

## **PESTICIDE BULLETIN**

## MOSQUITO CONTROL PRODUCTS – Bacillus thuringiensis (Bti)

## - Presented by The New Hampshire Division of Pesticide Control

The recent occurrence of West-Nile Virus (WNV) and Eastern Equine Encephalitis (EEE) here in New Hampshire has led many homeowners to search for better ways of controlling mosquitoes around their homes and neighborhoods. The Division has received numerous calls lately from people wondering about the usefulness of the over-the-counter mosquito control products now available. Many are interested in pesticides containing the active ingredient *Bacillus thuringiensis* or **Bti.** So what is Bti and how does it work? Bti is a bacterial organism often used in community-wide mosquito control programs and can be an effective tool in reducing local mosquito populations. Bti works by targeting the developing larval stage mosquitoes. Because most mosquito species require standing water for successful reproduction, Bti can be introduced into these waters where the developing mosquito larvae consume these bacteria and die. One of the biggest advantages to these products is they are often very species specific, attacking only mosquito larvae. A drawback, however, is they are only effective at destroying mosquito larvae during their early development. After this period, they are ineffective.

Additionally there are stringent regulations in New Hampshire related to the application of any pesticides to, or within 25' of, any surface waters. Specifically, no surface waters may be treated with pesticides prior to a special permit being granted by the Division. Surface waters include all streams, brooks, creeks, rivers, lakes, ponds, wetlands and tidal waters either natural or artificial. What this means is that any pesticide application by homeowners or others not possessing a special permit to any surface water in New Hampshire is **strictly prohibited**.

Given these restrictions, there are some Bti products available to homeowners for mosquito control in specific non-surface water areas. These include the products *Mosquito Dunks*<sup>®</sup> and *Mosquito Bits*, <sup>®</sup> which can be applied to containerized or other non-surface water areas such as flowerpots, swimming pools, birdbaths, rain barrels and water gardens. These areas may be producing significant numbers of mosquitoes around your home and neighborhood. By removing or draining any unnecessary or stagnant water from containers, or by treating sites where water will remain, you can help to reduce the local mosquito population around your home or in your neighborhood. Just remember that for your personal safety and the health of our environment, please follow the use and disposal instructions on these and all pesticide labels carefully!

New Hampshire places a high value on the protection and promotion of our natural resources. By understanding and following the regulations for pesticide use in and near aquatic areas, we can help to ensure the future quality of our water resources. Any questions regarding homeowner use of Bti products for mosquito control can be directed to the New Hampshire Division of Pesticide Control at: (603) 271-3550.

Mosquito Dunks<sup>®</sup> and Mosquito Bits<sup>®</sup> are registered trademarks of Summit Chemical Company, Baltimore, MD. No endorsement of these products is intended or implied by the Division.