

Survey of Arthropods Associated with Pomegranate in Florida

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Support provided by the Florida Department
of Agriculture and Consumer Services

Rotten or damage fruit will be infested by fruit flies and sap beetles. These are secondary invaders, not primary pests.



Detritavores attacking rotten/damaged fruit.



Sap beetle adult



Sap beetle larva



Fruit fly larva



Beetles and weevils can cause notching of leaves.



Soft scale on pomegranate



Scale egg mass underneath female

Ooencyrtus: Parasitic wasp attaching scale insects and other pests



Photo by Peter A. C. Ooi



Mealybug on Erythrina



Mealybug on pomegranate

Some ladybird beetle larvae (predators that eat mealybugs and other pests) have waxy secretions and resemble mealybugs.



Ladybird beetle larva on coffee, Oahu, Hawaii.

Unlike ladybird beetle larvae, mealybugs have a beak-like mouth and can have longish antennae.



Collecting and holding insects for identification



Insects and plant material can be kept for several days in the refrigerator if necessary.

Collecting and holding insects for identification



- Zip loc bags are useful for hard bodied insects like beetles.
- Soft insects need to be kept in a container where they won't get crushed.

Collecting and holding insects for identification



Soft-bodied insects like scales and mealybugs can be kept in rubbing alcohol if more than a week will pass before you can get them to someone for identification.

Collecting and holding insects for identification

Please record the

date,

location and

host plant (pomegranate variety)

of your specimen.

Write in *pencil* on regular paper, and put the paper with the specimen (even in alcohol).

There are several “softer” insecticides registered for use on pomegranate in Florida.

Active ingredient	Example	Mode of action Number
Azadirachtin	Aza-Direct	un
<i>Bacillus thuringiensis</i>	various	11A
Capsicum/garlic	Captiva	un
<i>Chromobacterium subtsugae</i>	Grandevo	un
Insecticidal soap	M-Pede	un
<i>Paecilomyces lilacinus</i> strain 251	Melocon WG	un
<i>Beauveria bassiana</i>	Mycotrol O	un
Sesame oil	Sesamin EC	un
Kaolin clay	Surround WP	un
Broad spectrum but short residual		
Piperonyl butoxide/pyrethrins	Evergreen EC 60-6	3
Pyrethrins	Pyganic EC 5.0 II	3

Various insecticides registered for use on pomegranate in Florida.

Active ingredient	Example	Mode of action Number
Imidacloprid	Admire Pro	4A
Clothianidin	Belay	4A
Spinetoram	Delegate WG	5
Spinosad	Entrust/GF-120	5
Spirotetramat	Movento	23
Chlorantraniliprole	Altacor	28
Hydramethylnon	Amdro Pro	20A
Tolfenpyrad	Apta	21A

IR4 request: thiamethoxam (whiteflies, scales, aphids) and fenpyroximate (mites).

Insect growth regulators registered for use on pomegranate in Florida.

Active ingredient	Example	Mode of action Number
Pyriproxifen	Esteem Ant Bait	7C
Pyriproxifen	Knack IGR	7C
Buprofezin	Applaud 70DF IGR	16
Methoxyfenozone	Intrepid 2 F	18

Organophosphate insecticides registered for use on pomegranate in Florida.

Active ingredient	Example	Mode of action Number
Carbaryl	Sevin	1A
Methomyl	Lannate	1A

Please contact me if you have questions about surveying pests and beneficials in your pomegranate, or if you would like assistance collecting/trapping insects.

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