



Pesticides Registered for Tropical Fruit Crops in Florida¹

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Introduction

Please note, this list may not cite all chemical and common names of pesticides legally registered at the present time. This list does not constitute endorsement of any pesticide chemical named; these pesticides may be available under other names locally. Some pesticides (i.e., Restricted Use Pesticides) require a license in order to buy and/or apply. Always follow the pesticide label instructions.

Please note the superscript adjacent to some brand names. Some pesticides are for 1) non-bearing trees only; 2) non-bearing trees in the nursery only and; 3) for use on dormant trees only. Please contact your local Agriculture or Horticulture Extension Agent if you have any questions.

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Table 1. Pesticides registered for atemoya and sugar apple in Florida.

Class	Chemical name	Brand name(s)	Pest(s) controlled
<i>Insecticides</i>	pyrethrin + rotenone	Pyrellin (atemoya only)	aphids, lepidoptera, thrips
	potassium salts of fatty acids	Safer Soap	aphids, lace bug, plant bugs, mites, thrips, scales
	various refined horticultural oils	Sunspray, citrus spray oil, crop oil, FC 435-66, FC 455-88, others	aphids, mites, scales
	azadirachtin	Align, Azatin	general insecticide
	spinosad	Spintor	lepidoptera
	methidathion	Supracide	scales
	pyrethrins	Pyronyl (atemoya only)	aphids, thrips
	<i>Beauveria bassiana</i>	Mycotrol	leaf hoppers, thrips, others
	<i>Bacillus thuringiensis</i>	Dipel, others	lepidoptera
	fenoxycarb	Precision ¹	ants
	pymetrozine	Endeavor ²	whiteflies, aphids,
	kaolin (clay)	Surround	barrier and irritant to various insects
	pyriproxyfen	Esteem ant bait	ants
	S-methoprene	Extinguish	ants
	hydramethylnon	Amdro ¹	ants
	pyriproxyfen	Knack	scales
	bifenazate	Floramite ¹	mites
	fenpropathrin	Tame ²	various insects, mites
	hexythiazox	Savey ²	various insects, mites
	bifenthrin	Talstar ¹	various insects, mites
<i>Fungicides</i>	azoxystrobin	Abound	anthracnose, rust, <i>Cercospora</i> leaf spot, powdery mildew
	copper	Kocide, others	anthracnose, various other diseases
	mefenoxam	Ridomil Gold EC	Pythium root rot
	<i>Trichoderma harzianum</i>	Rootshield ²	root system disease protectant
<i>Herbicides</i>	glyphosate	Roundup, Glyphosate	numerous weeds
	oxyfluorfen	Goal (sugar apple only)	broadleaf weeds
	carfentrazone	Aim	broadleaf weeds
	pelargonic acid	Scythe	broad leaf and grass weeds
<i>Repellents</i>	capsaicin	Deer Off	Deer, rabbit, mouse repellent

¹ For use with non-bearing trees only.² For nursery/nonbearing trees only.³ For use with dormant trees only.⁴ Not registered for use in Miami-Dade, Palm Beach, Broward Counties (see label for others).

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Table 2. Pesticides registered for avocado in Florida.

Class	Chemical name	Brand name(s)	Pest(s) controlled
<i>Insecticides</i>	azadirachtin	Align, Azatin	general insecticide
	spinosad	SpinTor 2SC	lepidoptera
	abamectin	Agri-Mek	thrips
	pyrethrin + rotenone	Pyrellin	aphids, lepidoptera, thrips
	sulfur	Sulfur 6L, Sulfur Flowable, Thiolux	mites
	fenoxycarb	Logic ² , Precision ²	ants
	malathion	Malathion	thrips, scales, lepidoptera
	permethrin	Pounce, Ambush	thrips, lepidoptera, lace bug, mirids, Brown soft scale, leaf hopper
	various refined horticultural oils	Sunspray, citrus spray oil, crop oil, FC 435-66, FC 455-88, others	various aphids, mites, scales
	potassium salts of fatty acids	Safer Soap	aphids, lace bug, plant bugs, mites, thrips, scales
	methomyl	Lannate	lepidoptera
	<i>Bacillus thuringiensis</i>	Dipel, others	lepidoptera
	<i>Beauveria bassiana</i>	Mycotrol	lace bug
	pymetrozine	Endeavor ²	whiteflies, aphids,
	kaolin (clay)	Surround	barrier and irritant to various insects
	pyriproxyfen	Knack	scales, thrips, ants
	S-methoprene	Extinguish	ants
	hydramethylnon	Amdro ¹	ants
	bifenazate	Floramite ¹	mites
	fenpropathrin	Tame ²	various insects, mites
hexythiazox	Savey ²	various insects, mites	
bifenthrin	Talstar ¹	various insects, mites	
<i>Molluscides</i>	metaldehyde	Slug & Snail Killer	slugs and snails
	ferric phosphate	Slug & Snail Bait	slugs and snails
<i>Fungicides</i>	copper	Kocide, others	anthracnose, Cercospora leaf spot
	sulfur	Sulfur 6L, Sulfur Flowable, Thiolux	powdery mildew
	mefenoxam	Ridomil Gold EC	Phytophthora root rot
	azoxystrobin	Abound	anthracnose, rust, Cercospora leaf spot, powdery mildew
	fosetyl-Al	Aliette	Phytophthora root rot
	<i>Trichoderma harzianum</i>	Rootshield ²	root system disease protectant
	folpet	Folpet	scab
<i>Herbicides</i>	simazine	Princep	pre-emergence, annual broadleaf and grass weeds

Table 2. Pesticides registered for avocado in Florida.

