

Mosquito In2Care

IN2CARE INTRODUCTION

The In2Care trap is a breakthrough in modern science achieving mosquito mortality through use of natural controls instead of through a chemical mist/spray application.



- A multi-impact tool against mosquitos.
- Kills (even insecticide-resistant) *Aedes* mosquitos.
- Kills mosquito larvae and pupae (inside trap & in surroundings).
- Reduces the risk of mosquito-borne virus transmission.
- Field validated & published results.
- Uses **environmentally responsible** ingredients.
- No power source needed.
- Made for use in residential yards, schools, and localized areas of hotels and resorts.

How does it work?

In2Care® Mosquito Traps deploy a small dose of insect growth regulator and a natural insecticide (fungus) inside of enclosed containers that are specifically attractive to mosquitos. Once mosquitos contact the IGR, they then leave dispersing the IGR to other breeding sites (mostly small man-made containers). Over time the IGR accumulates in these secondary sites and inhibits development of mosquito larvae. Non-target insects are not readily attracted to these areas which reduces risk for non-target organisms. In this way, In2Care offers an effective mosquito control option with limited impact on the environment.

The In2Care® Mosquito Trap is made of durable plastic and uses water with an odor lure to attract egg-laying *Aedes* mosquitos. Once inside, mosquitos contact the specially treated gauze near the water surface and are contaminated with IGR and fungus spores. *Aedes* species mosquitos will lay their eggs over multiple sites. So, as they fly out of the trap carrying IGR/larvicide on their legs they transport the larvicide and inoculate secondary breeding sites around the Trap. As the volume of IGR increases, development of mosquito larvae in these small and hard to find breeding sites stops. In addition to the larvicide, the adult mosquito also gets infected with an insect-specific fungus that reduces feeding and kills the mosquito in approximately 3 days allowing inoculation of multiple secondary sites before she dies.

Functioning Features of the In2Care trap:

- 1) Smooth surfaces of trap interior sides direct mosquitos to the treated net.
- 2) Treated powder on the net is electrostatically charged and is readily attracted to the mosquitos' body and legs as the female lay's eggs on the top of the water inside the trap.
- 3) Insect growth regulator in the trap prevents larvae that hatch from these eggs to reach the adult stage, keeping the trap from becoming a source of biting mosquitos.
- 4) Larvae that die in the trap become food source for larvae from hatching eggs.
- 5) Mosquitos are attracted to the trap by pheromones released by larvae and odors from organic debris in the IGR treated water.
- 6) Drains in the trap prevent over-filling.

Unique Control Process

- 1) The electrostatic charged powders on the treated net contain two active ingredients.
 - a. Pyriproxyfen - is an insect growth regulator that is picked up by the mosquitos in the trap and transferred to secondary egg laying sites in the vicinity.
 - b. *Beauveria bassiana* – a soil-based fungus that penetrates the mosquito's cuticle and

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overtakes its body. Affected mosquitos become lethargic and less prone to bite. In the mosquito's gut the fungus has shown the ability to inhibit the development of the dengue virus.

- 2) As adult mosquitos enter and leave the In2Care trap the active ingredients are transferred to egg laying sites inhibiting mosquito development across the normal foraging range.

Our Standard Program includes 1 In2Care trap covering up to 3,999 sq ft. Typically the trap will be placed in the back yard or near the area most occupied by the customer in the early evening. Place the trap in protected areas in the back yard, such as in dense foliage. The traps must be placed in areas shielded by wind, out of direct sunlight, and protected from disturbance from humans or animals. Counter-sink the base of each station about 2-3 inches into the ground so they cannot tip over. Service each trap every month.

Integrating In2Care traps into our regular mosquito program is expected to produce enhanced results.

Typical placements in a yard look like this according to the attached Instructions:



The In2Care® Mosquito Trap includes:

- Durable 5L water reservoir
- Lid with click-on mechanism.
- Floater (to carry the gauze strip)
- Green time indicator cap (servicing reminder)
- Optional securing tools (for securing to hard surfaces)
- Refill sachets (gauze, bio-actives & attractant tablets) for reactivation every 4 weeks.

