

## Disease Control for Forest, Christmas, and Ornamental Trees

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**Table 10-12. Disease Control for Forest, Christmas, and Ornamental Trees**

CROP Disease	Material	Rate	Method	Schedule	Remarks
<b>Ash</b>					
Anthracnose	thiophanate-methyl (AllBan Flo) (Cleary 3336)	10.75 to 20 fl oz/100 gal 12 to 16 fl oz/100 gal	foliar spray	Three to four applications at 14-day intervals.	First application at bud break.
	chlorothalonil (Daconil Ultrex) 82.5 WDG	1.4 lb/100 gal	foliar spray	Repeat in 7 to 14 days when conditions favor disease.	
	metconazole (Tourney)	1 to 4 oz/100 gal	foliar spray	Repeat in 14 to 28 days when conditions favor disease.	
	pyraclostrobin + boscalid (Pageant Intrinsic)	18 oz./100 gal	foliar spray	Repeat applications 7 to 14 days as needed	
	tebuconazole (Torque)	4 to 8 fl oz/100 gal	foliar spray	Begin applications 14 to 21 days prior to when disease is expected, or at very first sign of disease.	
<b>Crabapple</b>					
Fire blight	copper	See label	foliar spray	One spray before bud break.	Can be phytotoxic after bud break.
	streptomycin (Agri-mycin 17)	50 to 100 ppm	foliar spray	Three to five applications starting at 20% to 30% bloom.	Spray every 10 to 14 days.
Powdery mildew, rust	metconazole (Tourney)	1 to 4 oz/100 gal	foliar spray	Repeat in 14 to 28 days when conditions favor disease.	
	pyraclostrobin + boscalid (Pageant Intrinsic)	6 to 12 oz./100 gal	foliar spray	Repeat applications 7 to 14 days as needed	
	triadimefon (Bayleton) 50 WSP	5.5 oz/275 to 550 gal	foliar spray	Every 7 to 14 days.	Spray early for rust, as needed for mildew.
Scab, cedar apple rust, powdery mildew	metconazole (Tourney)	1 to 4 oz/100 gal	foliar spray	Repeat in 14 to 28 days when conditions favor disease.	
	myclobutanil (Systhane) (Immunox)	4 oz/100 gal 1 fl oz/gal	foliar spray	Spray every 10 to 14 days. Spray every 14 days.	For best control, use a protectant application schedule.
	propiconazole (Banner MAXX)	2 to 8 fl oz/ 100 gal	foliar spray	Every 14 to 21 days as needed.	Start at bud break.
	chlorothalonil + propiconazole (Concert II)	9 to 35 fl oz/100 gal (see label for specific rate instructions)	foliar spray	Every 14 to 21 days	See label for additional details
	pyraclostrobin + boscalid (Pageant Intrinsic)	6 to 12 oz./100 gal	foliar spray	Repeat applications 7 to 14 days as needed	
	tebuconazole (Torque)	4 to 8 fl oz/100 gal	foliar spray	Begin applications 14 to 21 days prior to when disease is expected, or at very first sign of disease.	
	triconazole (Trinity) 19SC	6 to 12 fl oz/100 gal	foliar spray	Every 7 to 14 days.	Use preventively. Begin applications when conditions favor fungal infection and before disease symptom development. The stem areas of the plant must be thoroughly covered using spray to runoff.
<b>Crapemyrtle</b>					
Cercospora leaf spot	azoxystrobin (Heritage) 50 W	4 oz/100 gal	foliar spray	Spray every 7 to 28 days.	
	horticultural oil (Ultra-Pure Oil)	See label	foliar spray	See label.	
	metconazole (Tourney)	1 to 4 oz/100 gal	foliar spray	Repeat in 14 to 28 days when conditions favor disease.	
	pyraclostrobin + boscalid (Pageant Intrinsic)	8 to 12 oz./100 gal	foliar spray	Repeat applications 7 to 14 days as needed	
	triconazole (Trinity) 19SC	4 to 8 fl oz/100 gal	foliar spray	Every 7 to 14 days.	Use preventively. Begin applications when conditions favor fungal infection and before disease symptom development. Use of an djuvant/spreader sticker can aid in control.
