

Suggested Antibacterial Product Use Pattern for Huanglongbing (HLB; citrus greening) Management

The information in this document is a suggested use pattern of antibacterial products in Florida citrus. This is not an official University of Florida recommendation. Information based on crisis declaration of March 4, 2016. Document is invalid after the establishment of a Section 3 or 18 label.

Antibiotic Application Schedule

Application schedule should be adjusted based on harvest and flush timing¹. Antibacterial products should **NEVER** be applied during harvest. **ALWAYS** rotate.

Citrus Type	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Early Season Varieties (Ex. Hamlin, Navel, Fallglo)		STP	OXY	STP			STP	OXY		X	X	X
Mid Season Varieties (Ex. Murcott, Pineapple, Midsweet)	X	X	X	STP	OXY	STP		OXY	STP	OXY		X
Late Season Varieties (Ex. Valencia)		OXY	X	X	X	X			STP	OXY	STP	
Grapefruit (Ex. Ray Ruby, Flame, Ruby Red)		STP	OXY	STP			STP	OXY		X	X	X

STP: streptomycin; OXY: oxytetracycline
¹apply with initiation of leaf flush

Product Details

	FireWall 50 WP™ (streptomycin)	FireLine 17 WP™* (oxytetracycline)	Mycoshield®* (oxytetracycline)
Preharvest Interval (days)	40	40	21
Maximum Number of Applications per Calendar Year	3	3	8
Minimum Retreatment Interval (days)	21	21	21
Re-entry Interval (hours)	12	12	12
Total amount of product per year	2.07 lbs product 1.36 lbs a.i.	4.50 lbs product 0.81 lbs a.i.	12.0 lbs product 2.04 lbs a.i.*
FRAC Group	25	41	41

*not more than 2.04 lb a.i. (oxytetracycline) per season no matter product used

Antibacterial programs do not replace Asian citrus psyllid management programs.

- Antibacterial products are only labeled for airblast ground sprays (no low volume applications)
- Adjuvants are recommended
- Agitation is required
- Alternate mode of action (MOA)

THE LABEL IS THE LAW!

Refer to label for additional information.
This guide does not supersede the label.

Suggested Product Amount Based on Volume¹

Spray Volume ² (GPA)	FireWall 50 WP™		FireLine 17 WP™		Mycoshield®	
	ounces of product	pounds per active ingredient	ounces of product	pounds per active ingredient	ounces of product	pounds per active ingredient
50	5.50	0.225	12.0	0.125	8.0	0.125
75	8.25	0.337	18.0	0.190	-	-
100	11.0	0.450	24.0	0.255	18.0	0.190
150	-	-	-	-	24.0	0.255

¹do not apply at rates lower than is specified on the labels

²application volume should be adjusted based on tree size



Created: March 2016
Version 2

Personal Protective Equipment for Applicators and Handlers

Product (EPA registration #)	FireWall 50 WP™ (80990-3)	FireLine 17 WP™ (80990-1)	Mycoshield® (55146-97)
Long-sleeved shirt and long pants	Yes	Yes	Yes
Chemical-resistant gloves made of waterproof material	Yes	Yes	Yes
Shoes and socks	Yes	Yes	Yes
Protective eyewear	Yes	Yes	Yes
Respirator	Yes ¹	Yes ²	Yes ²

¹a particulate respirator with any N,R, or P filter, NIOSH approval prefix TC-84-A

²dust/mist filtering respirator (MSHA/NIOSH approval number prefix TC-21C) or a NIOSH approved respirator with any N, R, P or HE filter

For worker protection concerns, applicators must be in enclosed cab or with headgear that ensures full coverage of the neck.

Crop Site

Citrus:

Grapefruit, lemon, lime, orange, tangelo, tangerine, citrus citron, kumquat, and hybrids of these plus pummelo.

Do not use antibacterial products in groves in which current practices include fertilization with animal manure. This restriction addresses concerns that antibiotic resistance could be transferred to *Escherichia coli* or other pathogenic bacteria in the feces.

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