



# Greensnap and Stand Reduction Effects on Corn Yield

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## Objective

Determine the effects of greensnap and stand reduction on corn yield and kernel weight.

## Materials and Methods

### Crop Years 2019 and 2021

Soil Type	Nicollet, Webster
Previous Crop	Soybean
Cultivar	P0688AM
Planting Date	June 4, 2021, and May 6, 2021
Row Spacing	30-in.
Seeding Rate	36,000 seeds/acre
Tillage	Field cultivator in the spring
Fertilizer	150 lb./acre as MESZ (12-40-0) in the fall
Nitrogen	185 lb. N/acre as NH <sub>3</sub> (32-0-0) in the spring
Harvest Date	October 31, 2019, and October 15, 2021
Experimental Design	Randomized complete block design
Replications	Four
Treatments	for both the greensnap and stand reduction 'event' there were three timings (ST: V16, VT/R1, R2 in 2019, and V13, V16, VT/R1 in 2020) and four severities (SEV: 0%, 25%, 50% and 75%).

## Results

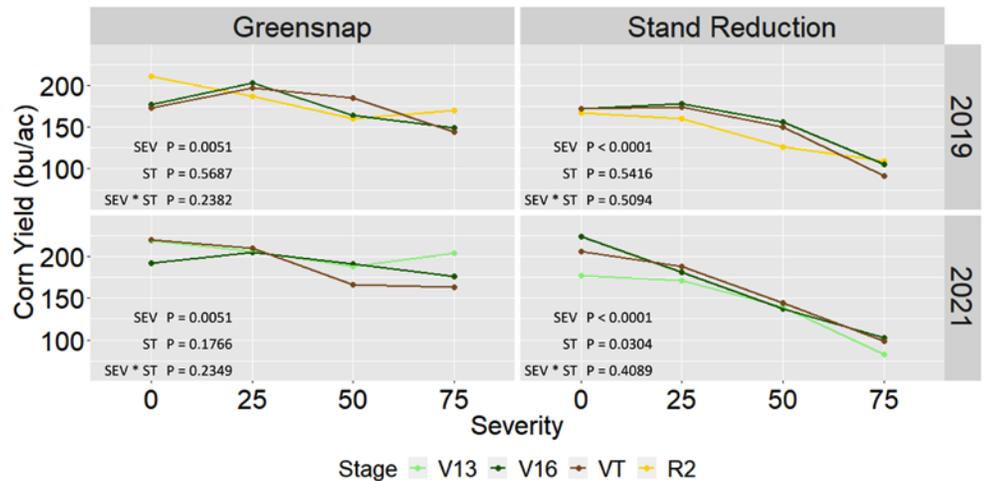


Figure 1. Corn grain yield at 15% moisture in 2019 and 2021.

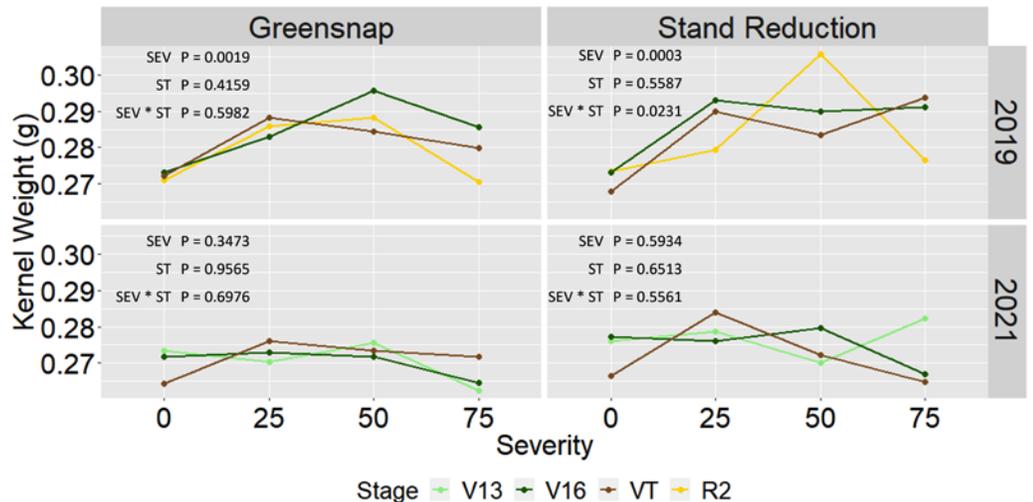


Figure 2. Kernel weight in 2019 and 2021.

## Key Takeaways

- In both years and events, treatment severity significantly affected corn yields, however, the stage of the event did not affect corn yield. For both events, yield loss was less than 1% for each percent severity, as previously assumed.
- Kernel weight increased with severity for both events in 2019, however, kernel was unchanged by severity in 2021.

## Acknowledgements

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