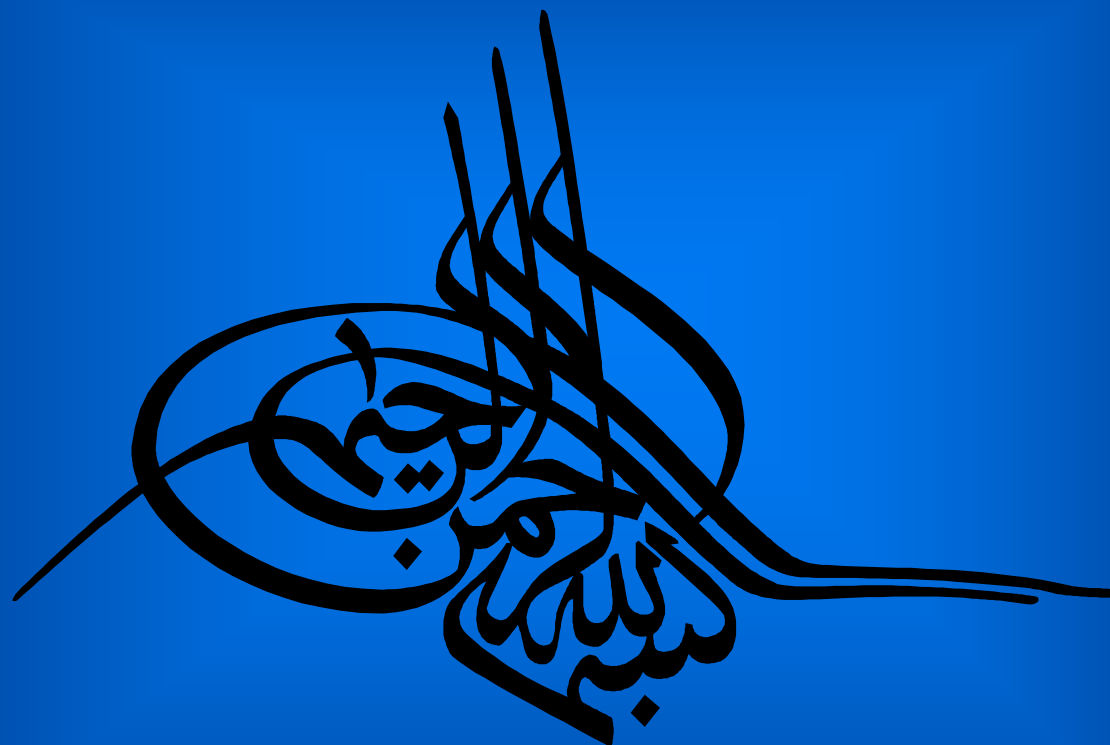




# کنترل غیر شیمیایی آفات با استفاده از قله ها

آموزشکده سمنگان  
تهیه کننده: مهندس مهرگان  
بهمن ۹۸

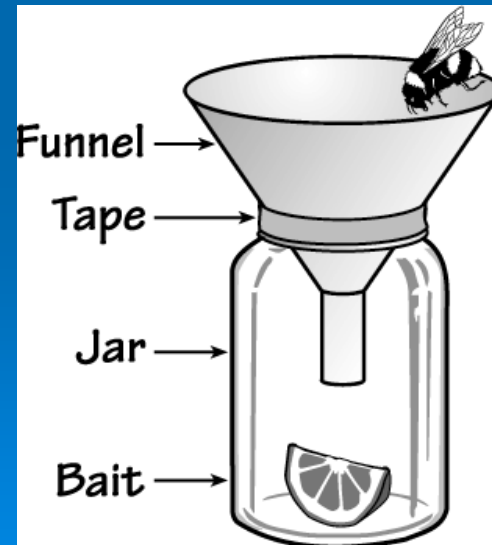
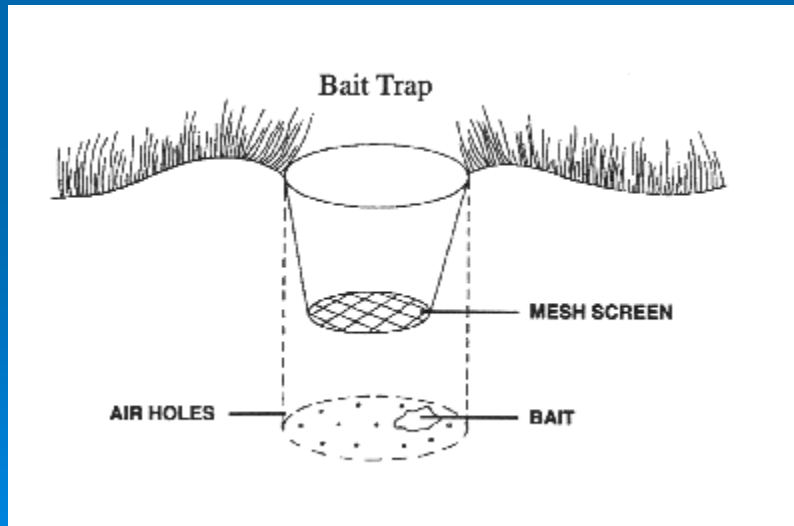
