Collard, Kale, Mustard, Turnip (greens) Fungicide Spray Programs 2023

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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 greens 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.	Copper fungicide[1]/BR; Cabrio/CERC
2.	Forum or Revus or Reason/DOW; copper fungicide/BR; Quadris Top/ALT + CERC (Phosphite fungicides for DOW will also help with ALT)
3.	Forum or Revus or Reason/DOW; copper fungicide/BR; Fontelis or Endura/ALT + SCR
4.	Forum or Revus or Reason/DOW; copper fungicide/BR; Luna sensation/ALT + CERC
5.	Forum or Revus or Reason /DOW; copper fungicide/BR; Inspire super/ALT + SCR
6.	Forum or Revus or Reason/DOW copper fungicide/BR; Luna sensation/ALT + CERC
	PHOSPHITE (ANY) OR K-PHITE SHOULD BE USED IN ROTATION FOR DM AND ALT CONTROL PHOSPHITE (ANY) OR K-PHITE SHOULD NOT BE TANK-MIXED WITH COPPER AND/OR XENTARI.

[1] Copper is used to suppress spread of black rot caused by the bacterium *Xanthomonas campetris* pv. *campestris.*

[2] Forum and Revus have the same mode of action, so don't spray them back-to-back. Use one or the other.

[3] 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.

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.

Broccoli/Cabbage Fungicide Spray Programs 2023

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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.	Copper[1]+Manzate/BR
2.	Chlorothalonil[2] /CERC+ALT; Actigard[3]/BR
3.	Forum or Revus[4] or Reason[5]/DOW; Chlorothalonil/ALT + CERC
4.	Copper+Manzate/BR; Quadris Top/ALT
5.	Inspire Super/ALT + CERC; Fontelis/SCR+ALT
6.	Forum or Revus or Reason or Presidio+ Inspire super/DOW+ALT; copper fungicide/BR;
7.	Copper+Manzate/BR; Endura/ALT+ SCR
8.	Copper+Manzate/BR; Luna sensation/ALT + CERC +
9.	Copper+Manzate/BR; Fontelis/SCR+ALT;

PHOSPHITE (ANY) OR K-PHITE SHOULD BE USED IN ROTATION FOR DM AND ALT CONTROL
PHOSPHITE (ANY) OR K-PHITE SHOULD NOT BE TANK-MIXED WITH COPPER AND/OR XENTARI.

[1] Copper is used to suppress spread of black rot caused by the bacterium *Xanthomonas campetris* pv. *campestris*.
[2] Chlorothalonil (Bravo, Echo, Equus, etc…).
[3] Actigard can be used at a labeled rate.
[4] Forum and Revus have the same mode of action, so don't spray them back-to-back. Use one or the other.
[5] If Reason is used you don't need to use Quadris or Cabrio as all three control Alternaria and Cercospora.
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.

Cantaloupe Fungicide Spray Programs 2023

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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.

This is a generalized sequence of fungicide spray. A 5-7 day schedule can be followed; however, frequency, type and sequence of fungicide spray may vary situation to situation and field to field. Growers are advised to communicate with their respective county extension agents if they have any queries regarding this spray guide.

Spray 1: Chlorothalonil – GSB; copper fungicide at lowest labeled rate[1] – BFB

Spray 2: Chlorothalonil – GSB; copper fungicide at lowest labeled rate – BFB

Spray 3: Chlorothalonil – GSB; copper fungicide at lowest labeled rate – BFB

Spray 4: Miravis Prime or Proline[2] or Inspire Super or Aprovia top – GSB, ANTH;
Orondis Gold (soil app) or Presidio or Revus - PCAP;
Ranman– DOW;
Topsin - ANTH

Spray 5: Chlorothalonil + Luna Experience - GSB;
Vivando or Gatten or Prolivo - POW;
Elumin (soil app) or Presidio or Revus - PCAP;
Ranman or Ariston or Previcur flex – DOW;
Proline-ANTH

Spray 6: Miravis Prime or Proline or Inspire Super or Aprovia top – GSB, ANTH;
Vivando or Gatten or Proline - POW;
Orondis Gold (soil app) or Presidio or Revus- PCAP

Spray 7: Ranman- DOW
Chlorothalonil + Proline - GSB;
Vivando or Gatten or Procure – POW;
Topsin - ANTH

Spray 8: Elumin (soil app) or Presidio or Revus - PCAP;
Ranman - DOW

[1] Copper is used prior to fruit set at lowest labeled rate if bacterial fruit blotch is an issue.
[2] Proline should be used at 5.7 fl oz when sprayed each time. 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.

