FLORAL CROPS DISEASE CONTROL
Compiled by H. R. Garriss and J. C. Wells, Plant Pathology Extension

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Crop	Disease Controlled	Material	Active Ingredient	Method	Concentration	Schedule			
Azalea (See Ext. Cir. 246)	Ovulinia petal blight	Dithane Z-78 or Parzate	zineb 65% zineb 6%	spray dust	1 lb./100 gal. 6% dust	3 times each week during bloom,			
	Exobasidium leaf and bud gall	Bordeaux	copper	spray	6-2-100	For extensive planting 1 to 2 applications 10 to 14 days			
	and bud gair	(For average home gard of galls.)	apart, beginning when galls are first evident.						
	Phytophthora root rot	Formalin	formaldehyde	soil drench	1 part commercial formalin in 49 parts water	½ gal. per sq. ft. of soil well in advance of planting.			
Camellia (See Ext. Cir. No. 246)	Sclerotinia flower blight	Fermate, Nu-Leaf or Ferradow + Dreft	ferbam 76%	soil drench	6 lb./1000 sq. ft.	Late December or early January.			
		(Pick up and destroy a clean pine straw.)	sulfur ll fallen flowers; ren	dust evenly nove old lit	1 lb./180 sq. ft. ter and replace with	Late December or early January.			
	Exobasidium leaf	(See under Azalea)							
	Phytophthora root	(See under Azalea)							
	Glomerella die-back	Bordeaux paste (pre- pared) Bordeaux pow- der mixed with water to the consistency of white wash	branches—all affected tissue must be eliminated.						
Carnation	Alternaria blight	Fermate, Nu-Leaf or Ferradow Bordeaux	ferbam 76% copper	spray spray	1½ lb./100 gal.+ spreader 4-4-100+spreader	7 day intervals			
	Bacterial leaf spot	Tag Fungicide, Quick- san, Orchard Brand, Green Cross Erad	phenyl mercuric acetate 10%	spray	½ pint/100 gal.+ spreader				
		Puratized apple spray	phenyl mercuric monoethanol am- monium acetate 11.5% (Avoid splashing w	spray	½ pint/100 gals.+ spreader				
Chrysanthemum	Heterosporium fairy ring spot	Fermate, Nu-Leaf or Ferradow	ferbam 76%	spray	1½ lb./100 gal.+ spreader	7- to 10-day intervals			
	Leaf rust	Fermate, Nu-Leaf or Ferradow	ferbam 76% (In early infections	spray	1½ lb./100 gal.+ spreader	When scattered rust pus- tules are evident			
	Bacterial blight	Agri-mycin, Phyto-mycin Dip for clean cuttings prior to rooting mycin							
	Foliar nematodes	Wettable Parathion	parathion 15%	spray	1½-3 lb./100 gal.	7- to 10-day intervals			
	Mycosphaerella ray blight	Dithane Z-78 or Parzate	zineb 65%	spray	1 lb./100 gal. plus spreader	2 to 3 times per week as flowers begin to open			
	Rust	Fermate, Nu-Leaf or Ferradow	ferbam 76%	spray	1½ lb./100 gal. plus spreader	7- to 10-day intervals			
	Septoria leaf spot	Fermate, Nu-Leaf or Ferradow	ferbam 76%	spray	1½ lb./100 gal. plus spreader	7 to 10 day intervals			
Dogwood (See	Anthracnose leaf and flower spot	Orthocide 50 or Captan. 50W	captan 50%	spray	2 lb./100 gal.	1st delayed dormant			
Ext. Folder No. 150)		Manzate or Dithane M-22	maneb 70%	spray	11/2 lb./100 gal.	2nd petal fall			
		Phaltan 50W	N-trichloro- methylthioph- thalimide 50%	spray	2 lb./100 gal.	3rd mid-summer 4th pre-dormant (after flow- er buds are well formed)			
Gladiolus (See Ext. Cir. No. 373 and Plant Path. Inf. Note No. 22)	Botrytis foliage blight	Dithane Z-78 or Parzate	zineb, 65%	spray	1½ to 2 lb./100 gal. plus spreader	Every 7 to 10 days during normal weather, every 2 to 3 days during wet periods.			
	Curvularia leaf spot	Dithane Z-78, Parzate or Dithane M-22, Manzate	zineb 65% maneb 70%	spray	1½ to 2 lb./100 gal. plus spreader	Same as for Botrytis			
	Corm rots-Pre storage (Fusarium, Botrytis, Curvularia)	Dowicide B	sodium trichloro- phenate 85%	steep	1¾-2 lb./100 gal.	Treat for 20 to 30 min. with a few days of harvest			
	Corm and cormel rots-pre-planting (Fusarium, Curvularia)	New Improved Ceresan	ethyl mercury phosphate, 5%	steep	2 lb./100 gal.	Treat for 15 minutes just before planting.			
Iris (See Plant Path. Info. Note No. 22)	Heterosporium	Dithane Z-78 or Parzate	zineb 65%	spray	2 lb./100 gal. + spreader	Every 10 to 14 days.			
	Bulb and stem nematode	Formalin	formaldehyde	long steep	2 qts./100 gal. 110-111°F for 3 hr.	2 hr. pre-steep in water 75°F + Vatsol O. S. at 8 oz./100 gal. Bulbs must be treated before root development begins; this is usually 3 to 4 weeks following early harvest.			

