

## Cotton Seed Sampling Basics

- The seed sample you take should be fully representative of the entire seed lot. As such, when taking any sample, one should check for any signs of non-uniformity with the seed.
- It is important to fully review the container or package to ensure that the packaging is sound. Also taking note of all seed information on the package (you will need this information for the form associated with the seed sample, see below for details of what information to collect from the seed label).
- For sampling small quantities of seed, it is often adequate to include 600 seed for cool and warm germination testing. This number provides an appropriate amount to provide true statistically valid results. Should the number of seed be limited, as many seed as possible should be sent without impacting your crop plans.
- For sampling seed in bulk, free-flowing seed in bags, mini-bulk containers or bulk, a probe (trier) could be utilized for effective sampling, though cotton seed is more prone to seed coat damage by using a probe. Never insert probe into densely packed seed, the probe may damage seed. Seed bags at the bottom of a stacked pallet may be densely packed and require unstacking to loosen bags to avoid damaging seed.
- To reduce the chance of seed damage caused by a probe, hand sampling may be utilized, especially for bulk products. If hand-sampling is utilized, the individual must reach to the bottom of the container in a swooping or scooping manner. It is recommended that if there is a seed treatment, that proper PPE be utilized when using this method to reduce chances of unwanted contact with the seed treatment.
- Depending on the volume of seed to sample and the size of the seed, about 20% of the total seed containers should be sampled and collected in a separate container, then the collected seed should be subsampled (approximately 600+ seed) for sample submission.
- Seed samples may be placed in fully sealed *paper* bags in a mailing envelope. Until seeds are ready to ship, store the seed sample in a cool, dry place and not in direct sunlight (don't leave the sample in a vehicle for long periods of time).
- Information to include on the associated information sheet to accompany the seed sample, if known: Name and address of labeler, kind and variety, brand name, lot number, container weight, seed treatment, germination percentage and germination test date.
- It is critical the sample date, name, address, and email of the individual furnishing the seed sample be included on the information sheet be provided. Submit this information using the seed submission form at the following link, <https://www.ncagr.gov/plant-industry/seed-sample-submission-form-pdf/download?attachment>. If you want both warm and cool germination tests to be conducted, you must specify that on this form. Otherwise, only warm germination will be conducted.

- Samples should be submitted to the NC Seed Laboratory, NCDA&CS-Plant Industry Division, 1060 Mail Service Center, Raleigh, NC 27699-1060. Overnight deliveries may be submitted to NC Seed Laboratory, 216 West Jones Street, Raleigh, NC 27603.
- For additional Seed Lab information go to the following website, [Plant Industry NC Seed Lab | NC Agriculture](#)

**Note: Presently there are no costs for purity, germination tests (both warm and cool) conducted for North Carolina Residents.**