

# Morris County Mosquito Extermination Commission

PO Box 405, Morris Plains, NJ 07950

Phone – (973) 285-6450, Fax - (973) 285-6454, email – [kncmorland@co.morris.nj.us](mailto:kncmorland@co.morris.nj.us)

## **Municipalities are encouraged to share this information with all residents in their community**

### **THE MORRIS COUNTY MOSQUITO COMMISSION**

The Morris County Mosquito Commission, founded in 1928, has the goal of reducing the number of nuisance and disease transmitting mosquitoes within the County. The Commission employs a number of techniques to provide this service to residents with minimal impact on the environment. The program can be summarized as follows:

1) Water Management - The Commission carries out extensive efforts to remove blockages from Morris County waterways, and to maintain drainage systems as needed. Such work is done carefully, with environmental impacts kept clearly in mind. This program helps reduce the use of insecticides needed to control mosquitoes.

2) Larval Control - Mosquitoes all start out in water as larvae, or “wrigglers”. In areas where water management is not feasible, larval control is necessary. Some locations are suitable for stocking with mosquitofish, which provide continuous, biological control of mosquitoes. In other areas, larvicides may be used to eliminate mosquitoes. We choose products that are specific for mosquitoes and have minimal or no effect on other organisms in the aquatic environment for this purpose, and these are applied by trained staff licensed by the NJDEP. All products are registered with both the USEPA and the NJDEP which mean they are legal to use in NJ and are reviewed and recommended by the New Jersey Agricultural Experiment Station, Cook College/Rutgers University. Locations receive treatment only when surveys show that large numbers of mosquitoes are a threat to populated regions. These products applied by hand crews, by all terrain vehicles, or by helicopter. Larval habitats are treated only when larvae are present.

3) Adult Control - Although this is the most visible aspect of mosquito control, we consider this to be a last resort. We try to stop mosquitoes before they are out and flying around. When adult control is needed because of a severe mosquito infestation, we generally use truck mounted sprayers that apply 1/2 – 1 ounce of material per acre. Sometimes, small hand sprayers are used to treat remote locations. Occasionally, a large, truck mounted air blast sprayer is used to create a barrier to control adult mosquitoes.

Homeowners can help control mosquitoes by making sure they do not have containers around the home that hold water. Buckets, gutters, bird baths, toys, tarpaulins and anything else that can contain water should be emptied or removed from the yard. Do not dispose of leaves and grass clippings in ditches, streams or catch basins. Make sure your screens are in good repair, and consider moving inside during periods of high mosquito activity (early evening and early morning).

The Morris County Mosquito Commission is constantly striving to improve our operations. These efforts include employing new products that are more specific for mosquitoes, using new equipment that gets us into problem areas more easily, and trying new methods for controlling mosquitoes. The employees of the Commission take their service to the public seriously, and will work to serve Morris County residents with the best possible mosquito control efforts.

**Where can I find more specific information on mosquito spraying in Morris County, and how will I be notified of the spraying?**

Call the Morris County Mosquito Commission at 973-285-6450. Attached is an example of a newspaper notice placed in the Daily Record and Star-Ledger by the Morris County Mosquito Commission throughout the mosquito control treatment season. A citizen has the right to ask the Morris County Mosquito Commission for specific information about a planned application in the county prior to that application.

If you have any questions about the Morris County Mosquito Commission, please let us know, or visit our web site at [www.morrismosquito.org](http://www.morrismosquito.org).

## Public Notice

In compliance with section 9.10 and 9.15 of the New Jersey Pesticide Control Code (N.J.A.C. Title 7, Chapter 30), the Morris County Mosquito Extermination Commission may be applying pesticides for the control of adult mosquito populations on an area-wide basis, as needed, throughout Morris County during the period of April 15 – November 2, 2011.

The pesticides used will be those recommended by the New Jersey Agricultural Experiment Station (NJAES) at Rutgers University for the control of adult mosquitoes, including malathion (Fyfanon ULV), resmethrin & piperonyl butoxide (Scourge 4+ 12 or 18+54), etofenprox 20% (zenivex E20) or sumithrin & piperonyl butoxide (Anvil 2 + 2 or Anvil 10 + 10). Products will be applied from the ground by truck, all terrain vehicle or handheld equipment or by aircraft using Ultra Low Volume techniques. All applications will be made according to product labeling.

