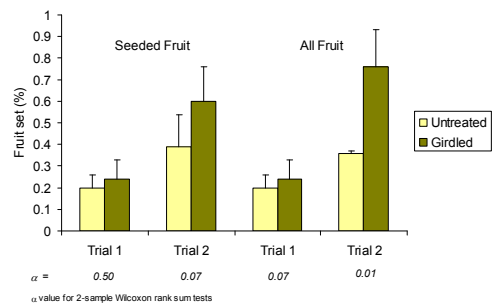
- determine effects of girdling on growth and physiology of 'Hass' avocado

Treatments

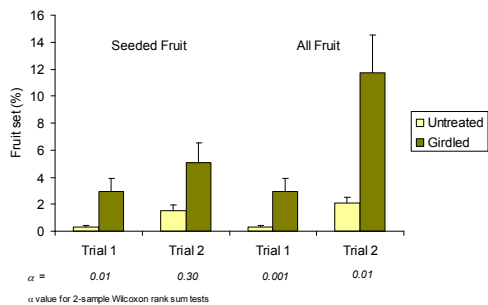
- Control (no girdling)
- Girdled pre-bloom (November)
- Girdled at full bloom (March/April)
- Girdled at peak fruitlet abscission (June/July)



Effect of Girdling at Full Bloom on Final Percent Fruit Set



Effect of Girdling at Peak Fruitlet Abscission on Final Percent Fruit Set



What *DIDN'T* Happen in Response to Girdling?

- Girdling did not result in a reduction in fruit size in terms of mass, length or diameter.
- Girdling did not result in a change in seed size in terms of mass or diameter.
- There was no inverse correlation between fruit size and fruit number per branch.

What *DIDN'T* Happen in Response to Girdling?

- The treatment did not significantly affect fruit size or retention of the preceding year's crop.



Indeterminate Inflorescences



Uses in Sustainable Agriculture

- Spatial and temporal changes in resource allocation due to girdling result in increased avocado yields without detrimental side effects.
- Applications...