## EXTENSION PLANT PATHOLOGY REPORT NO. 6 GAINESVILLE, FLORIDA, November, 2002

Chemical Control Guide For Diseases of Vegetables Revision No. 15

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Control of plant diseases is achieved by utilizing numerous cultural, biological, regulatory and chemical tactics. This publication serves as a guide to chemical control for vegetables grown in Florida. The performance of a chemical is enhanced by utilizing non-chemical tactics to reduce inocula. Also, within chemical control, numerous variables influence the performance of the chemical. Time of applications, nozzle arrangement, spray dilution, chemical rate per unit area, adjuvants, and rainfall are some of the variables associated with chemical application technology. It is best to begin spray programs prior to or at first sign of disease. Starting a spray program as late as when disease is visible through the windshield of a moving vehicle costs less initially but often results in substandard yields and quality.

USE A SPRAY ADJUVANT WITH A SPREADER AND A STICKER IN CONJUNCTION WITH SOME WETTABLE POWDER AND SOME FLOWABLE FORMULATIONS. SPREADER-STICKER ADJUVANTS ARE USEFUL PARTICULARLY ON SLICK LEAF AND VERTICALLY LEAF-ORIENTED CROPS LIKE ONIONS, CRUCIFERS AND SWEET CORN. SEE PLANT PROTECTION POINTER NO. 37 FOR MORE DETAILS ON ADJUVANTS. DO NOT USE SPRAY ADJUVANTS IF THE LABEL INDICATES THAT ADJUVANTS SHOULD NOT BE USED.

The purpose of this listing is to guide you with legal use of sprayable plant disease control chemicals. All legally available, plant disease control chemicals sold in Florida are not listed. For such a listing contact the Florida Department of Agriculture. Chemicals listed in this guide are 1) those for which data from Florida are available for the active ingredient, 2) those for which no other compound(s) is known to be available, but is legal for use (tolerance established and labeled) utilizing performance data from the United States, 3) those which are legal to use and lack data from Florida but would be expected to perform satisfactorily based upon professional judgement. It may seem rhetorical but read the label; you paid for it. Read labels for information about crop rotational limitations with fungicides. Also note within this publication the crop groupings for tolerance establishment that are available. REENTRY into fields treated with any pesticide is restricted by the use of a time interval, type of clothing to be worn, or protective wear needed. Use of fungicides containing tin, or chlorothalonil require a 48 hour reentry interval (REI). Labels of different copper fungicides vary for re-entry from the time the spray dries to 48 hrs. Most other fungicides have a 24 hour REI. Some fungicides have a 12 hour REI. Label information supersedes all other sources of information.

Whenever possible, rotate unrelated chemicals in your spray program for resistance management. Continued use of the same or related chemicals can result in insensitivity (resistance) of the target pest to that chemical or others in the same group.

		Maximum Rate	e Per Acre Per	Min. Days	Pertinent	
Crop	Chemical	Application	Season	To Harvest	Diseases	Remarks
Amaranth	Quadris 2.08 FL	15.4 fl. ozs.	2.88 qts.	0	Various, see label	For restrictions and use patterns, see celery for foliar diseases and onions for soilborne diseases
Arracacha	Quadris 2.08 FL	15.4 fl. ozs.	2.88 qts.	14	Various, see label	For restrictions and use patterns, see celery for foliar diseases and onions for soilborne diseases
Arrowroot	Quadris 2.08 FL	15.4 fl. ozs.	2.88 qts.	14	Various, see label	For restrictions and use patterns, see celery for foliar diseases and onions for soilborne diseases
Artichoke (Chinese & Jerusalem)	Quadris 2.08 FL	15.4 fl. ozs.	2.88 qts.	14	Various, see label	For restrictions and use patterns, see celery for foliar diseases and onions for soilborne diseases
Arugula	Quadris 2.08 FL	15.4 fl. ozs.	2.88 qts.	0	Various, see label	For restrictions and use patterns, see celery for foliar diseases and onions for soilborne diseases
Asparagus* Rate/season= rate/year for aspar.	Dithane F45 or Manex II 4 FLs	1.6 qts.	6.4 qts.*	180	Cercospora leaf spot Rust	Use after harvest of spears
	Penncozeb, Dithane M45 or Manzate 80 WPs	2.0 lbs.	8.0 lbs.*	180	Cercospora leaf spot Rust	Use after harvest of spears
	Dithane F45 or Manex II 4 FLs	0.8 qt./100 Gal.			Crown rot	Planting stock dip
	Manzate, or Dithane 75 DFs	1.0 lb./100 Gal.			Crown rot	Planting stock dip
	Ridomil Gold 4 EC	1 pt./trtd. acre	1 pt./trtd. acre	1	Pythium & Phytophthora blights	See label
	Dithane, Manzate, or Penncozeb 75 DF'S	2 lbs.	8.5 lbs.*	180	Cercospora leaf spot Rust	Use after harvest of spears

Beans	Ridomil Gold 4 EC	1 pt./trtd. acre			Pythium seedling blight	Apply at seeding in a 7-12" band on soil over seed furrow
	Ridomil Gold 10.48 G	3/4 lb/1000 ft. or row			Seedling blights	Apply in seed furrow. This is not sprayable. Do not use vines for feeding or forage.
	Equus 720, Chloronil 720, or Echo 720 6 FLs	3 pts. (snap) 2 pts. (dry & lima)	12 pts.	7 42	Rust Gray Mold	Do not use crop for livestock.
	Bravo 500, Echo 500, or GK Chloro Gold 4.17 FLs	4 pts. (snap) 3 pts. (dry & lima)		7 42	Rust Gray Mold	Do not use crop for livestock.
	Topsin M 70 WSB	2 lbs.		14 snap 28 lima	Gray mold Sclerotinia	Apply once at 50-70% bloom or twice (max.=1 ½ lbs/appl.) with first at 10-30% bloom and second at peak bloom
	Bravo Ultrex 82.5 WDG	2.7 lbs.	11 lbs.	7	Rust Gray mold	Do not use crop for livestock.
	Bravo S 4.04 F	8 pts.		7	Rust Powdery mildew	Do not use crop for livestock.
	Rovral 4 F (snap, dry & lima)	2 pts	4 pts.	full bloom	Gray mold White mold	Limit is 2 appl./crop. Not for use as livestock feed
	Rovral 50 WP (snap, dry & lima)	2 lbs.	4 lbs.	full bloom	Gray mold White mold	Limit is 2 appl./crop. Not for use as livestock feed
	Echo 90 DF	2.4 lbs (snap) 1.7 lbs. (dry)		7 42	Rust Gray mold	Do not use crop for livestock.
	Sulfur <sup>1</sup>			1	Rust Cercospora leaf spot	Sulfur can be phytotoxic during hot weather
	Nu-Cop, Kocide 101, Blue Shield, Champion, or KOP Hydroxide 77 WPs	3 lbs.		1	Bacterial blights Cercospora leaf spot	
	Nu-Cop 3L, Blueshield 3L, 3- lb. Copper Flowable, Kocide LF, or KOP Hydroxide FLs	4 pts.		1	Bacterial blights Cercospora leaf spot	
	Basicop 53 WP	2 lbs.		1	Bacterial blights	
	Champ 4.6 FL	2 pts.		1	Bacterial blights	
	Kocide 61.4 DF or Nu-Cop 50DF	3 lbs.		1	Bacterial blights	
	Kocide 404S 3.2 F	3 qts.		1	Bacterial blights Rust	

	V:1-2000 52 9 DE	2.25 lbs.		1	D4:-1 1-1:-1-4-	
	Kocide 2000 53.8 DF			1 121	Bacterial blights	
	Tenn-Cop 5E	3 pts.		12 hrs.	Bacterial blights	
	Basic copper sulfate 98 WP	4 lbs.		1	Bacterial blights	
	Kocide 4.5 LF	2 pts.		1	Bacterial blights	
	Nova 40 W	5 ozs.	1.25 lbs.	0	Rust Rhizoctonia pod rot	Note the 30 day plant back restriction.
	Botran 75 W	4 lbs. (pole) 3 lbs. (bush)		2	Sclerotinia	Do not feed treated foliage to livestock.
	Bravo Weather Stik 6F	3 pts	12 pts	7	Rust Gray Mold	Do not use treated crop for livestock. Limit is 4 appl./crop/season
	Cuprofix Disperss 36.9 DF	3.5 lbs		1	Brown Spot Halo Blight Common Blight	
Beets	Ridomil Gold 4 EC	2 pts./trtd. acre			Pythium Seedling blight	Apply at seeding in a 7-12" band on soil over seed furrow
	Basicop 53 WP	3 lbs.		1	Cercospora leaf spot	
	Kocide 2000 53.8 DF	3.75 lbs		1		
	Kocide 61.4 DF	5 lbs.		1	Cercospora leaf spot	
	Basic Copper Sulfate 98WP	3 lbs.		1	Leaf spots	
	Quadris 2.08 FL (garden & sugar)	15.4 fl. ozs.	2.88 qts	0	Various, see label	For restrictions and use patterns, see celery for foliar diseases and onions for soilborne diseases
	Cabrio 2.09 F	16 fl oz	48 fl oz	0	Various, see label	3 appl. max. See onions for resistance management.
Blackeyed peas	See Peas, Southern					
Bokchoi & other choi types	Same as Chinese cabbage & B	rassica leaf greens				
Brassica leafy greens (a wide range of crops in the brassica group according to crop grouping)	Quadris 2.08 FL	15.4 fl ozs.	1.44 qts.	0	Alternaria leaf spot Downy mildew <sup>1</sup> White rust	Limits are no more than 2 sequential applications and no more than 3 applications per crop.
Broccoli (includes Chinese Broccoli)	Echo 720, Equus 720, or Chloronil 720 6 FLs	1 ½ pts.	16 pts.	2	Alternaria leaf spot Downy mildew	7 day minimum to harvest for Chinese Broccoli

	Echo 90 DF	1.3 lbs.		2	Alternaria leaf spot Downy mildew	
	Echo 500, GK Chloro gold, or Bravo 500 4 FLs	2 ¼ pts.		2	Alternaria leaf spot Downy mildew	7 day minimum to harvest for Chinese broccoli
	Ridomil Gold 4 EC	2 pts./trtd. acre			Pythium seedling blight	Apply at seeding in a 7-12" band on soil over seed furrow.
	Rovral 4 F	2 pts.	4 pts.	0	Black Leg Sclerotinia	
	Bravo Ultrex 82.5 WDG	1.4 lbs		7	Alternaria leaf spot Downy mildew	
	Rovral 50 WP	2 lbs.	4 lbs.	0	Black leg Sclerotinia	
	Maneb 80 WP	2 lbs.	12 lbs.	7	Alternaria leaf spot Downy mildew	
	Manex 4 F	1.6 qts.	0.6 lbs.	7	Alternaria leaf spot Downy mildew	
	Ridomil Gold Bravo 76.4 WP	2 lbs.	8.0 lbs.	7	Alternaria leaf spot Downy mildew	Limit is 4 appl./crop
	Aliette 80 WDG	5 lbs.	35.0 lbs.	3	Downy mildew	Limit is 7 appl./crop. Do not tank mix with copper fungicides.
	Bravo Weather Stik 6 F	1.5 pts.		2	Alternaria leaf spot Downy mildew	7 day minimum to harvest for Chinese broccoli
	Aliette/Maneb 2+2	See label for mixing instructions		7	Alternaria leaf spot Downy mildew	Do not exceed 6 applications/crop/seasson
	Maneb 75 DF	2 lbs.	12.8 lbs.	7	Alternaria leaf spot Downy mildew	
	Quadris 2.08 FL	15.4 fl oz	1.44 qts.	0	White rust Downy mildew <sup>l</sup>	Limits are no more than 2 sequential applications and 3 total applications
Brussels sprouts	Chloronil 720, Echo 720, or Equus 720 6 FLs	1 ½ pts.	16 pts.	2	Downy Mildew Alternaria leaf spot	
	Echo 90DF	1.3 lbs.		2	Downy Mildew Alternaria leaf spot	
	Bravo 500, or GK Chloro Gold 4.17 FLs	2 ¼ pts.		2	Downy Mildew Alternaria leaf spot	

	Quadris 2.08 FL	15.4 fl oz	1.44 qts.	0	White rust Downy mildew <sup>l</sup>	Limits are no more than 2 sequential applications and 3 total applications
	Manex 4 F	1.6 pts.	9.6 pts.	7	Downy mildew Alternaria leaf spot	
	Maneb 80 WP	2.0 lbs.	12 lbs.	7	Downy mildew Alternaria leaf spot	
	Aliette 80 WDG	5.0 lbs.	35.0 lbs.	3	Downy mildew	Limit is 7 appl./crop. Do not tank mix with copper fungicides
	Aliette/Maneb 2+2	See label for mixing instructions		7	Alternaria leaf spot Downy mildew	Do not exceed 6 applications/crop/season
	Maneb 75 DF	2 lbs.	12.8 lbs.	7	Alternaria leaf spot Downy mildew	
	Bravo Ultrex 82.5 WDG	1.4 lbs.		7	Alternaria leaf spot Downy mildew	
	Cuprofix Disperss 36.9 DF	2.5 lbs		1	Black Leaf Spot (Alternaria) Downy Mildew	
	Bravo Weather Stik 6 F	1.8 pts.		2	Alternaria leaf spot	
Burdock	Quadris 2.08 FL	15.4 fl. ozs.	2.88 qts.	14	Various, see label	For restrictions and use patterns, see celery for foliar diseases and onions for soilborne diseases
	Cabrio 2.09 F	16 fl oz	48 fl oz	0	Various, see label	3 appl. max. See onions for resistance management.

