



Insect Management in Guava ¹

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The guava is subject to attack by several kinds of insects. Among the more important are guava whitefly, red-banded thrips, guava fruit moth, Caribbean fruit fly and several species of scales. Detailed life history and effective control measures for most of these pests still remain to be worked out.

Recommendations for effective control of insect pests are limited because only a few insecticides have been registered for use on guava. Some of these are not approved for use when fruit is present. Some of the most effective materials have not been approved. At the present time, EPA listings indicate that insecticidal soap, *Bacillus thuringiensis*, and Pyrenone are insecticides that are registered for use on guavas. *Bacillus thuringiensis* (Dipel) 2X, 4L is labeled for use on hornworms, leafrollers, omnivorous loopers and loopers.

The user must read the label carefully for more specific details on use. The local County Agricultural Extension office or farm chemical dealers may be able to provide more specific details on pest control materials.

Precautions and Restrictions

Guavas are a crop in which very little is known about the control measures concerning pests that attack them. It is the responsibility of the grower to take utmost care in selecting pesticide materials that are labeled for use in this crop. Even though certain insecticides are approved by the EPA for use on guavas, only certain labels that contain these specific insecticides may have guavas listed. If further information is needed contact local authorities or the County Agricultural Extension Agent.

Under the FIFRA amendment of 1978 the grower may use a material (insecticide) that is legal and EPA approved for a pest on a crop for other non-listed pests as long as the user follows the label directions and rates for the approved pest.

The following materials are legal for use on guava in Florida:

- *Bacillus thuringiensis* (several trade names)- for use against certain Lepidopterous caterpillars.

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The use of trade names in this publication is solely for the purpose of providing specific information. UF/IFAS does not guarantee or warranty the products named, and references to them in this publication does not signify our approval to the exclusion of other products of suitable composition. Use pesticides safely. Read and follow directions on the manufacturer's label.

- **Pyrellin** (pyrethrins + rotenone)- for use against aphids, caterpillars, fruit-flies, leafhoppers, mites, thrips, weevils, and whiteflies at 1 - 2 pts per acre. No waiting period to harvest.

Specific Pests

Thrips

Red-banded thrips are often troublesome on guava and may cause defoliation and fruit russetting. Infested leaves are spotted on the upper surface with fecal deposits that turn reddish brown to black.

Control. Make frequent observations during summer and fall for any developing infestation. Pyrellin may be effective if used on a timely basis.

Guava Fruit Moths

Larvae of the guava fruit moth may cause considerable damage to guava by tunneling through the fruit. The larvae are whitish in color with a black head. They become pink as they approach maturity and attain a length of nearly 1/4 inch.

Control. Satisfactory control measures have not been developed. Fruit that ripens first is less likely to be infested than that which ripens later; consequently, utilize early fruit and harvest it as soon as it matures.

Caterpillars and Lepidopterous larvae may be controlled with *Bacillus thuringiensis* materials such as Dipel and XenTari.

Caribbean Fruit Flies

The Caribbean fruit fly, *Anastrepha suspensa* (Loew) is also called the carifly and guava fruit fly. The adults are small yellow-brown species 1/2 to 2 times larger than a house fly, with rather long, patterned wings. The Caribbean fruit fly infests mostly mature to overripe fruits. Eggs are laid singly and hatch in about 2-3 days. The larval period occupies 10-14 days, and pupation about the same. These stages are prolonged in cool weather.

Pyrellin may be effective if used on a timely basis. Paper bags may be effective if placed when the fruit is less than 1 inch in diameter.

Notes

- **Diatect and Organic Plus**, a premix of silicon dioxide (diatomaceous earth) + pyrethrin + piperonyl butoxide, is labeled on guava for aphids, caterpillars, fruit flies, leafhoppers, mites, stink bugs, thrips, weevils and whiteflies.
- **Pyrellin**, a premix of pyrethrin + rotenone, is labeled on guava for aphids, caterpillars, fruit flies, leafhoppers, mites, thrips, weevils and whiteflies.
- **Fenoxycarb** (Logic) may be used for control of fire ants on non-bearing groves.