# Trapping

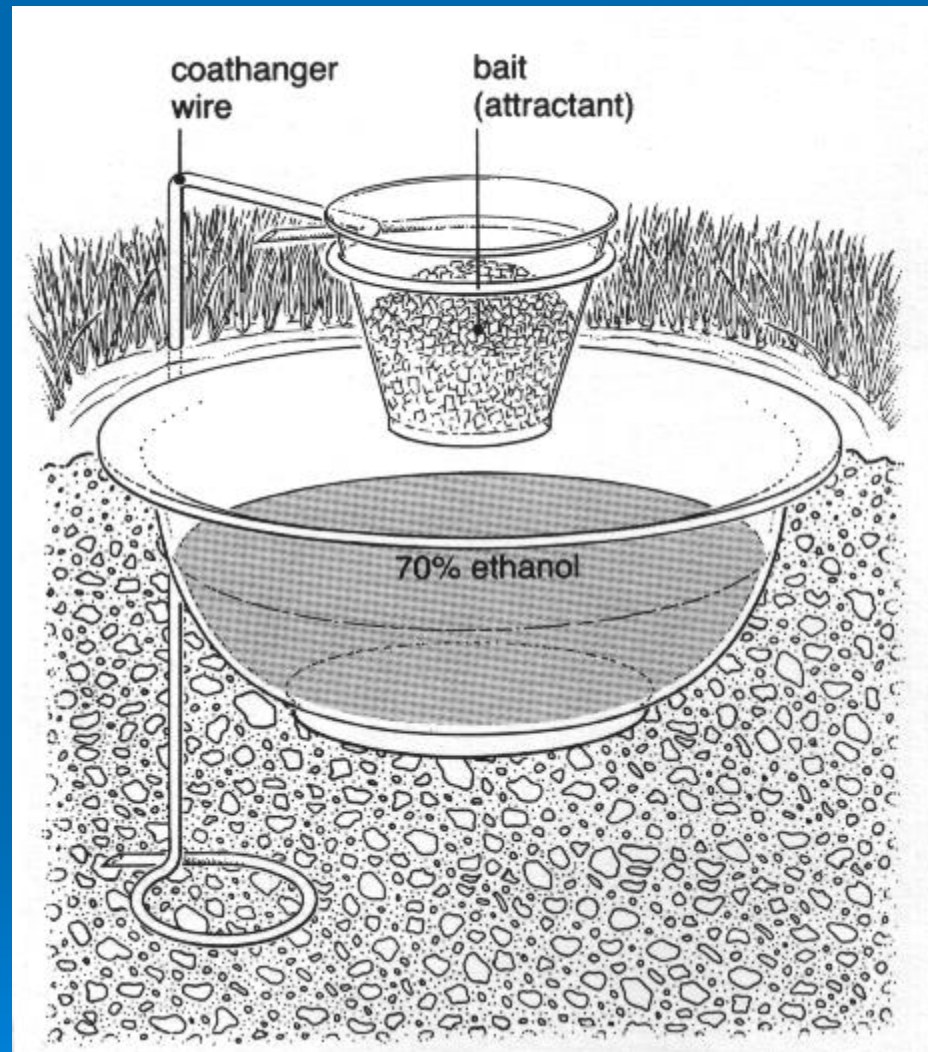
## Bait Traps

brown sugar, molasses, or syrup

peaches, bananas,  
Methyl eugenol,  
protein hydrolyses

Dead animals, rotting foods, and dry cereals  
are good baits for various crawling insects

