#### Pepper Fungicide Spray Programs 2016

# Bhabesh Dutta Extension Vegetable Pathologist – University of Georgia

As with most crops, disease management begins prior to planting the crop to be protected. By using such methods as disease-free seed and transplants, proper rotation, discing and plowing, and use of resistant varieties, growers can minimize the amount of disease that is available to attack their crop. Using many practices takes all the weight off of any one practice and gives growers more disease management options at lower risk. Once plants are in the field, however, fungicide sprays are relied on heavily for effective and economical management of plant diseases. This spray guide is designed to encompass many diseases that attack peppers in Georgia.

Spray Schedule = 3.5 day

	Spray Schedule = 3.5 day Fall or Winter/Spring
Spay No.	
Spay No.	Fungicide(s)/disease activity.
Pre-plant	Methyl bromide or Georgia 3-way
1.	Actigard at 0.75 oz/acre/BS Ridomil at plant drench/PCAP copper fungicide/BS
2.	copper fungicide/BS
3.	Quintec and copper fungicide/BS
4.	Actigard at 0.5 oz/acre/BS copper fungicide/BS
5.	Presidio through the drip/PCAP Quintec and copper fungicide/BS
6.	Cabrio or Quadris/ANTH copper fungicide/BS
7.	Actigard at 0.33 oz.acre/BS Quintec and copper fungicide/BS Zampro/PCAP
8.	copper fungicide/BS
9.	Presidio spray or through drip/PCAP Quintec and copper fungicide/BS
10.	Cabrio or Quadris/ANTH copper fungicide/BS
11.	copper fungicide/BS Zampro/PCAP
12.	copper fungicide/BS
13	Cabrio or Quadris/ANTH copper fungicide/BS
14.	copper fungicide/BS
15.	copper fungicide/BS
	and so on until harvest or pre-harvest interval

<sup>&</sup>lt;sup>1</sup> Chlorothalonil (Bravo, Echo, Equus, etc.). Always read the label for detailed application instructions or consult the Georgia Pest Control handbook. Disease Acronyms: BS = bacterial spot; ANTH = anthracnose; PCAP = Phytophthora crown rot.

#### South Georgia Tomato Fungicide Spray Programs 2016

# Bhabesh Dutta Extension Vegetable Pathologist – University of Georgia

As with most crops, disease management begins prior to planting the crop to be protected. By using such methods as disease-free seed and transplants, proper rotation, discing and plowing, and use of resistant varieties, growers can minimize the amount of disease that is available to attack their crop. Using many practices takes all the weight off of any on practice and gives growers more disease management options at lower risk. Once plants are in the field, however, fungicide sprays are relied on heavily for effective and economical management of plant diseases. This spray guide is designed to encompass many diseases that attack tomato during the growing season(s) in Georgia.

#### Spray Schedule = 3.5 day

	Fall or Winter/Spring		
Spray No.	Fungicide(s)/disease activity		
Pre-plant	Georgia 3-way or WSP or Paladin Pic		
1.	Actigard at 0.33 oz/acre in 30-50 gallons of water copper		
	fungicide + mancozeb + chlorotalonil <sup>1</sup> /BS + EB		
2.	copper fungicide + mancozeb/BS		
3.	Actigard at 0.33 oz/acre in 30-50 gallons of water copper fungicide + mancozeb + Quadris or Cabrio/BS + EB + TS		
4.	copper fungicide + mancozeb/BS		
5.	Actigard at 0.5 oz/acre in 60-70 gallons of water copper fungicide + mancozeb + chlorothalonil 1/BS + EB		
6.	copper fungicide + mancozeb/BS		
7.	Actigard at 0.5 oz/acre in 60-70 gallons of water copper fungicide + mancozeb + Quadris or Cabrio /BS + EB + TS		
8.	copper fungicide + mancozeb/BS		
9.	Actigard at 0.75 oz/acre in 70-100 gallons of water copper		
	fungicide + mancozeb + chlorothalonil <sup>1</sup> /BS + EB		
10.	copper fungicide + mancozeb/BS		
11.	Actigard at 0.75 oz/acre in 70-100 gallons of water copper fungicide + mancozeb + Quadris or Cabrio /BS + EB + TS		
12.	copper fungicide + mancozeb/BS		
13.	copper fungicide + mancozeb + Endura or Switch or Fontelis/BS + EB + BOT + TS		
14.	copper fungicide + mancozeb/BS		
15.	copper fungicide + mancozeb + Endura or Switch or Fontelis/BS + EB + BOT + TS		
1	and so on until harvest or pre-harvest interval		

Chlorothalonil (Bravo, Echo, Equus, etc)

Always read the label for detailed application instructions or consult the Georgia Pest Control Handbook. Disease Acronyms: BS = bacterial spot; EB = early blight; TS = target spot; BOT = Botrytis fruit rot.

