

Bug-Wise



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Carpenter Bees: Carpenter bees suffer from a serious identity problem; they are often mistaken for bumble bees. They do look a lot like bumble bees, but there is a big difference in the biology and habits of these two groups of bees, which do not even belong to the same entomological family. One of the most easily observed physical differences is that the top of the abdomen of carpenter bees is slick and shiny, while bumble bees are covered with black, white, or yellow hairs.

Xylocopa virginica is the primary species of carpenter bee that occurs here in the state. The ‘white-faced’ males are hard to miss because of their habit of buzzing about, hovering in mid-air, and occasionally hovering in one’s face. Some people feel threatened by this behavior, but the males are harmless because they have no sting, and many of us can remember playing with ‘white-faced bumble bees’ as children.

The females do have a sting, but they are not aggressive, and do not sting unless forced to do so. Females are easily distinguished from males because their face is solid black, while the males have the distinct white spot in the middle of the face. Females also behave differently than males. They don’t have time for the idle buzzing and aerial acrobatics of the males. They spend their time boring nesting galleries, collecting pollen and nectar to provision the gallery, and laying eggs.

Galleries, which are about ½ inch in diameter and may be up to two feet long, are most commonly made in unpainted softwood lumber. They especially prefer pine, cypress, and cedar, but will occasionally bore in other types of lumber. Carpenter bees tend to congregate around favorable nesting locations, and females will reuse, and enlarge old galleries from year to year. Timbers can be weakened by the presence of multiple galleries, and galleries can also allow moisture to enter the wood and hasten decay.

Painted or sealed wood is seldom attacked by carpenter bees, so painting or sealing the wood surface is the best long-term method of preventing this problem. However, there are situations where the rustic look of unpainted wood is preferred, and situations where it may not be practical to paint the exposed beams and rafters in barns, storage sheds, etc. When using paint to prevent carpenter bee attack, it is important for the paint or sealant coat to be thick enough to totally cover the wood grain. The bees will readily bore through paint as long as they can still ‘feel’ the wood grain.

The most effective way to control carpenter bees with insecticides is to apply small amounts of insecticide dust directly into the galleries. Female bees are killed when they return to the gallery and newly hatched bees are killed when they emerge. Dusts work better and last longer than liquid or aerosol treatments because they remain in the gallery, where they will contact the bees, rather than soaking into the wood.

Two of the most commonly available dust products are Terro Ant Dust and Enforcer Fire Ant Killer, which contain deltamethrin and are labeled for control of bees and wasps. There are also other brands of deltamethrin dust, and dusts containing other active ingredients, available through local distributors, but read the label carefully to verify that the product is approved for the intended use. Drione dust, which contains pyrethrins + piperonyl butoxide + silica gel, is another effective dust option. Dust can be quickly and easily applied into galleries by the use of a bulb duster. However, bulb dusters may be difficult to find locally and may have to be specially ordered (there are several online suppliers). One hazard associated with this means of control is that it may require the use of a ladder.

If liquid sprays are used, it is best to choose an insecticide that is formulated as a wettable powder, because this will leave a dry powder insecticide residue on the surface of the wood once the spray dries. Demon WP is a wettable powder formulation of cypermethrin that can be purchased in small quantities at many local distributors and is labeled for use as a residual surface treatment (Always read and follow label directions). Wettable powder sprays can be used to treat galleries, and, depending on the label, can also be used as a surface spray to help protect exposed wood siding and other types of exposed wood. Homeowners may wish to hire a professional pest control company to treat large areas of exposed wood. Repeated applications may be necessary.

Azalea Bark Scale: Azaleas that are unthrifty and appear chlorotic and/or blackened are likely infested with azalea bark scale. This is one of the 'felt' scales, which has been commonly encountered on azaleas this spring. Although infestations of azalea bark scale can become quite severe before they are noticed, this problem is easy to diagnose on close examination. Heavy accumulations of sooty mold are one of the first signs of infestation, but close examination will reveal the presence of white cottony balls, about 1/8 inches in diameter, located on the twigs. These are the scale insects themselves, or the covering of dead female scales, which contain the eggs. Often these scale insects will be located in the crotches of twigs and stems.

This insect overwinters as nymphs, which may mature during the winter and produce eggs, underneath the white, felt-like coverings of the females. The pink crawlers hatch very early spring, with crawlers being observed in late February in the extreme southern portion of the state and in mid-March around Starkville. There are one or two generations per year.

Although this pest is often kept in check by natural predators and parasites, we have encountered a number of severe infestations this spring. When treatment is necessary because of severe infestations, it is usually best to use a multi-pronged approach. Apply imidacloprid as a soil drench according to label directions (Bayer Advanced Tree and Shrub Insect Control is available for homeowner use. Merit is the formulation used by licensed commercial applicators).

Also, use a hand lens to check for the presence of the pink crawlers. Crawlers are normally present in very early spring and, where there are two generations, again in August or September. When/if crawlers are present apply a foliar spray of acephate (Ortho Systemic Insect Killer is one brand name) or malathion. When attempting to salvage plants that were severely infested, make about three treatments at approximately 10 day intervals, or as long as crawlers continue to be present. Stop making insecticide treatments once the infestation is eliminated in order to allow beneficial insects to return. However, it may be a good idea to apply a follow-up application of imidacloprid to infestation prone plants the following spring.

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This information is for educational and preliminary planning purposes only. Brand names mentioned in this publication are used as examples only. No endorsement of these products is intended. Other appropriately labeled products containing similar active ingredients should provide similar levels of control. Always read and follow the insecticide label.