<sup>&</sup>lt;sup>1</sup>e.g. Super-six, Microthiol Special, Microflo, Enduro, Super-Sul, Sulfur 6L, Thiolux 1 Not listed on label

		Maximum Rate	Per Acre Per	Min. Days		
Crop	Chemical	Application	Season	To Harvest	Pertinent Diseases	Remarks
Cabbage (also see Chinese cabbage)	Chloronil 720 or Equus 720 6 FLs	1 ½ pts.	16 pts.	2	Alternaria leaf spot Downy mildew	
	Ridomil Gold 4 EC	2 pts./trtd. acre			Pythium seedling blight	Apply at seeding in a 7-12" band on soil over seed furrow.
	Ridomil Gold Bravo 76.4 W	2.0 lbs.	8 lbs.	7	Alternaria leaf spot Downy mildew	Limit is 4 appl./crop
	Quadris 2.08 FL	15.4 fl oz	1.44 qts.	0	White rust Downy mildew <sup>l</sup>	Limits are no more than 2 sequential applications and 3 total applications
	Manex 4 F	1.6 qts.	9.6 qts.	7	Alternaria leaf spot Downy mildew	
	Maneb 80 WP	2 lbs.	12 lbs.	7	Alternaria leaf spot Downy mildew	
	Bravo 500 or GK Chloro Gold 4.17 FLs	2 ½ pts.		2	Alternaria leaf spot Downy mildew	
	Aliette 80 W or WDG	5.0 lbs.	35.0 lbs.	3	Downy mildew	Limit is 7 appl./crop. Do not tank mix with copper fungicides
	Maneb 75 DF	2 lbs.	12.8 lbs.	7	Alternaria leaf spot Downy mildew	
	Bravo Weather Stik 6 F	1 ½ pts.		2	Alternaria leaf spot Downy mildew	
	Cuprofix Disperss 36.9 DF	2.5 lbs		1	Black Leaf Spot (Alternaria) Downy Mildew	
	Bravo Ultrex 82.5 WDG	1.4 lbs.		7	Alternaria leaf spot Downy mildew	
Canna	Quadris 2.08 FL	15.4 fl. ozs.	2.88 qts.	14	Various, see label	For restrictions and use patterns, see celery for foliar diseases and onions for soilborne diseases

<sup>1</sup> Not listed on label

		Maximum Rate	Per Acre Per	Min. Days		
Crop	Chemical	Application	Season	To Harvest	Pertinent Diseases	Remarks
Cantaloupe (Muskmelon)	Equus 720, Echo 720, or Chloronil 720 6 FLs	3 pts.	21 pts.	2	Gummy stem blight Anthracnose Downy mildew Powdery mildew <sup>1</sup> Alternaria leaf spot	
	Topsin 70 WSB	½ lb.		1/2	Gummy stem blight Powdery mildew <sup>3</sup>	
	Echo 90 DF	2.4 lbs.		2	Same as Equus 720	
	Echo 500, GK Chloro Gold, or Bravo 500, or 4.17 FLs	4 ¼ pts.		2	Same as Equus 720	
	Bravo Ultrex 82.5 WDG	2.7 lbs.		2	Same as Equus 720	
	Ridomil MZ 68 WP	2.5 lbs.	7.5 lbs.	7		Limit is 4 appl./crop
	Aliette 80 WDG	5 lb.	35 lbs.	1	Downy mildew	7 appl/crop limit. Do not tank mix with copper fungicides.
	Ridomil Gold Copper 64.8 W	2 lbs.	8 lbs.	5	Downy mildew	Limit is 4 appl./crop
	Maneb 75 DF	2 lbs.	17.1 lbs.	5	Downy mildew Gummy stem blight Alternaria leaf spot	Limit is 7 appl./crop. Do not tank mix with copper fungicides.
	Ridomil Gold 4 EC	2 pts./trtd. acre			Pythium seedling blight	Apply at seeding in a 7-12" band on soil over seed furrow.
	Ridomil Gold Bravo 76.4 W	3 lbs.	12 lbs.	7	Same as Equus 720	Limit is 4 appl./crop
	Maneb 80 WP	2.0 lbs.	16 lbs.	5	Same as Maneb 75 DF	
	Manex 4F	1.6 qts.	12.8 qts.	5	Same as Maneb 75 DF	
	Penncozeb, Dithane M45, or Manzate 80 WPs	3 lbs.	24 lbs.	5	Same as Maneb 75 DF	
	Dithane F45, Manex II 4 FLs	2.4 qts.	19.2 qts.	5	Same as Maneb 75 DF	
	Sulfur <sup>2</sup>				Powdery mildew	Sulfur can be phytotoxic during hot weather
	Bravo Weather Stik 6 F	3 pts.		2	Same as Equus 720	
Cantaloupe continued	Quadris 2.08 FL	15.4 fl. ozs.	2.88 qts.	1	Downy mildew Powdery mildew Gummy stem blight Anthracnose Alternaria leaf spot	For restrictions and use patterns, see celery for foliar diseases and onions for soilborne diseases.

		Maximum Rate	Per Acre Per	Min. Days		Remarks
Crop	Chemical	Application	Season	To Harvest	<b>Pertinent Diseases</b>	
Cantaloupe continued	Flint 50 WP	2.0 ozs.	16.0 ozs.	0	Powdery mildew	Limit is 4 appl./crop & do not make more than 2 consecutive applications.
	JMS Stylet Oil	3 qts.		4 hrs.	Aphid-transmitted viruses, powdery mildew	See label for specific appl. Tech. (e.g. use of 400 psi)
	ManKocide 61.1 DF	2.66 lbs.	128 lbs.	5	Angular leaf spot Downy mildew	
	Dithane, Manzate, or Penncozeb 75 DFs	3 lbs.	25.6 lbs.	5	Same as Maneb 75DF	
	Aliette/Maneb 2+2	See label for mixing instructions		5	Downy mildew	Do not exceed 7 applications/crop
	Nova 40 W	5 ozs.	1.5 lbs.	0	Powdery mildew	Note that a 30 day plant back restriction exists.
	Cabrio 2.09 F	16 fl oz	64 fl oz	0	Same as Quadris	4 appl. maximum. See onion for resistance management
	Kocide 4.5 LF	1 1/3 pts.		1	Bacterial diseases	
	Kocide 101 77 WP	2 lbs.		1	Bacterial diseases	
	Kocide 2000 53.8 DF	1.5 lbs		1	Bacterial diseases	
	Cuprofix Disperss 36.9 DF	2.5 lbs		1	Alternaria Leaf Spot Angular Leaf Spot Anthracnose Downy Mildew Bacterial Fruit Blotch (Suppression)	
	<sup>1</sup> Sphaerotheca only <sup>2</sup> e.g. Super Six, Sulfur, Micr <sup>3</sup> Resistant strains exist. <sup>4</sup> Not on the label.	othol Special, Microf	lo, Enduro, Supo	ersul, Sulfur 6L,		
Cardoon	Quadris 2.08 FL	15.4 fl. ozs.	2.88 qts.	0	Various, see label	For restrictions and use patterns, see celery for foliar diseases and onions for soilborne diseases

		Maximum Rate	Per Acre Per	Min. Days		
Crop	Chemical	Application	Season	To Harvest	Pertinent Diseases	Remarks
Carrot	Ridomil Gold 4 EC	2 pts./trtd. acre			Pythium seedling blight	Apply at seeding in a 7-12" band on soil over seed furrow
	Bravo Ultrex 82.5 WDG	1.8 lbs.		2	Alternaria blight Cercospora blight	
	Nu-Cop, Kocide 101, Champion, Blue Shield, or KOP Hydroxide 77 WPs	2 lbs.		1	Bacterial blight	
	Kocide LF, Nu-Cop 3L, Blueshield 3L, 3-lb Copper Flowable, or KOP Hydroxide FLs	2 2/3 pts.		1	Bacterial blight	
	Champ 4.6 FL	1 1/3 pts.		1	Bacterial blight	
	Basic Copper or Basicop 53 WPs	4 lbs.		1	Bacterial blight	
	Nu-Cop 50, Blue Shield 61.4 or Kocide 61.4 DFs	2 lbs.		1	Bacterial blight	
	Ridomil Gold Copper 64.8 W	2 lbs.	8 lbs.	7	Pythium-induced diseases	Limit is 4 appl./crop
	Rovral 4FL	2 pts.		0	Pythium-induced diseases	Limit is 4 appl./crop
	Rovral 50 WP or WG	2 lbs.	8 lbs.	0	Alternaria Blight	Limit is 4 appl./crop
	Equus 720, Chloronil 720, or Echo 720 6 FLs	2 pts.	20 pts.	2	Alternaria blight Cercospora blight	
	Echo 90 DF	1 ½ lbs.		2	Alternaria blight Cercospora blight	
	Bravo 500, Echo 500, or GK Chloro Gold 4.17 FLs	2 ¾ pts.		2	Alternaria blight Cercospora blight	
	Kocide 4.5LF	1 1/3 pts.		1	Bacterial blight	
	Bravo Weather Stik 6 F	2 pts.		2	Cercospora blight Alternaria blight	
	Quadris 2.08 FL	15.4 fl. ozs.	2.88 qts.	0	Cercospora blight Alternaria blight Rhizoctonia diseases	For restrictions and use patterns, see celery for foliar diseases and onions for soilborne diseases.
	Cabrio 2.09 F	16 fl oz	48 fl oz	0	Same as Quadris	3 appl. max. See onions for resistance management.

		Maximum Rate Per Acre		Min. Days		
Crop	Chemical	Application	Season	To Harvest	<b>Pertinent Diseases</b>	Remarks
Cassava (bittersweet)	Quadris 2.08 FL	15.4 fl. ozs.	2.88 qts.	14	Various, see label	For restrictions and use patterns, see celery for foliar diseases and onions for soilborne diseases

		Maximum Rate	Per Acre Per	Min. Days		
Crop	Chemical	Application	Season	To Harvest	<b>Pertinent Diseases</b>	Remarks
Cauliflower	Ridomil Gold 4 EC	2 pts./trtd. acre			Pythium seedling blight	Apply at seeding in a 7-12" band on soil over seed furrow.
	Ridomil Gold Bravo 76.4 W	2 lbs.	8 lbs.	7	Alternaria leaf spot Downy mildew	Limit is 4 appl./crop.
	Bravo 500, or GK Chloro Gold 4.17 FLs	2 ¼ pts.		2	Alternaria leaf spot Downy mildew	
	Maneb 80 WP	2 lbs.	16 lbs.	7	Alternaria leaf spot Downy mildew	
	Manex 4 F	1.6 qts.	9.6 qts.	7	Alternaria leaf spot Downy mildew	
	Equus 720 6 FL	1 ½ pts.	16 pts.	2	Alternaria leaf spot Downy mildew	
	Maneb 75 DF	2 lbs.	17.1 lbs.	7	Alternaria leaf spot Downy mildew	
	Echo 90DF or Terranil 90 DF	1.3 lbs.		2	Alternaria leaf spot Downy mildew	
	Aliette 80 WDG	5.0 lbs.	35.0 lbs.	3	Downy mildew	Limit is 7 appl./crop. Do not tank mix with copper fungicides.
	Aliette/Maneb 2+2	See label for mixing instructions		7	Alternaria leaf spot Downy mildew	Do not exceed 6 application/crop/season
	Bravo Ultrex 82.5 WDG	1.4 lb.		7	Alternaria leaf spot Downy mildew	
	Cuprofix Disperss 36.9 DF	2.5 lbs		1	Black Leaf Spot (Alternaria) Downy Mildew	
	Bravo Weather Stik 6 F	1.5 pts.		2	Alternaria leaf spot Downy mildew	

