FRUIT TREE DISEASES (Commercial)

Aaron Cato

Growth Stage	Disease	Product	Active Ingredient	FRAC Code	Rate/Acre	Re-entry Interval	Days to Harvest	Comments
APPLE								
Dormant to Silver Tip	Fire blight	Bordeaux mixture	basic copper sulfate lime sulfur (hard to find)	M1		12 hours	Dormant only	Dissolve 8 lbs copper sulfate in 50 gals water; add 8 lbs spray lime with agitation and more water; add 1 gal miscible superior oil last but prior to complete fill; add water with agitation to 100 gals; spray with constant agitation. Do not mix with other pesticides or spray when drying conditions are slow or after 1/4 inch green as severe injury may result.
		Kocide 2000	copper hydroxide	M1	6 - 12 lb	48 hours	Not after green tip	Make Kocide application between silver tip and green tip. Apply as a full cover spray for early season disease suppression. NOTE: Moderate to severe crop injury may occur from late application; discontinue use when green tip reaches 1/2 inch. Applications should be made in early spring before growth starts and in the fall after harvest, but before the ground freezes.
		Kocide 3000	copper hydroxide	M1	3.5 - 7 lb	48 hours	Not after green tip	
	Phytophthora crown, root and collar rots	Aliette WDG	aluminum tris	P07	2.5 - 5 lb	12 hours	14	Apply Aliette at a 30 - 60 day interval when conditions favor disease development. See label.
		Ridomil Gold SL	mefenoxam	4	2 qt/A or 1.5 fl oz/ 1,000 sq ft	48 hours	1	New plants: Dip the entire root system in Ridomil Gold solution for 30 - 60 minutes prior to planting in the field. Established plantings: see label.
Green Tip *(continued)*	Alternaria Blotch and Spot Bitter rot Black rot Brooks Fruit spot Cedar Apple rust Flyspeck Sooty blotch Powdery mildew Quince rust Scab White rot	Aprovia	benzovindiflupyr	7	5.5 - 7 fl oz	12 hours	30	Scab – Protective Spray Schedule: Apply every 7 - 10 days starting at 1/4 to 1/2 inch green tip or when environmental conditions become conducive for scab. Continue through petal fall until the threat of primary scab is complete.

FRUIT TREE DISEASES (Commercial) – continued

Growth Stage	Disease	Product	Active Ingredient	FRAC Code	Rate/Acre	Re-entry Interval	Days to Harvest	Comments
APPLE (cont.)								
Green Tip *(cont.)*	Alternaria blotch Brooks fruit spot Cedar apple rust (suppression) Flyspeck Frogeye leaf spot Powdery mildew Scab Sooty blotch White rot	Pristine	boscalid + pyraclostrobin	7 + 11	14.5 - 18.5 oz	12 hours	0	Begin applications of Pristine prior to disease development and continue on a 7 - 14 day interval. See label.
	Botrytis Blossom end rot Flyspeck Fruit rots Scab Sooty blotch	Captan 50 WP	captan	M4	4 - 8 lb	24 hours	1	Apply at 7 - 10 day intervals as needed to maintain control in pre-bloom, bloom, petal fall and first cover. Apply at 10 - 14 day intervals for second and later covers.
	Powdery Mildew Quince Rust Cedar apple rust Brooks fruit spot Flyspeck Scab Sooty blotch White rot Bitter rot Black rot	Vangard WG	cyprodinil	9	4 - 6 oz	12 hours	0	For pome fruits EXCEPT PEAR, begin applications of Vangard at green tip and continue on a 7 - 10 day schedule.
		Rhyme	flutriafol	3	4-6.5 fl oz. see label			Make applications at green tip and continue through other sprays
(continued)	Powdery mildew Scab	Luna Tranquility	fluopyram + pyrimethanil	7 9	11.2 - 16 fl oz	12 hours	72 days	When disease pressure is severe, use the higher rates and/or shorter intervals.

