



# Commercial Apple Fungicide Spray Schedule Worksheet and Sample Spray Guides

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Growth Stage	Target Pathogen	Fungicide	FRAC
Dormant to Silver Tip	FB	(Use weather prediction models)	
Green Tip	S		
Half-Inch Green	S		
Tight Cluster	S, R, PM		
Pink	FB, S, R, PM		
Bloom	FB, S, R, PM		
Petal Fall	FB, S, R, PM		
First Cover	S, R, PM, FR, SB/FS	(Begin CaCl sprays)	
Second Cover	S, R, PM, FR, SB/FS		
Third Cover	S, FR, SB/FS	(No mancozeb or SI past second cover)	
Fourth Cover	S, FR, SB/FS		
Fifth Cover	S, FR, SB/FS		
Sixth Cover	S, FR, SB/FS		
Seventh Cover	S, FR, SB/FS	(Remember PHI)	

**Diseases/Target Pathogens**

FB – Fire blight, FR – Fruit rots, PM – Powdery mildew, R – Rust, S – Scab, SB/FS – Sooty blotch/Fly speck



## SAMPLE SPRAY SCHEDULE

Growth Stage	Target Pathogen	Fungicide	FRAC
Dormant to Silver Tip	<b>FB</b>	Copper (Use weather prediction models)	M
Green Tip	<b>S</b>	Mancozeb or Vanguard	M or 9
Half-Inch Green	<b>S</b>	Mancozeb or Vanguard	M or 9
Tight Cluster	<b>S, R, PM</b>	Rally or Indar	3
Bloom	<b>FB, S, R, PM</b>	Mancozeb or Vanguard (Antibiotics per weather prediction models)	11
Petal Fall	<b>FB, S, R, PM</b>	Mancozeb or Fontelis	M or 11
First Cover	<b>S, R, PM, FR, SB/FS</b>	Rally + Mancozeb (Begin CaCl sprays)	3 + M
Second Cover	<b>S, R, PM, FR, SB/FS</b>	Flint	11
Third Cover	<b>S, FR, SB/FS</b>	Topsin M + Captan (No mancozeb or SI past second cover)	1 + M
Fourth Cover	<b>S, FR, SB/FS</b>	Fontelis or Flint or Captan	11 or M
Fifth Cover	<b>S, FR, SB/FS</b>	Topsin M + Captan	1 + M
Sixth Cover	<b>S, FR, SB/FS</b>	Fontelis or Flint or Captan	11 or M
Seventh Cover	<b>S, FR, SB/FS</b>	Topsin M + Captan (Remember PHI)	1 + M

### Diseases/Target Pathogens

**FB** – Fire blight, **FR** – Fruit rots, **PM** – Powdery mildew, **R** – Rust, **S** – Scab, **SB/FS** – Sooty blotch/Fly speck

## SAMPLE SPRAY SCHEDULE FOR ORCHARDS WITH A HISTORY OF FRUIT ROT<sup>1</sup>

Growth Stage	Target Pathogen	Fungicide	FRAC
Dormant to Silver Tip	FB	Copper (Use weather prediction models)	M
Green Tip	S	Mancozeb or Vanguard	M or 9
Half-Inch Green	S	Mancozeb or Vanguard	M or 9
Tight Cluster	S, R, PM	Rally or Indar	3
Bloom	FB, S, R, PM	Mancozeb alone or Vanguard + Mancozeb (Antibiotics per weather prediction models)	11 + M
Petal Fall	FB, S, R, PM	Mancozeb alone or Fontelis + Mancozeb	M or 11 + M
First Cover	S, R, PM, FR, SB/FS	Rally + Mancozeb (Begin CaCl sprays)	3 + M
Second Cover	S, R, PM, FR, SB/FS	Flint + Mancozeb or Flint + Captan (Note 66 day PHI for Mancozeb) <sup>2</sup>	11 + M
Third Cover	S, FR, SB/FS	Topsin M + Captan (No Mancozeb or SI past second cover)	1 + M
Fourth Cover	S, FR, SB/FS	Fontelis + Captan or Flint + Captan	11 + M
Fifth Cover	S, FR, SB/FS	Topsin M + Captan	1 + M
Sixth Cover	S, FR, SB/FS	Fontelis + Captan or Flint + Captan	11 + M
Seventh Cover	S, FR, SB/FS	Topsin M + Captan (Remember PHI)	1 + M

### Diseases/Target Pathogens

FB – Fire blight, FR – Fruit rots, PM – Powdery mildew, R – Rust, S – Scab, SB/FS – Sooty blotch/Fly speck

### Notes

<sup>1</sup> Fruit rots include bitter rot, black rot, and white rot

<sup>2</sup> Continue to use Mancozeb as long as possible, depending on the apple cultivar's predicted harvest date; Mancozeb has a 66 day PHI. Continue with Captan until harvest.

*Revised October 2016*