Diplodia tip blight, Lophodermium needlecast, Swiss needlecast	azoxystrobin (Heritage) 50 WG	3.2 to 8 fl oz/100 gal	foliar spray	Spray every 7 to 28 days.	To avoid fungicide resistance, do not make more than three sequential applications before rotating with nonstrobilurin products.

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CROP Disease	Material	Rate	Method	Schedule	Remarks
<b>Crapemyrtle (continued)</b>					
Powdery mildew	azoxystrobin (Heritage) 50 W	4 oz/100 gal	foliar spray	Preventative sprays at 7- to 28-day intervals.	
	chlorothalonil + propiconazole (Concert II)	22 – 35 fl oz/100 gal	foliar spray	Every 14 to 21 days	See label for details
	metconazole (Tourney)	1 to 4 oz/100 gal	foliar spray	Repeat in 14 to 28 days when conditions favor disease.	
	myclobutanil (Eagle) 40 WP	3 to 6 oz/100 gal	foliar spray	Spray at 10- to 14-day intervals.	
	pyraclostrobin + boscalid (Pageant Intrinsic)	6 to 12 oz./100 gal	foliar spray	Repeat applications 7 to 14 days as needed	
	triconazole (Trinity) 19SC	6 to 12 fl oz/100 gal	foliar spray	Every 7 to 14 days.	Use preventively. Begin applications when conditions favor fungal infection and before disease symptom development. Use of an djuvant/spreader sticker can aid in control.
Root rot ( <i>Phytophthora</i> spp.)	cyazofamid (Segway)	3 to 6 fl oz/100 gal	soil drench	14 to 21 day intervals using another registered fungicide with a different mode of action.	
	fosetyl-AL (Aliette) WDG)	2.5 lb/100 gal 2.5 to 5 lb/100 gal	dip foliar (spray to wet)	Before transplanting 30-day minimum interval	Thoroughly wet plant and root mass immediately before transplanting.
	mefenoxam (Subdue MAXX)	Seedlings: 1.25 pt/50 gal 2-0 transplants: 2.5 pt/50 gal	directed soil spray over beds	Spring and fall (every 6 months).	Apply 0.5 to 1 in. of water after application, if rain is not expected within 3 days.
	phosphorous acid (Alude, Fosphite, Reliant)	See label for rates	Apply as a soil drench or foliar spray as a preventive		
	pyraclostrobin + boscalid (Pageant Intrinsic)	12 to 18 oz/100 gal	Soil drench	Repeat applications 14 to 28 days as needed	
Also see Fraser Fir					
<b>Dogwood</b>					
Anthracnose ( <i>Discula</i> )	azoxystrobin (Heritage) 50 WG	1 to 4 oz/100 gal	foliar spray	Spray every 7 to 28 days.	To avoid fungicide resistance, do not make more than three sequential applications before rotating with nonstrobilurin products.
	chlorothalonil (Daconil Ultrex) 82.5 WDG	1.4 lb/100 gal	foliar spray	Repeat every 7 to 14 days when conditions favor disease.	Prune out all diseased tissue. Several applications in fall before leaf drop may also be advisable.
	chlorothalonil + propiconazole (Concert II)	9 – 17 fl oz/100 gal	foliar spray	Spray every 14 to 21 days	See label for additional details.
	mancozeb (Dithane, Fore, Mancozeb DG) (Protect DF)	1.5 lb/100 gal 1 to 2 lb	foliar spray	Spray every 10 to 14 days from bud break until mid-summer.	Prune out all diseased tissue. Several applications in fall before leaf drop may also be advisable.
	metconazole (Tourney)	1 to 4 oz/100 gal	foliar spray	Repeat in 14 to 28 days when conditions favor disease.	
