

Concept overview and Do-it-yourself manual for the MosquitoMax tankless mosquito misting system



- Our misting systems work by regularly spraying a desired protection area through misting nozzles connected by small diameter (1/4") nylon tubing lines with a highly diluted insecticide & water mixture in the 150 to 200 PSI range. Eventually (over the course of a few weeks) you will have eliminated all of the adult mosquitoes living within your area. We offer organic or pyrethrin based products for use in our system which kill insects after contact by affecting their nervous systems.
- **MosquitoMax**[®] Nōtoχ , ECO MC and a cedar oil repellent are organic products which are non-toxic to mammals, birds and fish and are the safest products we offer.
- Natural pyrethrum and synthetic permethrin are widely used low in toxicity insecticides that can also be used in our system.

Larvicide pellets or dunks should be placed monthly into areas that periodically collect standing water for a complete mosquito management program.

when we move in... they move out.



Every mosquito control situation is unique



- The vast majorities of mosquito species during peak season tend to become active 1 to 3 hours before dusk and are most active at night feeding primarily on birds during the on 12:00 to 6:00AM time slot. There are also species that are active during daylight hours. Every property is a unique situation and to maximize the effectiveness you as the homeowner will need to experiment with the times you spray, for how long and at what strength. Excellent results can be achieved either by spraying more frequent shorter spray durations or longer spray times less frequently. The operator is the results barometer and should make the adjustments necessary to responsibly eliminate and control the mosquitoes in their particular area.
- Good control results have been achieved after an infestation is destroyed by using less than the recommended dilution rates.
- If you have an irrigation system, you should finish watering prior to your 6:00AM cycle so you won't wash off the early morning application.

Examples of problem areas and how to get maximum benefit



- **Examples of problem areas:** Poor drainage areas, catch basins, heavy ground cover, bird baths and shady areas underneath plants & hedges are typical places where mosquitoes rest and or breed. The mist is a very fine spray that is suspended in the air for a few minutes before it settles to the ground. When planning your nozzle locations make sure you know your seasonal predominant wind currents so you can position your spray nozzles accordingly to allow the mist to penetrate these types of areas.
- **How to get maximum benefit:** The object is to have the mist blanket the desired protection area, making certain you get the mist into the areas that breed & harbor mosquitoes.
- **Coverage is the most important factor:** A misting nozzle emits about 1.5 ounces of total fluid per minute in a cone shaped pattern. Most nozzles have filters to prevent clogging and some have check valves that seal or rapidly close the nozzle so dripping won't occur after spraying. A typical recommended dilution rate would be 109 parts water to 1 part insecticide which equals less than .01376 or thirteen thousandths of an ounce of actual insecticide per nozzle per minute. If no wind were present a nozzle would provide a coverage area of approximately 8' X 8' if positioned at least 8' above the ground.

55 gallon reservoir Technology

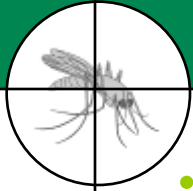


- This technology has been in existence for over 20 years for fly control in livestock farms and are effective if the fluid is used before the active ingredients break down. These systems use reservoirs that hold a pre-mixture of insecticide and water that is dispersed when an automatic timer activates a pump. These systems are rarely emptied due to their bulky nature and weight. Most reservoir systems utilize a low fluid level switch, which disables power to the pump when low fluid levels occur (refill time). Our observations are that most reservoirs contain approximately 5 to 15 gallons of fluid when the switch activates (re-fill time). Re-filling this type of system (per chemical label rate) requires accurate measurement of the water added to the reservoir to determine the appropriate amount of insecticide to add and is fairly time consuming. Additional chemicals should be added to prevent fungus growth and to slow down the chemical degradation process, but some of these ajuvants, surfactants and emulsifiers can cause increased plant burn in residential applications. Insufficient agitation inhibits the effective use of many organic plant oil insecticides. An intake filter should also be cleaned when servicing these systems.

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How the MosquitoMax tankless automated insect mist system works



- The MosquitoMax system was engineered to allow the operator the ability to kill and control mosquitoes without having to measure and mix chemicals. The self-contained system pumps concentrated insecticide into a small vented mixing tank plumbed to water. A push button controller provides flexible programming options and delivers an accurate chemical injection dosage for any approved insecticide. Chemical degradation and fungus growth is eliminated due to continuous fluid turn-over and “Green products” are used more effectively due to the real time agitation that occurs during each spray cycle. A temperature sensor reduces chemical consumption during colder days and our water only feature will reduce nozzle replacement costs during down time periods.

MosquitoMax benefits



- **Safety:** The mixing tank is not under pressure and incorporates an air-gap, which prevents contaminated water from entering the water supply line. Tremendous agitation takes place in the mixing tank during every spray cycle producing maximum efficacy for any insecticide. Additional benefits are consistent insecticide to water ratios, no fungus growth, quicker refills, easy winterizing, a small lockable enclosure and an advanced digital controller.
- **Economical and environmental benefits:** The MosquitoMax system is engineered for “open source refills” and does not require any proprietary, caps, bottles or insecticides to drive up costs and is at a minimum 10% more efficient than reservoir systems. Environmental impact is reduced since no ajuvants, surfactants or emulsifiers are used and insecticide to water ratios remain constant.

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