		Maximum Rate	Per Acre Per	Min. Days		
Crop	Chemical	Application	Season	To Harvest	<b>Pertinent Diseases</b>	Remarks
Celery, Anise & Fennel. Celeriac listed on some labels.	Bravo 500, GK Chloro Gold, or Echo 500 4.17 FLs	4¼ pts.		7	Early blight Late blight Rhizoctonia stalk rot	Use lower rates for leaf blights & higher rate for stalk rot.
	Equus 720, Echo 720, or Chloronil 720, 6 FLs	3 pts.	24 pts.	7	Early blight Late blight Rhizoctonia stalk rot	Use lower rates for leaf blights & higher rate for stalk rot.
	Echo 90 DF	2.4 lbs.		7	Early blight Late blight Rhizoctonia stalk rot	Use lower rates for leaf blights & higher rate for stalk rot.
	Nu-Cop 50, Blue Shield 61.4 or Kocide 61.4 DFs	2 lbs.		1	Bacterial blight	
	Nu-Cop, Kocide 101, Blue Shield, Champion or Kop Hydroxide 77 WPs	2 lbs.		1	Bacterial blight	
	Nu-Cop 3L, 3-lb Copper flowable, Kocide LF, or Kop Hydroxide FLs	2 2/3 pts.		1	Bacterial blight	
	Champ 4.6 FL	1 1/3 pts.		1	Bacterial blight	
	Basicop 53 WP	4 lbs.		1	Bacterial blight	
	Dithane, Manzate, or Penncozeb 75 DFs	2 lbs.	16 lbs.	14	Early & late blights	For Fennel only
	Dithane F45 or Manex II 4 FLs	1.6 qts.	12.8 qts.	14	Early & late blights	For Fennel only
	Dithane M-45, Penncozeb or Manzate 80 WPs	2 lbs.	16 lbs.	14	Early & late blights	For Fennel only
	Kocide 2000 53.8 DF	1.5 lbs.		1	Bacterial blight	
	Tenn-Cop 5 E	3 pts.		12 hrs.	Bacterial blight	
	Basic Copper 53 WP	4 lbs.		1	Bacterial blight	
	Kocide 20/20 31.7 WP	5 lbs.		1	Bacterial blight	
	Basic Copper Sulfate 98 WP	4 lbs.		1	Bacterial blight	
Celery continued	Kop 300 FL	1/3 gal.		12 hrs.	Bacterial blight	

		Maxi mum Ra	te Per Acre Per	Min. Days		
Crop	Chemical	Applicat	ion Season	To Harvest	Pertinent Diseases	Remarks
Celery continued	Bravo Weather Stik 6 F	3 pts.		7	Early blight Late blight Rhizoctonia stalk rot	
	Botran 75 W	5 a lbs.	5 a lbs.	7	Pink rot (Sclerotinia)	Direct spray to base of the plant.
	Botran 5 F	2 qts.	3 1/5 qts.	7	Pink rot (Sclerotinia)	Direct spray to base of the plant.
	Quadris 2.08 FL	15.4 fl. ozs.	2.88 qts.	0	Early blight Late Blight Various, see label	Do not make more than 3 sequential applications. Use other fungicides for resistance management. Limit is 6 appl./crop/season. See onions for restrictions and use patterns for soilborne diseases.
	Ridomil Gold 4 EC	2 pts./trtd. acre			Pythium seedling blight	Apply at seedling in a 7-12" band on soil over furrow
	Kocide 4.5 LF	1 1/3 pts.		1	Bacterial blight	
	Kop Oxy 85	4 lbs.		1	Bacterial blight	
	Cuprofix Disperss 36.9 DF	2.5 lbs		1	Cercospora Early Blight Septoria Late Blight Bacterial Blight	
	Bravo Ultrex 82.5 WDG	2.7 lbs		7	Early Blight Late Blight Rhizoctonia stalk rot	

		Maximum Ra	Maximum Rate Per Acre Per			
Crop	Chemical	Applicat	Application Season		<b>Pertinent Diseases</b>	Remarks
Celtuce	Quadris 2.08 FL	15.4 fl. ozs.	2.88 qts.	0	Various, see label	For restrictions and use patterns, see celery for foliar diseases and onions for soilborne diseases
Celeraic	Same as celery for some labels					
	Cabrio 2.09 Fl	16 fl oz	48 fl oz	0	Various, see label	3 app. max. See onions for resistance management.
Chayote root	Quadris 2.08 FL	15.4 fl. ozs.	2.88 qts.	14	Various, see label	Same as celtuce
Chervil	Quadris 2.08 FL	15.4 fl. ozs.	2.88 qts.	0	Various, see label	Same as celtuce
	Cabrio 2.09 F	16 fl oz	48 fl oz	0	Various, see label	3 appl, max. See onion for resistance management.
Chicory	Quadris 2.08 FL	15.4 fl. ozs.	2.88 qts.	0	Various, see label	Same as celtuce
	Cabrio 2.09 F	16 fl oz	48 fl oz	0	Various, see label	3 appl, max. See onion for resistance management

Crop	Chemical		ate Per Acre Per tion Season	Min. Days To Harvest	Pertinent Diseases	Remarks  Apply at seeding in a 7-12" band on soil over seed furrow.
Chinese cabbage	Ridomil Gold 4 EC <sup>1</sup>	2 pts./trtd. acre			Pythium Seedling blight	
	Ridomil Gold Bravo 76.4 W <sup>1</sup>	2 lbs.	8 lbs.	7	Alternaria leaf spot Downy mildew	Limit is 4 appl./crop
	Bravo Weather Stik 6 F <sup>1</sup>	1.5 pts.		7	Alternaria leaf spot Downy mildew	
	Equus 720 <sup>1</sup> , Echo 720 <sup>1</sup> , or Chloronil 720 <sup>1</sup> 6 FLs	1 ½ pts.	16 pts.	7	Alternaria leaf spot Downy mildew	
	Bravo Ultrex 82.5 WDG <sup>1</sup>	1.4 lbs.		7	Alternaria leaf spot Downy mildew	
	Bravo 500 <sup>1</sup> , GK Chloro Gold <sup>1</sup> , or Echo 500 <sup>1</sup> 4.17 FLs	2 ¼ pts.		7	Alternaria leaf spot Downy mildew	
	Maneb 80WP <sup>1</sup>	2.0 lbs.	12 lbs.	7	Alternaria leaf spot Downy mildew	
	Maneb 75 DF	2 lbs. <sup>1</sup>	12.8 lbs.	7	Alternaria leaf spot Downy mildew	For loose head types maximum rate is 1.5 lbs. And min. days to harvest is 10
	Manex 4 FL <sup>1,2</sup>	1.6 qts.	9.6 qts.	7	Alternaria leaf spot Downy mildew	·
	Quadris 2.08 FL	15.4 fl oz	1.44 qts.	0	Alternaria leaf spot Downy mildew	Limits are no more than 2 sequential applications and no more than 3 applications per crop.
	Aliette/Maneb 2+2	See label for mixing instructions		7	Alternaria leaf spot Downy mildew	Do not exceed 6 applications/crop/season
	Aliette 80 WDG <sup>3</sup>	5.0 lbs.	35.0 lbs.	3	Downy mildew	Limit is 7 appl./crop. Do not tank mix with copper fungicides.
	<sup>1</sup> Tight headed varieties only					<u>-</u>

<sup>&</sup>lt;sup>1</sup>Tight headed varieties only
<sup>2</sup>For loose headed types maximum 1.2 qts./appl. and 7.2 qts./crop
<sup>3</sup>Bok Choi and Napa Cabbage
<sup>4</sup>Not listed on label

G.			te Per Acre Per	Min. Days						
Crop	Chemical	Application	Season	To Harvest	Pertinent Diseases	Remarks				
Chinese mustard	See mustard									
Chives	No known labels									
Chrysanthemum (edible)	Quadris 2.08 FL	15.4 fl. o zs	2.88 qts.	0	Various, see label	For restrictions and use patterns, see celery for foliar diseases and onions for soilborne diseases.				
Chufa	Quadris 2.08 FL	15.4 fl. ozs	2.88 qts.	14	Various, see label	For restrictions and use patterns, see celery for foliar diseases and onions for soilborne diseases.				
	Headline 2.09F	12 fl oz	72 fl oz	3	Various, see label	Same as sweet potato				
Collards	Numerous brands of sulfur and coppers are available (MicroFlo, Enduro, Microthiol special, Thiolux, Sulfur, etc.)									
	Aliette 80 W or WDG	5.0 lbs.	35.0 lbs.	3	Downy mildew	Limit is 7 appl./crop. Do not tank mix with copper fungicides.				
	Quadris 2.08 FL	15.4 fl oz	1.44 qts.	0	Alternaria leaf spot Downy mildew <sup>l</sup>	Limits are no more than 2 sequential applications and no more than 3 total applications per crop				
Coriander leaves (cilantro)	Quadris 2.08 FL	15.4 fl. ozs.	2.88 qts.	0	Various, see label	For restrictions and use patterns see celery for foliar diseases and onions for soilborne diseases.				
Corn salad	Quadris 2.08 FL	15.4 fl. ozs.	2.88 qts.	0	Various, see label	For restrictions and use patterns, see celery for foliar diseases and onions for soilborne diseases.				
Cress, (Garden & Upland types). Also see Water cress	Ridomil Gold 4 EC	2 pts./trtd. acre			Pythium seedling blight	Apply at seeding as a 7-12" band in soil over seed furrow.				
	Quadris 2.08 FL	15.4 fl. ozs.	2.88 qts.	0	Various, see label	Same as for coriander leaves.				

<sup>1</sup> Not listed on label

		Maximum Rate	e Per Acre Per	Min. Days		
Crop	Chemical	Application	Season	To Harvest	Pertinent Diseases	Remarks
Cucumber	Ridomil Gold 4 EC	2 pts./trted acre			Pythium seedling blight	Apply at seeding in a 7-12" band on soil over seed furrow
	Dithane F45 or Manex II 4 FLs	2.4 qts.	19.2 qts.	5	Downy mildew Scab Gummy stem blight	
	Quadris 2.08 FL	15.4 fl. ozs.	2.88 qts.	1	Downy mildew Gummy stem blight Powdery mildew Anthracnose	For restrictions and use patterns for foliar diseases, see celery and for soilborne diseases, see onions.
	Penncozeb 80 WP, Dithane M- 45 WP, Manzate 75 DF, Manzate 80 WP, Penncozeb 75 DF, or Dithane 75 DF	3 lbs.	24 lbs.	5	Downy mildew Scab Gummy stem blight	
	Maneb 80 WP	2 lbs.	16 lbs.	5	Downy mildew Scab Gummy stem blight	
	Manex 4 F	1.6 qts.	12.8 qts.	5	Downy mildew Scab Gummy stem blight	
	Ridomil Gold Bravo 76.4 W	3 lbs.	12 lbs.	2	Downy mildew Scab Gummy stem blight Target spot	Limit is 4 appl./crop
	Aliette 80 WDG	5 lbs.	35 lbs.	1	Downy mildew	Limit is 7 appl./crop. Do not tank mix with copper fungicides.
	Bravo Ultrex 82.5 WDG	2.7 lbs.		2	Same as Quadris	
	Bravo 500, Echo 500, or GK Chloro Gold 4.17 FLs	4 ¼ pts.		2	Same as Quadris	
	Bravo Weather Stik 6F	3 pts.		2	Same as Quadris	
	Equus 720, Echo 720, or Chloronil 720 6 Fls	3 pts.	21 pts.	2	Same as Quadris	
	ManKocide 61.1 DF	2.66 lbs.	128 lbs.	5	Angular leafspot Downy mildew	
Cucumber continued	Echo 90 DF	2.4 lbs.		2	Same as Quadris	

		Maximum Rat	e Per Acre Per	Min. Days		
Crop	Chemical	Application	Season	To Harvest	Pertinent Diseases	Remarks
Cucumber continued	Topsin M 70 WP	½ lb.	2 lbs.	1	Target spot Gummy stem blight <sup>2,3</sup>	
	Maneb 75 DF	2 lbs.	17.1 lbs.	5	Downy mildew	
	Botran 75 W	1 a lbs.		1	Sclerotinia	Greenhouse only
	Aliette/Maneb 2+2	See label for mixing instructions		5	Downy mildew	Do not exceed 7 applications/crop
	Nu-Cop, Kocide 101, Kop Hydroxide, or Champion 77 WPs	2 lbs.		1	Angular leaf spot	
	Nu-Cop 50, Blue Shield 61.4 or Kocide 61.4 DFs	2 lbs.		1	Angular leaf spot	
	Blue Shield 3 L, 3-lb Copper Flowable, Kocide LF, or Kop Hydroxide FLs	2 2/3 pts.		1	Angular leaf spot	
	Champ 1.6 FL	1 1/3 pts.		1	Angular leaf spot	
	Basicop or Basic Copper 53 WPs	2 lbs.		1	Angular leaf spot	
	Kop 300 FL	1/3 gal.		12 hrs	Angular leaf spot	
	Kocide 2000 53.8 DF	1.5 lbs.		1	Angular leaf spot	Phytotoxicity may occur
	Tenn-Cop 5 E	3 pts.		12 hrs.	Angular leaf spot	
	Basic Copper Sulfate 98 WP	2 lbs.		1	Angular leaf spot	
	Nu-Cop 3 L	4 pts.		1	Angular leaf spot	
	Ridomil MZ 68 WP	2.5 lbs.	7.5 lbs.	5	Downy mildew	Limit is 4 appl./crop.
	Flint 50 WP	2.0 lbs	16.0 oz	0	Powdery mildew	Limit is 4 appl./crop & do not make more than 2 consecutive applications.
	Ridomil Gold Copper 64.8 W	2 lbs.	8 lbs.	5	Downy mildew Angular leaf spot	Limit is 4 appl./crop.
Cucumber continued	Nova 40 W	5 ozs.	1.5 lbs.	0	Powdery mildew	Note that a 30 day plant back restriction exists.