	myclobutanil (Systhane) (Immunox)	4 oz/100 gal 1 fl oz/gal	foliar spray	Spray every 10 to 14 days. Spray every 14 days.	Prune out all diseased tissue. Several applications in fall before leaf drop may also be advisable.
	propiconazole (Banner MAXX)	2 to 8 fl oz/100 gal	foliar spray	Spray every 14 to 28 days from bud break to mid-summer.	Prune out all diseased tissue. Several applications in fall before leaf drop may also be advisable.
	pyraclostrobin + boscalid (Pageant Intrinsic)	8 to 12 oz/100 gal	foliar spray	Repeat applications 7 to 14 days as needed	
	tebuconazole (Torque)	4 to 8 fl oz/100 gal	foliar spray	Begin applications 14 to 21 days prior to when disease is expected, or at very first sign of disease.	
	thiophanate-methyl (AllBan Flo) (Cleary 3336) F	10.75 to 20 fl oz/100 gal 12 to 16 fl oz/100 gal	foliar spray	Spray every 7 to 14 days from bud break to mid-summer.	Prune out all diseased tissue. Several applications in fall before leaf drop may also be advisable.
	triconazole (Trinity) 19SC	8 to 12 fl oz/100 gal	foliar spray	Spray every 7 to 14 days.	Use preventively. Begin applications when conditions favor fungal infection and before disease symptom development.

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CROP Disease	Material	Rate	Method	Schedule	Remarks
<b>Dogwood (continued)</b>					
Powdery mildew	azoxystrobin (Heritage) 50 WG	1 to 4 oz/100 gal	foliar spray	Spray every 7 to 28 days as needed.	Do not make more than three sequential applications of Heritage before rotating with nonstrobilurin products to avoid fungicide resistance. See label.
	chlorothalonil + propiconazole (Concert II)	22 – 35 fl oz/100 gal	foliar spray	Every 14 to 21 days	See label for additional details
	metconazole (Tourney)	1 to 4 oz/100 gal	foliar spray	Repeat in 14 to 28 days when conditions favor disease.	
	myclobutanil (Eagle) 40 WSP (Systhane)	3.0 oz/50 to 100 gal 4 oz/100 gal	foliar spray	Spray every 21 days. Spray every 10 to 14 days.	
	petroleum distillate: horticultural oil (Sunspray) 11 E	1 gal/100 gal	foliar spray	Spray at 14-day intervals.	
	propiconazole (Banner MAXX)	5 to 8 fl oz/100 gal	foliar spray	Spray every 21 days in spring.	
	pyraclostrobin + boscalid (Pageant Intrinsic)	6 to 12 oz./100 gal	foliar spray	Repeat applications 7 to 14 days as needed	
	tebuconazole (Torque)	4 to 8 fl oz/100 gal	foliar spray	Begin applications 14 to 21 days prior to when disease is expected, or at very first sign of disease.	
	trifloxystrobin (Compass O)	2 to 4 oz/100 gal	foliar spray	Repeat at 7- to 14-day intervals.	Follow resistance management information on label. A nonionic surfactant will improve efficacy.
	thiophanate-methyl + chlorothalonil (Spectro) 90 WDG	2 lb/100 gal	foliar spray	Minimum repeat interval is 7 days.	Protective and curative activity.
	triflumizol (Terraguard)	2 oz/100 gal	foliar spray	Make initial application prior to or at first sign of disease. Repeat at 7- to 14-day intervals.	
	triticonazole (Trinity) 19SC	6 to 12 fl oz/100 gal	foliar spray	Spray every 7 to 14 days.	Use preventively. Begin applications when conditions favor fungal infection and before disease symptom development. Use of an adjuvant/spreader sticker can aid in control.