#### Succulent Legume (snap, lima, pole bean) Fungicide Spray Programs 2016

# Bhabesh Dutta Extension Vegetable Pathologist – University of Georgia

As with most crops, disease management begins prior to planting the crop to be protected. By using such methods as disease-free seed and transplants, proper rotation, discing and plowing, and use of resistant varieties, growers can minimize the amount of disease that is available to attack their crop. Using many practices takes all the weight off of any practice and gives growers more disease management options at lower risk. Once plants are in the fields, however, fungicide sprays are relied on heavily for effective and economical management of plant diseases. This spray guide is designed to encompass many disease that attack succulent pod legumes during the growing season(s).

### Spray Schedule = 7 - 14 day

Spring/Summer		Fall		
Spray No.	Fungicide(s)/disease activity	Spray No.	Fungicide(s) /disease activity	
1.	Chlorothalonil of Folicur/R + CERC + ALT	1.	Chlorothalonil <sup>1</sup> of Folicur/R + CERC + ALT	
2.	Chlorothalonil <sup>1</sup> of Folicur/R + CERC + ALT	2.	Chlorothalonil <sup>1</sup> of Folicur/R + CERC + ALT	
3.	Chlorothalonil <sup>1</sup> of Folicur/R + CERC + ALT	3.	Chlorothalonil <sup>1</sup> of Folicur/R + CERC + ALT	
4.	Quadris/RHIZ + R CERC + ALT	4.	Quadris/RHIZ + R CERC + ALT	
5.	Topsin / ANTH (mainly lima bean) Quadris/RHIZ + R + CERC + ALT	5.	Topsin / ANTH (mainly lima bean) Quadris/RHIZ + R + CERC + ALT	
6.	Ridomil Gold Copper <u>or</u> Cabrio/PYTH <u>or</u> Quadris/PYTH + RHIZ + R + CERC + ALT Phosphite-type product/PYTH	6.	Ridomil Gold Copper <u>or</u> Cabrio/PYTH <u>or</u> Quadris/PYTH + RHIZ + R + CERC + ALT Phosphite-type product/PYTH	
7.	Rally/R + RHIZ Ridomil Gold Copper or Cabrio / PYTH or Quadris / PYTH + RHIZ + R + CERC + ALT Phosphite-type product /PYTH	7.	Rally/R + RHIZ Ridomil Gold Copper or Cabrio / PYTH or Quadris / PYTH + RHIZ + R + CERC + ALT Phosphite-type product /PYTH	
8.	Ridomil Gold Copper <u>or</u> Cabrio/PYTH <u>or</u> Quadris/PYTH + RHIZ + R + CERC + ALT Phosphite-type product/PYTH	8.	Omega 500 or Rovral or Topsin / SCR	

<sup>&</sup>lt;sup>T</sup> Chlorothalonil (Bravo, Echo, Equus, etc...).

Always read the label for detailed application instructions of consult the Georgia pest Control handbook.

Disease Acronyms: RHIZ=Rhizoctonia belly rot; R = rust; ANTH = anthracnose; ALT = Alternaria pod and leaf spot: CERC = Cercospora leaf spot; PYTH = Pythium cottony leak; SCR = Scelerotinia or "white mold".

### **Cucumber Fungicide Spray Programs 2016**

# Bhabesh Dutta Extension Vegetable Pathologist – University of Georgia

As with most crops, disease management begins prior to planting the crop to be protected. By using such methods as disease-free seed and transplants, proper rotation, discing and plowing, and use of resistant varieties, growers can minimize the amount of disease that is available to attack their crop. Using many practices takes all the weight off of any on practice and gives growers more disease management options at lower risk. Once plants are in the field, however, fungicide sprays are relied on heavily for effective and economical management of plant diseases. This spray guide is designed to encompass many diseases that attack squash during the growing season(s) in Georgia and is not intended to be followed literally but to give an idea of the chronology of disease pressure in relation to fungicide choice. Each field in each year has different situations that call for different actions.