Contact the National Pesticide Information Center at 1-800-858-7378 for routine pesticide inquiries. Call the New Jersey Pesticide Control Program at 1-609-984-6507 for pesticide regulation information, complaints and health referrals. In pesticide emergencies, call the New Jersey Poison Information and Education System at 1-800-222-1222.

Upon request, the Morris County Mosquito Extermination Commission shall provide a resident with notification at least 12 hours before application, except for quarantine and disease vector control activities, when conditions necessitate applications sooner than that time. We prefer the request in writing, including name, street address and phone number of the residence. Email addresses are also welcome. Updated, detailed information on adult mosquito control applications and all mosquito control activities may be found at the web site- [www.morrismosquito.org](http://www.morrismosquito.org), or by calling 973-285-6450. Those seeking further information regarding the Morris County Mosquito Extermination Commission may contact Kristian McMorland, Superintendent, pesticide license #20262B at the Commission at 973-285-6450 or by mail at PO Box 405, Morris Plains, NJ, 07950.

Insertion Date: April 8, 2011

# Morris County Mosquito Extermination Commission

PO Box 405, Morris Plains, NJ 07950

Phone – (973) 285-6450, Fax - (973) 285-6454, email – [kmcmorland@co.morris.nj.us](mailto:kmcmorland@co.morris.nj.us)

## **Malathion Fact Sheet** (“Atrapa<sup>®</sup>” “Fyfanon<sup>®</sup>” “Microflo<sup>®</sup>”)

### What is malathion?

The above products all contain the pesticide malathion, a slightly toxic compound that is used in very small amounts to control adult mosquitoes. Malathion is not residual (does not last long) and is applied with specialized equipment in a manner that maximizes mosquito control but minimizes the impact on other organisms. The product is included in the insecticides recommended for adult mosquito control list produced by Rutgers, the State University of New Jersey.

### How does malathion work?

Malathion disrupts the nervous system of target organisms. In mammals, the product is broken down quickly, while in insects it is broken down into other products that are fatal to them.

### Is there danger to humans from this chemical?

Malathion is an organophosphate insecticide with very low toxicity for mammals. During mosquito control operations, the product is applied at ½ to 1 ounce per acre.

### How is malathion applied?

Malathion is put out using Ultra Low Volume (ULV) equipment that produces droplets that are about 5 – 25 microns in size. There are 24,000 microns in an inch. In Morris County, we have found that the lowest application rate, ½ ounce per acre, is adequate for mosquito control. Malathion is broken down rapidly after application, and must contact flying mosquitoes directly to kill them.

### Is malathion harmful to other insects?

Other insects may be harmed by malathion, so care must be taken to avoid beneficial insects, such as honeybees.

## Malathion/2

### How can I avoid exposure to malathion?

Exposure to malathion, even during spray operations, is minimal for the general public because of the small quantities used. There are, however, steps that can reduce this exposure even further:

- Note contact information regarding spraying in newspapers, published every 23 days during the mosquito season. Local municipalities may also be contacted, since spray activities are coordinated with them.
- Plan your activities to limit time spent outside during times of possible pesticide treatments (when mosquitoes are very high in number, and usually in the evening).
- Move your pets, their food, water dishes inside during a ULV application.
- Stay away from application equipment, whether in use or not.
- Whenever possible, remain indoors with windows closed and with window air conditioners on non-vent (closed to the outside air) and window fans turned off during spraying.
- Avoid direct contact with surfaces that are still wet from pesticide spraying. Do not allow children to play in areas that have been sprayed until they have completely dried (approximately one hour). Very little settling of a ULV spray takes place, however, so the chances of contacting malathion this way is minimal.
- If you must remain outdoors, avoid eye and skin contact with the spray. If you get spray in your eyes or on your skin, immediately flush and rinse with water.
- Move children's toys out of application areas.

### What are symptoms of exposure to malathion?

Symptoms of exposure can include headache, nausea, dizziness, excessive sweating, salivation, excessive tearing and a runny nose. The chance of experiencing these symptoms of over-exposure with proper use is extremely low. You should contact your physician, other medical providers or the New Jersey Poison Information and Education System (NJPIES) at **1-800-222-1222** if you experience these symptoms following a pesticide spraying.

