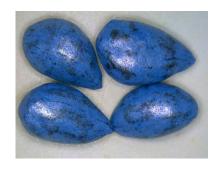
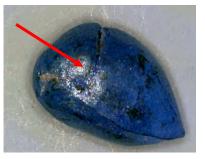


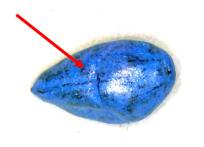
Normal Seed -Seed that is without cracks, divots/indentations, or pinholes



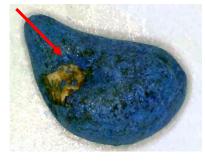


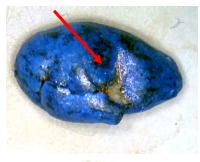






**Damaged Seed** - Seed with minimal cracks and small divots/indentations in the seed coat

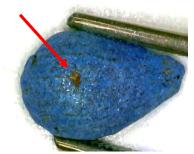






Very Damaged Seed - Seed with large cracks and holes leaving the inside of the seed in view and also abnormal shaped. If the interior of the seed is visible, it is very damaged.







**Pinhole Seed** - Seed with 'pinhole' like circular damage to the outer coating, often going to the center.

Thank you for the support of this research



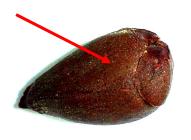
Research conducted by Dr. Lori Unruh Snyder, Dept. of Crop & Soil Sciences, NC State University



Normal Seed -Seed that is without cracks, divots/indentations, or pinholes







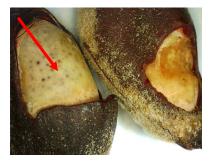




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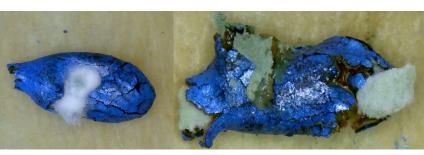


## Seed to Seedling: Types of Damage



















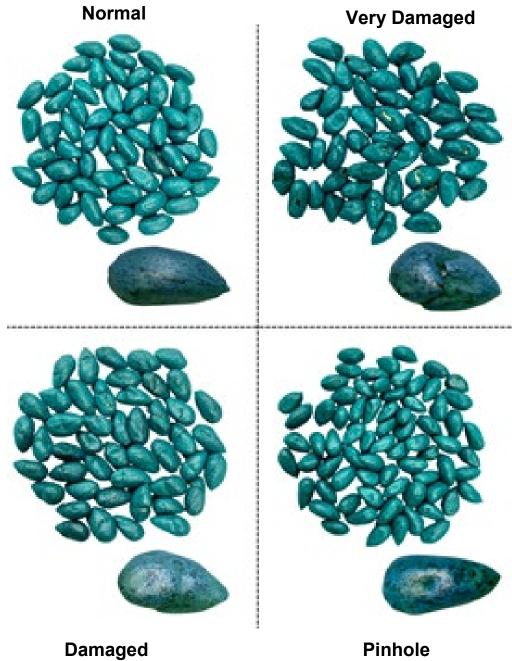
Images from left to right are very damaged, damaged, and pinhole with a truncated root system.

Thank you for the support of this research



NC

**NC Cotton Producers Association** 



Damaged