Root rot ( <i>Phytophthora</i> spp.)	cyazofamid (Segway)	3 to 6 fl oz/100 gal	soil drench	14 to 21 day intervals using another registered fungicide with a different mode of action.	
	fosetyl-AL (Aliette) WDG	2.5 lb/100 gal 2.5 to 5 lb/100 gal	dip foliar (spray to wet)	Before transplanting 30-day minimum interval	
	mefenoxam (Fenox ME, Mefenoxam 2, Subdue MAXX)	See label.	Can be applied as a drench or soil surface spray. Consult label for specific crops and applications.	Every 2 to 3 months.	FUNGICIDE RESISTANCE IS POSSIBLE. Do not apply rates of 2 fl oz more often than every 10 weeks.
	phosphorous acid (Alude, Fosphite, Reliant)	See label for rates	Apply as a soil drench or foliar spray as a preventive.		
	pyraclostrobin + boscalid (Pageant Intrinsic)	12 to 18 oz./100 gal	soil drench	Repeat applications 14 to 28 days as needed	
Spot anthracnose ( <i>Elsinoe</i> ) Septoria leaf spot	azoxystrobin (Heritage) 50 WG	1 to 4 oz/100 gal	foliar spray	Spray every 7 to 28 days as needed.	Do not make more than three sequential applications of Heritage before rotating with nonstrobilurin products to avoid fungicide resistance. See label.
	mancozeb (Dithane, Fore, Mancozeb DG) (Protect DF)	1.5 lb/100 gal OR 2.5 tsp/gal OR 1 to 2 lb	foliar spray	First spray as buds break in spring. Second as petals fall. Third in midsummer. Fourth when predormant (after flower buds are well formed).	See label as rate varies by product.
	myclobutanil (Systhane) (Immunox)	4 oz/100 gal 1 fl oz/gal	foliar spray	Spray every 10 to 14 days. Spray every 14 days.	
	pyraclostrobin + boscalid (Pageant Intrinsic)	8 to 12 oz./100 gal	foliar spray	Repeat applications 7 to 14 days as needed	
	tebuconazole (Torque)	4 to 8 fl oz/100 gal	foliar spray	Begin applications 14 to 21 days prior to when disease is expected, or at very first sign of disease.	

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CROP Disease	Material	Rate	Method	Schedule	Remarks
<b>Eastern Cedar</b>					
Annosus root rot ( <i>Fomes annosus</i> )	See PINE				
Phomopsis needle blight	azoxystrobin (Heritage) 50 WG	1 to 4 oz/100 gal	foliar spray	Spray every 7 to 28 days as needed.	Do not make more than three sequential applications of Heritage before rotating with nonstrobilurin products to avoid fungicide resistance. See label.
	thiophanate methyl (AllBan Flo) (Cleary 3336) F	14.5 to 20 fl oz/100 gal 12 to 24 fl oz/100 gal	foliar spray	Beginning when disease appears or during suspected periods of disease incidence, apply every 7 to 14 days.	
<b>Elm</b>					
Dutch elm disease ( <i>Ophiostoma ulmi</i> )	All treatments listed must be followed for effective <b>prevention</b> of disease on highly valued trees.				
	1. Sanitation—cut down and destroy diseased trees and dead limbs.				
	2. Elm bark beetle control.				
	3. SMDC (Vapam)—kills root grafts	1 gal SMDC/ 3 gal water 6 oz/hole	Pour in 1-in. diameter holes 15 in. deep, spaced 6 to 9 in. apart in a line between healthy and diseased trees	Apply with first appearance of disease.	Not closer than 20 ft from healthy tree. Soil temperature above 50° F. Professional applicators only.
	4. Systemic chemical prevention: propiconazole (Alamo) thiabendazole (Arbortect 20S)	See label	root flare injection	See label.	
