

Pecan Crop protection

This document includes information regarding

Pest management

- Most common pest
- Beneficial insets

Disease management

Most common pests

Yellow Pecan aphid

- Very common over large production areas
- A lot of natural predators
- Chemical and biological products available for control
- More common from mid-December to May
- Ants harvest the honeydew produced by aphids
- Ants prevent the natural enemies of aphids to feed on them



Brown Citrus Scale



Australian Bug (Wit wolluis)



Stink bug complex

- This complex includes different species of stink bug
- Opportunistic group of insects
- Can cause damage to the pecan kernel
- Scouting should be done before insecticides are applied



Bark borer

- Photos show the Wild fig tree Borer
- It has a three year life cycle
- Chemical control is very difficult
- Damage to the trees takes log to be repaired
- Scouting of trees are necessary for early control



Leaf hoppers

- Occurs sporadically
- Feeds on the new growth and causes the leaf margins to curl and turn yellow (photo 1)
- Leaves its white exoskeleton on the underside of the leaves.
- Scouting essential to consider control



Photo 1

African Bollworm

- Occurs very sporadically
- Scouting and monitoring with pheromone lures is essential for any control
- Feeding holes can be seen on the small nuts (photo 1)



photo 1

Problems on newly planted trees

Chafer beetles

- Nocturnal beetle
- Scouting is essential
- Spraying should be done on a case to case basis



Minor pests

White Grubs

- These larva feed on the roots of plants
- Problem only on newly planted trees
- Preventative treatment can be done just before planting

Termites

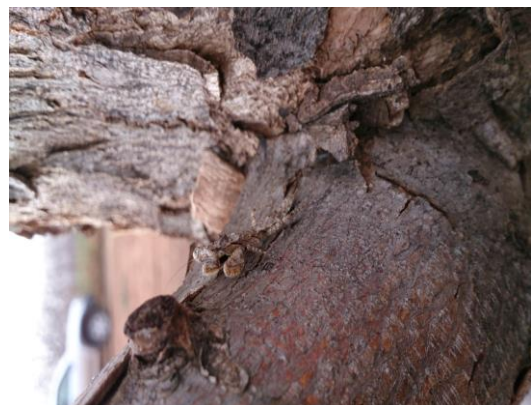
- Feed on the roots and trunks of trees
- Can occur on any age trees
- Can cause trees to die
- Needs to be treated on a case to case basis

Beneficial insects

Spiders



Praying Mantis



Lady Bugs



Lacewings



Fungal diseases

Pecan scab

- Pecan scab can occur on the nuts, leaves and stems
- It is limited to areas with high humidity
- Early season infection of the nuts can cause severe crop loss
- Cultivar selection is very important
- Fungicide spray programs need to start early in the season
- Secondary fungal infections also occur
- Air movement through the orchard is important



Alternaria Symptoms

- Alternaria dieback can affect the stems of pecans (photo 1)
- The term Alternaria black spot is used to describe the lesions on pecan leaves and nuts (photos 2 & 3)
- Plant stress increases the change of trees experiencing dieback symptoms
- Severely affected parts of the tree should be removed and destroyed
- Relieving stress factors such as nutrient deficiencies are important
- Fungicides can also be used as part of a control strategy



Photo 1

Photo 2 and 3 below



Sooty mold

It is caused by a fungus growing on the honey dew produced by aphids



Crop Protection

- Make use of AFCASA registered chemical advisors
- Only use registered chemical products, for insects and fungi
- Make sure your spraying equipment can apply the products where needed
- Insects and fungi are opportunistic and scouting orchards for potential problems are necessary
- For a list of registered chemical products go to: <http://sappa.za.org/crop-protection/>
- In any spray program active ingredients should be alternated, helps with resistance buildup