

Future prospects in usage of natural renewable raw materials

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Nature in its abundance offers us a lot of material than can be called fibrous. This is thanks to fibres that can be found in plant leaves, fruits, seed's cover or stalk. Plants of that structure grow under any geographical width we can name. They all have one common characteristic – all are environmental friendly in 100%. We can talk about them as totally renewable and biodegradable. In times when our health is playing most important role and good coexistence with nature is mankind's main task these properties should not be forgotten.

Green fibres like flax, cotton, jute, sisal, kenaf and fibres of allied plants, which have been used since more than 6000 years BC presently are and will be the future raw materials not only for the textile industry as well for: modern eco-friendly composites used in different areas of application like building materials, particleboards, insulation boards, food feed and nourishment, friendly cosmetics, medicine and source for other bio-polymers and “fine chemicals”. They do not cause any disturbing effects of ecosystem, they can grow in different climatic zones and they recycle the carbondioxide for the atmosphere of our Earth. Resuscitation of these plants for Europe is very important because they provide better agriculture balance in this region and they will reduce a deficit of cellulose pulp for next Millennium when the population will be multiplied up to about 11.6 billion people.

The following paper presents the newest achievements in textile and non-textile use of bast fibres as well as their potential for future applications.