

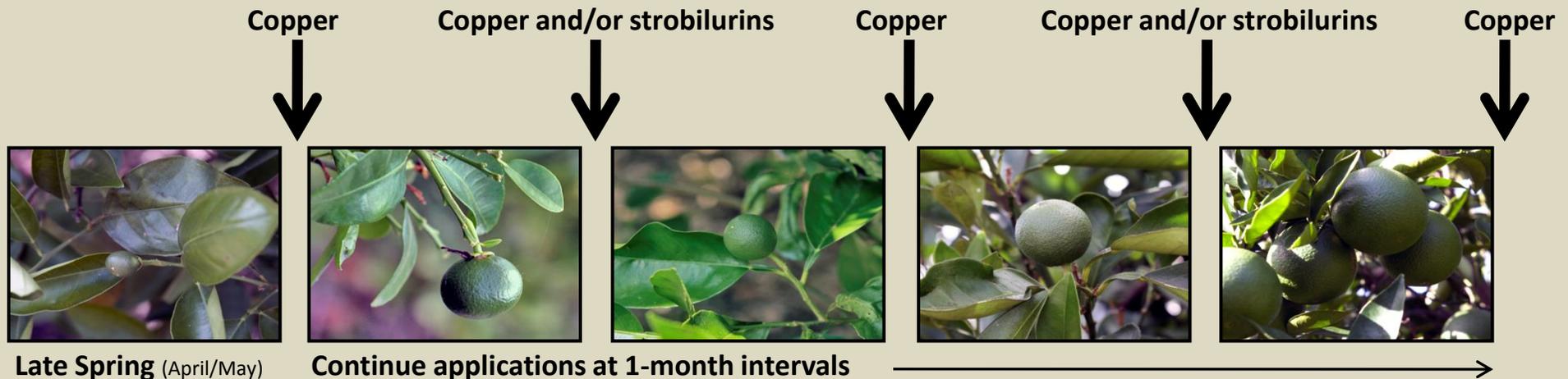
Management Timing Schedule¹

Fungicide Timing

Fruit is susceptible for 5 to 6 months post-petal fall

Megan M. Dewdney and Jamie D. Burrow²

Photo Credit: University of Florida



•Registered fungicides with reported efficacy against black spot are copper (all formulations; use maximum label rate) and strobilurins (Abound[®], Gem[®], Headline[®]; maximum label rate recommended). Strobilurins are recommended at temperatures greater than 94°F when phytotoxicity is a concern with copper. No more than four strobilurin applications can be made in a year for all diseases, and consecutive applications are not recommended due to potential resistance development.

•Black spot management can be coordinated with a canker management program. Copper sprays are effective for both diseases, but applications for black spot will need to be extended past the canker application season for most varieties (see back).

•Fungicide applications for greasy spot and melanose will also be effective against black spot. However, neither Enable[®] nor petroleum spray oil alone has a demonstrated effect against black spot.

•The prebloom fungicide applications for Alternaria brown spot and citrus scab are less effective for black spot because spores are not yet present in large enough numbers to cause infection. Petal fall may still be too early to begin applications for black spot if the weather is dry.

•It is important to get good canopy coverage with fungicides for black spot control. To ensure complete coverage, consider using a spray volume of 250 gal per acre.

•Leaf litter management is also an important tool for black spot management since the primary spores are produced in the litter, like greasy spot. The measures described below have shown to effectively reduce greasy spot inoculum, although not enough to eliminate fungicide applications.

•One urea (187 lb/treated acre) or ammonium sulfate (561 lb/acre) application will reduce the number of fungal structures and spore production.

OR

•Enhanced irrigation with microsprinklers five times a week starting mid-March and continuing until litter is decomposed.

•Dolomite lime (2,226 lb/acre) will also reduce the number of fungal structures and spores.

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Foliar Fungal Management Program

Shaded areas represent suggested spray periods. Refer to the annual Florida Citrus Pest Management Guide for more details.

		Oranges			Grapefruit			'Valencia'			Tangerines & hybrids			All varieties			Optional applications		
DISEASE	FRUIT MARKET and VARIETY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC						
Black spot ^a	Processed/fresh All varieties				////														
Greasy spot ^b	Processed/fresh Oranges and grapefruit																		
	Processed 'Valencia'																		
Canker ^c	Processed/fresh Early oranges																		
	Processed/fresh Grapefruit																		
	Processed/fresh 'Valencia', tangerines, and hybrids																		
Melanose ^d	Fresh Grapefruit																		
Alternaria brown spot ^e	Fresh Tangerines and hybrids																		
Scab ^f	Fresh Grapefruit, tangerines, and hybrids																		
DISEASE	FRUIT MARKET and VARIETY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC						

^aOptional application if there are high rainfall amounts in April, otherwise begin applications in early May

^bOptional application in late July–early August if infection was severe and has caused defoliation in the previous year

^cCanker is a bacterial disease managed with copper; apply every three weeks

^dApply every three weeks

^eFrequency of sprays depends on amount of rainfall; start applications at ¼ to ½ full expansion with the second spray at petal fall; see *Florida Citrus Pest Management Guide* for more details

^fApply first application at ¼" flush; second application at petal fall; and third application three weeks after petal fall; application time will vary depending on year and location, but typically begins mid-February

The label is the law!

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