

Hemmed In by Cotton, Hanes Eases Into Flax

Soaring Prices Lead Clothing Maker to Try an Alternative, Reflecting Urgency of Bringing Experimental Blends to Market

By [RACHEL DODES](#)

Pressured by rising cotton prices, \$4.3-billion-a-year apparel maker [HanesBrands](#) Inc. is developing new products made from a crop more often found in cereal: flax.



Cotton is harvested at the Santana Farm in Brazil. *Bloomberg News*

Last month, [Naturally Advanced Technologies](#), a small Portland, Ore., maker of sustainable fabrics, said it signed a 10-year deal with Hanes to "commercialize" flax fiber. The fiber is typically discarded after the plant is harvested for its seeds and oil, which are used in health foods and industrial products.

Clothing companies are always searching for alternative fibers that will improve performance or cut costs. But the move by Hanes, known for its cotton-based undergarments and active wear, shows the urgency of getting experimental blends on the market amid rising cotton prices. Since the current marketing year began in August, already high cotton prices have more than doubled.

About 60% of Hanes's products are "cotton intensive," meaning that they contain at least 90% cotton. On a conference call in January, Hanes Chief Executive Richard Noll said that costs for raw materials, notably cotton, are likely to drive up prices for certain items as much as 30% by the end of the year.

"Clearly everybody is looking for anything that they can substitute into a cotton garment," said Ken Barker, CEO of Naturally Advanced Technologies, who envisions his proprietary flax product, known as Crailar, becoming a household name like Lycra.



Naturally Advanced Technologies' Crailar creates a textile fiber using flax. *PR Newswire*

NAT declined to identify other companies it is working with, but it said it is in negotiations with about 12 well-known global brands.

Neither Hanes nor NAT disclosed financial terms of their deal, other than to say that Hanes had agreed to buy as much as \$375,000 of NAT's flax fiber earlier this year, an order that has absorbed most of the company's capacity.

NAT is currently operating out of a "pilot scale" facility in Kingstree, S.C., but it plans to open its first full-scale site by the end of the year, enabling it to produce 350,000 pounds of flax fiber a week.

Hanes spokesman Matt Hall said the flax will constitute around 20% of the fabric content in a small subset of the company's items, most likely starting in the third quarter.

Although Hanes, which is based in Winston-Salem, N.C., has the exclusive rights to develop Crailar for undergarments and active wear, Mr. Barker said other apparel makers, notably denim manufacturers, are also looking at the fiber to offset some of the impact of higher cotton prices.

Mr. Barker said Crailar is about 30% to 40% cheaper than cotton, which currently sells for \$2.29 a pound, according to the Cotlook index, a proxy for the world price of cotton.

In 2005, the Agriculture Department's Agricultural Research Service found in a study that when flax fibers are blended into denim, the fabric dries faster and wicks moisture.

Flax fiber has long been used to make linen. But NAT treats it with an enzyme that breaks down some of the rigid materials, known as "lignin," that cause linen to wrinkle. That makes its fiber softer and more pliable.

Until last year, NAT had focused on developing hemp, but it switched to flax when it found it could process that fiber twice as efficiently. Hemp also has other drawbacks: It's derived from the marijuana-producing cannabis plant, which can't be grown in the U.S., and it may be difficult to sell to mainstream consumers.

That was a concern for Hanes. "We were having a heck of a time with the hemp, thinking, 'How are we going to market this?'" said Hanes's Mr. Hall.

Meanwhile, Hanes is still conducting consumer research to figure out how it will pitch a blended product to its cotton-loving consumers.

"We are not necessarily going to be marketing this product as a pure cost play," Mr. Hall said. "If we've got other benefits to it—if there's something to the feel, the stretch—these are all things that go into the equation," he said.

NAT's Mr. Barker said that in tests, a sample T-shirt with 80% cotton and 20% Crailar showed improved tensile strength and moisture wicking and reduced shrinkage.

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