Class	Chemical name	Brand name(s)	Pest(s) controlled
	fluazifop-butyl	Fusilade ¹	post-emergence, annual and perennial grass weeds
	sethoxydim	Poast ¹	post-emergence, annual and perennial grass weeds
	norflurazon	Solicam	pre-emergence, annual broadleaf and grass weeds
	oryzalin	Surflan	pre-emergence, annual broadleaf and grass weeds
	benefin + oryzalin	XL 2G ¹	pre-emergence, annual broadleaf and grass weeds
	isoxaben	Gallery ¹	pre-emergence broadleaf weeds
	glyphosate	Roundup, Glyphosate	post-emergence annual and perennial weeds, woody brush, trees, grass
	carfentrazone	Aim	broadleaf weeds
	sulfosate	Touchdown	post-emergence annual and perennial weeds, woody brush, trees, grass
	napropamide	Devrinol	pre-emergence, annual broadleaf and grass weeds
	oxyfluorfen	Goal ³	pre- and postemergence of certain broadleaf weeds
	paraquat	Gramoxone Extra	post-emergence annual broadleaf and grass weeds
	pelargonic acid	Scythe	broadleaf and grass weeds
	trifluralin	Treflan ¹	pre-emergence annual broadleaf and grass weeds
<i>Repellents</i>	capsaicin	Deer Off	deer, rabbit, mouse repellent
¹ For use with non-bearing trees only. ² For nursery/nonbearing trees only. ³ For use with dormant trees only. ⁴ Not registered for use in Miami-Dade, Palm Beach, Broward Counties (see label for others).			

Table 3. Pesticides registered for banana and plantain in Florida.

Class	Chemical name	Brand name(s)	Pest(s) controlled
<i>Insecticides</i>	ethoprop	Mocap	nematodes
	<i>Myrothecium verrucaria</i>	DiTera	nematodes
	buprofezin	Applaud (banana only)	nymph stages of scales, mealybugs, leafhoppers
	azadirachtin	Align, Azatin	general insecticide
	oxamyl	Vydate	nematodes,
	<i>Bacillus thuringiensis</i>	Dipel, others	lepidoptera
	<i>Beauveria bassiana</i>	Mycotrol	aphids, mealybugs, others
	pyrethrin + rotenone	Pyrellin	aphids, lepidoptera, thrips
	potassium salts of fatty acids	Safer Soap	aphids, lace bugs, mealy bugs, spidermites, others
	pyrethrins	Pyrenone	aphids, lepidoptera, mites, thrips
	various refined horticultural oils	Sunspray, citrus spray oil, crop oil, FC 435-66, FC 455-88, others	various aphids, mites, scales
	pymetrozine	Endeavor ²	whiteflies, aphids,
	kaolin (clay)	Surround	barrier and irritant to various insects
	S-methoprene	Extinguish	ants
	hydramethylnon	Amdro ¹	ants
	bifenazate	Floramite ¹	mites
	fenpropathrin	Tame ²	various insects, mites
	hexythiazox	Savey ²	various insects, mites
	bifenthrin	Talstar ¹	various insects, mites
<i>Mollicide</i>	metaldehyde	Slug & Snail Killer	slugs and snails
<i>Fungicides</i>	mancozeb	Manzate, Dithane	yellow and black Sigatoka
	copper	Kocide, others	anthracnose, Sigatoka, other various diseases
	azoxystrobin	Abound	yellow and black Sigatoka
	fenbuconazole	Enable (banana only)	yellow and black Sigatoka
	fosetyl-Al	Aliette	yellow and black Sigatoka
	maneb	Manex	yellow and black Sigatoka
	tebuconazole	Elite	yellow and black Sigatoka
	thiabendazole (TBZ)	Mertect 340F, Deco Salt No. 19 (banana only)	postharvest fungicide
	sulfur	Sulfur 6L, Sulfur Flowable, Thiolux	various diseases (some mites)
	<i>Trichoderma harzianum</i>	Rootshield ²	root system disease protectant
	carbonic acid	Kaligreen (banana only)	general fungicide
	hydrogen peroxide	Oxidate (banana only)	biocide
<i>Herbicides</i>	ametryn	Evik	annual broadleaf and grass weeds
	diuron	Karmex	annual broadleaf and grass weeds
	glyphosate	Roundup, Glyphosate	broadleaf and grass weeds
	carfentrazone	Aim	broadleaf weeds

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Table 3. Pesticides registered for banana and plantain in Florida.

Class	Chemical name	Brand name(s)	Pest(s) controlled
	paraquat	Gramoxone Extra	broad leaf and grass weeds
	sulfosate	Touchdown	broad leaf and grass weeds
	pelargonic acid	Scythe	broad leaf and grass weeds
<i>Repellent</i>	capsaicin	Deer Off	deer, rabbit, mouse repellent
¹ For use with non-bearing trees only. ² For nursery/nonbearing trees only. ³ For use with dormant trees only. ⁴ Not registered for use in Miami-Dade, Palm Beach, Broward Counties (see label for others).			

Table 4. Pesticides registered for Barbados cherry in Florida.

Class	Chemical name	Brand name(s)	Pest(s) controlled
<i>Insectides</i>	pyrethrin + rotenone	Pyrellin	aphids, lepidoptera, thrips
	potassium salts of fatty acids	Safer Soap	aphids, lace bugs, mealy bugs, spidermites, others
	<i>Beauveria bassiana</i>	Mycotrol	aphids, mealybugs, others
	fenoxycarb	Precision	ants
	spinosad	SpinTor 2SC	lepidoptera larvae, thrips, mirids
	azadirachtin	Align, Azatin	general insecticide
	various refined horticultural oils	Sunspray, citrus spray oil, crop oil, FC 435-66, FC 455-88, others	various aphids, mites, scales
	pyrethrins	Pyrenone	aphids, lepidoptera, mites, thrips
	pymetrozine	Endeavor ²	whiteflies, aphids,
	kaolin (clay)	Surround	barrier and irritant to various insects
	pyriproxyfen	Eteem	ants
	S-methoprene	Extinguish	ants
	hydramethylnon	Amdro ¹	ants
	pyriproxyfen	Knack	scales
	bifenazate	Floramite ¹	mites
	fenpropathrin	Tame ²	various insects, mites
	hexythiazox	Savey ²	various insects, mites
	bifenthrin	Talstar ¹	various insects, mites
<i>Fungicides</i>	azoxystrobin	Abound	anthracnose
	<i>Trichoderma harzianum</i>	Rootshield ²	root system disease protectent
<i>Herbicides</i>	paraquat	Gramoxone Extra	broadleaf and grass weeds
	glyphosate	Roundup, Glyphosate	broadleaf and grass weeds
	carfentrazone	Aim	broadleaf weeds

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Table 4. Pesticides registered for Barbados cherry in Florida.