FRUIT TREE DISEASES (Commercial) – continued

Growth Stage	Disease	Product	Active Ingredient	FRAC Code	Rate/Acre	Re-entry Interval	Days to Harvest	Comments
APPLE (cont.)								
Green Tip *(cont.)*	Alternaria rot Bitter rot Black rot Botrytis gray mold Brooks fruit spot Cedar apple rust Flyspeck Powdery mildew Scab Sooty blotch Quince rust White rot	Luna Sensation	fluopyram + trifloxystrobin	7 + 11	4 - 5.8 fl oz	12 hours	14	Do not make more than 4 applications per year.
	Alternaria blotch Brooks fruit spot Cedar apple rust (suppression) Flyspeck Frogeye leaf spot Powdery mildew Scab Sooty mold White rot	Sovran 50 WG	kresoxim-methyl	11	3.2 - 6.4 oz	12 hours	30	Begin Sovran at 1/2 inch green and repeat at 7 - 10 day intervals depending on the rate of shoot growth and level of disease pressure.
	Fabraea leaf spot Rusts Scab	Dithane F-45 Rainshield	mancozeb	M3	4.8 qt	24 hours	77	Begin applications of Dithane at 1/2 inch green tip and continue on a 7 - 10 day schedule through bloom.
	Phytophthora Pythium Fusarium Rhizoctonia Powdery mildew	Fosphite	mono- and di-potassium salts of phosphorous acid	P07	1 - 4 qt/ 100 gal See label for trunk injections.	4 hours	0	Foliar, or aerial, or root dip, or irrigation or trunk injection. See label for rates and complete instructions.
	Cedar apple rust Quince rust Powdery mildew Scab	Eagle 20 EW	myclobutanil	3	4 - 6 oz/ 100 gallons	24 hours	14	Begin applications of Eagle at green tip. For rust, begin applications at pink stage and continue through second cover. For powdery mildew, begin applications at tight cluster and continue through second cover spray.
	Alternaria blotch Cedar apple rust Quince rust Powdery mildew Scab	Fontelis	penthiopyrad	7	14 - 20 fl oz	12 hours	28	Begin applications of Fontelis prior to disease and continue on a 7 - 21 day interval depending on targeted disease. See label.
	Scab	Scala SC	pyrimethanil	9	7 - 10 oz	12 hours	72	Begin applications of Scala at green tip and continue on a 7 day or longer interval. See label.

(continued)

FRUIT TREE DISEASES (Commercial) – continued

Growth Stage	Disease	Product	Active Ingredient	FRAC Code	Rate/Acre	Re-entry Interval	Days to Harvest	Comments
APPLE (cont.)								
Green Tip *(cont.)*	Flyspeck Fruit rots Scab Sooty blotch	Topsin M 70 WDG	thiophanate-methyl	1	1 - 1.5 lb	24 hours	1	Apply Topsin M at 5 - 10 day intervals from green tip through petal fall; continue at 7 - 14 day intervals in cover sprays.
		Topsin M 70 WP	thiophanate-methyl	1	1 - 1.5 lb	24 hours	1	
	Cedar apple rust Bitter rot Flyspeck Powdery mildew Quince rust Scab Sooty blotch White rot	Flint 50 WG	trifloxystrobin	11	2 - 2.5 oz	12 hours	14	Begin applications of Flint at green tip and continue as needed on a 7 - 10 day schedule.
1/2" Green Tip	Alternaria blotch Brooks fruit spot Cedar apple rust Flyspeck Powdery mildew Quince rust Scab Sooty blotch	Inspire Super	difenoconazole + cyprodinil	3 + 9	12 fl oz	12 hours	14	Apply every 7 - 10 days starting at 1/4 - 1/2 inch green tip or when environmental conditions become conducive for scab. Continue through petal fall until the threat of primary scab is complete.
	Cedar apple rust Powdery mildew Scab	Procure 480 SC	triflumizole	3	8 - 16 fl oz	12 hours	14	Begin spraying Procure at first sign of mildew. Continue applications at 7 - 14 day intervals as needed through the terminal growth period. For scab, spray at 7 - 10 day intervals from 1/2" green tip stage through second cover or until primary scab sporulation is complete.
	Cedar apple rust Powdery mildew Quince rust	Ziram	ziram	M3	6 - 8 lb	48 hours	14	Apply Ziram from pre-bloom through cover sprays as needed.
	Scab	Same as Green Tip						
Tight Cluster	Powdery mildew Scab	Same as Green Tip						Some materials listed in green tip are not labeled for powdery mildew. See label for most effective material(s).
Pink	Powdery mildew Rusts Scab	Same as Tight Cluster						Critical time for control of these diseases. Some of the materials listed are not labeled for powdery mildew. Follow label information.