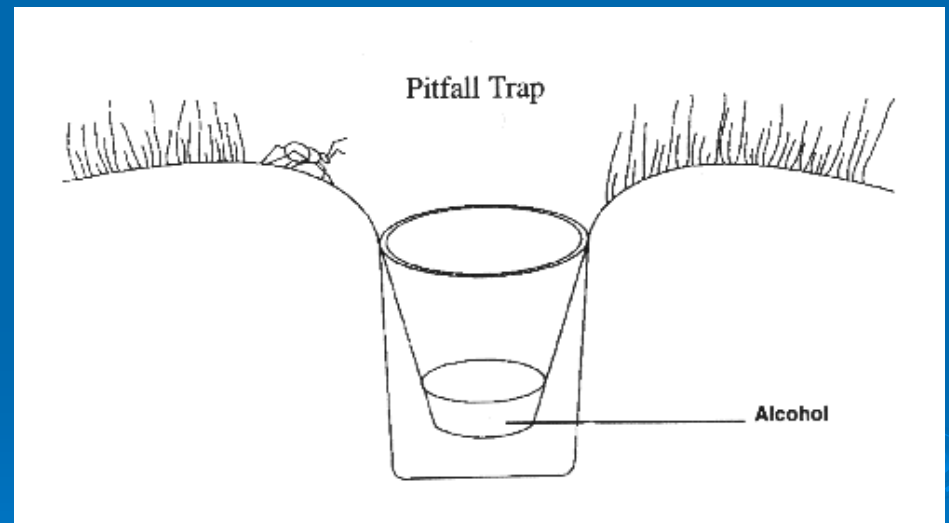
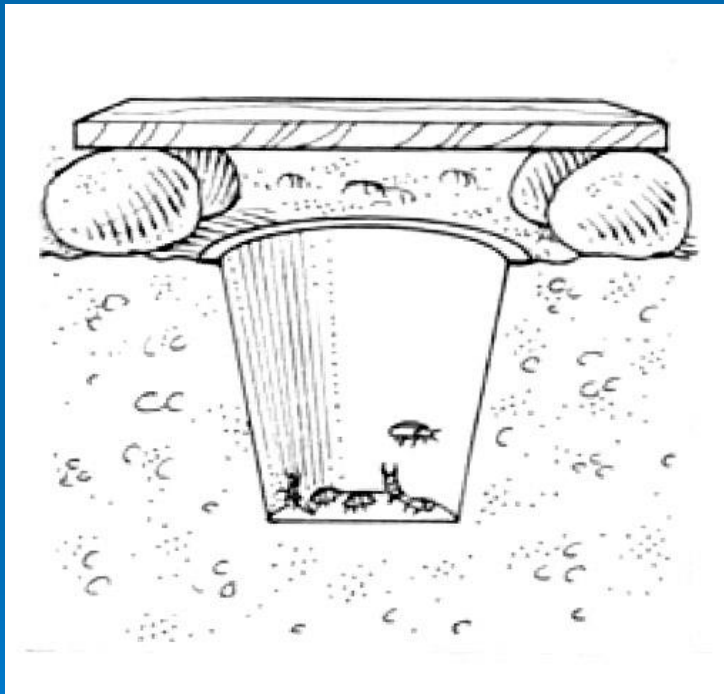




