

Sunscauld in Corn and Soybean

Key Points:

- Extreme heat and moisture stress can lead to tissue damage on the leaf surface of corn and soybeans.
- Sunscald can occur in irrigated as well as non-irrigated fields.
- Sunscald causes tissue damage that generally is not yield limiting unless foliar diseases infect and spread from the damaged tissue.



Sunscald injury on a corn leaf



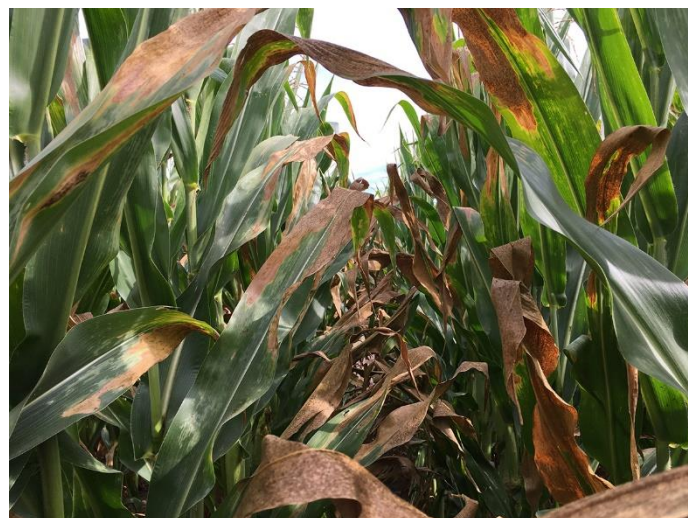
Closeup of sunscald injury on a corn leaf, showing injured tissue between the leaf veins.



Sunscald injury to a corn leaf tip (above).
Severe sunscald injury throughout the corn canopy (below).

Sunscald in Corn

- Sunscald occurs when the [rate of water movement](#) up to and through the leaf cells cannot keep up with the rate of evapotranspiration from these leaf cells.
- Younger leaves and leaves with direct orientation to the sun are most affected.
- Tissue can have a silver/gray cast initially and then turn brown and necrotic in a few days.
- If no additional disease is present, stalk tissue will look normal.
- Sunscald damage will not progress on the leaves.
- Injury can occur while leaves are still in the whorl.
- Water in the form of dew or from irrigation can injure tissue as high temperatures heat water on the leaf surface.
- Injury to the tassel can occur, but typically will not decrease pollination as damage is usually isolated within the field.
- Susceptibility to sunscald differs by hybrid genetics.



Sunscald in Soybeans

- Sunscald in soybeans occurs in the same manner as corn with water heating on the leaf surface.
- Typical sunscald injury is usually found on the underside of the leaf, since soybean leaves flip upside down during the warmer part of the day.
- Sunscald in soybeans may be mistaken for [herbicide injury](#), disease, or [spider mite](#) damage.
- If no additional disease is present, stem tissue will look normal.
- Spider mite damage may accompany sunscald; be sure to check the underside of the leaf for insect feeding.



Sunscald injury visible on the underside of a soybean leaf.



Comparison of sunscald injury and spider mite damage. Injury caused by spider mite feeding can be distinguished by the stippling pattern on the leaves.