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

Cucumber Fungicide Spray Programs 2023

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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
1	Chlorothalonil[1] /DOW + ANTH + GSB Orondis Gold (PCAP and PYTHIUM)	1	ProlineANTH Elumin or Ranman or Previcur Flex/DOW Chlorothalonil/GSB
2	Chlorothalonil/DOW + ANTH + GSB	2	Orondis Gold (soil app) or Presidio or Revus/PCAP Chlorothalonil+(Elumin or Ranman)
3	Chlorothalonil /DOW + ANTH + GSB Orondis Gold (soil app)/PCAP	3	Topsin/ANTH Elumin/DOW + PCAP Chlorothalonil/GSB
4	Proline/ ANTH + GSB	4	Miravis Prime or Aprovia top or Inspire Super /GSB+ANTH Elumin or Ranman or Previcur flex/DOW Orondis Gold (soil app)/PCAP
5	Orondis Gold (soil app) or Presidio or Revus/PCAP Elumin or Ranman or Previcur Flex /DOW Topsin/ANTH	5	Proline/ANTH Elumin or Ranman or Previcur flex/DOW Miravis Prime or Aprovia top or Inspire Super/GSB+ANTH
6	Aprovia top or Inspire super or Miravis Prime /GSB Elumin or Ranman or Previcur flex/DOW Proline/ANTH	6	Proline/ANTH+GSB Elumin or Ranman or Previcur flex/DOW
7	Ranman or Previcur flex/DOW Revus/PCAP Aprovia top or Miravis Prime/ANTH + GSB	7	Aprovia top or Miravis Prime/ANTH Elumin or Ranman or Previcur flex/DOW

[1] Chlorothalonil (Bravo, Echo, Equus).

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.

Northern Georgia Tomato Fungicide Spray Programs 2023

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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, disking 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 = 5 day

Fall or Winter/Spring	
Spray No.	Fungicide(s)/disease activity
Pre-plant	Georgia 3-way
1.	Actigard at 0.33 oz/acre in 30-50 gallons of water copper fungicide + mancozeb + chlorotalonil[1]/BS + EB
2.	Copper fungicide + mancozeb/BS
3.	Actigard at 0.33 oz/acre in 30-50 gallons of water/Leap copper fungicide + mancozeb + (Quadris or Cabrio or TopGuard EQ)/BS + EB + TS
4.	Copper fungicide + mancozeb/BS; Orondis Ultra or Revus top/Late Blight
5.	Actigard at 0.5 oz/acre in 60-70 gallons of water/Leap Copper fungicide + mancozeb + chlorothalonil[1]/BS + EB
6.	Copper fungicide + mancozeb/BS; Presidio or Zampro/ Late Blight
7.	Actigard at 0.5 oz/acre in 60-70 gallons of water/Leap copper fungicide + mancozeb + (Quadris or Cabrio or TopGuard EQ)/BS + EB + TS
8.	Copper fungicide + mancozeb/BS; Fontelis (soil-use)/SB; Revus Top/Late Blight
9.	Actigard at 0.75 oz/acre in 70-100 gallons of water copper or Leap/TopGuard EQ + mancozeb + chlorothalonil/BS + EB
10.	Copper fungicide + mancozeb/BS; Fontelis (soil-use)/SB
11.	Actigard at 0.75 oz/acre in 70-100 gallons of water /Leap copper fungicide + mancozeb + (Quadris or Cabrio or TopGuard EQ)/BS + EB + TS
12.	Copper fungicide + mancozeb/BS; Orondis Ultra or Revus Top/Late Blight
13.	Copper fungicide + mancozeb + Endura or Switch/BS + EB + BOT + TS
14.	Copper fungicide + mancozeb/BS
15.	Copper fungicide + mancozeb + Endura or Switch or Fontelis/BS + EB + BOT + TS

[1] 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; SB = Southern blight.

Onion Fungicide Spray Programs 2022-23

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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 = 7-10 day (may vary based on weather conditions)

