

VEGETABLE ISSUES

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Cucumbers not setting fruit, tomatoes and zucchini developing brown bottoms, and questions about how to avoid squash plants collapsing like they did last year. These are some questions Extension horticulturists are hearing.

On vine crops, especially cucumbers, there have been questions about plants not setting fruit or fruit falling off when it's a few inches long. On cucumbers that have many flowers but no fruit, a little patience may be all that is needed.

Some plants, like squash and cucumber, have separate male and female flowers on the same plant. When plants first begin to bloom, only male flowers are produced. This is why we see flowers but no fruit. Plants soon develop female flowers and fruits begin to develop.

If two to three inch long fruits are falling off, this is due to pollination issues. With poor or incomplete pollination, fruit will begin to develop but if not fully fertilized development stops and small fruits drop off.

Pollination issues can occur if plants are over fertilized with nitrogen, night time temperatures are above 75 degrees Fahrenheit, or there is extreme heat or water stress. Applying insecticides while plants are blooming can also lead to poor pollination.

In most cases, cucumbers and squash will continue to develop flowers that eventually will be fully pollinated; and fruits will reach adequate size for harvesting.

As tomatoes and other fruits like zucchini and peppers develop, the bottoms may turn brown and leathery or soft. This is the disorder blossom end rot and it is caused by a lack of calcium in the fruit. While there is a spray sold to supposedly solve this issue, using sprays to provide calcium only makes the gardener feel better.

Calcium is a macronutrient, meaning plants need it in larger quantities than some of the other nutrients. Calcium is also considered less mobile; making it difficult to transport through plants.

Soils are rarely deficient in calcium and most plants have plenty of calcium. It is just not reaching the fruit as plants first begin to set fruit. To aid transport into fruits, the soil needs to be kept evenly moist with adequate irrigation and mulching. Patience and correct watering are the best solutions.

When squash plants suddenly wilt and die, they are likely infested with squash vine borer which is white caterpillar. It is the immature form of a clear-winged red and black moth who lays eggs at the base of squash stems.

After hatching, larvae burrow into stems to feed. This damage cuts off the supply of water and nutrients to the plant. The base of the plant at ground level is often weak and full of holes with sawdust. If you slice open stems, the white caterpillar may be found.

This insect is hard to manage. Once inside stems, insecticides are no longer effective. During egg laying from late June into July, monitor squash plants for the moth. Squish any eggs that are found. The base of plants can be treated with insecticides like bifenthrin or permethrin labeled for use on vegetables. These only kill larvae before they burrow into the stems so application timing is critical.