

Using Eco-friendly materials to achieve the sustainability in the clothing industry

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Abstract:

The world is emerging to achieve sustainability in all area, so caring for the environment has become an urgent necessity, where industrial progress had a negative effect on the environment of air, water and land pollution. This has caused an imbalance in the ecosystem, the concept of product design has been developed to adapt to the environment and work not to harm it such as (recycling-reuse-alternative energy-use of environmentally friendly materials-use of modern technologies that do not harm the environment). The problem of this research is the negative environmental impact from the clothing industry as a result of the use of non-environmental materials, and the possibility of reducing this pollution. The importance of research is to keep up with the progress in conservation of the environment and access to green products. The research aims to use environmentally friendly materials to reduce environmental hazards and obtain sustainable clothing, beside that, opening new markets and increasing competitive advantage in the field of clothing industry. The research follows the experimental approach, Where Eco tex tests were carried out on products made of traditional cotton and another of organic cotton. The results were statically analyzed and showed that there is a small different between the organic and non-organic cotton. The dimensional stability test of organic and inorganic product was done; The results showed that the contraction rate of organic cotton is lower than that of organic cotton. also, the appearance and handle of the organic and inorganic product were evaluated. The results proved that organic cotton is better than inorganic cotton in terms of appearance and handle. and to preserve the environment and human from pollution.

Keywords:

Environmental sustainability – Eco-friendly materials – Sustainable fashion – Organic clothing.