Spray Schedule = 7 day

	Spring		Fall
Spray	Fungicide/disease activity	Spray	Fungicide/disease activity
number		number	
1	Chlorothalonil <sup>1</sup> or mancozeb/DOW +	1	Cabrio or Topsin/ANTH
	ANTH + GSB		Presidio/Ranman/Previcur Flex/Revus/
			DOW + PCAP
			Chlorothalonil/ANTH + DOW + GSB
2	Chlorothalonil <sup>1</sup> or mancozeb/DOW +	2	Topsin + mancozeb/ANTH + DOW
	ANTH + GSB		Orondis/Presidio/Ranman/Previcur flex/
			Revus/DOW + PCAP
			Chlorothalonil or mancozeb/ANTH +
			DOW + GSB
3	Chlorothalonil <sup>1</sup> or mancozeb/DOW +	3	Cabrio/ANTH
	ANTH + GSB		Presidio/Ranman/Revus/DOW + PCAP
			Chlorothalonil or mancozeb/ANTH +
			DOW + GSB
4		4	Aprovia top + chlorothalonil/RHIZ +
	_		GSB + DOW
	Quadris + Tebuconazole <sup>2</sup> /RHIZ +		Orondis/Presidio/Ranman/ Previcur
	ANTH + GSB		flex/Revus/DOW + PCAP
5		5	Quadris/RHIZ + ANTH
	Orondis (foliar)/ Presidio/Revus/PCAP		Presidio/Ranman/ Previour flex/Revus/
	Ranman/Previcure Flex/DOW		DOW + PCAP
	Chlorothalonil or mancozeb/		Chlorothalonil or mancozeb/ANTH +
	ANTH + DOW + GSB		DOW + GSB
6	Aprovia top+ chlorothalonil/RHIZ	6	Cabrio or Topsin/ANTH
	+ GSB + DOW		Orondis/Presidio/Ranman/Revus/DOW +
	Presidio/Ranman/Previcur flex/Revus/		PCAP
	DOW + PCAP		Chlorothalonil or mancozeb/ANTH +
	Chlorothalonil or mancozeb/ANTH +		DOW + GSB
	DOW + GSB		

7	Orondis/Presidio/Ranman/Previcur flex/Revus/DOW + PCAP Chlorothalonil/ANTH + DOW + GSB	7	Aprovia top + chlorothalonil/RHIZ + GSB + DOW Presidio/Ranman/Previcur flex/Revus/ DOW + PCAP Chlorothalonil or mancozeb/ANTH + DOW + GSB
8	Cabrio or Topsin/ANTH Presidio/Ranman/Previcur Flex/Revus/ DOW + PCAP Chlorothalonil/ANTH + DOW + GSB	8	Presidio/Ranman/Revus/DOW + PCAP Chlorothalonil/ANTH + DOW + GSB

Always read the label for detailed application instructions or consult the Georgia Pest Control Handbook.

Disease Acronyms: GSM = gummy stem blight; RHIZ=Rhizoctonia belly rot; DOW = downy mildew; ANTH = anthracnose; PCAP = Phytophthora crown and fruit rot.

<sup>&</sup>lt;sup>1</sup>Chlorothalonil (Bravo, Echo, Equus, etc...).
<sup>2</sup>Folicur should be used at 8.0 fl oz when sprayed each time with a seasonal limit of 24 fl oz.

### **Squash Fungicide Spray Programs 2016**

# Bhabesh Dutta Extension Vegetable Pathologist – University of Georgia

As with most crops, disease management begins prior to planting the crop to be protected. By using such methods as disease-free seed and transplants, proper rotation, discing and plowing, and use of resistant varieties, growers can minimize the amount of disease that is available to attack their crop. Using many practices takes all the weight off of any on practice and gives growers more disease management options at lower risk. Once plants are in the field, however, fungicide sprays are relied on heavily for effective and economical management of plant diseases. This spray guide is designed to encompass many diseases that attack squash during the growing season(s) in Georgia and is not intended to be followed literally but to give an idea of the chronology of disease pressure in relation to fungicide choice. Each field in each year has different situations that call for different actions.

