

Controlling Common Veggie Bugs

Controlling pests in your vegetable garden is vital to ensuring a successful harvest. In Oklahoma, where hot summers and various native insects present unique challenges, effective pest management requires a combination of prevention, identification, and treatment. Common pests such as tomato hornworms, squash bugs, caterpillars, and loopers can wreak havoc on your crops if left unchecked. The following strategies can help you control these pests while maintaining a healthy, productive garden.

Tomato Hornworms

Tomato hornworms are large green caterpillars with white stripes that can decimate tomato plants seemingly overnight. They feed on the leaves, stems, and fruit of tomato plants and are often difficult to spot due to their excellent camouflage.

One of the best methods for controlling tomato hornworms is handpicking. Regularly inspect your plants for hornworms, particularly in the early morning or evening when they are most active. Remove any that you find and dispose of them (no details here....just be sure they don't come back!).

Beneficial insects like parasitic wasps can also help control hornworm populations. These wasps lay their eggs on hornworms and, when the eggs hatch, the larvae feed on the hornworm, eventually killing it. Encouraging beneficial insects by planting nectar-rich flowers in your garden can help keep hornworm populations in check.

If infestations become severe, insecticidal soaps or Bt (*Bacillus thuringiensis*) can be used as an organic treatment. Bt specifically targets caterpillars and is safe for other insects, making it an excellent choice for organic gardeners.

Squash Bugs

Squash bugs are notorious for attacking squash, zucchini, and pumpkins. They suck the sap from plants, causing leaves to wilt and eventually die. These pests are most problematic in late spring and early summer when they lay eggs on the undersides of leaves.

Cultural controls are the first line of defense against squash bugs. Removing plant debris and keeping your garden clean will eliminate hiding places for

adults. Crop rotation can also help prevent the bugs from overwintering in your garden.

Regularly inspect the undersides of squash plant leaves for squash bug eggs. Remove and destroy any eggs you find. This will help reduce the population before the nymphs hatch and start feeding on your plants.

Insecticides are available for squash bug control, but they are often not very effective because adult bugs are highly resistant. Timing is crucial if you choose to use insecticides—apply them when nymphs are present, as they are more susceptible to treatments.

Caterpillars and Loopers

Caterpillars and loopers, including the cabbage looper and the corn earworm, are common pests in Oklahoma vegetable gardens. These pests can quickly defoliate plants, damaging both the foliage and the fruit. Caterpillars often attack crops such as cabbage, broccoli, and corn.

Handpicking is an effective way to control small populations of caterpillars and loopers. You can also use floating row covers to protect young plants from caterpillar infestations.

Bt is an excellent treatment option for these pests. It specifically targets caterpillars without harming beneficial insects. Spinosad, another organic insecticide, can also be effective against caterpillars and loopers.

Attracting natural predators like birds and predatory insects to your garden can help keep caterpillar populations under control. Planting companion plants that attract beneficial insects, such as dill, fennel, or marigolds, can proactively manage these pests.

General Pest Management Strategies

- 1) Preventing insect pests from becoming a problem in the first place is always the best strategy. Start by selecting resistant varieties of vegetables when planning your garden. Resistant plants are less likely to suffer significant damage from common pests.
- 2) Proper watering and fertilization will also help ensure that your plants are healthy and can withstand pest attacks. Stressed plants are more vulnerable to insect damage, so keeping your garden well-maintained is crucial.

- 3) Companion planting is another useful tool in pest control. Certain plants repel pests or attract beneficial insects. For example, planting marigolds around your garden can deter nematodes and other pests. Basil, when planted near tomatoes, can help repel tomato hornworms.
- 4) Crop rotation is essential for preventing the buildup of pest populations in your garden. By changing the location of your vegetable crops each year, you disrupt the life cycles of pests that overwinter in the soil.
- 5) Monitoring your garden regularly is crucial for catching pest problems early. Inspect your plants at least once a week, paying close attention to the undersides of leaves and the bases of plants where pests often hide. Early detection and prompt action can prevent small pest problems from becoming major infestations.

Conclusion

Controlling common vegetable garden pests in Oklahoma requires a combination of cultural, biological, and chemical methods. Handpicking, encouraging beneficial insects, and using organic insecticides like Bt are all effective strategies for managing pests such as tomato hornworms, squash bugs, caterpillars, and loopers. Regular monitoring and preventive measures like crop rotation and companion planting can help keep pest populations under control, ensuring a healthy and productive garden.

References

<https://extension.okstate.edu/fact-sheets/home-vegetable-garden-insect-pest-control.html>

<https://extension.okstate.edu/topics/plants-and-animals/insects-pests-and-diseases/lawn-and-garden-insects-pests-and-diseases/>

<https://agriculture.okstate.edu/departments-programs/entomol-plant-path/research-and-extension/plant-disease-insect-diag-lab/>

https://news.okstate.edu/articles/agriculture/2021/gedon_squash_bugs_hamp_er_gardening.html

<https://news.okstate.edu/magazines/agriculture/cowboy-journal/articles/2022/conquering-oklahomas-pests.html>