Class	Chemical name	Brand name(s)	Pest(s) controlled
	fluazifop-butyl	Fusilade ¹	post-emergence, annual and perennial grass weeds
	pelargonic acid	Scythe	broad leaf and grass weeds
	napropamide	Devrinol	broad leaf and grass weeds
¹ For use with non-bearing trees only. ² For nursery/nonbearing trees only. ³ For use with dormant trees only. ⁴ Not registered for use in Miami-Dade, Plam Beach, Broward Counties (see label for others).			

Table 5. Pesticides registered for black sapote in Florida.

Class	Chemical name	Brand name(s)	Pest(s) controlled
<i>Insecticides</i>	pyrethrin + rotenone	Pyrellin	aphids, lepidoptera, thrips
	pyriproxyfen	Knack	scales
	potassium salts of fatty acids	Safer Soap	aphids, lace bugs, mealy bugs, spidermites, others
	various refined horticultural oils	Sunspray, citrus spray oil, crop oil, FC 435-66, FC 455-88, others	various aphids, mites, scales
	spinosad	SpinTor 2SC	lepidoptera larvae, thrips, mirids
	pyriproxyfen	Knack	scales
	azadirachtin	Align, Azatin	general insecticide
	<i>Beauveria bassiana</i>	Mycotrol	aphids, mealybugs, others
	<i>Bacillus thuringiensis</i>	Dipel, others	lepidoptera larvae
	pymetrozine	Endeavor ²	whiteflies, aphids,
	kaolin (clay)	Surround	barrier and irritant to various insects
	pyriproxyfen	Esteem	ants
<i>Fungicides</i>	mefenoxam	Ridomil Gold EC	root rot
	azoxystrobin	Abound	anthracnose
	<i>Trichoderma harzianum</i>	Rootshield ²	root system disease protectent
<i>Herbicides</i>	glyphosate	Roundup, Glyphosate	broadleaf and grass weeds
	carfentrazone	Aim	broadleaf weeds
	pelargonic acid	Scythe	broadleaf and grass weeds
<i>Repellent</i>	capsaicin	Deer Off	deer, rabbit, mouse repellent
¹ For use with non-bearing trees only. ² For nursery/nonbearing trees only. ³ For use with dormant trees only. ⁴ Not registered for use in Miami-Dade, Palm Beach, Broward Counties (see label for others).			

Table 6. Pesticides registered for carambola in Florida.

Class	Chemical name	Brand name(s)	Pest(s) controlled
<i>Insecticides</i>	pyrethrin + rotenone	Pyrellin	aphids, lepidoptera, thrips
	potassium salts of fatty acids	Safer Soap	aphids, lace bugs, mealy bugs, spidermites, others
	various refined horticultural oils	Sunspray, citrus spray oil, crop oil, FC 435-66, FC 455-88, others	various aphids, mites, scales
	spinosad	SpinTor 2SC	lepidoptera larvae, thrips, mirids
	azadirachtin	Align, Azatin	general insecticide
	<i>Beauveria bassiana</i>	Mycotrol	aphids, mealybugs, others
	<i>Bacillus thuringiensis</i>	Dipel, others	lepidoptera larvae
	fenoxycarb	Logic ¹	ants
	pyriproxyfen	Knack	scales
	methidathion	Supracide	scales
	pyrethrins	Pyrenone	aphids, lepidoptera, mites, thrips
	pymetrozine	Endeavor ²	whiteflies, aphids,
	kaolin (clay)	Surround	barrier and irritant to various insects
	pyriproxyfen	Esteem	ants
	S-methoprene	Extinguish	ants
	hydramethylnon	Amdro ¹	ants
	bifenazate	Floramite ¹	mites
	fenpropathrin	Tame ²	various insects, mites
	hexythiazox	Savey ²	various insects, mites
	bifenthrin	Talstar ¹	various insects, mites
<i>Fungicides</i>	mefenoxam	Ridomil Gold EC	Pythium root rot
	azoxystrobin	Abound	anthracnose
	copper (Caution: may cause leaf damage and/or drop)	Kocide, others	various diseases
	<i>Trichoderma harzianum</i>	Rootshield ²	root system disease protectent
<i>Herbicides</i>	glyphosate	Roundup, Glyphosate	broadleaf and grass weeds
	carfentrazone	Aim	broadleaf weeds
	pelargonic acid	Scythe	broadleaf and grass weeds
<i>Repellent</i>	capsaicin	Deer Off	deer, rabbit, mouse repellent
¹ For use with non-bearing trees only. ² For nursery/nonbearing trees only. ³ For use with dormant trees only. ⁴ Not registered for use in Miami-Dade, Palm Beach, Broward Counties (see label for others).			

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Table 7. Pesticides registered for coconut in Florida.