FRUIT TREE DISEASES (Commercial) – continued

Growth Stage	Disease	Product	Active Ingredient	FRAC Code	Rate/Acre	Re-entry Interval	Days to Harvest	Comments
APPLE (cont.)								
Bloom	Fire blight	Fosphite	mono- and di-potassium salts of phosphorous acid	P07	1 - 3 qt/ 100 gal	4 hours	0	Foliar. See label for rates and complete instructions.
		Agri-Mycin 17	streptomycin sulfate	25	12 - 48 oz	12 hours	50	Apply at first sign of blossoms and repeat on a 5 day schedule through petal fall on susceptible varieties. Warm, wet weather during bloom favors the disease.
		Firewall	streptomycin sulfate	25	8 - 16 oz	12 hours	50	Spray trees every 3 - 4 days during blossom time. Apply sprays after petal fall every 10 - 14 days to control twig blight. (This could mean an additional 6 - 8 sprays after petal fall.)
	Powdery mildew Rusts Scab	Same as Pink						
Petal Fall	Fire blight Powdery mildew Rusts Scab	Same as Bloom	See label.					
First and Second Cover Sprays	Fruit rots Powdery mildew Rusts Scab	Same as Bloom					See label for PHI.	
Third Cover	Flyspeck Fruit rots Scab Sooty blotch	Same as Second Cover					See label for PHI.	
Summer Cover Sprays (10 - 14 day schedule)	Flyspeck Fruit rots Scab Sooty blotch	Same as Third Cover					See label for PHI.	

FRUIT TREE DISEASES (Commercial) – continued

Growth Stage	Disease	Product	Active Ingredient	FRAC Code	Rate/Acre	Re-entry Interval	Days to Harvest	Comments
PEAR								
Pre-Bloom	Alternaria blotch and spot Rut Powdery mildew Scab White rot	Aprovia	benzovindiflupyr	7	5.5 - 7 fl oz	12 hours	30	For resistance management, do not apply more than 2 consecutive applications before switching to a non-Group 7 fungicide.
	Alternaria Bitter rot Black rot Blue mold Brooks spot Powdery mildew Rust (suppression only) Scab Sooty blotch White rot	Pristine	boscalid + pyraclostrobin	7 + 11	14.5 - 18.5 oz	12 hours	0	Begin applications of Pristine prior to disease development and continue on a 7 - 14 day interval. See label.
	Alternaria blotch Brooks fruit spot Cedar apple rust Flyspeck Powdery mildew Quince rust Scab Sooty blotch	Inspire Super	difenoconazole + cyprodinil	3 + 9	12 fl oz	12 hours	14	Apply every 7 - 10 days starting at 1/4 - 1/2 inch green tip or when environmental conditions become conducive for scab. Continue through petal fall until the threat of primary scab is complete.
	Powdery Mildew Quince Rust Cedar apple rust Brooks fruit spot Flyspeck Scab Sooty blotch White rot Bitter rot Black rot	Rhyme	Flutriafol	3	4-6.5 fl oz. see label			Make applications at green tip and continue through other sprays
(continued)	Powdery mildew Scab	Luna Tranquility	fluopyram + pyrimethanil	7 9	11.2 - 16 fl oz	12 hours	72 days	When disease pressure is severe, use the higher rates and/or shorter intervals.

