



Zipper Ears

Overview

"Zipper ears" describes corn with missing kernel rows, giving it a zipper-like appearance. It results from environmental stress during key plant development stages such as pollination or grain fill. The absence of kernels on one side of a cob while kernels continue to develop on the other can also cause the cob to curve.

What you should know

- Zipper ears is a type of poor kernel set, a condition where kernels develop poorly, or more slowly, or have ovules that aborted shortly after pollination.
- Zipper ears have many potential causes, including:
 - Late pollination of silks, making kernels more susceptible to abortion.
 - Heavy silk feeding or clipping by Japanese beetles or corn rootworm beetles during pollination.
 - Slow silk emergence due to heat or drought stress. Zippering can occur if a portion of the ear is pollinated, but the developing kernels cannot compete with the neighboring row.
 - Hail damage at the late-silk and early-blister stages.
 - Ear shank size. Short shanks may collapse or pinch during a drought, keeping nutrients from reaching developing kernels.

Action steps

1. **Watch out for beetles:** Before and during pollination, scout for Japanese beetles and corn rootworm beetles that clip silks. Consider pest treatments to keep them from damaging ears.
2. **Select drought-tolerant hybrids:** Planting hybrids with drought tolerance can help guard against zippering by preparing your crop for potentially damaging weather and growing conditions.
3. **Identification:** Inspect ears to determine if rows are missing, creating the distinctive zipper pattern. Curved ears that result from unbalanced development are also described as "banana ear."



The missing rows in zipper ears result from stress during pollination or grain fill.



30-Second Summary

- Zipper ears have missing kernel rows due to poor pollination or grain fill.
- Beetles and corn rootworm, environmental conditions and ear shank size can contribute to damage that leads to zippering.
- Drought-tolerant hybrids can help decrease the incidence of zippering.

NOTES:

For more information, contact:



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