

# **Environmentally Friendly Practices to Deal with Pests**

THPRD intern staff researched environmentally friendly practices to deal with pests that don't require poison since it is not allowed to be used in the community gardens. Below you will find options to deter moles, rats, voles, and bugs. Hyperlinks have been placed throughout the document for gardeners to easily view the information in full.

## How to deter moles:

Moles are the frustrating critters that create mounds in yards and gardens. Here are some solutions:

- Traps:
  - Traps are allowed as long as there is no poison involved. They must be in concealed areas within the plot and out of reach of children.
  - THPRD is not responsible for the removal of carcasses.
- Liquid solutions:
  - o Three parts castor oil and One part dish soap. Apply castor oil by itself with a cotton ball
  - Mixing 6 ounces of 100 percent unrefined castor oil with 2 tablespoons of liquid detergent in 1 gallon of water. Spray it whenever you see a tunnel or holes because moles don't like the taste or smell of castor oil. This solution must be reapplied regularly.
- Aromatics:
  - Spread coffee grounds or red pepper in your garden plot as a natural repellent. Moles have sensitive noses and typically will not enter areas with strong smells.

## **How to deal with rats:**

#### Solutions:

- Traps:
  - Traps are allowed as long as there is no poison involved. They must be in concealed areas within the plot and out of reach of children.
  - THPRD is not responsible for the removal of carcasses.
- Liquid solutions:
  - Peppermint oil. Soak some cotton balls in peppermint oil and place throughout the plot
  - Multi-ingredient mix. 1 cup of water or 70% rubbing alcohol, 2 teaspoons of peppermint
    oil, 1 bag of large cotton balls, 1 8-oz. glass spray bottle, shake the bottle, <u>spray the</u>
    <u>solution on cotton balls and place them at entry points and other rodent-prone areas.</u>
- Spicy rat deterrent:
  - o 1 tablespoon of tabasco sauce
  - o 1 tablespoon of black pepper oil
  - 1 cup of vegetable oil
  - 1 cup of distilled water
  - 1 garlic clove

- o 116-oz. glass spray bottle
- o Mix them all into a spray bottle and spray them in your garden plot.

#### How to deal with voles:

- Traps are allowed as long as there is no poison involved. They must be in concealed areas within their plot.
- Garlic:
  - Crush a whole garlic and place it around your plot.

Or

- 6-cloves of garlic peeled and sliced fine.
- 2-quarts of tap water or purified water.
- 1 TBSP natural soap (Castile is a good type)
- 1 Spritzer bottle.
- 1 Mason Jar with lid (recycled jar works fine too)
- o In a sauce pot, warm water until it begins to steam. Add sliced garlic and maintain temperature for 20 minutes. Allow water to cool, Remove garlic from water and discard (compost.) Add soap to spritzer bottle. Using a funnel, add enough water to fill the spritzer bottle almost full but leave at least 1/2 inch of room. Put the lid on the spritzer bottle and shake slightly when ready to use. Spray plants early in the morning or in the evening time after the hottest part of the day have passed. Several applications may be needed. Avoid using the spray on hot days as the liquid and sunlight may burn the plants. The extra liquid can be stored in the jar in the fridge for up to two weeks.
- Three parts castor oil and One part dish soap:
  - Apply castor oil by itself with cotton balls

or

- o "...mixing 6 ounces of 100 percent unrefined castor oil (re-fined is suitable, but expensive) with 2 tablespoons of liquid detergent in 1 gallon of water."
- o Spray it whenever you see a tunnel or holes because they don't like the taste or smell of castor oil. They must be re-applied regularly
- Hot peppers: "To get rid of voles naturally, mix chopped hot peppers with water and earth-friendly dish soap. Put this mixture in a spray bottle and spray the spots where you suspect the voles are. This spray will keep voles away from your plants and will not harm your plants or the environment."

## How to deal with slugs and snails:

Use this link <u>10 Best Ways To Control Slugs and Snails Organically - Gardening | Learning with</u>
 Experts

### How to deal with cucumber beetles:

- Neem Oil
- Yellow sticky traps

- Dust your plants with food-grade diatomaceous earth (DE), a fine powder-like substance made from fossilized marine life.
- "The smell and taste of garlic and hot peppers can serve as a deterrent to the cucumber beetle. You can make your own spray by mixing several crushed garlic cloves, 1 tablespoon of dried hot peppers, and 1 tablespoon of Castile soap like Dr. Bonner's or Dr. Wood's, in one gallon of hot water. Let the mixture steep for one hour then cool completely. Strain the mixture and do a test spray on one leaf. If there is no negative reaction, spray the rest of the plant. Like most other sprays, do not apply when the sun is out or it could burn your plants. I use this sprayer and this sprayer for a wide variety of applications."
- Remove infected plants

## How to deal with aphids

• Aphid Control: How to Get Rid of Aphids on Plants | The Old Farmer's Almanac