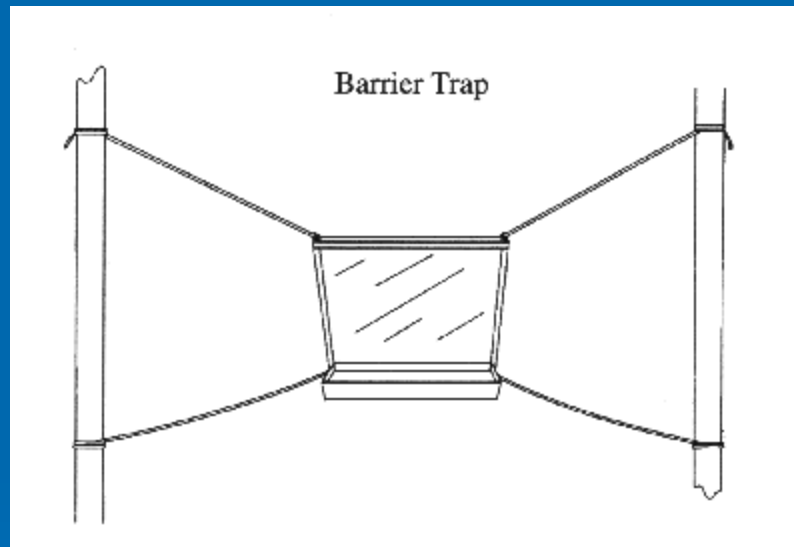
## Way To Catch Wasps, Hornets, Yellow Jackets and Flying Insects



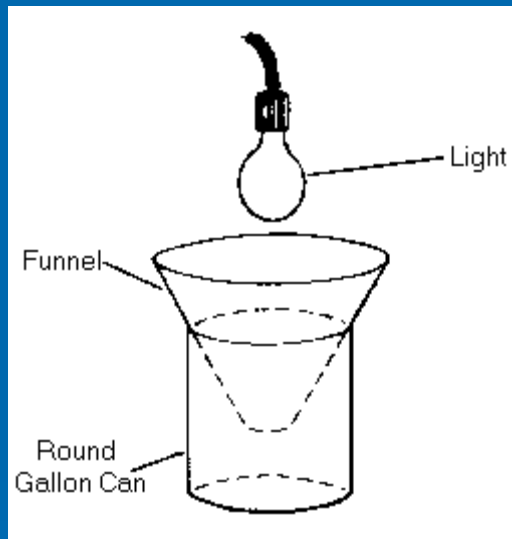
# Pit-fall trap



# Barrier Traps



# Light Traps

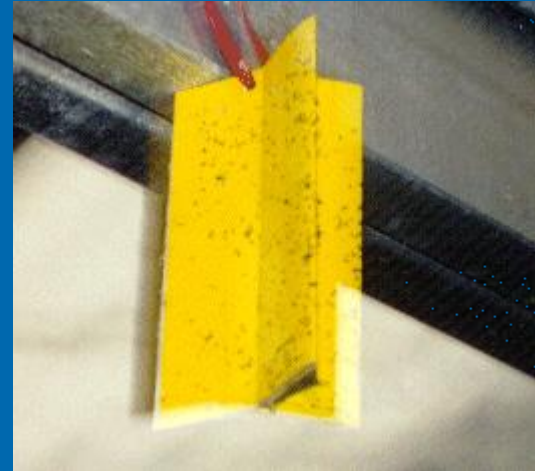


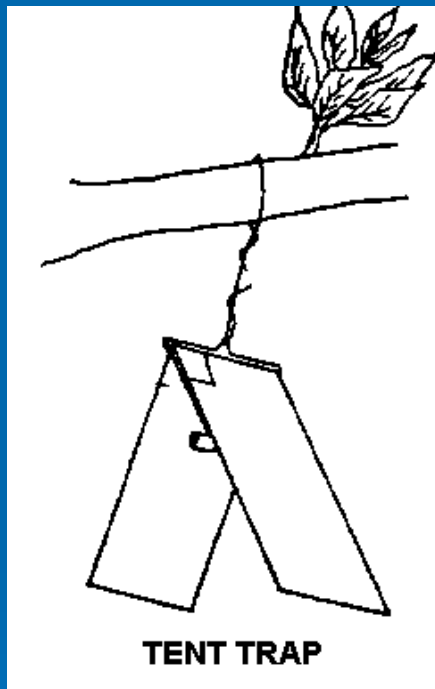
UV light (black light)