FRUIT TREE DISEASES (Commercial) – continued

Growth Stage	Disease	Product	Active Ingredient	FRAC Code	Rate/Acre	Re-entry Interval	Days to Harvest	Comments
PEAR (cont.)								
Make applications at green tip and continue through other sprays	Alternaria rot Bitter rot Black rot Botrytis gray mold Brooks fruit spot Cedar apple rust Flyspeck Powdery mildew Scab Sooty blotch Quince rust White rot	Luna Sensation	fluopyram + trifloxystrobin	7 + 11	4 - 5.8 fl oz	12 hours	14	Do not make more than 4 applications of Luna Sensation per year. Do not use tank mixes with horticultural oils in Pear due to potential for crop injury.
	Powdery mildew Rust Scab	Sovran 5 WG	kresoxim-methyl	11	3.2 - 6.4 oz	12 hours	30	Begin Sovran at 1/2 inch green and repeat at 7 - 10 day intervals depending on the rate of shoot growth and level of disease pressure.
	Phytophthora Pythium Fusarium Rhizoctonia Powdery mildew	Fosphite	mono- and di-potassium salts of phosphorous acid	P07	1 - 3 qt/ 100 gal	4 hours	0	Foliar. See label for rates and complete instructions.
	Scab	Scala SC	pyrimethanil	9	7 - 10 fl oz	12 hours	72	Begin applications of Scala at green tip and continue on a 7 day or longer interval. See label.
	Flyspeck Powdery mildew Rust Scab Sooty blotch	Adament 50 WG	tebuconazole + trifloxystrobin	3 + 11	4 - 5 oz	12 hours	14	Begin applications of Adament at green tip and continue as needed on a 7 - 10 day spray schedule.
	Powdery mildew Scab	Flint 50 WG	trifloxystrobin	11	2 - 2.5 oz	12 hours	14	Begin applications of Flint at green tip and continue as needed on a 7 - 10 day schedule.
	Bitter rot Fabraea leaf spot Flyspeck Quince rust Scab Sooty blotch	Ziram	ziram	M3	6 - 8 lb	48 hours	14	Apply Ziram from pre-bloom through cover sprays as needed.
Bloom *(continued)*	Alternaria blotch and spot Rut Powdery mildew Scab White rot	Aprovia	benzovindiflupyr	7	5.5 - 7 fl oz	12 hours	30	For resistance management, do not apply more than two consecutive applications before switching to a non-Group 7 fungicide.

FRUIT TREE DISEASES (Commercial) – continued

Growth Stage	Disease	Product	Active Ingredient	FRAC Code	Rate/Acre	Re-entry Interval	Days to Harvest	Comments
PEAR (cont.)								
Bloom *(cont.)*	Fire blight	Kocide 2000	copper hydroxide	M1	6 - 12 lb	48 hours	21	Apply Kocide every 5 days throughout bloom. **Russeting and fruit damage may occur in copper-sensitive varieties before the ground freezes.**
		Kocide 3000	copper hydroxide	M1	3.5 - 7 lb	48 hours	21	
	Fire blight *(cont.)*	Fosphite	mono- and di-potassium salts of phosphorous acid	P07	1 - 3 qt/ 100 gal	4 hours	0	Foliar. See label for rates and complete instructions.
		Mycoshield	oxytetracycline calcium	41	1 lb/100 gal	12 hours	60	Begin applications of Mycoshield at 10% bloom and continue on at 4 - 6 day intervals. Use of Mycoshield may cause phytotoxicity to fruit and/or foliage of sensitive varieties, especially Asian varieties.
		Firewall	streptomycin sulfate	25	8 - 16 oz	12 hours	50	Spray trees at 20% - 30% bloom with Firewall. Spray trees every 3 - 4 days during blossom time. Apply sprays after petal fall every 10 - 14 days to control twig blight. (This could mean an additional 6 - 8 applications after blossom sprays.)
	Fabraea leaf spot Scab Sooty blotch	Ferbam Granuflo	ferbam	M3	4 - 6 lb	24 hours	7	Make applications of Ferbam at pink, calyx, first and second cover sprays, and 1 pound in summer sprays. Do not apply in late-season cover sprays where unsightly residues may affect the fresh fruit finish of light-skinned pear varieties.
		Dithane F-45 Rainshield	mancozeb	M3	4.8 qt	24 hours	77	Do not apply Dithane after bloom. Do not graze livestock on treated areas.
	Phytophthora Pythium Fusarium Rhizoctonia Powdery mildew	Fosphite	mono- and di-potassium salts of phosphorous acid	P07	1 - 3 qt/ 100 gal	4 hours	0	Foliar. See label for rates and complete instructions.
	Alternaria leaf spot Powdery mildew Quince rust Scab	Fontelis	penthiopyrad	7	14 - 20 fl oz	12 hours	28	Begin applications of Fontelis prior to disease and continue on a 7 - 21 day interval depending on targeted disease. See label.
	Powdery mildew Scab	Procure 480 SC	triflumizole	3	8 - 16 fl oz	12 hours	14	Begin spraying Procure at the pink or white stage. Continue applications at 7 - 14 day intervals.

