

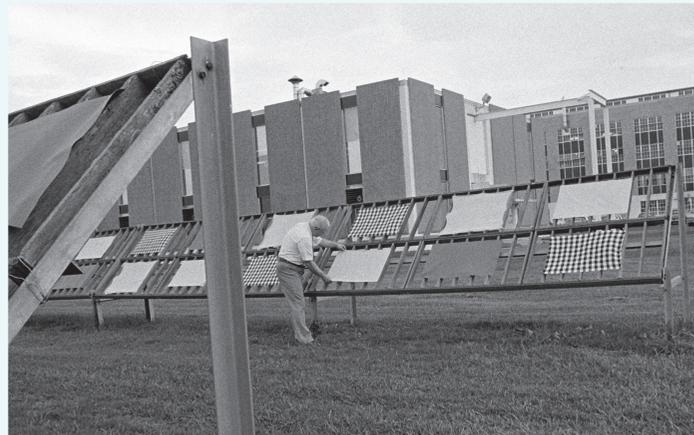


Agricultural Research Service

Southern Regional Research Center (SRRC)

Historical Achievements

- National Historic Chemical Landmark Award for developing permanent-press and flame retardant cotton fabrics
- Developed improved concentrate for frozen orange juice
- Developed improved sugarcane cultivars and improved processing methods
- Developed methods for quantitating and preventing aflatoxin contamination
- Developed methods to improve the shelf life of peanut products



Drying samples of permanent press treated cotton.



Peanut products utilizing SRRC research methods.



Production of cotton nonwoven fabric on a commercial-grade hydroentanglement system.

Current Research Units

- Cotton Structure and Quality
- Cotton Fiber Bioscience
- Cotton Chemistry and Utilization
- Commodity Utilization
- Food and Feed Safety
- Food Processing and Sensory Quality

Pilot Plant Facilities and Equipment

- 40,000 sq. ft. pilot plant
- Milling equipment (knife, hammer, attrition, pin mills, etc.)
- Reactors (glass and stainless steel jacketed reactors)
- Fiber carding, drawing, spinning, knitting, and weaving operations
- Non-woven fiber processing
- Fabric wet processing, dyeing, and chemical treatments
- Solvent extraction and processing
- Extrusion (single and twin barrel screw extruders)
- Ultrafiltration
- Ultrasonic treatment
- Evaporation
- Pelleting
- Pyrolysis
- Heat treatment (ovens, furnaces)
- Freeze-drying (barrel, shelf, manifold)
- Fermentation
- Particle separations (screening, air classification, gravity table separations)
- Dehulling
- Blending and mixing



Comparing sugar quality during industrial sugarcane processing.

