Pine Bark Beetles

Stan Rosenthal is an Extension Agent with the University of Florida IFAS Extension in Leon County, http://leon.ifas.ufl.edu

Throughout the year we receive many pine bark beetle calls. Pine bark beetles attack and kill pine trees that have been stressed. The three most common stresses for pine trees that invite pine bark beetles are lightning, root damage and soil compaction.

In the past you could spray a stressed tree with either of the insecticides, Dursban or Lindane. These insecticides helped protect and control the spread of pine bark beetles. Unfortunately they were found to be bad for us and our environment. Both these chemicals are now hard to find. So what can you spray your tree with now?

Currently the only bark beetle insecticide is Onyx™. Oynx became registered for use in Florida in late 2003. It is labeled for use as a trunk spray to prevent attacks by pine bark beetles (including Southern Pine Beetle (SPB), Black Turpentine Beetle, and Ips) on ornamental pines. In field trials it has been shown to provide several months (possibly to 4-6) of preventative control against attacks. Onyx is manufactured by FMC Corporation and the active ingredient is bifenthrin (23.4%).

When using this spray it is important to note that the active ingredient bifenthrin is a broad-spectrum insecticide that will kill a wide variety of insects, including some that are beneficial. Also, the signal word for this product is WARNING. May be fatal if swallowed and causes skin irritation and moderate eye irritation. Given the method of application for this product on trees (spray directed upwards, unless the applicator is elevated), anyone who intends to apply it needs to take the necessary precautions to protect themselves, others, and other non-target organisms; i.e. follow the label very carefully. Homeowners may want to contact a pest control operator for making the application.

Insecticides have a place in bark beetle management, but it is a rather limited place. For some homeowners, a product like this may be worth a try on high-value ornamental trees (particularly those that are injured or stressed) in close proximity to trees actively infested with bark beetles (especially SPB). It is by no means a cure-all solution, however, as the insecticide does not remove the source of stress that attracted bark beetles to the location in the first place.

To avoid stress it is best if we proactively manage our trees to keep them healthy. To accomplish this we should maintain our pines at a low enough density so that the tops of the trees are not touching. Thick stands of pine trees may look nice, but the trees compete with each other and thus become weaker and more likely to succumb to pine bark beetles. It’s good to have the pines in groups, just keep them spaced far enough apart. Adequate mulch beds under the trees also help trees stay more healthy and vigorous. Mulch should be two to four inches deep and not piled up against the trunk of the tree. Mulch should extend out at least as far as the branches spread. The easiest way to maintain such a mulch is just to let the pine needles stay more or less where they fall.

Finally, if the crown of the tree begins to turn brown, realize that you are going to lose the tree to pine bark beetles. Then you should remove the tree as soon as possible. Trees that are already turning brown are just breeding areas for more beetles. If this is happening, adjacent pine trees will be at risk. Then you are likely to
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have more trees to remove in the long run.