



ASK A MASTER GARDENER

TOMATO BLOSSOM DROP

By Trish Grenfell, Placer County Master Gardener.

Q My tomatoes this year are flowering but producing no fruit. I have also noticed that the bees seem to be absent also. Is this why I am not getting any fruit?

A There are many reasons for blossom drop but lack of honeybees is not a major one. Tomato flowers come complete with both male and female organs and can be self-fertilizing if the wind helps. To ensure better pollination, gently shake or vibrate the entire tomato plant during the day. Honeybees don't flutter their wings when they visit a tomato blossom; hence fertilization is not greatly enhanced and some studies show that the tomato doesn't produce a nectar that readily attracts the honeybees. However if you are lucky enough to have bumblebees visiting your tomato bed, celebrate because they will visit tomato blossoms, and they do flutter their wings. Bumblebees are the major pollinators used in tomato greenhouses throughout the world.

Temperature is a big factor in tomato fruit set. Night temperatures lower than 55 degrees F (unlikely here) or greater than 75 degrees F interfere with the growth of pollen tubes, preventing normal fertilization. Day temperatures in excess of 90 degrees F accompanied by very low humidity also hamper fruit set. Optimal fertilization occurs at 80-85 F in the day and when night temperatures remain above 62F, but below 72F.

According to the UC Integrated Pest Management Program, blossom drop can also be attributed to smog. Aha! We might be able to blame your lack of fruit to some degree on June and July's smoky days as well as the heat that accompanied them.

Other factors which may contribute to blossom drop: insufficient soil moisture (or too much), too little or too much nitrogen fertilizer, stress from insect damage or disease, too heavy of a fruit set, and planting tomato cultivars which are not heat tolerant.

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