Spray No.	[1]Fungicide(s)/target disease
Two weeks after transplanting	Overhead drench application of Fontelis or Endura/RHIZ, WM, PR + Copper fungicide (foliar pathogens)
1	[2]Chlorothalonil or Catamaran/BNR, BLB, PB/ BLB, PB
2	Pristine or Merivon or Fontelis/BLB, BNR, SLB, PB
3	Chlorothalonil or Catamaran/BNR, BLB, PB/ BLB, PB
4	Pristine or Merivon or Fontelis/BLB, BNR, SLB, PB; ManKocide or Kocide or Nordox (Pseudomonas)
5	Chlorothalonil or Catamaran/BNR, BLB, PB/ BLB, PB
6	Pristine or Merivon or Fontelis/BLB, BNR, SLB, PB; ManKocide or Kocide or Nordox (Pseudomonas)
7	Chlorothalonil or Catamaran/BNR, BLB, PB/ BLB, PB
8	Luna tranquility/Flex or Inspire super or Omega 500 or Miravis Prime or Switch/BLB, BNR, SLB, PB (Omega 500 lacks SLB activity)
9	Chlorothalonil/BNR, BLB, PB + ManKocide or Kocide or Nordox (bacterial diseases)
10	Luna tranquility/Flex or Inspire super or Omega 500 or Miravis Prime or Switch/BLB, BNR, SLB, PB (Omega 500 lacks SLB activity)
11	Chlorothalonil or Catamaran/BNR, BLB, PB + ManKocide or Kocide or Nordox (bacterial diseases)
12	Luna tranquility/Flex or Inspire super or Omega 500 or Miravis Prime or Switch/BLB, BNR, SLB, PB (Omega 500 lacks SLB activity)
13	Chlorothalonil or Catamaran /BNR, BLB, PB + ManKocide or Kocide or Nordox (bacterial diseases)

14	Luna tranquility/Flex or Inspire super or Omega 500 or Quadris top/BLB, BNR, SLB, PB (Omega 500 lacks SLB activity)
15	Chlorothalonil/BNR, BLB, PB + ManKocide or Kocide or Nordox (bacterial diseases)
16	Luna tranquility/Flex or Inspire super or Omega 500 or Miravis Prime/BLB, BNR, SLB, PB (Omega 500 lacks SLB activity)

The fungicide spray for **downy mildew (DM)** will be based on a forecasting model or based on a calendar spray (recommended spray may start **by second or third week of March)**. Alerts for the DM spray will be communicated by the Vidalia Onion and Vegetable Research Center and the UGA, Tifton. **Fungicides with moderate level of efficacy on DM are: Orondis Ultra, Omega 500, Zampro and Chlorothalonil. Use of Phosphite (irrespective of brand and type) is highly recommended as a rotation partner.**

[1]Please use the labeled rate of recommended fungicide. Rotate fungicides for good disease control.

[2]Chlorothalonil (Bravo, Echo, Equus etc)

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;

Pepper Fungicide Spray Programs 2023

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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 = 5 day

Spring or Fall	
Spay No.	Fungicide(s)/disease activity.
Pre-plant	Georgia 3-way
1.	Actigard at 0.75 oz/acre/BS; Ridomil at plant drench/PYTH
2.	Copper fungicide+Manzate/BS; Quadris Top**/ANTH
3.	Actigard at 0.5 oz/acre
4.	Leap/BS; Copper fungicide+Manzate /BS
5.	Orondis Gold or Presidio through the drip/PCAP; Copper fungicide+Manzate/BS; Quadris Top/ANTH
6.	Aprovia Top /ANTH; Leap or copper fungicide+Manzate/BS
7.	Actigard at 0.33 oz.acre/BS; Leap or Copper fungicide+Manzate/BS; Elumin/PCAP
8.	Orondis Gold (drip) or Elumin or Revus/PCAP; Copper fungicide+Manzate/BS
9.	Aprovia Top/ANTH; Copper fungicide+Manzate/BS

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

**Resistance to Quadris in ANTH pathogen has been detected in Georgia. Early use may show some efficacy; however, late season is not recommended.

Pumpkin Fungicide Spray Programs 2023

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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 number	Fungicide/disease activity	Spray number	Fungicide/disease activity
1	Chlorothalonil[1] or mancozeb/DOW	1	Orondis (soil app)/PCAP Chorothalonil or mancozeb/DOW
2	Orondis (soil app)/PCAP Cholrothalonil/DOW	2	Chlorothalonil[1] or mancozeb/DOW
3	Presidio or Revus/PCAP Chlorothalonil/DOW	3	Elumin or Presidio or Revus/PCAP Chorothalonil/DOW
4	Orondis (soil app)/PCAP Chlrothalonil/DOW Gatten or Vivando/POW	4	Orondis (soil app)/PCAP Cholrothalonil/DOW Gatten or Vivando/POW
5	Gatten or Vivando /POW Presidio or Revus or Elumin/ PCAP + DOW Chlorothalonil or mancozeb or Elumin or Ranman or Previcur Flex/ DOW	5	Prolivo/POW
6	Gatten or Vivando /POW Orondis (soil app)/ PCAP + DOW Chlorothalonil or mancozeb or Elumin or Ranman or Previcur Flex or Aristion/ DOW	6	Gatten or Vivando/POW Orondis (soil app)/ PCAP + DOW Chlorothalonil or Elumin or Ranman/ DOW
7	Prolivo/POW; Presidio or Revus/ PCAP + DOW; Chlorothalonil or Elumin or Ranman or Previcur Flex/ DOW	7	Orondis (soil app) or Presidio or Revus/ PCAP Chlorothalonil or Elumin or Ranman / DOW
8	Orondis (soil app) or Presidio or Revus/ PCAP + DOW Chlorothalonil or Elumin or Ranman / DOW	8	Gatten or Vivando/POW Presidio or Revus/ PCAP; Chlorothalonil or Elumin or Ranman or Previcur Flex/ DOW

