

**ASAE D535 MAY2005 (R2019)**  
**Shelled Corn Storage Time for 0.5% Dry Matter Loss**



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## ASAE D535 MAY2005 (R2019)

# Shelled Corn Storage Time for 0.5% Dry Matter Loss

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**Keywords:** Corn, Carbon dioxide, Deterioration, Storage time, Dry matter loss

## 1 Purpose and Scope

1.1 These data allow estimation of the time required for normal oil content shelled corn to deteriorate to the point where 0.5% of the original corn dry matter has been lost. This corresponds to the maximum time shelled corn can be stored before storage fungi damage causes the USDA market grade of the corn to be lowered one grade level because of an increase in total damaged kernels.

## 2 References

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## 3 Shelled Corn Storage Time Data

3.1 Shelled corn storage time (SCST) is dependent on corn temperature, corn moisture, kernel mechanical damage, genetic resistance to storage fungi, fungicide treatment, and possibly other factors. SCST can be estimated using this equation:

$$T = 9.583 M_T M_M M_D M_H M_F$$

where: