

# Ask Dr. Vege - Garden Pests and Other Undesirable Bug-A-Boos

What's eating my garden? The following make the 'Ten Most Hated' list (alphabetically):

## 1. Aphids

- **Aphids** are small, soft-bodied insects that are usually found on the underside of the leaves and stems of plants.
  - Most aphids are green or yellow in color, but others are pink, brown, red, or black. Heavy infestations can yellow or distort leaves and stunt the plant's growth.
  - Aphids feed in groups and release honeydew, a sticky, sugary substance that attracts ants and leads to sooty mold, causing black growth all over the plant.
  - Aphids like to feed on cucumbers, peppers, radishes, Swiss chard and tomatoes.
- **Aphid treatment.** Because they are so small and reproduce rapidly, they can become an infestation quickly.
  - Spray insects off the leaves with a jet stream of water.
  - Release aphid predators, lacewings and ladybugs, onto infested plants.
  - Companion plant flowering herbs like yarrow to attract aphids away from peppers.
  - Prune out heavily infested leaves.
  - In extreme cases, it may be necessary to treat with Neem Oil. Always follow label instructions.



Aphids



Sooty Mold

## 2. Bulb mites

- **Bulb mites** are the most common garlic pest. They are very tiny, less than one mm in length.
- **Bulb mites** stunt the growth of the bulb causing it to shrivel and rot in the ground or even later after harvest. Damage is indicated by tiny holes in the bulb.
- **Bulb mite treatment**
  - Purchase healthy bulbs from a reliable source.
  - Maintain healthy soils by adding compost. Healthy soils support predatory mites.
  - Add beneficial nematodes that target bulb mites.
  - Treat cloves to be planted with hot water before planting them. Soak seed cloves in hot water, 130 degrees, for 10-20 minutes. Use a cooking thermometer because any higher temperatures will damage the bulbs.
  - Remove and destroy infested bulbs and foliage.
  - Crop rotation, planting crops in different garden locations a 3–5-year cycle, helps control the population of mites.



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Bulb mite damage

### 3. Cabbage Loopers

- **Cabbage loopers** are small, pale green caterpillars with white lines that run down the sides of their bodies. They arch their bodies as they crawl along (think inchworm).
- **Cabbage loopers** feed on the plant's leaves leaving small holes and are especially fond of cucumbers and radishes.
- **Cabbage Looper treatment**
  - Release beneficial insects and natural enemies like parasitic wasps.
  - Pick off worms and eggs by hand or trim off heavily infested leaves.
  - Apply *Bacillus thuringiensis*, an organic control method that kills the larvae.



Cabbage Looper

### 4. Cutworms

- **Cutworms** are the caterpillars of moths.
  - The variegated and the black cutworm caterpillars are the two most likely to attack cucumber, pepper, radish and tomato plants.
- **Cutworms** cut down young plants to the soil level and eat the leaves.
  - They are nocturnal, feeding at night and hiding during the day in leaf debris or in the soil. When disturbed, they curl into a 'C' shape.
- **Cutworm treatment**
  - Make foil collars that extend 2-3 inches into and above the soil line.
  - Handpick larvae off and dispose of them. Use a flashlight to find them at night.
  - Spread diatomaceous earth around the base of the plant. The fine powder dehydrates them. Always follow label instructions.
  - Remove all plant debris at the end of each growing season to reduce the occurrences of overwintering.



Cutworm moth and its larvae

## 5. Flea Beetles

- **Flea Beetles** are very small, measuring between 1.5- and 3-mm. They are dark in color and iridescent. They get their name because they jump like fleas when disturbed.
- **Flea Beetles** are more detrimental to young plants.
  - They feed on the leaves leaving holes or pits. They especially like cucumbers, radishes, Swiss chard and tomatoes.
- **Flea Beetle treatment**
  - Use floating row covers before the infestation.
  - Plant 'trap crops' nearby as a preventative measure; cruciferous plants like radishes attract flea beetles the most.
  - Apply a layer of mulch under the plants to prevent beetles from reaching the top of the soil.
  - Dust leaves with plain talcum powder. It repels flea beetles.
  - Use diatomaceous earth or Neem oil to control the population. Always follow label instructions.



Flea Beetle

## 6. Hornworms – the most well-known tomato pests

- **Hornworms** are blue-green worms that grow to be 3-4 inches long. They have a horn on the second to last body segment and 7-8 white stripes diagonally on the sides of their bodies.
- **Hornworms** can devour large amounts of the plant's leaves and even the small green tomatoes in a relatively short time.
- **Hornworm treatment.** Since they grow to be quite large, handpicking is the best method of treatment.



Tomato Hornworm

## 7. Leafminers

- **Leafminers** are small, black and yellow flies that usually appear in late summer. The warm weather shortens their lifecycle to about two weeks. This allows for 7-10 generations in a year.
- **Leafminers** tunnel through the leaves leaving tracks. They lay their eggs in these tracks and on the surfaces of the leaves.
  - Leafminers are particularly fond of garlic, Swiss chard and tomatoes.
- **Leafminer treatment.**
  - Inspect tomato plants at purchase time for tracks. Leafminer larvae have many natural enemies such as parasitic wasps that usually take care of the problem.
  - Neem Oil can also be useful in controlling heavy infestations. Always follow label instructions.



Leafminer damage

## 8. Spider mites

- **Spider Mites** are too small to see with the naked eye and because their lifecycle is short (5-7 days), they are not usually detected until there is a significant infestation.
- **Spider Mite** damage presents itself as yellow and mottled leaves that look like they have been sandblasted. The leaves turn bronze and then brown. Look also for the tell-tell spider webs.
  - Spider mites will feed on peppers and tomatoes
- **Spider Mite treatment**
  - Blast them off the leaves with a strong jet of water.
  - Remove their host plants (Chickweed) from planting areas.
  - Plant garlic and chives near peppers to deter spider mites.
  - Neem oil and insecticidal soaps may be necessary for heavy infestations. Always follow label instructions.



Red Spider Mites

## 9. Thrips

- **Thrips** are so small that the gardener needs a magnifying glass to see them! They measure all of 1.5 mm in length. Adults are pale yellow to light brown. Nymphs are even smaller and lighter shades of the adults. Look for their tell-tell frass (poop).
- **Thrips** feed by sap-sucking and leave the leaves distorted and wilted with a coarse stripping and silvery appearance. They also leave a sticky honeydew that encourages the growth of sooty mold.
  - Thrips can be found devouring cucumbers, garlic, peppers and tomatoes.
- **Thrips** transmit the tomato spotted wilt virus. It is just as damaging as their feeding.
- **Thrips treatment**
  - Blast them off with a strong jet of water.
  - It may be necessary to use insecticides with an ingredient called Spinosad for heavy infestations. Always follow label instructions.
  - Thrips reproduce on weeds, so keep the garden clean and weed free.



Thrips

## 10. Whiteflies

- **Whiteflies** are very small insects whose bodies are triangular with tiny wings.
- **Whiteflies** are found on the undersides of the leaves and feed on the sap causing plant desiccation (dehydration).
  - Related to aphids, they also leave the tell-tell sticky honeydew which encourages the growth of sooty mold.
  - Whiteflies feed on cucumbers and peppers.
- **Whitefly treatment**
  - Blast them off with a strong jet of water.
  - Spread reflective mulches around the base of plants to keep whiteflies away.
  - It may be necessary to use organic soaps or neem oil. Always follow label instructions.
  - Keep the garden clean. Remove crop debris as it occurs and at the end of each growing season to reduce overwintering.



White Flies