THE PEANUT SEED CHAIN

From research to your fields- every step is designed to protect genetic purity, ensure quality, and deliver the best seed for your farm.

1 BREEDER SEED

Developed by NC State Peanut Breeding & Genetics

- Developed and tested in small quantities by the Peanut Breeding and Genetics Program at NC State.
- Minimum of 4 years of testing at NC State and 3 years through PVQE.
- Once proven distinct, uniform, stable and high performing, it becomes eligible to enter the certification process.

2 FOUNDATION SEED

Multiplied by NC Foundation Seed Producers, Inc. (NCFSPI)

- Breeder seed is planted by NC Foundation Seed Producers, Inc. (NCFSPI) in tightly controlled fields.
- NC Crop Improvement Association (NCCIA) inspects fields.
- Harvested lots are tested in approved seed labs.
- Result: Foundation seed- limited in quantity, but enough to supply licensed seed companies.

3 REGISTERED SEED

Produced by Licensed Seed Companies

- Licensed seed companies (often shellers) partner with licensed growers to plant foundation seed.
- Fields are inspected again by NCCIA.
- Seed is cleaned, conditioned, and lab-tested.
- Registered seed acts as a critical buffer- protecting the system if issues arise at the next stage.

4 CERTIFIED SEED

Grown by Certified Seed Producers

- Registered seed is planted on larger acreages by certified seed producers.
- Fields are inspected, and seed is tested.
- Lots that meet all standards are cleaned, treated, bagged, and tagged.
- Certified seed is the most readily available to growers.

YEARS 1-6 | **YEARS 7-9**

AT EVERY STAGE: Inspections, paperwork, and laboratory tests work together to ensure variety purity and quality seed at the end of the chain.

WHO DOES WHAT?

NC FOUNDATION SEED PRODUCERS, INC. (NCFSPI)

The Bridge from Breeder to Industry

NCFSPI receives a small quantity of purified breeder seed and multiplies it under tightly controlled conditions.

1. Receive breeder seed from NC State (think one bag, not a truckload).
2. Plant and grow out the seed with strict isolation and management in partnership with NCDA&CS Research Stations.
3. Multiply the seed while maintaining genetic purity and quantity, turning it into foundation seed to supply licensed seed operations.

NC CROP IMPROVEMENT ASSOCIATION (NCCIA)

Monitoring & Certification

NCCIA is the state's official seed certification agency. NCCIA follows the Approved Certification Standards for Peanuts, State Seed Laws, and the Federal Seed Act.

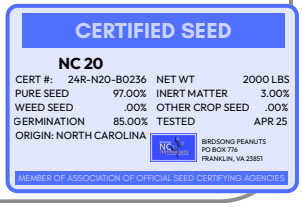
1. Review new varieties to ensure they are distinct, uniform, and stable before certification.
2. Inspect fields at the foundation, registered, and certified levels.
3. Review seed analysis (germination and purity results) from approved seed testing laboratories.
4. Issue the colored certification tags found on bags of foundation, registered, and certified seed.

READING THE TAG: WHAT THE COLORS MEAN

- Certification requirements are standardized regardless of the producer (Severn, Sandy Land, Birdsong, etc.)
- NCCIA issues the tags, which must meet state and federal seed law requirements.
- The brand or bag design may change, but the certification tag is your best assurance.

WHAT YOU WILL SEE ON THE TAG:

- Variety name
- Lot number
- Germination percentage (set conservatively to account for potential loss during storage)
- Purity and other required information



WHY THIS MATTERS FOR PEANUT GROWERS

Peanuts remain a publicly bred crop, helping preserve grower access, transparency, and affordability. When a new variety is released, it represents years of public breeding work and grower-funded research. The seed chain protects that investment, helping ensure the genetics growers pay to develop are the same genetics they plant—pure, consistent, and true to variety.