FRUIT TREE DISEASES (Commercial) – continued

Growth Stage	Disease	Product	Active Ingredient	FRAC Code	Rate/Acre	Re-entry Interval	Days to Harvest	Comments
PEAR (cont.)								
Petal fall	Alternaria leaf spot Fire blight Flyspeck Powdery mildew Quince rust Scab	Same as Bloom						
First and Second Cover	Powdery mildew Quince rust Scab	Same as Petal Fall						
Summer Cover		Same as First and Second Cover					See labels for PHI restric-tions.	
PEACH and NECTARINE								
Dormant	Phytophthora collar and root rot	Aliette WDG	aluminum tris	P07	5 lb	24 hours	365	Apply Aliette when conditions favor disease development.
		Ridomil Gold SL	mefenoxam	4	2 qt/A or 1.5 fl oz/ 1,000 sq ft	48 hours	0	Apply Ridomil under the tree canopy to cover the root zone two weeks after planting (new plantings) and in the spring before growth begins (established plantings).
	Peach leaf curl Shot hole	Bravo Ultrex Bravo WeatherStik	chlorothalonil chlorothalonil	M5 M5	2.8 - 3.8 lb 3 1/8 - 4 1/8 pt	12 hours 12 hours	Dormant (Do not apply after shuck split)	Make one application of Bravo in late autumn to early winter before hard freez-ing occurs. Make one or two additional applications in mid-late winter before bud swell in the spring.

(continued)

FRUIT TREE DISEASES (Commercial) – continued

Growth Stage	Disease	Product	Active Ingredient	FRAC Code	Rate/Acre	Re-entry Interval	Days to Harvest	Comments
PEACH and NECTARINE (cont.)								
Dormant *(cont.)*	Bacterial blast Bacterial canker Bacterial spot	Kocide 2000 Kocide 3000	copper hydroxide copper hydroxide	M1 M1	6 - 12 lb 3.5 - 7 lb	48 hours 48 hours	21 21	Make first application of Kocide before fall rains and a second at late dormant.
	Coryneum blight Leaf curl	Bordeaux Mixture	copper sulfate lime sulfur (lime sulfur hard to find)	M2	See label	12 hours	Dormant only	Dissolve 8 lbs copper sulfate in 50 gals water; add 8 lbs spray lime with agitation and more water; add 1 gal miscible superior oil last but prior to complete fill; add water with agitation to 100 gals; spray with constant agitation. Do not mix with other pesticides or spray when drying conditions are slow or after 1/4 inch green as severe injury may result.
	Peach leaf curl	Ziram	ziram	M3	8 - 10 lb	48 hours	30	Make dormant applications of Ziram after leaf drop and/or prior to bud swell.
Pink	Alternaria spot Anthracnose Brown rot Powdery mildew Rust Scab Shot hole	Abound FL	azoxystrobin	11	11 - 15.5 fl oz	4 hours	0	Begin applications of Abound at early bloom. See label.
	Alternaria spot Anthracnose Brown rot Powdery mildew Rust Scab Shot hole	Quadris Top	azoxystrobin + difenoconazole	11 + 3	12 - 14 fl oz	12 hours	0	Begin applications of Quadris Top at early bloom. See label.
(continued)	Alternaria spot Anthracnose Brown rot Powdery mildew Rust Scab Shot hole	Topguard EQ	azoxystrobin + flutriafol	11 + 3	6 - 7 fl oz	12 hours	7	For brown rot, begin applications at 1% - 5% bloom, followed by an application at 50% - 100% bloom.

