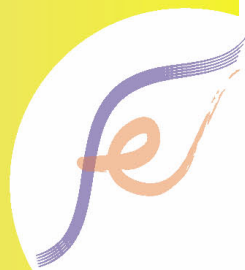


# Section four

## Suggested solutions to Mosquito Breeding



FEHD



# I. Suggested solutions to Mosquito breeding in construction sites

## Ground puddles

- \* Fill depressions.
- \* Treat puddles of water with larvicidal oil or insecticides such as sand granular insecticide according to the instruction label on the insecticide used.

## Working areas

- \* Provide a pitched roof to the container offices.
- \* Inspect canvas/plastic sheets regularly to prevent water accumulation.
- \* Stop using canvas/plastic sheets to cover construction materials if possible.
- \* Cover containers/receptacles with tightly-fitting lids.
- \* Store containers/receptacles away from rain in covered corner/sheltered place.

## Materials storage and stacking

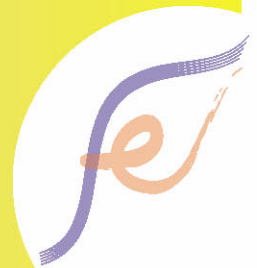
- \* Store construction materials or equipment away from rain under shelter.
- \* Dispose of all unwanted materials or receptacles.

## Bamboo scaffolding

- \* Use metal poles instead of bamboo poles for scaffolding.
- \* Seal the bamboo ends with suitable filling materials such as sand.
- \* Drill holes at the end of each vertical bamboo pole.

## Water storage tanks

- \* Install anti-mosquito screens to water tank outlets.
- \* Inspect tanks for mosquito breeding and cover properly after inspection.



# II. Suggested solutions to Mosquito breeding indoors

## **Domestic receptacles, potted plant saucers and flower vases**

- \* Change water in flower vases daily or at least weekly.
- \* Empty water tray below refrigerators weekly or whenever necessary.
- \* Empty all water from domestic receptacles before leaving the house for a long period of time.
- \* Loosen hardened soil to let water seep through.
- \* Stop using saucers under flower pots if possible or drain away water immediately after watering.
- \* Cover containers properly.

## **Lift shaft**

- \* Ensure that water does not get into the lift shaft during rainy days or while washing the lift lobby.
- \* Pump out accumulated water from the lift trough.

## **Scupper drains**

- \* Cleanse the drains daily to prevent chokes.
- \* Re-grade the channels of the drain with a steeper gradient to ensure smooth water flow.

## **Fire-hose compartment**

- \* Provide holes at the base of the compartment to allow water to drain.
- \* Inspect the fire-hose compartment regularly to prevent unauthorized usage.

## **Trays underneath air conditioners**

- \* Remove water in trays weekly or ensure it is properly drained away.

## **Pipe pan collar**

- \* Seal pan collar gaps with cement.



# III. Suggested solutions to

# Mosquito breeding outdoors

## **Plant axils, tree holes, bamboo stumps, potted plants and fallen leaves/barks**

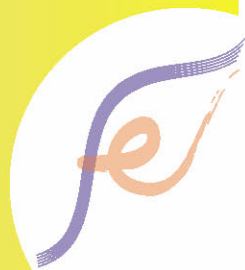
- \* Replace problematic plants with those that do not collect and hold water.
- \* Drill holes at plant axils as appropriate.
- \* Treat the axils with insecticides such as sand granular insecticide according to the instruction label on the insecticide used.
- \* Apply larvicidal oil or pesticide to tree holes and fill depressions and bamboo stumps with suitable filling material such as sand / soil as appropriate.
- \* Stop using saucers for potted plants.
- \* Loosen hardened earth in pots regularly.
- \* Remove fallen leaves/bark regularly.

## **Roof gutters, roofs, canopies and canvas/plastic sheets**

- \* Clean the gutters/roofs/canopies once a week to avoid choking with leaves or silt.
- \* Treat gutters with insecticides such as sand granular insecticide according to the instruction label on the insecticide used.
- \* Remove roof gutters as far as possible.
- \* Maintain drainage pipes of the canopy and roof regularly to prevent choking.
- \* Re-grade the floor of the concrete canopies/roofs to flow towards the drainage pipe.
- \* Stop using canvas/plastic sheets to cover motorcycles or other paraphernalia.
- \* Inspect canvas/plastic sheets regularly to avoid water accumulation.

## **Subterranean pits & chambers and key holes**

- \* Use tight fitting covers for pits and chambers.
- \* Seal key holes.
- \* Re-design covers to do away with opened key holes.



# III. Suggested solutions to

## Mosquito breeding outdoors

### Choked drains, gully traps and sand traps

- \* Cleanse drains and gully/sand traps regularly to prevent choking.
- \* Improve gradient of drains to prevent accumulation of water.
- \* Change gully trap covers to non-perforated type if gully trap does not receive water.
- \* Treat the gully/sand trap with a larvicide such as sand granular larvicide according to the instruction label on the insecticide used.

### Hollow metal rods

- \* Seal the end of hollow metal bollards or rods.
- \* Replace worn part of the hollow metal rods.
- \* Cover metal rod holders with lids or plugs to prevent accumulation of water.

### Outdoor structures, barbecue pits and playground equipment

- \* Treat fake rocks/depressions in structures with mosquito larvicides such as *Bacillus thuringiensis* subspecies *israelensis* or sand granular insecticide according to the instruction label on the insecticide used.
- \* Avoid using fake rocks if possible.
- \* Cover the barbecue pits when not in use.
- \* Inspect playground equipment regularly to avoid the accumulation of water.
- \* Introduce larvivorous fish into the ponds.
- \* Avoid using aeration slabs if possible, or fill the hollow with earth and carry out replanting of grass to prevent soil erosion.
- \* Use concrete to level off surfaces of fake rocks which can accumulate water.

# III. Suggested solutions to

# Mosquito breeding outdoors

## **Bamboo pole holder**

- \* Cap bamboo pole holders when not in use.

## **Abandoned vehicles, tyres and articles**

- \* Request the authorities to tow away abandoned vehicles for disposal.
- \* Remove discarded tyres and other articles for disposal.

## **Water Taps**

- \* Re-grade uneven ground at the base of the water taps to drain away excess water.
- \* Recap the cover of the tap after use to avoid water accumulating in the cover.
- \* Redesign the water tap cover to drain away the water.

## **Air Handling and Cooling Towers**

- \* Keep discharge outlets open to avoid water accumulation if the units are not in use.
- \* Remove the units if they are no longer in use.

## **Containers**

- \* Cover with lid.
- \* Store containers under shelter.

## **Air conditioner water trays**

- \* Inspect trays regularly and drain away water properly.

## **Litter bins**

- \* Provide drainage holes at the base of bins.
- \* Ensure that drainage holes are free of chokes.

## **Anti-bumping tyres**

- \* Puncture with big holes.

## **Ground puddles**

- \* Fill up depressions.

## **Water storage tanks**

- \* Inspect closely and cover properly after inspection.