[1] Chlorothalonil (Bravo, Echo, Equus, etc…).

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.

South Georgia Tomato Fungicide Spray Programs 2023

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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, disking 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 = 5 day

Fall or Winter/Spring	
Spray No.	Fungicide(s)/disease activity
Pre-plant	Georgia 3-way
1.	Actigard at 0.33 oz/acre in 30-50 gallons of water copper fungicide + mancozeb + chlorotalonil[1]/BS + EB
2.	Copper fungicide + mancozeb/BS
3.	Actigard at 0.33 oz/acre in 30-50 gallons of water/Leap copper fungicide + mancozeb + (Quadris or Cabrio or TopGuard EQ)/BS + EB + TS
4.	Copper fungicide + mancozeb/BS
5.	Actigard at 0.5 oz/acre in 60-70 gallons of water/Leap 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/Leap copper fungicide + mancozeb + (Quadris or Cabrio or TopGuard EQ)/BS + EB + TS
8.	Copper fungicide + mancozeb/BS; Fontelis or Quadris or Rhyme (soil-use)/SB
9.	Actigard at 0.75 oz/acre in 70-100 gallons of water copper or Leap/TopGuard EQ + mancozeb + chlorothalonil/BS + EB
10.	Copper fungicide + mancozeb/BS; Fontelis or Quadris or Rhyme (soil-use)/SB
11.	Actigard at 0.75 oz/acre in 70-100 gallons of water /Leap copper fungicide + mancozeb + (Quadris or Cabrio or TopGuard EQ)/BS + EB + TS
12.	Copper fungicide + mancozeb/BS;
13.	Copper fungicide + mancozeb + Endura or Switch/BS + EB + BOT + TS
14.	Copper fungicide + mancozeb/BS
15.	Copper fungicide + mancozeb + Endura or Switch or Fontelis/BS + EB + BOT + TS

[1] 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; SB = Southern blight.

Squash Fungicide Spray Programs 2023

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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 number	Fungicide/disease activity	Spray number	Fungicide/disease activity
1	Chlorothalonil[1] or mancozeb/DOW	1	Orondis Gold (soil app)/PCAP and PYTH Chorothalonil/DOW
2	Orondis Gold (soil app)/PCAP and PYTH Chorothalonil/DOW	2	Chlorothalonil[1]/DOW
3	Presidio or Revus/PCAP Chorothalonil or Ranman/DOW	3	Presidio or Revus/PCAP Chorothalonil or Ranman/DOW
4	Orondis Gold (soil app)/PCAP Elumin/DOW Vivando/POW	4	Orondis (soil app)/PCAP Elumin/DOW Vivando/POW
5	Gatten/POW Presidio or Revus/ PCAP Chlorothalonil+ Ranman or Previcur Flex/ DOW	5	Gatten/POW Chlorothalonil Ranman or Previcur Flex/ DOW
6	Vivando/POW Elumin/ PCAP and DOW	6	Vivando/POW Elumin/ PCAP and DOW
7	Gatten/POW Revus/ PCAP Ranman or Previcur Flex / DOW	7	Presidio or Revus/ PCAP Ranman or Previcur Flex/ DOW

[1]Chlorothalonil (Bravo, Echo, Equus, etc…).

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; PYTH = Pythium.

Watermelon Fungicide Spray Programs 2023

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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.

This is a generalized sequence of fungicide spray. A 7-10 day schedule can be followed; however, frequency, type and sequence of fungicide spray may vary situation to situation and field to field. Growers are advised to communicate with their respective county extension agents if they have any queries regarding this spray guide.