Crop	Chemical	Maximum Rate Application	Per Acre Per Season	Min. Days To Harvest	Pertinent Diseases	Remarks
Cucumber continued	Cuprofix Disperss 36.9 DF	2.5 lbs	Scason	1	Alternaria Leaf Spor Angular Leaf Spot Anthracnose Downy Mildew Gummy Stem Blight	
	Cabrio 2.09F	16 fl oz	64 fl oz	0	Same as Quadris	4 appl. maximum. See onion for resistance management
	Sulfur (various brands) <sup>1</sup>			1	Powdery mildew	

<sup>&</sup>lt;sup>1</sup>Numerous brands of sulfur are available (MicroFlo, Enduro, Microthiol special, Thiolux, Sulfur, etc.)

<sup>2</sup>Resistant strains present

<sup>3</sup>Disease not listed on the label.

		Maximum Rat	e Per Acre Per	Min. Days		
Crop	Chemical	Application	Season	To Harvest	Pertinent Diseases	Remarks
Dandelion	Quadris 2.08 FL	15.4 fl. ozs.	2.88 qts.	0	Various, see label	For restrictions and use patterns, see celery for foliar diseases and onions for soilborne diseases.
Dasheen (Taro)	Quadris 2.08 FL	15.4 fl. ozs	2.88 qts.	14	Various, see label	Same as dandelion
	Headline 2.09F	12 fl oz	72 fl oz	3	Various, see label	Same as sweet potato
Dock	Quadris 2.08 FL	15.4 fl. ozs.	2.88 qts.	0	Various, see label	Same as for Dasheen
Eggplant	Ridomil Gold 4 EC	1 pt./trtd. acre	3 pts./trtd. acre	7	Pythium & aerial blight Phytophthora diseases	Apply at seeding in a 7-12" band on soil over seed furrow.
	Manex 4 F	1.6 qts.	11.2 qts.	5	Phomopsis blight Cercospora leaf spot	
	Maneb 80 WP	2 lbs.	14 lbs.	5	Same as Manex	
	Maneb 75 DF	2 lbs.	14.9 lbs.	5	Same as Manex	
	Nu-Cop, Blue Shield, Kocide 101, Kop Hydroxide or Champion 77 WPs	2 lbs.		1	Phytophthora, Phomopsis, Alternaria Cercospora leaf spot	
	Blue Shield 3 L, Nu -Cop 3 L, Kocide LF, or Kop Hydroxide FLs	2 2/3 pts.		1	Same as Blue Shield WP	1 1/3 pts. for Blue shield 3L or Nu-Cop 3L
	Champ 4.6 FL	1 1/3 pts.			Same as Blue Shield	
	Kocide 4.5 LF	1 1/3 pts.		1	Same as Blue Shield	
	Kocide 2000 53.8 DF	1 ½ lbs		1	Same as Blue Shield	
	KOP 300 FL	1/3 gal.		12 hrs.	Same as Blue Shield	
	Basicop or Basic Copper 53 WPs	4 lbs.		1	Same as Blue Shield	
	NuCop 50 or Kocide 61.4 DFs	2 lbs.		1	Same as Blue Shield	
	Quadris 2.08 FL	15.4 fl oz	1.92 qts.	0	Powdery mildew Anthracnose	Limits are no more than 2 sequential applications and a limit of 3 applications per crop
	Cabrio 2.08 F	16 fl oz	96 fl oz	0	Same as Quadris	6 appl. maximum. See onion for resistance management.

		Maximum Rat	te Per Acre Per	Min. Days		
Crop	Chemical	Application	Season	To Harvest	Pertinent Diseases	Remarks
Endive & Escarole	Manex 4 F	1.6 qts.	9.6 qts.	10	Same as Maneb 80WP	
	Botran 75W	2 2/3 lbs.	5 1/3 lbs.	14	Botrytis Sclerotinia	Limit is 2 appl./crop. Some leaf bronzing may occur.
	Botran 5 F	1 3/5 qts.	3 1/5 qts.	half mature plants	Botrytis Sclerotinia	Limit is 2 appl./crop. Some leaf bronzing may occur.
	Quadris 2.08 FL	15.4 fl. ozs.	2.88 qts.	0	Downy mildew Alternaria leaf spot Various, see label	For restrictions and use patterns, see celery for foliar diseases and onions for soilborne diseases.
	Ridomil Gold 4 EC	2 pts./trtd. acre			Pythium blight	Apply at seeding in a 7-12" band on soil after seeding.
	Aliette/Maneb 2+2	See label for mixing instructions		14	Downy mildew	Limit is 6 applications
	Maneb 75 DF	2 lbs.	12.8 lbs.		Same as Maneb 80WP	
	Maneb 80 WP	2 lbs.	12 lbs.	10	Downy mildew	
					Alternaria leaf spot	
Fennel	Same as celery except man	ncozeb - containing fung	icides are labeled a	lso. See under c	elery.	
Ginger	Quadris 2.08 FL	15.4 fl. oz.	2.88 qts.	14	Various, see label	For restrictions and use patterns, see celery for foliar diseases and onions for soilborne diseases.
	Headline 2.08 FL	12 fl oz	72 fl oz	3	Various, see label	Same as sweet potato
Ginseng	Quadris 2.08 FL	15.4 fl. ozs.	2.88 qts.	0	Various, see label	Same as for ginger
	Cabrio 2.08 F	16 fl oz	48 fl oz	0	Various, see label	3 appl. max. See onion for resistance managemnt
Horseradish	Quadris 2.08 FL	15.4 fl. ozs.	2.88 qts.	0	Various, see label	Same as for ginger
	Cabrio 2.08 F	16 fl oz	48 fl oz	0	Various, see label	3 appl. max. See onion for resistance managemnt
Garlic	Same as onions					
Kale	Manex 4 F	1.6 qts.	3.2 qts./	10	Downy mildew Alternaria leaf spot	
	Maneb 80 WP	2 lbs.	4 lbs/ cutting	10	Downy mildew Alternaria leaf spot	
Kale continued	Maneb 75 DF	2 lbs.	4.2 lbs.	10	Downy mildew Alternaria leaf spot	

		Maximum Rate Per Acre Per		Min. Days		
Crop	Chemical	Application	Season	To Harvest	Pertinent Diseases	Remarks
Kale continued	Quadris 2.08 FL	15.4 fl oz	1.44 qts.	0	Alternaria leaf spot Downy mildew <sup>2</sup>	
	Some sulfur labels include Kale					
	Aliette 80 W or WDG	5.0 lbs.		3	Downy mildew	Limit is 7 appl./crop. Do not tank mix with copper fungicides.
	Aliette/Maneb 2+2	See label for mixing instructions		10	Alternaria leaf spot Downy mildew	Do not exceed 2 applications/cutting or 7 applications/season
	Basic Copper 53 WP	3 lbs.		1	Downy mildew Alternaria leaf spot	
Kohlrabi	Manex 4 F	1.6 qts.	9.6 qts.	7	Downy mildew Alternaria leaf spot	
	Maneb 80 WP	2 lbs.	12 lbs.	7	Downy mildew Alternaria leaf spot	
	Maneb 75 DF	2 lbs.	12.8 lbs.	7	Downy mildew Alternaria leaf spot	
	Quadris 2.08 FL	15.4 fl oz	1.44 qts.	0	Alternaria leaf spot Downy mildew <sup>l</sup>	Limits are no more than 2 sequential applications and no more than 3 applications per crop.
	Aliette 80 W or WDG	5 lbs.		3	Downy mildew	Do not mix with copper fungicides. Limit is 7 appl./crop.
Leeks	Same as onions or green onion	ns unless label restric	ts use to dry bulb o	nly.		
Leren	Quadris 2.08 FL	15.4 fl. ozs.	2.88 qts	14	Various, see label	For restrictions and use patterns, see celery for foliar diseases and onions for soilborne diseases.
	Headline 2.09F	12 fl oz	72 fl oz	3	Variuous, see label	Same as sweet potato

1 not listed on label

		Maximum Rat	e Per Acre Per	Min. Days		
Crop	Chemical	Application	Season	To Harvest	Pertinent Diseases	Remarks
Lettuce	Maneb 80 WP	2 lbs.	12 lbs.	10	Downy mildew	
	Manex 4 F	1.6 qts.	9.6 qts.	10	Downy mildew	
	Rovral 4 F	2 pts.	6.0 pts.	14	Sclerotinia drop Rhizoctonia bottom rot	Limit is 3 appl./crop.
	Rovral 50 WP or WG	2 lbs.	6 lbs.	14	Sclerotinia drop Rhizoctonia bottom rot	Limit is 3 appl./crop.
	Ridomil Gold 4 EC	2 pts./trtd. acre			Pythium seedling blight	Apply at seeding in a 7-12" band on soil over seed furrow.
	Aliette 80 WDG	5 lbs.	3.5 lbs.	3	Downy mildew	Do not mix with copper fungicides.
	Maneb 75 DF	2 lbs.	12.8 lbs.	10	Downy mildew	
	Botran 75 W (greenhouse)	2 2/3 lbs.	5 1/3 lbs.	14	Botrytis	Leaf lettuce only. Some leaf
	(field)	3 1/3 lbs.	5 1/3 lbs.	14	Sclerotinia	bronzing may occur. Limit is 2 appl. Pre- and post-thinning rates are specified on the label.
	Botran 5 F (greenhouse) (Field)	1 3/5 qts. 3 1/5 qts.	3.2 qts. 3 1/5 qts.	14 14	Botrytis Sclerotinia	Leaf & head lettuce. Some leaf bronzing may occur. Limit is 2 appl. Pre- and post-thinning rates are specified on the label
	Aliette/Maneb 2 + 2	See label for mixing instructions		14	Downy mildew	•
	Champion or Blue Shield 77 WPs	2 lbs.		1	Downy mildew	
	Champ 4.6 FL	1 1/3 pts.		1	Downy mildew	
	Blue Shield 61.4 DF	2 lbs.		1	Downy mildew	Margins of leaves may yellow.
	Basic Copper 53 WP	3 lbs.		1	Downy mildew	
	Oxycop	4 lbs.		1	Downy mildew	
	KOP Hydroxide FLs	2 2/3 pts.		1	Downy mildew	
	Quadris 2.08 FL	15.4 fl oz	2.88 qts	0	Downy mildew Rhizoctonia	For restrictions and use patterns, see celery for foliar diseases and onions for soilborne diseases.

		Maximum Rat	e Per Acre Per	Min. Days		
Crop	Chemical	Application	Season	To Harvest	Pertinent Diseases	Remarks
Melons (See cantaloupe & Watermelon	Melons include: cantaloupe, cas	abas, crenshaws, ho	oney dew, honey b	oalls, muskmelon	, Persion melons, waterm	elons and hybrids of these
Mint	Quadris 2.08 FL	15.4 fl ozs.	1.44 qts	01	Rust Powdery mildew Rhizoctonia diseases	Limits are no more than 2 sequentialo applications and no more than 3 applications per crop.
Mustard	Rovral 50 WP (Chinese mustard)	1 lb.	4 lbs.	10	Alternaria leaf spot	Limit is 4 appl./crop.
	Rovral 4 F (Chinese mustard)	1 pt.	4 pts.	10	Alternaria leaf spot	Limit is 4 appl./crop.
	Quadris 2.08 FL	15.4 fl ozs.	1.44 qts	0	Alternaria leaf spot Downy mildew <sup>2</sup>	Limits are no more than 2 sequentialo applications and no more than 3 applications per crop.
	Aliette 80 WDG (Mustard & Chinese mustard)	5 lbs.		3	Downy mildew	Limit is 7 appl./crop. Do not tank mix with coppers.
Napa	See Chinese Cabbage					
New cocoyam	See Tanier					
Okra	Quadris 2.08 FL	15.4 fl ozs.	1.44 qts	$0^1$	Powdery mildew	Limits are no more than 2 sequentialo applications and no more than 3 applications per crop.
	JMS Stylet Oil	3 qts.		4 hrs.	Powdery mildew	See label for specific appl. techniques required.

