Pine Bark Beetles

By Jane Morse, Manatee County Extension Agent

Most insect borers are considered to be "secondary pests" because they only attack after a plant has become weakened or is already dead. Bark beetles (Curculionidae: Scolytinae) tunnel under the bark of trees. The adult beetles are small and reddish-brown to black. Larvae are cream-colored and legless.

To determine if trees are infested look for a red or white powdery dust that collects around the entrance holes and in bark crevices. Sap may flow out from these entrance holes and form small "pitch masses". Over time there will be many small exit holes produced which will resemble a shotgun blast.

As with most things, an ounce of prevention is worth a pound of cure. The best way to prevent trees from being attacked by borers is to keep trees healthy. Place trees in properly prepared areas that will be protected from extreme weather conditions and follow recommended watering and fertilizing guidelines. A healthy, growing pine tree does not need to be sprayed for protection against bark beetles. Otherwise, we could not grow commercial pines in Florida.

To keep trees healthy it is also important to avoid physical injury or any stresses to the tree. Make sure that lawn mowers and weed trimmers stay away from and do not touch the tree. Protecting tree roots is paramount to keeping trees healthy and stress-free. Soil compaction, or adding/removing soil above the roots causes damage and can stress and even kill trees over time. Flooding, drought, high winds or lightening can also cause damage and stress. If roots must be severed for digging a house foundation, septic tank, sidewalk, etc the tree will be stressed and can die if too many roots, or those under the canopy are harmed.

Once trees are stressed or unhealthy they may be repeatedly attacked and need repeated insecticide treatments. This is expensive, not only to one's bank account, but also to the environment. Insecticides should only be used as a last resort. Most of these chemicals must be applied only by licensed professionals with specialized equipment. These products do not kill larvae that are already inside the tree, but they will kill adults and larvae tunneling through the treated bark layer. These products are applied as a preventative and may be effective for 3 to 10 weeks.

When trees are infested, dying or dead they should be removed (burn or chip), including any fallen limbs. Severely infested trees will only produce more pests that can attack neighboring trees so it is best to remove these infested trees.

There are several natural predators that attack and eat insect borers such as parasitic wasps or flies, predatory beetles, and birds, especially woodpeckers. Pheromone or ultraviolet blacklight traps can be used to monitor adult beetles.