Extraction and Utilization of Texture Fibres from the Leaves of the Pineapple Plants

Kariuki, Mary Mumbi

Abstract:

Given that vast quantities of pineapple leaves go into waste each year in Kenya, this study was carried out to investigate the possibility of extracting the fibre and to further analyze the quality of the fibre in comparison to other cellulosic fibres that are already in use in the Kenyan textile industry. About 1.lkg of fibre was extracted using hand decorticating methods. The fibre tests that were carried out showed the fibre to be similar to flax in visual and Longitudinal microscopic appearance, while the cross-sectional appearance is like that of sisal. The burning characteristics are similar to those of other cellulosic fibres in general. The moisture regain value of 10..39 is close to that of cotton which ranges from 7-12. However the tenacity of the fibre is lower than that of other cellulosic fibres, though slightly higher than that of regular rayon which is a regenerated cellulose fibre. The fibres were also spun using hand techniques, and a variety of textile articles made using various hand weaving techniques.