<sup>1</sup> mint for processing has 7 days for minimum days to harvest 2 not listed on label

Crop	Chemical	Maximum Rat Application	e Per Acre Per Season	Min. Days To Harvest	Pertinent Diseases	Remarks
Onion	Ridomil Gold 4 EC	1 pt./trted acre	Season	10 Hai vest	Pythium seedling blight	Apply at seeding in a 7-12" band on soil over seed furrow
	Manex 4 F	2.4 qts.	24 qts. <sup>1</sup>	7	Botrytis leaf blight Purple blotch	Do not apply to exposed bulbs.
	Maneb 80 WP	3 lbs.	30 lbs. <sup>2</sup>	7	Botrytis leaf blight Purple blotch	Do not apply to exposed bulbs.
	Botran 75 W	5 1/3 lbs.	5 1/3 lbs.		Botrytis	Limit is 1 appl./crop.
	Botran 5 F	1 3/5 qts.	2 qts.	14	Botrytis	Do not plant spinach as a follow up crop.
	Penncozeb, Dithane M45, or Manzate 80 WPs (Dry bulb only)	3 lbs.	30 lbs.	7	Botrytis leaf blight Purple blotch	Do not apply to exposed bulbs.
	Dithane F-45 or Manex II 4 FLs (Dry bulb only)	2.4 qts.	24 qts.	7	Botrytis leaf blight Purple blotch	Do not apply to exposed bulbs.
	Rovral 50 WP (Dry bulb only)	1.5 lbs.	7.5 lbs.	7	Botrytis leaf blight Purple blotch	Limit is 5 appl./crop unless 1 lb. is used where 10 appl/crop can be used.
	Maneb 75 DF	3 lbs.	32 lbs. <sup>3</sup>	7	Botrytis leaf blight Purple blotch	Do not apply to exposed bulbs.
	Rovral 4 F (Dry bulb only)	1.5 pts.	7.5 pts.	7	Botrytis leaf blight Purple blotch	Limit is 5 appl./crop unless 1 lb. is used where 10 appl/crop can be used.
	Equus 720, Echo 720, or Chloronil 720, 6 FLs	2 pts. <sup>4</sup>	20 pts.	<b>7</b> <sup>5</sup>	Botrytis leaf blight Purple blotch	Limit is 3 appl./crop for green bunching onions, leeks or shallots
	Echo 90 DF	1.7 lbs. <sup>8</sup>		7 <sup>5</sup>	Botrytis leaf blight Purple blotch	Limit is 3 appl./crop for green bunching onions, leeks or shallots
	Bravo Ultrex 82.5 WDG	1.8 lbs. <sup>6</sup>		7	Botrytis leaf blight Purple blotch	Limit is 3 appl./crop for green bunching onions, leeks or shallots
	Penncozeb, Dithane, or Manzate 75 DFs	3 lbs.	32 lbs.	7	Botrytis leaf blight Purple blotch	Do not apply to exposed bulbs
Onion continued	Bravo Weather Stik 6 F	2 pts. <sup>4</sup>		7	Botrytis leaf blight Purple blotch	Limit is 3 appl./crop for green bunching onions, leeks or shallots

		Maximum Rat	e Per Acre Per	Min. Days		
Crop	Chemical	Application	Season	To Harvest	Pertinent Diseases	Remarks
Onion continued	Bravo 500	3 pts. $^{7}$		$7^{5}$	Botrytis leaf blight	Limit is 3 appl./crop for
	GK Chloro Gold	3 pts. <sup>7</sup>		7	Purple blotch	green bunching onions, leeks
	Echo 500 4.17 FLs	2 3/4 pts. <sup>7</sup>		7		or shallots
	Cabrio 2.09 F	12 fl oz	72 fl oz	7	Purple blotch	6 appl. Maximum. Alternate with other fungicide types between every appl. of Cabrio and Headline.
	Quadris 2.08 FL	12.3 fl. ozs.	2.88 qts.	0	Purple blotch	Limit is 6 appl./crop/seas on. Do not use more than 3 sequential applications. Use other fungicides in resistance management program.
		0.6 fl. oz./1000 ro	w ft. for in-		Rhizoctonia damping	The in-furrow treatment can
		furrow			off and soilborne	be applied in 5-15 gpa of
		OR			diseases	water. The post-emergence band should be 7" directed at
		0.8 fl. oz./1000 ro	w ft. for banded,			the plant and soil interface no
		post-emergence sp	pray directed to			later than the last cultivation
		row center.				or layby.

<sup>116.8</sup> qts. for green onions
221.0 lbs. for green onions
322.4 lbs. for green onions
43 pts. for green bunching, leeks, shallots & garlic
514 days for green bunching, leeks, shallots & garlic
62.7 lbs. for garlic
74 1/4 pts. for green bunching, leeks, shallots & garlic
82.4 lbs. for green bunching, garlic, leek, & shallots

		Maximum Rat	e Per Acre Per	Min. Days		
Crop	Chemical	Application	Season	To Harvest	Pertinent Diseases	Remarks
Orach	Quadris 2.08 FL	15.4 fl. ozs.	2.88 qts.	0	Various, see label	For restrictions and use patterns, see celery for foliar diseases, and onions for soilborne diseases.
Parsley	Ridomil Gold 4 EC	2 pts./trtd. acre			Pythium seedling blights	Apply at seeding in 7-12" band on soil over seed furrow.
	Cabrio 2.08 F	16 fl oz	48 fl oz	0	Various, see label	3 appl. max. See onion for resistance management
	Quadris 2.08 FL	15.4 fl. ozs.	2.88 qts.	0	Various, see label	For restrictions and use patterns, see celery for foliar diseases and onions for soilborne diseases.
Parsnips	Ridomil Gold 4 EC	2 pts./trtd. acre			Pythium seedling blights	Apply at seeding in a 7-12" band on soil over seed furrow.
	Cabrio 2.08 F	16 fl oz	48 fl oz	0	Various, see label	3 appl. max. See onion for resistance management
	Quadris 2.08 FL	15.4 fl. ozs.	2.88 qts.	0	Various, see label	For restrictions and use patterns, see celery for foliar diseases and onions for soilborne diseases.
	Equus 720, Echo 720, or Chloronil 720 6 FLs	2 pts.	8 pts.	10	Diseases of parsnips in Florida & efficacy of chemicals are not known.	Limit is 4 appl./crop. Do not use crop for livestock feed.
	Bravo Weather Stik 6 FL	2 pts.	8 pts.		Same as Equus 720	Limit is 4 appl./season
	Bravo Ultrex 82.5 WDG	1.8 lbs.	7.2 lbs.	10	Same as Equus 720	Same as Echo 720
	Bravo 500 or Echo 500 4.17 FLs	3 pts.	12 pts.	10	Same as Equus 720	Same as Echo 720
	Echo 90 DF	1.7 lbs.	6.8 lbs.	10	Same as Equus 720	Same as Echo 720
Peas, English & Snow	Ridomil Gold 4 EC	1 pt./trtd. acre			Pythium diseases	Apply at seeding in a 7-12" band on soil over seed furrow.
	Various sulfur label are availab	ole.				

		Maximum Rate Po	er Acre Per	Min. Days						
Crop	Chemical	Application	Season	To Harvest	Pertinent Diseases	Remarks				
Peas, Southern (Vigna spp.)	Fungicides labeled on beans ca	Fungicides labeled on beans can be used on Southern Peas unless the label restricts use for specific crops (e.g. snap beans, lima beans, etc.)								
	Ridomil Gold 4 EC	1 pt./trtd. acre			Pythium seedling blights	Apply at seeding in a 7-12" band on soil over seed furrow.				
	Echo 720 6 FL	2 pts.		42	Rust Cercospora leaf spot	For use on dry forms harvested with pods removed. Do not use crop for livestock.				
	Echo 90 DF	1.7 lbs		42	Rust Cercospora leaf spot	For use on dry forms harvested with pods removed. Do not use crop for livestock.				
	Bravo 500, Echo 500, or GK Chloro Gold, 4.17 FLs	3 pts.		42	Rust Cercospora leaf spot	For use on dry forms harvested with pods removed. Do not use crop for livestock.				
	Bravo Ultrex 82.5 DF	1.8 lbs.		14	Rust Cercospora leaf spot	For use on dry forms. Limit is 4 appl./crop Do not use crop for livestock				
	Bravo Weather Stik 6 FL	2 pts.		14	Rust Cercospora leaf spot	For use on dry forms. Limit is 4 appl./crop. Do not use crop for livestock				

		Maximum Rate	Per Acre Per	Min. Days		
Crop	Chemical	Application	Season	To Har vest	Pertinent Diseases	Remarks
Peppers	For best possible, available, o	chemical control of b	acterial spot, a co	pper fungicide	must be tank-mixed with	a maneb fungicide
	Ridomil Gold 4 EC	1 pt./trtd. acre	3 pts./trtd./A	7	Pythium seedling	Apply at seeding in a 7-12"
				7	blights & Phytophthora	band on soil over seed furrow
	Nu-Cop, Kocide 101,	3 lbs.		1	Bacterial spot	
	Champion, Blue Shield or KOP Hydroxide 77 WPs				Frogeye leaf spot	
	Nu-Cop50, Blue Shield 64.1 or Kocide 64.1 DFs	3 lbs.		1	Bacterial spot Frogeye leaf spot	
	Nu-Cop 3L, Blue Shield 3L, 3-lb Copper Flowable,	4 pts.		1	Bacterial spot Frogeye leaf spot	
	Kocide LF, or KOP Hydroxide FLs					
	Champ 4.6 FL	2 pts.		1	Bacterial spot	
					Frogeye leaf spot	
	Basicop or Basic Copper 53 WPs	4 lbs.		1	Bacterial spot Frogeye leaf spot	
	Kocide 2000 53.8 DF	2.25 lbs.		1	Bacterial spot Frogeye leaf spot	
	KOP 300 FL	1/2 gal.		12 hrs.	Bacterial spot Frogeye leaf spot	
	Basic Copper Sulfate 98 WP	4 lbs.		1	Bacterial spot Frogeye leaf spot	Reenter when sprays have dried
	Kocide 4.5 LF	2 pts		1	Bacterial spot Frogeye leaf spot	
	Maneb 80 WP	3 lbs.	18 lbs.	7	Bacterial spot* Frogeye leaf spot Anthracnose	*Bacterial spot when tank mixed with a copper fungicide. Use of 1 lb. Maneb/A/appl. is sufficient.
	Maneb 75 DF	3 lbs.	19.2 lbs.	7	Bacterial spot* Frogeye leaf spot Anthracnose	*Same as Maneb 80 WP
	Quadris 2.08 FL	15.4 fl ozs.	1.92 qts.	0	Powdery mildew Anthracnose	Limits are no more than 2 sequential applications and 4 applications per crop.
Peppers continued	Manex 4 F	2.4 qts.	14.4 qts.	7	Bacterial spot* Frogeye leaf spot	Same for Maneb 80 except adequate rate/A is 0.8 qt.

		Maximum Rat	te Per Acre Per	Min. Days		
Crop	Chemical	Application	Season	To Harvest	Pertinent Diseases	Remarks
Peppers continued	Ridomil Gold Copper 64.8 W	2.5 lbs	10 lbs.	7	Phytophthora & Pythium Diseases	Use Ridomil Gold EC on soil at planting & one supplemental appl. at 1 pt./A each before using Ridomil Gold coller
	Cabrio 2.09 F	16 fl oz	96 fl oz	0	Same as Quadris	6 appl, max. See onions for resistance managment
	Cuprofix Disperss 36.9 DF	6 lbs		1	Bacterial Spot	
	JMS Stylet Oil	3 qts.		NTL	Potato Virus Y Tobacco etch virus Pepper mottle virus	See label for specific app. techniques required (e.g. 400 psi essential)
Pimento	Same uses as for Pepper				**	•

		Maximum Rat	te Per Acre Per	Min. Days		
Crop	Chemical	Application	Season	To Harvest	Pertinent diseases	Remarks
Potato	Dithane M45, Penncozeb, or Manzate 80 WPs	2 lbs.	14 lbs	3	Early Blight Late Blight	1 ¼ lbs./50gal. water for seed piece treatment. Allow to dry and do not use as livestock feed.
	Dithane F45 or Manex II 4 FLs	1.6 qts.	11.2 qts	3	Early blight Late blight	1 qt./50 gal. water for seed piece treatment. Allow to dry and do not use as livestock feed.
	Penncozeb, Dithane, or Manzate 75 DFs	2 lbs.	15 lbs.	3	Early blight Late blight	1 ¼ lbs./50 gal. water for seed piece treatment. Allow to dry and do not use as livestock feed.
	Manex 4 F	1.6 qts.	11.2 qts.	3	Early blight Late blight	0.8 qt./10 gal. of water for seed piece treatment. Allow to dry and do not use as livestock feed.
	Maneb 80 WP	2 lbs.	14 lbs.	3	Early blight Late blight	1 lb./10 gal. water for seed piece treatment. Allow to dry and do not use as livestock feed.
	Ridomil Gold Copper 64.8 W	2 lbs. <sup>1</sup>	7.5 lbs.	14	Late blight	Limit is 3 appl./crop of this product & other Ridomil prepacks (e.g. Ridomil MZ72 & Ridomil Gold Bravo 81W)
	Maneb 75 DF	2 lbs.	14.9 lbs.	3	Late blight Early blight	Same as for Maneb 80 WP
	Nu-Cop 50, Blue Shield 61.4 or Kocide 61.4 DFs	4 lbs.		1	Early blight Late blight	
	Nu-Cop, Kocide 101, Champion, Blue Shield, or KOP Hydroxide 77 WPs	4 lbs.		1	Early blight Late blight	
	3-lb Copper Flowable, Champion, Kocide LF, Champ or KOP Hydroxide FLs	5 a pts.		1	Early blight Late blight	
Potato continued	Kocide 2000 53.8 DF	3 lbs.		1	Early blight Late blight	

