



## Organic ... and Mosquito Free

**Learn some tips to help keep mosquitos away and maintain your organic approach.**

Organic gardeners and farmers know that they can save money and help the environment by cultivating rain gardens or collecting rainwater in barrels or other receptacles, but some people fear that conserving water in these ways will form active breeding grounds for mosquitoes.

These pesky insects do more than just disturb people and pets with their incessant buzzing and biting. Mosquitoes may also carry dangerous diseases like West Nile virus.

Mosquitoes lay their eggs on the surface of standing water and within two days, the eggs hatch into larvae that live in water for up to a week or two.

Larvae come to the surface to take in oxygen through a breathing apparatus that resembles a snorkel. After a resting, pupal stage of a few days, the adult mosquito emerges. Male mosquitoes dine on flower nectar, while female mosquitoes bite and drink blood from humans and other mammals.

Fortunately, there are earth-friendly solutions to deterring mosquitoes from your farm. Obviously, your first line of defense is to keep your barrels tightly covered with a lid after rainfall, but remember that mosquito eggs are extremely small and may still make their way through these barriers. There are a number of ecological precautions you can take to keep your standing water free of mosquito larvae and subsequent adult hatchings.

Your pesticide-free garden or farm already has nature's own way of holding down mosquitoes. Birds and bats on your property will enjoy a hearty meal of mosquitoes and other unwanted insects. Some beneficial, predatory insects like dragonflies also dine on mosquitoes and mosquito larvae; for example, dragonfly larvae feast heartily on mosquito larvae.

To ensure that mosquitoes don't proliferate in your rainwater barrels or ponds, consider non-toxic water treatments. One of the best-known treatments is the use of Certified Organic mosquito dunks. These small, donut-shaped products slowly release *Bacillus thuringiensis israelensis* (Bti), a type of bacteria toxic to mosquito larvae, but harmless to humans and other mammals.

You'll need one dunk per month during mosquito season for approximately every 100 square feet of surface water (regardless of the water's depth.) Unused dunks can be stored for long periods of time without losing their potency.

Quick Kill Mosquito Bits is another product that contains Bti and promises results within 24 hours. One tablespoon of the bits are sprinkled into standing water every two weeks during mosquito season to kill mosquito larvae before they can develop and emerge as adult insects. For longer-lasting protection, it's a good idea to use a follow-up treatment with mosquito dunks, which tend to last longer.

Another product that's designed to control these insects is called Mosquito Barrier; its active ingredient is garlic juice. Sprayed on grass and the lower leaves of trees, it repels adult mosquitoes. Sprayed on the surface of standing water, it prevents mosquito larvae from obtaining oxygen. Keeping your garden and yard free of mosquitoes doesn't have to involve toxic chemicals--stay organic while keeping these pests at bay.

This article is excerpted from "How Green Does Your Garden Grow?" by Linda Tagliaferro. Read the entire article and all about organic farming in Popular Farming Series: Organic Farm