

# COTTON COMPLEXITIES

*WHAT MAKES ALL THE VARIOUS COTTON TYPES SO DIFFERENT FROM EACH OTHER?  
EXPERTS AND FABRIC MANUFACTURERS EXPLAIN HOW AND WHY  
THE WHITE FLOCK FIBER CAN MAKE A DIFFERENCE.*

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**E**ven if they all look very similar not all cottons are created equal. They may have different intrinsic characteristics that can be employed for different product categories and segments. And, no less important, they may be sustainable and earth- and skin-friendly by different degrees.

Considering that cotton is a natural product, some of its characteristics depend first of all upon how it is grown, secondly how it is transformed into a yarn, a fabric and garment, and thirdly—though not necessarily—if it can be recycled into new products after it has been worn.

## THE ORIGIN OF COTTON

The entire world's cotton production, according to the US Agriculture Department, has reached over 24 million tons for 2015-16, 16% less than in 2014-15. About 27% of the total harvest comes from India and about 25% from China. Following in the list of the world's main cotton producers are the US (13%), Pakistan (9%) and Brazil (6%).

It is a widespread opinion that the best cotton generally comes from America and Egypt. The finest and longest staple quality one is grown in Egypt, even if it is produced in very limited quantities (2% of the total production). Specialized shirting manufacturer Cotonificio **Albini** (**Albini** Group) grows part of the cotton it employs in its own fields in Egypt and uses it for top quality fabrics. American cottons are considered among the purest ones. ITV buys American cotton as its bales are rarely contaminated with polyester residuals from packaging or impurities. This way better quality and an easier use of the fiber are guaranteed. Every area of the world generally produces distinct cotton types and each fabric

manufacturer selects and mixes qualities from different areas to get the best performance and quality for its denims. Candiani Denim mixes cottons from India and West Africa such as Ivory Coast, Benin and Mali to get extra long staple fibers that can create high quality fabrics. Vicunha, which is one of the largest denim manufacturers of the world, employs 100,000 tons of cotton every year as it produces more than 190 million meters of fabric annually. "Every ounce of cotton has to be first quality," explains Thomas Dislich, marketing director, Vicunha Textil, Europe and Asia. "We must control cotton type, fiber length, resistance, evenness and color so that day after day our fabrics come out looking the same." Vicunha employs Brazilian Responsible Cotton, a BCI-approved cotton.

## WHAT CHARACTERISTICS COUNT MOST?

Key aspects are staple length—ELS or Extra Long Staple fibers guarantee better fabric quality, tensile strength (indicating the maximum load a bundle of fibers can stand), micronair (proportion between fiber length and thickness) and color—which can vary from white, creamy, light spotted or spotted color. Technical aspects and availability also count. "Organic cotton is far too short and technically uneven," continues Dislich.

Many believe BCI cotton is the best choice. "BCI cotton is the major sustainable cotton source for years to come," says Orta Anadolu. Similarly, Tavex adds: "It is the most suitable option in order to get quality/sustainability and social participation. In terms of sustainability, recycled and organic cotton are good options too." For Simon Giuliani, marketing manager at Candiani Denim, BCI cotton is used

in one-third of the company's fabrics: "BCI can ensure that suppliers work according to the same principles and values as we do, but also ensures optimal and consistent fiber characteristics." Some companies prefer to use conventional cotton, as Isko does. "We use conventional cotton, but accordingly to our different products, we also use Pima, organic, BCI and recycled cotton," explains Marco Lucietti, marketing manager, Isko. Daren Barnes, strategic procurement manager at Cone Denim, believes that different alternative cotton qualities can help the environment and guarantee good quality denim production: "We are members of BCI, e3 and Cotton Leads. They are all sustainable and environmentally friendly, and good quality denim can be made through each of them and each organization has a unique tie to sustainability. Each of them is seeking continuous improvement and driving sustainability through their farming practices."