5. Therapeutic treatment: propiconazole (Alamo) thiabendazole (Arbortect)	See label		See label		
<b>Fraser Fir</b>					
Botrytis seedling blight	chlorothalonil (Bravo)	1.5 to 2.75 pt/100 gal/acre	foliar	Apply at first sign of disease.	Make additional applications to nursery beds at 7- to 14-day intervals as long as favorable conditions persist.
	metconazole (Tourney)	1 to 4 oz/100 gal	foliar spray	Repeat in 14 to 28 days when conditions favor disease.	
	thiophanate methyl (Cleary 3336) F	12 to 16 fl oz/100 gal	foliar	Apply at first sign of disease.	Tank mix combination with chlorothalonil is recommended.
Damping-off, postplant	mefenoxam (Subdue MAXX) + thiophanate methyl (Cleary 3336) F	0.25 fl oz + 12 fl oz/100 gal apply 2 pt/sq ft	drench	Apply at first sign of disease.	
	metconazole (Tourney)	1 to 4 oz/100 gal	foliar spray	Repeat in 14 to 28 days when conditions favor disease.	
Diplodia tip blight, Lophodermium needlecast, Swiss needlecast	azoxystrobin (Heritage) 50 WG IF GROWN AS ORNAMENTAL	3.2 to 8 fl oz/acre	foliar spray	Spray every 7 to 28 days.	To avoid fungicide resistance, do not make more than two sequential applications before rotating with nonstrobilurin products.
	azoxystrobin (Quadris) IF GROWN AS CHRISTMAS TREE	6 to 15.5 fl oz/acre	foliar spray	Spray every 7 to 21 days	To avoid fungicide resistance, do not make more than two sequential applications before rotating with nonstrobilurin products.
Phytophthora root rot	cyazofamid (Segway)	3 to 6 fl oz/100 gal	soil drench	14 to 21 day intervals using another registered fungicide with a different mode of action.	Irrigate with at least ½ inch of water if rainfall does not occur within 24 hrs. For container plants, check label for recommended maximum drench volume based on pot diameter.
	fosetyl-AL (Aliette WDG)	2.5 lb/100 gal	dip	Before transplanting	Thoroughly wet plant and root mass immediately before transplanting.
		2.5 to 5 lb/100 gal/acre	foliar (spray to wet)	30-day minimum interval	Field-grown trees in plantations.
	mefenoxam (Subdue MAXX)	1.5 pt/acre/50 gal/ acre 2.5 pt/acre/50 gal/acre 0.63 to 1.25 gal/50 gal/acre	drench drench directed soil spray	MAXX: May and September	Do not apply to fir growing on bottomlands or poorly drained soils, or near surface water. Seed beds or plug plantings. 2-0 transplants. Field-grown trees in plantations.
		(Subdue GR)	6 to 30 lb/acre 16 to 20 lb/acre 50 to 250 lb/acre	broadcast broadcast broadcast	GR: once in spring and again in fall
phosphorous acid (Alude, Fosphite, Reliant)	See label for rates	Soil drench or foliar spray.		Apply as a soil drench or foliar spray as a preventive	

Chapter X — Disease Control

<b>Table 10-12. Disease Control for Forest, Christmas, and Ornamental Trees</b>					
<b>CROP Disease</b>	<b>Material</b>	<b>Rate</b>	<b>Method</b>	<b>Schedule</b>	<b>Remarks</b>
<b>Hemlock</b>					
Twig rust ( <i>Melampsora farlowii</i> )	triadimefon (Bayleton) 50 WSP	5.5 oz/68.75 to 137.5 gal	foliar spray	Begin at bud break and continue every 14 days until growth stops.	
<b>Leyland Cypress</b>					
Needle blight ( <i>Passalora, Cercosporidium</i> )	chlorothalonil (Daconil Ultrex)	1.4 lb/100 gal	foliar spray	7 to 10 days intervals	Begin scouting last year's infection sites for sporulation (tufts of olive green spores) in mid-May to mid-June. At the first sign of sporulation, make 2 applications of a systemic fungicide at 14-day intervals. Follow with 1 or 2 applications of a protectant fungicide (Daconil, Fore, Kocide, Rainshield) applied at 7-day intervals. In early August, scout trees for new infections. If sporulation is observed, re-treat with 1 application of a systemic fungicide 14 days later with 2 applications of a protectant applied at 7-day intervals.
