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Mosquitoes & Midges

WHAT CAN PEST MANAGERS DO?

Mosquito and Midge management has traditionally been the responsibility of Local Government by treatment of larval habitats.

However, even the most thorough larvicidal program will not protect all residents from biting mosquitoes and midge. This is due to the extensive areas of saltmarsh larval habitats, limited accessibility to some of these habitats and limited number of selective products (effective on the pest without damaging non-targets) available. Also many people are choosing to live in areas subject to mosquito and midge attack – often unaware of the effect these pests could have on their life style.

Insecticide treatment of adult harbourages (lethal harbourage treatments) offers an extra level of protection against mosquito and midge. This is not seen as replacement for treatment of larval habitats but rather a worthwhile supplement. Some Councils have already indicated they will treat Government property containing harbourages but expect individual properties to be treated by Pest Control companies.

Bifenthrin is an ideal product for these sorts of treatments due to it's non-repellency. Mosquitoes (and other flying insects) are allowed to land on treated surfaces, thus picking up a lethal dose. Surfaces treated with repellent products do not allow the mosquito to land, therefore the insect is free to continue flying (and biting). More importantly as long as it avoids the treated surface it will not die.

HARBOURAGE TREATMENTS

Although adult mosquitoes are attracted to light, they harbour in protected dark areas where the immediate area has a high humidity. Products should be applied to these areas, including:

- Exterior – trees, shrubs, hedges, flower beds, tall grass, surfaces around entertainment areas, walls and eaves of structures and shaded, dark, humid areas such as under decks.
- Interior – behind and under furniture, refrigerators and sinks. (DO NOT USE AS A SPACE SPRAY)

There are two types of surfaces that need to be treated:–
one-plane surfaces such as walls, eaves, underside of decks and under furniture

- can be treated effectively with conventional spray equipment, spraying the surfaces to the point of run-off with a coarse spray to reduce drift

multi-plane surfaces such as trees, shrubs, hedges, flower beds and tall grass

- need to be treated with equipment that allows penetration of the spray into the foliage (treating the exterior surface only will give an inferior result).

Testing of possible equipment suitable for treatment of foliage has shown that the spray from tank-pump equipment used by Pest Managers may not penetrate sufficiently into dense foliage, but can be effective on exterior surfaces. A motorised knapsack mister may be better suited for canopy treatments. Regular low pressure sprayers can be effectively used indoors.

A motorized back-pack mister is designed to blow air with small droplets of spray. This achieves two aims – penetration of the spray into the foliage as the air current moves and twists the foliage and treatment to the point of run-off. However, the small droplet size allows drift. By dropping the revs, the mister throws large drops that will not drift but still gives penetration and treatment to run-off. If choosing a back-pack mister, selection is critical. Controls at hand are essential as the revs may need to be increased to treat a denser or more distant shrub. Unless the back-pack is modified to allow ease of wearing and continuous treatment, Pest Managers will find using a back-pack very tiring and cumbersome. Garrards have developed modifications to make back-pack misters easier to use.

IMPORTANT:

Hot spots of biting activity are often close to larval habitats. PCO's undertaking harbourage treatments should be aware that SP products are dangerous to fish and aquatic organisms.

IN ALL CASES YOU MUST ENSURE THAT SPRAY DRIFT AND/OR RUNOFF DOES NOT CONTAMINATE DAMS, RIVERS, STREAMS, WATERWAYS OR DRAINS.

Mosquitoes are attracted to stimuli from people – whether residents or Pest Control Operators. If treating a mosquito or midge harbourage wear the personal protective equipment required by the label AND protection for exposed areas against bites. Apart from the discomfort caused by bites, mosquitoes are vectors of Dengue, Ross River, Barmah Forest and other viruses.



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