

Insect Pest of Fruits and their Management

by

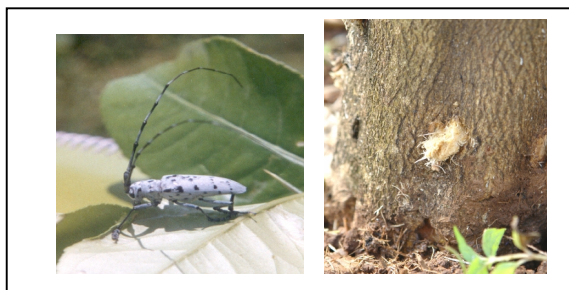
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Major pests	Scientific name	Nature of damage
Citrus Trunk borer	<i>Anoplophora versteegi</i>	Trunk tunneling, drying of branches
Citrus leaf miner	<i>Phyllocnistis citrella</i>	Leaf mining, curling and defoliation
Lemon butterfly	<i>Papilio demoleus</i>	Defoliation
Citrus psylla	<i>Diaphorina citri</i>	Wilting, drying and vitality of plant affected
Citrus black fly	<i>Aleurocanthus woglumi</i>	Curling, premature falling of buds and fruits
Guava trunk borer	<i>Aristobia testudo</i>	Withering and drying of branches
Guava fruit fly	<i>Bactrocera dorsalis</i>	Rotten fruits, unfit for consumption

Management

- Pruning and burning the dried and withered branches, kills the overwintering stages and the larvae or pupae of trunk borer and shoot borer
- The lines like Assam lemon, satkara, Pummello and Karna khatta are resistant to leaf miner and mealy bug.
- Collection and destruction of adult during April to August, by shaking the tree results in satisfactory control of trunk borer
- Neem seed kernel extract (NSKE) 5% or neem + garlic spray @ 3.0 ml/lit. during rainy season, are very effective in reducing sucking pest complex of citrus without effecting its natural enemies viz. lace wing flies etc.
- Application of fungi *Verticillium leccani* culture or *Beaveria bassiana* @ 0.5% twice at fortnightly interval during Feb.- March, June- July and Sept.- Oct. effectively reduces aphids, black flies, leaf miners, scales and psylla.
- Application of *Paecilomyces fumosoroseus* culture @ 0.5% twice at fortnightly interval at the time of leaf emergence reduces the mite population.
- Raking or ploughing the soil and application of *Beaveria bassiana* @ 5 kg/ha and *Metarrhizium anisopliae* @ 5 kg/ha to the soil underneath the tree canopy reduces mealy bugs and fruit flies respectively in guava.
- Raking up soil between the rows of plants kill and exposes the eggs/ nymphs of guava mealy bug to natural enemies like birds and also to sunlight



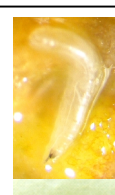
Citrus trunk borer



Lemmon butterfly



Guava trunk borer



Fruit fly