### Where can I get more information on malathion?

For overall pesticide-specific information – 9:30am to 7:30pm:

**National Pesticide Information Center: 800-858-7378**

For pesticide health information & possible exposures – 24 hours:

**New Jersey Poison Information & Education System: 800-222-1222**

For New Jersey pesticide regulation & misuse complaints:

**NJDEP Pesticide Control Program: 609-984-6507**

For Federal insecticide regulation:

**USEPA Region 2 Office of Pesticide Programs: 732-321-6768**

Malathion/3

Where can I get more information about local mosquito control?

**The Morris County Mosquito Control Commission: 973-285-6450 or**  
[www.morrismosquito.org](http://www.morrismosquito.org)

For state-wide mosquito control information:

**NJDEP Office of Mosquito Control Coordination: 609-292-3649**

Spraying for adult mosquitoes is a last resort. Most mosquito control work goes on “behind the scenes”, using water management, fish, and products to control immature mosquitoes in the water where they begin their life cycle. Controlling adult mosquitoes is more difficult because they are spread out and moving.

If you have questions about malathion or any other mosquito control related products or practices, please feel free to call the Morris County Mosquito Commission at (973) 285-6450, or visit our web site at [www.morrismosquito.org](http://www.morrismosquito.org)

# Morris County Mosquito Extermination Commission

PO Box 405, Morris Plains, NJ 07950

Phone – (973) 285-6450, Fax - (973) 285-6454, email – [kmcmorland@co.morris.nj.us](mailto:kmcmorland@co.morris.nj.us)

## Resmethrin Fact Sheet

(“Scourge<sup>®</sup>”)

### What is resmethrin?

The above product contains the pesticide resmethrin, a low toxicity compound that is used in very small amounts to control adult mosquitoes. Resmethrin is not residual (does not last long) and is applied with specialized equipment in a manner that maximizes mosquito control but minimizes the impact on other organisms. The product is included in the insecticides recommended for adult mosquito control list produced by Rutgers, the State University of New Jersey.

### How does resmethrin work?

Resmethrin is a synthetic version of natural pesticides produced by certain chrysanthemums. The product disrupts nerve transmissions of target organisms. In mammals, the product is broken down quickly.

### Is there danger to humans from this chemical?

Resmethrin has very low toxicity for mammals. During mosquito control operations, the product is applied at ½ to 3 ounces per acre. The insecticide is mixed with an agent that makes it more effective, called a synergist (piperonyl butoxide), so that only 0.02 to 0.12 ounces of insecticide are actually applied per acre.

### How is resmethrin applied?

Resmethrin is put out using Ultra Low Volume (ULV) equipment that produces droplets that are about 5 – 25 microns in size. There are 24,000 microns in an inch. In Morris County, we have found that the application rate of 1 ounce per acre is adequate for mosquito control. Resmethrin is broken down very rapidly after application, and must contact flying mosquitoes directly to kill them.

### Is resmethrin harmful to other insects?

Other insects may be harmed by resmethrin, but generally not at the rate at which mosquito control operations apply this product. Even very sensitive honeybees are not harmed when Scourge 4 + 12 is applied at 10 times the label rate.

## Resmethrin/2

### How can I avoid exposure to resmethrin?

Exposure to resmethrin, even during spray operations, is minimal for the general public because of the small quantities used. There are, however, steps that can reduce this exposure even further:

- Note contact information regarding spraying in newspapers, published every 23 days during the mosquito season. Local municipalities may also be contacted, since spray activities are coordinated with them.
- Plan your activities to limit time spent outside during times of possible pesticide treatments (when mosquitoes are very high in number, and usually in the evening).
- Move your pets, their food, water dishes inside during a ULV application.
- Stay away from application equipment, whether in use or not.
- Whenever possible, remain indoors with windows closed and with window air conditioners on non-vent (closed to the outside air) and window fans turned off during spraying.
- Avoid direct contact with surfaces that are still wet from pesticide spraying. Do not allow children to play in areas that have been sprayed until they have completely dried (approximately one hour). Very little settling of a ULV spray takes place, however, so the chances of contacting resmethrin this way is minimal.
- If you must remain outdoors, avoid eye and skin contact with the spray. If you get spray in your eyes or on your skin, immediately flush and rinse with water.
- Move children's toys out of application areas.

### What are symptoms of exposure to resmethrin?

Symptoms of exposure can include an asthmatic reaction or a skin rash. Resmethrin is related to chrysanthemums, and some people are allergic to them. The chance of experiencing these symptoms of exposure with proper use is extremely low. You should contact your physician, other medical providers or the New Jersey Poison Information and Education System (NJPIES) at **1-800-222-1222** if you experience these symptoms following a pesticide spraying.

