

Organic Fabrics – An Uphill Battle That Must be Fought

This past year, luxury clothing retailer Banana Republic joined brands like Gap, Old Navy, and H&M in offering styles that are made from organic fabrics. The 50-piece collection was unveiled on Earth Day as a sign of the designer's commitment to encouraging the use of eco-friendly materials in the fashion industry. The line includes shirts, skirts, and pants made from green fabrics like bamboo, organic cotton, organic denim, organic linen, and silk knits. In addition to providing earth-conscious products, Banana Republic has also begun an internal campaign to decrease dependency on harmful manufacturing processes and packaging materials, as well as refurbish many of its retail locations with more energy saving designs and floor layouts.

The recent trend in common mall stores like Banana Republic to include eco-friendly products in their new collections is a step in the right direction to bringing organic fabrics to the average American and also to alleviating dependency on the dangerous and potentially harmful process of producing traditional fabrics. According to Treehugger.com, conventional fabrics receive over 25% of the world's pesticide use, which is in turn responsible for over 20,000 deaths each year due to poisoning and watershed pollution. Furthermore, traditional cotton, the most widely used fiber throughout the world, receives enough pesticide treatment to equal 1/3 a pound of chemicals per cotton t-shirt. Knowing such treachery lies behind a simple t-shirt and jeans combo is enough to make even the most apathetic consumer go green.

However, designers' inclusion of organic fabrics in their new lines comes with a cost that shoppers feel at the checkout counter. For example, Banana Republic offers a cardigan made of 100% organic cotton for \$98.00; however, it sells a comparable shape and style made of a mixture of traditional fabrics for only \$89.00. Similarly, organic cotton t-shirts at H&M sell for \$19.99, while traditional blend t-shirts tempt consumers at only \$7.99.

The problem is the price of the fabric for designers. National Geographic's online magazine *Green Guide* offers a list of retailers that sell organic fabrics by the yard, and the cost is shocking. According to the article "Fabrics and Yarns," a yard of organic cotton can cost anywhere from \$13.60/yard to \$20.00/yard - traditional cotton runs typically around \$5/yard.

If green fashion is ever to be offered on a mass level by all designers and replace conventional fabrics, these prices will need to drop. Yet as of 2007, the Weekly Green Planet reported that less than 0.1% of all cotton grown around the globe was certified organic. The reason? Growing organic cotton is a time and resource commitment beyond spraying your crops with pesticide then harvesting them with a machine. It requires thought, effort, and time that many cotton magnates, especially in traditionally non-eco-concerned countries like China and Brazil, aren't interested in using to make their product more earth friendly.

For example, one of the requirements for cotton to be certified organic is that the field must be pesticide-free for three years before any crops grown can be considered organic. This is a tough requisite to meet for all but the most eco-dedicated farmers, since leaving a field free from pesticides for three years is basically condemning it to not producing worthwhile crops, unless they engage in the practice of integrated pest-management (IPM).

IPM is the method most organic farmers use to protect their crops instead of pesticides. It involves strategically introducing “helpful” pests into the crop field’s ecosystem to naturally control the pests that traditionally destroy the crops. Oddly, at times other bugs and animals need to be added to the field ecosystem to keep the helpful pests from getting out of control (thus becoming pests themselves). It is recommended that farmers practice “Beneficial Habitat Planting,” or the creation of other plant systems around the crops, to lure helpful insects and animals to the field.

The most frustrating part of the IPM system is that the delicate orchestration of pest control doesn’t mean they can’t use pesticides. SustainableCotton.org acknowledges that if IPM doesn’t initially work farmers can, “choose reduced-risk chemicals to keep pest outbreaks below economically damaging levels.”

So the “organic” solution is to throw ecosystems out of balance through what SustainableCotton.org calls “habitat manipulation” and introduce chemicals into the crops anyway? It is easy to see why only 0.1% of farmers practice these methods: they are illogical.

The real solution needs to be able to deal with the world’s need for organic fibers while making the organic process affordable and sensible for farmers and not destroying or drastically altering the ecosystems around the crops. An idea that has promise but is still in its infant-stage is the genetic modification (GM) of the helpful pests or even the crops themselves to make their effect more comparable to pesticide. National Geographic noted that initial studies of GM crops indicated that they were able to produce a chemical that warded off most harmful pests, but also affected helpful pests as well thus disrupting local ecosystems. Also, Rick Weiss’s article on the genetic modification of crops in the Washington Daily Post suggests engineering plants could actually come back to haunt farmers, as the resistant traits of crops could pass into the weeds of the field, creating a “superweed” species. Yet the concept has potential, and more research and government sanctioned funding need to be devoted to this idea to make it workable.

This leads to the suggestion of utilizing governments to potentially enact change in farmers’ policies, should they be like superweeds and resist eco-friendly farming techniques. While it is conceivable that, through lobbying and special interest pressure, an ordinance of this type could be established in the United States, it would be a different – and more difficult story – to get the rest of the world to cooperate. However, the United States could combat difficult opponents by offering incentives like increased import/export deals with countries that follow organic suit.

At this point, the logical solution is to lower organic fiber price by increasing supply, however to do that it seems science, government and a continued growth in green consumer expectations all must occur. We are hopeful that in the next few years more specialized work will be done with genetic manipulation to produce plants and helpful pests that allow crops to be grown 100% without pesticide use. The United States and other countries could offer tax rebates internally and trade agreements externally with farmers who choose to grow organic fiber utilizing sustainable business plans. But it is important to remember that cotton is a business – a rich and lucrative business – and those who are entrenched in their system of earth-abusing farming techniques will be defiant to the end, and those who fight for organic fabrics may need to play a bit dirty to get our world's fibers clean.