Olea Project Up-Potting Trial Years 1 and 2:
Progress and Preliminary Results
PRELIMINARY RESULTS NOT FOR DISTRIBUTION

Research Objective: Evaluate up-potting practices for field planting of trees at different stages of development in multiple orchard management conditions and their relations with winter cold injury and plant development and survival.

Four fields established in 2018 with different orchard management techniques:

- Permanent irrigation/weedmat/spring planting
- Establishment irrigation/cover cropped aisles/fall planting

NWREC (Aurora) fields replicated at OSU Woodhall Vineyard (Alpine)

- 80 trees so far in each spring-planted orchard
  - 40 more per field to be planted spring 2020
- 40 trees so far in each fall-planted orchard
  - 80 more per field to be planted fall 2019, including 1.5 year old plants (in 1 gal) and 2.5 year (3 gal) old plants

Data collection and analysis are still in progress, however preliminary results from trees planted at NWREC in 2018 are shown below.

Table 1. Effect of cultivar on change in average shoot number, length of longest shoot, and trunk diameter at 10 cm above soil surface, between measurements taken at planting (July 2018) and at the end of the first growing season (November 2018) for one year old olive trees in Aurora OR (n = 37).

Treatments	Number of Shoots	Length of Longest Shoot (cm)	Trunk Diameter (mm)
Cultivar			
Amphissa	15	52.93	6.1
Ascolana	4	29.61	3.69
Frantoio	4	33.45	3.26
Leccino	12	56.85	3.64
Significance[z]			
Cultivar	<0.0001	<0.0001	NS

[z] P value provided unless nonsignificant (NS; P > 0.05.)