THE DEVELOPMENT OF COTTON FROM THE OLD WORLD TO ALABAMA:

CHRONOLOGICAL HIGHLIGHTS IN ALABAMA COTTON PRODUCTION



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The Development of Cotton from the Old World to Alabama: Chronological Highlights in Alabama Cotton Production

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Cotton has played a major role in the religion, politics, laws, economics, and art of the southern United States. But where did cotton originate and how did it move into the South, specifically Alabama?

The purpose of this publication is to present a timeline of cotton's development—from the Old World to Alabama

5,000 BC. Wild cotton (*Gossypium herbaceum*) moved northward along trade routes in eastern Africa as packing or wadding to protect breakables such as pottery. It was also used as a dressing for wounds. *Gossypium herbaceum* race *acerifolium*, the race considered to be the most primitive cultivated form of cotton, became established in northeastern Africa and Arabia.

3,000 BC. G. hirsutum was used by Indians in central Mexico.

2,400 BC. New World, wild cotton (*G. Barbadense*) was used by Indians in Peru.

2,300 BC. Primitive cotton textile industry was established in Indus River valley in present-day Pakistan.

500 AD. Maya seafarers distributed *G. hirsutum* to the West Indies. They believed that the fibers came from a sacred tree that held up the heavens.

1492 New World cotton (*G. barbadense* and *G. hirsutum*) was discovered by Columbus in the West Indies.

1556 Spanish were the first Europeans to grow cotton in North America in the vicinity of St. Augustine, Florida, although native Indians had cultivated it.

1607 English colonists planted cotton near Jamestown, Virginia. It has been grown every year since 1621.

1721 England passed laws forbidding the use of and wearing of cotton in order to protect their wool industry.

1721 First slave ship arrived in Mobile with 120 surviving slaves.

1730 "Creole Black Seed" cotton was introduced by the French and "Georgia Green Seed" cotton was introduced by botanist Phillip Miller from the West Indies. Both were cultivars of *G. hirsutum*.

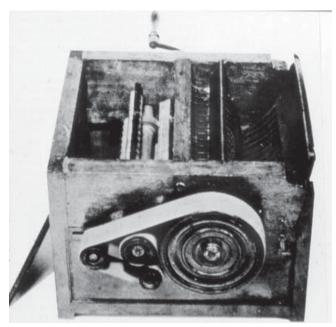
1750 Cotton growing and spinning was a home-craft industry in North American colonies; the only export was some from the West Indies.

1764 Eight sacks of lint (approximately 400 pounds) were shipped from Norfolk, Virginia, to Liverpool, England. An English clerk refused to validate the receipt, thereby identifying the cotton as contraband. At the time, cotton was so rare that the clerk did not believe that there could be that much cotton in all of America.

1776 Declaration of Independence

1786 Frank Levett introduced *G. barbadense* to Sapelo Island, Georgia. This superior quality, long-staple cotton later became known as "Sea Island cotton." Production of Sea Island cotton spread along the coast of South Carolina, Georgia, and Florida. Because of its long fiber, removing the seeds using a roller-type cotton gin was much easier.

1787 First cotton mill in the U.S. was built in Beverly, Massachusetts.



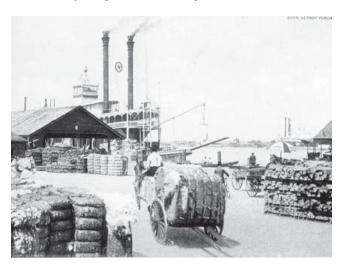
▲ 1793 Eli Whitney received the first U.S. patent on a cotton "engine" that would rapidly remove seeds from short-staple, upland cotton (*G. hirsutum*). This machine enabled a rapid expansion of cotton production in the interior of the American South.

1795 Joseph Collins, surveyor for Spanish government, began raising cotton near Mobile.

1804 Abram Mordecai built the first cotton gin in the Mississippi territory near the junction of the Coosa and Tallapoosa Rivers near present-day Wetumpka, Alabama. Indians brought him raw cotton in their canoes. The gin was burned by Indians in 1806.

1805 Walter Burling from Mississippi smuggled seed of a very productive and excellent quality upland cotton (*G. hirsutum*) from the Spanish ruler of Mexico. Reportedly, he hid the seed in Mexican dolls. The resulting crosses of this cotton with Creole Black and Georgia Green Seed spread throughout the southeastern U.S.

