MIAMI-DADE MOSQUITO CONTROL INSPECTIONS IN MIAMI BEACH

Miami-Dade County Mosquito Control (MDMC) is currently conducting inspections in Miami Beach. Inspections involve looking for both adult mosquitoes and mosquito breeding sites (containers and plants, such as bromeliads, holding water). If any mosquito larvae and/or adult mosquitoes are observed by the inspector, the inspector will also treat the inspection site.

Treatment for mosquito larvae typically uses products whose active ingredient is Baccillus thuringiensis israelensis, or Bti. Bti is applied to standing water by MDMC inspectors in the form of granules. Bti is a naturally occurring soil bacterium that works by destroying the digestive system of mosquito larvae. Bti specifically targets only the larvae of mosquitoes, fungus gnats and blackflies. According to the U.S. EPA, "Bti has no toxicity to people, so it can be applied safely to mosquito habitat without a detrimental impact on food crops or water supplies. In fact, Bti can be used for pest control in organic farming operations."

MDMC has been treating for adult biting mosquitoes on Miami Beach using several different insecticides registered by both the EPA and the Florida Department of Agriculture and Consumer Services, to reduce mosquito resistance to any one insecticide. Duet (Prallethrin 1% + Sumithrin 5%) is the only insecticide used in handheld sprayers. It is also used in backpack and truck-mounted sprayers. Biomist 30+30 (Permethrin 30%) is used in backpack and truck-mounted sprayers. DeltAGard (Deltamethrin 2%) is also used in backpack and truck-mounted sprayers. According to the EPA, these insecticides (which are known as pyrethroids) can be used for public health mosquito control programs without posing unreasonable risks to human health, wildlife or the environment, when applied according to the label. It should be added that the World Health Organization (WHO) has said about prallethrin (used in Duet) that it "is of low mammalian toxicity, with no evidence of carcinogenicity." All four insecticides (prallethrin, along with sumithrin, also called d-phenothrin; permethrin; and deltamethrin) have been listed by WHO among many other insecticides in a guide on the safe and effective use of pesticides, titled "Pesticides and their application" (see last link below).

Here are some links:

https://www.epa.gov/ingredients-used-pesticide-products/pyrethrins-and-pyrethroids
https://www.epa.gov/mosquitocontrol/permethrin-resmethrin-d-phenothrin-sumithrinr-synthetic-pyrethroids-mosquito-control
http://www.who.int/whopes/quality/en/prallethrin_spec_eval_Nov_2004.pdf
http://apps.who.int/iris/bitstream/10665/69795/1/WHO_CDS_NTD_WHOPES_GCDPP_2006.1_eng.pdf?ua=1