

Itabora and Westin Orange (*Citrus sinensis*)
Citrus Canker(*Xanthomonas axonopodis* pv.*citri*)

P.D. Roberts, R.E. Sytsma
University of Florida, IFAS
Southwest Florida REC
Immokalee, FL 34142

Evaluation of foliar applied products for management of citrus canker on orange trees, 2007.

The experimental site was at a commercial grove located on SR82 near Corkscrew Rd., Lee County, FL. The trees were planted in 2002 and are grafted to Swingle rootstock. The tree spacing is 12 × 24 ft on a double row bed, 151 trees/A. Irrigation is via microjet. Plots contained 10 trees within a row adjacent with at least one tree serving as buffer tree between each plot. There were four replications per treatment arranged in a randomized complete block design. Spray applications were applied with a Durand Wayland speed sprayer calibrated to deliver 125 GPA (gal per A) at 150 psi at 3 mph. Defoliant was Reglone at 1 qt/A plus Phase surfactant at 1 pt/A was applied on two dates, first by helicopter on 12 May at a spray rate of 15 gal/A followed by a second application on 2 Jun. Disease severity was rated on 20 Sep by counting the number of leaves per tree exhibiting canker lesions. The numbers from the replication of each treatment were subjected to ANOVA and the means tested by Tukey Multiple Range Test. Average monthly high and low temperatures (°F) were 95 and 66 in Jun, 95 and 68 in Jul, 95 and 69 in Aug, 92 and 62 in Sep. Rainfall totals for Jun, Jul, Aug, and Sep were 7.6, 5.3, 8.3, and 3.9, respectively.

Trees were badly damaged by defoliant. Canker spread was in a gradient in the field. However, nothing was statistically different from the untreated control plants.

	Treatment/Rate	Dates of application ^z	DI ^y
1	Admire 2F 32 fl oz/A	1.....	19.8 b
2	Admire 2F 32 fl oz/A	1.....	8.8 b
	Kocide 3000 2.68 lb/A	2,3,4,5,6	
3	Agrimek 7.5 fl oz/A	2.....	40.0 ab
	Citrus oil 235 5%	2	
4	Agrimek 7.5 fl oz/A	2.....	46.0 ab
	Citrus oil 235 5%	2	
	Kocide 3000 2.68 lb/A	2,3,4,5,6	
5	Fosphite 0.75%	2,3,4,5,6.....	87.5 a
6	Serenade Max 2 lb/A	2,3,4,5,6.....	27.0 ab
	Biotune 1 pt/A	2,3,4,5,6	
	Cuprofix 2 lb/A	2,3,4,5,6	
7	K-Phite 6 pt/A	2,3,4,5,6.....	17.3 b
8	Actigard 6 oz/A	2,3,4,5,6.....	26 ab
	Kocide 3000 2.68 lb/A	2,3,4,5,6	
9	Kocide 3000 2.68 lb/A	2,3,4,5,6.....	49.5 ab
10	Phyton 016-B 30 fl oz/A	2,3,4,5,6.....	25.5 ab
11	Actinovate 12 oz/A	2,3,4,5,6.....	53.0 ab
	Omega-Plus 5%	2,3,4,5,6	
12	Kasumin 64 fl oz/A	2,3,4,5,6.....	46.3 ab
13	Agriphage 1.5 qt/A	7 day intervals ^x	11.3 b
	Dried Skim Milk 7.5 g/L	7 day intervals	
14	Untreated control	42.0 ab

^z1 = 6 Jun, 2 = 26 Jun, 3 = 17 Jul, 4 = 7 Aug, 5 = 4 Sep, 6 = 25 Sep

^y DI= disease incidence on a per tree basis as the number of leaves with symptoms of citrus canker on 29 Sep 06.

^x Applied at 7 day intervals beginning on 6 Jun through 25 Sep.