Spray Schedule = 7 day

	Spring		Fall
Spray	Fungicide/disease activity	Spray	Fungicide/disease activity
number		number	
1	Chlorothalonil <sup>1</sup> or mancozeb/DOW	1	Orondis (soil app)/PCAP
			Chorothalonil or mancozeb/DOW
2	Orondis (soil app)/PCAP	2	Chlorothalonil <sup>1</sup> or mancozeb/DOW
	Chorothalonil or mancozeb/DOW		
3	Presidio or Revus/PCAP	3	Presidio or Revus/PCAP
	Chorothalonil or mancozeb/DOW		Chorothalonil or mancozeb/DOW
4	Orondis (soil app)/PCAP	4	Orondis (soil app)/PCAP
	Cholrothalonil/DOW		Cholrothalonil/DOW
	Torino or Fontelis/POW		Torino or Fontelis/POW
5	Torino or Fontelis/POW	5	Torino or Fontelis/POW
	Presidio or Revus/ PCAP + DOW		
	Chlorothalonil or mancozeb+Ranman		
	or Previcur Flex/ DOW		
6	Torino or Fontelis/POW	6	Torino or Fontelis/POW
	Orondis (soil app)/ PCAP + DOW		Orondis (soil app)/ PCAP + DOW
	Chlorothalonil or mancozeb+Ranman		Chlorothalonil or mancozeb+Ranman or
	or Previcur Flex/ DOW		Previcur Flex/ DOW
7	Torino or Fontelis/POW	7	Presidio or Revus/ PCAP + DOW
	Presidio or Revus/ PCAP + DOW		Chlorothalonil or mancozeb+Ranman or
	Chlorothalonil or mancozeb+Ranman		Previcur Flex/ DOW
	or Previcur Flex/ DOW		
8	Presidio or Revus/ PCAP + DOW	8	Torino or Fontelis/POW
	Chlorothalonil or mancozeb+Ranman		Presidio or Revus/ PCAP + DOW
	or Previcur Flex/ DOW		Chlorothalonil or mancozeb+Ranman or
			Previcur Flex/ DOW

Always read the label for detailed application instructions or consult the Georgia Pest Control Handbook.

Disease Acronyms: GSM = gummy stem blight; RHIZ=Rhizoctonia belly rot; DOW = downy mildew; ANTH = anthracnose; PCAP = Phytophthora crown and fruit rot.

<sup>&</sup>lt;sup>1</sup>Chlorothalonil (Bravo, Echo, Equus, etc...).
<sup>2</sup>Folicur should be used at 8.0 fl oz when sprayed each time with a seasonal limit of 24 fl oz.

#### Succulent Legume (snap, lima, pole bean) Fungicide Spray Programs 2016

# Bhabesh Dutta Extension Vegetable Pathologist – University of Georgia

As with most crops, disease management begins prior to planting the crop to be protected. By using such methods as disease-free seed and transplants, proper rotation, discing and plowing, and use of resistant varieties, growers can minimize the amount of disease that is available to attack their crop. Using many practices takes all the weight off of any practice and gives growers more disease management options at lower risk. Once plants are in the fields, however, fungicide sprays are relied on heavily for effective and economical management of plant diseases. This spray guide is designed to encompass many disease that attack succulent pod legumes during the growing season(s).

### Spray Schedule = 7 - 14 day

Spring/Summer			Fall
Spray No.	Fungicide(s)/disease activity	Spray No.	Fungicide(s) /disease activity
1.	Chlorothalonil of Folicur/R + CERC + ALT	1.	Chlorothalonil <sup>1</sup> of Folicur/R + CERC + ALT
2.	Chlorothalonil <sup>1</sup> of Folicur/R + CERC + ALT	2.	Chlorothalonil <sup>1</sup> of Folicur/R + CERC + ALT
3.	Chlorothalonil <sup>1</sup> of Folicur/R + CERC + ALT	3.	Chlorothalonil <sup>1</sup> of Folicur/R + CERC + ALT
4.	Quadris/RHIZ + R CERC + ALT	4.	Quadris/RHIZ + R CERC + ALT
5.	Topsin / ANTH (mainly lima bean) Quadris/RHIZ + R + CERC + ALT	5.	Topsin / ANTH (mainly lima bean) Quadris/RHIZ + R + CERC + ALT
6.	Ridomil Gold Copper <u>or</u> Headline/PYTH <u>or</u> Quadris/PYTH + RHIZ + R + CERC + ALT Phosphite-type product/PYTH	6.	Ridomil Gold Copper <u>or</u> Headline/PYTH <u>or</u> Quadris/PYTH + RHIZ + R + CERC + ALT Phosphite-type product/PYTH
7.	Rally/R + RHIZ Ridomil Gold Copper or Headline / PYTH or Quadris / PYTH + RHIZ + R + CERC + ALT Phosphite-type product /PYTH	7.	Rally/R + RHIZ Ridomil Gold Copper or Headline / PYTH or Quadris / PYTH + RHIZ + R + CERC + ALT Phosphite-type product /PYTH
8.	Ridomil Gold Copper <u>or</u> Headline/PYTH <u>or</u> Quadris/PYTH + RHIZ + R + CERC + ALT Phosphite-type product/PYTH	8.	Priaxor or Omega 500 or Rovral or Topsin or Fontelis/ SCR