Class	Chemical name	Brand name(s)	Pest(s) controlled
<i>Insecticides</i>	various refined horticultural oils	Sunspray, citrus spray oil, crop oil, FC 435-66, FC 455-88, others	various aphids, mites, scales
	<i>Bacillus thuringiensis</i>	Dipel, others	lepidoptera larvae
	<i>Beauveria bassiana</i>	Mycotrol	aphids, mealybugs, others
	potassium salts of fatty acids	Safer Soap	aphids, lace bugs, mealy bugs, spidermites, others
	azadirachtin	Align, Azatin	general insecticide
	pymetrozine	Endeavor ²	whiteflies, aphids,
	kaolin (clay)	Surround	barrier and irritant to various insects
	pyriproxyfen	Distance IGR ²	
	bifenezate	Floramite ¹	mites
	fenpropathrin	Tame ²	various insects, mites
	hexythiazox	Savey ²	various insects, mites
	bifenthrin	Talstar ¹	various insects, mites
<i>Fungicides</i>	<i>Trichoderma harzianum</i>	Rootshield ²	root system disease protectant
<i>Herbicides</i>	glyphosate	Roundup, Glyphosate	broadleaf and grass weeds
	carfentrazone	Aim	broadleaf weeds
	pelargonic acid	Scythe	broadleaf and grass weeds
<i>Repellent</i>	capsaicin	Deer Off	deer, rabbit, mouse repellent
¹ For use with non-bearing trees only. ² For nursery/nonbearing trees only. ³ For use with dormant trees only. ⁴ Not registered for use in Miami-Dade, Palm Beach, Broward Counties (see label for others).			

Table 8. Pesticides registered for guava in Florida.

Class	Chemical name	Brand name(s)	Pest(s) controlled
<i>Insecticides</i>	pyrethrin + rotenone	Pyrellin	aphids, lepidoptera, thrips
	potassium salts of fatty acids	Safer Soap	aphids, lace bugs, mealy bugs, spidermites, others
	various refined horticultural oils	Sunspray, citrus spray oil, crop oil, FC 435-66, FC 455-88, others	various aphids, mites, scales
	spinosad	SpinTor 2SC	lepidoptera larvae, thrips, mirids
	azadirachtin	Align, Azatin	general insecticide
	<i>Beauveria bassiana</i>	Mycotrol	aphids, mealybugs, others
	malathion	Malathion	thrips, scales, lepidoptera, Caribbean fruit fly
	fenoxycarb	Logic ²	ants
	<i>Bacillus thuringiensis</i>	Dipel, others	lepidoptera larvae
	pymetrozine	Endeavor ²	whiteflies, aphids,

Table 8. Pesticides registered for guava in Florida.

Class	Chemical name	Brand name(s)	Pest(s) controlled
	kaolin (clay)	Surround	barrier and irritant to various insects
	pyriproxyfen	Esteem	ants
	S-methoprene	Extinguish	ants
	hydramethylnon	Amdro ¹	ants
	pyriproxyfen	Knack	scales
	bifenazate	Floramite ¹	mites
	fenpropathrin	Tame ²	various insects, mites
	hexythiazox	Savey ²	various insects, mites
	bifenthrin	Talstar ¹	various insects, mites
<i>Fungicides</i>	azoxystrobin	Abound	anthracnose
	copper	Kocide, others	anthracnose, various other diseases
	<i>Trichoderma harzianum</i>	Rootshield ²	root system disease protectant
<i>Herbicides</i>	glyphosate	Roundup, Glyphosate	broadleaf and grass weeds
	carfentrazone	Aim	broadleaf weeds
	pelargonic acid	Scythe	broadleaf and grass weeds
	oxyfluorfen	Goal	pre-emergence on broadleaf weeds
	paraquat	Gramoxone Extra	broad leaf and grass weeds
	fluazifop-butyl	Fusilade ¹	post-emergence, annual and perennial grass weeds
	oryzalin	Surflan	annual grasses and certain broadleaf weeds
	pelargonic acid	Scythe	broad leaf and grass weeds
<i>Repellent</i>	capsaicin	Deer Off	deer, rabbit, mouse repellent
¹ For use with non-bearing trees only. ² For nursery/nonbearing trees only. ³ For use with dormant trees only. ⁴ Not registered for use in Miami-Dade, Palm Beach, Broward Counties (see label for others).			

Table 9. Pesticides registered for jackfruit in Florida.

Class	Chemical name	Brand name(s)	Pest(s) controlled
<i>Insecticides</i>	potassium salts of fatty acids	Safer Soap	aphids, lace bugs, mealy bugs, spidermites, others
	various refined horticultural oils	Sunspray, citrus spray oil, crop oil, FC 435-66, FC 455-88, others	various aphids, mites, scales
	spinosad	SpinTor 2SC	lepidoptera larvae, thrips, mirids
	azadirachtin	Align, Azatin	general insecticide
	pyrethrins	Pyronyl	aphids, thrips
	<i>Bacillus thuringiensis</i>	Dipel, others	lepidoptera larvae
	<i>Beauveria bassiana</i>	Mycotrol	aphids, mealybugs, others
	pymetrozine	Endeavor ²	whiteflies, aphids,

Table 9. Pesticides registered for jackfruit in Florida.

Class	Chemical name	Brand name(s)	Pest(s) controlled
	kaolin (clay)	Surround	barrier and irritant to various insects
	S-methoprene	Extinguish	ants
	hydramethylnon	Amdro ¹	ants
	pyriproxyfen	Distance ²	scales
	bifenazate	Floramite ¹	mites
	fenpropathrin	Tame ²	various insects, mites
	hexythiazox	Savey ²	various insects, mites
	bifenthrin	Talstar ¹	various insects, mites
<i>Fungicides</i>	azoxystrobin	Abound	anthracnose
	<i>Trichoderma harzianum</i>	Rootshield ²	root system disease protectent
<i>Herbicides</i>	pelargonic acid	Scythe	broadleaf and grass weeds
	glyphosate	Roundup, Glyphosate	broadleaf and grass weeds
	carfentrazone	Aim	broadleaf weeds
<i>Repellent</i>	capsaicin	Deer Off	deer, rabbit, mouse repellent
¹ For use with non-bearing trees only. ² For nursery/nonbearing trees only. ³ For use with dormant trees only. ⁴ Not registered for use in Miami-Dade, Palm Beach, Broward Counties (see label for others).			

Table 10. Pesticides registered for 'Tahiti' lime, Key lime, kumquat, and pummelo in Florida.