## Floral Crops Disease Control—(continued)

Crop	Disease Controlled	Material	Active Ingredients	Method	Concentration	Schedule
Dutch Iris	Bulb and stem rot caused by southern wilt organism	Terraclor	pentachloronitro- benzene 10%, 20%, 75%	Row	24 lb./acre	Apply 6 lbs. actual ingredient to soil in 1 ft. band on row at (1) planting time, (2) about April 1, (3) April 15, and (4) May 1. Apply as drench or dry application.
				Broad- cast 100 to 150 lb./acre	iau in the	Apply prior to planting.  Mix with top 2 or 3 inches of soil by discing or roto-tilling.
Narcissus	Bulb and stem nematode	Formalin	formaldehyde	long	2 qt./100 gal. 110 to 111° F for 4 hr.	2 hr. pre-steep in water 75° F Vatsol O. S. at 8 oz./ 100 gal. Treat 3 wks. fol- lowing harvest.
	Basal rot (Pre-storage)	Mersolite W	phenyl mercury acetate, 96.5%	steep	1 lb./400 gal.	Treat for 5 to 15 min. within 3 days after harvest.
		* Dowicide B	sodium trichloro- phenate, 85%	steep	3 lb./100 gal.	Treat for 15 min. within 3 days after harvest.
	Basal rot (Pre-planting)	Mersolite W	phenyl mercury acetate, 96.5%	steep	1 lb./600 gal.	Treat 5 to 15 min. prior planting.
	(220 )	New Improved Ceresan	Methyl mercury phosphate, 5%	steep	2 lb./100 gal.	Treat 2 to 5 min. just prior to planting.
	Stagonospora		phosphate, 070		COLUMN TO THE REAL PROPERTY.	To planting.
	leaf scorch	Bordeaux	copper	spray	8-8-100 + spreader	Every 10 to 14 days after 4 to 6 inches of foliage growth.
	Dormant bulbs	Formalin	formaldehyde	steep	2 qt./100 gal.	Treat for 2½ to 4 hrs. at temperature of 110 to 111.5°F.
Rose	Black spot	Fermate, Nu-leaf	ferbam 76%	spray	2 lb./100 gal.	Apply every 7 to 10 days and twice each week during rainy periods.
(See Ext. Cir.		Ferradow	ferbam 10%	dust	10% dust	
200 revised)		Orthocide 50W, Captan 50-W	captan 50%	spray	2 lb./100 gal.	
		Parzate or Dithane Z-78	zineb 65% zineb 6%	spray dust	2 lb./100 gal. 6% dust	
		Phaltan 50W	N-trichloro- methylthioph- thalimide 50%	spray	1½ lb./100 gal.	Apply every 7 to 10 days and twice each week during rainy periods.
	Powdery mildew	Wettable sulfur	sulfur	spray	4 lb./100 gal.	Sulfur should not be used when temperature approach- es or exceeds 90° F. Use according to mfr. label.
		Sulfur dust Karathane or	sulfur dinitro capry	dust		
		Mildex	phenylcrotonate		Date:	
-		ions of fungicides and in Bordeaux	copper	spray	8-8-100	Every 10 to 14 days.
Snapdragon	Anthracnose	Fermate, Ferradow, Nu-Leaf Dithane Z-78, Parzate	ferbam 76%	spray	1½ lb./100 gal.	livery to to 14 days.
			zineb 65%	spray	1½ lb./100 gal.	
			(Maintain dry	atmosphere	in greenhouse)	
	Phyllosticta	Bordeaux	copper		8-8-100	
	blight	(Clean up all debris of surface watering and t	snapdragon plants emperatures below 60	in fall; for		
	Rust	Dithane Z-78 or Parzate	zineb 65%	spray	1½ lb./100 gal.	
Tulip	Botrytis blight	Fermate, Nu-leaf or Ferradow	ferbam 76%	spray	1½ to 2 lb./100 gal.	Begin when foliage is 2 to 4 inches tall; spray at 7 to 10 day intervals; 4 succes- sive applications should be plentiful.
Woody Ornamentals	Nematodes	Nemagon Fumazone	1-2 dibromo- 3 chloropropane	Drench or injec- tion	4 to 6 gal./acre	When soil temperature is 50° F. or above.
Zinnia	Alternaria leaf and flower spot	Bichloride of mercury	mercury	soak	1 oz./7½ gal.	Treat 5 to 10 min. and rinse thoroughly.
	Mildew	Wettable sulfur or sulfur dust	sulfur sulfur	spray dust	4 lb./100 gal. thorough coverage	

<sup>\*</sup>Do not use Dowicide B on bulbs to be marketed in retail trade as slight staining and shrinkage often occurs. This treatment is effective against basal rot organism and also inactivates cysts of soybean cyst nematode.