	copper hydroxide (Kocide 2000)	0.75 lb/100 gal	foliar spray	7 to 14 day intervals	
	mancozeb (Fore) WSP (Rainshield)	1.5 lb/100 gal	foliar spray	7 to 10 day intervals	
	myclobutanil (Systhane) 40 WSP	4 oz/100 gal	foliar spray	10 to 14 day intervals	
Diplodia tip blight, Lophodermium needlecast, Swiss needlecast	azoxystrobin (Heritage) 50 WG IF GROWN AS ORNAMENTAL	3.2 to 8 oz/acre	foliar spray	Spray every 7 to 28 days.	To avoid fungicide resistance, do not make more than two sequential applications before rotating with nonstrobilurin products.
	azoxystrobin (Quadris) IF GROWN AS CHRISTMAS TREE	6 to 15.5 fl oz/acre	foliar spray	Spray every 7 to 21 days	To avoid fungicide resistance, do not make more than two sequential applications before rotating with nonstrobilurin products. Quadris is only for Christmas tree applications.
<b>Longleaf Pine</b>					
Brown spot ( <i>Scirrhia acicola</i> )	Bordeaux mixture (copper sulfate, lime, and water 8-8-100)	60 gal/acre	foliar spray	Spray at 10- to 14-day interval after emergence of seedlings until July 1.	
<b>Maple</b>					
Anthracnose	azoxystrobin (Heritage) 50 WG	1 to 4 oz/100 gal	foliar spray	Two to three applications at 14 to 28 days.	First application at bud break. Do not make more than three sequential applications of Heritage before rotating with nonstrobilurin products to avoid fungicide resistance. See label.
	metconazole (Tourney)	1 to 4 oz/100 gal	foliar spray	Repeat in 14 to 28 days when conditions favor disease.	
	pyraclostrobin + boscalid (Pageant Intrinsic)	8 to 12 oz./100 gal	foliar spray	Repeat applications 7 to 14 days as needed	
	thiophanate methyl (AlIBan Flo) (Cleary 3336) F	10.75 to 20 fl oz/100 gal 12 to 16 fl oz/100 gal	foliar spray	Three to four applications at 10- to 14-day intervals.	
	triticonazole (Trinity) 19SC	8 to 12 fl oz/100 gal	foliar spray	Spray every 7 to 14 days.	
<b>Oak</b>					
Anthracnose	See MAPLE				
Leaf spot	propiconazole (Banner MAXX)	16 fl oz/100 gal	foliar spray	Apply every 14 to 28 days.	Apply as needed.
	metconazole (Tourney)	1 to 4 oz/100 gal	foliar spray	Repeat in 14 to 28 days when conditions favor disease.	
	pyraclostrobin + boscalid (Pageant Intrinsic)	8 to 12 oz./100 gal	foliar spray	Repeat applications 7 to 14 days as needed	
	triticonazole (Trinity) 19SC	4 to 8 fl oz/100 gal	foliar spray	Spray every 7 to 14 days.	
Wilt ( <i>Ceratocystis</i> )	propiconazole (Alamo)	See label	Root flare injection	See label.	
<b>Pine</b>					
Annosus root rot ( <i>Fomes annosus</i> )	Borax, dry granular (sodium tetraborate decahydrate)	1 lb/50 sq ft of stump surface OR liberally cover stump surface	Sprinkle liberally on fresh-cut stump	Immediately after felling tree.	To prevent infection from freshly cut stumps.
Fusiform rust ( <i>Cronartium fusiforme</i> )	triadimefon (Bayleton 50 DF)	4 to 16 oz/acre	foliar spray	Begin application before infection. Repeat at 2- to 3-week intervals as needed. Use higher rate in high hazard areas.	
