

Abstract 15th Conference of the European Industrial Hemp Association (EIHA), 12th to 13th June 2018

Title: Will a Nordic production of sustainable hemp textiles be a reality?

*Author: senior consultant Bodil E. Pallesen, Technological Institute, AgroTech; bdp@teknologisk.dk;
Cell phone: +45 72 20 32 81; Teknologisk Institute, Agro Food Park 15, Skejby; DK-8200 Aarhus N;
www.teknologisk.dk*

Current production of textiles is highly environmental impact, in particular, the cultivation and production of cotton for textiles in the 3rd world and transported over long distances poses a major impact on the environment due to the large consumption of water and pesticides in the cultivation sector, and considerable water and chemical consumption to processing of cotton for textiles and energy for transportation. Therefore, the fashion and furniture industry / industry calls for alternatives to environmentally harmful raw materials and resource-consuming garbage, ie. greater sustainability throughout the value chain.

Attempts to rethink the decortication of hemp stalks to achieve more simple and scalable processes has been tried several times, but so far it is Chinese hemp fibers that still dominate the market, using quite heavy chemical treatment methods to scutching the hemp stalks.

In Denmark, we work on development of a concept for production of sustainable hemp textiles. The project consortium consisting of Kvadrat, Advance Nonwoven, Vittenbjerggård, designer Rachel Kollerup and the Danish Technological Institute have set themselves to solve the challenges in the project "Sustainable Hemp Textiles". The project has good support from e.g. Novozymes, which supplies enzymes for the tests and the Danish Fashion Institute, Dansk Mode & Textil, who demand alternative raw materials.

The effort targets the entire value chain from production of hemp in the field – often combined with production of hemp for food and other purposes, and using new innovative technologies and solutions, ie. ranging from the field of raw materials production, processing of raw materials to long textile fibers to finished fabrics and sample designs for the fashion and furniture industry.

The project is funded by the Danish Agency of Environment and Bodil E. Pallesen is project manager.