Spray 1: Proline at-plant drench

Spray 2: Chlorothalonil[1] - GSB; Actigard and/or copper fungicide[2] – BFB; Miravis Prime can be used with high-volume water after 10-14 of transplanting for additional Fusarium control

Spray 3: Chlorothalonil - GSB; Actigard and/or copper fungicide

Spray 4: Chlorothalonil - GSB; Actigard and/or copper fungicide – BFB

Spray 5: Chlorothalonil - GSB; Actigard and/or copper fungicide – BFB

FRUIT SET

Spray 6: Luna Experience – GSB; copper fungicide – BFB

Spray 7: Inspire Super or Aprovia top or Miravis Prime – GSB; Copper fungicide – BFB

Spray 8: Vivando or Gatten or Prolivo or Quintec – POW; Orondis Ultra (foliar) and Phosphite - DOW and PCAP; Copper – BFB

Spray 9: Inspire Super or Aprovia top or Miravis Prime – GSB; Vivando or Gatten or Quintec – POW; Topsin – ANTH

Spray 10: Orondis Ultra[3] (foliar) and Phosphite– PCAP; Elumin or Ranman or Previcur flex – DOW

Spray 11: Proline or Aprovia Top OR Inspire Super – GSB and ANTH; Vivando or Gatten or Quintec – POW; Presidio and Phosphite – PCAP; Elumin or Previcur flex - DOW

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[1] Chlorothalonil (Bravo, Echo, Equus, etc…) may cause rind burn if sprayed within 21 day of harvest.

[2] Actigard (0.33 fl oz) and/or Copper (any copper product; however, fixed copper tend to possess less phytotoxicity potential) is used prior to fruit set if bacterial fruit blotch is an issue.

[3] 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.

Carrot Fungicide Spray Programs 2022-23

Bhabesh Dutta; Extension Vegetable Pathologist – University of Georgia

Disease	Material	FRAC	Rate of Material	Minimum Days		Method, Schedule, and Remarks
				Harv.	Reentry	
Carrot						
Alternaria leaf blight, Cercospora leaf spot	azoxystrobin + difenoconazole (Quadris Top)	11 + 3	12 to 14 fl oz / acre	7	0.5	**FOR USE ON CARROTS ONLY**.
	cyprodinil + fludioxonil (Switch)	9+12	11 to 14 oz/acre	7	0.5	**Not for Cercospora.** Apply when disease first appears, and continue on 7 to 10 day intervals if conditions remain favorable for disease development. Do not exceed 56 oz of product per acre per year.
	fluopyram + trifloxystrobin (Luna Sensation)	7+11	4 to 7.6 fl oz/ acre	7	0.5	Do not make more than 2 consecutive applications before rotating to a labeled non- Group 7 or non-Group 11fungicide. Carrot rate is 4.0 to 7.6 fl oz/acre.
	fluopyram + pyrimethanil (Luna Tranquility)	7 + 9	11.2 fl oz/acre	7	0.5	Not for *Cercospora***.** Do not make more than 2 consecutive applications before rotating to a labeled non-Group 7 or non- Group 9 fungicide.
	fluxapyroxad + pyraclostrobin (Merivon)	7+11	4 to 5.5 fl oz/ acre	7	0.5	Do not make more than 2 consecutive applications before rotating to a labeled non-Group 7 or non-Group 11 fungicide. Make no more than 3 applications per season. Use maximum rate for Cercospora leafspot.
	pyraclostrobin + boscalid (Pristine)	11+7	8 to 10.5 oz/ acre	0	0.5	Make no more than 2 consecutive applications before alternating with a different mode of action. Use no more than 63 oz or make no more than 6 applications per season.
White mold (*Sclerotinia* spp.) and gray mold (*Botrytis* spp.) Southern blight (*Sclerotium rolfsii*)	penthiopyrad (Fontelis)	7	16 to 30 fl oz/acre	0	0.5	Make no more than 2 consecutive applications be-fore alternating with a fungicide with a different mode of action. Apply no more than 61 fl oz/ acre per year. Also labeled for use on harvested garden beet, turnip, and radish leaves.
	fluazinam (Omega)	29	1 pt / acre	7	0.5	For white mold only.
White Rust (*Albugo* spp.)	mefenoxam + copper hydroxide (Ridomil Gold/Copper)	4+M	2 lb/acre	7	1	Spray leaves. Use with preplant Ridomil 2E soil applications. Make 2 to 4 applications if needed on 14-day intervals.
Rhizoctonia	Azoxystrobin	11				Pre-plant application and soil incorporation. Apply 0.40 – 0.80 fluid ounce (0.10 – 0.20 oz. a.i.) per 1,000 rowfeet following the instructions in the SOILBORNE/SEEDLING DISEASE CONTROL section of this label.