## Practical aspects in the tiger mosquito control

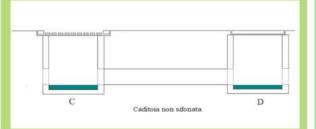
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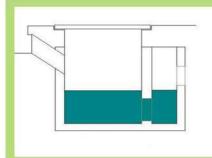
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Fighting Aedes albopictus daily teaches many practical aspects important in achieving good results. Moreover, a mistake in the control of a new breeding site can allow the mosquito to establish a population too great to eradicate. The tools and the way to use them, the insecticides and where, how and when to use them, are as important as the population size of the tiger mosquito.

Where the catch basins are not siphoned (Turin, Barcelona) the tiger mosquito cannot find places to lay eggs out of the private properties. In this way the mosquito is in big trouble to expande and the fight can be



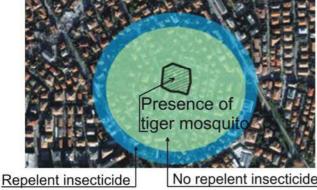






The choice between the formulations has to be made considering the breeding sites because some all them are less or not effective. For instance, the drains called "wolf mouth" can have a quite long tube and so tablets or granulars cannot reach the water.

In this case only the use of liquid insecticide is effective.



No repelent insecticide

Deltamethrin Repellent power Cypermethrin Irritant power Permethrin Temperature resistance Pyrethrins 1 4 1

Pyrethroids are good adulticides but they also act as a repellent so if we have to eradicate a breeding site we must choose the correct insecticide, otherwise we can spread the mosquito instead of killing it.



The use of tablets to treat the catch basins protected by a grill, can be improved by a tube to avoid the tablets bouncing back along the way. In fact, usually around 1/3 of the tablets don't fall into the basin, forcing us to waste time to collect





A garden can be effectively defended only if it surrounded by a dense hedge which treated with repellent insecticides it prevents the reentry of the mosquitos. A treatment in a garden without an hedge doesn't get appreciable effects.





Regarding adulticide treatments, we have to be clear that the mosquitoes are not the targets but the vegetation. The mosquitoes, touching the treated surfaces will die as a consequence. The treatments have to cover the vegetation with a film of insecticides and for this reason the size of the drops produced by the spraying device has to be quite large. In this way we reduce the drift and we can better wet the vegetation. In towns the mosquito usually lives in private gardens so in this way the suppression of drift reduces the health risks for the neighbours. Pyrethroids are good adulticides but they also act as a repellent so if we have to eradicate a breeding site we must choose the correct insecticide, otherwise we can spread the mosquito instead of killing it.

The mosquito does not like to fly so we do not have to spray very high, otherwise we waste insecticide. If we want to reduce the amount of insecticide we can just spray the preferred resting places with a non-repellent insecticide (organophosphate). Temperature, both the maximum and the average, are important for the choice of the insecticide because resistance can be very different as can the irritant power. Usually the irritant power and resistance decrease with increase in temperature (deltamethrin > cypermethrin > permethrin > pyrethrins). The time of the spray seems to not affect the results.