



Propagating Dwarfing Olive Rootstocks and Establishing a Long Term Orchard

- Progress Report, July 21, 2016



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Objective

- Establish an orchard with dwarfing rootstocks:
 - Mechanical harvesting
 - General olive production





Mechanical Pruning & Harvesting 2008 - 2015

4 x 8 m = 335 trees/hectare

USDA-ARS NCGR
> 200 genetically different olives



Selected Rootstocks

- Nikitskaya
- *Olea cuspidata*
- Verticillium Resistant Oblonga
- Dwarf D/Little Ollie
- Manzanillo: ungrafted and self grafted controls*
- Sevillano: pollinizer*

*purchased from nursery

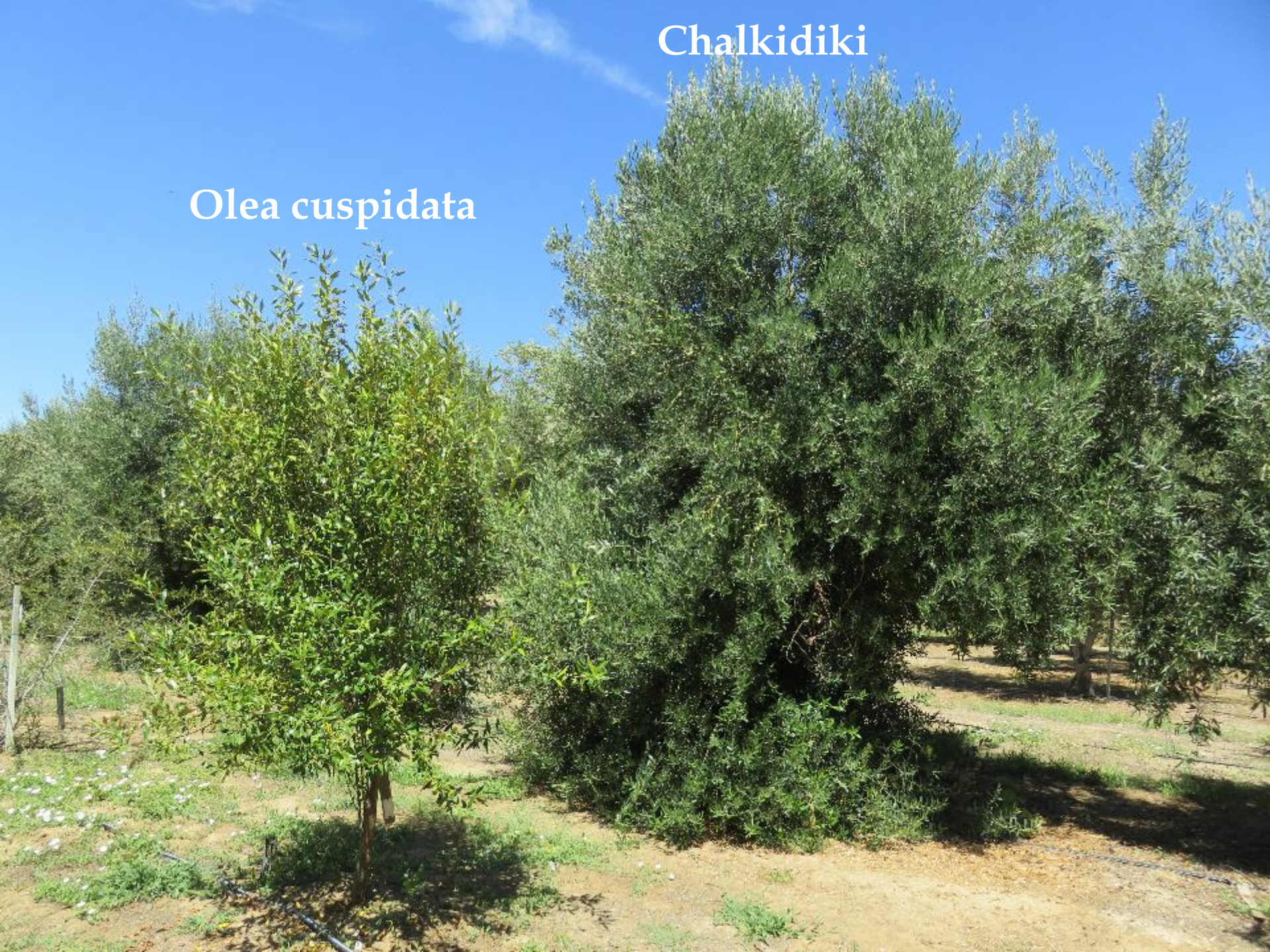
A photograph of an olive grove. The trees are arranged in rows, with a dirt path or road running through the center. The sky is clear and blue. The trees have dense, green foliage. The ground is dry and sandy, with some sparse green grass. The overall scene is bright and sunny.

