

ORANGE FIBER THE NEW GREEN IN TEXTILE PRODUCTION

Awarded by the 2015 [United Nations Economic Commission for Europe \(UNECE\) Ideas4Change competition](#), Orange Fiber is an innovative and high quality textile made from the orange scraps processing.

In September the fashion week of Expo 2015 will host the first collection of this innovative textiles, demonstrating that garbage from row material are not to be thrown away but, if correctly disposed, can primarily be transformed to shape a new sustainable vision.

Orange Fiber transforms industrial waste of citrus into a sustainable and biodegradable textile which is also a cosmetic and vitamin enriched cream to wear, available for high quality collections.

The innovation has been developed by two young Italian start-uppers, Enrica Arena and Andriana Santanocito jointly with the University *Politecnico di Milano*, involving 1500 young professionals. *Orange Fiber* was patented in Italy in 2013 and extended in 2014 when the first prototype was produced.

It was ranking among the top 5 start-ups in *Creative industries at the world level* at Copenhagen Creative Business Cup 2013 and was nominated Changemaker within the international competition for innovative start-ups for EXPO Milano 2015, in which *Orange Fiber* is entered in the top 10 selected projects, for being the company with the highest economic potential and less environmental impact.

A sustainability philosophy is at the core of *Orange Fiber* that aims to resolve the problem of the accumulation of waste from the citrus industry: in Italy well 700,000 tonnes per year involving high costs of disposal. The problem of citrus wastes is being studied by the Productive Citrus District of Sicily, funded also with the support of Coca-Cola Foundation, to develop research on how this process will produce renewable energies from row materials.

Orange Fiber not only contributes reducing the cost and the environmental impact of citrus pulp disposal, but is doing it by creating a high level quality and sustainable textile that in perspective can become an important production chain not only of Sicily but of other territories producer of citric too.

The productive process patented by *Orange Fiber* gives new life to the *pastazzo*, technical term to define what remains of the



citrus fruits after squeezing. The wet citrus residual, *pastazzo*, is processed to be able to extract the cellulose that will form the final yarn. Cellulose is extracted from the leftovers that would normally be discarded after pressing an orange and then treated with a special process.

A biodegradable material like silk is produced: soft to the touch and shiny appearance, suitable to be woven with any type of existing yarn. Inside are also positioned, with the aid of nanotechnologies, essential oils in the form of capsules that dissolve in contact with the skin, smoothening.

Wearing products made out of *Orange Fiber* is like wearing a vitamin cream; it's nourishing for the skin, and the effects are guaranteed for twenty washes, for now.

Three prototypes are obtained from the fray with citrus fruits yarn: a lace silk black and white, a duchesse, colour neutral between white and cream, similar to that which can be used for the summer jackets or cocktail dresses, and a fabric like viscose, very slight is indicated for the daily use, to be assembled with shirts and summer clothes.

The new vitamin-enriched textile would represent a brand new opportunity especially for Italian tradition in high quality textiles and fashion.

To know more

<http://www.orangefiber.it/>

<https://it-it.facebook.com/orangefiberbrand>

<http://www.unece.org/ideas4change/finalists.html>

<http://www.connect4climate.org/blog/our-new-partner-orange-fiber>

<http://www.orangefiber.it/6-cose-che-forse-non-sapete-su-orange-fiber/>

<http://www.orangefiber.it/ideas-4-change-award-delle-nazioni-unite/>

<http://www.orangefiber.it/pastazzo-dagrumi-da-problema-a-risorsa/>

<http://video.repubblica.it/edizione/palermo/orange-fiber-il-tessuto-dalla-buccia-degli-agrumi-prodotto-a-catania/178757/177519>

<http://www.orangefiber.it/il-tessuto-cosmetico-dagli-agrumi/>

<http://www.windbusinessfactor.it/news-eventi/startup-competition/tessuto-ecologico-scarti-arance/26929>

<http://www.alimenta2talent.eu/i-finalisti/orange-fiber>

