The fabrics are made from a salt-tolerant plant that thrives in seawater | Photo source: SaltyCo

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STUDENT STARTUP DEVELOPS SUSTAINABLE FABRICS USING SEAWATER PLANTS

FASHION & BEAUTY

SaltyCo hopes the fabrics will provide a sustainable alternative to insulating jacket liners, faux leather and other clothing

Spotted: An interdisciplinary team of students from Imperial College London and the Royal College of Art have found a way to make fabrics from plants grown in seawater. Potentially, this could provide a solution to the freshwater-intensive fashion and textile industries.

In contrast to water-thirsty cotton, which can require 20,000 litres of freshwater to produce just a kilogram of the material, the fabrics are made from a salt-tolerant plant that thrives in seawater.

The team, composed by mechanical engineer Julian Ellis-Brown, chemist Finlay Duncan, integrated designer Antonia Jara and business/design strategist Neloufar Taheri, is currently participating in Imperial Enterprise Lab’s Venture Catalyst Challenge.

After a successful period of trialling, the team is planning to launch three different textile products under the start-up name SaltyCo. There is a woven fabric, a non-woven fabric and a technical stuffing. In order to protect their intellectual property, the salt-tolerant plant is currently not being named.

The stuffing is the closest to being market-ready and has already been showcased as part of a jacket. SaltyCo has also showcased their non-woven fabric and is being used for accessories and faux leathers. The woven fabric is the one in need of the most development, but if done right, could have similar properties to linen or cotton.

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Takeaway:

Whilst vegan leather is often viewed as scoring more ethical brownie-points, the most common way to make fake leather is by applying a polyurethane coating to a base material such as polyester, nylon or cotton. According to SaltyCo, the water that goes into the creation of a single cotton sock could provide someone with three years worth of drinking water. In contrast, SalyCo's fabrics have the potential to relieve the freshwater-intensive fashion and textile industries.