

Gardening Basics

Aphid Control in Vegetable Gardens

Vegetable gardens can be overrun with aphids. The soil may be tilled, naturally repelling plants planted, neem and soap spray may be used, and the aphids sprayed off the plants with water, yet they can always get the upper hand. Even tenting plants with netting and releasing beneficial insects like ladybugs or katydids can help. What other methods may fight off these nasty pests?

We have a few additional tips from John A. Jackman of Texas A&M AgriLife Extension to consider.

- Putting a reflective mulch such as foil paper on top of the soil below the plants can slow aphid infestation
- In early spring or early fall, when it is not blistering hot, put a fine mesh screen or fabric over the garden. The plants will still need to be monitored regularly, preferably daily, and the barriers will need to be removed. It's not recommended to leave barriers in place during the hot summer months because the temperature inside the barrier is warmer than outside, so it can cause the plants to suffer heat stress.
- High-pressure water sprays can dislodge aphids. This treatment will need to be repeated frequently.
- Use pesticides, Neem oil, and insecticidal soaps only as a last resort because these products will also kill the beneficial insects that naturally control aphids.



Green peach aphid (Myzus persicae), Whitney Cranshaw, Colorado State University, Bugwood.org

These tips, as well as a list of registered pesticides for use on home garden vegetables and common insect pests, can be found at this link: <https://agrillifeextension.tamu.edu/library/gardening/managing-insect-and-mite-pests-in-vegetable-gardens/>

Other cultural practices to consider include:

- Remove any plant debris and soil residue and dispose of weeds or other unwanted plants that pop up to get rid of the food and shelter before planting and throughout the growing season. When the growing season ends, remove these things as well so aphids will not overwinter there. Also, control of aphids is easiest soon after they hatch from the eggs. Look for egg clusters or tight groups of eggs on the undersides of the leaves. The eggs can be gently scraped away the eggs or removed with a blast of water. Website link: <https://aggie-horticulture.tamu.edu/vegetable/guides/texas-vegetable-growers-handbook/chapter-vi-insect-management/>
- Although there's no scientific data to support this practice, some gardeners claim it is helpful to use trap plants or sacrificial plants that attract aphids to draw them away from the vegetable plants. Examples include nasturtiums and sunflowers. Be careful not to plant these too close to the vegetable plants to avoid the aphids traveling to them. In addition, consider planting plants that repel aphids amongst the vegetable plants. Plants that repel aphids include those of the allium family (garlic, chives, leeks), marigolds, or catnip, fennel, dill, and cilantro. Website link: <https://www.gardeningknowhow.com/plant-problems/pests/insects/plants-that-repel-aphids.htm>

Some other things may be contributing to the aphid issue:

- Are there other plants nearby in the yard or a neighbor's that may attract aphids to the vegetable garden? For example, the Cotton or Melon Aphid (*Aphis gossypii*) food sources include begonia, catalpa, citrus, ground ivy, hydrangea, violets, weeds, and vegetables. Green Peach Aphid (*Myzus persicae*) has many food sources, including peaches, some flowering ornamental plants, and vegetables. Website link: <https://agrillifeextension.tamu.edu/library/landscaping/aphids-in-texas-landscapes/>
- Is crop rotation happening each year? For example, not planting tomatoes or peppers, which are both members of the nightshade family, in the same place each season.
- Healthy vegetables can withstand some aphid damage, but stressed plants are much more susceptible to insect damage. Practicing good irrigation, mulch, and fertilization habits go a long way toward growing healthy vegetables that can tolerate some insect damage and still produce.
- Any beneficial insects introduced will stick around only if there's a food source. Once there's no food source, they'll move on. We think it may be better to use row covers, limit the use of pesticides, including insecticidal soap, to avoid killing the beneficial insects that occur naturally, and practice the other cultural control methods mentioned above.

Sources and Resources

Jackman, John A. "Managing Insect and Mite Pests in Vegetable Gardens." agrillifeextension.tamu.edu, Texas A&M AgriLife Extension, 1 Feb. 2008, agrillifeextension.tamu.edu/library/gardening/managing-insect-and-mite-pests-in-vegetable-gardens/.

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Baessler, Liz. "Trap Plants for Aphids: Plants That Repel Aphids In The Garden." gardeningknowhow.com, Gardening Know How, 4 Apr. 2018, www.gardeningknowhow.com/plant-problems/pests/insects/plants-that-repel-aphids.htm.

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