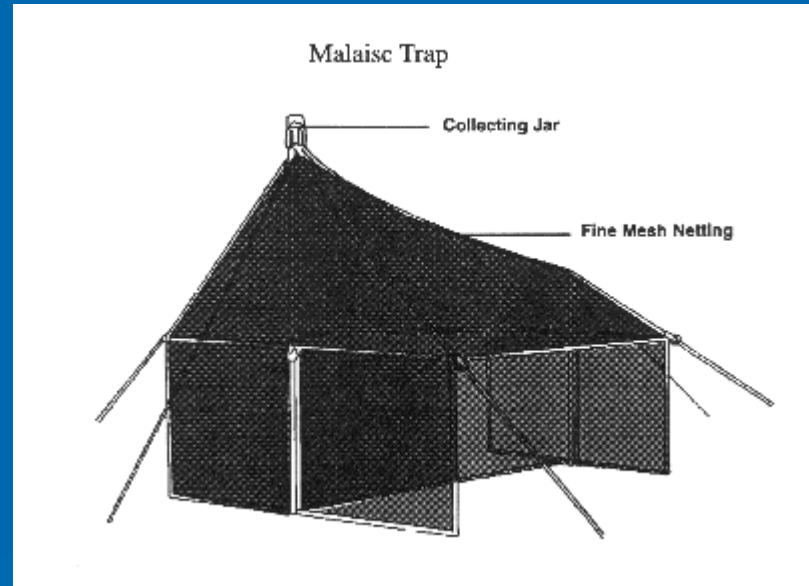


# Color traps





# Malaise Traps



# Plant traps



**Pheromone traps**

**Hormao:** تحریک می کنم

**Pher :** حامل بودن

**A: Primer Pheromone**

**B: Releaser Pheromone**



# **B: Releaser