Figure 1. Efficacy of labeled dose vs updated dilution ratios. Smaller lesions = higher efficacy.
Phosphonate Damage to Wood

Damage produced on Coast Live Oak saplings injected with phosphonates

Prob>F: <0.0001
df=3
n=40
Tukey’s HSD
Columns with different letters are significantly different P<0.05

Figure 2. Injection damage caused by labeled dose vs updated dilution ratios. Note that updated dosage damage is indistinguishable from damage caused by only injecting water.
New Recommended Phosphonate Injection Dosages

- **Label Dose** = 1 part chemical + 2 parts water = 1:3 delivered in 10ml dose (discontinued).

- **Dilution #1** = 1 part chemical + 29 parts water = 1:30 delivered in 20ml dose (Chemjet injector 20psi).

- **Dilution #2** = 1 part chemical + 59 parts water = 1:60 delivered in 40ml dose with higher pressure (Arborjet injector 35psi).

Table 1. The two updated dilutions differ in active ingredient concentration, injection volume, and recommended injection pressure. Pressurized injections maximize uptake of phosphonates, allowing the injected material to bypass the embolisms caused by the drilling of a hole in the xylem.