BIOCHEM show case

More sustainable natural fibres for clothing

Problem

With increasing demand on agricultural land, the use of intensive farming for clothing fibres is under scrutiny. New fibres that make better use of natural fibres are required without losing the desirable properties of materials such as cotton.

Technical solution

Tencel is made from wood pulp cellulose and its nanofibril structure provides properties that result in fabrics that are as soft as silk, strong as polyester, cool as linen, warm as wool and as absorbent as cotton. The nanofibrils are hydrophilic and optimize absorption of moisture with excellent cooling properties. The high moisture content and smooth surface of the nanofibris imparts a soft feel.

The use of wood pulp means less water and pesticide use than for cotton coupled with increased yield per hectare. The polymer is made using a solvent spinning process with a closed loop solvent system with no wastewater and low emissions compared to the viscose manufacturing process as well as taking third time and using less energy.

Benefits

- **Absorbs 50% more moisture than cotton (polyester does not absorb moisture)**
- **Reduced bacterial growth due to structural properties (no anti-bacterial additives required)**
- **100% biodegradable**

Tencel is made by Lenzing.

Further information

Lenzing http://www.lenzing.com/