		Maximum Rat	te Per Acre Per	Min. Days		
Crop	Chemical	Application	Season	To Harvest	Pertinent diseases	Remarks
Potato continued	KOP 300 FL	2/3 gal.		12 hrs	Early blight Late blight	
	Blue Shield 3L or Nu-Cop 3L FLs	4 pts.		1	Early blight Late blight	
	Basicop 53 or Basic Copper 53, KOP Oxy -85 WPs	6 lbs. 7 lbs.		1 1	Early blight Late blight	
	Rovral 4 F	2 pts.	8 pts.	14	Early blight Sclerotinia	Limit is 4 appl./crop
	Rovral 50 WP or WG	2 lbs.	8 lbs.	14	Early blight Sclerotinia	Limit is 4 appl./crop
	Ridomil Gold Bravo 76.4 W	2 lbs.	8 lbs.	14	Late blight Early blight	Limit is 4 appl./crop
	Bravo Ultrex 82.5 WDG	1.4 lbs.	14.5 lbs.	7	Late blight Early blight	Up to 0.7. lb is allowed before vines close or before 18 severity values occur
	Ridomil MZ 68 WP	2.5 lbs.	7.5 lbs.	3	Late blight Early blight	Limit is 3 appl./crop
	Equus 720 or Chloronil 720 6 FLs	1 1/2 pts.	15 pts.	7	Late blight Early blight	Same as Bravo Weather Stik
	Echo 90 DF	1.2 lbs.		7	Late blight Early blight	
	Bravo 500, Echo 500, or GK Chloro Gold 4.17 FLs	2 1/8 pts.	23 pts.	7	Early blight Late blight	Up to 1 pt. allowed before vines close or before 18 disease severity values occu
	Polyram 80 DF	2 lbs.	14 lbs.	3	Late blight Early blight	Limit is 7 appl./season
	Quadris 2.08 FL	15.4 fl. ozs.	2.88 qts.	14	Late blight Early blight Various, see label	Limit is 6 appl./crop/acre. For restrictions and use patterns, see celery for foliar diseases and onions for soilborne diseases.
	Bravo ZN 4.17 FL	2 1/8 pts.	23 pts.	7	Early blight Late blight	Same as Bravo 500
	ManKocide 61.1 DF	5.3 lbs.	74.66 lbs.	3	Early blight Late blight	
Potato continued	Super-Tin 80 WP <sup>2</sup>	3.75 ozs.	15 ozs.	7	Early blight Late blight	For use with closed tractor cabs only.

		Maximum Ra	te Per Acre Per	Min. Days		
Crop	Chemical	Application	Season	To Harvest	Pertinent diseases	Remarks
Potato continued	Bravo Weather Stik 6L	1 1/2 pts.	16 pts.	7	Early blight Late blight	Up to 3/4 pt. allowed before vines close between rows or before 18 disease severity values occur.
	Curzate 70 DF	3.2 ozs.	22.4 ozs.	14	Late blight	Limit is 7 applications/crop. It is best to alternate Curzate with other fungicides such as mancozeb or chlorothalonil. Do not replant area to other crops within 30 days of treatment.
	Topsin	1-1 ½ lbs/acre	4 lbs.	21	White Mold	May be tank mixed with other fungicides labeled for early and late blight control. Aerial application is not recommended.
	Gavel 75 DF	2.0 lbs.	12 lbs.	3	Early blight Late blight	This product contains 66.7% mancozeb so do not exceed maximum allowed for mancozeb considering this and other mancozeb-containing products. A 30 day rotational limit for non-labelled crops exists for this product
	Previcur Flex 6F	1.2 pts.	6.0 pts.	14	Late blight	For banded applications at early post-emergence, use a proportionately reduced amount based upon band width.
	Headline 2.09F	12 fl oz	72 fl oz	3	Early blight Late blight	6 appl. Maximum. Alternate with other fungicide type between appls. of Headline or Quadris 2.08F

<sup>&</sup>lt;sup>1</sup>Tank mix with a broad spectrum fungicide such as Dithane, Maneb, Penncozeb, Manex, Manzate or a chlorothalonil fungicide. <sup>2</sup>Super Tin should be tank-mixed with a mancozeb fungicide (e.g. Manex, Dithane, Manex, Manzate or Penncozeb)

		Maximum Rat	e Per Acre Per	Min. Days		
Crop	Chemical	Application	Season	To Harvest	Pertinent Diseases	Remarks
Pumpkin	Manex 4 F	1.6 qts.	12.8 pts.	5	Downy mildew	
	Maneb 80 WP	2 lbs.	16 lbs.	5	Downy mildew	
	Equus 720, Echo 720, or Chloronil 720 Bravo Weather Stik 6 FLs	3 pts.	21 pts.	2	Downy mildew Powdery mildew <sup>1</sup> Gummy stem blight	1 For Sphaerotheca only
	Echo 90 DF	2.4 lbs.		2	Same as Equus 720	
	Echo 500, GK Chloro Gold, or Bravo 500 4.17 FLs	4¼ pts.		2	Same as Equus 720	
	Quadris 2.08 FL	15.4 fl. ozs.	2.88 qts.	1	Same as Equus 720	For restrictions and use patterns, see celery for foliar diseases and onions for soilborne diseases.
	JMS Stylet Oil	3 qts.		4 hrs.	Aphid-transmitted viruses Powdery mildew	See label for specific appl. techniques required (e.g. 400 psi spray pressure)
	Ridomil Gold Bravo 76.4 W	3 lbs.	12 lbs.	2	Downy mildew Gummy stem blight	Limit is 4 appl./crop
	Ridomil Go ld Copper 64.8 W	2 lbs.	8 lbs.	5	Downy mildew	Limit is 4 appl./crop
	Flint 50 WP	2 ozs.	16 ozs.	0	Powdery mildew	Limit is 4 appl./crop. Do not exceed 2 consecutive applications
	Maneb 75 DF	2 lbs.	17.1 lbs.	5	Downy mildew	
	Sulfur (numerous brands)			1	Powdery mildew	
	Bravo Ultrex 82.5 WDG	2.7 lbs.		2	Same as Equus 720	
	Cabrio 2.09 F	16 fl oz.	64 fl oz	0	Same as Equus 720	4 appl. max. See onion for resistance management.
	Ridomil Gold 4 EC	2 pts./trtd. acre			Pythium seedling blight	Apply at seeding in a 7-12" band on soil over seed furrow.
	Cuprofix Disperss 36.9 DF	2.5 lbs		1	Angular Leaf Spot	
					Downy Mildew	
					Gummy Stem Blight	
	Nova 40 W	5 ozs.	1.5 lbs.	0	Powdery mildew	Note that a 30 day plant back restriction exists.

		Maximum Rat	te Per Acre Per	Min. Days		
Crop	Chemical	Application	Season	To Harvest	Pertinent Diseases	Remarks
Purslane	Quadris 2.08 FL	15.4 fl. ozs.	2.88 qts.	0	Various, see label	For restrictions and use patterns, see celery for foliar diseases and onions for soilborne diseases.
Radicchio	Quadris 2.08 FL	15.4 fl. ozs.	2.88 qts.	0	Various, see label	Same as for purslane
Radish	Ridomil Gold Copper 64.8 W	2 lbs.		7	Downy mildew	Limit is 4 appl./crop
	Ridomil Gold 4 EC	2 pts./trtd. acre			Pythium seedling blight, downy mildew	Apply at seeding on soil over seed furrow.
	Quadris 2.08 FL (for regular, daikon, & oriental radishes)	15.4 fl. ozs.	2.88 qts.	0	Downy mildew, Various, see label	For restrictions and use patterns, see celery for foliar diseases and onions for soilborne diseases.
	Cabrio 2.09 F	16 fl oz	48 fl oz	0	Same as Quadris	3 appl. max. See onions for resistance management.
Romaine	Same as lettuce if label does no	ot restrict use to tigh	t-headed types.			
Rhubarb	Botran 75 W	la lbs.		3	Botrytis	Greenhouse only
	Quadris 2.08 FL	15.4 fl. ozs.	2.88 qts.	0	Downy mildew, Various, see label	For restrictions and use patterns, see celery for foliar diseases and onions for soilborne diseases.
Rutabagas	Some sulfur labels are available	e.				
	Ridomil Gold 4 EC	2 pts./trtd. acre			Pythium seedling blight	Apply at seeding in a 7-12" band on soil over seed furrow.
	Quadris 2.08 FL	15.4 fl. ozs.	2.88 qts.	0	Downy mildew, Various, see label	For restrictions and use patterns, see celery for foliar diseases and onions for soilborne diseases.
	Cabrio 2.08 F	16 fl oz	48 fl oz	0	Various, see label	3 appl, max. See onion for resistance management.
Salsify	Ridomil Gold 4 EC	2 pts./trtd. acre			Pythium seedling blight	Apply at seeding in a 7-12" band on soil over seed furrow.

		Maximum Rate Per Acre Per		Min. Days		
Crop	Chemical	Application	Season	To Harvest	Pertinent Diseases	Remarks
	Quadris 2.08 FL (for black, spanish, & regular salsify)	15.4 fl. ozs.	2.88 qts.	0	Downy mildew, Various, see label	For restrictions and use patterns, see celery for foliar diseases and onions for soilborne diseases.
	Cabrio 2.09 F	16 fl oz	48 fl oz	0	Various, see label	3 appl, max. See onions for resistance management.
Sesame	No foliar fungicides labelled.					
Shallots	Same as for onions or green on	ons. If label states	dry bulb only, then	material can not	be used on shallots or other	er types of green onions.
Skirret	Quadris 2.08 FL (for black, spanish, & regular salsify)	15.4 fl. ozs.	2.88 qts.	0	Downy mildew, Various, see label	For restrictions and use patterns, see celery for foliar diseases and onions for soilborne diseases.
	Cabrio 2.09 F	16 fl oz	48 fl oz	0	Various, see label	3 appl, max. See onions for resistance management
Spinach	Ridomil Gold 4 EC	2 pts./trtd. acre			Pythium seedling blight	Apply at seeding in a 7-12" band on soil over seed furrow.
	Basicop or Basic Copper 53 WPs	4 lbs.		1	Downy mildew White rust Anthracnose Cercospora leaf spot	
	Nu-Cop 3L or Blueshield 3L FLs	2 2/5 pts.		1	Same as Basicop	
	Oxycop	5½ lbs.		1	Downy mildew	
	Aliette 80 WDG	5 lbs.		3	Downy mildew	Limit is 7 appl./crop. Do not tank mix with copper fungicides.
	Ridomil Gold Copper 64.8 WP	2.5 lbs.		21	Downy mildew White rust	Use 40 days after planting if Ridomil Gold EC is used at planting. Limit is 2 appl./crop.
	Kocide or Blue Shield DFs Nu-Cop 50 DF	3 lbs. 4 lbs.		1	Downy mildew	Flecking on leaves may occur.
	Nu-Cop 3L or Blue Shield 3L FLs	2 2/3 pts.		1	Same as Basicop	
	Kocide 101 77 WP Nu-Cop 50 WP	2 lbs. 4 lbs.		1	Same as Basicop	Flecking on leaves may occur.
	Kocide 2000 53.8 DF	2.25 lbs.		1	Same as Basicop	Flecking on leaves may occur.

		Maximum Rate Per Acre Per		Min. Days		
Crop	Chemical	Application	Season	To Harvest	Pertinent Diseases	Remarks
	Kocide 2.4 LF	4 pts.		1	Downy mildew	Flecking on leaves may occur.
Spinach continued	Basic Copper Sulfate 53 WP	4 lbs.		1	Same as Basicop	
Spinach continued	Quadris 2.08 FL	15.4 fl. ozs.	2.88 qts.	0	Downy mildew, Stemphyllium leaf spot Various, see label	For restrictions and use patterns, see celery for foliar diseases and onions for soilborne diseases.