Meski

Nikitskaya

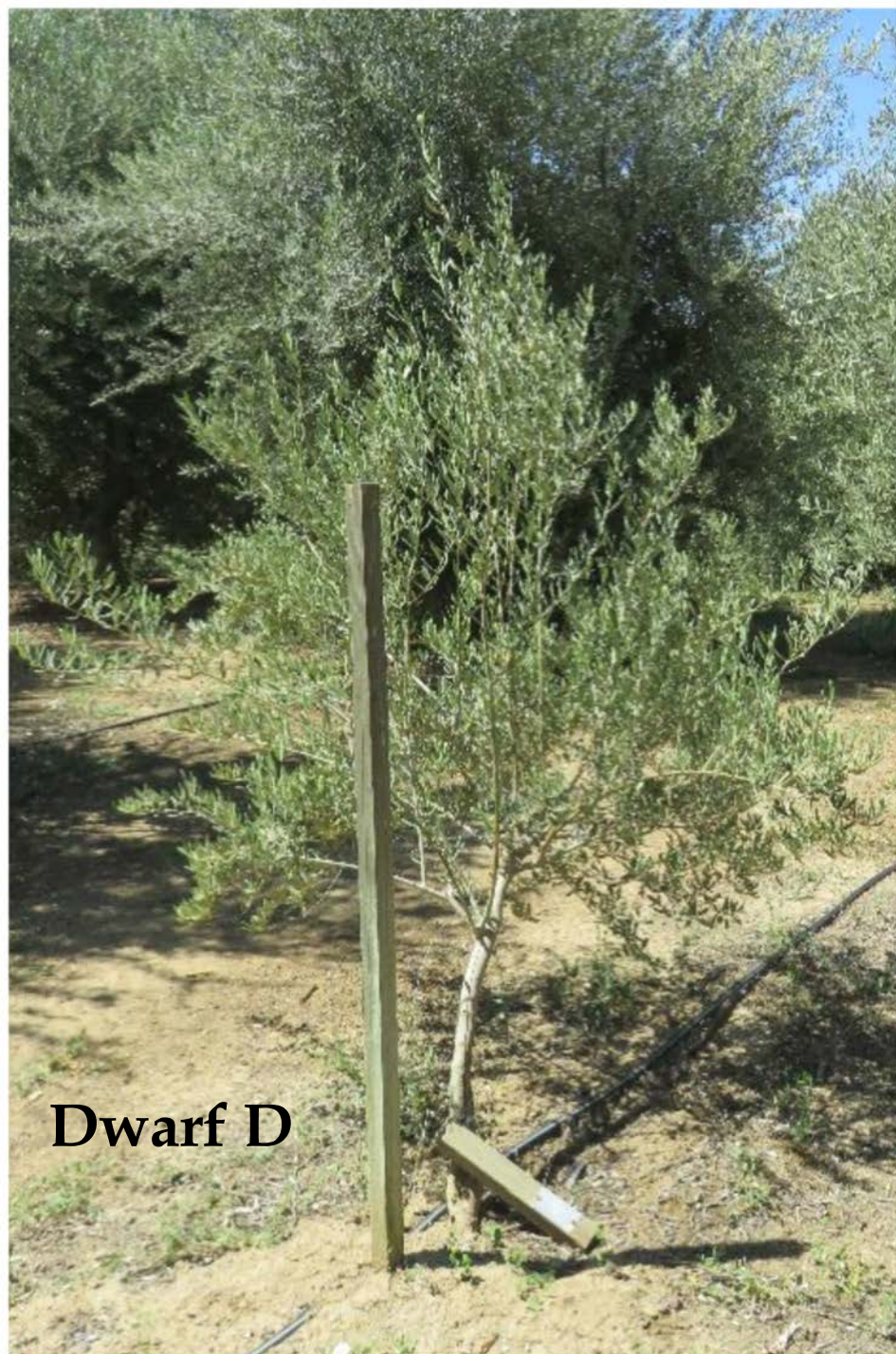
Chalkidiki

Olea cuspidata



Verticillium Resistant Oblonga





Dwarf D



Little Ollie



Planted in 2014:

**Four replications of four dwarfing rootstocks
+ Manzanillo self graft and ungrafted control
(Sevillano pollinator)**

**Split plot with 2 spacings: 8 and 10 X 16'
272 and 311 trees per acre**

Grafted September 28, 2015







Pruned to nurse limbs
May 2, 2016

Desired Outcomes

- Smaller trees and more trees/acre
- Better and earlier yields
- Able to trunk shake longer
- Possible Verticillium trial later

2016 Objectives:

- **Finish grafting all rootstocks, once the 2015 plants are established**
- **Collect data to study the growth differences among the scions on the different rootstocks compared to the controls**

Thank you!



Questions?