### Where can I get more information on resmethrin?

For overall pesticide-specific information – 9:30am to 7:30pm:

**National Pesticide Information Center: 800-858-7378**

For pesticide health information & possible exposures – 24 hours:

**New Jersey Poison Information & Education System: 800-222-1222**

For New Jersey pesticide regulation & misuse complaints:

**NJDEP Pesticide Control Program: 609-984-6568**

Resmethrin/3

Where can I get more information about local mosquito control?

**The Morris County Mosquito Control Commission: 973-285-6450 or**  
[www.morrismosquito.org](http://www.morrismosquito.org)

For state-wide mosquito control information:

**NJDEP Office of Mosquito Control Coordination: 609-292-3649**

For Federal insecticide regulation:

**USEPA Region 2 Office of Pesticide Programs: 732-321-6768**

Spraying for adult mosquitoes is a last resort. Most mosquito control work goes on “behind the scenes”, using water management, fish, and products to control immature mosquitoes in the water where they begin their life cycle. Controlling adult mosquitoes is more difficult because they are spread out and moving.

If you have questions about resmethrin or any other mosquito control related products or practices, please feel free to call the Morris County Mosquito Commission at (973) 285-6450, or visit our web site at [www.morrismosquito.org](http://www.morrismosquito.org)

# Morris County Mosquito Extermination Commission

PO Box 405, Morris Plains, NJ 07950

Phone – (973) 285-6450, Fax - (973) 285-6454, email – [kmcmorland@co.morris.nj.us](mailto:kmcmorland@co.morris.nj.us)

## **Etofenprox Adulticide Fact Sheet** “Zenivex”

**Municipalities are encouraged to share this information with all residents in their community**

This Fact Sheet answers some basic questions about mosquito control products in use in your County. The Morris County Mosquito Commission, along with several other resources (listed at the end of this sheet), can provide more detailed information.

### **What is *Etofenprox* and how is it used?**

*Zenivex*<sup>TM</sup> contains a pesticide called Etofenprox, a member of the category of pesticides called *non-ester pyrethroids*, which are synthetic versions of pesticides produced by plants called pyrethrins. Traditional pyrethroid/piperonyl butoxide mixtures are recommended for Ultra-Low-Volume (ULV) mosquito control in New Jersey by Rutgers, The State University of New Jersey. *Zenivex*<sup>TM</sup> is a non-ester pyrethroid, and therefore does not require a synergist such as piperonyl butoxide. The U.S. Environmental Protection Agency (EPA) has classified Etofenprox as a reduced risk molecule. It poses a low risk to human health and the environment when used properly as part of an integrated mosquito control program. As formulated in *Zenivex*<sup>TM</sup> adulticide, Etofenprox is considered a non-carcinogen, non-teratogen and non-mutagen.

This non-ester pyrethroid-containing product is used for the control of adult mosquitoes. While habitat management and measures to control immature mosquitoes in water are preferred and most used, the spraying of adult mosquitoes is necessary when biting populations reach critical levels or when a disease organism is present in adult mosquitoes. A very fine mist is sprayed into the air since flying mosquitoes must directly contact the pesticide in order for it to be effective.

### **How can I reduce my exposure to Etofenprox?**

Because of the very small amounts of active ingredients released per acre, the risk to the general public from the use of non-ester pyrethroid-containing products is minimal. Avoiding exposure is always the safest course of action. Any possible exposure risk can be reduced by following some common sense actions:

- Pay attention to notices about spraying found through newspapers, websites, automated telephone messages, or distributed by municipal, county or state agencies.
- Plan your activities to limit time spent outside during times of possible pesticide treatments.



For local mosquito control information:  
**Morris County Mosquito Commission**

**973-285-6450**

For mosquito control recommendations:  
**Rutgers University, Department of Entomology**

**732-932-9437**

Spraying for adult mosquitoes is a last resort. Most mosquito control work goes on “behind the scenes”, using water management, fish, and products to control immature mosquitoes in the water where they begin their life cycle. Controlling adult mosquitoes is more difficult because they are spread out and moving.

If you have questions about Zenivex or any other mosquito control related products or practices, please feel free to call the Morris County Mosquito Commission at (973) 285-6450, or visit our web site at [www.morrismosquito.org](http://www.morrismosquito.org)