Crop	Chemical	Maximum Rat Application	e Per Acre Per Season	Min. Days To Harvest	Pertinent Diseases	Remarks
Squash	Ridomil Gold 4 EC	2 pts./ trtd. acre	Season	TO HAI VEST	Pythium seedling blight	Apply at seeding in a 7-12" band on the soil over seed furrow.
	Maneb 80 WP	2 lbs.	16 lbs.	5	Downy mildew	
	Manex 4 F	1.6 qts.	12.8 qts.	5	Downy mildew	
	Dithane F45 or Manex II FLs	2.4 qts.	19.2 qts.	5	Downy mildew	Summer squash only
	Manzate 80, Penncozeb or Dithane M45 WPs	3 lbs.	24 lbs.	5	Downy mildew	Summer squash only
	Dithane, Manzate, or Penncozeb 75 DFs	3 lbs.	25.5 lbs.	5	Downy mildew	Summer squash only
	Echo 720, Equus 720, or Chloronil 720 6 FLs	3 pts.	21 pts.	2	Downy mildew Gummy stem blight Powdery mildew <sup>i</sup>	
	Ridomil Gold Copper 64.8 WP	2 lbs.	8 lbs.	5	Downy mildew Phytophthora	Limit is 4 appl./crop.
	Topsin M70 WP	½lb.		1	Gummy stem blight <sup>4</sup>	
	JMS Stylet Oil	3 qts.		4 hrs.	Aphid-transmitted viruses, Powdery mildew	See label for specific appl. techniques required (e.g. 400psi is essential)
	Echo 90 DF	2.4 lbs.		2	Same as Echo 720	
	Echo 500, GK Chloro Gold, or Bravo 500 4.17 FLs	4 1/4 pts.		2	Same as Echo 720	
	Bravo Ultrex 82.5 WDG	2.7 lbs.		2	Same as Echo 720	
	Aliette/Maneb 2+2	See label for mixing instructions		5	Downy mildew	
	Ridomil Gold Bravo 76.4 W	3 lbs.	12 lbs.	0	Downy mildew Gummy stem blight	Limit is 4 appl./crop
	Ridomil MZ 68 WP (Summer Squash)	2.5 lbs.	7.5 lbs.	5	Downy mildew	Limit is 3 appl./crop
	Maneb 75 DF	2 lbs.	17.1 lbs.	5	Downy mildew	
	ManKocide 61.1 DF	4 lbs.	128 lbs.	5	Downy mildew	Summer Squash only
	Aliette 80 WDG	5 lbs.		1	Downy mildew	Limit is 7 appl./crop. Do not tank mix with copper fungicides
Squash continued	Bravo Weather Stik 6 F	3 pts.		2	Same as Echo 720	
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	Chemical	Maximum Ra	te Per Acre Per	Min. Days		
Crop		Application	Season	To Harvest	Pertinent Diseases	Remarks
Squash continued	Quadris 2.08 FL	15.4 fl. ozs.	2.88 qts.	1	Same as Echo 720	For restrictions and use patterns, see celery for foliar diseases and onions for soilborne diseases.
	Flint 50 WP	2 ozs.	16 ozs.	0	Powdery mildew	Limit is 4 appl./crop. Use a maximum of 2 consecutive applications.
	Cuprofix Disperss 36.9 DF	2.5 lbs		1	Alternaria leaf spot	
					Angular leaf spot	
					Anthracnose	
					Downy mildew	
					Gummy stem blight	
	Nova 40 W	5 ozs.	1.5 lbs.	0	Powdery mildew	Note that a 30 day plant back restriction exists.
	Cabrio 2.09F	16 fl oz	64 fl oz	0	Same as Quadris	4 appl. maximum. See onions for resistance management.
	Sulfur (various brands <sup>3</sup> )			1	Powdery mildew	_
	Various copper fungicides are	labeled and could be	e useful if angular le	eaf spot (a bacter	rial disease) became a prob	olem.

<sup>&</sup>lt;sup>1</sup>Sphaerotheca only
<sup>2</sup>Erysiphe only
<sup>3</sup>Microthiol special, Super 6, Enduro, Microflo, Supersul, Sulfur 6L, Thiolux
<sup>4</sup>Resistant strains present

		Maximum Rat	e Per Acre Per	Min. Days		
Crop	Chemical	Application	Season	To Harvest	Pertinent Diseases	Remarks
Strawberry	Ridomil Gold 4 EC	1 pt./trtd. acre	3 pts./trtd. acre		Pythium diseases Phytophthora red stele	See label for use in drip irrigation.
	Rovral 50 WP <sup>1</sup> or WG	2 lbs.	8 lbs.	NTL	Botrytis diseases	No applications after bloom initiation
	Rovral 4 F <sup>2</sup>	2 pts.	8 pts.	NTL	Botrytis	No applications after bloom initiation
	Captan 50 WP	6 lbs.	48 lbs.	1 <sup>3</sup>	Botrytis	Rate is on a sprayed acre basis.
	Captan 80 WP	3 ¾ lbs.	30 lbs.	1 <sup>3</sup>	Botrytis	Rate is on a sprayed acre basis.
	Sulfur (Numerous brands <sup>4</sup> )			1 <sup>3</sup>	Powdery mildew	Do not use during hot weather.
	Aliette 80 WDG <sup>5</sup>	5 lbs.		NTL	Leather rot	Do not tank mix with copper fungicides.
	Kocide 101, Nu-Cop, Blue Shield, KOP Hydroxide, Champion 77 WPs	3 lbs.		1	Angular leaf spot	Frequent use of copper fungicides may result in plant injury.
	Kocide 4.5 F	2 pts		1	Angular leaf spot	
	Kocide 2000 53.8 DF	2.75 lbs.		1	Angular leaf spot	Same as Kocide 101
	Basicop or Basic Copper 53 WPS	3 lbs.		1	Angular leaf spot	Same as Kocide 101
	Quadris 2.08 FL	15.4 fl ozs.	1.92 qts.	0	Anthracnose Powdery Mildew Rhizoctonia diseases	Limits are no more than 2 sequential applications and no more than 4 applications per crop.
	Topsin M 70 W	1 lb.		1	Botrytis, Leaf scorch, Leaf blight, leaf spot <sup>7</sup>	Do not use Topsin alon in spray program.
	Nu-Cop 50, Kocide 61.4 or Blue Shield 61.4 DFs	3 lbs.		1	Angular leaf spot	Same as Kocide 101
	Basic Copper Sulfate 98 WP	3 lbs.		1	Angular leaf spot	Same as Kocide 101
Strawberry contd.	KOP 300 FL	1/2 gal.		12 hrs	Angular leaf spot	Same as Kocide 101

		Maximum Rat	<b>Maximum Rate Per Acre Per</b>			
Crop	Chemical	Application	Season	To Harvest	Pertinent Diseases	Remarks
Strawberry continued	Champ 4.6 FL	2 pts.		1	Angular leaf spot	Same as Kocide 101
	3-lb. Copper Flowable, Nu- Cop 3L, Kocide LF, KOP Hydroxide FLs	4 pts		1	Angular leaf spot	Same as Kocide 101
	Thiram 65 WP	5 lbs.		3	Botrytis	Do not rotate treated crops with other crops for which Thiram is not registered.
	Elevate 50 WDG	1.5	6.0	4 hrs	Botrytis	Avoid making more than 2 consecutive applications.
	Microsperse C.O.C.	3 lbs.		2	Angular leaf spot	Same as Kocide 101
	Cabrio 2.09 F	14 fl oz	70 fl oz	0	Anthracnose Leaf spot	5 appl, maxx. Limit is two sequential appl. of Cabrio or
					Powdery mildew	Quadris.

<sup>&</sup>lt;sup>1</sup>2 lbs./100 gal. water may be used as a preplant dip immediately prior to planting. <sup>2</sup>2 pts./100 gal. water may be used as a preplant dip immediately prior to planting. <sup>3</sup>Unless protective clothing is worn <sup>4</sup>e.g. Thiolux, Micro Flo, Enduro, Sulfur, Super-Sul <sup>5</sup>See label for instructions for dip and foliar treatments for red stele.

<sup>&</sup>lt;sup>6</sup>Resistant strains may exist <sup>7</sup>Not listed on label

		Maximum Rat	te Per Acre Per	Min. Days		
Crop	Chemical	Application	Season	To Harvest	Pertinent Diseases	Remarks
Sweet Corn	Dithane M45, Manzate 80, or Penncozeb WPs	1 ½ lbs.	22.5 lbs.	7	Rusts, northern & southern corn leaf blights	Do not use crop for livestock.
	Manex II or Dithane F45 4 FLs	1.2 qts.	18 qts.	7	Same as Dithane M45	Do not use crop for livestock.
	Manzate, Penncozeb, or Dithane 75 DFs	1 ½ lbs.	22.5 lbs.	7	Same as Dithane M45	Do not use crop for livestock.
	Maneb 75 DF	1.5 lbs.	18.0 lbs.	7	Same as Dithane M45	Do not use crop for livestock.
	Maneb 80 WP	1 ½ lbs.	22.5 lbs.	7	Same as Dithane M45	Do not use crop for livestock.
	Manex 4 F	1.2 qts.	18 qts.	7	Same as Dithane M45	Do not use crop for livestock.
	Echo 500, GK Chloro Gold, or Bravo 500, 4.17 FLs	2 ¾ pts.		14	Same as Dithane M45	Do not use crop for livestock or for crop intended for processing.
	Equus 720, 6L, Echo 720, or Chloronil 720 6 FLs	2 pts.	12 pts.	14	Same as Dithane M45	Same as Echo 500
	Tilt	4 fl. ozs	16 fl. oz.	14	Same as Dithane M45	Should be tank-mixed with a broad spectrum fungicide.
	Bravo Ultrex 82.5 WDG	1.8 lbs.		14	Same as Dithane M45	Same as Echo 500
	Echo 90 DF	1.6 lbs.		14	Same as Dithane M45	Same as Echo 500
	Bravo Weather Stik 6 F	2 pts.		14	Same as Dithane M45	Same as Echo 500
	Quadris 2.08 FL	15.4 fl. ozs.	2.88 qts.	7	Same as Dithane M45	Do not apply more than 2 sequential applications before alternating with a different type of fungicide. Limit is 6 appl./crop/season. See onions for restrictions and use patterns for use against soilborne diseases.

_	_		ite Per Acre Per	Min. Days		
Crop	Chemical	Application	Season	To Harvest	Pertinent Diseases	Remarks
<b>Sweet Potato</b>	Sweet potato fungicide	1 lb/ 7 ½ gal. wa			Scurf	Seed dip
		3 3/4 lbs./1000 sq	ft.		Sclerotium rolfsii	Plant bed
	Mertect 340 F	8 fl. ozs./ 7.5 ga	l.		Black rot & scurf	Dip seed roots for 1-2 min.
		water				See label for various rates used in post harvest situations.
	Ridomil Gold 4 EC	2 pts./trtd. acre			Pythium diseases	Apply before setting on soil in transplanting zone.
	Botran 75 W	1 lb/7 ½ gal. of v	vater for seed dip		Scurf	Dip for 10-15 seconds
			of water per 1000		Sclerotium rolfsii	Spray potatoes in bed prior to covering them with soil.
		1 lb./100 gal. of harvest use or di harvest use.			Rhizopus spp.	See label for information on making new suspensions.
	Quadris 2.08 FL	15.4 fl. ozs.	2.88 qts.	14	Various, see label	For restrictions and use patterns, see celery for foliar diseases and onions for soilborne diseases.
	Headline 2.09F	12 fl oz	72 fl oz	3	Various see label	6 appl. Maximum. Alternate with another type of fungicide whenever using Headline or Quadris.
Swiss Chard	Ridomil Gold 4 EC	2 pts./trtd. acre			Pythium seedling blight	Apply at seeding on a 7-12" band on soil over seed furrow.
	Quadris 2.08 FL	15.4 fl. ozs.	2.88 lbs.	0	Various, see label	For restrictions and use patterns, see celery for foliar diseases and onions for soilborne diseases.
Tanier (new cocoyam)	Quadris 2.08 FL	15.4 fl. ozs.	2.88 lbs.	14	Various, see label	Same as sweet potato
- '	Headline 2.09 F	12 fl oz	72 fl oz	3	Various, see label	6 appl, maximum. Alternate with other fungicide types whenever using Headline or Quadris
Taro	See Dasheen					

Crop	Chemical	Maximum Rate Application	Per Acre Per Season	Min. Days To Harvest	Pertinent Diseases	Remarks
Tomato	**For best possible chemical	control of bacterial	spot with copper	fungicides, mai	neb or mancozeb must be	added to the tank mix.
	Ridomil Gold 4 EC	2 pts./trtd. acre	3 pts./trtd./ acre		Pythium diseases	See label for use at & after planting.
	Nu-Cop, Kocide 101, Blue Shield, KOP Hydroxide or Champion 77 WPs	4 lbs.		2	Bacterial spot	3 lbs. maximum for Nu-Cop
	Blue Shield 3 L, Nu-Cop, Kocide LF, or KOP Hydroxide, 3-lb Copper Flowable FLs	5apts.		2	Bacterial spot	
	Kocide 4.5 LF	2 2/3 pts		1	Bacterial spot	
	Kocide 2000 53.8 DF	3 lbs.		1	Bacterial spot	
	Champ 4.6 FL	2 2/3 pts.		1	Bacterial spot	
	Basicop or Basic Copper 53 WPs	4 lbs.		1	Bacterial spot	
	Manex 4 F	2.4 qts.	16.8 qts.	5	Early & late blight, Gray leaf spot, Bacterial spot <sup>1</sup>	Field & Greenhouse use
	Dithane, Manzate or Penncozeb 75 DFs	3 lbs.	22.4 lbs.	5	Same as Manex 4 F	
	Nu-Cop 50, Kocide 61.4 or Blueshield 61.4 DFs	4 lbs.		1	Bacterial spot	
	Maneb 80 WP	3 lbs	21 lbs.	5	Same as Manex 4 F	Field & Greenhouse use
	Dithane F 45 or Manex II 4 FLs	2.4 pts.	16.8 qts.	5	Same as Manex 4 F	
	Dithane M-45, Penncozeb 80, or Manzate 80 WPs	3 lbs.	21 lbs.	5	Same as Manex 4 F	
	Equus 720 <sup>4</sup> , Echo 720, or Chloronil 720 6 Fls	3 pts. or 2.88 pts.	20.1 pts.	2	Early & late blight, Gray leaf spot, Target spot	Use higher rates at fruit set & lower rates before fruit set.
Tomato continued	Maneb 75 DF	3 lbs.	22.4 lbs.	5	Same as Manex 4 F	Field & Greenhouse Use.

