

Better Cotton and Avalo partner to accelerate climate-resilient cotton breeding

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The partnership combines Avalo's AI-driven plant breeding with Better Cotton's grower network to develop cotton varieties designed for tougher conditions, including water scarcity and extreme heat across the Texas High Plains



The cotton industry is facing a problem that better farming practices alone may not be able to solve: how to keep producing the crop as water becomes scarcer, heat intensifies and production costs rise.

The Better Cotton Initiative (BCI) is partnering with agriculture technology company Avalo to tackle that challenge through plant genetics and artificial intelligence, with a particular focus on developing cotton varieties adapted to increasingly difficult growing conditions.

Avalo's plant-breeding platform uses AI to identify traits associated with resilience and accelerate the development of locally adapted varieties. The approach is designed to help breeders produce seeds that require less water and fertilizer, potentially giving farmers more flexibility as climate pressures reshape where and how cotton can be grown.

The partnership builds on work the two organisations have already undertaken during the 2026 season. Avalo has helped BCI enrol a significant number of new producers while testing an online platform designed to support data collection and reporting across multiple programmes.

For BCI, the collaboration extends beyond genetics. Digital tools can also simplify the administrative burden associated with certification and compliance, allowing growers and programme partners to spend more time on farm-level implementation.

"Serving as both a BCI Member and local partner, Avalo is supporting the growers we work with by streamlining data collection and compliance processes across certifications while providing technical assistance in the field," said Ashley

Barrington, BCI Senior Country Manager in the US.

The breeding programme is particularly relevant in the Texas High Plains, where cotton producers are confronting limited water availability alongside increasingly intense heat.

BCI-certified farms in the region have begun contracting with Avalo to grow its cotton varieties. Avalo is also working with Quarterway Cotton Growers, a longstanding BCI US Programme Partner whose growers see genetics as an increasingly important tool for maintaining the viability of cotton production in the region.

"If this works, it will save us. With limited water and more intense heat on the Texas High Plains, breeding for more extreme conditions is the only way growing cotton in our region will remain viable for farming families," said Todd Straley, CEO and BCI Group Manager at Quarterway Cotton Growers, as well as a cotton farmer. "By partnering with Avalo and BCI, our organisations work toward a common goal of ensuring the resilience of Texas High Plains cotton."

The economics are becoming harder to ignore. Cotton growers are dealing with low prices while production costs continue to rise, increasing the value of varieties that can deliver acceptable yields with fewer inputs.

Avalo said approximately two-thirds of the cotton it sold was driven by demand from brands committed to regenerative farming. For those companies, the appeal extends beyond the crop itself. Access to production data and a stronger focus on farmer equity are becoming increasingly important components of regenerative agriculture programmes.

That creates a potential link between genetics, farm economics and consumer demand. A cotton variety that performs better under water stress could reduce input requirements for farmers, while the associated data can help brands demonstrate progress toward sustainability commitments.

"At Avalo, we work across data, agronomy and genetics to help farmers grow cotton that's better for their land and their livelihoods, and partnering with the Better Cotton Initiative lets us bring that work directly to more growers, at scale," said Tricia Carey, Avalo's Chief Commercial Officer. "Together, we can lower the impact of cotton production while strengthening the resilience and profitability of the farmers at the heart of it."

The partnership also highlights how AI is beginning to influence an area of agriculture that has traditionally moved at biological rather than software speeds. Conventional crop breeding can take years to identify, cross and validate traits. Avalo's technology is designed to narrow the search and accelerate the development of varieties adapted to specific environments.

For cotton producers in regions such as the Texas High Plains, that speed could become increasingly important. Climate conditions are changing faster than many existing varieties can be replaced, while farmers cannot simply move production to areas with more favourable growing conditions.

BCI and Avalo are continuing their collaboration through field activities in the United States. Avalo participated in BCI's NYC Member & US Programme Partner Meeting in June and is scheduled to participate in the organisation's September Cotton & Beyond: Regenerative Agriculture in the Texas High Plains field event. BCI's Ashley Barrington is also expected to participate in Avalo Farm Days later that month.

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