FRUIT TREE DISEASES (Commercial) – continued

Growth Stage	Disease	Product	Active Ingredient	FRAC Code	Rate/Acre	Re-entry Interval	Days to Harvest	Comments
PEACH and NECTARINE (cont.)								
Pink *(cont.)*	Alternaria spot Anthracnose Brown rot Powdery mildew Rust Scab Shot hole (cont.)	Pristine	boscalid + pyraclostrobin	7 + 11	10.5 - 14.5 oz	12 hours	0	Begin applications of Pristine prior to disease development and continue on a 7 - 14 day interval. See label.
	Brown rot Scab	Captan 50 WP	captan	M4	4 - 8 lb	24 hours	1	Apply Captan at full pink, bloom, petal fall, shuck stages, and in cover and pre-harvest sprays.
	Alternaria spot and fruit rot Anthracnose Brown rot Blossom blight and fruit rot Leaf rust Powdery mildew Scab Shot hole	Inspire Super	difenoconazole + cyprodinil	3 + 9	16 - 20 fl oz	12 hours	2	For brown rot, blossom blight, begin applications at early bloom and make a second application at full bloom. For brown rot on fruit, apply as needed a maximum of two sprays during the pre-harvest period up to the day of harvest (minimum of a 7 day retreatment interval).
	Blossom blight Brown rot Scab	Indar 2 F	fenbuconazole	3	6 fl oz	12 hours	1	Begin applications of Indar at early red bud stage before infection occurs. See label.
	Anthracnose Brown rot Blossom blight Cherry leaf spot Fruit rot Gray mold Green fruit rot Jacket rot Peach leaf curl Powdery mildew Ripe fruit rot Rusty spot Scab Rust	Luna Sensation	fluopyram + trifloxystrobin	7 + 11	5 - 7.6 fl oz	12 hours	14	Do not make more than 4 applications of Luna Sensation per year.
	Blossom blight Brown rot Scab	Rovral 4 FL	iprodione	2	1 - 2 pt	24 hours	Do not apply after petal fall.	Do not make more than 2 applications of Rovral per season.

(continued)

Growth Stage	Disease	Product	Active Ingredient	FRAC Code	Rate/Acre	Re-entry Interval	Days to Harvest	Comments
PEACH and NECTARINE (cont.)								
Pink *(cont.)*	Phytophthora Pythium Fusarium Rhizoctonia Powdery mildew	Fosphite	mono- and di-potassium salts of phosphorous acid	P07	1 - 3 qt/ 100 gal	4 hours	0	Foliar. See label for rates and complete instructions.
	Blossom blight Brown rot Powdery mildew Rust Shot hole	Eagle 20 EW	myclobutanil	3	2 - 3 fl oz/ 100 gal	24 hours	0	Do not apply more than 100 fl oz per acre per season.
	Alternaria spot Blossom blight Brown rot Powdery mildew Rust Scab Shot hole	Fontelis	penthiopyrad	7	14 - 20 fl oz	24 hours	0	Begin applications of Fontelis prior to disease and continue on a 7 - 14 day interval. See label.
	Brown rot	PropiMax EC	propiconazole	3	4 fl oz	12 hours	10	Apply PropiMax at early bloom, at 75% - 100% bloom, and at petal fall. See label.
	Brown rot Powdery mildew Rust	Tilt	propiconazole	3	4 fl oz	24 hours	0	Begin applications of Tilt at early bloom.
	Blossom blight Brown rot Jacket rot Shot hole	Scala SC	pyrimethanil	9	9 - 18 fl oz	12 hours	2	Begin applications of Scala at pink, red or white bud. See label.
	Blossom blight Brown rot Powdery mildew Rust Scab Shot hole	Gem 500 SC	trifloxystrobin	11	1.9 - 3.8 fl oz	12 hours	1	Begin applications of Gem at bud stage. If conditions are favorable for disease, apply again at full bloom and at petal fall or on a 14 - 21 day spray schedule.
	Alternaria spot Anthracnose Brown rot Jacket rot Powdery mildew Rust Scab Shot hole	Adament 50 WG	trifloxystrobin + tebuconazole	11 + 3	4 - 8 fl oz	12 hours	1	Begin applications of Adament when conditions are favorable for disease but before infection. Apply on a 7 - 14 day spray schedule.

