

## Wood-Destroying Insects

*Dini M. Miller, Extension Entomologist, Virginia Tech*  
*Richard D. Fell, Extension Entomologist, Virginia Tech*

Control of wood-infesting insects is best accomplished by a professional pest control operator. The information below is intended to provide a homeowner with some control methods and materials, but not all the steps are included. Most termite control chemicals are only available to professionals.

**Table 6.2 - Recommended Insecticide Use**

Pests	Pesticide	Application	Nonchemical Control and Remarks
<b>Termites</b> (subterranean)	Barrier Treatment: Permethrin (Prelude) <sup>1</sup> Cypermethrin (Demon TC) <sup>1</sup> Imidacloprid (Premise) <sup>1</sup> Fipronil (Termidor) <sup>1</sup> Baits: Noviflumuron (Sentricon) <sup>1</sup> Sulfluramid (First Line) <sup>1</sup> Dimilin (Exterra) <sup>1</sup> Diflubenzuron (Advance) <sup>1</sup>	Barrier: Soil adjacent to the house foundation must be soaked with insecticide. A "V"-shaped trench is dug against the foundation at least 1 foot deep to get total insecticidal penetration to the footing. Concrete floors, patio, walks, etc., are drilled at 12-inch intervals and the chemical injected under pressure. Caution must be taken not to damage heat pipes, vapor barriers, etc., located under the slab. In trenches: 4 gal of solution/10 linear ft. per foot of depth to the footer applied on each side of foundation and around piers. Under concrete slabs: 1 gal solution/ 10 sq ft of fill surface.  <b>Baits:</b> Monitoring stations are placed in the ground around the perimeter of the structure (~10 ft). When termites are observed in the monitoring station, it is replaced with a bait. The termites consume the bait and die immediately or carry it back to the colony and feed it to the nestmates, thus killing the entire colony.	Termite control is a job for professional pest control operators. Homeowners do not have the training, experience, or equipment. Termite baits that can be purchased at home stores for consumers have not been proven to prevent or remediate termite infestations.
<b>Powderpost beetles</b> and old house borer	Disodium Octoborate Tetrahydrate (BoraCare) <sup>1</sup> (Tim-Bor) <sup>1</sup> (Jecta) <sup>1</sup>	If infestation is contained, removal and replacement of infested wood is recommended. If the infestation is widespread, a professional pest control operator can apply a surface treatment or an injection treatment. With a surface treatment, liquid insecticide is applied to the surface of the wood. Surface application will kill adults as they emerge and will slowly penetrate the wood to kill the larvae. Injection treatment consists of drilling the wood and injecting the product into the drilled holes. The injection treatment will kill beetle larvae in the wood and will last several years. Fumigation is the last resort and rarely used in Virginia.	Controlling powderpost beetle and old house borer infestations is a job for a professional pest control operator. Painting wood surfaces will prevent beetles from reinfesting wood but will not prevent existing larvae from continuing to feed inside the wood and later emerging as adults.

<sup>1</sup> Professional Use

## 6-4 Home and Yard Insect Control: Wood-Destroying Insects

**Table 6.2 - Recommended Insecticide Use (cont.)**

Pests	Pesticide	Application	Non-chemical Control and Remarks
<b>Carpenter ants</b>	Baits, Aerosols, Insecticide Sprays	Locate the nest if possible (nests can often be associated with areas of water damage). If the nest is found and can be exposed with minimal damage to the structure, aerosol sprays can be used to destroy the colony. If the nest cannot be located or exposed, baiting is the most effective means of carpenter ant control.	The most specific and effective carpenter ant baits are available only from a professional pest control operator. However, boric acid bait formulations labelled for carpenter ant control (Taro) can significantly reduce the foraging population.
	Perimeter treatment Fipronil (Termidor) <sup>1</sup> Imidacloprid (Premise) <sup>1</sup>	Apply a perimeter spray around the base of a structure. The spray typically is applied ~3 feet up the side of the structure, and to the soil or landscaping ~3 feet around the structure.	The perimeter spray should be applied by a pest-management professional with the proper equipment. The application should be made in the early spring when ant populations are low. One application should last all season.
<b>Carpenter bees</b>	Pyrethroid sprays and dusts: Imidacloprid spray (Premise 2) <sup>1</sup>	Apply insecticide to the entry holes or galleries as soon as bee activity is observed (spring and early summer).	Leave treated galleries open for 24 to 48 hours to ensure adult bees contact treated galleries. Afterward (48 hours), gallery entrance holes can be sealed with putty or caulk.
Note: Male bees cannot sting. Female bees will only sting if intentionally provoked.	Site treatment with Pyrethroid sprays, Imidacloprid spray (Premise 2) <sup>1</sup>	Apply spray to areas known or suspected to be targets of carpenter bees (e.g. soffits and eaves).	The Premise label allows for preventative application to building surfaces (soffits, eaves, trim, etc.) as part of a perimeter treatment. Carpenter bees are territorial, often returning to wood that they infested in previous years. Therefore, applications should be made to these areas in early summer, or as soon as bee activity is observed.

<sup>1</sup>Professional Use