<sup>&</sup>lt;sup>T</sup> Chlorothalonil (Bravo, Echo, Equus, etc...).

Always read the label for detailed application instructions of consult the Georgia pest Control handbook.

Disease Acronyms: RHIZ=Rhizoctonia belly rot; R = rust; ANTH = anthracnose; ALT = Alternaria pod and leaf spot: CERC = Cercospora leaf spot; PYTH = Pythium cottony leak; SCR = Scelerotinia or "white mold".

#### **Cantaloupe Fungicide Spray Programs 2016**

## Bhabesh Dutta Extension Vegetable Pathologist – University of Georgia

As with most crops, disease management begins prior to planting the crop to be protected. By using such methods as disease-free seed and transplants, proper rotation, discing and plowing, and use of resistant varieties, growers can minimize the amount of disease that is available to attack their crop. Using many practices takes all the weight off of any on practice and gives growers more disease management options at lower risk. Once plants are in the field, however, fungicide sprays are relied on heavily for effective and economical management of plant diseases. This spray guide is designed to encompass many diseases that attack cantaloupe during the growing season(s) in Georgia.

#### Spray Schedule = Start 1 week after transplanting, then use 7 day schedule if raining once a week.

	Carriero		Tall
Spray	Spring	Spray	Fall
No.	Fungicide(s)/disease activity	Spray No.	Fungicide(s)/disease activity
1.	Chlorothalonil/GSB	1.	Chlorothalonil + tebuconazole <sup>2</sup> /GSB
1.	copper at lowest labeled rate 1/BFB	1.	copper at lowest labeled rate 1/BFB
	copper at lowest labeled rate /BI B		Presidio, Ranman, or Zampro/DOW
2.	Chlorothalonil/GSB		Tiestoro, Ramman, or Zampro/Do W
2.	copper at lowest labeled rate 1/BFB	2.	Chlorothalonil/GSB
		2.	copper at lowest labeled rate <sup>1</sup> /BFB
3.	Chlorothalonil/GSB		Orondis (soil app), Presidio, Revus/
J.	copper at lowest labeled rate 1/BFB		PCAP
4.	Proline or Inspire Super or Aprovia top/GSB;	3.	Chlorothalonil + tebuconazole <sup>2</sup> OR Inspire Super or
	Orondis (soil app), Presidio, Revus/ PCAP;		Aprovia top/GSB;
	Ranman or Previour flex, or Curzate/DOW		copper at lowest labeled rate <sup>1</sup> /BFB;
			Ranman or Previour flex or
5.	Chlorothalonil + Luna Experience/GSB;		Curzate/DOW
	Quintec or Torino or Proline or		C11 41 1 1/CCD
	Procure/POW; Presidio or Revus / PCAP;	4.	Chlorothalonil/GSB
	Ranman or Previour flex or		Orondis (soil app) or Presidio, Revus/
	Curzate/DOW		PCAP; Ranman or Previour flex or Curzate/DOW
	D II I G A I GOD		Cuizate/DOW
6.	Proline or Inspire Super or Aprovia top/GSB;		
	Quintec or Torino or Proline or Procure/POW;	_	Chlorothalonil + tebuconazole OR Proline or
	Orondis (soil app) or Presidio, Revus/ PCAP	5.	Aprovia top/GSB; Quintec, Torino, Proline or
			Procure/POW; Presidio or Revus / PCAP;
	Ranman or Previcur flex or Curzate/DOW		Ranman or Previour flex, or Curzate/DOW
	Chlorothalonil + Luna Experience/GSB;		ramman of Frevieur flex, of Careaco Bo W
7.	Quintec, Torino, Proline or		Chlorothalonil + Luna
	Procure/POW; Presidio or Revus/ PCAP;	6.	experience/GSB; Quintec, Torino or
	Ranman, Zampro, or Curzate/DOW		Procure/POW; Presidio, Revus/
	Ramman, Zampro, or Curzate, DOW		PCAP; Ranman or Previour flex or
			Curzate/DOW
03	Chlorothalonil/GSB;		
$8^3$ .	Quintec, Torino, Proline or	7.	Chlorothalonil + tebuconazole OR Inspire Super/GSB
	Procure/POW; Presidio, Revus / PCAP;	/ .	Quintec, Torino or Procure/POW
	Ranman or Previour flex or		Presidio or Revus / PCAP Ranman,
	Curzate/DOW		Zampro, or Curzate/DOW
		$8^{3}$ .	Chlorothalonil + Fontelis/GSB + POW
			Quintec, Torino or Procure/POW
			Presidio, Revus / PCAP; Ranman or
			Previour flex, or Curzate/DOW