(continued)

FRUIT TREE DISEASES (Commercial) – continued

Growth Stage	Disease	Product	Active Ingredient	FRAC Code	Rate/Acre	Re-entry Interval	Days to Harvest	Comments
PEACH and NECTARINE (cont.)								
Pink *(cont.)*	Blossom blight Brown rot Shot hole	Ziram Granuflo	ziram	M3	4.5 - 8 lb	48 hours	14	Apply at pre-bloom through cover sprays as needed.
Full Bloom	Alternaria spot Anthracnose Brown rot Powdery mildew Rust Scab Shot hole	Same as Pink						
	Bacterial spot	Mycoshield	oxytetracycline sulfate	41	0.75 - 1.5 lb	12 hours	21	Apply on a weekly schedule beginning at petal fall (< 5% shuck split) through first cover. See label for subsequent cover sprays.
Shuck Split	Alternaria spot Anthracnose Brown rot Powdery mildew Rust Scab Shot hole	Same as Full Bloom						
	Powdery mildew Rusty Spot Brown Rot Coryneum shothole	Rhyme	flutriafol	3	7 fl oz	12 hours	7	Start applications at petal fall. See label for compete directions.
Bacterial spot								
Additional Covers and Pre-Harvest	Same as Shuck split							
PLUM								
Dormant	Phytophthora collar and root rot	Aliette	aluminum tris	P07	5 lb	12 hours	365	Apply Aliette when conditions favor disease development.
		Ridomil Gold SL	mefenoxam	4	2 qt or 1.5 fl oz/ 1,000 sq ft	48 hours	0	Apply Ridomil under the tree canopy to cover the root zone two weeks after planting (new plantings) and in the spring before growth begins (established plantings).

(continued)

FRUIT TREE DISEASES (Commercial) – continued

Growth Stage	Disease	Product	Active Ingredient	FRAC Code	Rate/Acre	Re-entry Interval	Days to Harvest	Comments
PLUM (cont.)								
Dormant *(cont.)*	Bacterial canker Bacterial spot Black knot Shot hole	Kocide 2000 Kocide 3000	copper hydroxide copper hydroxide	M1 M1	6 - 12 lb 3.5 - 7 lb	48 hours 48 hours	21 21	Make first application of Kocide before fall rains and a second at late dormant.
Pre-Bloom	Alternaria spot Anthracnose Brown rot Powdery mildew Rust Scab Shot hole	Topguard EQ	azoxystrobin + flutriafol	11 + 3	6 - 8 fl oz	12 hours	7	For scab, start applications at petal fall.
		Pristine	boscalid + pyraclostrobin	7 + 11	14.5 - 18.5 oz	12 hours	0	Begin applications of Pristine prior to disease development and continue on a 7 - 14 day interval. See label.
	Brown rot Scab	Captan 50 WP	captan	M4	4 - 8 lb	24 hours	1	Apply Captan at full pink, bloom, petal fall, shuck stages, and in cover and pre-harvest sprays.
	Alternaria spot and fruit rot Anthracnose Brown rot Blossom blight and fruit rot Leaf rust Powdery mildew Scab Shot hole	Inspire Super	difenoconazole + cyprodinil	3 + 9	16 - 20 fl oz	12 hours	2	For brown rot, blossom blight, begin applications at early bloom and make a second application at full bloom. For brown rot on fruit, apply as needed a maximum of two sprays during the pre-harvest period up to the day of harvest (minimum of a 7 day retreatment interval).
	Blossom blight Brown rot Scab	Indar 2 F	fenbuconazole	3	6 fl oz	12 hours	1	Begin applications of Indar at early red bud stage before infection occurs. See label.
	Anthracnose Brown rot Blossom blight Cherry leaf spot Fruit rot Gray mold Green fruit rot Jacket rot Peach leaf curl Powdery mildew Ripe fruit rot Rusty spot Scab Rust	Luna Sensation	fluopyram + trifloxystrobin	7 + 11	5 - 7.6 fl oz	12 hours	14	Do not make more than 4 applications of Luna Sensation per year.