If you have NEVER set up an In2Care Trap, then:

GO TO www.in2care.org for trap setup and instructional video.

Mosquito Control Program Protocol

 **In2Care[®] Mosquito Trap**



Installation

Contents



Refill package **Base** **Lid** **Floater** **Time indicator cap**

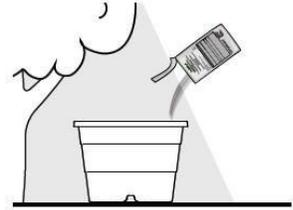
Assembly



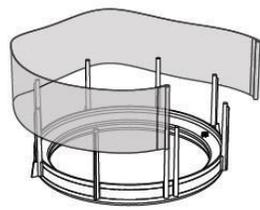
Fill the base with 4 to 5 quarts (3.5 - 4.5 liters) of clean tap water. For placement details see other side of this sheet.



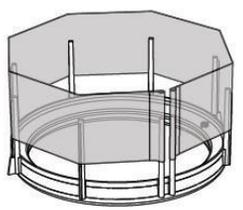
Shake the refill package thoroughly and open it by tearing at the notches. Gently take out the powder-coated piece of gauze.



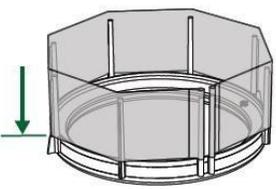
Empty the remaining contents (powder and odor tablets) of the refill package into the water of the trap. Avoiding the gauze from getting wet.



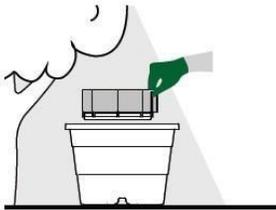
Slide the loop at the ending of the gauze over the pin as shown. Try not to touch the gauze extensively to avoid removal of the active powders.



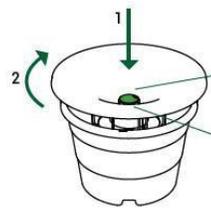
Wrap the gauze around the floater and slide the other gauze loop on the last pin as shown. Work your way around moving the gauze down at each pin.



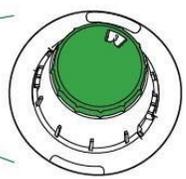
Push the gauze down the pins until it will go no further (where the bottom of the pin hits the circular rib). The rib will prevent the gauze from sliding too far.



Put the gauze-carrying floater inside the trap by gently placing it over the central tube flat onto the water. Prevent the gauze from getting wet as water will degrade the powder.



Place the lid on the central tube, push it down and turn it clockwise.



Turn the time indicator to the number of the current month as a service reminder.



Note: The In2Care Mosquito Trap slowly kills adult *Aedes* spp. mosquitoes. The contents of the trap therefore may not contain high numbers of dead mosquitoes. However, the trap kills the mosquito larvae that emerge from the eggs that are laid inside the trap, prior to larvae transforming into adult mosquitoes. This means that small living larvae may be encountered in the trap that will eventually die. The exiting adult female *Aedes* spp. mosquito itself is contaminated with a growth regulator and slow acting adulticide, so that she can carry the growth regulator to other breeding sites (in the vicinity of the trap). She will be killed by the growth regulator within a few days.

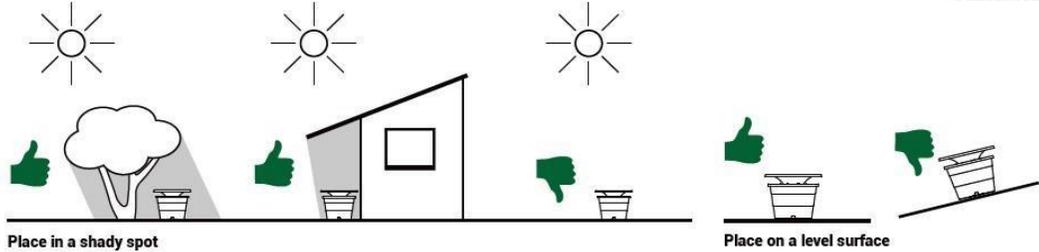
Mosquito Control Program Protocol

 **In2Care**® Mosquito Trap



Maintenance

Placement



Place in a shady spot **Place on a level surface**

Recommendations

For an optimal efficacy of the activated In2Care Mosquito Trap, ensure high trap coverage (1 trap per 400m²/10-15 per acre) in the selected treatment area and remove other mosquito breeding sites as much as possible. Do not exceed 15 traps per acre.

