

Insecticides vs “Green” Options

Whenever one is considering having a mosquito, fly, spider or wasp control automated misting system installed in an area they need to ask themselves what type of solution is best for them. Mr. Mist Systems offers the use of a number of types of insecticides.

1. Riptide, Hydropy and Vampyre - These solutions are all forms of insecticide that use varying percentages of pyrethrin as the active ingredient and PBO as the synergist. The active ingredient is the insecticide portion of the solution and the synergist helps with the effectiveness of the active ingredient. The remainder of the solution is water. Riptide and Hydropy are used for mosquito, spider and wasp control and are extremely effective. Vampyre is used more for mosquito-fly control in stables but it is a bit more expensive, yet may be used if the other two are not yielding the pest control results being sought after. Pyrethrin has a quick knock-down and kill effect but it has very little residual effect because it biodegrades so quickly in its exposure to air and sun. When using each of these insecticides there may be a surfactant added to the mixture at times in an effort to help the droplets of mist attach more effectively to the flying insect. Any of these chemicals can be used in a tank or a tankless system with great result and longevity to the life of the pump. The primary reason for caution with pyrethrin is that it must be misted at least 50 feet from water or it may kill the fish living in that water.
2. Sector – Uses permethrin as its active ingredient along with a PBO that acts as a synergist. The active ingredient is the insecticide portion of the solution and the synergist helps with the effectiveness of the active ingredient. The remainder of the solution is water. Permethrin has a longer lasting residual effect on the pests that it is targeting and does not break down as easily in air or under the sun. This is quite effective on mosquitos, flies, spiders and wasps but is generally used when pyrethrin has not yielding the desired control of the targeted pests. At times a surfactant may be added to the mixture in an effort to help the droplets of mist attach more effectively to the flying insect. This solution can be used in a tank or a tankless system with great result and longevity to the life of the pump. The primary reason for caution with permethrin is the fact that it has a longer lasting residual effect which is good for control but more caution must be used in its degree of application.
3. Eco-Exempt MC and BugDefence – These would be considered “green” options. These are solutions that the EPA does not inspect because of the active ingredients in it are not considered to be insecticides. The Eco-Exempt MC is more effective at controlling mosquito, flies, spiders and wasp than Bug Defence because it kills, where as Bug Defence is a repellent. The amount of Eco-Exempt solution that must be used to achieve good results is equitable with the same amount of insecticide as previously talked about. Yet, with BugDefence the amount of solution to achieve good results is generally 3Xs the amount which results in a higher cost to the customer. These solutions are effective in controlling mosquitoes, flies, spiders and wasps and their usage fish ponds is not detrimental to the fish. Yet, there are drawbacks as well. Both are an oiled based product that can leave a residue behind especially if a nozzle is located over a brick or concrete floor where a spot may develop over a long period of time. In addition, these chemical are tougher on the seals of the pump and tend to decrease the life of the pump especially when used in a tankless system where they are not diluted with water until immediate usage occurs. Yet, it is okay for them to be misted near water because they do not kill fish.