

Monitoring

Most species of fruit fly respond to synthetic lures (also called pheromones or para-pheromones). These lures are attractive to male fruit flies, although females are occasionally caught in traps, particularly if large numbers of males have already been caught.

Male traps

Lynfield traps are used by DAFWA to monitor for Medfly. The trap is a vertical plastic 1 litre jar, with a white screw-on lid. Four holes 2.5 cm in diameter allow fly entry.

- **Lure:** Capilure® wicks or Magnet™ plug (commercial preparations of trimedlure). Wicks consist of 2 mL Capilure® soaked into cotton held together by a metal clip. Magnet™ plug is a solid form of Capilure®.
- **Killing agent:** DDVP (dichlorvos) is used to kill flies that enter the trap. A square centimetre of DDVP is placed on the bottom of the trap.
- **Longevity:** Both the lure and DDVP should be changed every 3 months.
- **Trap range:** About 25 m. Medfly does not normally move more than 50 m, unless no suitable hosts are available.
- **Availability:** Lynfield trap and Capilure® wicks are not yet commercially available, but may be purchased from the Department of Agriculture and Food.



Lynfield trap - wicks soaked in Capilure® are hung from the lid



McPhail trap

Female traps

Female traps differ from male traps in that they have a base that can also hold liquid attractants.

McPhail traps consist of a plastic container with a clear dome mounted on a yellow base. The base of the trap clips into position. Flies enter the trap through a hole in the base.

Tephri traps comprise a yellow base fitted with an opaque lid. Four fly entry holes, 2.1 cm in diameter, are 90 degrees to each other.

Availability: Commercially available.

Lures consist of either two (2-part) or three sachets (3-part) of ammonium acetate, putrescine and trimethylamine. The food-based lure attracts both male and female Medflies.



Tephri trap

Setting monitoring traps

Place traps in fruiting trees (if present) about 1.5 m from the ground, in shade and in the middle of the block of trees. If using both male and female traps, these should be installed in pairs, 25 m apart. Traps should be moved to each block within an orchard as the crop ripens for maximum effect.

How many traps do I need?

At least two traps per hectare (one male, one female) or a minimum of four traps per orchard (two male, two female).

What do the trap catches mean?

An **action threshold** is the point at which a treatment must be applied to prevent pest numbers from causing economic damage.

Scoring system of trap counts

Medfly caught/trap/week	Action required
1-4	Weekly bait spraying
5-9	Twice-weekly bait spraying
10 or more	Twice-weekly bait spraying, cover spray if necessary

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