		Maximum Rat	te Per Acre Per	Min. Days		
Crop	Chemical	Application	Season	To Harvest	Pertinent Diseases	Remarks
Tomato continued	Quadris 2.08 FL	6.2 fl.ozs.	37.2 fl.ozs.	0	Early Blight Late Blight Sclerotinia Powdery mildew Target spot Buckeye rot	Do not make more than 2 sequential applications with Quadris. Do not make more than 6 appl. or alternate or tank mix with fungicides for which resistance to a pathogen exists. For soilborne diseases see onions section.
	Echo 90 DF	2.3 lbs.		2	Early & late blight, Gray leaf spot, Target spot	Use higher rates at fruit set & lower rates before fruit set.
	Bravo 500, Echo 500, or GK Chloro Gold 4.17 FLs	4 pts.		2	Early & late blight, Gray leaf spot, Target spot	Use higher rates at fruit set & lower rates before fruit set.
	Ridomil Gold Bravo 76.4 W	3 lbs.		14	Early & late blight, Gray leaf spot, Target spot	Limit is 4 appl./crop
	Ridomil MZ 68 WP <sup>2</sup>	2.5 lbs.	7.5 lbs.	5	Late blight	Limit is 3 appl./crop
	JMS Stylet Oil	3 qts.		NTL	Potato Virus Y Tobacco Etch Virus	See label for specific info on appl. technique (e.g. use of 400 psi spray pressure)
	Ridomil Gold Copper 64.8 W	2 lbs. <sup>3</sup>	6 lbs.	14	Late blight	Limit is 3 appl./crop. Tank mix with a maneb or mancozeb fungicide
	Sulfur (many brands)			1	Powdery mildew	
	Aliette 80 WDG	5 lbs.	20 lbs.	14	Phytophthora root rot	Using potassium carbonate or Diammonium phosphate, the spray of Aliette should be raised to a pH of 6.0 or above when applied prior to or after copper fungicides.
	Bravo Ultrex 82.5 WDG	2.75 lbs.	_	2	Early & Late blights, Gray leafspot, Target spot, Botrytis, Rhizoctonia fruit rot	Use higher rates at fruit set.
Tomato continued	Bravo Weather Stik 6 FL	3 pts.		2	Same as Bravo Ultrex	Use higher rates at fruit set.

		Maximum Rate	e Per Acre Per	Min. Days		
Crop	Chemical	Application	Season	To Harvest	Pertinent Diseases	Remarks
Tomato continued	Botran 75 W	1 lb.	4 lbs.	10	Botrytis	Greenhouse tomato only. Limit is 4 applications. Seedlings or newly set transplants may be injured.
	Nova 40 W	4 ozs.	1.25 lbs.	0	Powdery mildew	Note that a 30 day plant back restriction exists.
	Actigard 50 WG	1/3-3/4 oz <sup>5</sup>	4 ozs.	14	Bacterial spot Bacterial speck	Do not use highest labeled rate in early sprays to avoid a delayed onset of harvest.  Begin with 1/3 oz. rate and progressively increase the rate as instructed on the label.  Limit is 6 appl./crop/ season.  Do not exceed a concentration of 3/4 oz.100 gal. of spray mix. Begin spray program before occurrence of disease.
	Exotherm Termil	1 can/1000 sq.ft.		2	Botrytis, Leaf mold, Late & Early blights, Gray leaf spot	Greenhouse use only. Allow can to remain overnight & then ventilate. Do not use when greenhouse temperature is above 75F
	ManKocide 61.1 DF	5.3 lbs.	112 lbs.	5	Bacterial spot Bacterial speck Late blight Early blight Gray leaf spot	
Tomato continued	Cuprofix Disperss 36.9 DF	6 lbs			Bacterial speck Bacterial spot Early blight Gray leaf mold Late blight	

Crop	Chemical	Maximum Rat	te Per Acre Per	Min. Days	Pertinent Diseases	
		Application	Season	To Harvest		Remarks
Tomato continued	Basic Copper Sulfate 98 WP	4 lbs			Bacterial spot	Reenter when sprays are dried
	Gavel 75DF	1.5 to 2.0	16 lbs	5	Buckeye rot	
					Early blight	
					Gray leaf spot	
					Late blight	
					Leaf mold	
	Cabrio 2.09 F	16 fl oz	96 fl oz	0	Same as Quadris	6 appl maximum. See onions for resistance management.
	KOP 300 FL	1/2 gal.		12 hrs.	Bacterial spot	Limit is 8 appl./ crop

<sup>&</sup>lt;sup>1</sup>When tank mixed with a copper fungicide

<sup>2</sup>Do not exceed limits of mancozeb active ingredient as indicated for Dithane, Penncozeb, Manex II or Manzate products.

<sup>3</sup>Maximum crop is 3.0 lbs. a.i. of mefenoxam from Ridomil-containing products

<sup>4</sup>Do not tank mix with Copper Count N.

<sup>5</sup>Label indicates 1/3, 1/2, & 3/4 oz. for 30-50, 60-70, and 70-100 gpa of water.

Crop	Chemical	Maximum Rat	<b>Maximum Rate Per Acre Per</b>					
		Application	Season	Min. Days To Harvest	Pertinent Diseases	Remarks		
Turmeric	Quadris 2.08 FL	15.4 fl. ozs.	2.88 qts.	14	Various, see label	For restrictions and use patterns, see celery for foliar diseases and onions for soilborne diseases.		
	Headline 2.09F	12 fl oz	72 fl oz	3	Various, see label	Same as sweet potato		
Turnips	Various brands of sulfur (e.g. Signal, Special Electric, Microthiol special, Enduro, etc.) are labelled							
	Ridomil Gold 4 EC	2 pts./trtd. acre			Pythium seedling blight	Apply at seeding in a 7-12" band on soil over seed furrow.		
	Quadris 2.08 FL	15.4 fl. ozs.	2.88 qts.	14	Various, see label	For restrictions and use patterns, see celery for foliar diseases and onions for soilborne diseases.		
	Cabrio 2.09 F	16 fl oz	48 fl oz	0	Various, see label	3 appl, max. See onion for resistance management.		
Watercress (Also see Cress)	Kocide 61.4 DF	2 lbs.		1	Cercospora leaf spot	Limit is 4 appl./crop		
	Kocide 2.4 LF	4 pts.		1	Cercospora leaf spot	Limit is 4 appl./crop		
	Kocide 101 77 WP	2 lbs.		1	Cercospora leaf spot	Limit is 4 appl./crop		
	Kocide 2000 53.8 DF	1.5 lbs.		1	Cercospora leaf spot	Limit is 4 appl./crop		
	Nu-Cop 3 L	2 2/3 pts.		1	Cercospora leaf spot	Limit is 4 appl./crop		
	Cuprofix Disperss	2.5 lbs		1	Cercospora leaf spot	**		
	Quadris 2.08 FL	15.4 fl ozs.	2.88 qts./cutting	7	Cercospora leaf spot	Limits are no more than 2 sequential applications and 3 applications per cutting.		

Crop		Maximum Rate Per Acre Per		Min. Days		
	Chemical	Application	Season	To Harvest	Pertinent Disease	Remarks
Watermelon	Ridomil Gold 4EC	2 pts./ trtd. acre			Pythium Seedling blight	Apply at seeding in a 7-12" band on soil over seed furrow
	Quadris 2.08 FL	15.4 fl oz	2.88 qts.	1	Same as Echo 720	For restriction and use patterns, see celery for foliar diseases and onions for soilborne diseases.
	Echo 720, Equus 720, or Chloronil 720 6 FLs	3 pts.	21 pts.	2	Gummy stem blight, Alternaria leaf spot, Downy mildew & Cercospora leaf spot Powdery mildew	Do not use after fruit is set unless foliage covers the fruit.
	Echo 90 DF	2.4 lbs.		2	Same as Echo 720	Same as Echo 720
	Echo 500, GK Chloro Gold, or Bravo 500 4.17 FLs	4 ¼pts.		2	Same as Echo 720	Same as Echo 720
	Bravo Ultrex 82.5 WDG	2.7 lbs.		2	Same as Echo 720	Same as Echo 720
	Dithane F45 or Manex II 4 FLs	2.4 qts.	19.2 qts.	5	Downy mildew, Cercospora leaf spot, Gummy stem blight, Alternaria leaf spot, Anthracnose	
	Penncozeb, Dithane M45, or Manzate 80 WPs	3 lbs.	24 lbs.	5	Same as Dithane F45	
	Dithane, Manzate, or Penncozeb 75 DFs	3 lbs.	24 lbs.	5	Same as Dithane F45	
	Manex 4 F	1.6 qts.	12.8 qts.	5	Same as Dithane F45	
	Maneb 80 WP	2 lbs.	16 lbs.	5	Same as Dithane F45	
	Topsin M 70 WP	½ lb.		1	Gummy stem blight, Anthracnose	Same as Benlate
	Aliette 80 WDG	5 lbs.	35 lbs.		Downy mildew	Limit is 7 appl./crop. Do not tank mix with copper fungicides.
	Nu-Cop, Kocide 101, Blue Shield, KOP Hydroxide or Champion 77 WPs	3 lbs.		1	Bacterial Diseases	
Watermelon continued	Nu-Cop 3L, Blue Shield 3L, 3-lb Copper Flowable, Kocide LF, Champion or KOP Hydroxide FLs	4 pts.		1	Bacterial diseases	

		Maximum Rate Per Acre Per		Min. Days		
Crop	Chemical	Application	Season	To Harvest	Pertinent Disease	Remarks
Watermelon continued	Basicop or Basic Copper 53 WPs	2 lbs.		1	Bacterial diseases	
	Ridomil Gold Bravo 76.4 W	3 lbs.	12 lbs.	2	Downy mildew, Gummy stem blight, Anthracnose	Limit is 4 appl./crop.  Do not use after fruit is set unless foliage covers the fruit.
	Ridomil MZ 68 WP	2.5 lbs.	7.5 lbs	5	Downy mildew	Limit is 3 appl./crop
	Ridomil/Copper 70 W	2 lbs.	8 lbs.	5	Downy mildew, Phytophthora	Limit is 4 appl./crop
	Flint 50 WP	2 ozs.	16 ozs.	0	Powdery mildew	Limit is 4 appl./crop. Do not use more than 2 consecutive application
	Nova 40 W	5 ozs.	1.5 lbs.	0	Powdery mildew	Note that a 30 day plant back restriction exists.
	Maneb 75 DF	2 lbs.	17.1 lbs.	5	Same as Dithane F45	
	Kocide or Blue Shield 61.4 DFs	2 lbs.		1	Bacterial diseases	
	ManKocide 61 DF	2.66 lbs.	128 lbs.	5	Angular leaf spot Downy mildew Bacterial fruit blotch	
	Aliette/Maneb 2+2	See label for mixing instructions		5	Downy mildew	Limit is 7 applications/ crop
	Kocide 2000 53.8 DF	1.5 lbs.		1	Bacterial diseases	
	KOP 300 FL	1/3 gal.		12 hrs.	Bacterial diseases	
	Bravo Weather Stik 6F	3 pts.		2	Same as Echo 720	Same as Echo 720
	Nu-Cop 50 DF	3 lb.		1	Bacterial diseases	
	Cuprofix Disperss 36.9 DF	2.5 lbs		1	Alternaria leaf spot Angular leaf spot	
					Anthracnose Downy mildew Bacterial fruit blotch (Suppression)	
	JMS Stylet Oil	3 qts.		4 hrs.	Aphid-transmitted viruses, powdery mildew	See label for specific appl. techniques required (e.g. use of 400 psi.)
Watermelon continued	Cabrio 2.09 FL	16 fl oz	64 fl oz	0	Same as Quadris	4 appl. maximum. See onion for resistance management.

		Maximum Rate Per Acre Per		Min. Days		
Crop	Chemical	Application	Season	To Harvest	Pertinent Disease	Remarks
Watermelon continued	<sup>1</sup> Resistant strains exist <sup>2</sup> Not listed on label					
Yams	See under sweet potato					
Yam bean	Quadris 2.08 FL	15.4 fl. ozs.	2.88 qts.	14	Various, see label	For restrictions and use patterns, see celery for foliar diseases and onions for soilborne diseases.
	Headline 2.09F	12 fl oz	72 fl oz	3	Various, see label	Same as sweet potato