Pheromone**

**1- Alarm Pheromone**

**2- Aggregation Pheromone**

**3- Death Pheromone**

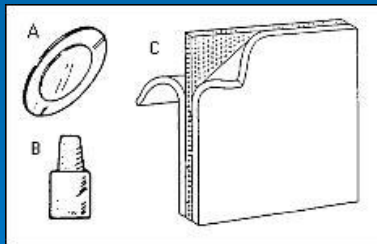
**4- Trail Pheromone**

**5- Sex Pheromone**

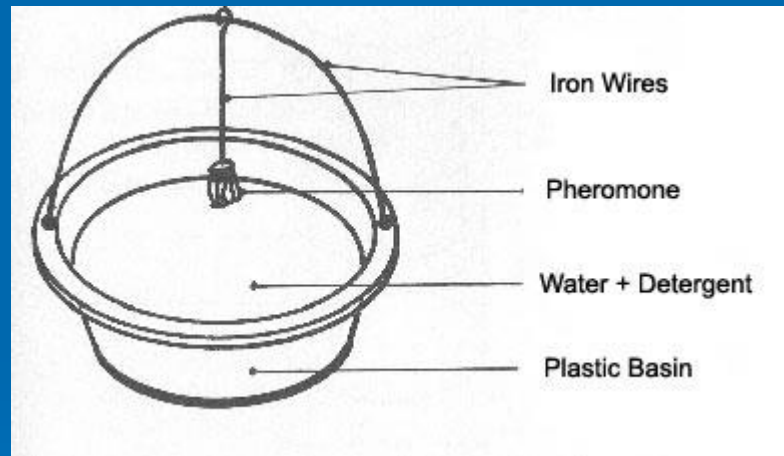