Class	Chemical name	Brand name(s)	Pest(s) controlled
<i>Insecticides</i>	various refined horticultural oils	Sunspray, citrus spray oil, crop oil, FC 435-66, FC 455-88, others	various aphids, mites, scales
	sulfur	Sulfur 6L, Sulfur Flowable, Thiolut	various mites
	pyriproxyfen	Esteem	ants
	fenoxycarb	Logic ¹	ants
	abamectin	Agri-Mek	mites
	formetanate	Carzol SP (limes only)	thrips
	buprofezin	Applaud	scales, mealybug, leafhoppers
	cryolite	Kyrocide	lepidoptera
	imidacloprid	Provado	aphids, leafminers, scales, leafhoppers, mealybugs
	oxamyl	Vydate	rust mites, thrips, nematode suppression
	oxydemeton-methyl	Metasystox ¹	mites, leafminers
	propargite	Omite ¹	mites
	spinosad	SpinTor 2SC	lepidoptera larvae, thrips, mirids
	fenpropathrin	Danitol	thrips, mites, sharpshooters, adult weevils
	kaolin (clay)	Surround	barrier and irritant to various insects
	dicofol	Kelthane	mites

Table 10. Pesticides registered for 'Tahiti' lime, Key lime, kumquat, and pummelo in Florida.

Class	Chemical name	Brand name(s)	Pest(s) controlled
	ethion	Ethion (limes only)	mites, scales
	diflubenzuron	Micromite	leafminers, weevil eggs/larvae, rust mite
	fenbutatin-oxide	Vendex, Hexakis	miticide
	dimethoate	Dimethoate, Cygon	miticide
	<i>Beauveria bassiana</i>	Mycotrol	aphids, mealybugs, others
	<i>Bacillus thuringiensis</i>	Dipel, others	lepidoptera larvae
	chlorpyrifos	Lorsban	aphids, lepidoptera, scales, thrips
	malathion	Malathion	thrips, scales, lepidoptera, Caribbean fruit fly
	pyrethrin + rotenone	Pyrellin	aphids, lepidoptera, thrips
	potassium salts of fatty acids	Safer Soap	aphids, lace bugs, mealy bugs, spidermites, others
	methidathion	Supracide	scales
	acephate	Acephate ²	aphids, plant bugs, grasshoppers, thrips, ants
	azadirachtin	Align, Azatin	general insecticide
	carbaryl	Sevin	citrus root weevil adults, mites, lepidoptera
	fenamiphos	Nemacur	nematodes
	pyridabin	Nexter	mites
	pymetrozine	Endeavor ²	whiteflies, aphids,
	S-methoprene	Extinguish	ants
	hydramethylnon	Amdro ¹	ants
	pyriproxyfen	Knack, Distance ²	scales, thrips, ants
	bifenazate	Floramite ¹	mites
	fenpropathrin	Tame ²	various insects, mites
	hexythiazox	Savey ²	various insects, mites
	bifenthrin	Talstar ¹	various insects, mites
<i>Fungicides</i>	copper	Kocide, others	Greasy spot, melanose
	azoxystrobin	Abound	anthracnose
	fosetyl-Al	Aliette	phytophthora root rot
	mefenoxam	Rldomil Gold EC	phytophthora root rot
	ferbam	Ferbam Granuflo (limes only)	post bloom fruit drop, scab, anthracnose
	<i>Trichoderma harzianum</i>	Rootshield ²	root system disease protectent
	hydrogen peroxide	Oxidate	biocide
<i>Herbicides</i>	bromacil	Hyvar X ⁴	grass weeds
	diuron	Karmex	annual broadleaf and grass weeds
	bromacil + diuron	Krovar	annual broadleaf and grass weeds
	carfentrazone	Aim	broadleaf weeds
	norflurazon	Solicam	grass weeds
	oryzalin	Surflan	annual grasses and certain broadleaf weeds
	glyphosate	Roundup, Glyphosate	broadleaf and grass weeds

Table 10. Pesticides registered for 'Tahiti' lime, Key lime, kumquat, and pummelo in Florida.

Class	Chemical name	Brand name(s)	Pest(s) controlled
	paraquat	Gramoxone Extra	broadleaf and grass weeds
	fluzifop-p-butyl	Fusilade ¹	post-emergence, annual and perennial grass weeds
	sethoxydim	Poast	grass weeds
	pelargonic acid	Scythe	broad leaf and grass weeds
<i>Repellent</i>	capsaicin	Deer Off	deer, rabbit, mouse repellent
¹ For use with non-bearing trees only. ² For nursery/nonbearing trees only. ³ For use with dormant trees only. ⁴ Not registered for use in Miami-Dade, Palm Beach, Broward Counties (see label for others).			

Table 11. Pesticides registered for lychee and longan in Florida.

Class	Chemical name	Brand name(s)	Pest(s) controlled
<i>Insecticides</i>	methidathion	Supracide (longan only)	scales
	pyrethrin + rotenone	Pyrellin	aphids, lepidoptera, thrips
	potassium salts of fatty acids	Safer Soap	aphids, lace bugs, mealy bugs, spidermites, others
	methoxyfenozide	Intrepid	lychee web worm
	spinosad	SpinTor 2SC	lepidoptera larvae, thrips, mirids
	azadirachtin	Align, Azatin	general insecticide
	<i>Beauveria bassiana</i>	Mycotrol	aphids, mealybugs, others
	various refined horticultural oils	Sunspray, citrus spray oil, crop oil, FC 435-66, FC 455-88, others	various aphids, mites, scales
	fenoxy carb	Logic ¹	ants
	kaolin (clay)	Surround	barrier and irritant to various insects
	<i>Bacillus thuringiensis</i>	Dipel, others	lepidoptera larvae
	pymetrozine	Endeavor ²	whiteflies, aphids,
	pyriproxyfen	Esteem ant bait	ants
	S-methoprene	Extinguish	ants
	hydramethylnon	Amdro ¹	ants
	pyriproxyfen	Knack	scales, thrips, ants
	bifenazate	Floramite ¹	mites
	fenpropathrin	Tame ²	various insects, mites
	hexythiazox	Savey ²	various insects, mites
	bifenthrin	Talstar ¹	various insects, mites
<i>Fungicides</i>	copper (lychee only)	Kocide, others	anthracnose
	cyprodinil and fludioxonil	Switch 62.5WG	anthracnose
	azoxystrobin	Abound	anthracnose
	<i>Trichoderma harzianum</i>	Rootshield	root system disease protectent
	mefenoxam	Ridomil Gold EC	root rot
<i>Herbicides</i>	glyphosate	Roundup, Glyphosate	broadleaf and grass weeds
	carfentrazone	Aim	broadleaf weeds

Table 11. Pesticides registered for lychee and longan in Florida.

