



Dr. F Nayeb Morad

Part 2

Sustainable Fabrics

Future Fabrics

Who would have known that pineapple leaves could be made into fabric?

Piñatex is a much more sustainable alternative to leather that supports local fruit farmers. The parts of pineapple that used to be discarded can actually be manufactured into something we can wear!

Ananas Anam manufactured this material in 2017 and currently works with farmers in the Philippines. In comparison to leather, Piñatex requires no additional raw materials for production and uses only non-toxic chemicals which are then reused through a closed-loop system. A closed-loop system continues to use the original input and requires no extra material.

However, it's not all good news. Piñatex is not biodegradable because the final product contains a percentage of petroleum. Additionally, cultivating pineapples is resource intensive and if the demand for Piñatex rises too quickly, the result could be deforestation.

Qmonos

Even if you're not a huge fan of spiders, they are very important creatures for a multitude of reasons. One of them is the potential that

their web silk holds for sustainable clothing fabrics.

Qmonos is a synthetic spider silk fabric and is one of the strongest fibers in nature. It is entirely biodegradable and requires zero spider farming.

Qmonos is sustainable and ethically made. The material is often compared to nylon and silk regarding its physical properties.

Bamboo

Bamboo is primarily grown in China and Taiwan, and in America the majority of the raw material is imported from China.

The material is biodegradable and sustainable in the growing phase, which is why bamboo toothbrushes

have become more and more popular. When it comes to bamboo as a fabric, it is often touted as being eco-friendly due to the availability and high yield of bamboo.

The plant grows very quickly, is incredibly resilient, and saves a great deal of water!

But the story does not end there. Most bamboo is manufactured using the same process as rayon, which is fairly chemical and water-intensive. While bamboo can be manufactured more sustainably, such as with bamboo linen, these versions of the fabric are quite rare.

For these reasons, GOTS does not currently certify bamboo, even though it's a natural fiber.

TLDR: it is probably best to avoid

انالله وانا اليه الراجعون

جناب آقایان منصور و ناصر الیاسی

مدیران محترم مجموعه ال سی من

در گذشت مادر گرامی تان را صمیمانه تسلیت گفته، برای شما صبر و برای آن مرحومه رحمت بی کران الهی را آرزو داریم، امید که روحشان آرام، آسوده و خرسند در حریم امن الهی آرام گیرد.

تحریریه نساجی امروز

bamboo in your clothes unless you know how it was made.

Is Leather Eco-Friendly?

Leather is extremely durable and when sourced without harmful chemicals, as regenerative leather, deforestation free leather, or recycled leather it can make a good choice and be a more eco-friendly fabric.

Leather is an animal product and is not vegan friendly.

Many of the environmental claims against leather are tied to the beef industry, of which leather is a by-product, or a co-product, but in either case small compared to the profits from beef.

To read more about leather, vegan alternatives to leather, and the brands doing it right, check out our guide: [How Sustainable is Leather?](#)

Is Wool Good for the Environment?

The sustainability of wool is “it depends” – it can have a big footprint or be regenerative depending on how it’s sourced.

Arguably wool could have its own article as it gets pretty complicated, but we’ll attempt to address it concisely [here](#).

Some concerns about wool stem from its poor ranking on the HIGG index, but like other fabrics rated by the HIGG index, that’s not the full story.

Also worth noting that many vegans are against wool since it is an animal product, regardless of how the animals are treated.

When shopping for wool, recycled wool or regenerative wool are fantastic choices from an environmental perspective.



Is Cellulose Fabric Modal Good for the Planet?

Modal is a man made fabric and a type of rayon, like viscose.

The short answer is no, avoid this fabric and see our notes on rayon above. But naturally, it’s a bit more complicated than that.

Like rayon, the primary concerns with modal are the chemicals used to make it and where the trees are sourced from.

There are versions of modal like Tencel™ Modal that are more sustainable in both chemical use and raw material sourcing.

Don’t confuse Tencel Modal with Tencel Lyocell (noted above) though, they are different fabrics.

Another way to look for better modal is to look for FSC certification or PEFC (Programme for the Endorsement of Forest Certification) as these help ensure the trees were sourced sustainably.

How Sustainable is Cupro?

While Cupro seems sustainable at first (it’s made from a cotton bi-product) the process to make it is chemical intensive.

Worth noting it’s illegal to produce

Cupro in the US. Without a certification to verify it was made sustainably, it’s best to avoid it.

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