# Virgin females trap

## Sex pheromone trap



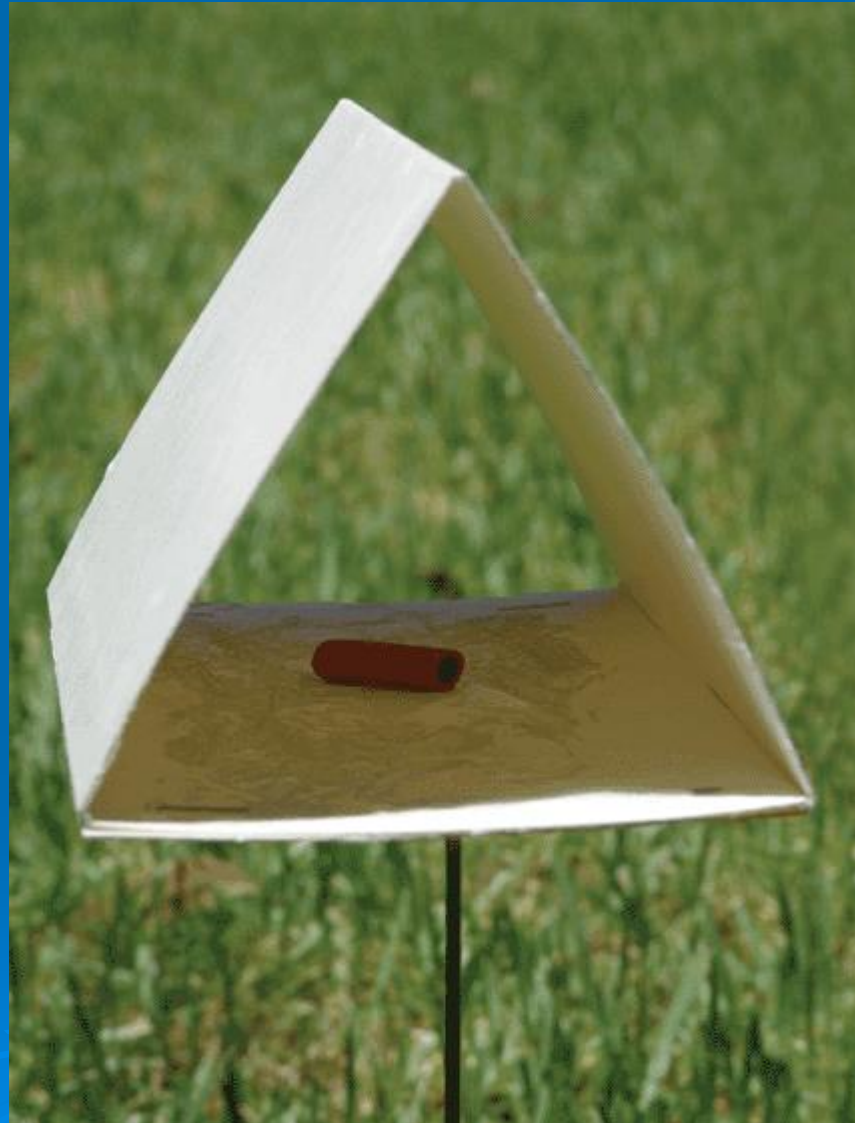
## تله های آبی فرومونی





# Delta trap

PLASTIC DELTA TRAP  
PAPER DELTA TRAP

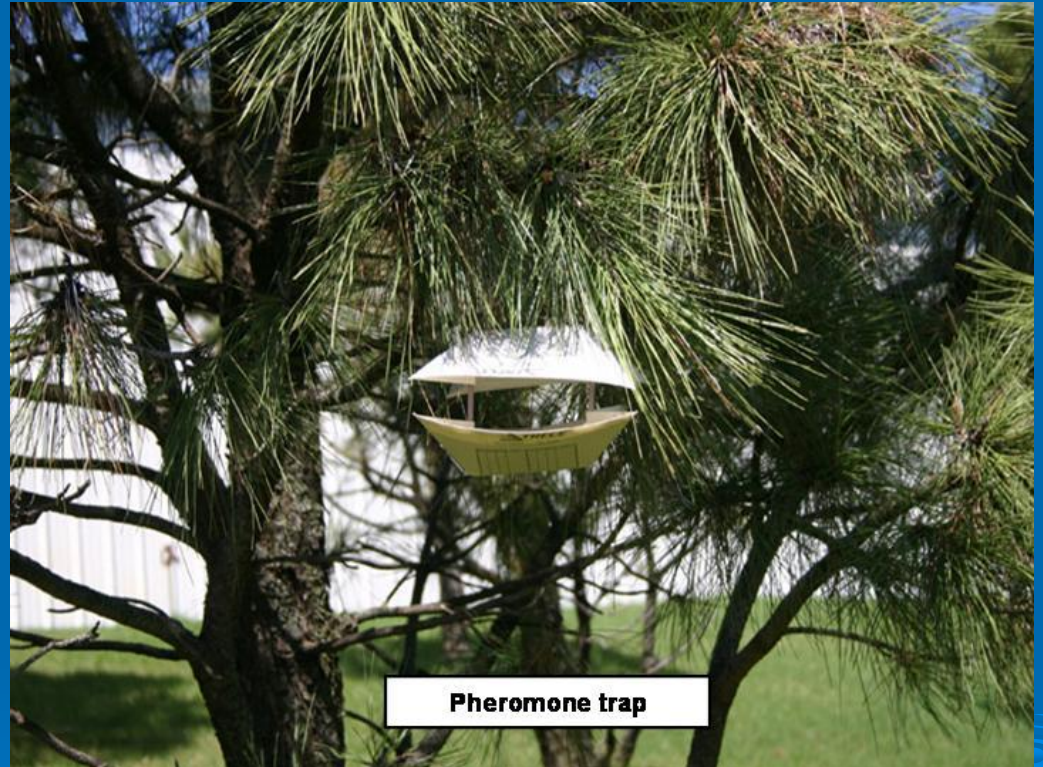
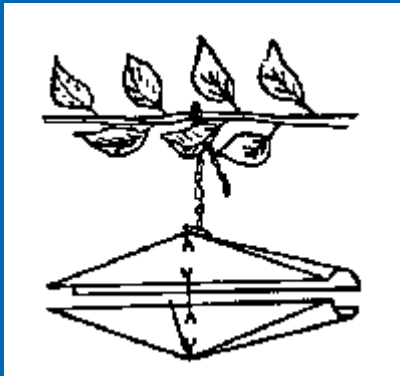