Always read the label for detailed application instructions or consult the Georgia Pest Control Handbook

<sup>&</sup>lt;sup>1</sup> Copper is used prior to fruit set at lowest labeled rate if bacterial fruit blotch is an issue.
<sup>2</sup> Tebuconazole (any tebuconazole) should be used at 8.0 fl oz when sprayed each time with a seasonal limit of 24 fl

<sup>&</sup>lt;sup>3</sup> Be mindful of preharvest intervals (PHIs) for later sprays as many may have a 7-14 day PHI. Disease Acronyms: BFB = bacterial fruit blotch; GSB = gummy stem blight; POW = powdery mildew; DOW = downy mildew; ANTH = anthracnose; PCAP = Phytophthora crown and fruit rot.

#### **Watermelon Fungicide Spray Programs 2016**

### Bhabesh Dutta Extension Vegetable Pathologist – University of Georgia

As with most crops, disease management begins prior to planting the crop to be protected. By using such methods as disease-free seed and transplants, proper rotation, discing and plowing, and use of resistant varieties, growers can minimize the amount of disease that is available to attack their crop. Using many practices takes all the weight off of any on practice and gives growers more disease management options at lower risk. Once plants are in the field, however, fungicide sprays are relied on heavily for effective and economical management of plant diseases. This spray guide is designed to encompass many diseases that attack watermelon during the growing season(s) in Georgia.

#### Spray Schedule = Start 1 week after transplanting, then use 7 day schedule if raining once a week.

Spring			Fall
Spray	-	Spray	
No.	Fungicide(s)/disease activity	No.	Fungicide(s)/disease activity
0.	Proline at-plant drench/FW	1.	Chlorothalonil <sup>1</sup> + Tebuconazole <sup>3</sup> /GSB Actigard and/or copper fungicide <sup>2</sup> /BFB
1.	Chlorothalonil <sup>1</sup> /GSB		
	Actigard and/or copper fungicide <sup>2</sup> /BFB	2.	Chlorothalonil/GSB copper fungicide/BFB
2.	Chlorothalonil/GSB		
	copper fungicide/BFB Proline/FW	3.	Chlorothalonil + Aprovia top OR Inspire Super/GSB Actigard and/or copper fungicide/BFB
3.	Tebuconazole <sup>3</sup> /GSB or chlorothalonil/GSB Actigard and/or copper fungicide/BFB	4.	Chlorothalonil/GSB copper fungicide/BFB
4.	Chlorothalonil/GSB copper fungicide/BFB	5.	Chlorothalonil + Tebuconazole OR Inspire Super/GSB copper fungicide/BFB
5.	Inspire Super OR Aprovia top/GSB copper fungicide/BFB	6.	Luna Experience/POW + GSB Orondis or Presidio or Revus/DOW or PCAP copper fungicide/BFB
6.	Luna Experience/POW + GSB Orondis (foliar) or Presidio or Revus or Zampro /DOW or PCAP copper fungicide/BFB	7.	Proline or Aprovia top or Inspire Super /GSB Quintec or Torino + Quadris or Cabrio/POW+ANTH Presidio, Revus or Zampro/DOW or PCAP
7.	Proline or OR Inspire Super or Aprovia top /GSB Quintec or Torino or Procure + Quadris or Cabrio/POW+ANTH		copper fungicide/BFB
	Presidio or Revus or Zampro/DOW or PCAP	8 <sup>4</sup> .	Luna Experience/POW + GSB
	copper fungicide/BFB		Orondis or Presidio, Revus or Zampro/DOW or PCAP
8 <sup>4</sup> .	Luna Experience/POW + GSB Orondis (foliar), Presidio, Revus or Zampro/DOW or PCAP	9 <sup>4</sup> .	Proline, Tebuconazole OR Inspire Super/GSB  Quintec or Torino + Quadris or Cabrio/POW+ANTH  Presidio or Revus/DOW or PCAP