Class	Chemical name	Brand name(s)	Pest(s) controlled
	pelargonic acid	Scythe	broadleaf and grass weeds
<i>Repellent</i>	capsaicin	Deer Off	deer, rabbit, mouse repellent
¹ For use with non-bearing trees only. ² For nursery/nonbearing trees only. ³ For use with dormant trees only. ⁴ Not registered for use in Miami-Dade, Palm Beach, Broward Counties (see label for others).			

Table 12. Pesticides registered for mamey sapote in Florida.

Class	Chemical name	Brand name(s)	Pest(s) controlled
<i>Insecticides</i>	pyrethrin + rotenone	Pyrellin	aphids, lepidoptera, thrips
	potassium salts of fatty acids	Safer Soap	aphids, lace bugs, mealy bugs, spidermites, others
	spinosad	SpinTor 2SC	lepidoptera larvae, thrips, mirids
	azadirachtin	Align, Azatin	general insecticide
	<i>Beauveria bassiana</i>	Mycotrol	aphids, mealybugs, thrips, others
	various refined horticultural oils	Sunspray, citrus spray oil, crop oil, FC 435-66, FC 455-88, others	various aphids, mites, scales
	fenoxy carb	Logic ¹	ants
	kaolin clay	Surround	barrier and irritant to various insects
	<i>Bacillus thuringiensis</i>	Dipel, others	lepidoptera larvae
	pymetrozine	Endeavor ²	whiteflies, aphids,
	pyriproxyfen	Esteem	ants
	S-methoprene	Extinguish	ants
	hydramethylnon	Amdro ¹	ants
	pyriproxyfen	Knack	scales
	bifenazate	Floramite ¹	mites
	fenpropathrin	Tame ²	various insects, mites
	heythiazox	Savey ²	various insects, mites
	bifenthrin	Talstar ¹	various insects, mites
<i>Fungicides</i>	copper	Kocide, others	red alga leaf spot
	azoxystrobin	Abound	anthracnose
	mefenoxam	Ridomil Gold EC	Pythium root rot
	<i>Trichoderma harzianum</i>	Rootshield ²	root system disease protectent
<i>Herbicide</i>	glyphosate	Roundup, Glyphosate	broadleaf and grass weeds
	carfentrazone	Aim	broadleaf weeds
	pelargonic acid	Scythe	broadleaf and grass weeds
<i>Repellent</i>	capsaicin	Deer Off	deer, rabbit, mouse repellent
¹ For use with non-bearing trees only. ² For nursery/nonbearing trees only. ³ For use with dormant trees only. ⁴ Not registered for use in Miami-Dade, Palm Beach, Broward Counties (see label for others).			

Table 13. Pesticides registered for mango in Florida.

Class	Chemical name	Brand name(s)	Pest(s) controlled
<i>Insecticides</i>	pyrethrin + rotenone	Pyrellin	aphids, lepidoptera, thrips
	potassium salts of fatty acids	Safer Soap	aphids, lace bugs, mealy bugs, spidermites, others
	spinosad	SpinTor 2SC	lepidoptera larvae, thrips, mirids
	azadirachtin	Align, Azatin	general insecticide
	<i>Beauveria bassiana</i>	Mycotrol	aphids, mealybugs, thrips, others
	<i>Bacillus thuringiensis</i>	Dipel, others	lepidoptera larvae
	various refined horticultural oils	Sunspray, citrus spray oil, crop oil, FC 435-66, FC 455-88, others	various aphids, mites, scales
	fenoxycarb	Logic ¹	ants
	pyrethrins	Pyrenone	aphids, lepidoptera, mites, thrips
	malathion	Malathion	thrips, scales
	imidacloprid	Provado	thrips
	methidathion	Supracide	scales
	sulfur	Sulfur 6L, Sulfur Flowable, Thiolux	mites
	<i>Myrothecium verrucaria</i>	DiTera	nematodes
	harpin	Messenger	general plant disease and insect management
	pymetrozine	Endeavor ²	whiteflies, aphids,
	kaolin (clay)	Surround	barrier and irritant to various insects
	pyriproxyfen	Esteem ant bait	ants
	S-methoprene	Extinguish	ants
	hydramethylnon	Amdro ¹	ants
	pyriproxyfen	Knack	scales
	bifenazate	Floramite ¹	mites
	fenpropathrin	Tame ²	various insects, mites
	heythiazox	Savey ²	various insects, mites
	bifenthrin	Talstar ¹	various insects, mites
<i>Fungicides</i>	sulfur	Sulfur 6L, Sulfur Flowable, Thiolux	powdery mildew
	copper	Kocide, others	anthracnose, red alga
	chlorothalonil	Bravo Weather Stik, Echo	anthracnose (apply up to golf-ball size only)
	azoxystrobin	Abound	anthracnose
	mefenoxam	Ridomil Gold EC	Pythium root rot
	ferbam	Ferbam Granuflo	anthracnose
	potassium bicarbonate	Armcarb 100	powdery mildew
	<i>Trichoderma harzianum</i>	Rootshield ²	root system disease protectent
	thiabendazole (TBZ)	Mertect 340-F, Decoo Salt No. 19	postharvest fungicide
<i>Herbicides</i>	glyphosate	Roundup, Glyphosate	broad leaf and grass weeds
	fluazifop-p-butyl	Fusilade ¹	post-emergence, annual and perennial grass weeds
	pelargonic acid	Scythe	broad leaf and grass weeds

Table 13. Pesticides registered for mango in Florida.

