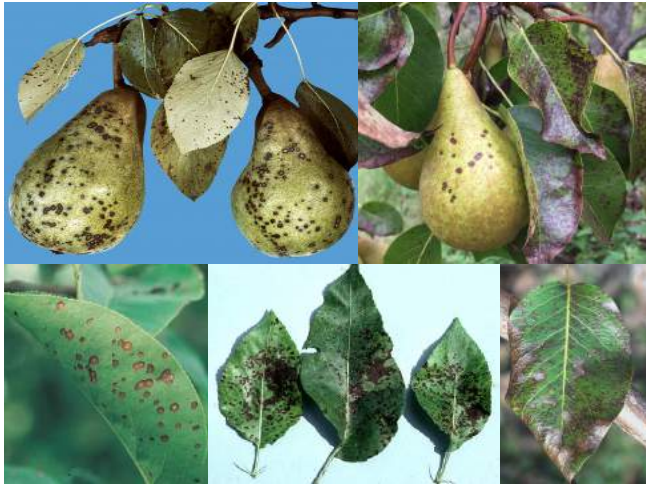




POP Pear & Asian Pear Scouting Guide

PEAR PLANT DISEASES

FABRAEA LEAF SPOT



- Fungal disease from *Fabraea maculata*
- Round, purplish-black spots on leaves
- Lesions found on the fruit are a bit larger
- May cause fruit to crack or drop prematurely and premature defoliation
- Overwinters in twig cankers as well as fallen leaves
- First infections occur around mid-June, secondary infections a month later after rain and easily becomes endemic

FIRE BLIGHT



- Bacterial disease from *Erwinia amylovora*
- Leaves begin to die at terminal end of new wood, gradually spreading further
- End of branches bend over
- Leaves first appear green-grey then turn brown, appearing 'scorched'
- Sticky honey-colored drops of bacterial ooze seep from branches, fruit, leaves
- Can kill tree if not treated
- Overwinters in living tissue at the base of spurs or shoots killed the previous season.

PEAR SCAB



- Fungal disease from *Venturia inaequalis*
- Velvety olive green lesions appear on leaves, buds or fruits
- Often begins in springtime and lasts into summer
- Overwinters on infected leaves on ground
- Spring rains release spores which grow rapidly on the tree as temperatures warm

PSEUDOMONAS BLIGHT or BLOSSOM BLAST



- Bacterial infection from *Pseudomonas syringae*
- Brown lesions appear on foliage and shoots, expand and turn black, killing blossoms and reducing fruit set
- **First appears during cool fall weather unlike fire blight** (which it's commonly mistaken for) that appears in warm spring
- Buds are a major site for overwintering



PEAR PEST AND INSECT DAMAGE

CODLING MOTH



- Greyish adult with light grey and copper stripes
- Females lay eggs on fruit or leaves in summer, larvae attack the fruit immediately upon hatching
- Larva ruins fruit by burrowing, eats for three weeks.
- Overwinters in cocoon under loose bark, soil, or leaf litter at base of tree.
- Adult moth emerges in spring.
- Crumbly brown frass is sometimes found at the hole where the larva exited, usually near the blossom end.



PEAR LEAF BLISTER MITES



- An eriophyid mite that feeds on developing pear buds and foliage
- Overwinters in outer bud scales, feed on buds, lays eggs there during bud swell
- Feeds on early spring leaves and creates reddish to yellowish green blister-like dwellings.
- Blisters turn brown or black as tissue dies
- Creates oval russet-colored spots on leaves and misshapen fruit
- Eggs are spherical and pearly white



PEAR PSYLLAS



- Adult psyllas appear as 1/10" reddish-brown cicadas
- Pear-shaped yellow eggs visible to the eye are laid in cracks around buds and in bark
- Early spring psyllas feed on plant tissue juices esp. along mid-veins of leaves, excreting honeydew on fruit and foliage with sooty brown fungus and spots
- Fruit becomes blackened and scarred
- Four generations per year
- Overwinter as semi-dormant adults on a variety of hosts.
- Return to pears at bud swell to lay eggs

PEAR SLUGS



- Not a true slug, but a sawfly with a slug-like larva body
- Adults emerge late spring to lay eggs
- Eggs laid in leaf tissue appear as small blisters
- Larva passes through 5 instar stages to adulthood, in which it turns into a glossy black wasp 1/8"
- The slug-like larva feeds on the leaves of pear trees, skeletonizing them
- Leaves turn brown, wither and drop on heavily infested trees
- Overwinters in cocoon 2-3" under soil



PEAR PEST AND INSECT DAMAGE

SAN JOSE SCALE



- Sucking insect injects toxins into plant that causes reddish blisters and purplish-red halos on young bark
- Winged males and wingless females emerge in spring, crawlers appear on whole plant
- After settling down, crawlers excrete a permanent waxy barrier to protect themselves from pesticides - female scales
- Results in reduced vigor, thin foliage, and cracked or dying branches
- Immature scales overwinter predominantly in black cap stage

PLUM CURCULIO



- 1/4" long dark brown beetle with white patches and four humps on its back
- Appear in orchards during bloom
- Adults make crescent-moon shaped punctures on the fruit to lay eggs and to feed
- Pearly white eggs laid in cavity of crescent flap hatch in 7 days and feed on buds, petals and blossoms
- Can cause deformed fruit and premature drop
- Overwinter in nearby brush and soil



STINK BUGS



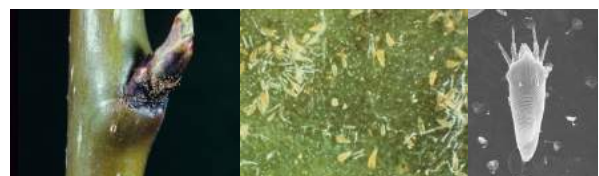
- Stink bugs feed on the fruit of the tree
- Their piercing mouthparts cause sunken dimpled areas on the fruit or catfacing
- Under these 'dimples,' the flesh is brown and pithy to the core of the fruit
- Eggs are light yellow-red and elliptical with spines forming fine lines on the underside of leaves
- Group of adults overwinter in buildings and protected natural environments



PEAR RUST MITES



- An eriophyid mite that is so small, you may need magnification to see them
- Mites overwinter in bark crevices or behind loose bud scales
- Females feed and lay eggs on emerging buds
- Feeding causes light russetting, or bronzing
- Often, only the calyx of fruit is russeted, but populations may affect the whole fruit
- Sometimes attack young leaves





PEAR SHREW



In our pest scouting, we came across a new urban orchard threat, the pear shrew.

This elusive creature may be mistaken for edible fruit!

Half pear, half shrew, this creature defies the laws of nature.

Most likely made its way to North America on cargo ships due to our increasing reliance on industrial food grown in foreign lands.

There is Atlantean lore of such a creature, which has not been seen in millenia.

It is said that if you befriend the pear shrew, you will obtain mystical powers that you may never be rid of.

This creature's only purpose is to cause mischief in the garden and must be removed immediately.

This may indicate a return of ancient pests and disease due to a shifting climate!

Overwinters in the human subconscious.

BEWARE THE PEAR SHREW!