Quintec or Torino + Quadris or Cabrio/POW+ANTH Orondis (foliar), Presidio, Revus or Zampro/DOW or

**PCAP** 

<sup>&</sup>lt;sup>1</sup>Chlorothalonil (Bravo, Echo, Equus, etc...) may cause rind burn if sprayed within 21 day of harvest.

<sup>&</sup>lt;sup>2</sup> Actigard and/or Copper is used prior to fruit set if bacterial fruit blotch is an issue.

<sup>&</sup>lt;sup>3</sup> Tebuconazole should be used at 8.0 fl oz when sprayed each time with a seasonal limit of 24 fl oz.

<sup>&</sup>lt;sup>4</sup>Be mindful of preharvest intervals (PHIs) for later sprays as many may have a 7-14 day PHI.

Always read the label for detailed application instructions or consult the Georgia Pest Control Handbook.

Disease Acronyms: BFB = bacterial fruit blotch; GSB = gummy stem blight; POW = powdery mildew; DOW = downy mildew; ANTH = anthracnose; PCAP = Phytophthora crown and fruit rot. FW=Fusarium wilt.

### **Onion Fungicide Spray Programs 2016**

## Bhabesh Dutta Extension Vegetable Pathologist – University of Georgia

The effective management of onion diseases begins prior to planting. By using integrated methods such as disease-free seed and transplants, proper crop rotation, disking and deep ploughing of plant debris, and use of resistant varieties, growers can minimize the amount of disease epidemic by either reducing the amount of initial inoculum or the rate of disease development. Integrated use of management practices reduces the weight on individual management option and provides growers disease management options at lower risk. Chemical management using fungicides should be the last resort after using the other management options. Most of the fungicides are effective when used as protectants, only handful of fungicides have curative actions.

### **Spray Schedule = 7 day**

Spray No.	<sup>1</sup> Fungicide(s)/target disease
Two weeks after	Banded soil application of Fontelis/RHIZ, WM, PR + Copper fungicide (foliar
transplanting	pathogens)
1	<sup>2</sup> Chlorothalonil/BNR, BLB, PB or Catamaran/ BLB, PB
2	Pristine or Merivon or Fontelis/BLB, BNR, SLB, PB
3	Chlorothalonil/BNR, BLB, PB or Catamaran/ BLB, PB
4	Pristine or Merivon or Fontelis or Scala/BLB, BNR, SLB, PB; (Scala do not
	have activity against SLB)
5	Chlorothalonil/BNR, BLB, PB or Catamaran/ BLB, PB
6	Pristine or Merivon or Fontelis/BLB, BNR, SLB, PB
7	Chlorothalonil/BNR, BLB, PB or Catamaran/ BLB, PB
8	Scala or Inspire super or Omega 500 or Quadris top or Switch/BLB, BNR,
	SLB, PB (Omega 500 and Scala do not have SLB activity)
9	Chlorothalonil/BNR, BLB, PB + ManKocide (bacterial blight)
10	Scala or Inspire super or Omega 500 or Quadris top or Switch/BLB, BNR,
	SLB, PB (Omega 500 and Scala do not have SLB activity)
11	Chlorothalonil/BNR, BLB, PB + ManKocide (bacterial blight)
12	Scala or Inspire super or Omega 500 or Quadris top or Switch/BLB, BNR,
	SLB, PB (Omega 500 and Scala do not have SLB activity)+ Pristine or
	Merivon or Fontelis or Scala/BLB, BNR, SLB, PB; (Scala do not have activity
	against SLB)
13	Chlorothalonil/BNR, BLB, PB + ManKocide (bacterial blight)
14	Scala or Inspire super or Omega 500 or Quadris top or Switch/BLB, BNR,
	SLB, PB (Omega 500 and Scala do not have SLB activity)
15	Chlorothalonil/BNR, BLB, PB + ManKocide (bacterial blight)
16	Scala or Inspire super or Omega 500 or Quadris top or Switch/BLB, BNR,
	SLB, PB (Omega 500 and Scala do not have SLB activity)