# Wing trap

## تله بالی شکل



# Funnel trap

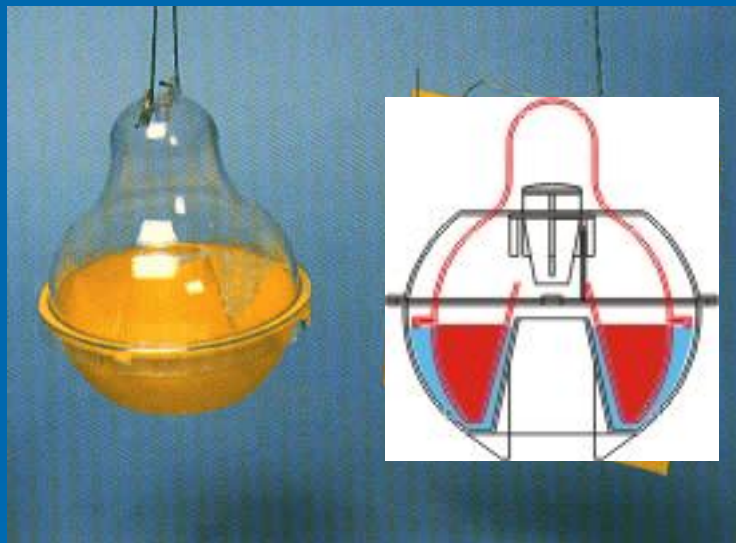
## تله قیفی





# Dome trap

تله کنبدی







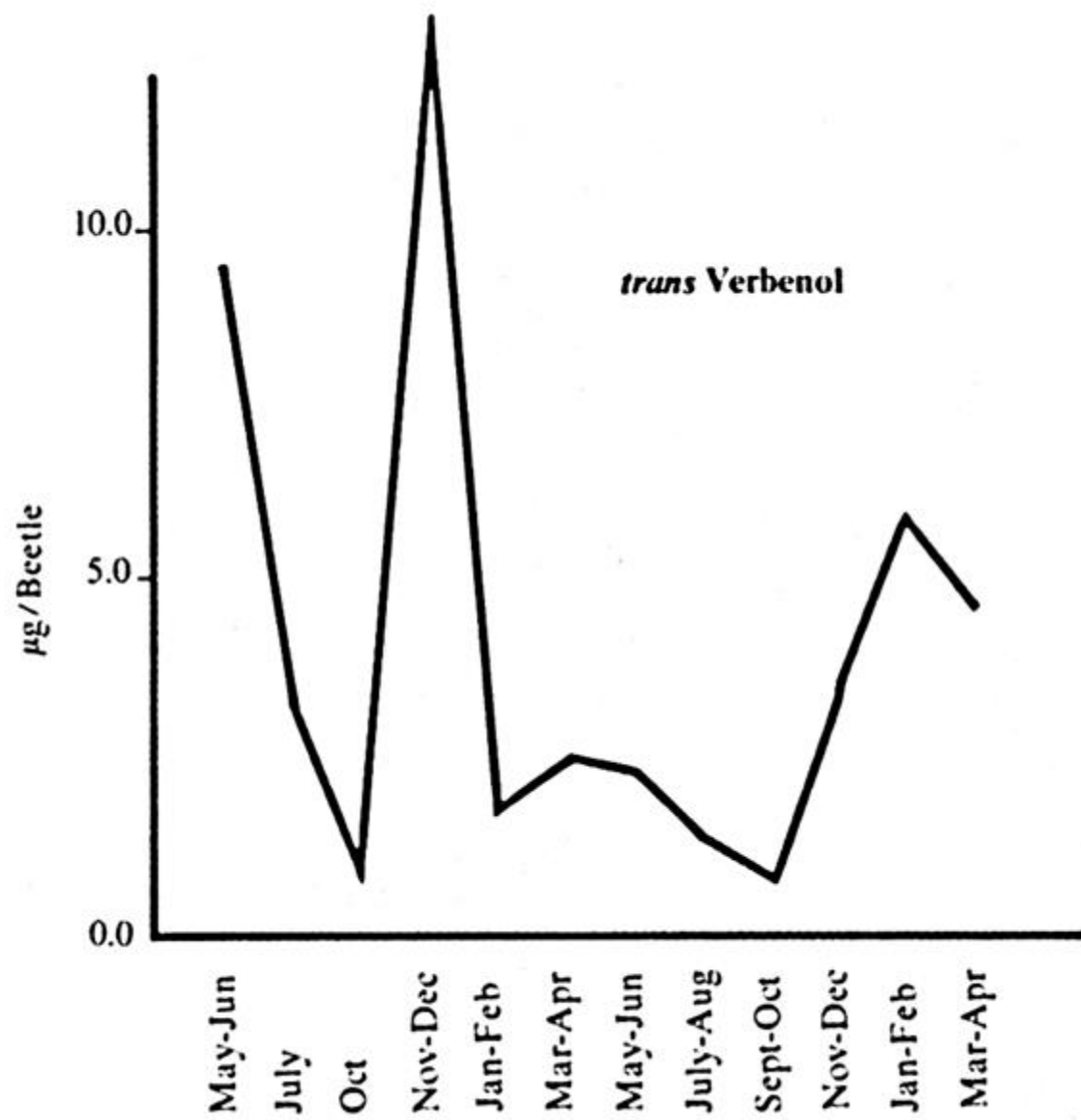
Steiner trap (Queensland modification) with cotton wick soaked in cue lure

There is also a filter paper strip soaked in dichlorvos

© IMW 1990

استفاده از فرومون ها در مدیریت تلفیقی آفات

- 1- Detection
- 2- Monitoring
- 3- Luring and kill
- 4- Mass trapping
- 5- Mating disruption or Confusion



# 1- Imbalance in the pheromone mixture

## 2- Habitation

