

# TORULA YEAST PELLETS & BALL TRAP

(or McPhail type Traps)

Attractant trap for fruit fly species which respond to torula yeast such as *Bactrocera tyroni* & *Ceratitis capitata*

## BACKGROUND

The Fruit fly is a major pest in high value horticultural crops throughout Australia. In Western Australia growers battle with Mediterranean fruit fly (*Ceratitis capitata*). It attacks a range of cultivated fruits and some fruiting vegetables. In recent years Medfly has been detected in parts of SA and with a changing climate it is expected to continue to move towards the Eastern states and become a permanent pest in SA and parts of Victoria. The other major Fruit fly pest to Fruit growers in the Eastern states is Queensland fruit fly (*Bactrocera tyroni*) or QFF and with a changing climate is expected to keep moving South west from Victoria into SA and possibly TAS & WA

Both these fruit fly pest are currently managed by using baits and cover sprays. The use of baits is the best IPM compatible method of management but requires very effective monitoring techniques to know when the most optimal time is to start the baiting process. Female flies emerge from the soil in early spring and the very first thing they want is a rich protein based feed to give them the energy needed to reproduce. Torula yeast is a rich source of natural protein that fruit fly feed on in the wild, so is highly attractive for young emerging females looking for a protein meal. The Torula Yeast tables are a very convenient way of dosing the the large ISCA ball traps as a very effective method to monitor for female emergence and knowing when to start applying the lure & kill baits.

## INSTRUCTIONS

1. The instructions for the ISCA Ball Trap™ may be applicable for other McPhail type traps. However, note the larger volume of the ISCA Ball Trap and follow the instructions applicable for the McPhail type trap. Twist off the clear plastic top of the ISCA Ball Trap™. If your ISCA Ball Trap has a lure receptacle at the top of the trap, the cover of the receptacle should remain closed. Traps with Torula Yeast solution attract more female than male olive fruit flies. For additional attraction of male fruit , the olive fruit fly pheromone lure (product code IT079P40) can be placed in the lure receptacle of the ISCA Ball Trap.
2. Fill the yellow (or colored) plastic bottom of the ISCA Ball Trap with water (almost to the rim). The water level can be filled to about 20 mm from the rim of the plastic bottom.
3. Based on a ratio of 1 pellet for every 300 ml of water, drop the Torula Yeast Pellets into the water. For the ISCA Ball Trap, 3 pellets are typically used.

### PRODUCT CODE:

55575 Ball Trap, 55992 Torula Yeast Pellets

### TORULA YEAST PELLET FIELD LIFE:

4 to 8 weeks depending on environmental conditions. May require water replenishment due to evaporation.

### SHELF LIFE:

2 years or more if properly stored.

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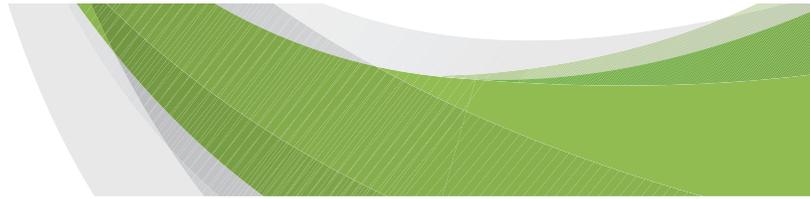
### Pictures and Illustrations:



ISCA Ball Trap in yellow.



Torula Yeast Bait Pellets in a 907g container.



## TORULA YEAST & BALL TRAP (CONTINUED)

### Attractant for flies

4. Twist the clear plastic top of the ISCA Ball Trap in place and hang the trap up on the fruit trees using the provided string or wire. The pellets go through a fermentation process, so please allow approximately 2 to 3 days for the attraction to take effect depending on the ambient temperature.
5. (Optional) If using the Medfly plug pheromone lure for additional attraction, remove the lid from the lure, place the entire vial in the upper lure basket of the ball trap and close the lid of the basket.
6. Depending on wind and temperature, and your preferences, the water should be replenished when it evaporates below 1/2 of the water volume.
7. Depending on weather and environmental conditions, the field life of the Torula Yeast solution is around 4 to 8 weeks. For your first time of use, you should monitor the level of attraction based on a) how strong you want the attraction and b) the level of fruit fly infestation, to determine when you should dispose the solution and start with a new batch of pellets. The duration of the fruit fly attraction typically declines gradually after 4 weeks, but will continue to be effective for approximately an additional month.
8. Trap Placement: Traps are hung on the south side of the tree in winter and on the northside in the summer. Place traps on the inside of the canopy of fruiting trees, in open shade, with ~25cm of clearance from foliage.
9. Trap density for the ISCA Ball Trap with Torula Yeast Pellets is dependent on many factors, such as: purpose (e.g. detection, monitoring, mass trapping, or mass trapping used in combination with other pest control methods), infestation level fruit/crop use and economic damage threshold. For monitoring purposes, we recommend placing 4 trap(s) per hectare in the early part of the season and doubled in Dec-Jan if sting levels go above the monitoring threshold of 3%. For monitoring purposes, we recommend placing 2 traps per hectare. For mass trapping purposes, we recommend placing 50-100 traps/ha. When appropriately deployed, the Ball Trap with Torula Yeast Pellets can provide good management of fruit fly in areas with low to medium infestation levels. Use 1 more additional trap in some paddocks in the middle of the field to monitor fruit fly movements inside the field. If numbers are high in these middle field traps then control programs are not working to economic thresholds and more needs to be done.

**For further instruction refer to [https://youtu.be/LISJuo1Q\\_T8](https://youtu.be/LISJuo1Q_T8)**

### STORAGE INFORMATION

1. Unused Torula Yeast Pellets should be stored in the provided air-tight container or bags e.g. Ziploc bags, and placed in a cool and dry place.
2. Plastic McPhail Traps and ISCA Ball Traps can be stored preferably in a closed box to prevent dust build up.