Class	Chemical name	Brand name(s)	Pest(s) controlled
<i>Repellent</i>	capsaicin	Deer Off	deer, rabbit, mouse repellent
¹ For use with non-bearing trees only. ² For nursery/nonbearing trees only. ³ For use with dormant trees only. ⁴ Not registered for use in Miami-Dade, Palm Beach, Broward Counties (see label for others).			

Table 14. Pesticides registered for papaya in Florida.

Class	Chemical name	Brand name(s)	Pest(s) controlled
<i>Insecticides</i>	pyrethrin + rotenone	Pyrellin	aphids, lepidoptera, thrips
	potassium salts of fatty acids	Safer Soap	aphids, lace bugs, mealy bugs, spidermites, others
	spinosad	SpinTor 2SC	lepidoptera larvae, thrips, mirids
	azadirachtin	Align, Azatin	general insecticide
	<i>Beauveria bassiana</i>	Mycotrol	aphids, mealybugs, others
	<i>Bacillus thuringiensis</i>	Dipel, others	lepidoptera larvae
	malathion	Malthion	thrips, scales
	pyrethrins	Pyrenone	aphids, lepidoptera, mites, thrips
	fenbutatin-oxide	Vendex	mites
	permethrin	Pounce, Ambush	mites
	pymetrozine	Endeavor ²	whiteflies, aphids,
	kaolin (clay)	Surround	barrier and irritant to various insects
	<i>Myrothecium verrucaria</i>	DiTera	nematodes
	pyriproxyfen	Esteem ant bait	ants
	S-methoprene	Extinguish	ants
	hydramethylnon	Amdro ¹	ants
	pyriproxyfen	Knack	scales
	bifenazate	Floramite ¹	mites
	fenpropathrin	Tame ²	various insects, mites
hexythiazox	Savey ²	various insects, mites	
bifenthrin	Talstar ¹	various insects, mites	
<i>Fungicides</i>	sulfur	Sulfur 6L, Sulfur Flowable, Thiolux	powdery mildew
	copper	Kocide, others	anthracnose
	azoxystrobin	Abound	anthracnose
	mefenoxam	Ridomil Gold EC	Pythium root rot, Phytophthora root rot
	chlorothalonil	Bravo Weather Stik, Echo	anthracnose
	mancozeb	Dithane, Manzate	anthracnose
	maneb	Manex	anthracnose
	thiabendazole	Mertect 340F, Decco Salt No. 19	postharvest fungicide
	<i>Trichoderma harzianum</i>	Rootshield ²	root system disease protectant
<i>Herbicides</i>	glyphosate	Roundup, Glyphosate	broadleaf and grass weeds
	carfentrazone	Aim	broadleaf weeds

Table 14. Pesticides registered for papaya in Florida.

Class	Chemical name	Brand name(s)	Pest(s) controlled
	oxyfluorfen	Goal	pre-emergence on broadleaf weeds
	diuron	Karmex	annual broadleaf and grass weeds
	paraquat	Gramoxone Extra	broadleaf and grass weeds
	oryzalin	Surflan	annual grasses and certain broadleaf weeds
	pelargonic acid	Scythe	broadleaf and grass weeds
<i>Repellent</i>	capsaicin	Deer Off	deer, rabbit, mouse repellent
¹ For use with non-bearing trees only. ² For nursery/nonbearing trees only. ³ For use with dormant trees only. ⁴ Not registered for use in Miami-Dade, Palm Beach, Broward Counties (see label for others).			

Table 15. Pesticides registered for passion fruit in Florida.

Class	Chemical name	Brand name(s)	Pest(s) controlled
<i>Insecticides</i>	pyrethrin + rotenone	Pyrellin	aphids, lepidoptera, thrips
	potassium salts of fatty acids	Safer Soap	aphids, lace bugs, mealy bugs, spidermites, others
	spinosad	SpinTor 2SC	lepidoptera larvae, thrips, mirids
	azadirachtin	Align, Azatin	general insecticide
	<i>Beauveria bassiana</i>	Mycotrol	aphids, mealybugs, others
	<i>Bacillus thuringiensis</i>	Dipel, others	lepidoptera larvae
	malathion	Malathion	thrips, scales
	pyrethrins	Pyrenone	aphids, lepidoptera, mites, thrips
	pymetrozine	Endeavor ²	whiteflies, aphids,
	kaolin (clay)	Surround	barrier and irritant to various insects
	pyriproxyfen	Esteem	ants
	S-methoprene	Extinguish	ants
	hydramethylnon	Amdro ¹	ants
	pyriproxyfen	Knack	scales
	bifenazate	Floramite ¹	mites
	fenpropathrin	Tame ²	various insects, mites
	heythiazox	Savey ²	various insects, mites
	bifenthrin	Talstar ¹	various insects, mites
<i>Fungicides</i>	chlorothalonil	Bravo Weather Stik, Echo	anthracnose
	copper	Kocide, others	anthracnose
	azoxystrobin	Abound	anthracnose
	<i>Trichoderma harzianum</i>	Rootshield ²	root system disease protectent
<i>Herbicides</i>	glyphosate	Roundup, Glyphosate	broadleaf and grass weeds
	paraquat	Gramoxone Extra	broadleaf and grass weeds
	carfentrazone	Aim	broadleaf weeds
	pelargonic acid	Scythe	broadleaf and grass weeds
<i>Repellent</i>	capsaicin	Deer Off	deer, rabbit, mouse repellent

Table 15. Pesticides registered for passion fruit in Florida.

Class	Chemical name	Brand name(s)	Pest(s) controlled
¹ For use with non-bearing trees only.			
² For nursery/nonbearing trees only.			
³ For use with dormant trees only.			
⁴ Not registered for use in Miami-Dade, Palm Beach, Broward Counties (see label for others).			

Table 16. Pesticides registered for sapodilla in Florida.

