Facts: Mosquito insecticides in the residential landscape.

"Pesticide" is an umbrella term that includes—but is not limited to—insecticides, herbicides, fungicides, and rodenticides. Each year in the United States, more than a billion pounds of pesticides are applied across home gardens, parks, and farms to manage unwanted weeds, insects, diseases and other “pests”. The majority of pesticides used are “broad-spectrum” meaning they kill broadly. Very broadly.

Contamination resulting from the extensive use of pesticides has been tied to the decline of species important to ecosystems, including pollinators. Pesticide contamination is wide-spread. More than 90% of pollen samples from bee hives in agricultural landscapes and more than 90% of stream samples are contaminated with more than one pesticide. It is critical that we work simultaneously to reduce use of pesticides and to minimize the risk of pesticides to pollinators where pesticides are used.

Most residential mosquito control companies use insecticides known as **pyrethrins**, which are toxic chemicals derived from chrysanthemum flowers; or more frequently, **pyrethroids**, which are synthetic chemicals that mimic pyrethrins. Bifenthrin is also commonly used. Whether natural or synthetic, these are broad-spectrum insecticides that are highly toxic to a wide variety of insects, not just mosquitoes. They are highly toxic to all aquatic life including amphibians as well as pollinators.

Unfortunately, despite continued marketing claims, these sprays don’t just harm mosquitoes. The most widely used residential mosquito sprays are also highly toxic to native pollinators such as bees and butterflies, fish and other aquatic organisms, and they can even pose a risk to pets and people. Organic does not mean safe (arsenic is organic).

Companies such as Mosquito Joe, Mosquito Squad, Mosquito Authority and a host of others use pyrethrins and pyrethroids in their standard treatment options. Marketing efforts and corporate talking points correctly state that these pesticides are regulated and approved for use by the Environmental Protection Agency (EPA), **but that doesn’t mean they are without any negative environmental consequences.** The May 2021 issue of Consumer Reports states that the EPA’s testing requirements are outdated and don’t reflect the latest in toxicological science. Do your homework on chemicals used.

We know the specific pyrethroids that these companies use such as bifenthrin, deltamethrin, and permethrin are all highly toxic to bees, killing them and beneficial insects on contact and are effective in landscapes and gardens for one or more days after treatment, a fact the EPA itself acknowledges. There’s a reason you are urged to keep your pets and children out of the yard for at least 30 minutes.

There is no way for companies to spray these broad-spectrum insecticides in your yard without also killing other insects they come in contact with, including bees, butterflies, caterpillars, ladybugs, dragonflies and other beneficial insects, along with the mosquitoes. Do your chemical research and protect ecosystems.

Source: www.NWF.org

Source: www.beyondpesticides.org

Impacts of Pesticides Database: https://pesticideimpacts.org