



**This news release from K-State Research and Extension is available online at <https://ksre-learn.com/flooded-gardens-need-repair>

Released: May 9, 2024

Gardens that have been flooded may need repair

K-State expert says soil could be damaged after flooding

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

MANHATTAN, Kan. — Recent severe thunderstorms that have brought abundant moisture to parts of Kansas may have caused unexpected damage due to flooding in home gardens, says a Kansas State University horticultural expert.

“One major problem with gardens that have been flooded is the potential damage to the soil structure,” said K-State’s Cynthia Domenghini. “When the soil becomes flooded, water fills in the air spaces depriving plant roots of necessary oxygen.”

An additional concern is the risk of soil compaction, which further restricts oxygen to the roots. The longer the flood conditions last, the more likely damage will occur.

“Typically, if water recedes within 24 hours, the impact on plant health is minimal. However, contaminants in the flood waters may make consumption of exposed vegetables unsafe,” Domenghini said.

Here are some considerations, but Domenghini urges consumers to follow [US Food and Drug Administration guidelines](#) when deciding the safety of growing edible plants in flooded areas.

- If crops have not been planted, determine if there is a better location to establish a garden where flooding is not a concern. Consider planting a cover crop instead to begin repairing the soil and protecting it from exposure to further compaction. Do not plant when soils are still saturated to prevent damage to the structure caused by digging, tilling and even foot traffic.
- For established gardens where flooding occurs, leafy green crops and any fruit that is present should be disposed of due to the risk of contamination. Late season crops that develop after floodwaters have receded may be safe to eat, but the grower must evaluate the potential contaminants of the water.
- With young crops it may be best to replant if symptoms of stress appear, such as stunted growth and discoloration.

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](#).

-30-

FOR PRINT PUBLICATIONS: Links used in this story

K-State Horticulture Newsletter, <https://hnr.k-state.edu/extension/info-center/newsletters/index.html>

[Food and Drug Administration Guidelines, https://www.fda.gov/regulatory-information/search-fda-guidance-documents/guidance-industry-evaluating-safety-flood-affected-food-crops-human-consumption](https://www.fda.gov/regulatory-information/search-fda-guidance-documents/guidance-industry-evaluating-safety-flood-affected-food-crops-human-consumption)

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

K-State Research and Extension is a short name for the Kansas State University Agricultural Experiment Station and Cooperative Extension Service, a program designed to generate and distribute useful knowledge for the well-being of Kansans. Supported by county, state, federal and private funds, the program has county extension offices, experiment fields, area extension offices and regional research centers statewide. Its headquarters is on the K-State campus in Manhattan. For more information, visit www.ksre.ksu.edu. K-State Research and Extension is an equal opportunity provider and employer.

Story by:

Maddy Rohr
Maddy23@ksu.edu

For more information:

Cynthia Domenghini
Cdom@ksu.edu