In the Garden: Why is my crop not producing fruit?

K-State horticulture expert shares why some vegetables produce flowers and not fruit

By Maddy Rohr, K-State Research and Extension news service

MANHATTAN, Kan. — It’s common for vegetables like squash, cucumbers and melons to produce flowers but no fruit, said Kansas State University horticulture expert Cynthia Domenghini.

“Most squash, cucumbers and melons have separate male and female flowers on each plant,” Domenghini said. “Usually, male flowers appear first in the season. Female flowers have a swollen area beneath the petals while male flowers have a narrow base.”

Domenghini suggests checking garden plants to see if both flower types are present. If male and female flowers are present, observe the area for pollinators.

“If few to no pollinators are present, vegetables with separate male and female flowers may not produce fruit,” Domenghini said.

To pollinate the flowers, use a paintbrush to transfer pollen from a male flower to the stigma of the female flower. Domenghini recommends marking that flower and make note of whether it is the only one that sets fruit. If this is the case, the problem is likely a lack of pollinators.

She added that pollinator activity can be inhibited by weather.

“(Pollinators) are less active on cold or rainy days. The use of insecticides can also harm pollinators. If using herbicides, apply them in the evening when the flowers have closed for the day,” Domenghini said.

Additionally, high temperatures can cause vegetables to drop their blossoms prematurely.

“Tomatoes will stop producing fruit in temperatures above 95 degrees Fahrenheit. Production will resume once temperatures decrease,” she said.

Domenghini said it is important to ensure plants are receiving adequate water during this time.

“Applying nitrogen promotes vegetative growth. However, excessive amounts can inhibit flower and fruit production. Follow fertilizer recommendations to avoid this,” she said.
Domenghini and her colleagues in K-State’s Department of Horticulture and Natural Resources produce a weekly Horticulture Newsletter with tips for maintaining home landscapes and gardens. The newsletter is available to view online or can be delivered by email each week.

Interested persons can also send their garden and yard-related questions to Domenghini at cdom@ksu.edu, or contact your local K-State Research and Extension office.

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K-State Research and Extension local offices, https://www.ksre.k-state.edu/about/statewide-locations.html

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Story by:
Maddy Rohr
Maddy23@ksu.edu

For more information:
Cynthia Domenghini
Cdom@ksu.edu