



ENTFACT - 643

LIMITATIONS OF HOME INSECT FOGGERS (“BUG BOMBS”)

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The Entomology Department receives many questions from householders about total-release pesticide foggers, commonly referred to as “bug bombs.” We seldom recommend these products for home insect control for the following reasons:

1. *While foggers are convenient and require little effort or knowledge to dispense, they seldom are effective against indoor pest problems.* Most foggers are designed to be placed in the center of a room on a chair or table, and activated by depressing or removing a tab at the top of the can. The entire contents are released upwards, into the airspace, where the aerosol droplets remain suspended for a period of time and then gradually settle onto floors, counter tops and other surfaces. Prior to application, drawers, cabinets and closets are supposed to be opened to enhance coverage in areas where pests are likely to be living. When applied in this manner, very little insecticide actually penetrates into cracks, voids, and other hidden locations where cockroaches, ants, silverfish, and most other household pests congregate and spend most of their time.

Many insect foggers contain pyrethrin as their primary active ingredient. While pyrethrins are somewhat effective against exposed flying insects such as mosquitoes and house flies, they are seldom lethal to cockroaches, ants, spiders, beetles, and other crawling pests. The ingredients within “bug bombs” also tend to be repellent, causing insects to scatter and move deeper into wall voids and other hard-to-reach areas.

When insecticides are needed to eliminate a pest infestation, results will be better if the spray, bait, dust, etc., is placed **directly into areas where pests are likely to be hiding**. Targeted insecticide applications tend to be more effective against all varieties of household pests, including fleas. Flea control products that can be dispensed by hand can be directed under beds, behind furniture, and into other hidden locations less accessible to foggers.

2. *It is generally poor practice to allow pesticide residues to settle onto counter tops, bedding, toys, pet food dishes, and other exposed surfaces.* While the directions for use accompanying total-release foggers specify that exposed food, utensils, and food preparation equipment and surfaces be covered and cleaned before reuse, many homeowners fail to read and follow these instructions.

The extent to which the resultant pesticide residues on exposed surfaces constitute a health hazard is debatable and would depend on various factors. A potentially greater hazard is pyrethrum, a common ingredient in bug bombs which is often touted as being “natural” and “safe” since it is derived from chrysanthemum flowers. Occupants with asthma and other respiratory ailments can react severely when pyrethrins and other irritating, volatile compounds are used indoors. According to label instructions, people and pets are not supposed to remain in the treated area, but are not necessarily required to leave the house.

3. *The ingredients in aerosol insecticide products may be flammable when used or stored near open flame.* There have been a number of house fires involving insect foggers when homeowners neglected to extinguish pilot lights, cigarettes, etc.

In summary, there are many ways to wage a “bug war.” One of the *least* effective battle plans involves using a bug bomb. Although other methods may require a bit more study and effort, the results usually will be better and more permanent. Many times the solution is as simple as a fly swatter, vacuum, or door sweep. One of the few instances where total-release foggers might be useful is where cluster flies, paper wasps, etc. are infesting attics, outbuildings or other cluttered, hard-to-reach areas. Refer to our other entomology extension publications for specific suggestions for managing these and other insect pest problems.

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