The fungicide spray for **downy mildew** (**DM**) will be based on a forecasting model. Alerts for the DM spray will be communicated by the Vidalia Onion and Vegetable Research Center and the UGA, Tifton. **Fungicides with some degree of efficacy on DM are: Reason, Zampro and Omega 500.** 

<sup>1</sup>Please use the labeled rate of recommended fungicide. Rotate fungicides for good disease control.

Disease acronyms: BNR=Botrytis neck rot; BLB=Botrytis leaf blight; PB=Purple blotch; RHIZ=Rhizoctonia root rot; WM=White mold; PR=Pink root; SLB=Stemphylium leaf blight;

<sup>&</sup>lt;sup>2</sup>Chlorothalonil (Bravo, Echo, Equus, etc)

#### **Broccoli/Cabbage Fungicide Spray Programs 2015**

# Bhabesh Dutta Extension Vegetable Pathologist – University of Georgia

As with most crops, disease management begins prior to planting the crop to be protected. By using such methods as disease-free seed and transplants, proper rotation, discing and plowing, and use of resistant varieties, growers can minimize the amount of disease that is available to attack their crop. Using many practices takes all the weight off of any on practice and gives growers more disease management options at lower risk. Once plants are in the field, however, fungicide sprays are relied on heavily for effective and economical management of plant diseases. This spray guide is designed to encompass many diseases that attack these brassicas during the growing season(s) in Georgia.

#### Spray Schedule = 7 day

Fall or Winter/Spring				
Spray No.	Fungicide(s)/disease activity			
Pre-plant	Besides deep-turning, use Terraclor/RHIZ + CR or Quadris/RHIZ			
1.	Chlorothalonil¹/DOW copper fungicide²/BR			
2.	Ridomil Gold Bravo <sup>3</sup> or Forum or Revus <sup>4</sup> or Reason <sup>5</sup> or Presidio + chlorothalonil/DOW copper fungicide/BR Quadris or Cabrio/ALT + CERC			
3.	Ridomil Gold Bravo or Forum or Revus or Reason or Presidio + chlorothalonil/DOW copper fungicide/BR Switch/ALT + CERC + SCR			
4.	Ridomil Gold Bravo or Forum or Revus or Reason or Presidio + chlorothalonil/DOW copper fungicide/BR Quadris or Cabrio/ALT + CERC or Endura/ALT + SCR			
5.	Ridomil Gold Bravo or Forum or Revus or Reason or Presidio + chlorothalonil/DOW copper fungicide/BR Switch/ALT + CERC + SCR or Quadris or Cabrio/ALT + CERC			
6.	Ridomil Gold Bravo or Forum or Revus or Reason or Presidio + chlorothalonil/DOW copper fungicide/BR Endura/ALT + SCR			

<sup>&</sup>lt;sup>1</sup> Chlorothalonil (Bravo, Echo, Equus, etc...).

Always read the label for detailed application instructions or consult the Georgia Pest Control Handbook.

Disease Acronyms: DOW = downy mildew; ALT = Alternaria leaf spot; CERC = Cercospora leaf spot; BR = black rot; SCR = Sclerotinia (raisin head); CR = club root.

<sup>&</sup>lt;sup>2</sup> Copper is used to suppress spread of black rot caused by the bacterium *Xanthomonas campetris* pv. *campestris*.

<sup>&</sup>lt;sup>3</sup> Ridomil Gold Bravo and/or Presidio need to be rotated with Forum, Revus, and/or Reason.

<sup>&</sup>lt;sup>4</sup> Forum and Revus have the same mode of action, so don't spray them back-to-back. Use one or the other.

<sup>&</sup>lt;sup>5</sup> If Reason is used you don't need to use Quadris or Cabrio as all three control Alternaria and Cercospora. Don't spray Reason, Cabrio or Quadris back-to-back as they have the same mode of action.