

Safety of gas mosquito traps

Saturday, 11 August 2007

Mosquito season has arrived, and people concerned about how to best protect themselves from mosquito bites may have purchased a mosquito trap. This week, one manufacturer has recalled a trapping device designed to reduce or eliminate mosquito populations.

On July 15th, in cooperation with the U.S. Consumer Product Safety Commission (CPSC), the Coleman Company agreed to recall 136,000 Mosquito Deleto(tm) Traps. The mosquito trap's propane regulator can leak propane gas, which poses a fire hazard to consumers. In addition, the fuel hose attachment sold with the Back Home(tm) System can become damaged and leak propane.

Coleman has received 28 reports of traps melting or catching on fire as a result of propane leaking, and 7 reports of damage to the propane fuel hoses. No injuries have been reported.

If you are considering buying a mosquito-trapping device, investigate carefully how they work and consider their effectiveness. According to University of Florida Extension Entomologist Dr. Roxanne Rutledge, these homeowner devices have recently appeared on the market, and they retail for \$300.00 - \$1400.00. But that's just for the initial investment.

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07/17/02 - Advice to Consumers on Propane Mosquito Traps

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According to Rutledge, some traps generate carbon dioxide (CO₂) that lures the mosquitoes to the device, and then collects the pests in a bag. Similar devices may use chemical "attractants", such as octenol, to lure the mosquitoes into the trap. Fuel and attractants must be replaced monthly at the buyers' expense.

Currently, there is no research to support the manufacturers claims that they can "decimate a population of mosquitoes". The CO₂ baited traps will catch mosquitoes, but their effectiveness in reducing mosquito-borne diseases or clearing large areas of these pests is unproven. Researchers at Vero Beach's IFAS/FMEL are studying the devices this summer.

Consider the following before spending money on these products:

- Female mosquitoes are attracted to carbon dioxide to find a blood-meal. Research Entomologists have been using CO₂ in the form of dry ice baits for years to attract mosquitoes. Devices that take advantage of this behavior do capture mosquitoes, and a collection bag full of mosquitoes gives the perception that the device "works great". However, a "bag full" represents a minute percentage of all mosquitoes and will not likely impact these very large populations.

- Not all mosquitoes in Florida that bite humans are attracted to these traps. The Asian tiger mosquito is a primary homeowner pest, and is not attracted to these advertised traps. Dumping out water holding containers every three to four days will be much more effective.

- Claims that the trap will decimate a mosquito population in four to six weeks fail to consider that the populations of many mosquitoes will often decline naturally within a few weeks, and sooner, if rainfall is intermittent and if public mosquito control is conducted in the area.

- Local taxpayers live within a mosquito control districts, and pay less for public mosquito control than the purchase and maintenance costs of these traps. In Indian River County, the owner of a home valued at \$100,000 pays about \$20.00 per year for mosquito control.

Circumstances where the mosquito trapping devices may work in a small area for a short time period include sites where:

- There is little wind to disrupt the attractive CO2 cloud.
- The initial mosquito numbers are manageable.
- The attractant plume is larger than the area where people are being protected.

Buyer beware is still good advice. The available "results" of how well these devices work are testimonials from those who have purchased them. Such testimonials do not incorporate controlled studies or proper data analysis. With what is known right now, proper clothing and use of insect repellants may be a better use of your money.