

The Truth about Cotton and Environmental Safety: Separating Fact from Fiction

If you've heard something on the street about the production of cotton, chances are, it's likely wrong. One of the most versatile crops grown all over the world, the cotton story is one that's commonly told with misconceptions and some outright falsehoods, especially with regard to the environmental impact of a product so crucial to the success of multiple industries, including apparel, non-wovens, upholstery, and many more.

Let's take a look at some of the more common misperceptions that the public has as a result of misinformation on the world of cotton production, especially here in the United States, where scrutiny of many industries is more intense than in other markets.

Fiction: Cotton uses a large percent of all the herbicides and pesticides in agriculture.

Fact: Global cotton production actually accounts for a [little more than 5 percent of global use of herbicides and pesticides](#). Crops like corn and soybeans require exponentially greater use of these chemical aids.

Fiction: Cotton uses a large amount of farmland.

Fact: Again, cotton shows far less use of arable land, with only three percent of arable land plantings coming from cotton production. In addition, you need to consider the annual, dramatic increases in yield per acre in cotton production over the last decade. There are many factors that contribute to the

more efficient growth of cotton, including precision agriculture techniques and technologies tied to agronomy and genetically modified cotton that's able to better withstand elements and pests. The goal for the next 10 years for U.S. Cotton is to [increase land use efficiency by 13%](#).

Fiction: Cotton uses a large amount of water for irrigation.

Fact: Cotton only accounts for three percent of water used for crop irrigation. Corn, to use another quite versatile crop as an example, uses more than twice as much water to produce. And other aspects of agriculture dwarf even these two stalwart crops—watering pasture to raise livestock triples the amount of consumption for cotton production. Compared to 25 years ago, U.S. farmers are now using [45% less irrigation water to grow a pound of cotton](#) and they have a goal to further decrease [water usage by 18% in the next 10 years](#).

Fiction: Genetically modified cotton (aka biotechnology) is bad for the environment and harmful to humans.

Fact: Genetic modification has different goals in different crops. For cotton, one of the main purposes of genetic modification is to [lessen the amount of pesticides needed throughout the growing season](#), which results in less pesticide runoff. This phenomenon has had a positive effect on both the environment human health through the reduction in water contamination. As an interesting side note, 95 percent of human clothing derives from genetically modified cotton.

Fiction: Purified Cotton®, used in a wide range of hygiene products for women and babies, contains genetically modified organisms.

Fact: Actually, Purified Cotton® contains no genetically modified genes even if grown from seeds that were genetically modified. [Data shows that the purification process removes these organisms.](#)

Fiction: Hygiene products made with Purified Cotton® contains glyphosate, one of the most widely-used herbicides in agriculture.

Fact: Testing at Barnhardt Purified Cotton® shows that [our purified cotton product](#), used in a wide variety of wipes, feminine care, and baby products, is free of glyphosate [down to the testing limit of 10 parts per billion.](#)

Fiction: Purified Cotton® contains chlorine, which can be harmful to human health as a respiratory irritant.

Fact: Not at [Barnhardt](#). Our process for purifying cotton is [completely chlorine-free](#). In fact, we recently updated our purification process on a number of fronts. We call it the [Enhanced Visual Opening Cleaning System \(EVOC\)](#), which produces the cleanest cotton on the market today, virtually free of all impurities. EVOC contributes to our vision for a more sustainable, high-performance Purified Cotton® that sets a new standard for excellence in nonwovens, particularly in the areas of feminine and baby hygiene products.

Fiction: Disposable, single-use products are not biodegradable.

Fact: This couldn't be farther from the truth. [All cotton is biodegradable](#). If a product has non-poly lactic acid synthetic components in conjunction with cotton components, the cotton will biodegrade, while the synthetic components will not.

Barnhardt Purified Cotton® has proven to completely decompose in a managed landfill in 30 days.

Fiction: The production of cotton is inefficient, creating a lot of waste products along the production chain.

Fact: When it comes to cotton, the [fact is that nothing goes to waste](#). Every part of cotton, whether you're talking about the [plant itself, seed, oil, and of course the fiber](#), is used in one way or another.

Here's another way of looking at the efficiency of cotton production—the end-product yield of just one 480-pound bale is quite stunning:

- 215 Jeans
- 249 Bed Sheets
- 409 Men's Sports Shirts
- 690 Terry Bath Towels
- 1,217 Men's T-shirts
- 1,256 Pillowcases
- 2,104 Boxer Shorts
- 2,419 Men's Briefs
- 3,085 Diapers
- 4,321 Mid-Calf Socks
- 6,436 Women's Knit Briefs
- 21,960 Women's Handkerchiefs
- 313,600 \$100 Bills

The US Leads in Sustainability

Initiatives, But the World Is Changing

While the US market has emphasized working toward more sustainable cotton production practices over the last two decades, the rest of the world has lagged. Lately, global members of the supply chain have worked in collaborative frameworks like Cotton LEADS, a joint venture of the American and Australian cotton industries. The Cotton LEADS program was jointly initiated by the Australian and United States cotton industries. These two cotton-rich markets have joined forces, as producers and industry organizations pursue new standards for sustainability with pioneering investments in infrastructure and practices. The American/Australian venture will surely point the way forward for all cotton-producing markets that prioritize sustainability over multiple generations.

At Barnhardt, we take the business of producing purified cotton, and doing so as sustainably as possible, as central to our mission. If you have questions about the environmental impact of our products, please contact us to learn the facts about cotton and the safety of our environment.