Phytophthora root rot	cyazofamid (Segway)	3 to 6 fl oz/100 gal	soil drench	14 to 21 day intervals using another registered fungicide with a different mode of action.	Irrigate with at least ½ inch of water if rainfall does not occur within 24 hrs. For container plants, check label for recommended maximum drench volume based on pot diameter.

**Table 10-12. Disease Control for Forest, Christmas, and Ornamental Trees**

CROP Disease	Material	Rate	Method	Schedule	Remarks
<b>Pine (continued)</b>					
Phytophthora root rot (continued)	fosetyl-AL (Aliette WDG)	2.5 lb/100 gal 2.5 to 5 lb/acre	dip foliar (spray to wet)	Before transplanting 30-day minimum interval	Thoroughly wet plant and root mass immediately before transplanting. Field-grown trees in plantations.
	mefenoxam (Fenox ME, Mefenoxam 2, Subdue MAXX)	See label.	Can be applied as a drench or soil surface spray. Consult label for specific crops and applications.	Every 2 to 3 months.	FUNGICIDE RESISTANCE IS POSSIBLE. Do not apply rates of 2 fl oz more often than every 10 weeks.
	phosphorous acid (Alude, Fosphite, Reliant)	See label for rates	Apply as a soil drench or foliar spray as a preventive.		
<b>Scotch and White Pine</b>					
Needle blight ( <i>Lophoderimum pinastri</i> )	maneb (Pentathlon DF)	1 to 2 lb/100 gal	foliar spray	Spray every 7 to 10 days August 15 to October 1.	
<b>Sycamore</b>					
Anthracnose	chlorothalonil (Daconil Ultrex) 82.5 WDG	1.4 lb/100 gal	foliar spray		Spray at budswell and repeat at 7- to 14-day intervals during cool, moist weather.
	metconazole (Tourney)	1 to 4 oz/100 gal	foliar spray	Repeat in 14 to 28 days when conditions favor disease.	
	pyraclostrobin + boscalid (Pageant Intrinsic)	8 to 12 oz./100 gal	foliar spray	Repeat applications 7 to 14 days as needed	
	thiophanate methyl + mancozeb (Zyban) 70 WSB	4 bags/100 gal	foliar spray		Spray at budswell and repeat at 7- to 14-day intervals during cool, moist weather.
	thiophanate methyl (Cleary 3336) F	12 to 16 fl oz/100 gal	foliar spray		Spray at budswell and repeat at 7- to 14-day intervals during cool, moist weather.
	triticonazole (Trinity) 19SC	8 to 12 fl oz/100 gal	foliar spray	Spray every 7 to 14 days.	Use preventively. Begin applications when conditions favor fungal infection and before disease symptom development.
Powdery mildew	See Crabapple				

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#### Further Information

All the following Plant Pathology *Information Notes* can be accessed from [http://www.ces.ncsu.edu/depts/pp/notes/Ornamental/ornamental\\_contents.html](http://www.ces.ncsu.edu/depts/pp/notes/Ornamental/ornamental_contents.html).  
*Diseases of Leyland Cypress*, Plant Pathology Ornamental Disease Information Note No. 17.  
*Dutch Elm Disease*, Plant Pathology Ornamental Disease Information Note No. 18.  
*Holly Diseases and Their Control in the Landscape*, Plant Pathology Ornamental Disease Information Note No. 7.  
*Phytophthora Root Rot and Its Control on Established Woody Ornamentals*, Plant Pathology Ornamental Disease Information Note No. 13.  
*Powdery Mildew of Ornamentals and Shade Trees*, Plant Pathology Ornamental Disease Information Note No. 4.  
*Scorch Disease on Shade Trees*, Plant Pathology Ornamental Disease Information Note No. 10.  
*Some Common Pecan Diseases and Their Control in North Carolina*, Plant Pathology Ornamental Disease Information Note No. 3.  
*Some Common Pine Diseases in North Carolina Landscapes and Their Control*, Plant Pathology Information Note No. 192.  
*Dogwood Diseases*, Plant Pathology Information Note No. 23.