Vegetable Problems By: Kelly Feehan, Extension Educator Release: Week of August 14

Vegetable garden harvest is at its peak. While most gardens produce an abundance of vegetables, some encounter problems that lead to lower yields. Issues can be environmental or due to insects or diseases.

If green beans or tomatoes produce flowers but no fruit, it is likely related to environmental conditions that are not conducive to flower fertilization. Both of these vegetables are self-pollinating meaning they do not require insect pollination in most cases.

Temperature is a key factor that affects bean and tomato production. High temperatures above 85F or low temperatures below 70F can lead to plants producing flowers but no fruit. Pollination may occur, but flower ovaries are not fertilized. Soils that become too dry between watering also inhibit fruit development as does hot, dry winds.

To encourage bean and tomato fruiting, place mulch over soil to maintain cooler soil temperatures and a uniformly moist soil. If feasible, plant a taller crop such as corn near beans or tomatoes to protect plants from drying winds.

Harvesting beans and most other fruits, like cucumbers, on a regular basis will encourage continued production. When beans or cucumbers are left on plants beyond their peak harvest maturity, they use energy to develop mature seed rather than producing new beans or cucumbers.

Spider mite populations can explode during hot weather and cause severe plant damage. Beans, tomatoes, eggplant and cucumbers are most susceptible to mites. Due to their piercing sucking mouth parts, infested leaves appear speckled first and then turn bronze.

Scout plants early and often for mites and their symptoms. Mites are usually found on leaf undersides and while they spin webs, these are tiny and usually between leaf veins or around plant stems. Mites can be detected by shaking a leaf over a white sheet of paper.

If spider mites are found or damage is noticed, use frequent sprays of water from a hose to wash them off and to slow population growth. Know that mites are not only promoted by hot dry weather but also by high nitrogen fertilizer and even some insecticides.

Insecticide selection is more difficult for mite control on vegetables. In part because they are present on plants during harvest and preharvest intervals need to be noted and followed for safety. Mites are also present during hot, dry weather and insecticides are more likely to burn plants under these conditions.

Insecticides that can increase mite populations include carbaryl, some organophosphates, and some pyrethroids. Insecticides applied during hot weather appear to have the greatest positive effect on mites, leading to spider mite outbreaks within a few days of application. Check garden insecticides for the active ingredient and avoid these products for mite control.

Frequent strong sprays of water, miticides labeled for vegetables, or insecticidal soaps and horticultural oils are best to use to prevent an increase in mites and to reduce harm to beneficial insects.

While there are a number of diseases that infect vegetables, especially tomatoes and cucumbers, by August fungicides are usually no longer helpful. Harvest what you can from plants. Remove and destroy plants that have died. Next season, use crop rotation and select disease resistant cultivars.

If fungicide applications are needed in a vegetable garden, these are best applied at the first sign of disease early in the season. Avoiding overhead irrigation and not planting plants too close together to increase air circulation will help slow diseases.