(continued)

FRUIT TREE DISEASES (Commercial) – continued

Growth Stage	Disease	Product	Active Ingredient	FRAC Code	Rate/Acre	Re-entry Interval	Days to Harvest	Comments
PLUM (cont.)								
Pre-Bloom *(cont.)*	Blossom blight Jacket rot Scab Shot hole	Rovral 4 FL	iprodione	2	1 - 2 pt	24 hours	Do not apply after petal fall.	Do not make more than 2 applications of Rovral per season.
	Blossom blight Brown rot Powdery mildew Rust Shot hole	Eagle 20 EW	myclobutanil	3	2 - 3 fl oz/ 100 gal	24 hours	0	Begin applications of Eagle at green tip before infection occurs. If conditions are favorable for disease development, reapply at full bloom and petal fall.
	Phytophthora Pythium Fusarium Rhizoctonia Powdery mildew	Fosphite	mono- and di-potassium salts of phosphorous acid	P07	1 - 3 qt/ 100 gal	4 hours	0	Foliar, aerial, root dip, or irrigation or trunk injection. See label for rates and complete instructions. Do not apply during dormancy.
	Alternaria spot Blossom blight Brown rot Powdery mildew Rust Scab Shot hole	Fontelis	penthiopyrad	7	14 - 20 fl oz	24 hours	0	Begin applications of Fontelis prior to disease and continue on a 7 - 14 day interval. See label.
	Blossom blight Brown rot Jacket rot Shot hole	Scala SC	pyrimethanil	9	9 - 18 fl oz	12 hours	2	Begin applications of Scala at pink, red or white bud. See label.
	Black knot	Topsin M 70 WDG	thiophanate-methyl	1	1 - 1.5 lb	24 hours	1	Apply Topsin M at pre-bloom, petal fall, and at first, second, and third covers. Spray at 10 - 14 day intervals.
		Topsin M 70 WP	thiophanate-methyl	1	1 - 1.5 lb	24 hours	1	
	Blossom blight Brown rot Powdery mildew Rust Scab Shot hole	Gem 500 SC	trifloxystrobin	11	1.9 - 3.8 fl oz	12 hours	1	Begin applications of Gem at bud stage. If conditions are favorable for disease, apply again at full bloom and at petal fall, or on a 14 - 21 day spray schedule.

(continued)

FRUIT TREE DISEASES (Commercial) – continued

Growth Stage	Disease	Product	Active Ingredient	FRAC Code	Rate/Acre	Re-entry Interval	Days to Harvest	Comments
PLUM (cont.)								
Pre-Bloom *(cont.)*	Alternaria spot Anthracnose Brown rot Jacket rot Powdery mildew Rust Scab Shot hole	Adament 50 WG	trifloxystrobin + tebuconazole	11 + 3	4 - 8 fl oz	12 hours	1	Begin applications of Adament when conditions are favorable for disease but before infection. Apply on a 7 - 14 day spray schedule.
Full Bloom	Alternaria spot Anthracnose Brown rot Powdery mildew Rust Scab Shot hole	Abound FL	azoxystrobin	11	11 - 15.5 fl oz	4 hours	0	Begin applications of Abound at early bloom. See label.
		Topguard EQ	azoxystrobin + flutriafol	11 + 3	6 - 8 fl oz	12 hours	7	For powdery mildew, begin applications at petal fall.
	Brown rot	PropiMax EC	propiconazole	3	4 fl oz	12 hours	10	Apply PropiMax at early bloom, at 75% - 100% bloom, and petal fall. See label.
	Brown rot Powdery mildew Rust	Tilt	propiconazole	3	4 fl oz	12 hours	0	Begin applications of Tilt at beginning of bloom.
	Alternaria spot Anthracnose Brown rot Powdery mildew Rust Scab Shot hole	Same as Pre-Bloom						
	Phytophthora Pythium Fusarium Rhizoctonia Powdery mildew	Same as Pre-Bloom						
Petal fall	Powdery mildew Rusty Spot Brown Rot Coryneum shothole	Rhyme	flutriafol	3	7 fl oz	12 hours	7	Start applications at petal fall. See label for compete directions
Petal Fall	Same as Full Bloom							
Additional Covers and Preharvest	Same as petal fall						See label for PHI.	

*FRAC Code – Fungicides with the same FRAC Code have the same mode of action. See http://www.frac.info/ for an explanation of the FRAC Codes. Rotation of fungicides with different FRAC Codes could minimize the development of fungicide-resistant strains.