1814 Colonel Andrew Jackson, his Tennessee Volunteers, local recruits, and friendly native Indians, fought and defeated the Creek Indian nation at Horseshoe Bend on the Tallapoosa River. This opened up most of what is now eastern Alabama to settlement by emigrants from Georgia and the Carolinas.



▲ **1817** First cotton (7,000 bales) was shipped from the Port of Mobile (population 800).

1819 Alabama became the 22nd state, and 16,000 bales were shipped from Mobile. Two steamboats, the "Harriet" and the "Cotton Plant" brought the cotton down the Alabama and Tombigbee Rivers to Mobile.

1821 Alabama exported \$3,000,000 worth of cotton.



▲1822 First cotton shipped from Port of Appalachicola, Florida. This included Alabama cotton shipped down the Chattahoochee River from the Eufaula area.

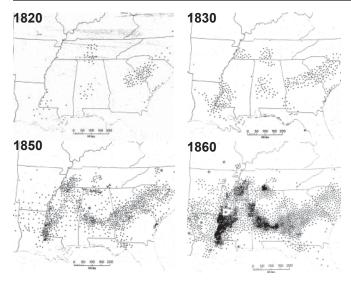


▲ 1838 Daniel Pratt established a cotton gin manufacturing company in the town bearing his name, Prattville, Alabama. (Photo taken in late 19th Century in Tallapoosa.)

1839 Half of all U.S. cotton exports were shipped out of the Port of Mobile (440,000 bales).

1840 Major Alabama cotton producing counties were Montgomery (30,000 bales), Perry (25,000 bales), and Franklin (22,000 bales).

1846 Peruvian guano was the first fertilizer on record used on U.S. cotton.



▲ 1820-1860 Cotton production spread throughout the southeast. There are no records of acres of cotton planted, but good records were kept of bales produced. Each dot represents 2,000 bales of cotton.

1850 Alabama's population was 771,623. Total cotton production was 564,429 bales on 4,435,614 acres (65 pounds of lint per acre). There were 16,100 cotton plantations in Alabama. The leading cotton producing counties were

Tuscaloosa (73,561 bales), Dallas (35,275 bales), and Marengo (32,295 bales).

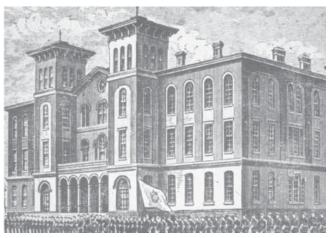
1856 East Alabama Male College was established. It later became the Agricultural and Mechanical College of Alabama, Alabama Polytechnic Institute, and Auburn University.

1860 More cotton was shipped out of the Port of Mobile than any other city in the world except New Orleans. Estimates are that more than 5,000,000 acres were planted to cotton in Alabama.

1861-1865 Alabama cotton production plummeted due to the Civil War; the export market and economy were devastated. No records were kept.

1862 President Abraham Lincoln signed the Morrill Act that established the land grant university system.

1866 Alabama cotton at 977,000 acres produced 264,000 bales (135 pounds of lint per acre).



▲ **1872** Agricultural and Mechanical College of Alabama at Auburn became the first land grant college in the South to be established separately from the state university.

1877 Alabama cotton acreage rebounded to 2 million acres with an average yield of 151 pounds lint per acre. The old plantation system was being replaced by a new share-cropping system of cotton production.

1880 58 cultivars of cotton were grown in the U.S.



▲ 1883 The Alabama Agricultural Experiment Station was established by the Alabama General Assembly to conduct scientific research in agriculture. Alabama was the first southern state and the ninth state in the U.S. to fund agricultural research.

1885 The Alabama General Assembly passed an act to establish a branch research station in the "Canebreak Region." The Canebreak Research Station opened in 1886 on 40 acres of land near Uniontown.

1888 The U.S. Hatch Act established federal funds for agricultural research.

1890 The U.S. Cotton Belt with Alabama at its center produced more cotton per square mile than any other region in the world. Nearly 3,000,000 bales were exported to Europe.

1891 Professor George Atkinson at the Agricultural and Mechanical College of Alabama reported that cotton rust, the malady that plagued cotton production throughout the South, could be easily corrected with potash (potassium) fertilization.