Silvio **Albini**, president of Cotonificio **Albini**, has a different point of view: "We started employing GOTZ certified organic cotton already 10 years ago among the first ones, but the market was not ready for that." While referring to BCI cotton he dissents: "We also operate with BCI but not much is available. Now we can produce special selections with BCI cotton upon request. What counts most is monitoring every productive aspect of your entire company and 100% tracking all the cotton you use. The first sustainability you practice starts from your company."

## LIFE AFTER LIFE

More companies are keen about guaranteeing a practical afterlife to discarded cotton as part of the much talked about circular economy





BALES OF EGYPTIAN COTTON  
AT THE ALBINI GROUP



## FABRICS



COTTON YARN ROLLS AT THE ALBINI GROUP

approach. Levi's has partnered with the Evrnu start-up to produce new Levi's jeans by recycling old discarded cotton T-shirts. The Inditex Group will place 2,000 containers in its shops for collecting used garments that Lenzing will use to produce a new Tencel fiber incorporating recycled cotton. Vicunha also recycles 5,000 tons of cotton remains yearly into bricks for insulation buildings and others uses, all certified by GRS (Global Recycling System). Also ITV weaves 100% recycled cottons into new fabrics. Finally, Ecotex by Marchi & Fildi is a new fabric selection obtained by recycling old cotton fabric stocks.

### THE WORLD LOVES COTTON

Cotton Incorporated promotes US grown cotton worldwide. According to the organization, of the total US raw cotton production, around 75% is exported around the world. China is the largest export market for US cotton, followed by Mexico and Turkey. The US produces all types of cotton, from short and long staple qualities to Pima. Cotton Inc's yearly study *Global Lifestyle Monitor* shows local consumers' different preferences for the fiber. The 2016 edition emphasized Italian consumers' affinity for denim: they own about six pairs of jeans and 45% of them wear jeans or denim shorts five days a week, even in the office.

Also UK consumers love jeans as their wardrobes are bursting with over 321 million pairs, an average of five pairs per person. Germans consumers love cotton too: 82% of them think cotton is safe for the environment and 80% consider cotton the most sustainable fiber. Chinese consumers are also cotton fans: 58% of them prefer cotton for the clothing they wear most and 81% would pay more for clothing made from natural fibers such as cotton. But it's Thai consumers who set a record: they own an average of 15 T-shirts, 10 pairs of casual pants and nine pairs of shorts—which is above the global average. More than half of them shop for clothing at least once a week. Most of them (59%) wear denim jeans to work once a week or more.

### COTTON GLOSSARY

In co-work with Paolo Foglia, a cotton expert and manager for ICEA, an international certifying organization for organic agriculture products, we have compiled a list of common terms qualifying you for your next insider cotton talk.

**Organic cotton** is grown in accordance with biological agriculture laws of Europe, the US or other countries. According to these laws no pesticides, weed killers and fertilizers can be employed, nor any OGM seeds can be used.

Growers should also follow rotations of cultures and other measures to preserve soil fertility.

**Supima** is an Extra-Long Staple (ELS) cotton grown in the southwest United States since the early 1900s. But it was only after 1951 when a new seed type with superior fiber properties, luster and silkiness, and unusually higher yields and better spinning characteristics was developed that it started receiving greater attention.

**BCI** (Better Cotton Initiative) is a not-for-profit organization stewarding the global standards for Better Cotton. While trying to guarantee that local economy is supported (guaranteeing work and fair salaries to growers and farmers), BCI's cultivating methods follow a specific discipline aimed at reducing water consumption and chemical product use. BCI does not ban the use of harmful pesticides and allows the use of OGM seeds.

**Cotton USA** generally indicates that this cotton is grown in the US. Out of this total cotton cultivated 99% is conventional cotton grown from OGM seeds.

**E3 Cotton** is a sustainably grown cotton produced by Bayer. Its program should include a rational use of chemical products aimed to avoid waste and, as a consequence, also pesticides.