Class	Chemical name	Brand name(s)	Pest(s) controlled
<i>Insecticides</i>	pyrethrin + rotenone	Pyrellin	aphids, lepidoptera, thrips
	potassium salts of fatty acids	Safer Soap	aphids, lace bugs, mealy bugs, spidermites, others
	azadirachtin	Align, Azatin	general insecticide
	spinosad	SpinTor 2SC	lepidoptera larvae, thrips, mirids
	<i>Beauveria bassiana</i>	Mycotrol	aphids, mealybugs, others
	<i>Bacillus thuringiensis</i>	Dipel, others	lepidoptera larvae
	various refined horticultural oils	Sunspray, citrus spray oil, crop oil, FC 435-66, FC 455-88, others	various aphids, mites, scales
	pymetrozine	Endeavor ²	whiteflies, aphids,
	kaolin (clay)	Surround	barrier and irritant to various insects
	pyriproxyfen	Esteem	ants
	S-methoprene	Extinguish	ants
	hydramethylnon	Amdro ¹	ants
	pyriproxyfen	Knack	scales
	bifenazate	Floramite ¹	mites
	fenpropathrin	Tame ²	various insects, mites
	hexythiazox	Savey ²	various insects, mites
	bifenthrin	Talstar ¹	various insects, mites
<i>Fungicides</i>	azoxystrobin	Abound	anthracnose
	mefenoxam	Ridomil Gold EC	Pythium root rot
	<i>Trichoderma harzianum</i>	Rootshield ²	root system disease protectent
<i>Herbicides</i>	glyphosate (systemic)	Roundup, Glyphosate	broadleaf and grass weeds
	carfentrazone	Aim	broadleaf weeds
	pelargonic acid	Scythe	broadleaf and grass weeds
<i>Repellent</i>	capsaicin	Deer Off	deer, rabbit, mouse repellent
¹ For use with non-bearing trees only.			
² For nursery/nonbearing trees only.			
³ For use with dormant trees only.			
⁴ Not registered for use in Miami-Dade, Palm Beach, Broward Counties (see label for others).			

Table 17. Pesticides registered for wax jambu in Florida.

Class	Chemical name	Brand name(s)	Pest(s) controlled
<i>Insecticides</i>	potassium salts of fatty acids	Safer Soap	aphids, lace bugs, mealy bugs, spidermites, others
	azadirachtin	Align, Azatin	general insecticide
	spinosad	SpinTor 2SC	lepidoptera larvae, thrips, mirids
	<i>Beauveria bassiana</i>	Mycotrol	aphids, mealybugs, others
	<i>Bacillus thuringiensis</i>	Dipel, others	lepidoptera larvae
	various refined horticultural oils	Sunspray, citrus spray oil, crop oil, FC 435-66, FC 455-88, others	various aphids, mites, scales
	pymetrozine	Endeavor ²	whiteflies, aphids,
	kaolin (clay)	Surround	barrier and irritant to various insects
	pyriproxyfen	Esteem	ants
	S-methoprene	Extinguish	ants
	hydramethylnon	Amdro ¹	ants
	pyriproxyfen	Knack	scales
	bifenazate	Floramite ¹	mites
	fenpropathrin	Tame ²	various insects, mites
	hexythiazox	Savey ²	various insects, mites
	bifenthrin	Talstar ¹	various insects, mites
<i>Fungicides</i>	azoxystrobin	Abound	anthracnose
	<i>Trichoderma harzianum</i>	Rootshield ²	root system disease protectent
<i>Herbicides</i>	glyphosate (systemic)	Roundup, Glyphosate	broadleaf and grass weeds
	carfentrazone	Aim	broadleaf weeds
	pelargonic acid	Scythe	broadleaf and grass weeds
<i>Repellent</i>	capsaicin	Deer Off	deer, rabbit, mouse repellent
¹ For use with non-bearing trees only. ² For nursery/nonbearing trees only. ³ For use with dormant trees only. ⁴ Not registered for use in Miami-Dade, Palm Beach, Broward Counties (see label for others).			

Table 18. Pesticides registered for white sapote in Florida.

Class	Chemical name	Brand name(s)	Pest(s) controlled
<i>Insecticides</i>	potassium salts of fatty acids	Safer Soap	aphids, lace bugs, mealy bugs, spidermites, others
	azadirachtin	Align, Azatin	general insecticide
	spinosad	SpinTor 2SC	lepidoptera larvae, thrips, mirids
	<i>Beauveria bassiana</i>	Mycotrol	aphids, mealybugs, others
	<i>Bacillus thuringiensis</i>	Dipel, others	lepidoptera larvae
	various refined horticultural oils	Sunspray, citrus spray oil, crop oil, FC 435-66, FC 455-88, others	various aphids, mites, scales
	pymetrozine	Endeavor ²	whiteflies, aphids,
	kaolin (clay)	Surround	barrier and irritant to various insects
	S-methoprene	Extinguish	ants
	hydramethylnon	Amdro ¹	ants

Table 18. Pesticides registered for white sapote in Florida.

Class	Chemical name	Brand name(s)	Pest(s) controlled
	bifenazate	Floramite ¹	mites
	fenpropathrin	Tame ²	various insects, mites
	heythiazox	Savey ²	various insects, mites
	bifenthrin	Talstar ¹	various insects, mites
<i>Fungicides</i>	azoxystrobin	Abound	anthracnose
	<i>Trichoderma harzianum</i>	Rootshield ²	root system disease protectent
<i>Herbicides</i>	glyphosate	Roundup, Glyphosate	broadleaf and grass weeds
	carfentrazone	Aim	broadleaf weeds
	pelargonic acid	Scythe	broadleaf and grass weeds
<i>Repellent</i>	capsaicin	Deer Off	deer, rabbit, mouse repellent
¹ For use with non-bearing trees only. ² For nursery/nonbearing trees only. ³ For use with dormant trees only. ⁴ Not registered for use in Miami-Dade, Palm Beach, Broward Counties (see label for others).			