



WSU Extension Fire Blight Trial

Var. Red Delicious – WSU, Wenatchee, WA 2021



Effect of essential oil/ plant extract treatments applied to apple, cv. Red Delicious on infection of *Erwinia amylovora* in apple blossoms in Wenatchee, WA in 2021

	Treatment Rate per 100 gal	Timing	Infections per 100 clusters ^y	Fruit russet ^u
Streptomycin standard (Firewall 17) ^x	8 oz	100% bloom	16.1 ± 2.3 a ^w	0.06
Oxytetracycline standard ^y (Fireline 17) ^x	16 oz	100% bloom, petal fall	17.0 ± 5.7 a	0.00
Organic standard apple			17.8 ± 4.5 a	0.69
Blossom Protect + Buffer Protect	1.24 lb + 8.75 lb	70% bloom, 100% bloom,		
Previsto	3 qt	100% bloom + 1 day, petal fall		
Organic standard pear			13.9 ± 2.6 a	0.73
Blossom Protect + Buffer Protect	1.24 lb + 8.75 lb	70% bloom, 100% bloom,		
Serenade Opti	20 oz	100% bloom + 1 day, petal fall		
Cinnerate + Probald Verde	32 oz + 40 oz	100% bloom, 100% bloom + 1 day, petal fall, petal fall + 3 days	17.6 ± 3.2 ab	0.02
Cinnerate	32 oz	100% bloom, 100% bloom + 1 day, petal fall, petal fall + 3 days	20.8 ± 3.7 ab	0.01
Water-treated check	NA	100% bloom, petal fall, petal fall + 3 days	38.6 ± 5.1 c	0.00

2021SA-PROB-CIN-POME-D-FBL-WA-UNI-WSU

Application dates were: **18 Apr (70% bloom), 19 Apr (full bloom), 20 Apr (full bloom + 1 day), 23 Apr (petal fall), 26 April (petal fall + 3 days).**
 Inoculation was conducted on the evening of 19 Apr 2021 at full bloom (of king blooms) using a suspension of 50% freeze-dried cells and 50% live cells of *Erwinia amylovora* strain Ea153 (streptomycin and oxytetracycline sensitive strain) prepared at 1 x10⁶ CFU ml⁻¹ (verified at 40-94 x10⁶ CFU ml⁻¹).