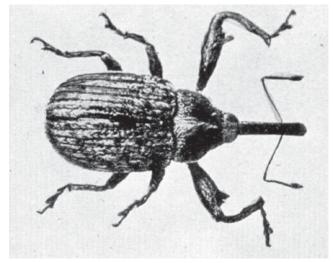
1892 Mexican boll weevil (Anthonomus grandis Boheman) entered South Texas.



▲ 1896 Professor J.F. Duggar established an experiment at Auburn to demonstrate the importance of crop rotation and winter cover crops for sustainable cotton production. This later became known as the "Old Rotation."

1899 Agricultural and Mechanical College at Auburn became Alabama Polytechnic Institute.

1907 600 cultivars of cotton were grown in the U.S.



▲ 1909 Mexican boll weevil entered Alabama in Mobile County.

1911 Alabama planted more than 4 million acres of cotton—the most since before the Civil War. Lint yield averaged 214 pounds per acre.

1911 The "Cullars Rotation" experiment began at Auburn as one of many on-farm, soil fertility experiments to help farmers produce better cotton. This experiment was on the same site where Professor Atkinson did his early research with cotton rust.

1914 U.S. Smith-Lever Act established the Cooperative Extension Service to take research-based information from the land grant universities to those who can use it.

1915 Mexican boll weevil spread throughout Alabama.

1920 Paris green (copper acetoarsenite) used unsuccessfully to control boll weevils in Alabama; calcium arsenate dust became the principal pesticide used on cotton by 1930.



▲ 1935 Severe soil erosion had devastated most Alabama cropland. Kudzu was introduced by USDA Soil Conservation Service to control gully erosion due to abusive cotton production practices.



▲ **1944** DDT, the first synthetic insecticide, was evaluated for bollworm control in cotton; it was widely used by 1947.

1951 Karmex® (diuron) was developed by Dupont Co. for broadleaf weed control in cotton.

1953 Alabama Polytechnic Institute established a soil testing laboratory to help cotton and corn producers.

1960 Trifuralin (Treflan®) was introduced by Eli Lilly Co. and became the most widely used grass herbicide in cotton.

1960 Alabama Polytechnic Institute became Auburn University.

1962 Rachael Carson published *Silent Spring*, which brought public attention to the widespread and growing use of synthetic pesticides especially DDT in all crops.

1963 Cotoran® (fluometuron) was developed by Ciba Geigy for broadleaf weed control in cotton; this became the dominant preemergence weed control chemical in cotton and put an end, for all practical purposes, to hand weed control.

1970 From 1960 to 1970, Alabama cotton producers switched from 98 percent hand-picked cotton to 98 percent machine-picked cotton.

1971 DDT was canceled by the new U.S.-Environmental Protection Agency.

1977 Synthetic pyrethroid chemistry was first available under emergency use; it was conditionally registered in 1979.

1983 Alabama cotton acreage dropped to its lowest since the Civil War, 215,000 harvested acres; lint yield per harvested acre was 410 pounds. Leading cotton producing counties were all in the Tennessee Valley:

Limestone (34,000 acres) Lawrence (24,500 acres) Colbert (20,200 acres) Madison (18, 300 acres) Lauderdale (14,900 acres)

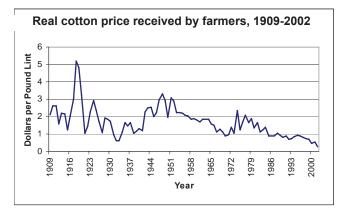
1987 USDA boll weevil eradication efforts began in south-eastern Alabama.



▲ 1988 The Old Rotation was placed on the National Register of Historical Places. The site was originally established by J.F. Duggar in 1896 to demonstrate sustainable cotton production practices.

1994 Alabama average per acre cotton yield reached a record high of 766 pounds lint on 500,000 acres.

1996 Alabama growers planted approximately 400,000 acres of the new, genetically engineered cotton for bollworm control (Bollgard® containing Bt). The boll weevil has been effectively eliminated as an economic pest in Alabama.



▲ 2002 Almost half of all Alabama cotton was produced with conservation/minimum tillage. Roundup Ready® technology meant reduced herbicide use in cotton. However, the real, adjusted price farmers received for their cotton reached a 100-year low.



▲ 2003 The "Cullars Rotation" experiment (circa 1911) was placed on the National Register of Historical Places as the oldest soil fertility experiment in the South and the second oldest, continuous cotton experiment in the world. (The nearby Old Rotation is older.)

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