

Responding to hailstorm on vegetable farms

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Hail and wind can cause significant damage to vegetable crops, including leaf defoliation, tearing, shredding, stem breakage, bruising, wounding, loss of flowers and small fruits, as well as holes and spots on fruits. The extent of hail damage varies widely depending on the size and shape of hailstones, wind velocity, and storm duration, meaning responses must be tailored to each situation. Even neighboring farms can experience varying levels of damage. Some fields may be completely devastated, while others might still have a chance to recover. In cases where crop revival is unlikely, consider replanting cool-season crops like radish, turnips, lettuce, spinach, or cover crops. Here, we'll focus on strategies for partially damaged crops that still have the potential to recover.

In solanaceous crops like tomatoes and peppers, fruit bruising and wounding are major concerns as they increase the incidence of fruit diseases and storage rots, particularly bacterial rots. Damaged fruits should be removed to prevent them from draining resources needed by healthy fruits, which will have access to more water and nutrients. In peppers, stem breakage can lead to significant losses due to reduced fruiting area and increased sunburn from exposure to intense sunlight.

Vining crops such as pumpkins and squashes recover more quickly from damage by producing new branches, though production will be delayed. Hail damage may cause spotting on pumpkins, but minor spots will typically heal over. The overall impact of storm damage on vegetable crops depends on factors such as crop type, growth stage, weather conditions after the storm, and the presence of disease organisms. Hot, wet conditions post-storm pose the highest risk, particularly by increasing bacterial diseases, which can enter through wounds. **It is recommended to include copper products and fungicides in spray programs after storm injury.** Organic growers can use peroxide-based products like Oxidate or biological fungicides like Serenade and Cease to manage diseases. Maintaining plant nutrition, particularly by applying additional nitrogen where appropriate, will encourage new growth.

Although insect populations are decreasing, scouting and monitoring remain essential to integrated pest management. **Hail damage during the reproductive stages of corn can increase the risk of sap beetle infestation.** These beetles are attracted to ripe, damaged, or decomposing plant material and can vector fungi such as *Aspergillus*, *Penicillium*, and

Fusarium. Fields impacted by hail during ear development should be monitored closely for secondary pathogens.

Please contact your local Farm Service Agency county office to report your damages as well as your insurance agent to report impacts for covered crops. USDA disaster assistance information can be found on [farmers.gov](https://www.farmers.gov), including USDA resources specifically for producers impacted by flooding. For FSA programs eligibility, producers should contact their local [USDA Service Center](#). Infrastructure losses should be reported to your local emergency response team. You can find contact information by region [here](#).

As always, if you'd like to discuss your options after hail or any other weather event, feel free to call or email me. You can reach me at 860-870-6933 or shuresh.ghimire@uconn.edu.