For the results, remove and/or empty artificial water containers (flower pots, plastic cups, car tires, etc.) and natural breeding sites (puddles, tree holes etc.). Larger water bodies that cannot be removed or emptied should be (frequently) treated with appropriate mosquito larvicides.

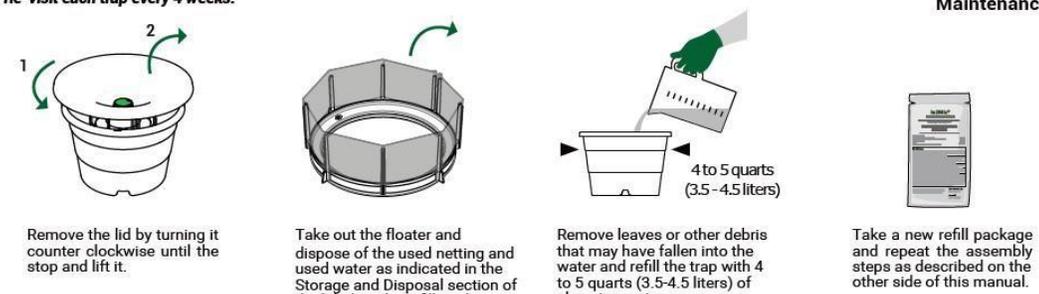
We recommend outdoor trap placement on the ground in a level, shaded location, close to human habitation/houses. In dry areas, check the water level inside the trap regularly and add more water when needed.



Evenly distribute traps over available space

Maintenance

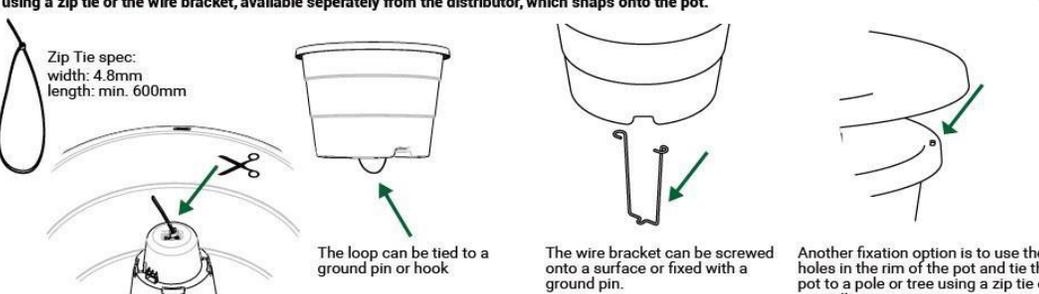
Re-visit each trap every 4 weeks.



- Remove the lid by turning it counter clockwise until the stop and lift it.
- Take out the floater and dispose of the used netting and used water as indicated in the Storage and Disposal section of the label on the refill package.
- Remove leaves or other debris that may have fallen into the water and refill the trap with 4 to 5 quarts (3.5-4.5 liters) of clean tap water.
- Take a new refill package and repeat the assembly steps as described on the other side of this manual.

Fixating

When traps are disturbed by animals, stability can be improved by fixating the trap to the ground using a zip tie or the wire bracket, available seperately from the distributor, which snaps onto the pot.



Zip Tie spec:
width: 4.8mm
length: min. 600mm

The loop can be tied to a ground pin or hook.

The wire bracket can be screwed onto a surface or fixed with a ground pin.

Another fixation option is to use the holes in the rim of the pot and tie the pot to a pole or tree using a zip tie or a small rope.