

## Lack of fruiting in cucumbers

**Q.** My cucumber plants have grown well and have been flowering for a month. Attached to the base of some of the blossoms is what looks like a small young cucumber. But they never get more than 1½ inch in length and then wither and die. Why do these cucumbers not continue to grow to harvesting size?

**A.** More than likely this is the result of incomplete pollination. It's quite common in the cucurbits, which include cucumbers, squash, cantaloupe (muskmelon) and watermelon. Plants in the cucurbit family mostly have separate male and female flowers occurring on the same plant. The male flowers produce pollen which has to be moved, usually by bees, to the female flowers. Both the male and female flowers are yellow. But the female flower will be attached to the plant by what looks like an immature cucumber if it is a cucumber plant or an immature squash if it is a squash plant, etc. The male flower is attached to the plant by a thin greenish stem. The immature fruit is botanically an ovary which becomes the fruit following pollination.

In the cucurbit crops, incomplete pollination occurs when there is insufficient movement of pollen (from the male blossoms) to the female blossoms. In most cases, this means that there were not enough bee visits and, as a consequence, not enough pollen delivered to fertilize enough of the seeds. This will result in the fruit (cucumber, squash, watermelon, etc.) either aborting or only developing partially around the seeds that did become fertilized, producing a malformed fruit. Researchers have found that it takes at least nine honeybee visits per flower to pollinate cucumbers adequately.

Many farmers will place a strong beehive per acre near the field where cucurbits are grown to better assure sufficient pollination.

If you see few to no bees working the flowers, you can do what the bees do. Simply take a small paintbrush or cotton swab and brush it around in several open male flowers. Then find an open female flower and brush it around. Repeat this process, transferring pollen from male flowers to female flowers, and you should see an increase in cucumber production. This works with the other cucurbits, too. The individual flowers are only open for a short period, usually a day or less.

Be very careful with the use of insecticides on cucurbit crops. Insecticides are designed to kill insects. Bees are insects. The old practice of dusting every plant in a garden with an insecticide is a very unwise practice. This practice may quickly wipeout an entire bee population. Always read and follow the insecticide's label directions and precautions.

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